REPORT

FROM THE

SELECT COMMITTEE

ON

EAST INDIA RAILWAY COMMUNICATION;

TOGETHER WITH THE

PROCEEDINGS OF THE COMMITTEE,

MINUTES OF EVIDENCE,

AND APPENDIX,

Ordered, by The House of Commons, *to be Printed,*
18 *July* 1884.

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284.

Ordered,—[*Tuesday*, 12*th February* 1884]:—THAT a Select Committee be appointed to inquire into and report upon the necessity for more rapid extension of Railway Communication in India, and the means by which this object may be best accomplished, with special reference to the Report of the Famine Commissioners, and with due regard to the financial condition of India.

Ordered,—[*Friday*, 7*th March* 1884]:—THAT the Committee do consist of Nineteen Members.

Committee nominated of—

Mr. Bernhard Samuelson.
Mr. Edward Stanhope.
Lord George Hamilton.
Mr. Baxter.
Mr. Dalrymple.
Mr. Bolton.
Mr. Brodrick.
Mr. Slagg.
Mr. Arthur Balfour.
Mr. William Fowler.
Mr. Jackson.
Mr. Wodehouse.
Mr. Onslow.
Mr. Carbutt.
Mr. William Henry Smith.
Mr. Justin M'Carthy.
Sir George Campbell.
Mr. Gorst.
Mr. Kynaston Cross.

THAT the Committee have power to send for Persons, Papers, and Records.

THAT Seven be the Quorum of the Committee.

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REPORT.

THE SELECT COMMITTEE appointed to inquire into and report upon the Necessity for more Rapid Extension of RAILWAY COMMUNICATION in INDIA, and the Means by which this Object may be best accomplished, with special reference to the REPORT of the FAMINE COMMISSIONERS, and with due regard to the FINANCIAL CONDITION of INDIA;——HAVE agreed to the following REPORT:—

1. YOUR Committee have endeavoured to confine their inquiry within the limits of the reference made to them, and have devoted their attention mainly to the alleged "necessity for more rapid extension of railway communication in India, and the means by which this object may be best accomplished." They have examined two of the most eminent members of the Famine Commission; they have given attention to the minutes of the colleagues of these gentlemen contained in the Despatches, and they have considered the evidence placed before them as to the effect which the proposed schemes of the Government of India may have upon its financial position.

2. In the first instance your Committee would refer to the chief recommendations made by the Select Committee, which in 1878 and 1879 inquired into the expediency of constructing public works in India with money raised on loan, both as regards financial results and the prevention of famine. Those recommendations were, that the construction of new works with borrowed money should for the future be limited to those schemes which, upon the responsibility of the Government, are estimated to be productive, by yielding an annual income equal to the interest on the capital expended in their construction, including in such capital interest during construction; that the amount to be annually expended upon productive public works should mainly depend upon the financial condition of India, and should, therefore, for the present be limited to an amount of 2,500,000 *l.*; that 2,500,000 *l.* should be the maximum amount to be raised in any one year by the Indian Government (in addition to existing liabilities) for the prosecution of productive public works; that all expenditure on the construction of productive public works should be treated as borrowed money; and that, if in any year the financial condition of India should admit of an increase in this expenditure, by devoting to that purpose surplus revenue, care should be taken that the permanent establishments should not be so increased as to prove burdensome in years less generally prosperous. The Select Committee of 1878-79 were further of opinion that loans for public works in India should always be raised in India, unless the Secretary of State in Council should be satisfied that the difference between the rates of interest in England and India is so considerable as to afford full compensation for the disadvantages which inevitably attend borrowing in this country. Report, p. xxi.

3. While, therefore, that Committee contemplated the outlay of 2,500,000 *l.* a year, in addition to such sums as could be supplied from surplus revenue, and in addition also to the then existing liabilities connected with the guaranteed railway companies, they made no recommendation as to the policy to be pursued in the event of those companies proposing an extension of their systems, or of other companies being ready to undertake the construction of railways, either with or without a guarantee. In fact, the guarantee system was at that time treated as expiring.

4. In

Papers, No. 2, "Correspondence regarding Indian Railway Policy, 1881–4," pages 2–4.

4. In 1881 the Secretary of State, in communicating to the Government of India his desire that the policy to be pursued in regard to public works should continue to be in general concurrence with the views expressed by the Select Committee in 1879, laid down a rule that no railway should be considered to be a productive work, *i.e.*, one for which it was legitimate to borrow money, unless it could be fairly estimated that, within a maximum limit of five years from the date of the line being opened for traffic, it would pay 4 per cent. on the capital invested, including therein all arrears of simple interest incurred up to that date, and also the capitalised value of the land revenue and of leave allowances and pensions.

Papers, No. 2, foot-note on page 76. Strachey, 132–5. Conway Gordon, 3541.

5. Of the sum of 2,500,000 *l.* thus authorised to be annually borrowed, the Government of India have ordinarily applied 1,800,000 *l.* to railways, and 700,000 *l.* to irrigation. In addition, however, to this sum of 1,800,000 *l.*, they have, with the sanction of the Secretary of State, spent the sums needed for the improvement of the East Indian Railway (which in 1879 had not become a State line), and also such amounts as could be supplied from the ordinary revenue of the year; while further outlay has been incurred by companies working with a Government guarantee of interest.

Papers, No. 16, page 6.

6. The following statement shows the capital expenditure on the construction of railways, in the five years before 1879, and in the five subsequent years:—

RAILWAYS.	1874–75 to 1878–79.					1879–80 to 1883–84.				
	1874–75.	1875–76.	1876–77.	1877–78.	1878–79.	1879–80.	1880–81.	1881–82.	1882–83.	Revised Estimate, 1883–84.
	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.
State	3,035,000	3,227,000	2,893,000	4,056,000	3,549,000	3,152,000	2,631,000	1,883,000	2,115,000	2,695,000
Frontier	–	–	–	–	–	1,334,000	2,393,000	225,000	260,000	—22,000
Protective	–	–	–	–	–	–	–	614,000	—129,000	626,000
East Indian	–	–	–	–	–	154,000	418,000	455,000	142,000	238,000
TOTAL direct Outlay	3,035,000	3,227,000	2,893,000	4,056,000	3,549,000	4,640,000	5,342,000	3,177,000	2,384,000	3,537,000
Guaranteed Companies	1,088,000	951,000	716,000	1,324,000	1,012,000	350,000	435,000	673,000	411,000	1,064,000
Subsidized Companies	–	–	–	–	–	–	–	170,000	338,000	348,000
Southern Mahratta Companies	–	–	–	–	–	–	–	–	711,000	636,000
TOTAL by Companies	1,088,000	951,000	716,000	1,324,000	1,012,000	350,000	435,000	843,000	1,460,000	2,048,000
GRAND TOTAL	4,123,000	4,178,000	3,609,000	5,380,000	4,561,000	4,990,000	5,777,000	4,020,000	3,854,000	5,585,000
Annual Average	£. 4,370,000.					£. 4,845,000.				

(Exclusive of the sum spent by the Bengal and North Western Railway Company.)

From these figures it appears that, although the direct outlay on State railways and irrigation works from borrowed money has been limited to an annual average of 2,500,000 *l.* (1,800,000 *l.* being usually devoted to railways), there has been so much spent from the ordinary revenues or by companies working with

with Government assistance, that the annual average outlay in the last five years on railways alone exceeds that in the former period by 475,000 *l.*

7. Having regard to the certain recurrence of periodical famines, and being of opinion that the cost of famine relief should not be added to the permanent debt of the country, the Government of India established, in 1878, an annual Famine Insurance Fund of 1,500,000 *l.* This sum was fixed upon the calculation that famine relief would cost, in every 10 years, 15,000,000 *l.* And the additional taxation required to provide the Famine Insurance Fund was sanctioned by the Secretary of State in Council on the understanding that the revenue thus raised should be applied to the construction of works likely to avert famine, or to the reduction of debt contracted for famine expenditure. Proposals have more than once been made by the Government of India to hypothecate a portion of the annual Famine Insurance Fund to the payment of interest on money borrowed for the construction of railways. But the Secretary of State in Council has declined to sanction these proposals; and the Select Committee of 1878–79 were also of opinion that the appropriation of a part of the Famine Fund for the payment of interest on loans raised to be expended on famine works, not fully productive, would be an entire inversion of the object for which the fund was created. Westland, 4745–7. Waterfield, 6046–51 6067.

8. In 1880 the Famine Commission made its Report to the Government of India. From a general calculation of the carrying power of railways in relation to the food supply, and to the greatest population likely ever to require to be fed during a season of famine, they reckoned that, for the million square miles of British India, the length of railway needed to protect the country, on the assumption that each line would provide for a tract 25 miles in width on either side, was 20,000 miles, of which nearly half had been already completed, or was under construction. Taking the cost at 6,000 *l.* a mile, the total outlay might be estimated at 60,000,000 *l.* for the remaining 10,000 miles, which sum, spread over 25 years, would amount to 2,500,000 *l.* a year, or about the amount that had for some few years past, according to their statement, been appropriated yearly to the extension of railways. Such an estimate was, however, in their opinion, greatly in excess of the probable needs of the more accessible tracts for which protection was pressingly required; and, excluding mountainous and desert districts and those naturally placed beyond danger, the Commission considered it probable that less than one half of that length, or 5,000 miles, in addition to the then existing lines (9,000 miles), would go far to remove all future risk of serious difficulty in supplying food to any part of any district in the whole country. The Commission were strongly of opinion that the policy of investing borrowed capital in railway extension should not be abandoned, and expressed their hope that nothing might stand in the way of a very early return to the former scale of grants for that paramount object, or to the adoption of some other equivalent form of aid. Page 170 of Report Famine Commission.

9. Mr. Danvers, the Secretary of the Public Works Department in the India Office, stated to your Committee that the length of railway open on the 31st of March this year was 10,832 miles, and that at the same date 3,617 miles were under construction, making a total length of nearly 15,000 miles which will be open in a very few years, apart from any other lines not yet commenced. So far, therefore, as the mere mileage is concerned, the recommendations of the Famine Commission are in course of fulfilment. Danvers, 6866. 6971–81.

10. It is, however, obviously necessary to consider, not merely with what length of railway India is already supplied, but what tracts of country remain unsupplied and exposed to the risks of famine. The Government of India in 1881 were so deeply impressed with the Report of the Famine Commission, that they considered it necessary forthwith to construct 3,000 miles of lines needed for protective purposes; and the scheme which they propose has been developed in three despatches written in 1883 and 1884, of which the following is a summary. Papers, No. 2, p. 7. Papers, No. 2.

11. The proposed policy of the Government of India is to leave to private enterprise those lines which are commercially most attractive, and to construct, either directly by the State, or indirectly through the agency of companies, those which are, relatively speaking, unprofitable, but which they consider to be Page 34.

be indispensable for protection against famine, or for other urgent purposes. With this object the Government of India have sketched a programme of the railways with which, in their opinion, it is desirable that India should sooner or later be provided.

12. These lines have been arranged in two schedules, A. and B.

Page 86. Schedule B. contains 34 lines, with a total length of 3,432½ miles, of which the cost is estimated at 24,288,000 *l.*; these railways are all considered likely to be remunerative, and they are left to be taken up by private companies, Pages 35, 36. without any aid from the Government except the grant of land free of cost. The immediate construction of these lines is not contemplated by the Government of India.

Page 82. Schedule A. contains 30 projects, many of which are already under construction, the length requiring still to be made being 3,896 miles, and the cost being estimated at 28,262,450 *l.*, or, after allowing for the repayment of 630,000 *l.* by a Company, 27,832,450 *l.* These railways are all said to be Page 84. indispensable for protective or other urgent purposes; it is intended that 13,444,000 *l.* shall be borrowed by the Government, 2,100,000 *l.* by construction Page 76, foot note. and working companies, that is, companies receiving a permanent guarantee of interest to make a line on behalf of the State, and 12,040,000 *l.* by companies working on their own account, with a guarantee of advances of interest for a limited term of years, repayable from surplus profits. The remaining 48,450 *l.* will be supplied from the provincial balances.

13. In order to provide the means of defraying the charge for interest on the capital sum to be raised by the limited guarantee companies for the construction of certain railways in Schedule A., the Government of India propose to appropriate to this purpose an average annual sum of 200,000 *l.* from the famine Pages 35. 77. grant, together with the anticipated net receipts from these railways. The whole of the outlay for the lines in Schedule A. is to be spent in a period at first fixed at five, but now modified into "a few months more or less than six years."

14. It will be evident that this proposal implies a complete inversion of the Pages 25-6. regulations hitherto in force, as indeed was stated by the Government of India; for loan funds would be applied to unproductive works, and the famine grant would in part be used as interest on borrowed capital.

15. The arguments of the Government of India in favour of their scheme, were explained to your Committee clearly and in great detail, by the official Conway-Gordon, witnesses sent from India for that purpose. Major Conway-Gordon, Deputy 3496, &c. Accountant General and Under Secretary to the Government of India in the Public Works Department, showed the details of the proposals in all their Westland, 4776, &c. administrative bearings; Mr. Westland, the Comptroller and Auditor General, stated what would be their probable effect on the finances; and Mr. Hunter, Hunter, 7138, &c. the Director General of Statistics, also gave evidence.

Papers, 2, p. 100, and Papers, 6, Strachey, 24-5. Lord, 2512-3. Hardie, 2810. 2817. Conway-Gordon, 3560. Ashburner, 6366. Henderson, 712. Coke, 1255-9. 1427-8. 16. Besides the official evidence, your Committee have considered the memorials of the Bengal, Madras, and Bombay Chambers of Commerce, and the East India Association, and they have examined representatives of the Liverpool and Manchester Chambers of Commerce, and many other witnesses acquainted with the trade of India. But while all these witnesses strongly advocated the more rapid construction of railways in India, none of them supported such extensive proposals as those put forward by the Chambers of Commerce of Bombay and Madras.

17. Your Committee will now proceed to sum up the grounds on which the various witnesses have urged the more rapid construction of railways.

Papers, No. 2. Strachey, 371. Caird, 377. 697. Trevor, 1795. Hardie, 2941. Conway-Gordon, 4279. Westland, 4746. 4879. 4964. (1.) The first ground is the necessity for increasing the works likely to protect the country against famine. General Strachey and Sir James Caird stated that there was no other means of saving life in time of famine so efficient and economical as railways; and Mr. Hunter showed that the plans of the Government rest, not merely on the importance of facilitating the conveyance of food into districts likely to be affected with scarcity, but also on the advantage of providing for its ready transmission from the tracts where grain is abundant. Hunter, 7138-9. 7331. As he expressed it, "What the Government of India desires, is continuous broad-gauge communications from the centres of food production to the centres of

of population and to the famine tracts." It is with this object mainly that they earnestly press for the construction of certain lines, especially the Bhopal-Gwalior and the Nagpore-Barakur Railways, which they desire to entrust to "Limited Guarantee" Companies. The wants of Bundelcund, which is especially liable to famine, would be provided for, by a line from Manickpur, on the Jubbulpore and Allahabad Line, westwards to Jhansi, and this line has been already undertaken directly by the State.

Chapman, 870. Bullen Smith, 2354. Conway-Gordon, 4351 4417. 4425. Hunter, 7139–51. Conway-Gordon, 4100 Westland, 4921. Hunter, 7140–3. 7152.

(2.) Next may be placed the development of the internal trade of India, with the results of reducing the price of salt and other necessary articles of consumption, of increasing the price of grain which had previously found no market, and of equalising prices throughout a large extent of country.

Lord, 2462. Rendel, 5977. Ashburner, 6462. Hunter, 7188.

(3.) Another point on which stress was laid was the rapid development of the export trade in recent years, exclusive of bullion, of which the following figures, extracted from the Tables of Exports, afford proof:—

Strachey, 276. Caird, 413. 539–40. Coke, 1259–66. 1418–21. Lord, 2461–2. 2494. 2503. 2533. Graham, 2728. Hardie, 2859. 2871. Conway-Gordon, 5452. Hunter, 7188. Statistical Abstract relating to India, 17th Number, page 219.

Years ending 31st March.	Average Annual Value of Exports.
	£.
1864 to 1868 - - - - - -	57,770,000
1869 to 1873 - - - - - -	54,990,000
1874 to 1878 - - - - - -	57,140,000
1879 to 1883 - - - - - -	69,980,000
And the exports in 1883-84 amounted to -	88,076,000

In regard to the export of wheat in particular, the development of the trade is even more remarkable, the quantity having risen from an average of 4,544,000 cwts., valued at 1,951,000 *l.*, in the five years from 1876-77 to 1880-81, to 19,901,000 cwts., valued at 8,870,000 *l.*, in 1881-82, to 14,144,000 cwts., valued at 6,069,000 *l.*, in 1882-83, and to 20,961,000 cwts., valued at 8,880,000 *l.*, in 1883-84. Your Committee inquired whether the export of food from India in favourable years was detrimental to the welfare of the people, through the reduction of the stocks on which they would depend in times of famine. In reply to this it was stated that famine might be feared when prices rose threefold, but that, long before the cost of wheat to the consumer had been trebled, the price, with the addition of charges for freight, would have become so high as to remove all chance of its being exported; and, even assuming that the prospect of impending famine should fail to prevent exports, the quantity of wheat at all likely to be sent out of the country would not exceed a very small part of the total produce. On the other hand, the position of the cultivator is strengthened by the export trade of prosperous years; the sale of his produce enabling him to accumulate funds with which to meet the attack of famine. It was also stated that some kinds of grain which form a main portion of the staple food of the people are not, as a rule, exported.

Statistical Abstract relating to India, 17th Number, pages 100–3. Coke, 1260. 1522. Trade Tables of India, March 1884. Hunter, 7168–9. 7205–13. Strachey, 277. Caird, 561–2. Hunter, 7184.

(4.) The stimulus of the high price realised by their produce induces the people, not merely to substitute wheat for less remunerative crops, but also to improve their crops and to extend the area of cultivation, and, as the railways tap fresh districts, more sources of supply are found.

Caird, 613. 672. Coke, 1266 1319–20. Glover, 1890. 1945. 1962–5. 2057. 2071–5. 2247–9. Bythell, 2614; Conway-Gordon, 5527–9. 5578; Ashburner, 6419. 6427. 6521–3; Hunter, 7162. 7179.

(5.) To a certain extent the land revenue of the Government is thereby increased; but this can only take place very gradually as the assessments of the districts expire, and the enhancement of the Government revenue bears but a small proportion to the increase of the income of the cultivator. General Strachey estimated the annual benefit to the people of India, owing to the construction of railways, at 30 to 40 million pounds sterling.

Strachey, 353. 355. Bythell, 2614. Birkmyre, 3446–8. Ashburner, 6343. 6405–14. Danvers, 6887. 7021–2. Hunter, 7144. 7217.

(6.) In certain districts the construction of railways would open up valuable coal fields; and possibly they would lead to the profitable working of iron mines, though on this point the evidence was slight. The line from Bilaspur to Etawah has been specially mentioned as being likely to have a profitable trade in minerals.

Caird, 567–8. 619. Glover, 1899. 2133–4. Dickens, 3162. Crawford, 3687. 3803. Hunter, 7151. 7236–9. 7263.

Caird, 376. 381. 431–4. 692. Chapman, 802–5. 860–1. 876. 903–5. Strachey, 1187. Glover, 1913 9. 1943. 1949–54. 1998–2001. 2251. Clarke, 2271–3. Wood, 2292; Hardie, 2899–2902; Birkmyre, 3387. 3393; Danvers, 6887. 7016–23; Hunter, 7159–61. 7216, 7307. 7423.

(7.) Some of the witnesses testified to the improvement in the economic and material condition of the people caused by railways, through the rise in wages, and the spread of manufacturing industry among a people of whom the great bulk gain their living entirely from agriculture. In sparsely populated countries the railways are said to have been of much use, by facilitating immigration from overcrowded districts.

Strachey, 239. Caird, 384. 451. Chapman, 796. 800. 808. 859. Coke, 1410–2. 1502–3. Glover, 1896. 1909. 1947. 2081–4. 2192–2200. 2241–2. Graham, 2778. Dickens, 3062. Rendel, 6006. Papers, No. 12.

(8.) The unusual cheapness of materials, and especially of iron and steel, was strongly pressed as a reason for taking advantage of the present moment to push the construction of railways. Mr. Rendel, whose experience as Consulting Engineer to the Indian Government and many Indian Railway Companies entitles his opinion to great weight on such a point, said that "rails and sleepers were never so cheap and never so good as they are now." Mr. Glover, a contractor of much experience, said that the saving in the cost of materials and labour was estimated at 11 per cent., compared with the prices of 10 years ago. These statements were fully confirmed by the tables of prices furnished by the British Iron Trade Association.

Caird, 380. 436. 555. Birkmyre, 3416.

(9.) The improvement which has taken place in the credit of the Government of India in the London Money Market would enable it now to borrow the requisite capital at a much cheaper rate than was formerly the case; and, if guarantees have to be given to companies, it is no longer necessary to offer the high rate of 5 per cent., formerly given.

Papers, No. 2. Papers, No. 6, page 2. Strachey, 21–31. 55. 374. 1139; Chapman, 741–3. 1023; Coke, 1281–4; Dickens, 3058–60; Conway-Gordon, 4293–3. 4303. 4486. 4501; Ashburner, 6364; Danvers, 6875–6.

(10.) The possibility of accelerating the construction of railways by the Government availing itself of the agency of companies was pointed out. The general opinion is that the emulation created by the two systems is advantageous, and that, in the words of the Bengal Chamber of Commerce, "for many years to come the field will be large enough for both agencies to work side by side."

Strachey, 308. Bythell, 2609. Dickens, 3233. Birkmyre, 3416. Westland, 4954.

(11.) The experience of the conditions of railway construction in India, gained by the engineers, is another reason why lines can now be constructed at much less cost.

Financial Statement for 1884–85, page 55. Strachey, 4. Bythell, 2607. Graham, 2728. Westland, 4776.

(12.) The financial position of the Government of India is unquestionably better than five years ago, when the country was struggling with the burden caused by the terrible famine in Southern India, and had also to bear the cost of the military operations in Afghanistan.

Graham, 2740. Birkmyre, 3462–4.

(13.) Finally, it has been represented that slow construction is costly, and that, when once a railway is begun, the truest economy consists in speedily bringing it into operation.

18. On the other hand, your Committee deem it necessary to specify various reasons assigned by some of the witnesses, which seem to point to caution in incurring a great expenditure in the rapid development of railways.

Conway-Gordon, 4396. Waterfield, 6110–2.

(1.) From a Despatch which has been recently addressed by the Secretary of State to the Government of India, it appears that up to the present time the charge imposed on the revenues, year by year, in consequence of the railway policy, has varied from a maximum of nearly 236 lakhs of rupees (in 1878–9) to a minimum of 20¼ lakhs in 1881–82, and that the aggregate charge up to the end of the current year is 41 crores of rupees, or (in the conventional exchange of 2 *s.* to the rupee) 41 millions sterling, excluding interest on the sums so laid out which would amount to about 30 crores in addition. It has, however, been pointed out that this payment is not a loss, but is the price at which India has purchased the great advantages she derives from a network of some 10 or 11 thousand miles of railway traversing the country in all directions, and enabling her people to move their produce and goods with a facility which was unknown before the railways were made. It was also observed that the annual burden has been almost extinguished in recent years; that to a great extent it is the result of the guarantees given in former years on terms which would not now be granted; and that many of the lines are paying excellent dividends, even on the heavy capital outlay incurred on them.

(2.) The

(2.) The difficulty of raising money in India has been set before us, especially by Mr. Hardie and Mr. Westland, whose calculations show that not much more than a crore of rupees each year is likely to be subscribed in India for permanent holding as an investment in that country; and, therefore, since the bulk of the funds required for railway extension must be found in England, whether in the shape of sterling loans, of guaranteed capital, of unguaranteed or temporarily guaranteed capital, or of rupee loans held in this country, the possible loss by exchange must be accepted as an element of risk either to the Government or the investor. Capital raised here would now, however, be transmitted to India at the present low rate of exchange, and no loss would arise in remitting the dividends to England, unless the value of the rupee should fall yet further.

Hardie, 2803. 2915. 2922-3. 2960. 2996. 3008-9. 3027. 3042. Westland, 4773. 4785-92.

(3.) With regard to the finances, it is said that when the pressure of war and famine ceased, there was undoubtedly a very large surplus of revenue; but the fiscal reforms effected in 1882 and 1883 disposed of that surplus, and sufficient time has not yet passed for the recovery of such a financial position as would enable the country to meet an emergency without fear of fresh taxation. Even since the last financial statement of the Government of India was published in March, it has been determined to complete the railway to Quetta, involving an expenditure of about 2,000,000 *l.* in four years, which is sufficient to sweep away the whole of the surplus reckoned upon by Mr. Westland as justifying the proposals of the Government of India.

Financial Statement for 1884–5, page 3.

Westland, 4938. 5266–8.

(4.) Great objection is felt by some to any measure that shall divert from its primary object any portion of the famine insurance provision. On this point your Committee were referred to the evidence given before the Committee of 1879 by Sir Thomas Seccombe, lately Assistant Under Secretary of State for India, whose long experience as Financial Secretary at the India Office renders his advice on such a subject peculiarly valuable.

Seccombe, 467 (of 1879).

(5.) So recently as 1879, a large reduction of the engineer establishment in India was effected; and any measure involving a sudden increase of the establishment, with the consequent pensions, was greatly deprecated.

Coke, 1283. 1406. 1425–6. Graham, 2775. Dickens, 3129–31. 3292.

(6.) The scheme of the Government of India is largely dependent on their belief that certain lines, to which they attach the greatest importance, will be taken up by companies working with a guarantee of interest limited to a comparatively short period, or without any guarantee. Considerable doubt, however, is thrown by the evidence, on the prospect of such companies being willing to undertake the desired task; and Mr. Hunter admitted that, although he had ascertained that one set of promoters was still desirous of constructing the line for which they had been in treaty, the proposal which they had last made involved a permanent guarantee. Apart from this also, objection is felt to hypothecating the sum annually set aside for railways from the famine grant.

Strachey, 23. 1081. 1139–41. Caird, 390. 558–9. 702. Chapman, 787. 820. 914–21. 949. 979. Bullen Smith, 2908–10. Hardie, 2823–4, 2831–3. Dickens, 3074. 3036–7. 3238. 3258–60; Conway-Gordon, 4119. 4308. 5553. 5590–6; Westland, 4849–50; Ashburner, 6360–2; Robertson, 6710–1; Danvers, 6877–9. 7089; Hunter, 7317–24. 7382–3. 7388.

(7.) One point on which great stress has been laid by the official witnesses, is that the proposals for an extension of the railways are contingent upon their involving no new taxation. This was clearly stated by the Government of India, and has been emphatically asserted by Major Conway-Gordon as a cardinal principle, and confirmed by Mr. Westland.

Papers 2, page 33, para. 54; Conway-Gordon, 3526. 3557. 3620. 4071–72. 4277. 4288. 4695–9. 4731. 5523. 5609. Westland, 4970–1. Waterfield, 6280–1. Danvers, 6872–7071.

19. The maintenance of the rigid distinction between productive and protective lines is said to hinder the application of borrowed capital to the very lines which are most needed as a protection against famine, and tends to cause unreasonably sanguine estimates of the remunerative nature of projected works to be produced, in order to bring them into the productive class.

Strachey, 7, 8. 179.

20. Your Committee have given the most careful consideration to the arguments thus summarized, and they consider the evidence in favour of a more rapid extension of railway communication to be conclusive.

Strachey, 26. 119. 320. 1109; Caird, 396; Henderson, 713; Chapman, 740. 875. 942; Coke, 1259. 1393 1427–8; Glover, 1889–93. 1898. 1995; Clarke, 2280; Wood, 2277–8, Bullen-Smith, 2302–3. 2315–6, Lord, 2461–2. 2494. 2512. 3533; Bythell, 2607 2612; Graham 2728, Hardie, 2859–61; Dickens, 3047–8. 3055. 3061; Birkmyre, 3374. 3379 3386. 3477–9; Conway-Gordon, 3615–8 5484. 5532–3; Rendel, 5658. 5845 5848. 5887. 5976; Ashburner, 6336–40. 6351–2; Danvers, 6871; Hunter, 7137–9. 7158.

Coke, 1297–1300. 1310–1; Glover, 1848. 1852–6. 1967; Lord, 2478. 2534–6; Bythell, 2711; Graham, 2737–9; Conway-Gordon, 4341–2. 4394. 4694. 4712–4. Danvers, 6892–5.

21. With regard to the question of gauge, your Committee are of opinion that all the leading trunk lines, with their principal feeders, should be on the broad gauge, the metre gauge being as a rule confined to tracts of country where that system is already in successful operation, and to local lines where the traffic is likely to be so light, that cheapness of construction more than counterbalances the undoubted disadvantage of break of gauge. The witnesses, with singular unanimity, General Strachey and Mr. Rendel being the only exceptions, attached great importance to the avoidance of breaks of gauge.

Chapman, 741. Coke, 1281–4. Trevor, 1665. Dickens, 3058–60. Conway-Gordon, 4293–4303: 4371. Westland, 4928. Danvers, 6875.

22. In considering the means by which a more rapid extension of railway communication may be accomplished, your Committee have given great attention to the merits of State operations, as compared with construction and working by the means of companies; and they are of opinion that it is desirable to employ both agencies. State operations are according to the present practice limited to the strength of the Public Works Department, the permanent staff of which it is not desirable to increase, for reasons given before the Select Committee of 1878-79, which reasons your Committee fully endorse. On the one hand, money can be raised more cheaply by the State, on the other construction and working by companies does not necessarily involve any increase of the staff of the Public Works Department, and it relieves the Government of India of a somewhat onerous charge; besides which, the emulation between *quasi* private enterprise and Government working tends to promote economical construction and management.

Chapman, 787. Conway-Gordon, 5590 to 5594. Danvers, 6874. 7089.

23. Your Committee think that the time may come when new railways will be made in India by unassisted private enterprise, and that this should be kept in view in all contracts made by the State, so that nothing should be done to prejudice a change of system which improved financial results of Indian railways, and greater consequent confidence on the part of the investing public might justify. Your Committee are confirmed in this belief by an examination of the last year's railway accounts, which show clearly that, irrespective of loss by exchange, which is a matter really outside the consideration of loss or profit on any particular line, the return on the whole railway investment of India was 5·68 per cent.

Waterfield, 6071–3. 6078–84.

24. The terms on which companies have lately undertaken railways in India are as follows, in all of which the companies have received land free of cost:—

(*a.*) The plan known as the "Bengal and North Western" terms, under which the company makes the line upon its own responsibility, and receives the whole of the profits of the undertaking, the line reverting to the State at the end of 99 years. The terms of purchase by the Government under this plan are that, at the end of 30 or 50 years, the Government may buy the company's interest at the rate of 25 years' purchase of the average annual net earnings of the line for the previous five years.

(*b.*) The plan known as the "Bengal Central" terms, under which the Company receives a guarantee of 4 per cent. on paid-up capital during construction, which advance is to be repaid with simple interest by the Company to the Government, by a contribution of half its net earnings over 5 per cent. The terms of purchase are, that at the end of 30 or 50 years the Government may buy the undertaking at the rate of 125 *l.* for each 100 *l* of stock.

(*c.*) The "Southern Mahratta" terms, under which the Company practically acts as agent for the Government, receiving a guarantee of 3½ per cent. plus one-fourth of the net receipts during the currency of the agency, which is terminable after the 25th year, or at subsequent intervals of 10 years, at the option of the Government, while the Company by giving a year's notice may demand the return of their capital. This guarantee is payable in rupees; such a number of rupees being guaranteed as will insure to the holder of stock a sterling payment in London of 3½ per cent. (plus at least a half per cent. until 1889), after which the guarantee is the equivalent of 3½ per cent. sterling in London, plus one-fourth of the net receipts, which are payable in India.

25. In

25. In commenting upon these plans, your Committee will point out that each is suitable under certain circumstances.

(*a.*) When a line may be expected to give a considerable immediate return, the Bengal North-Western terms are reasonable.

(*b.*) When the prospect is not so well assured, the Bengal Central terms offer a greater inducement to the investor, by guaranteeing interest on capital during construction.

(*c.*) The Southern Mahratta terms offer a permanent security to investors, which is equal to the security of the Government of India, with the addition of a quarter of the net receipts of the line.

Your Committee, however, think that it is unnecessary to complicate these terms by stating that the *equivalent* in rupees of a 3½ per cent. sterling guarantee shall be given; and suggest that the guarantee in sterling should be absolute.

They also suggest that, in future contracts, the option of demanding the repayment of the capital of the Company by one year's notice should not be unconditionally given.

26. Your Committee do not feel justified in recommending which particular lines should be made on particular terms, but they are of opinion that simplicity of terms is of great importance in inducing companies to make new lines; that all possible publicity should be given both in India and in England to the projects which Government wish to be undertaken by companies; that negotiations should be conducted as expeditiously as possible, so as to avoid all unnecessary delays in arranging contracts; and that the accounts of the financial results of railways in India should be kept in such a manner, and so published, as to be easily available to and understood by the investing public.

Dickens, 3081. 3213–4. Birkmyre, 3350–1. Conway Gordon, 3353, 3653–4 4307. 4465–8. 4580. 4590–1. 4627–43, 4697. Westland, 4813–7. 4957–9. 5028–39. 5067–9. 5106–8. Waterfield, 6106–11.

27. Your Committee are of opinion that the Government should retain in their own hands a power of fixing or from time to time varying the maximum of fares and rates, subject to adequate provisions to secure the interests of investors.

Lord, 2508–9. Bythell, 2681. Graham, 2742. Hardie, 2829. Dickens, 3250. Birkmyre, 3361. Conway-Gordon, 4367. Danvers, 6999.

28. Your Committee are of opinion that the technical distinction which has been hitherto made between protective and productive lines cannot be maintained. They recommend, therefore, that railways, needed for protection from famine or for the development of the country, be made as required, whether they be technically considered protective or productive. Your Committee do not approve of the entire removal of the existing check upon the construction of unremunerative railways as suggested by the Indian Government. The evidence even of their own witnesses has been against this revolution of policy. Your Committee are strongly of opinion that the bulk of the lines made should be self-supporting.

Strachey, 8. Caird, 386. Conway-Gordon, 5367, 5600–3. Hunter, 7139.

29. The attention of your Committee has been called to the misehief occasioned by constant fluctuations of policy in the construction of railways, and they are of opinion that a careful forecast having been made of future requirements for public works over a considerable term of years, such a scale of expenditure upon railways should be adopted as can reasonably be maintained.

Papers, No. 2, page 36. Trevor, 1580–2. Dickens, 3048. 3131, 3304. Conway-Gordon, 3526. Waterfield, 6104. 6193–5. 6320–1.

30. Your Committee are of opinion that the amount proposed to be spent on railways by the Government of India during the next six years is moderate, and that, looking to the experience of past years, and to present prospects, there is a very fair ground for expecting that an extension of the railway system of India on the scale proposed will have most beneficial effects.

Conway-Gordon, 3495 to 3527. 5609 to 5611, and *passim*. Westland, *passim*.

31. Your Committee have considered with great care the evidence placed before them as to the expediency of borrowing in India or England. They are strongly impressed with the reasons which weighed with the Committee of 1879, and with the Home Government; and they are of opinion, that if the capital required could be *really obtained from Indian sources*, the advantages of borrowing there, as compared with borrowing in England, would be very great. The growth too of the sterling debt in times of war or famine, and the difficulty of reducing that debt, even in prosperous years, has been clearly demonstrated,

Bullen Smith, 2317. Lord, 2484 8. Bythell, 2711. Graham, 2748. Hardie, 3005. Birkmyre, 3355. Conway-Gordon, 4256. Westland, 4805–6. Danvers, 6874. 7038–9.

Papers, 14. Waterfield, 6091–6105. 6117-9. 6121–33. 6184–90. 6201–4. 6221–40. 6249–66. 6322–3.

demonstrated, both in the evidence of Sir T. Seccombe before the Committee of 1879, and in Mr. Waterfield's evidence before the present Committee. Your Committee think also that, for political as well as for financial reasons, it is desirable that loans should, as far as possible, be raised in India; but they do not believe that rupee loans, *which are not really absorbed in India*, differ materially in their effect upon exchange from sterling loans, as, if held in Europe, the interest upon them will probably be remitted from India, and will come into the exchange market. They would, therefore, recommend, quoting the words of the Report of the Select Committee of 1879, that, when "the difference between the rates of interest in India and in England is so considerable as to afford full compensation for the great comparative disadvantages which inevitably attend borrowing in this country," the Secretary of State in Council should not hesitate to borrow such moderate sums in this country as will enable the Government of India to complete such public works as shall have obtained his sanction.

* Despatch of 29 Jan. 1884, paras. 10 and 11. Papers, No. 2, pages 70 and 77.

32. With regard to the recommendation of the Government of India that interest on the sum of 11,250,000 *l*,* to be spent on productive and protective railways, should be partly provided by hypothecating 200,000 *l.* of the Famine Grant, your Committee are of opinion that any such application of any portion of that grant would be entirely contrary to the purposes for which the fund was created, and they cannot concur in this suggestion.

33. Your Committee have endeavoured to arrive at some definite conclusion respecting the amount of money which may, on an average of years, and with safety to the finances, be annually borrowed for the construction of public works. But, from the limited field of taxation, and the fluctuations to which the finances of India are liable, they believe it to be impossible for them to form any precise forecast on which to base a definite recommendation on this subject. Whilst expressing an opinion that the present limit of borrowing, fixed by the Committee of 1878-79 at 2,500,000 *l*, might safely be enlarged, they think that the full responsibility of deciding upon the amounts to be borrowed from year to year should rest with the Secretary of State in Council.

34. In making the recommendations contained in this Report, your Committee wish most emphatically to endorse the declaration of the Government of India, made by Major Conway-Gordon and Mr. Westland, that the proposed extension of railways should not involve additional taxation.

18 *July* 1884.

PROCEEDINGS OF THE COMMITTEE.

Wednesday, 12th March 1884.

MEMBERS PRESENT:

Mr. Jackson.	Mr. Carbutt.
Sir George Campbell.	Mr. Wodehouse.
Mr. Dalrymple.	Mr. William Fowler.
Mr. Justin M'Carthy.	Mr. William Henry Smith.
Mr. Onslow.	Mr. Edward Stanhope.
Mr. Kynaston Cross.	Mr. Gorst.
Mr. Baxter.	Mr. Brodrick.
Mr. Bernhard Samuelson.	

Mr. BAXTER was called to the Chair.

[Adjourned till Friday the 21st, at Twelve o'clock.

Friday, 21st March 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. Bernhard Samuelson.
Mr. Bolton.	Sir George Campbell.
Mr. Justin M'Carthy.	Mr. Dalrymple.
Mr. Slagg.	Mr. Onslow.
Mr. William Fowler.	Mr. Jackson.
Mr. Carbutt.	Mr. Gorst.
Lord George Hamilton.	Mr. Brodrick.
Mr. Kynaston Cross.	Mr. Arthur Balfour.
Mr. William Henry Smith.	Mr. Edward Stanhope.

Lieutenant General *Richard Strachey* was examined.

[Adjourned till Tuesday next, at Twelve o'clock.

Tuesday, 25th March, 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. William Henry Smith.
Mr. Slagg.	Mr. Bernhard Samuelson.
Mr. Justin M'Carthy.	Sir George Campbell.
Mr. William Fowler.	Mr. Edward Stanhope.
Mr. Carbutt.	Mr. Onslow.
Mr. Brodrick.	Mr. Dalrymple.
Mr. Kynaston Cross.	Mr. Jackson.

Sir *James Caird* and Lieutenant General *W. Anderson* were examined.

[Adjourned till Friday next, at Twelve o'clock.

Friday, 28th March 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.
Mr. Bolton.
Mr. Slagg.
Mr. Justin M'Carthy.
Mr. William Fowler.
Mr. Carbutt.
Mr. Brodrick.
Lord George Hamilton.
Mr. Kynaston Cross.
Mr. William Henry Smith.
Mr. Bernhard Samuelson.
Sir George Campbell.
Mr. Dalrymple.
Mr. Gorst.
Mr. Onslow.

Mr. *F. S. Chapman* and Lieutenant General *Richard Strachey* were examined.

[Adjourned till Tuesday next, at Twelve o'clock.

Tuesday, 1st April 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.
Mr. Bolton.
Mr. Justin M'Carthy.
Mr. William Fowler.
Mr. Carbutt.
Mr. Brodrick.
Lord George Hamilton.
Mr. Kynaston Cross.
Mr. Bernhard Samuelson.
Sir George Campbell.
Mr. Gorst.
Mr. Edward Stanhope.
Mr. Onslow.
Mr. Dalrymple.
Mr. Arthur Balfour.
Mr. William Henry Smith.

Mr. *Henry Coke* and General *Trevor* were examined.

[Adjourned till Friday next, at Twelve o'clock.

Friday, 4th April 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.
Mr. Bolton.
Mr. Slagg.
Mr. William Fowler.
Mr. Carbutt.
Lord George Hamilton.
Mr. Kynaston Cross.
Mr. William Henry Smith.
Mr. Bernhard Samuelson.
Sir George Campbell.
Mr. Gorst.
Mr. Onslow.
Mr. Dalrymple.
Mr. Brodrick.

Mr. *Thomas Craigie Glover*, Mr. *Hyde Clarke*, and Mr. *William Martin Wood*, were examined.

[Adjourned till Tuesday, 29th inst., at Twelve o'clock.

Tuesday, 29*th April* 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. Gorst.
Mr. Bolton.	Mr. Dalrymple.
Mr. William Fowler.	Mr. Onslow.
Mr. Carbutt.	Mr. Jackson.
Lord George Hamilton.	Mr. Arthur Balfour.
Mr. Kynaston Cross.	Mr. Brodrick.
Mr. Bernhard Samuelson.	Mr. Edward Stanhope.
Sir George Campbell.	

Mr. *James Bullen Smith*, Mr. *George Lord*, Mr. *John K. Bythell*, and Mr. *Donald Graham*, were examined.

[Adjourned till Friday next, at Twelve o'clock.

Friday, 2*nd May* 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. Bernhard Samuelson.
Mr. Bolton.	Sir George Campbell.
Mr. Slagg.	Mr. Gorst.
Mr. William Fowler.	Mr. Onslow.
Mr. Carbutt.	Mr. Dalrymple.
Lord George Hamilton.	Mr. Jackson.
Mr. Kynaston Cross.	Mr. Brodrick.
Mr. William Henry Smith.	

Mr. *Robert Hardee*, Lieutenant-General *C. H. Dickens*, and Mr. *William Birkmyre*, were examined.

[Adjourned till Tuesday next, at Twelve o'clock.

Tuesday, 6*th May* 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. Onslow.
Mr. Bolton.	Mr. George Campbell.
Mr. Slagg.	Mr. Gorst.
Mr. William Fowler.	Mr. Dalrymple.
Mr. Carbutt.	Mr. Brodrick.
Mr. Kynaston Cross.	Mr. Jackson.
Mr. Bernhard Samuelson.	

Mr. *William Birkmyre* and Major *L. Conway Gordon* were examined.

[Adjourned till Friday next, at Twelve o'clock.

Friday, 9th May 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Bolton.	Sir George Campbell.
Mr. William Fowler.	Mr. Brodrick.
Mr. Carbutt.	Mr. Dalrymple.
Mr. Kynaston Cross.	Mr. Jackson
Mr. Bernhard Samuelson.	

Mr. *Robert Wigram Crawford* was examined.

[Adjourned till Tuesday next, at Twelve o'clock

Tuesday, 13th May 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. Bernhard Samuelson.
Mr. Bolton.	Sir George Campbell.
Mr. Slagg.	Mr. Gorst.
Mr. William Fowler.	Mr. Jackson.
Mr. Carbutt.	Mr. Brodrick.
Mr. Kynaston Cross.	Mr. Dalrymple.
Mr. William Henry Smith.	Mr. Edward Stanhope

Major *L. Conway Gordon* was further examined.

[Adjourned till Friday next, at Twelve o'clock.

Friday, 16th May 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. William Henry Smith.
Mr. Bolton.	Mr. Bernhard Samuelson.
Mr. Slagg.	Sir George Campbell.
Mr. William Fowler.	Mr. Gorst.
Mr. Carbutt.	Mr. Jackson.
Mr. Kynaston Cross.	Mr. Dalrymple.

Major *L. Conway Gordon* and Mr. *Westland* were examined.

Tuesday, 20th May 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. Dalrymple.
Mr. Bolton.	Sir George Campbell.
Mr. Carbutt.	Mr. Edward Stanhope.
Mr. Kynaston Cross.	Mr. William Henry Smith.
Mr. Bernhard Samuelson.	Mr. Gorst.
Mr. Jackson.	Mr. Slagg.

Mr. *James Westland* was further examined.

[Adjourned till Friday next, at Twelve o'clock.

Friday, 28*th May* 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. William Henry Smith.
Mr. Bolton.	Sir George Campbell.
Mr. Slagg.	Mr. Gorst.
Mr. William Fowler.	Mr. Brodrick.
Mr. Carbutt.	Mr. Dalrymple.
Mr. Kynaston Cross	Mr. Jackson.

Mr. *James Westland* was further examined.

[Adjourned till Tuesday next, at Twelve o'clock.

Tuesday 27*th May* 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. William Henry Smith.
Mr. Bolton.	Mr. Bernhard Samuelson.
Mr. Slagg.	Sir George Campbell.
Mr. William Fowler.	Mr. Carbutt.
Mr. Kynaston Cross.	Mr. Brodrick.

Major *Conway Gordon* and Mr. *James Westland* were further examined.

[Adjourned till Tuesday, 10th June, at Twelve o'clock.

Tuesday 10*th June* 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. Bernhard Samuelson.
Mr. Bolton.	Sir George Campbell.
Mr. William Fowler.	Mr. Brodrick.
Mr. Carbutt.	Mr. Dalrymple.
Mr. Kynaston Cross.	Mr. Jackson.
Mr. William Henry Smith.	

Mr. *Alexander Meadows Rendel* was examined.

[Adjourned till Friday next, at Twelve o'clock.

Friday, 13*th June* 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. Dalrymple.
Mr. Bolton.	Mr. Slagg.
Mr. William Fowler.	Mr. Jackson.
Mr. Kynaston Cross.	Mr. Brodrick.
Mr. Bernhard Samuelson.	Mr. Carbutt.
Sir George Campbell.	Mr. William Henry Smith.
Mr. Gorst.	Lord George Hamilton.
Mr. Edward Stanhope.	

Mr. *Henry Waterfield* was examined.

The Committee deliberated.

[Adjourned till Tuesday next, at Twelve o'clock.

Tuesday 17*th June* 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. Brodrick.
Mr. Bolton.	Mr. Dalrymple.
Mr. William Fowler.	Mr. Jackson.
Mr. Kynaston Cross.	Mr. Carbutt.
Mr. Bernhard Samuelson.	Mr. Edward Stanhope.
Sir George Campbell.	Mr. William Henry Smith.

Mr. *Lionel Ashburner*, Mr. *Trail Robertson*, and Major *Conway Gordon* were examined.

[Adjourned till Friday next, at Twelve o'clock.

Friday 20*th June* 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Wodehouse.	Mr. Bernhard Samuelson.
Mr. Bolton.	Sir George Campbell.
Mr. Slagg.	Mr. Jackson.
Mr. Brodrick.	Mr. William Fowler.
Mr. Kynaston Cross.	Mr. William Henry Smith.

Mr. *Juland Danvers* was examined.

[Adjourned till Tuesday next, at Twelve o'clock.

Tuesday 24th June 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Slagg.	Sir George Campbell.
Mr. William Fowler.	Mr. Dalrymple.
Mr. Carbutt.	Mr. Jackson.
Mr. Kynaston Cross.	Mr. Bolton.
Mr. Bernhard Samuelson.	Mr. Gorst.

Dr. *W. W. Hunter* was examined.

[Adjourned till Thursday, 10th July, at Twelve o'clock.

Thursday, 10th July 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Brodrick.	Mr. Slagg.
Mr. Edward Stanhope.	Mr. Bolton.
Sir George Campbell.	Mr. Wodehouse.
Mr. Kynaston Cross.	Mr. Bernhard Samuelson.
Mr. Carbutt.	Mr. Jackson.
Mr. William Fowler.	

DRAFT REPORT, proposed by the *Chairman*, read the first time, as follows:—

"1. YOUR Committee have endeavoured to confine their inquiry to the limits of the reference made to them, and have devoted their attention mainly to the alleged 'necessity for more rapid extension of Railway Communication in India, and the means by which this object may be best accomplished.' They have examined two of the most eminent members of the Famine Commission; they have given attention to the minutes of the colleagues of these gentlemen contained in the Despatches, and they have considered the evidence placed before them as to the effect which the proposed schemes of the Government of India may have upon its financial position.

"2. In the first instance your Committee would refer to the chief recommendation made by the Select Committee, which in 1878 and 1879 inquired into the expediency of constructing public works in India with money raised on loan, both as regards financial results and the prevention of famine. Those recommendations were, that the construction of new works with borrowed money should for the future be limited to those schemes which, upon the responsibility of the Government, are estimated to be productive, by yielding an annual income equal to the interest on the capital expended in their construction, including in such capital interest during construction; that the amount to be annually expended upon productive public works should mainly depend upon the financial condition of India, and should, therefore, for the present be limited to an amount of 2,500,000 *l.*; that 2,500,000 *l.* should be the maximum amount to be raised in any one year by the Indian Government (in addition to existing liabilities) for the prosecution of productive public works; that all expenditure on the construction of productive public works should be treated as borrowed money; and that, if any year the financial condition of India should admit of an increase in this expenditure, by devoting to that purpose surplus revenue, care should be taken that the permanent establishments should not be so increased as to prove burdensome in years less generally prosperous. Report, p. xxi.

"3. While, therefore, that Committee contemplated the outlay of 2,500,000 *l.* a year, in addition to such sums as could be supplied from surplus revenue, and in addition also to the then existing liabilities connected with the guaranteed railway companies, they made no recommendation as to the policy to be pursued in the event of those companies proposing an extension of their systems, or of other companies being ready to undertake the construction of railways, either with or without a guarantee; in fact, the guarantee system was at that time treated as expiring.

Papers, No. 2, 'Correspondence regarding Indian Railway Policy,' 1881-4," pages 2-4.

"4. In 1881 the Secretary of State, in communicating to the Government of India his desire that the policy to be pursued in regard to public works should continue to be in general concurrence with the views expressed by the Select Committee in 1879, laid down a rule that no railway should be considered to be a productive work, *i.e.*, for which it was legitimate to borrow money, unless it could be fairly estimated that, within a maximum limit of five years from the date of the line being opened for traffic, it would pay 4 per cent. on the capital invested, including therein all arrears of simple interest incurred up to that date, and also the capitalised value of the land revenue and of leave allowances and pensions.

Papers, No. 2, footnote on page 76. Strachey, 132-5. Conway Gordon, 3541.

"5. Of the sum of 2,500,000 *l.* thus authorised to be annually borrowed, the Government of India have ordinarily applied 1,800,000 *l.* to railways, and 700,000 *l.* to irrigation. In addition, however, to this sum of 1,800,000 *l.*, they have, with the sanction of the Secretary of State, spent the sums needed for the improvement of the East Indian Railway (which in 1879 had not become a State line), and also such amounts as could be supplied from the ordinary revenue of the year; while further outlay has been incurred by companies working with a Government guarantee of interest.

Papers, No. 16, page 6.

"6. The following statement shows the capital expenditure on the construction of railways, in the five years before 1879, and in the five years subsequently:—

RAILWAYS.	1874-75 to 1878-79.					1879-80 to 1883-84.				
	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	Revised Estimate, 1883-84.
	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.
State	3,035,000	3,227,000	2,893,000	4,056,000	3,549,000	3,152,000	2,631,000	1,883,000	2,115,000	2,695,000
Frontier	—	—	—	—	—	1,334,000	2,293,000	225,000	200,000	—22,000
Protective	—	—	—	—	—	—	—	614,000	—129,000	626,000
East Indian	—	—	—	—	—	154,000	418,000	455,000	148,000	238,000
TOTAL direct Outlay	3,035,000	3,227,000	2,893,000	4,056,000	3,549,000	4,640,000	5,342,000	3,177,000	2,394,000	3,537,000
Guaranteed Companies	1,088,000	951,000	716,000	1,324,000	1,012,000	350,000	435,000	673,000	411,000	1,064,000
Subsidized Companies	—	—	—	—	—	—	—	170,000	338,000	348,000
Southern Mahratta Companies	—	—	—	—	—	—	—	—	711,000	636,000
TOTAL by Companies	1,088,000	951,000	716,000	1,324,000	1,012,000	350,000	435,000	843,000	1,460,000	2,048,000
GRAND TOTAL	4,123,000	4,178,000	3,609,000	5,380,000	4,561,000	4,990,000	5,777,000	4,020,000	3,854,000	5,585,000
Annual Average	£. 4,370,000.					£. 4,845,000.				

"From these figures it appears that, although the direct outlay on State railways and irrigation works from borrowed money has been limited to an annual average of 2,500,000 *l.* (1,800,000 *l.* being usually devoted to railways), there has been so much spent from the ordinary revenues or by companies working with Government assistance, that the annual average outlay in the last five years on railways alone exceeds that in the former period by 475,000 *l.*

Page 170 of Report of Famine Commission.

"7. In 1880 the Famine Commission made its Report to the Government of India. From a general calculation of the carrying power of railways in relation to the food supply, and to the greatest population likely ever to require to be fed during a season of famine, they reckoned that for the million square miles of British India, the length of railway needed to protect the country, on the assumption that each line would provide for a tract 25 miles in width on either side, was 20,000 miles, of which nearly half had been already completed, or was under construction. Taking the cost at 6,000 *l.* a mile, the

the total outlay might be estimated at 60,000,000 *l.* for the remaining 10,000 miles, which sum, spread over 25 years, would amount to 2,500,000 *l.* a year, or about the amount that had for some few years past, according to their statement, been appropriated yearly to the extension of railways. Such an estimate was, however, in their opinion, greatly in excess of the probable needs of the more accessible tracts for which protection was pressingly required; and, excluding mountainous and desert districts and those naturally placed beyond danger, the Commission considered it probable that less than one half of that length, or 5,000 miles, in addition to the then existing lines (9,000 miles), would go far to remove all future risk of serious difficulty in supplying food to any part of any district in the whole country. The Commission were strongly of opinion that the policy of investing borrowed capital in railway extension should not be abandoned, and expressed their hope that nothing might stand in the way of a very early return to the former scale of grants for that paramount object, or to the adoption of some other equivalent form of aid.

"8. Mr. Danvers, the Secretary of the Public Works Department in the India Office, stated to your Committee that the length of railway open on the 31st of March this year was 10,832 miles, and that at the same date 3,617 miles were under construction, making a total length of nearly 15,000 miles which will be open in a very few years, apart from any other lines not yet commenced. So far, therefore, as the mere mileage is concerned, the recommendations of the Famine Commission are in course of immediate fulfilment. Danvers, 6866. 6971–81.

"9. It is, however, obviously necessary to consider, not merely with what length of railway India is already supplied, but what tracts of country remain unsupplied and exposed to the risks of famine. The Government of India in 1881 were so deeply impressed with the Report of the Famine Commission, that they considered it necessary forthwith to construct 3,000 miles of lines needed for protective purposes; and the scheme which they propose has been developed in three despatches written in 1883 and 1884, of which the following is a summary. Papers, No. 2, p. 7. Papers, No. 2.

"10. The proposed policy of the Government of India is to leave to private enterprise those lines which are commercially most attractive, and to construct, either directly by the State, or indirectly through the agency of companies, those which are, relatively speaking, unprofitable, but which they consider to be indispensable for protection against famine, or for other urgent purposes. With this object the Government of India have sketched a programme of the railways with which, in their opinion, it is desirable that India should sooner or later be provided. Page 84.

"11. These lines have been arranged in two schedules, A. and B.

"Schedule B. contains 34 lines, with a total length of 3,432½ miles, of which the cost is estimated at 24,288,000 *l.*; these railways are all considered likely to be remunerative, and they are left to be taken up by private companies, without any aid from the Government except the grant of land free of cost. The immediate construction of these lines is not contemplated by the Government of India. We may, therefore, for the purposes of this inquiry dismiss all consideration of them. Page 86. Pages 35, 36.

"Schedule A. contains 30 projects, many of which are already under construction, the length requiring still to be made being 3,896 miles, and the cost being estimated at 28,262,450 *l.*, or, after allowing for the repayment of 630,000 *l.* by a Company, 27,832,450 *l.* These railways are all said to be indispensable for protective or other urgent purposes; it is intended that 13,444,000 *l.* shall be borrowed by the Government, 2,100,000 *l.* by construction and working companies, that is, companies receiving a low permanent guarantee of interest to make a line on behalf of the State, and 12,040,000 *l.* by companies working on their own account, with a guarantee of advances of interest for a limited term of years, repayable from surplus profits. The remaining 48,450 *l.* will be supplied from the provincial balances. Page 82. Page 84. Page 76, foot-note.

"12. In order to provide the means of defraying the charge for interest on the sum to be raised by the limited guarantee companies, the Government of India propose to appropriate to this purpose an average annual sum of 200,000 *l.* from the famine grant; in other words, instead of expending this amount year by year in the construction of railways, they would capitalise it together with the anticipated receipts from these railways, and spend the money so raised upon some of the railways in Schedule A. The whole of the outlay for the lines in Schedule A. is to be spent in a period at first fixed at five, but now modified into 'a few months more or less than six years.' Pages 35. 77.

"13. It will be evident that this proposal implies a complete inversion of the regulations hitherto in force, as indeed was stated by the Government of India, for loan funds would be applied to unproductive works, the famine grant would in part be used as interest on borrowed capital, and the expenditure of borrowed money on productive lines would be discontinued. Pages 25–6.

"14. The arguments of the Government of India in favour of their scheme, were explained to your Committee clearly and in great detail, by the official witnesses sent from India for the purpose. Major Conway-Gordon, Deputy Accountant-General and Under Secretary to the Government of India in the Public Works Department, showed Conway-Gordon, 3496, &c.

Westland, 4776, &c. Hunter, 7138, &c.

the details of the proposals in all their administrative bearings; Mr. Westland, the Comptroller and Auditor General, stated what would be their probable effect on the finances; and Mr. Hunter, the Director General of Statistics, set before the Committee the economical aspects of the question.

Papers, 2, p. 100, and Papers, 6. Strachey, 24–5. Lord, 2512–9. Hardie, 2810. 2817–8. Conway-Gordon, 3560.

"15. Besides the official evidence, your Committee have considered the memorials of the Bengal, Madras, and Bombay Chambers of Commerce, and the East India Association, and they have examined a representative of the Liverpool Chamber of Commerce, and many other witnesses acquainted with the trade of India.

Ashburner, 6366. Henderson, 712. Coke, 1255–9. 1427–8.

"16. Your Committee will now proceed to sum up the grounds on which the various witnesses have urged the more rapid construction of railways.

Papers, No. 2. Strachey, 371. Caird, 377. 697. Trevor, 1795. Hardie, 2941. Conway-Gordon, 4379. Westland, 4746. 4879. 4964. Hunter, 7138–9. 7331.

"(1.) The first ground is the necessity for protecting the country against famine. General Strachey and Sir James Caird stated that there was no other means of saving life in time of famine so efficient and economical as railways; and Mr. Hunter showed that the plans of the Government rest, not merely on the importance of facilitating the conveyance of food into districts likely to be affected with scarcity, but also on the advantage of providing for its ready transmission from the tracts where grain is abundant. As he expressed it, 'What the Government of India desires, is continuous broad-gauge communications from the centres of food production to the centres of population and to the famine tracts.' It is with this object mainly that they earnestly press for the construction of the three principal lines which they desire to entrust to the 'Limited Guarantee' Companies, namely: the continuation of the Nagpore-Chhattisgurh Line eastward to Barakur, on the East Indian Railway; a line from Bilaspur on the Nagpore Line, north-westward, to Kutni, on the East Indian (Jubbulpore Branch), and on to Saugor and Etawah; and one from Bhopal northwards, by Etawah, to Jhansi, and thence northwards to Gwalior, and eastwards to Cawnpore. The wants of Bundelcund, which is especially liable to famine, would be more immediately provided for by a line from Manickpur, on the Jubbulpore and Allahabad Line, westwards to Jhansi, which is among those of which the construction is to be undertaken directly by the State.

Conway-Gordon, 4350. 4417. Hunter, 7139–50. Hunter, 7151. Chapman, 870. Conway-Gordon, 4350. 4425. Conway-Gordon. 4100. Westland, 4921. Hunter, 7140–3. 7152.

Lord, 2462. Rendel, 5977. Ashburner, 6462. Hunter, 7188.

"(2.) Next may be placed the development of the internal trade of India, with the results of reducing the price of salt and other necessary articles of consumption, of increasing the price of grain which had previously found no market, and of equalising prices throughout a large extent of country.

Strachey, 276. Caird, 413. 539–40. Coke, 1259–66. 1418–21. Lord, 2461–2. 2494. 2503. 2533. Graham, 2728. Hardie, 2859. 2871. Conway-Gordon, 5452. Hunter, 7188.

"(3.) Another point on which stress was laid was the rapid development of the export trade in recent years, of which the following figures, extracted from the Tables of Exports, afford proof:—

Statistical Abstract relating to India, 17th Number, page 219.

Years ending 31st March	Average Annual Value of Exports.
	£.
1864 to 1868 - - - - - -	57,770,000
1869 to 1873 - - - - - -	54,990,000
1874 to 1878 - - - - - -	57,140,000
1879 to 1883 - - - - - -	69,980,000

Statistical Abstract relating to India, 17th Number, pages 100–3. Coke, 1260. 1522. Trade Tables of India, March 1884.

In regard to the export of wheat in particular, the development of the trade is even more remarkable, the quantity having risen from an average of 4,544,000 cwts., valued at 1,951,000 *l.*, in the five years from 1876–77 to 1880–81, to 19,901,000 cwts., valued at 8,870,000 *l.*, in 1881–82, an amount which has been exceeded in the year just closed.

Caird, 643. 672. Coke, 1266, 1319–20. Glover, 1890. 1945. 1962–5. 2057. 2071–5. 2247–9. Bythell, 2614; Conway-Gordon, 5527–9. 5578; Ashburner, 6419. 6427. 6521–3; Hunter, 7162. 7170.

"(4.) The stimulus of the high price realised by their produce induces the people, not merely to substitute wheat for less remunerative crops, but also to improve their crops and to extend the area of cultivation, and, as the railways tap fresh districts, more sources of supply are found.

Strachey, 353. Bythell, 2614. Birkmyre, 3446–8. Ashburner, 6343. 6405–14. Danvers, 6887. 7021–2. Hunter, 7144. 7217. Strachey, 355.

"(5.) To a certain extent the land revenue of the Government is thereby increased; but this can only take place very gradually as the assessments of the districts expire, and the enhancement of the Government revenue is but a small share of the improved income of the cultivator. General Strachey estimated the saving to the people of India, owing to the construction of railways, at 30 to 40 millions.

"(6.) In

"(6.) In certain districts the construction of railways would open up valuable coal-fields; and possibly they would lead to the profitable working of iron mines, though on this point the evidence was slight The line from Bilaspur to Etawah has been specially mentioned as being likely to have a profitable trade in minerals. Caird, 557-8. 619. Glover, 1899. 2133-4. Dickens, 3162. Crawford, 3697. 3893. Hunter, 7151. 7236-9. 7283.

"(7.) Some of the witnesses testified to the improvement in the economic and material condition of the people caused by railways, through the rise in wages, and the spread of manufacturing industry among a people of whom the great bulk gain their living entirely from agriculture. In sparsely populated countries the railways are said to have been of much use, by facilitating immigration from overcrowded districts. Caird, 376. 381. 431-4. 692. Chapman, 802-5. 860-1. 876. 903-5. Strachey, 1187. Glover, 1913-9. 1943. 1949-54. 1998-2004. 2251. Clarke, 2271-3. Wood, 2292; Hardie, 2899-2902; Birkmyre, 3387. 3393; Danvers, 6887. 7016-23; Hunter, 7159-63. 7216. 7307. 7423.

"(8.) The improvement which has taken place in the credit of the Government of India in the London Money Market would enable it now to borrow the requisite capital at a much cheaper rate than was formerly the case. Caird, 880. 436. 556. Birkmyre, 3416.

"(9.) The possibility of accelerating the construction of railways by the Government availing itself of the agency of companies was pointed out. Papers, No. 2. Papers, No. 6, page 2. Strachey, 21-31. 55. 374. 1139; Chapman, 741-3. 1023; Coke, 1281-4; Dickens, 3058-60; Conway-Gordon, 4293-8. 4303 4486. 4501; Ashburner, 6364; Danvers, 6875-6.

"(10.) Finally, it has been represented that slow construction is costly, and that when once a railway has begun, the truest economy consists in speedily bringing it into operation, Graham, 2740. Birkmyre, 3482-4.

"17. On the other hand, your Committee deem it necessary to specify various reasons assigned by some of the witnesses, which seem to point to caution in incurring a great expenditure in the rapid development of railways.

"(1.) From a Despatch which has been recently addressed by the Secretary of State to the Government of India, it appears that up to the present time the charge imposed on the revenues, year by year, in consequence of the railway policy, has varied from a maximum of nearly 236 lakhs of rupees (in 1878-79) to a minimum of 20¼ lakhs in 1881-82, and that the aggregate charge up to the end of the current year is 41 crores of rupees, or (in the conventional exchange of 2 *s.* to the rupee) 41 millions sterling, excluding interest on the sums so laid out which would amount to about 30 crores in addition. In considering this argument, it is necessary to bear in mind that this payment is not a loss, but is the price at which India has purchased the great advantages she derives from a network of some 10 or 11 thousand miles of railway traversing the country in all directions, and enabling her people to move their produce and goods with a facility which was unknown before the railways were made. It must also be observed that the annual burden has been very much diminished in recent years; that to a great extent it is the result of the guarantees given in former years on terms which would not now be granted; and that many of the lines are paying excellent dividends, even on the heavy capital outlay incurred on them. Conway-Gordon, 4396. Waterfield, 6110-2.

"(2.) Great objection is felt by some to any measure that shall divert from its primary object any portion of the famine insurance provision. On this point your Committee have referred to the evidence given before the Committee of 1879 by Sir Thomas Seccombe, lately Assistant Under Secretary of State for India, whose long experience as Financial Secretary at the India Office renders his advice on such a subject peculiarly valuable. Seccombe, 467 (of 1879).

"(3.) So recently as 1879, a large reduction of the engineer establishment in India was effected; and any measure involving a sudden or considerable increase of the establishment, with the consequent pensions, is greatly to be deprecated. Coke, 1283. 1406. 1425-6. Graham, 2775. Dickens, 3129-31. 3292.

"(4.) The calculations made by Mr. Westland are very moderate, and appear to demonstrate that, if no emergency arise, the propositions of the Government of India will not result in an increase of taxation. The surplus, however, which he shows is not large, and is liable to be swept away by any unexpected demand, in consequence of war or famine, or of any measure that may involve a large expenditure, such as the determination to construct the railway to Quetta. Westland, 4776-81. 5266-8.

"(5.) Many witnesses take exception to the neglect by the Governmedt of lines passing through populous districts, on the ground that they are more liable to famine owing to the density of their population, and that the financial results of the railways will be unfavourably affected if the productive lines are excluded. Caird, 3848-, 417. 426. 503. 571. 578. 584. 699-70. Bullen Smith, 2393. Graham, 2733-4. Dickens, 3048. 3168-9. Conway-Gordon, 3559. 3576. 4282-4. 4305. 4469.

"(6.) The scheme of the Government of India is largely dependent on their belief that certain lines, to which they attach the greatest importance, will be taken up by companies working with a guarantee of interest limited to a comparatively short period, or without any guarantee. Considerable doubt, however, is thrown by the evidence, on the prospect of such companies being willing to undertake the desired task; and Mr. Hunter admitted that, although he had ascertained that one set of promoters was still desirous of constructing Ashburner, 6358. 6534-7. Strachey, 23. 1081. 1139-41. Caird, 390. 558-9. 702. Chapman, 787. 899. 914-21. 949. 979. Bullen Smith,

2308-10. Hardie, 2823-4. 2831-3. Dickens, 3074. 3096-7. 3238. 3253-60. Conway-Gordon, 4119. 4308. 5553. 5590-6; Westland, 4849-50; Ashburner, 6360-2; Robertson, 6710-1; Danvers, 6877-9. 7089; Hunter, 7317-24. 7382-3. 7388.

constructing the line for which they had been in treaty, the proposal which they had last made involved a permanent guarantee. Apart from this also, objection is felt to capitalising the sum annually set aside for railways from the famine grant.

"18. Your Committde consider that the evidence in favour of a "more rapid extension of railway communication" in that country is conclusive; in fact, only two or three witnesses expressed any doubt on the subject; and, looking to the recent great expansion of Indian trade and commerce, the importance of developing the material resources of many districts remote from the present lines, the imperative necessity of having better means of distribution in case of scarcity, it is of the utmost moment that sustained and vigorous efforts be made to extend railroads in various directions throughout the Indian Empire.

Sir J. Caird, 380. Mr. Glover, 2191. 2194.

"19. There are three other considerations which weigh with your Committee in recommending a more rapid extension of railways in India at the present time.

1st. Money and materials are so cheap that they can be made at a very much less cost than formerly: in fact, there are those who think that there is scarcely a railway in India which would not have paid from the beginning if it had been built at the prices of the present day.

Gen. Strachey 308. 339. Gen. Dickens, 3238 to 3235. Mr. Birkmyre, 3416.

2nd. The great experience which has been obtained by engineers now enables them to construct railways much more cheaply than formerly, apart from the cost of material.

Gen. Dickens, 3048. Mr. Graham, 2727. 2729.

3rd. The financial position of India is much better than it was when the last Select Committee reported in 1879.

Major Gordon, 3560. Gen. Strachey, 24-5. Mr. Hardie, 2817. Major Gordon, 3560. Mr. Ashburner, 6366.

20. Your Committee are glad to observe the great interest that commercial bodies, both in this country and in India, have manifested in the question; and, whilst agreeing with Major Gordon that "the proposals of the Bengal Chamber of Commerce are extremely moderate," are of opinion that those of the Bombay Chamber of Commerce are of too sweeping a nature, and could not be carried out with "due regard to the financial condition of India."

Mr. Chapman, 741. Gen. Strachey 1104 to 1107. Mr. Coke, 1281 to 1284. Gen. Trevor, 1665. Gen. Dickens, 3058 to 3060. Mr. Birkmyre, 3355. Major Gordon, 4299 to 4303. 4371. Mr. Westland, 4928. Mr. Danvers, 6875.

21. Your Committee have had set before them at great length, in much detail and by many witnesses, the comparative advantages and disadvantages of the lines being made by the State and by means of guaranteed companies, and they have arrived at the conclusion, which, indeed, is that of the best authorities who appeared before them, that, all things considered, the competition between the two is desirable; that, in the words of the memorial of the Bengal Chamber of Commerce, "for many years to come the field will be large enough for both agencies to work in side by side." State operations are necessarily limited to the strength of the Public Works Department, the permanent staff of which it is not desirable to increase, for reasons given before the Select Committee of 1878-79, which reasons your Committee fully endorse. Construction and working by companies does not necessarily involve any increase of the staff of the Public Works Department, and it relieves the Government of India of a somewhat onerous charge; besides which, the emulation between *quasi*-private enterprise and Government working, tends, in the opinion of many of the witnesses, to promote economical construction and management.

Mr. Chapman, 787. Major Gordon, 5590 to 5594. Mr. Danvers, 6874. 7089.

22. Your Committee think that the time may come, perhaps sooner than many people believe, when new railways will be made in India by unassisted private enterprise, and that this should be kept in view in all contracts about to be made by the State, so that nothing should be done to prejudice a change of system which improved financial results of Indian railways, and greater consequent confidence on the part of the investing public might justify. Your Committee are confirmed in this belief by an examination of the last year's railway accounts, which show clearly that, irrespective of loss by exchange, which is a matter really outside the consideration of loss or profit on any particular line, the return on the whole railway investment of India was 5·68 per cent.

Mr. Coke, 1452. Gen. Trevor, 1635. Mr. Glover, 2128 to 2131. Mr. Lord, 2469-2470; Major Gordon, 4346; Mr. Danvers, 6895-6-7.

23. Your Committee think that the railroad from Bhopal to Gwalior and Cawnpore should be made without delay, as there is remarkable concurrence of testimony on the part of witnesses, official, professional, and commercial, placing it in the front rank as a necessity. It should be on the broad gauge.

Mr. Bullen Smith, 2354. Mr. Lord, 2463. Mr. Bythell, 2613. Major Gordon, 4346. 4375. Mr. Westland, 4853. Hon. W. W. Hunter, 7139, and *passim*.

24. The only other line which the Committee think it necessary to specify, is that for opening up the country between Calcutta and Nagpore, which a glance at the map will show is worse provided with railroads than any other part of India. Taken in connection with the new line proposed between Bundelcund and Chhattisgarh, to which the Government of India attach the highest importance as absolutely necessary in case of famine, this line is likely to prove a great distributing medium, will tap coal fields of considerable extent, and satisfy the demand for a more direct through line from Calcutta to Bombay. Nearly all the witnesses were of opinion that it should be made on the broad gauge without unnecessary delay.

25. With

"25. With regard to the question of gauge, your Committee are of opinion that all the leading trunk lines on the great plains of Central India and in the North West Provinces, with their principal feeders, should be on the broad gauge, the metre gauge being, as a rule, confined to comparatively isolated districts, such as the Mahratta country, Kattiwar, and portions of the Lower Province of Bengal towards Nepaul and Assam, self-contained areas in which the traffic for many years to come is scarcely likely to justify a broad-gauge line. The witnesses, with singular unanimity, General Strachey and Mr. Rendel being the only exceptions, attached great importance to the avoidance of breaks of gauge unless in cases where they were absolutely necessary. Major Gordon, 4841-4694.

"26 Your Committee concur with the Committee which reported in 1879 on East India (Public Works), that the principle of borrowing in India is sound, and they also think that every encouragement should be given to the natives to invest money in railroads, but it has been clearly proved in evidence that the amount that could be thus obtained is much too small to provide for any considerable extension of the railway system, and they think that, in present circumstances, the Government would be justified in borrowing in the cheapest market, which, unquestionably, is London. The great bulk of the evidence is to this effect. Mr. Bullen Smith, 2317 to 2324. Mr. Lord, 2484 to 2488. Mr. Bythell, 2711. Mr. Graham, 2748. Mr. Hardie, 3005. Mr. Birkmyre, 3355. Major Gordon, 4256. Mr. Westland, 4805-6. Mr. Danvers, 6874. 7028-9.

"27. Many witnesses, who had carefully studied the subject, pointed out to your Committee two considerations which go far to counterbalance and compensate for the loss in exchange which may result from borrowing in England. Mr. Coke, 1291. Mr. Lord, 2494, 2499. Mr. Hardie, 2820-1. Major Gordon, 4312. 4396

"1st. The increase in trade consequent upon making railways with money borrowed in the cheapest market; and, 2ndly, that while a low exchange causes a certain small loss to the natives, by making clothing, &c., dearer, their gain is immeasurably greater, inasmuch as they obtain a higher price for their produce. Mr. Westland, 5091. Hon. W. W. Hunter, 7184.

"28. Several of the official witnesses, as well as those representing the mercantile communities, expressed an opinion that simplicity of terms was of great importance in inducing companies to make new lines; that all possible publicity should be given both in India and in England to the projects which Government wish to be undertaken by companies; that negotiations should be conducted as expeditiously as possible, so as to avoid all unnecessary delays in arranging contracts; and that the accounts of the financial results of railways in India should be kept in such a manner, and so published, as to be easily available to and understood by the investing public. The general tenour of the evidence was that improvements might be made in all these respects.

"29. The Committee recommend that no chief executive engineer should be appointed by Government to superintend the construction or working of railways who had not had previous railway experience. Mr. Glover 2235 to 2240. Gen. Dickens, 3050-1.

"30. There was a remarkable concurrence of testimony in favour of Government retaining in their own hands a power of fixing the maximum of fares and rates, and both official and mercantile witnesses suggested that a commission might be appointed to exercise this control. Your Committee are not prepared to make any absolute recommendation in regard to this matter; but former arrangements have not been at all satisfactory, and more stringent rules ought to be made in future in the interests of the public. Mr. Lord, 2508. Mr. Bythell, 2631. Mr. Graham, 2742. Mr. Hardie, 2829. Gen. Dickens, 3250. Mr. Birkmyre, 3361. Mr. Danvers, 6999.

"31. The terms on which companies have lately undertaken railways in India are as follows, in all of which the companies have received land free of cost:— Waterfield, 6071-3. 6078-84.

"(*a.*) The plan known as the "Bengal and North Western" terms, under which the company makes the line upon its own responsibility, and receives the whole of the profits of the undertaking, the line reverting to the State at the end of 99 years.

"The terms of purchase by the Government under this plan are that, at the end of 30 or 50 years, the Government may buy the company's interest at the rate of 25 years' purchase of the average annual net earnings of the line for the previous five years.

"(*b.*) The plan known as the 'Bengal' terms, under which the Company receives a guarantee of 4 per cent. on paid up capital during construction, which advance is to be repaid with simple interest by the Company to the Government, by a contribution of half its net earnings over 5 per cent.

"The terms of purchase are, that at the end of 30 or 50 years the Government may buy the undertaking at the rate of 125 *l.* for each 100 *l.* of stock.

"(*c.*) The 'Southern Mahratta' terms, under which the Company practically acts as agent for the Government, receiving a guarantee of 3½ per cent. plus one-fourth of the net receipts during the currency of the agency, which is terminable after the 25th year, or at subsequent intervals of 10 years, at the option of the Government, while the Company by giving a year's notice may demand the return of their capital.

"This guarantee is payable in rupees; such a number of rupees being guaranteed

as will insure to the holder of stock a sterling payment in London of 3½ per cent. (plus at least a half per cent. until 1889), after which the guarantee is the equivalent of 3½ per cent. sterling in London, plus one-fourth of the net receipts, which are payable in India.

"32. In commenting upon these plans, your Committee report that each may be varied as applied in varying circumstances.

"(*a.*) When a line may be expected to give a considerable immediate return, the Bengal North-Western terms are reasonable; the possible terms of re-purchase by the Government giving a hope of considerable ultimate profit.

"(*b.*) When the prospect is not so well assured, the Bengal Central terms offer a greater inducement to the investor, by guaranteeing interest on capital during construction; and they hold out the hope that Government may re-purchase the line at a premium of 25 per cent.

"(*c.*) The Southern Mahratta terms offer a permanent security to investors, which is equal to the security of the Government of India, with the addition of a quarter of the net receipts of the line. These terms appear to your Committee to be especially suited to those lines about which there is any doubt as to their earning a fair dividend.

"Your Committee, however, think that it is unnecessary to complicate these terms by stating that the *equivalent* in rupees of a 3½ per cent. sterling guarantee shall be given; and suggest that the guarantee in sterling should be absolute.

"They also suggest that, in future contracts, the option of demanding the repayment of the capital of the company by one year's notice should not be given.

"33. Your Committee are not disposed to lay down specifically any terms by which the Government of India and the Secretary of State should be guided in framing contracts with companies; that must be left to their discretion, and they have no doubt that they will do the best they can for the public interest. We have already described the arrangements made with the Bengal and North Western, the Bengal Central, and the Southern Mahratta Companies, and many witnesses thought these contracts judicious and fair both to the shareholders and to the public. It would be undesirable, in fact impossible, to lay down a hard-and-fast rule on this subject which would apply in all circumstances, at all times, and in every part of the country.

Mr. Waterfield, 6079 to 6074. 6078 to 6080.

"34. Your Committee are of opinion that the broad distinction which has been hitherto made between protective and productive lines is untenable. General Strachey and Sir James Caird first drew the attention of the Committee to this point, and Major Gordon, the first witness examined on behalf of the Government of India, corroborated their views, as did also Dr. Hunter. They recommend, therefore, that the arbitrary distinction hitherto in force be abolished; that railways, needed for protection from famine or for distribution of produce, be made as required; and that such portion of the famine grant, such portion of surplus revenue, and such portion of the money borrowed by the State, as the Government of India and the Secretary of State in Council shall think fit, be expended upon the construction of railways, whether they be technically considered protective or productive.

Gen. Strachey, 6. Sir James Caird, 386. Major Gordon, 6367. 5900, 5603. Hon. W. W. Hunter, 7139.

"35. Your Committee are of opinion that the amount proposed to be spent on railways by the Government of India during the next five years is not excessive, and that the whole scheme as explained, and to some extend modified and amended by its official witnesses, Major Gordon, Mr. Westland, and Dr. Hunter is, to use the words of Mr. Danvers, the Government Director of the guaranteed railway companies, and Secretary of the Public Works Department at the India Office, 'upon the whole, reasonable;' and they agree with him when he says, 'It seems to me, that, looking to the expenditure of past years, and to present prospects, there is a very fair ground for expecting that the extension of the railway system of India on the scale proposed will have most beneficial effects, and could be carried out without inconvenient financial pressure.'

Major Gordon, 3495 to 3527. 5609 to 5611, and *passim*. Mr. Westland, *passim*.

"36. Major Gordon stated that these proposals would involve, under the most unfavourable circumstances, and taking the most gloomy view of the case, an additional expenditure in the Indian Budget of not more than 200,000 *l.* a year.

Major Gordon, 3525–6. 5610.

"37. Your Committee, however, are prepared to sanction these proposals only on the distinct understanding that under no circumstances is there to be any additional taxation of the people of India for the extension of railways. This was clearly understood and laid down by the official witnesses both from Calcutta and the India Office.

Major Gordon, 3526. 3557. 4277, 4288. 4695 to 4700. 5523. 5609. Mr. Westland, 4970. Mr. Waterfield, 6380–1. Mr. Danvers, 6872. 7071.

"38. Your Committee do not concur with the Government of India in their proposal completely to reverse the policy which has hitherto been acted upon in regard to the nature of the lines to be made by the State, by substituting for it the policy expressed in the following sentence: 'We consider that instead of continuing State agency for the construction

Paper, No. 2 handed in, "Correspondence regarding Indian Railway Policy, 1881, 1884.

construction of productive lines of railways, we should for the future, as far as possible, exclude the action of the State altogether from this field of enterprise, and that, as a general rule, the Government should only undertake the construction of railways which from their unprofitable character in a commercial sense or other causes, cannot be made by private agencies.' The evidence has been wholly against this change, and indeed it was not supported even by the witnesses sent by the Government of India. Major Conway Gordon emphatically expresed his dissent, and in the summing up of his evidence proposed to substitute certain lines in Schedule B. for certain other lines now appearing in Schedule A. Your Committee express general approval of the policy recommended by Major Gordon, and without tying the hands of the Government of India, so as to prevent them in any case making lines which they consider absolutely necessary for protection against famine, but which are not likely to prove remunerative, they think it more important, 'having due regard to the finances of India,' and on general grounds, that the bulk of the lines made by the State should be at least self-supporting.

Sir J. Caird, 388. Mr. Bullen Smith, 2391. Mr. Waterfield, 6085. Major Gordon, 4305. Major Gordon, 5597, to 5608.

"39. With regard to the recommendation contained in sub-head *d.*, paragraph 10, of the Despatch of 29th January 1884, *i.e.*, that interest on the sum of 11,250,000 *l.** to be spent on productive and protective railways, should be provided by capitalising 200,000 *l.* of the Famine Grant, your Committee are of opinion that any such application of any portion of the Famine Grant would be entirely contrary to the purposes for which that fund was created, and they cannot concur in this suggestion.

* Despatch of 29 Jan. 1884, para. 11, Sub-section c (2). Papers, No. 2, pages 76 and 77.

"40. The Government of India proposed, in the event of their scheme being sanctioned in its entirety, to be allowed to borrow 350,000 *l.* per annum more for railways than is permitted at present; but as your Committee in an important particular, do not see their way to sanction the change of policy just explained, they doubt if this increase in the liberty to borrow would be sufficient, and are prepared, in view of all the circumstances of the case, looking to possible contingencies, to recommend that the sum fixed by the Committee of 1879, of 2,500,000 *l.*, should be raised to 3,500,000 *l.*, a sum which they think is justified by the improved financial condition of India, although of course it may not be necessary to borrow to the full extent of the limit."

Page 76 of Paper No. 2. Major Gordon 3540. Gen. Strachey, 128. Hon. W. W. Hunter, 7158.

Question, "That the Draft Report proposed by the Chairman be now read a second time, paragraph by paragraph,"—put, and *agreed to.*

Paragraphs 1 2, amended, and *agreed to.*

Paragraph 3, *agreed to.*

Paragraph 4 amended, and *agreed to.*

Paragraph 5, *agreed to.*

Paragraph 6, amended, and *agreed to.*

Amendment proposed, That the following new paragraph be inserted in the proposed Report: "Having regard to the certain recurrence of periodical famines, and being of opinion that the cost of famine relief should not be added to the permanent debt of the country, the Government of India established in 1878 an annual Famine Insurance Fund of 1,500,000 *l.* This sum was fixed upon the calculation that famine relief would cost in every 10 years 15,000,000 *l.*, and the additional taxation required to provide the Famine Insurance Fund was sanctioned by the Secretary of State in Council on the understanding that the revenue thus raised should be applied to the construction of works likely to avert famine, or to the reduction of debt contracted for famine expenditure. Proposals have more than once been made by the Government of India to hypothecate a portion of the annual Famine Insurance Fund to the payment of interest on money borrowed for the construction of railways. But the Secretary of State in Council has declined to sanction these proposals; and the Sub-Committee of 1878–79 were also of opinion that the appropriation of a part of the Famine Fund for the payment of interest on loans raised to be expended on famine works, not fully productive, would be an entire invertion of the object for which the Fund was created"—(Mr. *Wodehouse*).—Question, That this paragraph be inserted in the proposed Report,—put, and *agreed to.*

Paragraphs 7–10, *agreed to.*

Paragraphs 11–14, amended, and *agreed to.*

Paragraph 15, amended.—Another Amendment proposed, to add at the end of the paragraph the words, "That while all these witnesses apparently advocated the more rapid construction of railways in India, none of them supported such extensive proposals as those put forward by the Chambers of Commerce of Bombay and Madras"—

(Mr. *Bolton*).—Question put, That those words be there added.—The Committee divided:

Ayes, 7.	Noes, 4.
Mr. Bolton.	Sir George Campbell.
Mr. Brodrick.	Mr. Carbutt.
Mr. Kynaston Cross.	Mr. William Fowler.
Mr. Jackson.	Mr. Slagg.
Mr Bernhard Samuelson.	
Mr. Edward Stanhope.	
Mr. Wodehouse.	

Paragraph, as amended, *agreed to.*

[Adjourned till Tuesday next, at Eleven o'clock.

Tuesday, 15*th July* 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Jackson.	Mr. William Henry Smith.
Mr. Dalrymple.	Mr. Kynaston Cross.
Mr. Brodrick.	Lord George Hamilton.
Mr. Edward Stanhope.	Mr. Carbutt.
Mr. Gorst.	Mr. Wodehouse.
Sir George Campbell.	Mr. William Fowler.
Mr. Bernhard Samuelson.	Mr. Slagg.

Paragraphs 16–18, amended, and *agreed to.*

Paragraphs 19–21, *disagreed to.*

Amendment proposed, That the following new paragraph be inserted in the proposed Report: "In considering the means by which a more rapid extension of railway communication may be accomplished, your Committee have given great attention to the merits of State operations, as compared with construction and working by the means of companies; and they are of opinion that it is desirable to employ both agencies. State operations are, according to the present practice, limited to the strength of the Public Works Department, the permanent staff of which it is not desirable to increase, for reasons given before the Select Committee of 1878–79, which reasons your Committee fully endorse. On the one hand, money can be raised more cheaply by the State; on the other, construction and working by companies does not necessarily involve any increase of the staff of the Public Works Department, and it relieves the Government of India of a somewhat onerous charge; besides which, the emulation between *quasi* private enterprise and Government working, tends to promote economical construction and management"—(Mr. *Kynaston Cross*).—Question, That this paragraph be inserted in the proposed Report,—put, and *agreed to.*

Paragraph 22, amended, and *agreed to.*

Paragraph 23. Question put, That this paragraph stand part of the Report.—The Committee divided:

Ayes, 4.	Noes, 7.
Mr. Carbutt.	Sir George Campbell.
Mr. William Fowler.	Mr. Kynaston Cross.
Mr. Bernhard Samuelson.	Lord George Hamilton.
Mr. William Henry Smith.	Mr. Jackson.
	Mr. Slagg.
	Mr. Edward Stanhope.
	Mr. Wodehouse.

Paragraph 24, *disagreed to.*

Paragraph 25, amended, and *agreed to.*

Paragraphs 26—27, *disagreed to.*

Amendment proposed, that the following new paragraph be inserted in the proposed Report:—"Your Committee have considered with great care the evidence placed before them as to the expediency of borrowing in India or England. They are strongly impressed with the reasons which weighed with the Committee of 1879, and with the Home

Home Government; and they are of opinion, that if the capital required could be *really raised from Indian sources*, the advantages of borrowing there, as compared with borrowing in England, would be very great. The growth too of the sterling debt in times of war or famine, and the difficulty of reducing that debt, even in prosperous years, has been clearly demonstrated, both in the evidence of Sir T. Seccombe before the Committee of 1879, and in Mr. Waterfield's evidence before the present Committee. Your Committee think also that, for political as well as for financial reasons, it is desirable that loans should, as far as possible, be raised in India; but they do not believe that rupee loans, *which are not really absorbed in India*, differ materially in their effect upon exchange from sterling loans, as, if held in Europe, the interest upon them will probably be remitted from India, and will come into the exchange market. They would, therefore, recommend, quoting the words of the Report of the Select Committee of 1879, that, when 'the difference between 'the rates of interest in India and in England is so considerable as to afford full compen-'sation for the great comparative disadvantages which inevitably attend borrowing in this 'country,' the Secretary of State in Council should not hesitate to borrow such moderate sums in this country as will enable the Government of India to complete such public works as shall have obtained his sanction"—(*Mr. Kynaston Cross*).—Question, That this paragraph be inserted in the proposed Report,—put, and *agreed to.*

Paragraph 28, amended, and *agreed to.*

Paragraph 29, *agreed to.*

Paragraph 30, amended.—Question put, That the paragraph, as amended, stand part of the Report.—The Committee divided:

Ayes, 11.	Noes, 3.
Mr. Brodrick.	Mr. Dalrymple.
Sir George Campbell.	Mr. Gorst.
Mr. Carbutt.	Mr. Jackson.
Mr. Kynaston Cross.	
Mr. William Fowler.	
Lord George Hamilton.	
Mr. Bernhard Samuelson.	
Mr. Slagg.	
Mr. William Henry Smith.	
Mr. Edward Stanhope.	
Mr. Wodehouse.	

Paragraphs 31—32, amended, and *agreed to.*

[Adjourned till Friday, at Twelve o'clock.

Friday, 18th July 1884.

MEMBERS PRESENT:

Mr. BAXTER in the Chair.

Mr. Dalrymple.	Mr. Kynaston Cross.
Mr. Edward Stanhope.	Lord George Hamilton.
Mr. Brodrick.	Mr. Carbutt.
Mr. Gorst.	Mr. William Fowler.
Sir George Campbell.	Mr. Slagg.
Mr. Bernhard Samuelson.	Mr. Bolton.
Mr. William Henry Smith.	Mr. Wodehouse.

Paragraphs 33-34, *disagreed to.*

Amendment proposed, That the following new paragraph be inserted in the proposed Report: "Your Committee are of opinion that the technical distinction which has been hitherto made between protective and productive lines cannot be maintained. They recommend, therefore, that railways, needed for protection from famine, or for the development of the country, be made as required, whether they be technically considered protective or productive"—(The *Chairman.*)—Amendment proposed to the proposed Amendment, to add at the end of the proposed new paragraph the following words:—"Your Committee do not approve of the entire removal of the existing check upon the construction of unremunerative railways as suggested by the Indian Government. The evidence, even that of their own witnesses has been against this revolution of policy. Your Committee are strongly of opinion that the bulk of the lines made should be self-supporting"—(Lord *G. Hamilton*).—Question, That those words be there added,—put, and *agreed to.*

Question, "That this paragraph, as amended, be inserted in the proposed Report,"—put, and *agreed to*.

Paragraphs 35–36, *disagreed to*.

Paragraph 37, *postponed*.

Paragraph 38, *disagreed to*.

Paragraph 39, amended.—Question put, "That this paragraph, as amended, stand part of the Report."—The Committee divided:

Ayes, 10.	Noes, 3.
Mr. Bolton.	Mr. Carbutt.
Sir George Campbell.	Mr. Dalrymple.
Mr. Kynaston Cross.	Mr. William Fowler.
Mr. Gorst.	
Lord George Hamilton.	
Mr. Pernhard Samuelson.	
Mr. Stacy.	
Mr. William Henry Smith.	
Mr. Edward Stanhope.	
Mr. Wodehouse.	

Paragraph 40, *disagreed to*.

Postponed paragraph 37, *disagreed to*.

Amendment proposed, That the *following* new paragraph be inserted in the *proposed* Report:—"Your Committee have endeavoured to arrive at some definite conclusion respecting the amount of money which may, on an average of years, and with safety to the finances, be annually borrowed for the construction of public works. But, from the limited field of taxation, and the fluctuations to which the finances of India are liable, they believe it to be impossible for them to form any precise forecast on which to base a definite recommendation on this subject. Whilst expressing an opinion that the present limit of borrowing, fixed by the Committee of 1878–79 at 2,500,000 *l.*, might safely be enlarged, they think that the full responsibility of deciding upon the amounts to be borrowed from year to year should rest with the Secretary of State in Council."—(*Mr. Kynaston Cross.*)—Question, That this paragraph be inserted in the *proposed* Report.—put, and *agreed to*.

Amendment proposed, That the following new paragraph be inserted in the proposed Report:—"The attention of your Committee has been called to the mischief occasioned by constant fluctuations of policy in the construction of railways, and are therefore of opinion that a careful forecast having been made of future requirements for public works over a considerable term of years, such a scale of expenditure upon railways should be adopted as can reasonably be maintained."—(*Mr. Edward Stanhope.*)—Question, That this paragraph be inserted in the proposed Report.—put, and *agreed to*.

Amendment proposed, That the *following* new paragraph be inserted in the proposed Report:—"Your Committee are impressed with the belief that most of the important through and trunk lines having been already made, there is great need of minor and branch local lines in the most productive and populous parts of the country, and that in this connection great advantage would result from the practical application of that principle of provincial and local responsibility on which the Famine Commission so much dwell, and which will be the best security that the lines undertaken are well considered and likely to pay. Your Committee are not in a position to suggest the precise rules by which this object may be effected, but they are strongly of opinion that it ought not to be lost sight of."—(*Sir George Campbell.*)—Question, That this paragraph be inserted in the proposed Report.—put, and *negatived*.

Amendment proposed, That the following new paragraph be inserted in the proposed Report:—"In case it is not found possible to obtain capitalists to construct those lines which the Government find it difficult to undertake, with adequate security for cheapness of transit, it might be possible to obtain most of the advantages attributed to companies by selecting the best of the class of men who are usually directors of Indian railways to manage railway trusts, constituted on the same principle as road trusts in this country, or harbour trusts in India. The official directors of these trust lines might to some extent be remunerated by a commission on earnings so as to secure that incentive to progress and economy which is said to influence the directors of well-managed companies; while at the same time the Government would not lose the ultimate control of the lines, and the rates would be regulated so as to adjust the balance fairly between the interests of the revenue and those of the customers of the line, cheapness and quantity being preferred to monopoly rates."—(*Sir George Campbell.*)—Question, That the paragraph be there inserted,—put, and *negatived*.

Amendment proposed, That the following new paragraph be inserted in the proposed Report:—"In making the recommendations contained in this Report, your Committee wish

wish most emphatically to endorse the declaration of the Government of India, made by Major Conway-Gordon and Mr. Westland, that the proposed extension of railways must not under any circumstances involve additional taxation"—(*Mr. Kynaston Cross.*)—Amendment proposed to the proposed Amendment, to leave out in line 2 the word "must," in order to insert the word "shall"—(*Mr. Bernhard Samuelson.*)—Question put, That the word "must" stand part of the Amendment.—The Committee divided:

Ayes, 3.	Noes, 8.
Mr. Kynaston Cross.	Mr. Bolton.
Mr. Slagg.	Sir George Campbell.
Mr. Edward Stanhope.	Mr. Carbutt.
	Mr. Dalrymple.
	Mr. William Fowler.
	Mr. Bernhard Samuelson.
	Mr. William Henry Smith.
	Mr. Wodehouse.

Question put, That the word "shall" be there inserted.—The Committee divided:

Ayes, 5.	Noes, 6.
Mr. Kynaston Cross.	Mr. Bolton.
Mr. Bernhard Samuelson.	Sir George Campbell.
Mr. Slagg.	Mr. Carbutt.
Mr. William Henry Smith.	Mr. Dalrymple.
Mr. Edward Stanhope.	Mr. William Fowler.
	Mr. Wodehouse.

An Amendment made.—Question, That this paragraph, as amended, be inserted in the proposed Report,—put, and *agreed to.*

Ordered, That this Report, as amended, be the Report of the Committee to the House.

Ordered, To Report; together with the Minutes of Evidence, and an Appendix.

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Friday, 21*st March* 1884.

MEMBERS PRESENT:

Mr. Arthur Balfour.	Lord George Hamilton.
Mr. Baxter.	Mr. Jackson.
Mr. Bolton.	Mr. Justin McCarthy.
Mr. Brodrick.	Mr. Onslow.
Sir George Campbell.	Mr. Bernhard Samuelson.
Mr. Carbutt.	Mr. Slagg.
Mr. J. Kynaston Cross.	Mr. William Henry Smith.
Mr. Dalrymple.	Mr. Edward Stanhope.
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The RIGHT HONOURABLE WILLIAM E. BAXTER, IN THE CHAIR.

General STRACHEY, R.E., C.S.I., F.R.S., called in; and Examined.

Chairman.

1. YOU have spent most of your life in India, and you are now a Member of the Indian Council?—Yes.

2. And you were President of the Famine Commission?—I was. My connection with the General Public Works Administration, I may say, began in 1858, and it has been continued from that time to the present either in India or at the India Office. I left active Government service in India in 1870, but I returned to India in 1877; I was there the whole of 1878 and a part of 1879. Therefore, my information is not altogether fossilized.

3. The section in the Report of the Famine Commissioners with regard to railways, I take to express the general views of yourself as well as the other members of the Commission which reported in 1880?—It is so. If you refer to that section of the Report, you will see that the earlier part of it gives a general sketch of what the Commission thought would be the sort of provision of railways which would be able to meet any demand for the distribution of food in a famine time. It is arranged on a somewhat theoretical basis, in order to arrive at something like an estimate of the power of any given system of railways to distribute food all over India. If any member of the Committee has read it he will see

Chairman—continued.

that it is merely a theoretical outline. It shows that, supposing railways were distributed over the country 50 miles apart, it would require something like 20,000 miles of railway to give that degree of provision of railway lines to India. Lines of railway 50 miles apart would only require the transport of food about 25 miles in either direction, and it is estimated that a very few trains a day would keep the population of the country supplied with food.

4. The general and the specific recommendations contained in that Report refer to the circumstances of the country in 1880, but have they not considerably changed since?—No doubt some change has taken place since. The actual construction of railways, of course, has advanced in the interval, and considerably advanced, but also following the season of famine which had pressed upon the country at the time that the Report was written, there have been a series of extraordinarily favourable seasons, and otherwise the finances of India are in a much stronger condition than they were when the Report was written.

5. So that in your opinion the Committee may look upon the question rather from a different point of view from that entertained four years ago?—Yes, somewhat; that is so.

6. We all, I suppose, are aware that there are

 restrictions

Chairman—continued.

restrictions upon the Government of India in spending money which were laid down by the Committee in 1879, and have, I believe, been strictly acted upon since then; what is your opinion with regard to that limitation?—I would say, in general explanation of the restrictions which are more or less referred to in paragraph 11 of that chapter of the Report, that from the time that the Government of India began to borrow money for the purpose of railway enterprise in India (which goes back to about 1870, to the time of Lord Lawrence, or just after he left the Governor Generalship), the India Office has acted (I do not say this at all as intending to throw blame on the India Office) as a restraining power. Its influence has been in the direction of moderating the disposition to expend. It is very natural that it should be so. The Government of India saw more of what the emergency and the inducement to make railways was. The Secretary of State, on the other hand, saw the risks that arose from excessive expenditure. This repressive action continued, becoming gradually, from my point of view, more severe, as I daresay the disposition of the Government of India to spend more money became more active, until 1879. In 1879 a Committee of the last Parliament sat upon the subject, and they, no doubt, under the influences of the period in which the Committee sat, emphasised the necessity of putting restrictions upon the expenditure. The Secretary of State accepted these restrictions, and applied them in what I should call even a harsher way than the Committee had indicated or intended, and the final culmination of this policy of restriction is indicated by a Despatch from Lord Hartington, in January 1881, which emphasises the former orders, and adds additional restrictions and additional limitations to the power of spending money on these objects.

7. Then, in your opinion, is it desirable now to increase the amount to be spent yearly, and to relax the rules as to the application of funds?—It is. I decidedly think so. I think that what is rather wanted is to relax restrictions than to lay down, or to attempt to lay down, any definite rule according to which work can be done. It is rather that the negative should be taken off, and that the discussion of how far railway construction in India should go, should be left more to be fought out between the Secretary of State and the Government of India. I think myself that everything that was done in the shape of imposing restrictions by that Despatch of Lord Hartington's was mischievous. In that Despatch arbitrary distinctions were introduced between what were called, and have since been called, productive lines of railway and protective lines. Lines that might be estimated to give a surplus of net income in excess of the interest on the capital necessary to be laid out upon them were called productive, and those that could not be expected to provide that sort of surplus within a few years (I think it was four or five years), were called protective. To the one the application of borrowed money was authorised, to the other it was prohibited, and certainly the first result of this was to prohibit the construction of exactly those lines of railway which, so far as famine protection goes, were the most important, while the others, which in the famine point of view were less important, were authorised to be made. That is one of the points on which the Government of India has strongly remonstrated. I should also add that this distinction between the so-called productive and the so-called protective railways is based simply upon estimates of cost and receipts.

Chairman—continued.

8. You do not think that it is a tenable distinction?—It is not; it is not tenable in a certain sense at all. Of course there is a distinction between a railway that will pay and that will not pay interest on capital; but before a railway is made, when it is merely in a condition of *estimate*, a distinction based wholly on an estimate of cost and an *estimate of income* is of very little value, and there is the greatest danger (a danger which so far as I am able to say has been shown really to have arisen in practice) of its producing a tendency to reduce the estimate of those lines that it is desired to make, and to exaggerate their probable income.

9. Then you have something to say to the Committee, I understand, with regard to the principles which in your opinion ought to guide the Government in borrowing money for Public Works. Will you kindly make a statement on that subject?—First of all, I should say that the manner in which the Government has, up to the present time, directly forwarded railway construction in India, has been either by State construction, borrowing the money itself, and spending it itself, through its own officers, or giving a guarantee of interest to companies to carry out railways. Of course, as regards the immediate financial effect, so long as the interest on capital has to be paid, it does not very much matter whether it is paid upon a guaranteed capital, or paid upon debt; that is, so far as regards the immediate burden thrown upon the revenues of India, but in other respects the difference is very considerable. I will first of all say, as regards the direct borrowing of money by the Government, that there is only a certain limited amount which capitalists will be prepared to lend to the Government in a given time, unless it will increase the rate of interest offered.

10. Do you mean capitalists in England or in India, or both?—I mean altogether. There is a certain sum of money which people who have spare cash are prepared to invest in that sort of way, but it is obviously limited; if you attempt to press for more than a certain amount in the form of debt you will be obliged to give a higher rate of interest for it. That there is no question about.

11. But that sum may vary considerably at different times, may it not?—Quite so.

12. For instance, there is a much larger sum now possibly available for that purpose than there was in 1879?—Quite so, and that is indicated by the fact that the debt has been gradually expanding without any very serious alteration of the rate of interest up to the present time. It seems now, from causes into which I need not enter, that there is a tendency in the opposite direction. That is the first point. Then the second thing which

Chairman—continued.

which ought to be considered, in my judgment, is this, that under no circumstances can it be safe to allow the net charge of interest upon capital laid out upon railways by the State, after setting off the receipts from the working of the lines, to exceed whatever amount it may be considered possible to apply from the revenues year by year to stimulate the extension of railways. That I may add was the old principle which was adopted in Lord Lawrence's time, and in Lord Mayo's time, as a guide in dealing with expenditure of that sort. It was stated to be an objectionable principle by the House of Commons' Committee in 1879. I respectfully entirely disagree with them. I think that is the proper principle to go upon. When the policy of borrowing money for public works was initiated, the charge on the revenues of India on account of the guaranteed railways was very large. The net charge amounted to over 2,000,000 *l.* or 3,000,000 *l.* a year at that time. It was calculated by Lord Mayo's Government that if we went on, not too fast, borrowing money and spending it in fresh railways, and allowed for the gradual growth of the income of the existing lines, the net income would gradually overtake the charge, and that we should be able eventually not only not to increase this burden of two or three millions, but at last to arrive at a time when we should have a surplus; and that is exactly what has happened. Those previsions of Lord Lawrence and Lord Mayo have been thoroughly carried out; there has been a gradual and steady improvement in the income of the railways, and a gradual and steady diminution of the charge, until during the last three or four years there has been a net surplus, and in the present year I think the surplus is about a million sterling. That is the net surplus after paying the interest not only upon the capital which is really producing income, but the whole of the borrowed capital of every description that has been spent on the railways, whether those railways are opened or not, and whether those railways were made in expectation of profit or not, and including all those lines which were made for political or military objects in the Punjaub at very considerable expense.

13. Are you including the back interest?—No, I am talking only of the income and charge for the year. There has been a very large accumulated amount of interest which, however, has been charged off in the past against the revenues of the year. I would repeat then that the principle according to which the addition to the debt on account of public works should take place is this, that you should never increase your capital debt so that the net charge upon it, after setting off the income, should exceed whatever you may consider a reasonable sum to apply from the revenues to stimulate the provision of public works. I would go on to say that *à fortiori* it follows, that so long as there is a net receipt after paying all charges, which as I explained is the case now, the financial position is a perfectly safe one; so long as we are getting an absolute net income of a million sterling from our railways, after paying every description of charge, we are perfectly safe in going on at all events at the rate at which we have been going on until the time ar-

Chairman—continued.

rives, if it does ever arrive, when we find the charges exceed your net income.

14. You were going on to state that there had been a change after the Report of the House of Commons' Committee of 1879?—Quite so. The Committee of 1879 laid down that the proper principle to go upon at that time was to fix an arbitrary limit, to say that the sum that shall be spent by the Government year by year on railways from borrowed money shall not exceed two and a-half millions.

15. On public works?—Yes, on public works.

16. You have stated two principles which should be laid down in regard to borrowing money; are there any more?—I think I have covered the others.

17. Then, subject to those conditions, do you think there is any objection to borrowing money for railways required for military or protective purposes?—No, it seems to me that that is the rational principle to go upon; you have a certain available revenue which you should not go beyond.

18. Do you mean a surplus?—Not precisely. You have a certain available revenue to meet the charges of the country and the requirements of the country. So long as you do not press unduly upon that, I think that it is perfectly reasonable to apply borrowed money to railways that are required for any purpose. Of course the question will always arise whether the object for which the railway has to be made, if it is likely to bring a charge upon the State, is a desirable one. Then you have to set off the disadvantage, so to speak, of charging the revenues permanently, or for a considerable time, for this object. If, for instance, it is held to be desirable to have a railway made to some place for an important military object, then though we know it is extremely improbable that the line will be productive in the ordinary sense, and almost certain that the ordinary traffic will be comparatively small; it seems to me that precisely for the same reason that you keep up an army, it is a reasonable thing to apply the resources of the State to make that railway, and if the revenues do not suffice to borrow for its construction. That is so with regard to a railway that I understand is virtually in progress, for that is likely to be extended to Quetta. It is part of your military defence.

19. We understand that you have very strong views in regard to guarantees, and I think it would be convenient at this point if you would state them to the Committee?—I have a very decided objection to giving a guarantee, and particularly to giving guarantees in the form in which they have been given up to the present time. I have had considerable experience in watching the manner in which the operations of the guaranteed companies have been carried out, and I say, without any hesitation, that the system of giving an absolute guarantee on the capital has been productive of a very great waste of money. Not only has it been productive of waste of money, but it also has created a very valuable property at the expense of the taxpayers of India, which has passed into the hands of third parties without their having incurred,

in

Chairman—continued.

in any sort of way, any risk. Theirs was not an enterprise. They not only had a securely guaranteed rate of interest settled virtually for an indefinite period of time, but it was a high rate of interest, and at the same time they got a virtual monopoly. What has been the result of it? I will give you an instance in the case of the Eastern Bengal Railway. The Eastern Bengal Railway is very profitable. It will be bought by us in July at the rate of about 150 *l.* for 100 *l.* of stock, and possibly a little more. We shall have to pay for every 100 *l.* originally subscribed 150*l.*, or something of that sort. And how has that additional value of 50 *l.* been created, which will be given in addition to the original 100 *l.* when we buy the railway? It has been partly by the guarantee of the State, which means payment from the taxes of India, and in the next place through the action of the monopoly. The net income of this line recently was, in one half year, at the rate of 14 per cent. per annum on their capital. The profits have been very high. The stock of the railway would not have risen in the market to 150 *l.* if they had not been very considerable. I say that, according to my judgment, this is an entirely unjustifiable application of the resources of India for the benefit of private persons.

20. Do we understand that you are in favour of all the railways in India being made by the State?—No, I would not go so far as that.

21. Where would you draw a line?—If the promoters of the private enterprise will undertake railways, then by all means let them have the opportunity of doing it. If people will accept the risk of putting their money into railways in India, let them do it, and give them every reasonable facility.

22. But without guarantee?—Without guarantee. If any State aid is given, then whatever the profits are from the construction of the railway, the State ought to share in them, and share in them largely. If it is really a State risk, although it is covered by the name of a company, then the State ought to profit by it. This will only be taking a return on what the Government or State gives. Under the system of what you may call sham private enterprise, the companies get a monopoly, and at the end of a series of years, if they are called upon to sell their property, which has attained an artificial value by reason of the monopoly that they get, or any assistance that they get from the State, it is unreasonable that they shall receive a very large premium on their investment, and I hold that the State, under those circumstances, ought to be able to acquire the property for India at a far more reasonable rate; that is to say, a rate really not exceeding the original amount of capital that was put into the concern. I would also say that I have this great objection to the giving of a guarantee on railway capital, that it is perfectly certain that if the Government again begins to give a guarantee of interest on railway capital, then you will never get a sixpence of unguaranteed capital.

23. Has that turned out so in practice?—It has turned out so in practice, and, with one exception, we have never had any unguaranteed or unaided capital. There was one company

Chairman—continued.

started without State aid, beyond the grant of land, but its shares have been at a discount ever since. Since this failure no other offer has been made, and so far as I can see, no one expects there will be any offer made; at all events there is no trace of it.

24. Do you think that there is a danger of railways being too rapidly constructed in India?—I think that the proposals that have been made by various parties in India, which have been backed up by people in this country, are very excessive, and that those proposals have been put forward by persons who in reality are not interested in the taxation of the country. I do not, however, say that anybody can be blamed for making proposals which shall benefit himself or the class to which he belongs; it is natural that they should be made.

25. You mean the proposals of the Chamber of Commerce, of Bombay, do you not?—Yes, they are most excessive. I forget what it is the Chamber of Commerce, Bombay, proposes, but it is 10,000,000 *l.* or 20,000,000 *l.* a year that they want. Who is to pay the interest upon it? Certainly not the gentlemen who put forward that proposal; they would not bear the weight of it; not a halfpenny of it would come upon their shoulders.

26. Then you think the last proposals made by the Government of India excessive, likewise?—I think they are. I would, however, draw a distinction between the proposals and the grounds upon which they have been put forward. The proposals of the Government of India were very strongly pressed upon the Secretary of State as being nothing more than a carrying out of the objects which the Famine Commission had desired to see carried out. Now I confess that I think the Government of India have, in the circumstances that I have referred to before, and in order to avoid the operation of the restrictions put upon the expenditure, sought to persuade the Secretary of State that a great many railways were in reality necessary to give protection against famine, which cannot, in my humble judgment, be at all recognised as being required for that purpose. There is no railway, or hardly any railway that can be made, or that is at all likely to be proceeded with, that would not be useful, but that is a totally different thing to saying that it is essential for the safety of the country. My own impression is, that within the financial limits which the Government from time to time finds to be possible without pressing unduly on the resources of the country, you should allow it to go on making railways as fast as it can. I think it is altogether a delusion to say that the progress of railways has been slow in India, considering all things. I have a return here which shows what was the actual length of railway that was under construction on the 31st December last, and it is 2,000 miles. People, however, may have different ideas as to what is reasonable progress and what is not reasonable progress.

27. Then giving evidence as the Chairman of the Famine Commissioners, you think that the scheme proposed in January of last year by the Government of India is in excess of the railway requirements of the country?—I think so, certainly.

Chairman—continued.

tainly. I think that if anybody will read this chapter of the Famine Commission Report, it will be apparent to them on the face of it, that the Famine Commission never contemplated anything on such a magnificent scale as the Government of India propose. There is in paragraph 17 of that chapter (page 172, Part 2 of the Report) a statement of the lines that we at that time thought were specially desirable: I may say also that as far as I am able to judge, the whole tenor of the Report, and the manner in which it is expressed, does not press at all for any such development of railways as the Government of India have proposed for the purposes of trade; I am very far from saying that the extension of railways on a considerable scale is not an object to be aimed at; very far from it.

28. You think they are going too fast?—I think that is the danger; and, as I said earlier in the day, it seems to me that it will be dangerous and objectionable for any external authority to press the Government of India to undertake any specific quantity of work. That is just as objectionable as to say you shall not go beyond a certain point. I think it is very desirable that principles should be discussed, and that the general bearing of all these important questions, which are mainly financial, should be thoroughly discussed and thoroughly considered, but beyond that, I think the more that is left to the responsibility of the Secretary of State and the Government of India the better it will be.

29. But then the Secretary of State and the Government of India differ; that is precisely the difficulty in which we find ourselves placed?—I think all that can be said on this point is that it is in the nature of things, human authorities constantly differ. In the case of you gentlemen in the House of Commons, there are two sides; one party sits on one side the House, and the other on the other; but somehow or other you come to a result ultimately, and so ultimately the Government of India and the Secretary of State will come to a result. If I may be allowed to say so (I am not going to divulge anything, it is what is commonly called an open secret), the Secretary of State last year would have been prepared to make a considerable concession to the Government of India in the direction in which it desired to move had it not been for what I must be permitted to say was the unfortunate vote of the House of Commons in supporting the resolutions of Mr. Stanhope, to the effect that expenditure in India should be reduced; I say, if it had not been for that, this Committee would probably not have been sitting; I think also that the Government of India would have been pacified, and that the Secretary of State and the Authorities in India would have come to a happy conclusion and a settlement.

30. Just let me call your attention to two sentences at page 30 of the Papers that have been laid before us. "In view, however, of the recommendations of the Famine Commission of the importance of railways not only to avert or mitigate the effects of famines, but also to develop the agricultural resources of the country and of the improvement which had taken place since 1861 in the financial condition of India, Lord Kimberley thought the time had come for a renewed inquiry on the part of Parliament into the policy to be pursued for the extension of railway communication in India; and he accordingly announced the intention of Her Majesty's Government to propose the appointment of a Select Committee for the purpose, with especial reference to the recommendations of the Famine Commission with respect to protective lines." Now, as I understand it, the Secretary of State for India has pretty much referred that very question to this Committee for their opinion, whereas you now say it ought to be fought out between the Secretary of State and the Government of India?—If you will allow me to say so; what I said was that the question has been referred to this Committee under the unfortunate circumstance that arose last year, and I think the reference would not have been made had it not been for that, and that an arrangement would have been come to which would have been satisfactory to the Government of India.

31. I only got this précis of your evidence after I came into the room this morning. I have not had time to read it, much less to study it, and there may be some other points which you would like to state in your evidence in chief to the Committee?—I think after what I have said regarding the objection that I have to the guarantee of capital for railway construction I should add that it is not to be understood that I object to railways being carried out by companies. That is a different point entirely. There is, I think, no very material difference between the conditions under which a railway company would carry out work and those under which the State would carry out work, inasmuch as they both necessarily make use of paid agency for their operations. As regards the State railways in India, I do not think anything can be shown against them, either as to the first cost of the lines, or the cost of working. So far as my knowledge goes, I do not think anything is to be said against the State management either of the construction or the working; in some respects it has been better than that of the private companies, but there are certainly advantages in working through the agency of a company, and that plan of working I have always supported. Those advantages are mainly these, that for the Government to undertake the working of railways in a country like India involves the most tremendous operation; it is an enormous business. That map on the wall does not at all convey to the mind of anybody who may look at it what an enormous country India is. I was looking at the globe this morning in my room, and at the distance from one end of India to the other. The distance from Calcutta to Peshawur, or Calcutta to Travancore, is not very greatly different from the distance between Madrid and St. Petersburg. At all events, you may take as an illustration of the size of India, that it exceeds a triangle of which the three apices are Paris, St. Petersburg, and Rome. The idea of any centralised authority attempting to manage the railway affairs of a country like that seems to me little short of absurd.

32. It has been suggested in various publications that there ought to be a Railway Com-

Chairman—continued.

mission composed of permanent officials with a mercantile element added to manage the railroads of India?—That I am entirely opposed to. It seems to me that the great principle we ought to adopt, not only as regards railways, but every part of the administration of India, is to decentralize. I am quite satisfied that nothing can be more erroneous than attempting to pile up the responsibility of working railways, or constructing them on the central government. They ought to be provincialised. The experience we have had in devolving the responsibility of administration on the provincial governments is such as perfectly to justify the extension of it to railways. No doubt it would require a little arrangement to make the change from the existing system, and it would require a little care and a little thought to adjust the financial bearings of the thing, and to bring home the financial responsibility to the provincial governments, but it is all within the limits of possibility. That is one of the things mentioned in the Report of the Famine Commission.

33. In paragraphs 13 and 15 of the Report of the Famine Commission in regard to railroads, a great deal was said about local provincial responsibility. I think the Committee would like you to explain precisely what change of system you propose. Would you devolve the management of railroads upon the governments of the respective presidencies?—Quite so.

34. The paragraphs to which I refer are at page 171: "Each province should be required to draw out a scheme for the application of the funds allotted to it, extending over a series of some years, and after making provision for the bringing into harmony the schemes for adjacent provinces, the several governments should be left to carry out the lines in the order and on the general plan agreed upon, the principle of provincial financial responsibility being as far as practicable applied in the manner already explained in the earlier part of our Report." Then paragraph 15: "It is of the greatest moment that the sense of local financial responsibility shall at the outset be brought into operation, both in respect to the careful consideration of the character of the works, and to the frugal application of the funds essential for carrying them out." I understand that you would devolve this responsibility upon the governments of the separate presidencies?—Certainly I would. You understand that I do not say it could be done suddenly, because none of these changes can be made suddenly, but it is the principle up to which we should work. We should strive to do it as far as we can. Moreover, no absolute rule can be prescribed in such a matter. I will give an instance. Take a railway like the East Indian Railway, which runs through three provinces. You cannot break it up; therefore some single authority must manage that.

35. You would begin with the new lines?—The subject is a great deal too complicated to admit of my specifying how the thing is to be done.

36. Then you think that this Committee should recommend that all that the Government of India should do would be to lay down the principle?—Quite so.

37. Leaving it to the authorities in India to

Chairman—continued.

show how it should be carried out in practice?—Quite so, to strive to carry it out; I can say nothing more.

38. There is another passage in the Report of the Famine Commission to which I should like to call your attention, because I do not quite understand it. In the middle of paragraph 11 I find these words: "We may remark that there would be manifest advantages in giving free scope to the extension of railways by private enterprise, if it were possible; and though the original form of guarantee has been condemned, it may not be impossible to find some substitute which shall be free from its defects, and may secure the investment of capital in these undertakings without involving the Government in financial or other liabilities of an objectionable nature." Will you kindly inform the Committee what was in your mind when those words were penned; what is the substitute?—To begin with I may say that, although I did as a matter of fact write the greater part of that chapter, I was not alone in the Commission, and it was necessary therefore that the language of the Report should be more or less elastic. There is nothing in the passage that has been read to which I absolutely object, but I am not prepared to go back from what I have just been saying about the objections to the old form of guarantee; there are, however, schemes, I think, under which companies can be employed, and capitalists induced to undertake railway construction and working in India without the objection to the old form of guarantee, and in illustration of that I would refer to the system which has been carried out in the case of the South Mahratta Lines. It is a little complicated.

39. Will you explain what that system is, if you please?—I think, perhaps, if I were to read an extract from this document, it would put it better than I can say it. It is at the bottom of page 7 of these printed papers, "The Southern Mahratta Railway Company on the 1st June 1882 entered into a contract with the Secretary of State in Council for the construction and working of a line to Bellary, from the terminus of the West of India Portuguese Railway on the British frontier, with various branches, the whole system as sanctioned comprising a length of 435 miles. The Government are owners of the property. The company have to raise the capital, estimated at 3,000,000*l.*, and deposit it with the Government, who pay, in India, a sum which at the then current rate of exchange will produce, in London, interest thereon at 3½ per cent." We give them a sufficient number of rupees to pay them 3½ per cent. sterling, in London, and they made the remittance themselves.

Mr. *W. H. Smith.*

40. "The then current rate of exchange," I take it, is used as applying to the capital sum of 3,000,000*l.*; it is the rate of exchange then prevailing, is it not?—No, it means from time to time.

41. It is a guarantee of 3½ per cent.?—It is a guarantee of 3½ per cent. with a difference. You may call it a guarantee, but, in reality, it is rather a peculiar way of borrowing. Some people have said

Mr. *W. H. Smith*—continued.

said that it was a way of evading the recommendations of the Committee of 1879. The Company receive their interest in rupees in India, and it is their responsibility to get them home. Then the Paper goes on, "The Government advance the funds needed for the construction and working of the line, twelve rupees being taken as equivalent to one pound in respect of the capital subscribed" Then, "The company are also to be remunerated for working by receiving one-fourth of the net earnings, and the Government agreed that up to the 1st of June 1887" (it has been extended now to 1889) "the amount received on this account should be made up to a half per cent. more, so that for five years the company had a guarantee of 4 per cent. In the event of the company receiving from the Government, and expending on capital account, more than the sum paid by the company the undertaking was to be debited with interest at 4½ per cent. on the excess advanced by the Government, but the company were at liberty to make terms with the Government for raising capital to meet this excess, and would receive 3 per cent. thereon (unless otherwise agreed)."

Mr. *J. K. Cross.*

42. To make it quite clear, they would receive sufficient rupees in India to give them 4 per cent. on the subscribed capital in England?—Yes.

Mr. *Bolton.*

43. Then that changes the other, does it not?—The signification of that is this, that for four or five years the line will be under construction or in its infancy. After the five years it is assumed that the share which the company will get of the net receipts will probably at least amount to one-half per cent., and of this they have to take their chance, but in reality at the end of five years it is hardly possible that they would not be getting 4 per cent.

44. Only the guarantee for the 4 per cent. and for the 3½ per cent. are different, are they not?—They are.

Mr. *William Fowler.*

45. Is the guarantee of 3½ per cent. indefinite in duration?—As I explained, it is only a guarantee in a certain sense. These gentlemen advanced 3,000,000 *l.* sterling, on which the Government pays 3½ per cent. interest. The railway belongs to the State; it is not theirs; the company is formed to work the railway; they lend the Government the money, and the Government pays them 3½ per cent. upon the capital.

46. How do you distinguish that from a guarantee?—In this way, that the property belongs to the Government, and that the Government has complete control over it.

47. What is the practical result; I suppose the railway never pays?—Then the liability is thrown upon the Government.

48. Then it is a loan, is it not?—Yes; they will be entitled to get their money back again if they choose to ask for it.

49. At any time?—At any time.

Mr. *William Fowler*—continued.

50. And in the meantime how much interest is paid?—Three-and-a-half per cent.

51. Not 4 per cent.?—Only for the first four years.

52. Then they may ask for the money back?—If not satisfied they may ask for their money back; it is really a loan.

Chairman.

53. And that you approve of?—That, as far as I am able to judge, is a way of obtaining the advantage of the agency of a company to make railways, leaving a more reasonable share of the profits to the Government, and without, in practice, throwing a greater risk upon them.

54. You have mentioned this to the Committee as an illustration of one of the plans referred to in that paragraph?—Yes.

Mr. *W. H. Smith.*

55. I think you have stated, generally, your preference for private enterprise, as compared with Government enterprise, in the construction and management of railways?—I think that there is an advantage in having the agency of a company. Certain views were expressed by Lord Salisbury in a Despatch that was written to the Government of India, when the negociations were going on for the purchase of the East Indian Railway. I assisted in writing that Despatch, and it pretty well conveys the opinion that I hold, and I think that those are the opinions which are generally held at the India Office; that is to say, that it is desirable to entrust the construction and working of railways to companies, in preference to a State agency. I may mention among the difficulties that arise in connection with huge establishments, such as those employed on railways, is that they necessarily involve questions of pension, questions of promotion, and a great class of personal questions. It is much more difficult for a Government to dispose of questions of that sort, than for a body like a private company.

56. We begin with questions of construction, because you make a railway before you enter upon questions of that kind?—Quite so.

57. Is it your view that the construction of a railway can be better carried out, and more economically carried out in its results, by a company, than by the State in India?—I think that is to be doubted.

58. You would not lay it down as an absolute fact?—I would not lay it down as an absolute fact; I think a great deal depends upon the conditions under which the capital is supplied. If, as under the old guarantee system, there is an absolute advantage to the company in spending more money, more money they will spend. If it is less money; if they do not benefit by an increase of capital, and an increase of the value of the increased capital, then there is no inducement to spend more money; on the contrary there is an inducement to spend little. If, as was contemplated, under what I call the South Mahratta system, what the company has to look to is a share of the ultimate profits, then the less

Mr. *W. H. Smith*—continued.

money that is spent upon the railway the better for them. They get nothing out of the capital except the fixed rate of interest, which is a small rate of interest.

59. It comes to this, then, that the bargain between the State and the company should be well considered before it is entered into?—Certainly.

60. And it should be plainly to the interests of the company to conduct its affairs in the interests of the State; they should be partners, you think?—Quite, in the interests of economy.

61. That is the interest of the State, is it not?—It is, quite.

62. Take construction in times of difficulty; there have been times when the Indian Government has had to make an expenditure upon public works in such times; is not that so?—*Yes.*

63. Frequently, I suppose?—No, not frequently.

64. Well, under such circumstances they have delayed the construction of public works, have they not?—*They have done so.*

65. Frequently?—Well, they have done it; but as to whether they are compelled to do it or not is another affair.

66. I do not enter into the motives which influence men, but as a matter of fact, from time to time, public works in course of construction have been very considerably delayed in India, have they not?—I am not prepared to say that. As a general rule I should say no, I should think not.

67. Not as a general rule, but it has been the case?—*Per contra,* I may tell you that on one occasion the Secretary of State had to advance money to the railway companies.

68. Yes, I can quite believe that?—Therefore it cuts both ways.

69. You would say, I suppose; I should like to know whether it is a fact or not; that delay or suspension of works is a source of extravagance?—Yes, it is surely. It is a cause of waste. If you will allow me to say so, I attribute this sort of backing and filling in the matter of Public Works Expenditure, the stopping of expenditure and going on with it, and the stopping of it again, and so on, to the uncertainties of the policy, the attempt on the one side to over-restrain, and on the other side to over-stimulate. I think that the one is just as bad as the other. The over-restriction is certain to be followed by a reaction, which leads to over-production. Human beings are all the same, whether members of Governments, or directors of railways, or anything else.

70. Is not that almost one of the inevitable results of Parliamentary Government?—Yes; it is human nature. All I say is, avoid it as far as you can; I do not expect that it will be avoided entirely.

71. But the State carries out these works itself, and not by contract, does it not, largely?—Yes; but I think if there is one thing that has become more and more obvious, at all events, as regards railway construction in India, it is that construction by contract is being entirely given up as unsatisfactory.

72. So that it is in the power of the State to

Mr. *W. H. Smith*—continued.

delay or suspend a great work at will, almost?—It is.

73. Then, if the State enters into great enterprises in the construction of railways or canals, it is more liable, is it not, to the influence of these frequent changes of feeling and opinion, this backing and filling of which you have spoken, than a company to which it had devolved the duty, upon well-understood terms, and carefully considered terms, and whose interest it would be at once to carry out the works economically, and as rapidly as possible?—That is perfectly true, and if I may be allowed to say so, that is one of the reasons that induced me personally to think the South Mahratta plan a very good one, because it in a measure tied the hands of the Government, and it led to the construction of those lines, which, on any other plan, would not have been made; they would not even have been commenced to this moment.

74. I understand you to lead up to this, that if railways are to be made in India, and a contract between a company and the State can be framed on terms and conditions which will give the company a strong interest in the economical construction of the line, and the State a fair share of the profits to be obtained, you advocate the making of those lines by the company rather than by the State?—*Yes; as a general principle,* I should say, certainly.

75. We are looking out for general principles here?—I would quite agree to that.

76. In the particular case of the South Mahratta Railway, which you have spoken of, are you aware whether the company is a successful financial concern or not; I do not really know myself, and therefore I ask you?—I will answer you quite candidly. We a little overdid it; we were a little too hard.

77. You were too hard, you think?—We were too hard, it is quite true. The consequence is, that the shares are only just hanging at par. I was looking at the paper this morning, and I see that the 20*l.* share is now quoted at 20*l.* It has been hanging a little below that, but it ought in reality to be higher, considering that the Secretary of State's 3½ per cents. are at 102, or something of that sort, and that the security is absolutely identical.

Mr. *Bolton.*

78. No, you pay in rupees?—No, I beg your pardon, the security is identical, and there is really no reason why their shares should not be at a premium. They have got the half per cent. also in addition for the five years, and after that they have got a share of the profit.

Mr. *J. K. Cross.*

79. With interest at 4 per cent.?—At 4 per cent.; they cannot get less than 4 per cent.

Mr. *W. H. Smith.*

80. The fact remains that the bargain was a little too hard, as you say?—Under the circumstances it was a little too hard, and I think that it turned out a little badly, partly from some unfortunate expressions used regarding it in Parliament

Mr. *W. H. Smith*—continued.

liament by the Secretary of State; he rather decried the value of the lines, he depreciated them.

81. I think, in your evidence, you suggested that the State should purchase the lines back again at the original capital price; that is to say, if the East Indian Railway had only spent (for the sake of argument) 20,000,000 *l.*, the East Indian Railway Company should only get 20,000,000 *l.* for its purchase?—Quite so.

82. Have you considered the conditions under which it would be possible to carry out an arrangement of that kind, and yet obtain the capital which you require, taking into consideration the difficulty which sometimes occurs in obtaining capital, as illustrated by the very case of the Southern Mahratta Railway, which you have now disclosed?—If we had given a little better terms; for instance, if we had said that we would give the half per cent. in addition to the 3½ per cent. for 10 years instead of five years, I have not the least doubt in the world that the stock would have gone to a premium, and that we should have got the money without any difficulty. An extension of the original lines has been desired by the Government and by the company. The company in order to carry out the extension will require 2,000,000 *l.* more of capital, and they came to the Government and said, "If you will give us for 10 years this additional half per cent., we shall be able to raise the money without any difficulty." However, we said, "No, we will not," trying to drive as good a bargain as we could for India. We made another arrangement, and we still hope that we shall be able to get the money, but there is not the least doubt in the world that by a very small addition to the advantages that were given under that system we should get as much money as we wanted. I do not doubt that in the least.

83. It comes to this, that in order to induce the investment of capital, you must give or promise a fair interest for it; is that so?—According to my view, what is wanted, and what is essential to float a company to carry out any of these projects is, not at all any interest on the part of the ultimate investors in the line, or any belief on their part in particular that the line will be profitable; what is wanted is an assurance on the part of the speculators in the London money market that they will make a profit from it. That is the thing that is wanted, and that is the only thing that is wanted. If the stock will go to a premium, say, for the first six weeks, that is all they care about, and that is what enables the capital to be raised.

84. Are you quite certain that you are right in your view about that; can you get capital from speculators only, unless there is behind the speculator someone who has sufficient confidence in the investment as a permanent investment to take it off his hands?—Yes, I think so.

85. You can get it from the speculators alone, you think?—Surely. What has happened with the Nizam's railway?

86. Well, that is a new view of business?—I do not doubt it a bit. Possibly, however, I have been misunderstood.

87. I do not want to put words into your

Mr. *W. H. Smith*—continued.

mouth, but I want you to explain your financial views very clearly to the Committee, because it is a matter of the greatest importance that we should understand them, coming, as they do, from so great an authority as you are. Do you suppose it would be possible to raise money on terms which would simply enable the stock to attain a premium in the market after six weeks, as you say, without giving a positive security to the investor, so as to carry with the investment the certainty of repayments, humanly speaking, in case of sale, at the amount which the investor may have put into the concern, or at a profit?—There must, of course, be a reasonable expectation of that sort underlying the action of the promoter or speculator; a stock could not get to a premium unless there were that expectation; it is impossible.

88. The point which I want to ask you to make plain in this: do you depend rather upon the speculator than upon the investor?—I think so. That is my experience.

89. That is your view?—It is. That is my way of of interpreting the phenomena.

90. You insist very much upon the necessity for decentralization. I suppose very few people would differ from you upon that, but, taking the case of the East Indian Railway, you said that the East Indian Railway passes through three provinces, therefore the East Indian Railway would have to be exempted from the operation of any general law which might be laid down?—Quite so.

91. How would you deal with a railway which traversed a province and had to exchange traffic with another province at each end of it; under what management would you put that railway?—As I think I said before, I do not think any practical utility will come of my attempting to answer a question of that sort. I do not pretend to give any specific solution of the difficulties that must arise in carrying out such a policy. I quite admit the difficulties, but so far as it is practicable, I think it is desirable that, instead of centralising the whole railway administration of such a country as I have described, it should be broken down. I will not go further than that.

92. After all, is not the best management of a commercial enterprise, such as a railway is, the management which is prompted by interest, viz., the interest to obtain a profit, checked and controlled, of course, by a superior authority, so that the great interests of the country are not sacrificed?—Surely, and that really is involved in what I talked of in regard to the management and working of the railways by companies.

93. So that the ultimate result of your evidence is, that the construction of a railway by a company is better than its construction by the State, and that the working of the railway certainly is better in the hands of the company than in the hands of the State?—Not necessarily the construction, I do not say that, but as to the working I do. I think it is more desirable that the working should be in the hands of a company. To say that it is better I think goes a little beyond what I have stated to be my opinion, because our experience in India (and in other parts of the world experience is the same) is, that State management is quite capable of being very good.

Mr. *W. H. Smith*—continued.

94. Quite so, but it seems to be costly, does it not?—There is no evidence of that I think, but under all the circumstances there are, in my opinion, decided advantages in working through companies.

95. Then, finally, I think you caution the Committee against proceeding too fast in the construction of railways?—I do.

96. And your apprehension is rather that the pressure of public feeling in India and in England is to urge the State to make too many railways than too few?—At the present moment, yes.

97. Would you be prepared to lay down a scheme for the construction of railways extending over a period of years, or would you merely take the immediate necessities of the day and deal with them?—I once did make a scheme, but that is a good many years ago, and it has been acted up to, to a certain point. I think that things have gone on so far now that what remains to be done is, fill in cross lines between the main lines already constructed, so that it is almost better to go on from hand to mouth as occasion arises.

98. It is better to go on from day to day, you think?—I think so. It would be more difficult to deal with the thing in any other way. It would add to the difficulties, which are great enough already.

Mr. *B. Samuelson.*

99. You stated that in the event of care being taken that it should not be the interest of companies to increase the capital expended by them in order to obtain an increased amount in the shape of interest upon it, that then upon the whole you thought it would be preferable that the construction should be carried out by companies?—Well, I rather put it the other way, I think. I stated what my general views were as to the advantage of making use of companies, and I also said what were the disadvantages.

100. Supposing those disadvantages to be set aside, would you then think that it would be best that the railways should be made by companies?—As I have said, if you could get rid of the objections; not if you get rid of one objection, but if you get rid of the objections generally.

101. Supposing you get rid of the objections that you have stated, would you then think so?—Well, possibly. I probably have stated all that I thought serious.

102. I should like to ask you whether the temptations to the companies to spend money unnecessarily in the shape of capital being set aside, you think that companies are able to construct railways in India more cheaply than the Government?—No; I do not.

103. So that in respect to the amount of capital to be expended, there would be no saving by the employment of companies?—I do not think so.

104. Then in regard to working, I think I understood correctly from you that you believed that companies were able to work railways more cheaply than the Government; did I rightly understand that?—No; I do not think I said that. I said advantages of an administrative nature; for instance, there are all sorts of questions that arise in the working of a railway, as between the railway management and individual traders, as

Mr. *B. Samuelson*—continued.

well as with their own servants. It is a very difficult thing for the Government to go and haggle about small matters; for instance, if anybody has lost his portmanteau, to come in and say whether he shall be paid so many pounds, or whether he shall not, and so on; all that class of questions can be best dealt with by a company.

105. Then in point of fact you do not think railways can be worked more economically by companies than by the State?—No, as a matter of economy, I think not. I think that our statistical returns give perfectly satisfactory results for the State railways. Of course everybody has to learn his business; until you have got a staff which really appreciates what it has to do and is properly trained, and until the machine has got into proper order it does not work very smoothly.

106. Do you consider that the Government now has such a staff?—I think on many of our railways it is excellent; in fact it is certainly so.

107. Do you think that the returns are likely to be greater if railways are worked by companies than by the State?—I see no reason for expecting a larger traffic. I should say rather the reverse, and for this reason, that the Government is less anxious to make a big money return; they are more likely to reduce rates than a company is.

108. Then you mean that the returns under Government would be likely to be less than under companies?—I would not say that the traffic would be less; I think more business would be done; I say there is a tendency that way.

109. You think the railways would be more likely to be of use to the public if in the hands of the Government than if in the hands of private companies?—I think the balance would be in that direction.

110. Of course companies would endeavour to obtain the greatest possible revenue?—They would, and they do.

111. And that might not be in the interest of the public of India?—It certainly is not thought so at Bombay.

112. You think that the public might obtain greater advantages from the Government than they would be able to do from the companies?—I am sure they would.

113. Then that would be a reason in favour of leaving the working of the railways in the hands of the Government rather than in the hands of companies, would it not?—It is one of the advantages to be set off.

114. I say "a" reason?—Yes.

115. In the Report of the Famine Commission, you take no account of the advantages arising from railways, except in regard to the provision against famine, or at least you take very little account, I believe, of any other reason for constructing railways?—There is a good deal said about it, I think you will find, if you turn back in the Report to page 146. We go there rather into the general question, and there you will find everything that can be said as regards the prosecution of works of that sort in as strong language as anybody could wish for, I should think.

116. But in the estimate which you ultimately make of the railways, which are required, you confine

Mr. *B. Samuelson*—continued.

confine yourself, I believe, to those which are purely protective railways?—The special duty of the Famine Commission was to deal with that aspect of the question, and it was purely with that aspect of the question that we did deal.

117. Before this Committee to-day you have brought forward another matter which ought to be considered, and that is the military question?—Yes.

118. You would admit, I suppose, that the development of the resources of India may fairly be taken into consideration?—Surely. Do not suppose at all that I would suggest that there should be any limitation to the development or construction of railways.

119. Wherever railways can be made at a reasonable rate, and would be likely to do good, you would be glad to see railways made?—I should, within what is financially possible.

120. That is what I am coming to now. You have laid down the principle which you think ought to be regarded as the limit within which money may be borrowed for the making of railways, and that limit is the sum available annually as interest on capital out of the general revenues of the State?—Quite so.

121. Have you any computation of what that amount of interest available is at the present moment?—It is nothing; there is no charge; on the contrary, so far from there being a charge, we have got a surplus of a million. There is no burden at all in that respect; we have passed the line.

122. You have at present available a million?—Virtually.

123. By way of interest?—Quite so.

124. Without trenching at all upon the revenues of the State?—Quite so.

125. Have you considered at all what sum might be added from the revenues of the State to that million in order to provide the interest upon loans for railways?—If the urgency for making railways was very great, then it might be proper not only to spend the surplus of a million, but to spend another million a year in interest. I, for one, do not think it is necessary. The situation of the Government of India is a very peculiar one, and I think that the obligations upon that Government to avoid incurring debt, if it is possible, are so great, that, I for one, certainly would not recommend that there should be any extension of the debt which is not absolutely required for the immediate necessities of the country.

126. But the million you think might fairly be taken?—The million of course falls into the general revenues, and so long as you do not produce a charge by reason of your railways, which shall so far hamper you, or so far eat up the general surplus of your revenue, I say go on, certainly.

127. Is it not possible to put that into figures?—Is it useful to put it into figures?

128. Yes, it is useful, decidedly; because we are anxious to have your opinion as to what sum we may conveniently borrow for the purpose of railways?—I could tell you in a general way my general opinion; it is very difficult to put it definitely. The advice I gave last year to the Secretary of State, and which I am prepared to repeat to-morrow, if need be, is, that I think in addition to the 2½ millions authorised up to the present time, we might allow another million.

Mr. *B. Samuelson*—continued.

129. I understand you are now proposing to proceed simply on the principle which you have condemned, and from which you proposed to go away, and to return to the old principle of setting aside a certain sum as interest upon money to be borrowed?—To a certain extent you may accuse me of that, it is true.

130. It is not an accusation?—I accept the situation frankly, but I do not like going back upon the past. The past lies there, and so far as my knowledge of affairs goes, and so far as my experience goes, I think that the very worst way of getting on is to tear to pieces what has gone before. It is much better to go on, and although I may not like altogether everything that has been done on the past, I accept it. Let us move on in a general direction without tearing one another to pieces, and trying to undo what has been already done. I, therefore, say I think there can be no objection to giving another million in addition to the 2½ millions, and I do not think you could get more if you tried.

131. What, in London?—No, not subject to the other condition; that is to say, that you shall not add excessively to the debt of India, which is the most important thing.

132. The 2½ millions are for public works of every kind?—It is borrowed money, but there is a very large sum spent besides that. As far as I remember, the actual amount of capital outlay upon railways is something like 4 to 5 millions a year in India. Remember that the 2½ millions we talk of is the 2½ millions which the Government of India borrows for a particular class of works, but there is a large sum spent outside that. The money which is required, for instance, for the East India Railway is outside that; the money still required to be spent (and it is not an inconsiderable amount) on guaranteed railways is outside that. The South Mahratta Railway expenditure is outside that. There is a great deal of money being spent upon railways in India. It is impossible that you could have had 2,000 miles actually in progress at the end of last year without a large outlay.

133. I was going to ask you a question about the 2,000 miles, but in the meantime I would like to ask you whether it is not possible to arrive at a total of what is now being spent on railways?—Yes, I will state the amount.

134. Within a quarter of a million, what is the sum you estimate is being spent on railways?—I could not tell you off-hand. The total outlay is 20,000,000 *l.* in the current three years, I am told. There has been a correspondence on the subject quite lately, and two or three letters written from the Secretary of State to some of the British-Indian institutions and chambers of commerce, which state that the amount is something like 7,000,000 *l.*; it is 6,000,000 *l.* or 7,000,000 *l.* a year. This, however, includes outlay other than capital outlay.

135. May we take it that the amount now spent upon railways is about 7,000,000 *l.* a year; instead of saying "upon" railways, I would rather say "about" railways, because a portion of that consists of a guarantee?—The capital outlay on railways during the last three years

Mr. *B. Samuelson*—continued.

has been as follows:—for 1881–82, 4,019,754*l.*; for 1882–83, 4,451,900*l.*; and for 1883–84, 5,357,600*l.*; the two last years are partly estimated. For the coming year the estimate is 6,591,000*l.* But this is not wholly outlay on new lines, and some considerable sum will have been for extensions or improvements in existing lines.

133. I understand from you that you do not recommend that any particular sum, having any relation to what the railways are now producing as a surplus, should be applied in the shape of interest upon borrowed capital. What I men is this: assuming the surplus to be a million, you would not say we will apply this million as interest upon, say, 25,000,000*l.* to be borrowed?—No.

137. You object to that?—I object to that.

138. You wish the million to go in to the general revenue?—Certainly.

139. But you take out a certain limited amount for railways?—I do.

140. And you are not prepared to say definitely what you think the sum to be spent on railways should be?—That is my view. I may add that I think it would be a very dangerous financial measure to attempt to set aside, and to appropriate, out of the general income of the State, any specific element of income for a particular purpose. You never can tell from one moment to another what emergency may arise, or what you may have to do with your money. Such a proceeding would create complications in accounts, and be otherwise objectionable. It is quite right in determining how much money you are to apply to railway extension, that you should consider as an important element in the calculation; what is actually produced by the railways; but I would not tie my hands.

141. Do you think it is absolutely necessary that the surplus derived from railways should be considered as part of the general income of the State, or might it not be appropriated specifically to the purposes of railway extension?—That is a large and difficult question to answer off-hand; but my impression, if I am obliged to answer at once, is this: you cannot merely consider how much money you can spend from your net income, but also how you are to apply the net income so as to reduce your permanent liability for debt. I think it would be very unsafe to appropriate the surplus specifically to railway extension, unless some specific provision were made in the shape of a sinking fund. The position of a Government in raising capital by borrowing money, is a very different one from that of a private individual or a joint stock company in raising capital as an investment. A Government cannot go on indefinitely adding to its debt; if it does go on adding indefinitely to its debt, it comes to grief. You destroy your credit, and when an emergency arises you find you cannot borrow, or that the difficulties of borrowing are great.

142. Then, in point of fact, you look upon the surplus from railways as you do the surplus we have in England, say from the Post Office?—Yes.

Mr. *B. Samuelson*—continued.

143. You look upon railways as one of the sources of revenue of the State?—I do.

144. But you do not think it could be specially allocated to the purpose of the extension of railways, or that it should not be, as I understand?—That is the view that the Secretary of State has accepted, and it is my own view.

145. You have stated that 2,000 miles of railway are now under construction; would you kindly state what has been the average rate at which the railways have been completed and opened within the last year in India?—We made out a Return of that not very long ago for one of those bodies that represented to the Secretary of State that we were going on too slowly, but my impression is that taking an average of three years together (because there are fluctuations from year to year), it was about 650 miles yearly, or something of that sort.

146. What is the progress you look forward to as the rate at which the completion of railways will go on during the next three years?—I am not in a position to say; the fact of the matter is, we have for the last few years been in a great degree at a standstill as to a fixed policy. The whole question of what should be done in the future as to the construction of railways in India has been hung up, and nobody has known anything about it during the last two years. People have not been able to make up their minds what to do, and practically, until something is settled, nobody can say what is going to be done.

147. Then the fact of our knowing that there are 2,000 miles under construction tells us nothing whatever of the rate at which those 2,000 miles are likely to be finished?—Oh, yes; there is an estimate made of that.

148. Then will you kindly give us that estimate?—I am afraid that I am not in a position to give it off-hand; but, as far as my recollection goes, it is anticipated that about 1,000 miles will be opened this year.

149. Leaving 1,000 miles more to be finished?—Yes, of those railways that were actually in hand on the 31st December. However, there is every reason to suppose that more will be sanctioned as the time goes on.

150. Perhaps you will fill in the figures as to the rate at which we may calculate that railways will be opened during the next three years, distinguishing between State railways and railways constructed by a company?—The figures, so far as I can ascertain them, are as follows:—

Lines now open—	*Miles.*
East Indian - - - -	1,507
Guaranteed Companies - -	4,611
Assisted - ditto - -	97
	6,215
State, British - - -	3,646
„ Native - - -	503
	4,149
TOTAL - -	10,364

Under

Mr. *Samuelson*—continued.

Under construction or sanction: end of 1883—	*Miles.*
East Indian	6
Guaranteed Companies	164
Assisted Companies	1,141
	1,311
State, British	842
„ Native	93
	935
TOTAL	2,266

Under construction or sanction for 1884–85—	
East Indian	4
Guaranteed Companies	138
Assisted - ditto	1,292
	1,434
State, British	1,302
„ Native	231
	1,533
TOTAL	2,967

Likely to be opened in 1884–85—	
Guaranteed Companies	47
Assisted Companies	498
	545
State, British	465
„ Native	93
	558
TOTAL	1,103

151. Is it the case that the sanction of railways on the metre gauge, as distinct from the broad gauge, has led to very considerable economy in railway construction in India?—I think so; much more perhaps indirectly than directly.

152. Will you kindly explain how?—In Lord Mayo's time, before the metre gauge was accepted, and before construction on the metre gauge was adopted, the style of construction on the broad gauge (the 5 ft. 6 in. gauge, you will understand, is the broad gauge of India) was very expensive; and, as a matter of fact, the whole system of railway construction has become less costly since; the engineers have seen their way, somehow or other, to make less expensive lines.

153. The engineers have tried to show that a 5 ft. 6 in. gauge of railway can be made almost as cheaply as a metre gauge railway, have they not?—They have; the competition there has had that effect.

154. You mean the competition between the two gauges has had that effect?—I think so.

Mr. *B. Samuelson*—continued.

155. With regard to the capacity of those railways, I think it is stated in the Report of the Famine Commission that the proportion is about as one and a half to one?—It is something of that sort. That means that an average train load on the metre gauge, as compared with the 5 ft. 6 in. gauge, the proportion will be about that.

156. You could convey as many trains on the one gauge as on the other, could you not?—I should think so; I do not see that there is the smallest reason why you should not.

157. Then in point of fact the proportion would be as 1½ to 1?—Yes, supposing always that the traffic that had to be carried was infinite. If the traffic is finite then after you have got it all there is an end of it.

158. I spoke of the capacity?—As regards the capacity that is so.

159. Have you ever compared the mileage of railways existing in India at this moment with the mileage of railways in other poor countries; take Russia for instance?—No, I am afraid that I have not.

160. Are you aware that for every mile of railway that India possesses for its population there are 14 miles in Russia?—No, I am not. As far as my information goes with regard to Russian railways they have to a very large extent been made for military purposes, and in a manner (also as far as my information goes) which has left Russian finance in a very questionable state.

161. You attribute the unfavourable state of Russian finance to the capital which has been expended on railways?—I had supposed that it is one of the causes. My information is very limited on the subject, but that is my impression.

Mr. *J. K. Cross.*

162. Referring back to the Report of the Famine Commission, I should like to ask you just one or two questions about it. You spoke of the proportion of mileage to area I think, and you said that it required the construction of 20,000 miles in all India to bring railways within certain distances of the population; that is about one mile of railway, is it not, for every area of 50 square miles?—Yes.

163. Then you go on to say that you require 10,000 more miles to give the full number of miles that are wanted, but that at the present time 5,000 miles in addition to the existing lines would go far to remove all future risk of serious difficulty?—That is called a "rough estimate." It was a rough sort of estimate that was made in order to bring the proposal into a tangible shape.

164. Suppose this expenditure were made, would famine be much less costly to relieve?—That I should extremely doubt.

165. You think that, even with the 5,000 miles more made and working, famine would not be less costly to relieve?—My impression is that famine would be more costly to relieve, and for this reason, that the sense of the obligation of the State to give relief becomes more and more acute in the case of every successive famine that occurs. I have always thought, and I think you will find that that is the sense of the Report, that

Mr. *J. K. Cross*—continued.

all that the railways are likely to do will be to protect the people from starvation, but I extremely doubt whether there will be any saving of money.

166. Then the result would be that more people would be kept alive?—Quite so; that is it.

167. At an increased cost?—No, not at an increased cost because there were railways, for *pro tanto* the transport of food would be less costly.

168. But not at a reduced cost?—My impression is that there are other causes that would lead to increased outlay on the protection of the people; one is that it would be considered necessary to treat them more liberally, to give them more, and to give to a larger number.

169. And more would be kept alive?—More would be kept alive. And under the most favourable circumstances, consider what it is that happens in an Indian famine; for instance, such a famine as we had in 1877–78. The whole food supply of the country fails; the occupations of the agricultural community cease; there is nothing to feed them with, and there are no wages to give them; they have to be kept alive at the cost of the State; railways will not alter that condition of things at all. The people will equally have to be fed. The cost of bringing the food down of course will be diminished, but as I said before, they will get more of it.

170. Then this 5,000 miles more that you would make, costing 5,000 *l.* a mile, will cost altogether a sum of 25,000,000 *l.* sterling, will it not?—That was an approximate estimate.

171. And if this money had to be borrowed at 4 per cent., it would be a charge on the Indian revenues under certain circumstances, supposing the railways did not pay anything to the extent of a million sterling a year, would it not?—Yes.

172. Can you give the Committee any idea of the probability of this million being forthcoming from any extra available produce for export?—I do not suppose that there is any such thing as a railway that pays absolutely nothing; I do not think it is at all to be anticipated that those railways would be absolutely unproductive.

173. Even though made through the famine district?—Even though made through the famine district, if they are made with a suitable economy, and that is the whole pith and the very essence of what the Famine Commission say; they say, make the railways cheap, and if you make them cheap, they will not be a burden upon the State, or at all events they will be a comparatively small burden.

174. Could you make them cheaper than 5,000 *l.* per mile?—I should say if you make them for 5,000 *l.* or 6,000 *l.* a mile, they would pay 3 or 4 per cent. even in the worst districts, because after all, it does not at all follow that a famine district, in time of prosperity, has not got a very fair amount of population, and a very fair amount of cultivation, and so on. The fact is, that the North West Provinces, a part of India which is extremely liable to severe forms of famine, are very productive under ordinary circumstances in favourable years.

175. You might expect that the income derived in the favourable years would pay the expense of working the lines in those years?—It would go far towards it.

176. Including the interest upon them?—Yes.

177. And that in bad years the advantage would be that they would convey food at a considerably less cost?—Yes, and they will enable you to do it. During the last famine in 1877–78, the whole of the food of that portion of Madras was all brought in by a single line of railway. Of course the strain upon it was tremendous. Then there were the very great difficulties of distribution. In a famine of that description the cattle die, or there is extreme difficulty in feeding the cattle, and therefore there is extreme difficulty in distributing food.

178. You look to the general results from the establishment of these railways in famine districts rather more than to any direct revenue that would come from the working of the lines?—Certainly.

179. Going on to Clause 11 of the Famine Commission Report, you advocate a distinct increase of expenditure from borrowed funds. I think you say that about a million sterling more should be spent, yearly, and that to that extent we should have the restriction taken away which was placed upon us by the Committee of 1878–79?—Quite. I think not only should that restriction be removed, but that the other restrictions should be removed; that is to say, that this arbitrary distinction between the so-called productive and protective lines should be done away with. I think it is all very well to consider before you undertake a railway what it is likely to do, and whether it is likely to pay well or pay ill; and that you must not undertake too many of the less profitable lines without considerable caution; but I really do not see myself, if money is to be spent on railways, why you should not spend it upon those lines which are important (so long as you do not get into financial difficulties), whatever their importance may be; whether they are important for trade or important for protecting people from famine, I see no distinction.

180. I rather confined myself to protective lines for the moment, those which are to protect the country from famine; in one paragraph I think you say, the proposal would be that they should be completed in 25 years?—My understanding of those paragraphs is, not that we proposed that they should be done in 25 years or any other number of years, but that if such-and-such an outlay were permitted, that it would lead to that; at all events, it was my view in writing this, that it was not for me to interfere with the responsibility of the Government for providing funds for doing it. The object rather was to indicate to them what was the nature of the obligation, and what was the nature of the liability, which would enable them to discharge this duty, and to leave it to them to carry it out.

181. Though it would take 25 years to do, you thought it was not worth while to go to any great cost beyond the 3,500,000 *l.* a year; as I understand, you think it not worth while to borrow more than that, even if it would take 25 years

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25 years to accomplish?—There is nothing in the Report to suggest that at all. What is said is merely this, if you will make 5,000 miles of railway, the most serious aspect of the question will be dealt with. Of course if you can do anything more, so much the better for the country. There is no question at all about that, and as regards the 3,500,000 *l.*, I merely say my own personal opinion is that at the present time there would be no objection to spending an additional 1,000,000 *l.*, but I do not say the time may not come when you may spend another; it entirely depends upon what the resources of India are.

182. In the same paragraph you recommend that advantage should be taken of capital subscribed locally; I think you have not explained to the Committee what you meant by that?—A specific proposal had been put forward by the Government of India, which was not favourably received by the Secretary of State, for encouraging local capitalists to subscribe money for short lines of railway locally; the thing had been attempted but it did not come to anything.

183. Can you give me, from your own knowledge, any information upon the subject?—There are one or two short lines in the North West Provinces; one of them is known as the Hathras Line, a line of about 36 miles in length, which was made in that way. Half the money was subscribed by the merchants of the place, the other half the Government gave. That has paid very well; the line was made very cheaply; it only cost about 3,000 *l.* a mile; that was a metre gauge line; it has paid nearly 5 per cent., or 4 or 5 per cent., ever since. It is a short line; it is a little branch from the East Indian line.

184. Would you expect to get any considerable amount of money subscribed locally in that way, if steps were taken to prosecute the construction of railways?—No, not anything very large. As far as my knowledge goes, there is no large amount of available capital in India; but so far as it went I think it would be useful. I think it is always an advantage, and a great advantage, to induce the people in any locality to contribute their savings, whatever they may be, for local objects.

185. How would you expect to get, in the interior of India, considerable local subscriptions from private persons, when the rate of interest is so much higher usually in India than in England?—You would have to give them a sufficient rate of interest, no doubt, to induce them to put their money in.

186. Then at the rate which we offered for Government loans, 3½ per cent., you would not expect to get many local subscriptions for a railway?—It is not 3½ per cent. We never have paid so low as that, or less than 4 or 4½ per cent., and at that rate you would not get very much.

187. Supposing the locality were empowered to guarantee a certain rate of interest, and the line did not earn that rate of interest, would you give the localities or the Provincial Governments power to levy what may be called a railroad cess to make up the difference?—That is a very large question.

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188. Is not that a question that comes immediately and prominently before you when you recommend that the thing should be left to the Provincial Governments?—I do not think that necessarily altogether arises; but personally I am not prepared to say that I should object to it, under suitable control and check.

189. But you would not think of laying down any definite rules for the Committee to be guided by?—No, I could not do so at the present time. I think a question of that sort would have to be discussed with very great care between the authorities in India and the Secretary of State. I could not off-hand say anything more. I may say incidentally that a proposal in that direction has come from Madras quite lately to the Secretary of State, and the Secretary of State has rather declined to go into it at the present moment.

190. Leaving it rather for this Committee to decide, or to make a recommendation upon?—Desiring that the Committee should say anything they may be pleased to say about it; meanwhile asking the Government of India to reconsider the matter in detail.

191. One may naturally expect that you, knowing so very much about it, would be able to give us some little information upon the subject?—Well, I am rather unprepared to do that.

192. You can give us your opinion, at any rate?—As a principle, I should not object to it, subject to suitable limitations. I may say that, but it is like all questions of local taxation and local finance; it can only be properly dealt with after very careful local consideration, but the principle appears to me to be a sound one.

193. Then, applying the sound principle to the districts that are most likely to be attacked by famine, you would propose to let the locality guarantee a certain rate of interest on a railway to be run through the district?—That I should extremely hesitate to do.

194. Is it not those provinces that are most liable to famine which require the protective railways most?—As regards protective railways, certainly they do; but then, at the same time, they are poorest, and you have less chance of getting it.

195. Then the recommendations you make in the Famine Commission Report, to give power to the localities to levy practically a railway cess, would be impossible of application in those provinces where the railways are most required, would it not?—I do not think it is applicable as regards the famine districts; those are the less valuable lines.

196. You would say that this recommendation to raise the money in various localities, even with the guarantee of the Provincial Government, is not applicable where you want to establish famine lines?—No, the suggestion that local effort should be encouraged was not intended to apply to them.

197. That makes a great deal of difference; you have not gone into the question of borrowing in India or in England, except, incidentally, regarding the Southern Mahratta lines?—I, in common I think with many people who have interested themselves in Indian finance, have a very

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strong disinclination to do anything which shall add to the sterling liabilities of the Secretary of State; I think whether it is in the shape of a guarantee of interest in sterling or the creation of sterling debt, the increase of these home liabilities is greatly to be deprecated. The power of borrowing in sterling, I argue, should be reserved for times of difficulty and occasions of emergency, such as inevitably arise from time to time, and the experience of the past shows that however much the Secretary of State has tried (because he has tried very hard) to avoid borrowing in England, circumstances have compelled him to go on borrowing. And unfortunately also, whatever may be done in the opposite direction, in trying to reduce this sterling debt it has been practically found to be almost impossible; that the reductions of it have been extremely small and that it is extremely difficult to make them. Of course, the whole of the money that the Secretary of State gets in England has to be got by the sale of bills, and every addition to the amount of the bills that are sold in excess of what is really necessary for carrying on the business of the Government, and discharging its liabilities here, adds to the difficulties under which the financial administration at the India Office is carried out. I have now been connected with the India Office a good many years, and have sat in the Finance Committee for a good many years, and there is hardly a single year in which, at one time or other, we have not been in a very considerable state of anxiety as to whether we shall be able to make the two ends meet, that is to say as to whether we shall get our bills sold at a sufficient rate and in sufficient time to enable us to discharge the whole of our liabilities, and I am sure the members of this Committee who have also been at the India Office, will corroborate that view. During the last eight years the liabilities which have arisen from the guaranteed railways have increased the annual payments at the India Office to no less than 5,700,000 *l.*; at the present moment they are 5,700,000 *l.* a year more than they were 15 years ago.

198. That is owing to the remittances which are brought home by the Indian Government being transferred from rupees in India to sterling in England, not at the cost of the Indian Government, but still for the convenience of the Indian Government; is not that so?—Yes.

199. Arising out of that, what is the difference in the arrangement made in the case of the Southern Mahratta Company (which receives its money in rupees in India and has to transfer those rupees into sterling, and to remit that sterling to England, the proprietors having to receive as much as will give then 3½ per cent. in London), and a remittance of that same amount of rupees by the Government?—Whichever way it is done the money has to be brought here. In the one case it is done by the company, and in the other case it is done by the Secretary of State. I will put it in this way, at the present time say the Secretary of State has to get home 15,000,000 *l.* or 16,000,000 *l.*; out of that 6,000,000 *l.* is on account of these railway remittances, and 10,000,000 *l.* is really for his own *bonâ fide* business. If we get rid of the 5,000,000 *l.* or 6,000,000 *l.*, or whatever it is, of the railway guarantee, then our liabilities are 10,000,000 *l.* In proportion as our absolute liability is reduced the monetary difficulty that may arise in providing for our payments will also be reduced.

200. You mean the monetary difficulty to ourselves?—To the Secretary of State. I mean that at any moment supposing there is any obstruction in the sale of the bills, our difficultie swould be proportionate to the total sum we had to provide. If this could be reduced say from 16 millions to 10 millions, we should, in case of emergency, have to go to the Bank of England and ask for a loan, say of 500,000 *l.* or 250,000 *l.*, and in the other case 2,000,000 *l.* or 1,000,000 *l.*; it is that sort of thing.

201. Given that the 16,000,000 *l.* has to come, would you say that it would come better in one hand or in two?—As far as I am concerned I should prefer it by two.

202. Is that because you think it would relieve you of liability?—I am sure it would. It would relieve me of liability, and that is exactly what I want. That the general rate of exchange would not be materially altered, is another affair.

203. You think that the general rate of exchange would not be materially altered?—I see no reason to suppose that it would.

204. Suppose you had two sellers in the market at one time, one selling his 10,000,000 *l.* a year and the other selling his 6,000,000 *l.* a year, and, at the time that the railway dividend became due, we will say half-yearly, there was a large amount of exchange upon the market, would the exchange sell at a higher rate than it does now, supposing that half were in the hands of private persons for sale and half in the hands of the Government?—I do not think myself, in the long run, that it would probably make much difference. As far as I can judge, I think the probability is that the railway companies would look after their own finance. They would see, if the whole of the 5,000,000 *l.* had to come home at one time, that it would be a very bad thing for them, and they would make an arrangement with the Bank somehow or other to distribute this remittance in a reasonable way, so as not to press too hardly upon the bills.

205. Do you think the railway companies, or those who receive the dividends (because it might not be in the hands of railway companies, but in the hands of private proprietors), would exercise a restraining force upon themselves with regard to selling their exchange, which the Government has hard work in doing itself?—I do not know what the exact result would be, but it appears to me that it is desirable, even though it did cost more, that we should get rid of that peculiar liability.

206. But if you got rid of it, and it went into other people's hands, would that make any difference in the average rate which was obtained for the bills?—No. I will accept for the moment that we get even a worse rate of exchange. I do not infer that we should get a better rate, but all these matters must be looked at all round. You cannot say, because there is an advantage in one direction, with a disadvantage in another, that merely because there is an advantage, it should prevail over the disadvantage. You must consider both the advantage and the disadvantage.

207. And

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207. And really you come to the conclusion that it does not make very much difference whether the remittances are in the hands of private persons or in the hands of the Government?—All the foreign remittances, except for the Government of India, are made by private persons, and they manage it very well. If the Government declined to accept, or could manage to get out of, these remittances for mercantile purposes, I do not see why the mercantile people could not manage it themselves just as well as they manage remittances from Russia, America, or any other country

208. What I want to get at is what is the particular advantage which the Government get by passing it from themselves into the mercantile world?—Every year we have 6,000,000 *l.* railway liability; we have every half year to pay 3,000,000 *l.* down on a certain day. Then supposing there is any difficulty in getting together the money for that 3,000,000 *l.*, we have to go to the bank and borrow it; we must pay it.

209. You would say that the remittances from India, or the manner in which you can get your money home, depends entirely upon the amount of produce offering from India in the market at a given time?—It does; the remittances are made through the produce, and if at any time there is a collapse of the produce, or I should think if there is any considerable trade disturbance, it might make the remittance extremely difficult, as we know it does occasionally; and if it has done so in the past, it will do so in the future to a certainty. Occasionally we have not been able to sell our bills at all.

210. Your fear, I gather, is that there may not be sufficient produce coming forward to enable you to dispose of your bills?—Or that there may be other commercial causes which would produce the same effect.

211. What would the other commercial causes be?—I am not prepared to say; but it did happen in 1879 that the Secretary of State for some time was absolutely unable to sell his bills; that is a fact.

212. But that was a short time after the famine when there was very little produce coming forward, was it not?—That is exactly what I am talking about; I will not say positively that it was owing to the absence of produce; I am not prepared to say that. There were other causes. Last financial year the banks held back for a long time. Of course, you may say that was partly the Secretary of State's fault, because he did not give a high enough rate; but it is a fact that the bills were not sold.

213. You have not quite thoroughly explained the difference between the Southern Mahratta arrangement and the sterling arrangement, have you; that is as to Southern Mahratta remittances?—The Southern Mahratta people get their interest paid to them in rupees in India, but they have to make the remittance home just as any private person would have to do.

214. But you give them enough rupees in India to guarantee them what is equal to 3½ per cent. sterling?—Yes, for instance, the agent of the Southern Mahratta Railway Company goes

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to the Bank of Bombay, and he says, "I require bills to such an amount," so many pounds sterling. Then the bank manager says, "Well, the current rate of the day is so much; you must therefore get so many rupees." Then that having been approved by the Government officer (the Accountant General there), the Accountant General pays him over the rupees, and the bank gives him the bills.

215. What would be the difference between that and the ordinary way in which you sell your Council drafts now. You sell your rupees in India, and have the sterling placed in your hands in England?—I say the only difference is that it shifts the responsibility.

216. But what responsibility; it does not relieve you of the responsibility of placing the shareholder in possession of such a number of rupees as will guarantee him 3½ per cent. in sterling in England, does it? The holder would hand them over and get geld for them in London, would he not?—Of course it would be exactly the same thing if the Secretary of State, instead of paying in sterling paid in a bill. If the Secretary of State gave the Southern Mahratta Railway Company rupee bills of exchange, and said, "You can go and sell those," that would be exactly the same thing, of course, excepting the difference of buying bills in India and selling bills in London. The bills that are bought in India, and remitted to England, do not immediately come into competition with those which are sold here. You may say that they do indirectly, but still there is a difference.

217. Is there a difference?—There is, and there is a difference in the rate too.

218. Can you explain it?—There is the difference in the rate, and a habitual difference in the rate. This depends, I presume, on the variation between the demand and supply; the demand is relatively greater in London, and the rate worse.

219. In the one case, I suppose, the Government sells its rupees in India, and practically get hold of an order on London; in the other it delivers in India rupees, sold in London, and is placed in possession of cash in London, though sold as a matter of exchange?—As a matter of fact in 1879 we were able to buy bills on London through the Bank of Bengal at Calcutta, while the Secretary of State was unable to sell his bills on Calcutta.

220. You would immediately put that right, so far as the finances of India are concerned, by the India Government buying bills in India on London with its rupees and making the remittance?—That is what they did.

221. The difficulty could only exist for a very few moments, could it?—That is quite true.

222. It is a pure exchange transaction, is it not?—There is one great objection to this plan, because these are mercantile bills, and it throws the risk of those bills being paid, when they come to maturity, on India.

223. Still it comes to exactly the same thing, does it not, as a sterling remittance?—No, I do not think it does come to the same thing. It appears to me that there is a difference. The

 difference

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difference is not great, and measured by the actual difference of charge against the revenues of India, I admit it may be a small thing. I quite admit that; but it is the risk, and the annoyance, and the trouble that is given here which I desire to avoid.

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224. I think you said that the Committee which reported in 1879 imposed a certain restriction upon the construction of works, and that the Government accepted that restriction, and in fact emphasised it; are you not aware from the Blue Books that, as a matter of fact, that restriction was proposed by the representatives of the Government, and accepted by the Committee?—I suppose that is very natural, and the fact that the Government did emphasise it shows that it was indicated by them. That is quite true.

225. I think you alluded to the change which apparently has taken place in the views of Parliament and the Government which has necessarily led to the appointment of this Committee; what I want to ask you is whether the change of opinion is not something wider than that; therefore will you tell me whether the views submitted to the last Committee on the part of the Parliamentary representatives of the India Office were shared by the India Office generally, the Members of Council and the advisers of the Secretary of State; is not the change of opinion in the India Office, which has now taken place, something more than a mere personal change, due to Parliamentary changes, and is it not in fact a change of opinion which has taken place in regard to what I may call the Government of India as a whole, including the permanent part of it?—That I think is true, and I do not think that I said anything adverse to that.

226. I merely asked the question; that is a fact, is it not?—It is; that is quite true.

227. Then I understood you to say in the first part of your evidence that you thought the construction of unproductive public works, or what I may call imperfectly reproductive works, should be regulated by the surplus amount of revenue which India could spare towards promoting railways of that kind; does not that seem to conflict with what you afterwards said. I understood that you afterwards took a somewhat different view, and said that you would not like to construct railways on the faith of any possible surplus of revenue, or to make any scheme of that kind?—No, I think you misunderstood me. What I said was that I should object to setting apart the special surplus which was derived from the railways to be dealt with in that way; that is to say, to be appropriated as a source out of which, so to speak, to guarantee additional capital.

228. As a matter of fact, has not that surplus been already absorbed in the revenue, and is it not the case that the revenue as budgetted at present shows only a very small surplus, which is entirely due, if I may so express it, to the surplus of the railways, because if you had not that surplus appropriated from the general railways you would now have a deficit and not a surplus?—That is only due to the form of the budget. As a matter of fact the real surplus as I should reckon it of Indian revenues, which has been announced by Sir Auckland Colvin in the last few days, instead of being 300,000 *l.*, is much more. It is nearly 2,800,000 *l.* The 300,000 *l.* is the surplus which will appear on the accounts, but in addition to that, there is one and-a-half millions which has been during the last two or three years included in the expenditure of the year as a charge for what is called "famine insurance," which is in reality surplus, having nothing to do with the real service of the year; and besides that there is an additional million which has been appropriated to pay off the arrears of military charges, which is not in any sense a charge of the year, and which we hope to get rid of in a year to two altogether. Therefore, as a matter of fact, you cannot say that the railway surplus is discounted in any true sense.

229. I suppose I may put it shortly that this is one of many years in which there would have been a very large surplus if something had not happened?—Yes, a very large surplus, comparing the true income with the true charge of the year.

230. If something had not happened?—Of course, if you make away with your surplus as soon as it is created, it does not exist. I say there was a surplus, comparing the true income with the true charge of the year.

231. I may put it in this way: is it not the case that the revenues as regards surplus are a very fluctuating and uncertain quantity, and that something has happened a great many years which has deprived us of any surplus that might have been expected, and that, therefore, in forecasting the future, you must accept the fact that there is absolute uncertainty, and that it is impossible to calculate upon any certain fixed surplus in the future?—I entirely concur in that general view. I think that you must be extremely cautious how you extend operations such as those of which we are talking, lest you extend them in such a way as to involve yourself in dangerous liabilities. I perfectly admit the necessity for great caution.

232. And that, therefore, it is impossible to form any definite far-reaching plans, but that you must from day to day form your plans according to the immediate state of your revenue?—I think so; and from year to year to regulate your action according to the facts you have got to deal with.

233. Then I come to another subject, that is, as regards the use of private enterprise in the shape of public companies, in constructing public works in India. You have had a very long experience in regard to public works in India, and I want to ask you, not taking the railways alone, but taking public works generally, whether (putting aside the regular guaranteed railway companies, and taking rather the companies which have undertaken the works more in the nature of private enterprises) your experience has been favourable to that private enterprise, and whether you have not generally found that companies that deal with works in India, having their head-quarters in London, proceed upon the "heads, I win; tails, you lose" principle; that is to say, if they get a profitable thing, whether they do not hold on to it, and try to

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to make the very utmost of it without regard to the benefiting, or otherwise, of the people in India, and whether if they find that they are likely to make a loss, they do not throw it back upon the Government of India and insist (and successfully insist) upon being compensated and recompensed out of the finances of India?—That is perfectly true; I agree with every word of that, and that is one of my strong reasons for objecting to entangle ourselves any more in the way of guarantee. I do not care whether limited or unlimited. A limited guarantee is asked for now for ten years. If the Secretary of State gives a guarantee, what does he do by giving it? He testifies to his belief, more or less, that it is a sound concern. If it turns out to be unsatisfactory, the shareholders of the company will come down upon him, and say, "We have been misled; you misled us, and you must put us right somehow or other, other by extending the guarantee or giving us better terms or something by way of compensation."

234. As regards the few companies that have undertaken works without guarantee, in the nature of private enterprise, has not that been still more the case. Has it not been the case as regards the Orissa Canal and several other undertakings?—The Orissa Canal, no doubt, was a very unfortunate business. The Madras Irrigation Company was guaranteed; the history of that is peculiar.

235. I merely ask, is it not the fact that the Orissa Canal was undertaken as a private enterprise without guarantee?—It was.

236. And is it not the case that when it financially failed, the company came back upon the Government, and insisted that the Government should reimburse them, and that the Government did reimburse them?—We were compelled to reimburse them.

237. And the Government not only reimbursed them the money outlay, but also gave them a large sum, which caused the secretary of that concern, who carried on the polemical correspondence with the Government, to go out of it with a very large sum in his pocket?—They gave him something which was called compensation; he did not think it a very large sum.

238. Was it not something like 30,000 *l.*?—There was a largish amount divided among the officers of the company.

239. And when the Madras Irrigation Company exhausted its guarantee, did not the same gentleman again turn up and get another compensation?—He was the secretary of that company; it was an unfortunate business.

240. Did not the same gentleman turn up in the Madras Irrigation Company?—I daresay he shared in the compensation, but we never heard the secrets of the distribution of the compensation there.

241. Then I will allude to another company. Is it not the case that there is only one known deposit of coal in the Nerbudda Valley, that that deposit of coal was made over to a company under stringent conditions, under which they

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were bound, in consideration of getting that concession of the coal, to undertake large iron works, and to develope the iron resources of India, and to make a certain quantity of iron, and also to make a railway to the coal works; and is it not the case that then the coal did pay, and it was thought that the iron ore might not, and that they insisted upon keeping the profitable part of the concession, and abandoned the unprofitable part; and that as a matter of fact the iron engagement has been altogether abandoned, and that the Government have been forced to make the railway to the coal works, leaving the coal company to make a profit out of the coal if they can, the Government bearing the loss; and also failing to obtain that development of the iron which they had expected to obtain?—As far as my recollection of the terms of the Nerbudda Company's lease extends, they did not undertake any obligation to work the iron. Whatever lapse there may have been in that respect, was rather the lapse of the Government in not insisting upon their doing it; the agreement I think was merely that if they did not work the iron their concession would cease after a certain time, and so on; but in a general way I think your account of what happened there is a little highly-coloured, though there is a foundation of truth in it.

242. Is it not the case, as regards all the railways which have been undertaken by private companies, and that have failed to pay, the companies almost invariably have come back to the Government and obtained more favourable terms? Is it not the case that the Port Canning Railway being a total failure, Government was obliged to take it over; and is it not the case that even so lately as the concession to the Bengal and North Western Railway when it was found the shares did not go off, they came back again and secured more favourable terms from the Government?—As regards the Calcutta and South Eastern Line, as it is called, under the terms of the contract the Secretary of State was bound to pay them back their capital, and he simply acted up to the terms of that agreement. After having paid them a great deal of money under the guarantee, I quite admit it was a most unsatisfactory arrangement. The Bengal and North Western Railway was a different thing. It is quite true that the promoters of that found that they had burnt their fingers. It did not go off on the market as well as had been proposed, and the Government was induced to agree to give up the share of profits in excess of six per cent., which had been reserved under the original contract, but it has produced absolutely no result; the shares of the Company are in precisely the same condition as they were.

243. I do not ask particulars, I only ask this. Is it not the fact that after this railway had been taken up by a syndicate, finding they were likely to lose, they got more favourable terms from the Government?—That is perfectly true.

244. As regards what you have said about these railways being floated rather by speculative people than by investors, is it not the case at this moment that in almost all these instances the practice is that the shares, or the greater part of them,

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them, are, in the first instance, taken up by a syndicate, that if they go to premium that syndicate makes a profit, and that if they go to loss the syndicate almost invariably comes to the Government either to be let off or to get more favourable terms?—I do not think that. The Government have nothing to do with the syndicate in any sort of way. All that the Government have to do is to say, we will agree to certain terms, and as a rule the Secretary of State before entering into any actual bargain, has satisfied himself, more or less fully, that there is reasonable evidence to show that the undertaking will be floated. I have no knowledge of anybody coming back in the way you suggest.

245. Can you mention any instance in which the original speculators who have taken up a line have submitted to the loss which has accrued by their shares going to a discount, and fulfilled their contract without coming to the Government to ask for any better terms?—The fact is the occasion has hardly arisen. With the South Mahratta Company there has been a modification of the contract.

246. In favour of the company?—Yes, but there was a reason for it. It was in order to induce the company to carry out the extension which they were not strictly bound to do under the original arrangement, and, as the Government was desirous of getting that extension made, they thought it was desirable to give somewhat more favourable terms.

247. In the case of the Bengal and North Western Railway, it was the same thing, was it not?—No. I think the fact is, that there was (if the truth must be told) a division of opinion as to whether it was a right thing for the Secretary of State to have asked for any share of the profits in that company; and as opinion is fluctuating, even in such an excellent body as the Indian Council, it so happened that when the demand was made that the Secretary of State should give up this share in the surplus profits above 6 per cent., a majority of voices was obtained in favour of giving it up.

248. Did anything of the kind take place in regard to the Upper Assam Railway?—No.

249. In times of great trouble, such as serious war, and serious famine, what has been your experience in dealing with private companies as compared with the use of a Government railway; have you found that the companies are invariably as ready to meet the requirements of the Government, and to do so upon as reasonable terms, and as fair to the country, as might have been the case if the railway had been entirely in the hands of the Government?—As regards the actual work done, or to be done, I think they have done it extremely well always, but they have made us pay for it; they have not been extremely liberal.

250. Are you aware that on the occasion of the Bengal famine of 1874, Lord Northbrook had occasion to express some dissatisfaction with reference to East Indian railways?—Well, the East Indian Company made them pay, there is no doubt about that.

251. And very heavily?—And heavily; they were not very liberal, but they did the work very well.

252. I think I understood you to say that, as a general result of your experience, it is the case that railways, which are in any shape (whether guaranteed or unguaranteed) in the hands of private companies (I think you alluded to Bombay, referring, I suppose, to the case of the Great Indian Peninsula Railway) are likely to stretch their rates to the uttermost, and to insist upon high rates and high fares, such as a Government owning a railway, looking only to the interests of the public in general, would not be inclined to insist upon?—I think that may be said to be generally the case.

253. Your views being such as you have now stated, I do not quite understand the points in regard to which you think the construction by private companies has an advantage over the construction and working by Government?—You must consider the sort of terms which I propose, and which we have actually got the Southern Mahratta Company to accept. As I have said, the Government is the owner of the railway, and we regulate the rates in any way we please; there is no limitation whatever to the power of the State over the working of that railway. The company is in reality nothing more than a State agency for working the line.

254. Then I want to know what you gain by having the company; is not the company established merely upon the "heads, I win; tails, you lose" principle?—In a certain sense, but exactly in the same way that your gardener is established upon that principle. You pay him his wages and he makes a profit out of his employment, because it is more convenient for you to get somebody else to dig your garden, or water your flowers, than to do it yourself.

255. You alluded to what happened in regard to the Nizam's railways; may I ask you what the circumstances were to which you referred?—Merely that there was a syndicate who were greatly disappointed. They thought they would be able to make a profit out of the concern, but if you look at the Stock Exchange quotation you will see that the shares are at a considerable discount.

256. You said that in a case such as that of the Southern Mahratta Railway, your only advantage is that you employ the company as you employ a gardener to do work for you; I have not quite realised, in the case of the railway, what that advantage is. You employ a gardener to dig your garden, because you cannot do it yourself. I want to know what is the advantage of employing a company to manage your railways as compared to the management of them by Government. You alluded, I think, specially to the appointment and promotion of officers, and matters of that kind. I can quite understand that in the case of a popular Government it is difficult to vest patronage in the hands of the Government, and that there may be a difficulty in that respect; but is it your opinion that the patronage in regard to the appointment of engineers, the promotion of engineers, the working of the railway and similar matters is better exercised

Sir *George Campbell*—continued.

exercised by what I may call the average quality of private companies that are established in London, than it could be by a Government of the character of the Government of India?—You have perhaps a little misconceived what I meant, when I said that there were difficulties arising in connection with the staff and the railway administration. What I rather meant was, that the action of a company is much more elastic; it is more free than that of a Government. If a company have an inefficient traffic manager they do not hesitate to say, "You may go about your business, we do not care about keeping you." A Government does not get rid of its servants in that way, and so little is a Government capable of getting rid of its servants in that way that it is only last year that some of our public works officers who were pensioned thought it necessary to bring an action against the Secretary of State for restitution of their rights, and claimed salary at the rate they had been receiving in India for an indefinite period of time, and so on. They lost their case it is perfectly true, but still they made the claim. There is a much greater difficulty in dealing with your staff. Then there are other difficulties arising in this sort of way. If the Government has its officers in charge of railway or any other work, and if a man shows special talent he will be looked upon as a desirable man to be put into something better, and then he is taken away. Thus you do not get the same continuity of service. A company has its own agent or chief engineer, and the man remains there; whereas a man in Government employment is always looking out for something better. There is not that continuity of service which is essential for real efficiency; at all events there is great risk of breaking the continuity of service which is essential to managing such a concern as a railway, which is a very difficult thing to do well.

257. Is it your opinion that at the present the system under which the guaranteed railways obtain their officers, and are able to dismiss them, renders their service more efficient than that of the officers of Government railways, under the system upon which engineers are supplied from Cooper's College, and so on?—I think that there is a tendency in that direction.

258. Is it your impression that the railway service is more efficient than the Government service for this purpose?—That is, I think, perhaps, hardly a fair way of putting it. I began by saying, and I have said all along, that I think we have arrived by degrees at a system of State management of railways which is excellent, and probably as good as anything which is to be got; and, as I said in reply to some other question that was put to me, you cannot merely view the thing from one side, you must view it all round. Even supposing the Government officers were as good, or even supposing they were a little better, let us see what it comes to. You ultimately encumber the Government with the duty of looking after the details of railway management, which is a duty which it cannot very satisfactorily discharge, and which it is not necessary that it should discharge. There are a great many functions of Government which can only be performed by a

Sir *George Campbell*—continued.

Government, such as looking after the administration of Justice, the Army, the Police. A vast number of things such as those the Government must do. You, Sir George Campbell, must know as well as anybody, that the burden put upon an administrator in India is enormous, and if he can be relieved of any part of the infinite volume of work which is put upon him, it is a great advantage; and I think that if you can get rid of this particular sort of work (which it appears to me you can get rid of) and still maintain satisfactory efficiency, it is desirable that you should do so.

259. Is there no greater disposition to jobbery and nepotism on the part of private companies than on the part of a Government?—I do not know that it has shown itself in a very objectionable form.

260. Still the gist of the whole thing is this: is it your opinion that a more efficient service is obtained taking the *pros* and *cons*, the advantages and disadvantages of the service under private companies than under a Government?—I will not say a more efficient service, but I think it is more conveniently managed in that way.

261. And do you think that the advantage and the convenience of management in that respect over-weigh the disadvantages on the other side, in respect to convenient management, as in the case of war, famine, or other great emergencies?—I think so. I think that arrangements may be made under which all the necessary securities may be maintained.

262. And taking the world as it is, and joint stock companies as they are, you think, upon the whole, there is an advantage in joint stock companies' management over Government management, do you?—Yes, I think so. Of course it depends upon circumstances; if you mean advantage as regards £. *s. d.*, that is another thing.

263. I mean advantage to India; that is to say, to the country?—I do think so; I think the Government will have more freedom of action in regard to the other multifarious duties that it has to discharge, and that it is not expedient that it should take upon itself every function performed by a company. Surely one great objection that is taken to our Government in India is that the whole of it is too much a merely State or bureaucratic machinery.

264. I think you are Chairman of the Public Works Committee in the India Office, and that you have for a long time been connected with it in that way. Have you had occasion to compare the system under which the State exercises the control over railways with that which is exercised in countries where they have an absolutely free system, and the system exercised in countries, such as France, where they have something between the two?—I think in most of those cases the various countries will adopt the system which is most suited to the general organisation of the government of the country, or the general feeling of the people, according to the state of advancement or backwardness of the people. I do not think myself that any very valuable results can be obtained by drawing a comparison of that sort.

265. As regards the localising of railways and provincialising them, I should like to know

Sir *George Campbell*—continued.

whether you have considered the question as to how, supposing the railways are provincialised, the money is to be raised? In what shape would you say that provincial governments are to be allowed to raise loans, and allowed to guarantee them or to give security for them?—I do not know that I went so far as to say that I thought that the provincial governments should be authorised to raise money or to guarantee companies or anything of that sort. What I said was that I thought that, so far as was practicable, if the administration of railways was placed more under the provincial governments it would be an advantage, and if they were made financially responsible for the working of them. It does not at all follow that a scheme may not be devised under which funds, so far as they are public funds, shall still be applied under the control of the central government, the Government of India. The Government of India necessarily controls the main outlines of the finances of India. You have in the North-West Provinces, Bengal, Burmah, and elsewhere, railways which are designated as provincial lines, for which the local government has accepted the financial responsibility; it pays the Government of India 4 per cent. on the capital, and takes the surplus or provides the deficit as the case may be.

266. You do not propose that provincial governments should be empowered to raise loans, do you?—No, I do not go so far as that; I do not say that some of these days the Government of Bengal may not be in a position to raise its own loans, as the Governments of Melbourne or Queensland or other colonies do, but I do not think we have arrived at that at present, and I do not think that is at all necessary.

267. During your examination I think the suggestion was made that one of the advantages of companies is this, that the companies having undertaken the work may be expected to carry it on continuously, whereas the credit of a Government is variable, and that there have been occasions when a Government has been obliged to stop public works on account of financial difficulties. Now what I want to ask you is this: does not that only apply to works which are constructed out of revenue; within your experience has there ever been a time when a Government having undertaken a great work to construct from borrowed money has fallen so low in credit that the Government of India would have any difficulty in raising money in the market supposing they were prepared to carry on the line without reference to the immediate surplus or deficit of revenue?—No, it is quite true that it has not; so far as my knowledge goes there has never been any difficulty in carrying out works of that class.

268. Even in the worst period of the Mutiny the Government were able to raise money not on very exorbitant terms, were they not?—And they had to supply money to the guaranteed companies.

268. At the time of the Mutiny?—Yes.

Lord *George Hamilton.*

270. Was not that by loans raised here?—Yes; still it was done by the Government, and on the credit of the Government of India.

Lord *George Hamilton*—continued.

271. That money was not paid out of revenue, but all out of loan, was it not?—Perfectly so.

Sir *George Campbell.*

272. While we are on the subject of localising or provincialising these railways, I think you did once propose a cess for irrigation purposes, did not you, on the principle of the London water companies?—I did.

273. Then I distinctly understand that you are not prepared to suggest anything of the kind at this moment for railway companies?—What I should suggest and what is likely to be done is quite a different thing. I said (and I think it is to be found in this book before me) that we throw it out as a suggestion that it might be the proper thing to do.

274. But at this moment you are not prepared to advocate it?—No, I do not think so. My disposition is not to propose anything which I think will certainly not be done, and I think that this will not be done.

275. Then as regards the cost of dealing with famine, is not this very much the case, that owing to the construction of railways, commerce in grain has very much increased, and that districts which formerly used to store large quantities of grain now make money by exporting that grain; are not enormous quantities of wheat, which might have been put in pits, as a provision against future famine, now exported to England, and sold in England, and in that way though an immediate profit is derived by the cultivation of the soil, and by the Government as owners of the revenue, yet when you come to a famine is it not the fact that your stores are dried up, that you have great facilities of re-importing grain from other quarters, but that somebody must pay for it, and that, in that case, the poorer members of the community being unable, the Government (in that case accepting the obligation as we now do) must pay for it, and that, therefore, in that sense, the more railways you make, and the more means of communication you provide, the more expensive the relief becomes to the Government as representing the central power?—I do not quite follow that question.

276. Is it not the case that in former days, before railways were made, very large quantities of grain were stored in the districts as a provision against famine, the natives habitually acting upon the same principles that Joseph did in Egypt; but that since railways have been made, the more that railways have been made, the more these stores are exported, and the less grain is stored to remain, the more, consequently, is it necessary in times of famine to provide again to meet that famine; and that therefore, although there are, through railways, great facilities for feeding the poor, still that involves an enormously increased payment, which must come from the Government?—I should doubt the conclusion. To some extent I admit your premises, but the conclusion I should draw from the facts would be this; that although it is quite true that a larger proportion of the actual surplus will be exported in the first place, a greater stimulus will be given to production by the fact that everybody will have a better market for his produce; and in the next place,

Sir *George Campbell*—continued.

place, by the development of railways, whereas before you could only draw upon a very limited area, now your feeders will be thrown out into all parts of the country, and a small contribution from the large area will be more effectual for the relief of any particular place than a large contribution from the small area.

277. It is the case, is it not, that since communications have been made grain is stored in great pits much less than it used to be?—I have no information upon that question. Of course, if a much larger quantity of it is exported that must be so. It must be so in the nature of things, unless a larger quantity is produced. But what is the export of grain? The export of grain from India merely consists of two articles; that is to say, wheat and rice. The great mass of the food of Northern India, at all events, is never exported at all.

278. All I mean is this: is it not the case that an immediate advantage being derived from an improved means of communication, the risk of famine and the difficulty of meeting it has been by no means diminished, but rather increased by this system which has been pursued of late years, in spite of the greater facilities of communication?—I quite admit that; I have always recognised that as a fact. Every year that we go on, if famine arises, we shall be bound to spend more and more, but that arises from the sense of the obligation becoming more acute. The first thing is that we see that we can do it; and in the second place, we feel also that in proportion as we can do it we ought to do it. When we were unable to do it the stimulus to try and do something was, so to speak, absent. I need not refer to the particular passages in the report, but if you study it you will find some very excellent sentiments as to the causes which led to the comparatively inefficient relief which was given in past times.

Mr. *Dalrymple.*

279. Would your objection with reference to guarantees be general, or would you be disposed to waive it in a case where remunerative traffic might be fairly counted upon?—It is general; and I should particularly object to it if it was a line which I thought would be profitable, because there is no justification for it. Why I should spend the taxes of India for the purpose of putting money into other peoples' pockets, I cannot conceive.

280. If it is likely to be remunerative it would not be a burden upon the taxes, would it?—Then what is the meaning of "Guarantee"?

281. For the purpose of starting it in the first instance, would you not do it?—It gives these people the security which they want. They would not undertake the thing unless you secure them. If I give a security that a person shall not fail, it appears to me unreasonable that he shall go on getting all the benefit derived from his operation, whatever it may be.

282. You spoke of the guarantee system throwing a burden on the Indian ratepayer, but would it not be right to say that the non-development of the railway system also entails a loss to

Mr. *Dalrymple*—continued.

the revenues of India?—I suppose that that is true.

283. And that some assistance by a State guarantee might lead to that loss being avoided?—The question, of course, arises as to the balance of advantages, what is the best way of doing what we want, and is the system of guarantee better than any other system; I think the fundamental hypothesis upon which the whole of this discussion goes is that something has to be done. If we did not recognise the obligation to do something we should none of us be here.

284. You consider that there is some suspension of railway development just now?—It has been rather I should say a relaxation, I will not say a suspension. There has been a relaxation of that amount of additional progress which I think would have been reasonable. It has been generally felt, and I think properly felt, that the restrictions which were imposed immediately after the famine of 1877 and 1878, and during the Afghan War, were too tight, and that something more should be done, and the reason that something more has not been done really is that people have not been able quite to make up their minds in what direction to go.

285. When you propose to leave the matter to the Secretary of State and the Government of India, and admit at the same time that they differ in the nature of things, is there not a risk of nothing being done?—If their hands are loosed, I do not see any reason why they should not come to a satisfactory conclusion amongst themselves, and, as I said before, I think if they had not been pressed upon by what I consider an untoward event that happened last year in the House of Commons that conclusion would have been come to then.

286. If there is a State guarantee do not you think, as Lord Dalhousie said long ago, that if the guarantee was only extended to such an amount of capital as might be needed if the work were well carried on, and if provision were made for its completion within a definite period, that it would be an inducement to economy?—That, in reality, was the system under which the guarantees were given; but then having once started a company with a guaranteed capital, practically you find that you cannot get any more capital without a guarantee. The consequence has been that every sixpence now being spent under the old contracts still continues to be guaranteed, and you cannot draw a line.

287. If the guarantee were to cease and the work entrusted alone to companies, how could the recommendation of the Famine Commission be carried out in reference to railways; they might not be carried out at all, might they?—Certainly not, unless Government intervened in some way. It is admitted I think by everybody that, in some shape or another, the Government must contribute something from the revenue of India. Really the practical question is, how it is to be done; not whether it shall be done, but what is the most efficient way of doing it.

288. The South Mahratta District was referred to; that is a poor district, is it not?—Some part of it is extremely poor.

289. And the purport of your observations

Mr. *Dalrymple*—continued.

pointed to the desirability of a more generous arrangement?—I do not altogether say that, but I think a more generous arrangement at the commencement would have left the shares on the market with a small premium instead of being at a small discount.

290. I think you said a very small additional guarantee would have called out a larger amount of capital?—I think so.

291. Then the smallness of guarantee injured the success of the railway?—Not the railway, because we got the money; but it injured the success of the speculator.

292. Who is responsible for the South Mahratta being carried out for the 3,000,000 *l.*?—The arrangement is rather a complicated one. It is something after this fashion. We had estimates made by our own officers which satisfied us that it was not likely to cost more than the 3,000,000 *l.*; then we agreed to give the 4 per cent. on the money that was actually spent on the railway up to the limit of 3,000,000 *l.* If more has to be spent then we are not bound to give more than 3 per cent., and the company have to come to us to make a fresh bargain. If we are compelled to supply the money we can charge the company 4½ per cent. for it.

Mr. *Bolton.*

293. That was not quite all, I think; there is still another condition, is there not?—In the South Mahratta arrangement?

294. Is there not a condition that if the company used the money they were to receive from the Government 3 per cent.?—Yes, but that was optional. If the company chose to do it they might, but there was no inducement to them whatever to squander the money.

Mr. *Dalrymple.*

295. We have received a caution not to mention the gauge question, but I may be allowed to ask you if it has not been found that the adoption of the narrow gauge has been a check to traffic?—Not that ever I heard of.

296. If the traffic is finite, of course, the narrow gauge may suffice, but if it is almost infinite, you cannot say that it will suffice, can you?—Is there any place in the world where the traffic is infinite; I never heard of it.

297. I will say capable of development?—The traffic that has ever come upon any Indian railway that I know anything of is not of that nature.

298. Have you heard of the Great Indian Peninsula proving unequal to its traffic at the height of the wheat export season?—That it did not carry everything that was offered is possible, but that is a totally different thing to saying that it could not do it if it had sufficient engines and wagons. That is one of the complaints that the Great Indian Peninsula Company made; they said that they had not got engines and wagons enough, and that is the reason why they could not do it.

299. Have you heard it suggested that when the through traffic from Bombay to Calcutta is thrown upon it, it is anticipated that the break of gauge at Nagpore will be a great evil?—I have heard a great many things said about that. But I wholly disbelieve that there ever can be a through goods traffic between Bombay and Calcutta; it is out of the question.

300. If you are favourable to the narrow gauge would you not be favourable to grouping together, as far as possible, railways of each gauge and avoiding breaks of gauge?—Yes, it is desirable so to do.

301. Is it not mischievous that great arterial routes should be broken by change of gauge?—Yes, but it depends upon what you call an arterial route.

302. There is the line from Ahmedabad to Delhi; take that as an instance?—There is something to be said on both sides. My own impression is (and up to the present time I have heard nothing to induce me to give up my idea) that the actual cost of the break of gauge, under the conditions of the Indian traffic, is extremely small. It is estimated to be certainly not more than a cost of 10 miles of transport. I calculate that such a break of gauge as that, in the case of grain, put on the line at Delhi and going to Bombay, would cost certainly not more than 1 *d.* a quarter. The additional cost on food grain supplied for famine relief in India would be quite inappreciable. That may be an intolerable burden, but I cannot see it.

Mr. *Carbutt.*

303. Including detention of waggons?—That is the actual cost. The wheat delivered in London will be 1 *d.* per quarter more expensive on account of the break of gauge, or rather, I should say, that is the direct additional cost to the exporter. But what further has to be considered is, what is gained, which is the reduced cost of a metre gauge line from Delhi to Ahmedabad.

Mr. *Onslow.*

304. Under the guarantee system there was every inducement, if I may so put it, to a company not to economise, because, as long as they could raise the capital, there was a guarantee of 5 per cent. on the whole sum subscribed; is it not the case that on the East Indian Railway, at all events for many years, there was an enormous waste of money on account of this guarantee of 5 per cent. in the construction of the line?—I would not say that. I think myself that the East Indian Railway is the best managed railway in the world. There was a certain amount of waste, partly unavoidable, and partly avoidable, during the first 10 or 15 years of its life, and no doubt the fact that the interest was guaranteed, and that as soon as the shares rose to a premium, every additional shilling that was spent on the line put money into the pockets of the shareholders, of course was not an inducement to economy; that is admitted.

305. Under this system of guarantee to the Southern Mahratta Railway, I suppose the Government of India have appointed officers to see that there is no waste of money?—Yes, the whole thing is under strict supervision.

306. They have their own auditors, and as far as

Mr. *Onslow*—continued.

as the construction of the line goes, the officers under the Government of India sanction the mode of construction before it is actually taken in hand?—Quite so.

307. That is the case, is it not?—It is.

308. You recollect that was not the case on the East Indian line for many years, and hence the great waste of money?—Nominally it was. The position was totally different. When the East Indian Railway was commenced, and the other railways in 1854, there was nobody in India who knew anything about railway construction. Everybody who had to start railways had to be brought from England, and the Government had no officers whatever of any experience in railway construction. Gradually a body of men have been educated to the work, who, at all events, themselves consider that they know as well how to manage a railway as the railway company's officers. Now they are in a position to say what is reasonable and what is not reasonable; and what is more to the point, the Government will listen to what its officers say and support them. In the earlier days to which my memory goes back perfectly well, where a difference of opinion arose between the Government officers and the officers of a railway company, the Government officers having been men of no practical experience in railways, always went to the wall, and if the railway company's engineer insisted he got what he wanted.

309. But is it not the case that the Government of India of the day, when they sanctioned this guarantee to the East Indian and other railways, could not practically have borrowed the money themselves?—I do not know whether they could or not. There is no evidence that they could not; at all events, they thought that it was better that they should not. My own impression is that that was a delusion, and that the probability is, in fact it is almost a certainty, that they could have borrowed the money on better terms than the company.

310. At that date?—At that time, because after all it was merely borrowing second-hand. What enabled the companies to raise the money was the Government's guarantee.

311. A certain class of gentlemen who take an interest in Indian affairs, because the system of railways has developed in a most rapid way in America, have drawn an analogy between that country and India, and their presumption is, that because that has been the case there, therefore, it may be the case in India. Hence, as you know, several gentlemen have urged the Government to borrow annually to a very large extent; but is there, in your opinion, any analogy whatever between the railway system in America and the railway system in India?—Absolutely none, and I hope there never will be.

312. Therefore, you think that the analogy which has been drawn is utterly fallacious?—Utterly. When I say that I hope there never will be, what I mean is this, that it is only about one-third of the share capital invested in the railways in the United States that pays any dividend at all. There are comparatively few of the railways there that pay their shareholders any dividend at all. Further, this is a most im-

Mr. *Onslow*—continued.

portant point which must be considered, that whether the capital, which is invested in railways in the United States, is profitable or not, it is to a very great extent capital provided locally, so that a very large part of the return on the capital, whether it be regarded as interest or profit, remains in the country, and no doubt the country benefits by it, even if the shareholders do not. In India, so to speak, none of the capital is provided locally; the interest and profits are for the most part exported, and the whole of the burden of providing the capital therefore falls upon the country if the lines are not remunerative.

313. Then, as regards the system of construction of the railways themselves and the mode in which they are laid down in America, in your opinion that system would not answer in India?—I think not at all. So far as I know anything of American railway construction, it has been most extravagant and wasteful. I have seen a little of the United States myself, and the conclusion I came to was that half the money reasonably laid out would have given three times the amount of real accommodation to the country that they have got. That arises from the railways having been laid out absolutely without any control whatever. I remember going to Omaha, at the end of the Central Pacific line, I think it is, and finding there facing me three trains, all going exactly to the same place, timed to start at the same time, and to arrive at Chicago at the same time.

314. One of the great evils of carrying on railways in India by companies is, is it not, that those companies get on the London Stock Exchange, and into the hands of the jobbers, who do not look so much to the interests of India as to their own profits?—I think after a railway is once started, when it has got into the hands of the company, the London Stock Exchange has very little to do with it. The business quickly works itself into order, and runs clear. I have no particular fault to find with the management of any of the railway companies.

315. Then I suppose I may understand from you that as far as railways now are constructed in India, whether by a *quasi* system of guarantee or any other means, there is a perfect Government supervision and a perfect audit of every rupee that is spent?—"Perfect" is perhaps too large a word, but it does what it can. It is more or less efficient and thorough.

316. And since the first construction of the East Indian Railway great improvement has been made in that point, has it not?—Very great.

Mr. *Jackson.*

317. In this Famine Commission Report you subscribe to the view that it is desirable to make 10,000 miles of railway, do you not?—I think that it is a little misunderstood; I endeavoured to explain before that the intention of these paragraphs was rather to give an illustration of the quantity of railway that might be considered sufficient to protect the country against famine, and from that to deduce the probable amount of outlay which the Government would have to

Mr. *Jackson*—*continued.*

incur to make that quantity of railway, rather than to indicate that either 5,000 or 10,000, or any other number of miles of railway ought to be built; and the calculation is made by and of the idea of cutting up the country by railways 50 miles apart.

318. In the next paragraph you speak of the probable present need of an addition of 5,000 miles to the existing lines?—The words are that it "would go far to remove all future risk of serious difficulty." It was roughly estimated at about that at that time.

319. And you thought that extent of railway might be constructed in 25 years with advantage to the country?—I do not wish it to be supposed, and I do not think that we stated that it would be satisfactory, that it should take such a long time.

320. I was going to ask you whether you did not think it would not be very much to the advantage of India if the extension were made at a much more rapid rate than that, if it could be done?—Assuredly. The more rapid the rate at which it can be done the better, but you have facing you the financial difficulties, and the financial difficulties are the only difficulties to prevent you making railways as fast as you please.

321. But the financial difficulties do not appear to be quite so great if we take your view of them. I think you have told us that there is a million surplus at present from the railroads, and that therefore the railways are paying?—That is so.

322. Have you any doubt that other railroads could with advantage be made, and which would pay the interest on the outlay?—No, I have no doubt at all; if you will go on at a not excessive rate you will find in the future similar results to those that we have obtained in the past; that is to say, you will have a gradual development of your railway income, which will cover the growth of the interest charge, whatever it may be. I quite admit that it is a mere question of the balance between the two; you must not go on too fast, that is all.

323. I suppose we may take it that there are districts in India where new railroads might be made which in your opinion would pay interest on the outlay pretty nearly at once?—Before many years are over, yes. In a country like India you must not expect too much. It takes a little time to get people into the way of a change in the system of transport, because in opening a railway it is not merely that it is a novelty to the people which requires them to arrange their affairs somewhat differently, but it also leads to their produce going to new markets, and, as everybody knows who has had any experience of those things, especially in a backward country like India, it takes a little time before trade settles down.

324. I suppose, judging by past experience, the advantage has been accruing at a very considerable rate during the last three or four or five years?—It has. If you will look at the returns you will see that they go on steadily and in a very satisfactory way.

325. And you have no reason to suppose that that will not continue?—No, quite the reverse.

Mr. *Jackson*—continued.

326. And you have no reason to suppose that this million surplus which we have at present from the existing railroads will not continue, and that the surplus will probably grow; I think you used the term that they were making a gradual and steady increase in the returns?—Yes; of course, the million which we have this year may be trenched upon considerably if you go and borrow a large sum of money and put it into new lines that would not come into operation for some years; that is to say, which would not become paying for some years. This million is the balance after having set off your net receipts against your total charge.

327. Take the railroads as they exist at present, there is a surplus revenue of a million after paying all the charges which you are called upon to meet; you have no reason to suppose that, so far as the existing railroads are concerned, that million surplus will in any way diminish in the future, but rather increase, as I understand?—As regards the existing railways that is generally true.

328. Then with regard to any extension of railroads, you have got certainly a million in hand as a sort of guarantee to meet any increased interest?—That is quite true.

329. Therefore would it not be safe, or would you see any particular risk in borrowing money and making new lines, the interest on which would not exceed the surplus revenue which you have at present?—Subject to certain qualifications. Because there happens to be a million this year, it does not follow that there will be a million next year.

330. It is not absolutely certain, you think?—The fluctuations are very great, and a bad year may make a difference of 200,000 *l.* or 300,000 *l.*, or more.

331. We are hoping for good years?—You may hope for good years, but you are certain to have bad years sometimes.

Mr. *Samuelson.*

332. All over India, do you think?—All over India.

333. At one time?—Well, we have been in that unfortunate condition. In 1877 and 1878 that was the case. I admit that it was quite unusual, but you must be prepared for this sort of thing. Then suppose there is a falling off in any other element of the revenue of India. You must look upon the revenues of India as a whole. If you could separate railways from the rest of the business of the Government, and that the Government was not responsible for anything except railway making, then you might, of course, work upon the railway surplus in the sort of manner that has been suggested, but that is not the position of the Government. The Government has to take its expenditure and its income as a whole, and all sorts of charges may arise, and all sorts of failures may occur in the revenue. Therefore you cannot, in my judgment, as I have said before, with safety say that that particular sum can properly be made available for that particular object.

Mr.

Mr. *Jackson.*

334. Then I understand you to say that, except for the purposes of providing for loss of revenue from some other cause than from the railroads, it would be safe, in your opinion, to calculate upon this sum of money in that way, and to use it for such a purpose?—And for meeting other unforseen charges. Suppose we go to war with Russia on the Afghan frontier; you may say it is not likely, but still I say "suppose."

335. Then you think, as a matter of prudence, it is necessary to hold in hand this surplus as a provision against loss of revenue from some other cause entirely unconnected with railways?—I consider that by reason of other obligations which rest upon the Government, besides the obligation of making railways, that it is necessary in considering their financial position, to consider it as a whole, and not to isolate that particular portion of the income which comes from railways.

336. But do you not think that the extension of railways in India would very largely benefit the country of India and develope its trade and the prosperity of its inhabitants?—And for a great part of my life I have been one of the strongest advocates for extending railways, and for extending them in this sort of way, that is to say, by borrowing money. In fact, I was one of the earliest of the servants of the Government who urged it upon them; but I can only repeat once more that, in my judgment, it must be done with prudence, and it must be done with reference to the general condition of the finances, and not to any particular part of them.

337. But I suppose there is no objection in principle, in your mind, to constructing railways out of borrowed capital?—On the contrary, as I have just said, I have been an advocate for it for at least half of my official life.

338. You said that, in your opinion, railways in India if constructed cheaply (I think that was the term) would pay?—Yes.

339. I suppose you have seldom known a time when they could be constructed more cheaply, perhaps, than at present?—Quite true.

340. Therefore, in that sense this is a favourable time to stimulate the extension of railways, is it not?—Yes, that is quite true; and let me add with reference to some of your observations before, that I quite recognise the fact that the probability, or you may call it almost a certainty, of the railway income gradually and steadily increasing is a justification for going on steadily.

341. I wanted to ask you whether you could tell us anything, or give us your opinion, as to the several different gauges of railways in India. Do you think that the broken gauges are a disadvantage to the railway system of India?—Of course it is perfectly true that there is a disadvantage in having a break of guage; there is no doubt of it.

342. Do not you think that this broken gauge interferes very much with the through carrying of goods from one part of the country to another, and that it is rather likely to increase the cost?—I have already said that it does increase the cost. I may repeat, as far as my knowledge goes, that the cost of the break of gauge is equivalent to

Mr. *Jackson*—continued.

something less than the cost of transport of ten miles of the goods affected by it.

343. And I suppose, from a military point of view, the break of gauge is an inconvenience?—No doubt it is an inconvenience; there is no question about it; but really the sole question that weighs with me, or that ever did weigh with me, is the old story of the balance of the advantages and disadvantages; are you to get more good by spending a smaller sum on the metre gauge line, or a larger sum on the 5 feet 6 gauge line, the one being attended with the inconvenience of a break of gauge, and the other being attended with the inconvenience of the greater cost.

344. Have you made up your mind as to which is the preferable gauge for India for future extensions?—So far as I am able to answer that question at all, I think it must depend upon circumstances. I do not lay down any absolute rule either in one sense or the other.

345. I will put the question in another way. Do you think that in the future extensions it will be desirable to continue making broad gauge and narrow gauge, or would it not be more desirable to try and keep to one uniform gauge?—I think that as you have got the metre gauge, and as you have got the 5 feet 6 gauge, you cannot altogether avoid, at all events for some time to come, going on making both.

346. You have a very strong objection, you told us, to the system which has hitherto prevailed. I notice that at page 7, para. 8 of the Papers which have been handed in (App. No. 1., p. 493) the Government of India say, "Under these circumstances, and in the present financial position of India, we have no hope of being able to effect what we urgently require, without a delay which it is of the utmost importance to avoid, except by entrusting our railway works to private enterprise under a safe and reasonable guarantee." Do you agree with that?—No, I do not.

347. Then will you turn to para. 11 of the same Paper, on page 8 (App. No. 1., p. 494). They say there, "Our principal object at present is to recommend to your Lordship that private capitalists should be invited to undertake the construction of these lines upon a guarantee of interest limited both in amount and in duration." Do you see any objection to a limited guarantee.—I do; I see a strong objection to it.

348. Then how do you think that the capital could be raised for the extension of these railways, assuming that they are to be constructed at a much more rapid rate?—I think I have already explained what my own personal view is as to the most satisfactory way of continuing the construction of railways.

349. You think the capital could be raised from the public without a guarantee, do you?—Not without paying interest, but without a guarantee, which is another thing.

350. Well, I will say a payment of interest?—You cannot get money without paying interest upon it, certainly. All I say is this, that it appears to me that it is better for the Government to undertake the risk of paying interest upon whatever capital is to be put into these

Mr. *Jackson*—continued.

railways, to accept the entire risk, than to accept the limited risk of paying guaranteed interest.

351. You see no objection then to the Government paying the interest on the capital which is raised?—Within the reasonable limits that we can pay. What I have advocated is the particular plan which has been alluded to as the South Mahratta plan, but possibly some other scheme may be devised, or the Government to a certain extent might undertake the work themselves.

352. You spoke of the rupee difficulty with reference to the exchange; do you think that the increase of exports from India will help the Government in that question?—It must. The fact is you could not get the remittances unless the exports did increase. The only means of increasing the remittances must be through the additional exports. It is very far from me to say, with the knowledge that I have of the actual growth of the trade of India, that it will not continue to grow. It will continue to grow, and it will, no doubt, admit of increased remittances from India to pay the interest on any English capital that is invested in railways in India, or invested in anything else for that matter; but you cannot expect it to start up all of a sudden, and it will be liable to certain fluctuations. For these reasons, as I have already said, I consider that a certain amount of caution and hesitation should be exercised in entering upon expenditure of this description.

353. Do you think that the railways in India have had any effect upon the general revenue of the country apart from the surplus derived from the railways themselves?—No doubt they have stimulated trade largely, but, under the peculiar forms of taxation which exist in India, that brings in very little to the Government revenue. No doubt anything that adds to the general prosperity of the country adds to the general elasticity of the revenue, and the revenue has in all branches been very steadily and satisfactorily increasing of late years. But the whole system of taxation in India is totally different from anything that you have here. A very large proportion of the revenue of the country is derived from the land, which virtually does not fluctuate from year to year, and does not immediately at all events, although no doubt it does eventually, depend upon the advantages given by railways. There is no immediate response.

354. The making of railways would increase the value of the product of the land, would it not?—It does eventually, but not to the Government; to the people it does, undoubtedly.

355. Therefore they are better able to contribute the taxes that they have to pay, are they not?—Certainly. The relief to the country is immense. I have estimated in some of the papers that I have written upon the subject, that the saving to the people of India from the construction of railways is probably twice the gross income received by the railway companies. It is a very large sum, indeed; it amounts to 30,000,000*l.* or 40,000,000*l.*, probably, annually. The cost of transport has certainly been reduced one-third.

Mr. *Wodehouse.*

356. I understand you to deprecate the existence of such a restriction as has been imposed upon the Secretary o fState and the Government of India by the recommendation of the Committee of 1879?—I deprecate the form in which those restrictions are imposed, but more particularly the subsequent restrictions which have been imposed by the Secretary of State himself on the Government of India; I say, although I ought not, perhaps, to throw stones at people, that the fact of the matter is that Lord Hartington's letter of the 4th of January 1881, was the outcome of a policy which strove really to arrest the expenditure on public works, and it was hardly denied that that was the object of it.

357. Would you prefer that the hands of the Secretary of State should be unfettered by such recommendations?—No, I think that the recommendations of such a Committee as this are most valuable, and that it is most desirable that recommendations should be made; but I think it is not desirable that any specific sum should be named as the limit to which expenditure might go; nor do I think, for instance, that it is desirable that you should say that any specific number of miles of railway should be made.

358. You desire only recommendations of a general character?—Certainly, and that the responsibility should be thrown upon the Secretary of State and the Indian Government of acting upon them, because in reality the action that is taken must depend so very much upon the financial position of India as it arises from year to year.

359. I think you said that the Secretary of State had exercised as a rule a restraining influence upon the Government of India in the matter of expenditure?—Yes.

360. Would you say that it has been rightly so?—I would say usefully so.

361. Then do not such recommendations as those contained in this Report of 1879 strengthen the hands of the Secretary of State for that purpose?—They do, but that may go too far.

362. Is it not an advantage to him to have such a recommendation to appeal to in case of demands for what he regards as excessive expenditure, coming either from the Government of India, or from private bodies like chambers of commerce?—That is perfectly true, and therefore I say the recommendations of a body like this would be most useful, and it is most desirable that we should have them.

363. Do you deprecate specific proposals?—What I meant to say was rather that you should not lay down a hard-and-fast line; for example, that you should not say that two and a-half millions, or three and a-half millions, or a specific sum only should be expended, or that you should not say that we should make 800, or 900, or 1,000 miles of railway. I think you should not tie our hands too tightly.

364. But you would not object to a recommendation of a restraining character, if it be not too tight?—Certainly not.

365. You would desire it, as I understand?—Just so. And equally one of a stimulating character, if it is not too extravagant.

366. Is it your opinion, that looking to the general

Mr. *Wodehouse*—continued.

general circumstances of India, extensive and costly public works should be undertaken there with great caution?—It is, with considerable caution.

367. *Looking to* all the elements of uncertainty in the future of such a country, you mean?—I do; and I may repeat (because I do not think it can be repeated too often) that there is always a great danger on the one side that if you tie people up too tightly there will be a reaction against it, and if you let things go on too fast there will be a reaction in the other direction.

368. I think you said that the proposed extension of railways would increase rather than diminish the cost of future famine relief?—I do not know that I should say that it would increase it, but it would be coincident with an increase.

369. It would not diminish it?—I think not, or very little relatively to the increase that would take place from other causes. I think the diminished cost of actual transport of grain (because grain would be given to the people somewhat cheaper) will not be a set-off against the necessary increase from other causes.

370. But the railways will be a most valuable instrument in the saving of life?—They will, and in the fulness of time I should hope that we might be able to say that we had effectually saved life, and that the country was fully protected. In every other country of the world that I have heard of, in the progress from barbarism to civilization, the people have all gone through this state of things, of being liable to famine. We have had it in our own country, and it lasted a long time. They have had it in France and in other countries.

Mr. *Wodehouse*—continued.

371. There is no other means which would save life in time of famine with equal efficiency, and greater economy, in your opinion?—I think not.

372. With regard to the comparative economy of railways worked by the State and private companies, I understand you to say that, looking to the simple question of railway management, there is no great balance of advantage and disadvantage of the one over the other?—I think not.

373. But that looking to the whole administration of the Indian Empire, the management by private companies is preferable?——That is quite my opinion.

374. With regard to the Southern Mahratta arrangement, do you think that that is preferable to direct construction by the State?—I think it is preferable for this reason, that it introduces a company at once. You have a company interested not merely in the working of the line, but also in the construction of it. You get rid of the Government agency at an earlier stage, although the Government may be able to make the line equally as well. I need only repeat, however, that my own impression is that if the Government can divest itself of this function, it is desirable that it should do so.

Tuesday, 25th March 1884.

MEMBERS PRESENT:

Mr. Baxter.
Mr. Brodrick.
Sir George Campbell.
Mr. Carbutt.
Mr. Kynaston Cross.
Mr. Dalrymple.
Mr. William Fowler.
Mr. Jackson.
Mr. Justin M'Carthy.
Mr. Onslow.
Mr. Bernhard Samuelson.
Mr. Slagg.
Mr. William Henry Smith.
Mr. Edward Stanhope.
Mr. Wodehouse.

The RIGHT HONOURABLE WILLIAM E. BAXTER, IN THE CHAIR.

Sir JAMES CAIRD, K.C.B., called in; and Examined.

Chairman.

375. YOU were a Member of the Indian Famine Commission?—Yes; I was the English Member of the Indian Famine Commission, and traversed a large portion of India on that Commission, and at all the principal places we examined witnesses and took evidence, and otherwise had a very favourable opportunity of seeing the country.

376. Let me call your attention to the order of reference to this Committee. This Committee has been appointed "to inquire into and report upon the necessity for more rapid extension of railway communication in India, and the means by which this object may be best accomplished, with special reference to the Report of the Famine Commissioners, and with due regard to the financial condition of India." As a Member of that Famine Commission, after being in India, what opinion did you form regarding the extension of railways in that country?—In the Report of the Famine Commission we recommended railway extension for protection in time of famine, and the more ready development of the various interests of the people, three-fourths of whom are engaged in agricultural pursuits; and further, in a Report of my own which I made at the same time to the Government, I expressed views of the same purport.

377. Can you inform the Committee whether any of the recommendations in the Report of the Commission, or your own separate Report, have been carried into effect since you left the country?—I may say that in the Report we stated that no other means of succour in famine was comparable with railways. We found that the transport by cart was five times the cost of that by rail in ordinary times, and ten times the cost in times of famine. I suppose I need not trouble the Committee by reading the paragraphs from the Report, which would fully confirm what I have stated. The additional length which we recommended as necessary for the protection of the country against famine was 10,000 miles, spread over a period of 25 years, at a cost of about two-and-a-half millions a year, and embracing about 400 miles of railway a year. Since that time I

Chairman—continued.

think, practically, our recommendations seem to have been fulfilled.

378. Are you quoting now from Part II., chapter 5, section 10, at the end of the Report of the Famine Commission?—Section 4, as to public railways, at page 169, paragraph 4; it is what the Right honourable Chairman refers to.

379. Have certain of the recommendations made in that Report been since carried into effect?—Practically, I think they have been carried into effect.

380. Have any circumstances since arisen which would justify you in recommending a more rapid extension of railways in India than was thought prudent at that time by the Famine Commission?—At that time India was just recovering from the effects of probably the most severe famine of the century, and was at the same time engaged in a very expensive war, and the financial state of the country forbad us proposing anything of a more rapid nature than that which I have mentioned. Since then there have been prosperous seasons, and there has been a close of the war, and the state of the finances of India has very greatly improved; and independently of those circumstances, the interest of money has considerably fallen; and capital could be got now at a much less cost than it could be got at the early time for the making of railways in India, and the value of the material used, the rails, is greatly reduced. These are all circumstances which naturally lead me to the conclusion that what was impracticable at that moment is perfectly practicable now.

381. You think it would be quite safe and prudent for the Government of India to go considerably further than what you at that time recommended?—I do so for the reasons which I have just mentioned, and also from the fact that the people of India, or three-fourths of them, are agriculturists; there is probably nothing that is more against their progress than the want of diversity of employment, and we thought in the Famine Commission, and I certainly think myself, that the extension of railways would do much to increase variety of employment, and thereby

Chairman—continued.

thereby be very beneficial to the people of India. And if I might borrow the words of a high authority, Sir Charles Wood, in 1861, he said that borrowed money if spent on "works calculated to aid the commercial industry of a country, should only be limited by the necessity for taking care that full value for the outlay was obtained." I am strongly of opinion that with prudence and caution, and wise management, an extension of railways could be made with great advantage for the future benefit of India.

Mr. *Onslow.*

382. Did not those words of Sir Charles Wood point more especially to irrigation works?—They referred to all sorts of works; to irrigation works, to cotton roads, and to all works that were likely to yield a profit to the undertakers; at least so I understand.

383. At that time it was for irrigation by private companies?—His words were, "and to other works calculated to aid the commercial industry of the country."

Chairman.

384. I suppose you have had an opportunity of seeing the Despatch of the Government of India, dated the 23rd January 1883, with regard to a certain scheme for making additional railways; will you favour the Committee with your opinion with regard to the proposals made in that despatch?—Before leaving the last topic, there is one point which I would like to add, that, looking at the cost of the railways made up to this time, I notice by a recent Return of Mr. Juland Danvers that the average cost of broad and narrow gauge together has been 13,500 *l.* a mile. Now the present probable cost would be not much more than one-half of that; and that is another good reason in addition to those I have already offered. With regard to the works referred to in the despatch to which you have called my attention, the Government propose that productive lines should be offered to private enterprise, and that the protective and probably unproductive lines, should be made at the risk of the Government by loans. In the first class are schemes of 3,497 miles, at a cost of 24,344,000 *l.*; in the second class there are 3,837 miles, at a cost of 32,052,000 *l.* Now I would say as to the first, that is the productive lines, that they are the lines which are most required, for they pass through, or tap, the most densely peopled tracts of country, and therefore the richest naturally.

385. And they are really required as a protection against famine?—They are really required for both keeping up the communications of the country, and also as protective lines.

386. Do you think that this distinction, which is drawn in that despatch between protective and productive lines, is hardly tenable?—I would desire at once, since my opinion has been asked, with all deference to say that I think the comparison which is made between the two descriptions of lines is incorrect. As a Famine Commissioner, and in the interests of India, looking at both, I object to the distinction, because I believe that in promoting the welfare of India you will have the best protection that you can have against famine. I say as to the first, or the productive lines, that they are really the lines that are best for both purposes, because they pass through the most densely-peopled tracts, and therefore the richest part of the country, and in those richest parts of the country such lines as those will not only give the best return, but the most effective famine assistance. Where a population of 500 or 600 to the square mile are struck by famine, five or six times the weight of food must be carried to them compared with a district of 100 to the square mile, for the thinly-peopled part of the country can be supplied with famine food at one-sixth of the transport that the densely-peopled part can. You run, therefore, a very much smaller risk in leaving the thinly populated parts of the country unsupplied with protective lines than you do in the more densely-peopled parts of the country. If I might be allowed to point to this map for a moment, perhaps it might help to illustrate what I mean. In the part coloured blue, there are 500 to 600 of population per square mile, and I think a glance at the map will show every honourable Member of the Committee that the great mass of the dense population of India lies in the Gangetic Plain, a degree of density which is scarcely seen on any other part of the map except at Tanjore (which is an exceedingly rich delta, and which shows a very dense population), and this is the part which has been very frequently struck with famine. I notice in a map of the Committee, showing the protective lines, that many of those lines stretch into a country which for the last 50 years has not been struck with famine. This part of the central provinces of India seemed to be on the whole very free from famine. In other parts they have been three times struck with famine in the last 30 years. Orissa, as you well know, and other parts up in this direction (*pointing to the map*), have been struck with famine, and in the more densely peopled parts of the country generally the famines have been most severe.

387. You have made it very clear to the Committee with regard to the distinction attempted to be drawn in the Despatch by the Government; will you now state your view as to the magnitude of the operations in general; do you think that, having due regard to the finances of India, we ought to authorise such an expenditure as 32,000,000 *l.* with Government assistance, and 24,000,0000 *l.* unassisted by the Government?—For every reason I should make all the paying lines first, and leave the unproductive lines for the future. If the country and the people become richer by the fuller development of its natural resources, the poorer lines, cheaply constructed, may then be profitable; but for the present, and considering the inelasticity of the revenue of India, and the possible, and indeed I might say the almost certain, recurrence of famine, and the possible recurrence of war, I should not expend borrowed capital on any railway that is not likely to be profitable.

388. You think, speaking as a Famine Commissioner, that it is unnecessary, at all events, for the time being, to make any railway that has not a fair chance of yielding a profit?—I am quite

Chairman—continued.

quite sure of it, seeing that all the railways cannot be made at once, that the best policy for the country to adopt, and the most prudent and safe, is to make those lines which will serve the most densely populated parts of the country, and that the least risk would be run by leaving out, until the last, those which are very thinly populated.

389. *Supposing it is found desirable to make railways at an increased rate, under what system would you propose to raise the capital; whether by guarantee, by State lines, or by borrowing money, or by companies without any guarantee?*—Three plans have been tried in India; first, lines made with Government guarantee, which, on the whole, have been successful, although in construction they have been expensive.

390. More expensive than those built by the companies?—That I cannot answer; but certainly far more expensive than what may, in future, be built, either by the companies or by the Government. The Government took all the risk, and those railway companies having secured the best lines, will get all the gain. For the best lines in India are already occupied, and in the future division of the surplus profit, the Government share continues only so long as their advances have not been recouped. The second plan was of State railways, the capital for which was found by the State partly out of revenue, and partly by borrowing. This plan has hardly had time to be fully tested. It has had the advantage of giving official experience in dealing with such works, which is a great matter. It is said that these lines have been longer in hand, and cramped in execution for want of funds, which were required for some more pressing purpose, and that that is why they failed to obtain that degree of economy which the continuity of progress ensures. And the third plan most recently tried, that of lines made by companies without a guarantee, does not seem to have been quite successful, and the financial character of Indian Railways without guarantee seems to have suffered thereby. In the case of the Bengal and North Western Railway, though Messrs. Rothschild and Messrs. Baring each took a large portion of the capital, the stock has been at a discount since its issue; this line, however, being in a rich and thickly-peopled country, and having been made very cheaply, will probably pay. The contract of the Southern Mahratta line is practically 4 per cent., and that line is eminently protective, as well as exceedingly convenient for all the traffic of the west of India that wants to communicate with the Madras line, and with the sea at Goa, and Karwar. Here is the answer which the Government of India made in 1880 to a proposition which was at that time put forward of a 3 per cent. guarantee for capital in making Indian railways, and the whole profit to be left to the companies; their answer was, "Hardly a mile of railway has yet been constructed in India without Government help. The choice has lain between a 5 per cent. guarantee, or a State railway made with borrowed money at 4½ per cent. During the last three years certain small lengths of railways have been taken up by private companies on the modified system of our guaranteeing a certain sum of gross annual earnings; but it is not yet clear how this system will answer. Last year we engaged to guarantee certain minimum earnings on a projected Assam railway for five years. The company who undertook this had received also valuable accessions of land, timber, and mines; but the attempt to raise capital on these terms broke down, and we have been compelled to extend our guarantee from 5 to 20 years, rather than to allow a useful undertaking to collapse." That was the opinion of the Government of India in 1880; to what extent it has changed since that time I do not know.

Chairman—continued.

391. *You have stated the various plans which have been adopted in making railways in India, but as I understand you, you have not yourself any decided preference for one more than the other?*—If you will permit me to go on a little further with my answer to your previous question, it seems to me that these facts have probably prompted the doubt expressed a week ago in his late Financial Statement by the Indian Finance Minister, of the mercantile community in India giving him any aid of capital for railway construction, by incurring a risk, which they "desire to throw entirely upon the resources of the Government." Now I would venture to say that if there is a risk, the Government must accept it. Nothing would be more injurious to the financial credit of the Indian Government than to induce English capitalists to enter upon unsuccessful railway speculations for the benefit of India. And in reference to the guarantee of capital, I would say that other countries which have to look for capital to England, have in one form or another to take the risk. The American railways, for instance, through the new regions that they traverse, get every alternate square mile of land for 10 or more miles on each side of the line, as the Government contribution. Armed with this material guarantee, the company attract capital by debentures securing 5 to 6 per cent. Of the 1,500,000,000 sterling invested in American railways, fully one-fourth is believed to be English capital, the interest of which America sends us in money or money's worth, to the amount of some 20,000,000 *l.* yearly. The Governments of Australia make their own railways with capital borrowed here, thus taking the risk, which they expect to turn to a public profit, and there is nothing unusual in other countries coming to this country for what may be either direct guarantees or guarantees in a different form.

392. *There is a great difference, is there not, between a guarantee of a certain money dividend and a grant of land?*—With regard to America, the grant of land is given to help the railway itself to gain credit. The railway usually gains credit by means of the land, and they come to this country and offer debentures; and the people in this country lend their money. They do not look directly to the grant of land, except that it is an additional security, and shows that Government at all events are desirous that the railway should succeed, and believe it to be likely to do so.

393. *Do you approve of the Indian Government guaranteeing those railways either in perpetuity, or for a limited period of time?*—My opinion is, that whilst the risk, if any, should be borne

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borne by those who are to benefit, that is the people of India, there are many collateral advantages in the Government of India making the railways themselves, and retaining the entire control in their own hands. They may at once proceed with the most advantageous lines. They have no interest to consider but that of India. It is in their power to secure the most competent railway talent for construction and administration, and that might be conducted by each province. The Australian Governments, in order to protect themselves against jobbery and party influence, have done this, and with success. They have sent to this country, and have offered a very large salary, and have obtained the highest practical assistance in the whole conduct and management of their lines; and I see no reason why India should not follow their example. They could adjust the question of rates, through and local, as they found most advantageous. By keeping the railways in their own hands there would be no adverse interests to contend with, and no dual control, and the future profit from carefully selected lines would probably become a main and growing resource of public revenue.

394. Do I understand you to advocate that the Government of India should make the railways as well as have control over them?—Yes. I believe that the Government of India could directly, by themselves, command the use of money on more favourable terms than any company which is working under them. I believe that the Government of India, under proper administration there, could lay out that money in the most favourable way; and inasmuch as they cannot get private capitalists to give money except upon such terms as practically would leave them in the position of indirectly or directly guaranteeing a certain return, I think, upon the whole, it would be better for the Government of India to undertake it for themselves.

395. Do you mean the whole railway extension; all the new lines?—I think so, but it would be well that it should not be done by any single body in India. India is a vast country, and there are several provinces under different Governments, and with very able management in them. I would subdivide this great business through those provinces.

396. Supposing that, in the meantime at all events, the Government of India should restrict their expenditure to productive lines, do you think it would be prudent to proceed to spend twenty or thirty millions in five years, having due regard to the finances of India?—The Government's own proposal was to spend on unproductive lines, 3,837 miles, 29,052,000*l.*, and to get English capitalists to take up, in productive works, 3,497 miles, 24,000,000 *l.* in five years, making altogether 53,380,000 *l.*, which is equal to a yearly rate of 10,600,000 *l.* The Famine Commissioners say that 20,000 miles altogether would make India safe so far as transport of famine food was required. A very considerable extent of that has been already made, and we also added that 5,000 miles, in addition to the existing mileage, would for a time suffice. Therefore, for protective purposes, I do not think it is necessary to go at so speedy a rate as seems to have been contemplated by the Government to

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obtain what is immediately required in India for protective as well as commercial purposes. For commercial and industrial purposes I have no doubt that it might be done at greater speed, but we have to consider several things: we have to consider first, the question of finance in India, and next the disturbance of labour in India. I would venture to say that if we could obtain these 5,000 miles in the next four years at the rate of 1,250 miles a year, and costing, say, about six or seven millions a year in order to obtain it, that that would suffice. And as that is little more than half the yearly expenditure which the Government recommends, one-half to be found by themselves, and the other half by private capital, we may conclude that it would cause no strain on the finances; and as it should be divided over the three Presidencies, it would not injuriously disturb the labour market, nor interfere with the maintenance of other public works in India. I should thus go more cautiously than the Government seems to be prepared to do, and therefore would be quite within what they consider the region of safety.

397. In various pamphlets that have been circulated upon this subject, and from various quarters, we hear complaints of the restriction imposed by the Government on the railway management in India. It is stated that it is that sort of dual control which causes a great delay in the adoption of improvements. Has that come to your knowledge?—It has not come directly to my knowledge, for I had not any opportunity in India of going strictly into it; but that would be another reason in favour of the single control of the Government, if that be correct.

398. And that is another reason for the Government making all the new lines?—Certainly. And the time is favourable, for two lines have recently been completed in Bengal, one of 5½-feet gauge, at 6,000 *l.* a mile, and one from Patna into Oude, on the metre gauge, at 4,000 *l.* a mile, both fully equipped; and both, as I am told, are expected to pay.

399. There have been great complaints, have there not, on the part of many of our railways that they have not sufficient rolling stock to meet the requirements of trade, which is practically increasing?—I have heard that complaint with regard to the East Indian Railway at Benares, and that the railways coming down from the north-west of Benares (*pointing to the map*) were quite choked up with wheat at that point in vast quantities, incapable of being sent by a single line to Calcutta, and that a large quantity of profitable traffic was lost by that reason. It is quite obvious, when one looks at the map, that this great Gangetic Plain, by far the richest part of all India, having only one outlet to the sea in this direction by the East Indian line, is at great disadvantage compared with the Bombay side, where there are three lines of railway, all coming into Bombay, and not through anything like so rich a country as this. I see that it has been proposed by the consulting engineer in India that a new line from Benares should be made so as to tap the rich coalfields and iron of Chotia Nagpur, going on, not into the South East Indian Railway again, into this single neck, but obtaining an independent entrance into Cal-

Chairman—continued.

cutta. I think that would be of immense importance, and very probably one of the earliest lines which should be made, to give a double outfall to that great and rich Gangetic plain.

Sir *George Campbell.*

400. When you say a single line of railway, is not the East Indian line doubled up to Benares?—It may be, but then there is only one line into Calcutta notwithstanding.

401. For the greater part of that country there are two lines besides the river?—One railroad, and one point of arrival.

Chairman.

402. Are there any other lines that you would suggest as lines that the Government in your opinion ought to proceed with as soon as possible?—My view of what would be best to be done (but I must bow to the greater knowledge of gentlemen from India who have spent their lives there), I should say that probably a thousand miles of broad gauge would complete the great through lines, and the remainder on the metre gauge should be feeders to those through lines, and at the same time they would be best suited for famine protection. Another consideration arises with regard to through railways and making railway lines in India. When a famine strikes the country, one of the greatest means of providing against it, is to employ all the able-bodied people at once if you can, and not far from their homes if possible. No better kind of employment can be had for them, and none to which their labour is more suitable, than that of preparing the line for the rails. I should not, therefore, be very desirous of completing all the railways that are required, immediately. I should not wait for that if pretty sure that those railways would be remunerative. But I should not press on, in countries of doubtful kind, the making of railways until the others are completed, but wait for an opportunity, which is almost certain to arise, of famine, when Government would have the means of immediately employing able-bodied people, who would otherwise be thrown out of employment, upon the construction of the line.

403. Is the result of your observation in India that you think it undesirable there should be a break of gauge on the great main lines?—Perhaps you will allow me to say a word more on this subject before we go to the other. When I was speaking of the country on the eastern seaboard of India, below Calcutta, this part of Orissa was visited by one of the most severe famines in our times; that famine came totally unexpectedly upon everyone there; nobody knew that there was a famine, until there was no food to be bought in the market for the supply of the prisoners in the gaols. By that time, unfortunately, the monsoon had come on, when this country could not be approached from the sea; it was totally isolated, and the people perished in tens of thousands. If you look at the map you will see that this is a pretty thickly peopled country, and part of it has from 400 to 500 population per square mile. Therefore, if a metre gauge line were carried down to Cuttack, which is in Orissa, and there is one proposed to go to Puri, I think it would not only most likely be a

Chairman—continued.

paying line, but certainly it would render the country of Orissa safe in time of future famine. This line might be prolonged to the mouth of the Godavery, and all along this seaboard, through fairly peopled country. And when the more pressing lines are finished, it would be a great object that you should continue your lines along here so far as Rajamundry upon the Godavery, or to the Kistna, and thence to a junction at Cuddapah with the main Madras Line, which would bring you to Madras with great ease. There would then be a through line direct from Calcutta to Madras, being itself highly protective. The whole of this coast has been very frequently visited with famines, I think four times since 1833, and these famines affecting, more or less, about 60,000,000 of people. I have not had an opportunity of acquiring a knowledge as to whether it would really be a paying line, that is to say, a productive line, but it would certainly be a very highly protective line.

404. Do you think that they should be made on the broad or the metre gauge?—The metre gauge would be quite enough at present.

405. It would form a main line from Madras to Calcutta?—Yes, it would form a direct line, which would be a matter of very great importance.

406. Has it not been found very inconvenient in famine times, or in time of war, that there should be a break of gauge?—On this line that would be only for a short distance, and I do not think that there would be any very heavy traffic upon the greater part of this line, because it has to compete with the sea all along. I have very little doubt that a narrow-gauge line would pay, and would probably for many years carry all the traffic that is likely to go upon it, and that mostly passenger traffic, for which the moving from one gauge to another is of no great importance.

407. On the main lines between Bombay and Delhi *viâ* Ahmedabad, and from Bombay to Calcutta *viâ* Nagpore, do you think it desirable that there should be no break of gauge, or do you think it desirable that it should be on the broad gauge all the way?—I have travelled on that line of narrow gauge from Delhi towards Ahmedabad; it was not then open all the way. There is no doubt that the break of gauge is a great hindrance as a through line, because one of the great objects of the line is to carry the heavy traffic of the country, and the movement of grain from the narrow trucks to the broad, especially in bulk, must be expensive and very inconvenient. Wherever there is a through line, I should say decidedly let it be on the broad gauge, so that there may be no break of gauge; and for the same reason, I should say that as the railway which is now made from Bombay as far as Nagpore is broad gauge, it should be completed to Calcutta as broad gauge, as it will also be one of the great through lines.

408. So that any new lines upon the narrow gauge as a rule, you think, should be mere feeders, and not lines on which masses of troops or waggons would be conveyed, or great quantities of provisions in time of famine?—In time of famine I have no doubt that the narrow gauge would carry all that is wanted, and in time of war I should think that they could get troops conveyed

Chairman—continued.

conveyed more quickly than by any mode other than a railway.

409. But you are not in favour of a break of gauge?—No, I am quite against a break of gauge upon any through line.

410. With regard to the famine question, you have bestowed great attention upon agricultural matters and the food supply of this country, and I daresay you have read this pamphlet in yellow, which has had a great circulation, and was written by Major Gordon, an exceedingly interesting pamphlet, entitled, "Indian Wheat *versus* American Protection." Will you kindly tell the Committee whether you think the picture in this pamphlet is overdrawn or not?—I cannot quite recall what the pamphlet is to which the Right honourable Chairman refers, but I know very well that the import of Indian wheat into this country has within the last few years very greatly increased.

411. The purport of that pamphlet is to show that if railway works were extensively carried out in India on anything like the scale proposed to the Government of India or the Chambers of Commerce, then the United States of America could not compete with India in the British markets?—I noticed in a newspaper yesterday morning a statement which is different from a statement that was made a year ago with regard to the cost of producing wheat in India. A year ago the Indian Agricultural Department put the cost at about 1 *l.* a quarter, and I see now they put it at 12 *s.* a quarter. If there is any real foundation for that, and if wheat can be produced in India at 12 *s.* a quarter, I do not think that America could compete with India. America cannot produce wheat at 12 *s.* a quarter with profit, except on fresh and very rich land.

412. Then I presume you have some doubt about the premises?—It is certainly different from what is stated in the Government inquiry that was made, either one or two years ago, which showed that the cost of growing wheat was about 1 *l.* per quarter. And then, so far as the cost of carriage is concerned, the cost of carriage in America from the great wheat plains, probably the mileage is considerably longer than the average mileage to be traversed in India. To get to the sea coast in America, to the Atlantic, you have to go over a great extent of mileage of railway; and if the Indian railways with a shorter mileage on land could do the work at the same rate per ton per mile as the American railways do, I think that the shorter carriage by land would quite meet the difference of the longer carriage by sea, so that, in point of carriage, probably the two countries would be pretty much on a par. Then we have to consider the difference in the quality of the wheat. Indian wheat is very good for certain purposes; it is very good for mixing with the damper wheats of Europe generally, but it is not equal in quality to the finer American wheats, and therefore I should say that the finest quality of American wheat would take a higher price in the market here than the finest quality of Indian wheat. But if Indian wheat can be grown at 12 *s.* a quarter, and could be laid down in England at no greater cost of transport than that of America, I have no doubt there would be a large demand for it from this country.

Chairman—continued.

413. You look forward with certainty to an immense development of the resources of India if Indian railways were constructed on a much larger scale?—Yes. I do not look to wheat alone. I am not so sanguine about wheat as many people. If India goes on prospering as it is doing the increase of population every year would require an additional production of food to the extent of 500,000 tons. The largest export of wheat that has yet been made is 1,000,000 tons, so that two years' increase of population would require the whole of that 1,000,000 tons, unless there is an increase of production in India either by extending the cultivation of their land or by getting larger crops from it. But I think there are many other things that India is capable of producing which the extension of railways and freer intercommunication would most likely encourage. For instance, I have an extract here from a Return showing that, besides the promotion of internal trade and facilitating the transport of food in time of famine, the extension of railways is warranted by the increase of exports from India of Indian produce during the last 10 years. The exports of Indian produce and manufactures was in value in 1873, 53,449,000 *l.*, and in 1882, 79,255,000 *l.*, making an increase of 25,806,000 *l.*, which is nearly 50 per cent. In the same period the United States have increased their exports 38 per cent., Russia 33 per cent., Germany 14 per cent., the United Kingdom 4 per cent., and China 3 per cent., so that there is the largest proportionate increase apparently in India of all those different countries which I have mentioned. The articles exported from India have increased in the following amounts:—wheat to the value of 8,890,000 *l.*; seeds to 4,556,000 *l.*; rice to 2,547,000 *l.*; cotton to 2,805,000 *l.*; jute to 1,796,000 *l.*; indigo to 1,083,000 *l.*; tea to 2,072,000 *l.*; hides to 1,030,000 *l.*; and opium to 1,006,000 *l.* Of these, excluding tea, two-thirds are food grains, which in time of famine might in large proportion be required for home consumption; but its distribution through the country would then equally employ the railways. And the more the grain and rice production can be developed in good seasons by foreign demand, the better will India find herself provisioned for a famine when she can retain to herself the surplus so developed. I may mention also that the exports of India, and their increase, are beginning to be known in other countries as well as this. I received a letter from the Minister of Agriculture in Rome just the other day, saying that the people of his country are getting alarmed at the continued increase of Indian productions; and he has written to me on these terms; "By an Act of Parliament a committee has been appointed in Italy in order to inquire into the condition of agriculture and manufactures, and to prepare the revision of the custom duties. As in Italy a cry is often raised for protection against American and Indian exports, the committee have determined on inquiring into the agriculture both of North America and of India." Then he says, "I might almost say that India is of greater interest to us, because we feel more the competition of her

Chairman—continued.

exports of wheat, rice, and silk;" I need not read the rest, but he asks me if I will be good enough to give him such information as I can in reference to these points. I only quote this to show that the continued progress of exports from India is being looked to by other countries as well as by this, and that the exports vary greatly, as I have shown you by the list I have read. No doubt wheat for the last two years has taken exceptional prominence, very much on account of the very favourable seasons which they have had since the last famine, the continuance of which is not to be entirely relied upon.

414. Have you any further statement to make to the Committee before the other honourable Members examine you?—I took out some other points (comparing India with other countries) with regard to the population per mile served by railways. I find that in France the cost of construction was 27,303 *l.* per mile; the public debt is 21 *l.* 9 *s.* per head, and the population served by railways is one mile to every 2,380 people. Perhaps this does not come within the scope of the Committee. I should like, however, very much if you will allow me to read a few points with regard to the experience of America. I know that America cannot be put in strict comparison with India in regard to its railways, but the extraordinary development of American railways may teach us very useful lessons. If the Committee will allow me I have taken here the heads which seem to me to be of most interest upon that point, from an article in the "Princetown Review" of January last. These are the general statements made in this article. "Railways have overcome the disintegrating influences of distance and of conflicting sectional interests. They have made the toil of the farmer productive by bringing the markets of the world to his door. They have added directly to the wealth of the whole country, and of every citizen. While doing this they have steadily reduced their transportation rates until on the rates of 1880 as compared with those of 1866 they have saved to the producer and consumer a sum equivalent to one cent. per ton per mile, which, on the freight moved in 1880, amounted to more than 323,000,000 dollars," or 64,600,000 *l.* sterling. They say that "enlightened selfishness" teaches them to charge such rates as will attract and not repel traffic. Separate State lines have become merged in great railway systems which transport the commerce of the country without transhipment or breaking bulk from the Lakes to the Gulf of Mexico, and from the Atlantic to the Pacific. 56·16 per cent. of freight receipts is from local freight, and 42·51 per cent. of freight receipts is from through traffic. No legislation can enable railways to transport goods as cheaply across rivers, or over or under mountains, as through level plains, or compel railways to charge rates upon local traffic so low as to force their relinquishment of through traffic. There are 950,000,000 arable acres in the United States, less than one-twelveth of which is yet in cultivation. (Now, the whole arable area of India is stated to be 200,000,000 acres.) In America they trust for prevention of railway abuses to ordinary legal remedies, healthy competition, and enlightened selfishness of railway managers, rather than to extraordinary

Chairman—continued.

measures of prevention which would produce worse abuses. They show that their capital stock is about one-half in unguaranteed stock and one-half in debenture stock. They say that the wages paid to employés in 1880 was 39,000,000 *l.*, and that the taxes paid by the railways in 1880 amounted to 2,650,000 *l.* Europe, which is only half the area of the United States, has a population of 145 to the square mile, and the United States 16½ to the square mile, and therefrom they deduce that they have an immense future yet in the want of railway communication to go on with.

Mr. *Kynaston Cross.*

415. With regard to the comparison between India and America, you have asked us to consider India as compared with America, and at the same time you have told us that in America there are only 16½ human beings to the square mile, whereas in India I think you would say that there are, at any rate, between 300 and 400 on the average?—I do not think it is as much as the half of that everywhere, but in many parts it is so, no doubt.

416. In America they make railways where there are only 16½ people to the square mile, and expect a great profit?—They do so.

417. In India you lay it down as an absolute rule, that if the population is thin you would not make a railway?—I would not make it with borrowed money until I had made all the best lines first where the population is most dense.

418. Although throughout America you think it is a great advantage to make railways in places where there is no population, in India you confine your railways to those places where the population is densest?—Purely because you cannot do it all at once; and in my opinion the most prudent course for India is to do it where it is most likely to be remunerative and protective at the same time.

419. Going on from that to the Report of the Famine Commission, is famine more likely to strike those districts which have a large population, or those with a comparatively small population?—I should think with a large population.

420. What was the experience in the last famine?—I have here with me index maps of past famines, from which it appears that the first famine was in 1833, and it struck the population from Madras to Gundakal (*pointing out the district on the map*).

421. Without going so far back as that, would you take the great famine of 1876 to 1878?—The great famine of 1876 and 1878 was here (*pointing to the map*); it prevailed over the whole of Madras.

422. Was it not in Madras, Mysore, and the Deccan?—Yes; and in the southern part of Bombay, and it also existed in the North Western Provinces, but in a lesser degree.

423. Let us go to the Southern Provinces first; are not Madras, Mysore, and Hyderabad rather thinly populated districts?—This part of Madras (*pointing to the map*) is pretty well populated; it has 300 to 400 to the square mile.

424. Was that the part where the famine was?—The famine was there.

425. Was it not more severe there than it was

in

Mr. *Kynaston Cross*—continued.

in the North Western Provinces?—It was very bad all over the part which is coloured on the map.

426. What I want to ask you is whether you would abstain from making those railways that are required in that part to prevent famine being so very severely felt, or whether you would rather go on with railways in the more populous parts first?—I have already stated my reason for the latter, and it is this, that in the history of famines it has been found in the more populous parts that to provide for a population of 500 or 600 to the square mile you require five or six times the transport of food that you would require where there were only 100 to the square mile.

427. In those thickly peopled districts do you think it is more likely that railways would pay where there is not much produce over and above what suffices for their own food?—I think they are naturally the most productive, otherwise the people could not be there; and I should imagine that they would on the whole, between passengers and produce, be able to give the best return.

428. In your knowledge of the Indian railways do you think that that is borne out by the facts of the case?—I am not able to say, but I should expect it to be so.

429. There are a certain number of lines which you said go through the great centres of population, and certain others which do not; there is a difference between the financial results of the two, is there not?—Yes; but clearly a main line which taps a very rich part of the country with great produce carried by the shortest route over the whole country, may be a remunerative line.

430. But as a matter of fact you have not any evidence to give to the Committee as to the paying capacity of the various lines going through the rich and the poor countries?—I am afraid you must get that from the railway people.

431. You have mentioned, I think, that the extension of railways would lead to a great diversity of employment?—I think so.

432. Could you elaborate that answer a little?—Looking at the variety of produce that I have already read, wheat, seeds, rice, cotton, jute, indigo, tea, and hides, certainly the more you can bring about intercommunication amongst the people who produce those different articles the more likely you are to lead to a variety of occupation.

433. You would tap the various districts in which those articles are mostly produced and bring them down to the coast?—No doubt those for shipment would go to the coast, but the facilities of railway communication will lead also to extension of intercourse and business among the people themselves.

434. It would be an extension of agricultural produce more than an extension of manufactures?—Manufactories are increasing in India. I was in two or three cotton mills there, which seemed to do their work very well, and I suppose the probability is that those would increase.

435. And being at the ports already, they would only require that the cotton should be brought down to them, and then the goods that they make would be exported?—Yes, for what is exported, but the mills make chiefly for native consumption, and some of them are inland.

Mr. *Kynaston Cross*—continued.

436. When you said that it was desirable to go on with railway extension because the rate of interest had greatly fallen during the last few years to what you were referring?—I was comparing with the 5 per cent. guarantee the rate at which money could be raised now. In looking at the price of Indian Government Stock, I find that their 3½ per cent. is above par in England.

437. But you remember that the Report of the Public Works Committee which sat in 1878-79, recommended that money should be borrowed exclusively in India if possible, and at that time the rate of interest was very much about what it is now; I thought perhaps you alluded to the rate of interest having fallen since the year 1877-78?—I was referring to the original cost of the construction of railways, as compared with the cost at which they could be constructed now. I take it from the fact of 5 per cent. guarantee being given upon all those earlier guaranteed lines, and I compare that with the rate at which money could be raised now, and I think there would be a great saving in the present cost of construction, compared with what it was then.

438. You said that since the Public Works Committee's Report in 1878-79 there has been a considerable change in the situation; that war had passed away, and that famine had passed away; and, as I understood you, interest was lower; and the only point that I wanted to bring to your mind was that the interest is not any lower than it was in the year 1878-79?—No, but the difficulties of India were greater, and it was to the difficulties of India that I was alluding chiefly, that they had then to contend with an enormously expensive famine, and with a very costly war.

439. Then you say that the only limitation that you would put upon railway construction would be the full value obtained, that you would only make a railway where you think you could get full value; that is to say, the full rate of interest, and where you could do that you would put down a railway?—I would put down a railway, but I should not be inclined even there to go beyond a prudent measure, simply because you are subject to sudden collapses either by famine or war, and I think it might be imprudent to go too fast. I would confine myself, in the first place, to the exhaustion of lines of a paying description.

440. There are some lines which have been worked on that principle; for instance, I would direct your attention to the Madras lines, and I believe that those lines are necessary to prevent famine in the district?—Yes, and I think they are most useful.

441. Do you know whether they pay well?—I do not know.

442. You would be rather astonished to find that 860 and odd miles of the Madras railways only pay 2 per cent.?—I suppose that that is upon a very large capital expenditure. I do not know what the cost of capital construction was, but I should imagine that it was very heavy.

443. There are other lines also in other districts; for instance, the Scinde, Punjaub and Delhi Line; would that be useful for famine protection?—It would be a very useful line, but that line, as you can easily see, has had great difficulties

Mr. *Kynaston Cross*—continued.

to contend with. It has most expensive bridges across the Indus and other rivers, and it runs through a great deal of country which is exceedingly poor, but that it will be a very useful line I should imagine nobody can doubt.

444. Could you give us any instances of any lines which have been placed in a densely populated district which is liable to be struck with famine?—The East Indian Railway passes through a district which has been struck with famine.

445. Has it often been so?—On the last occasion of the famine, in which my honourable friend Sir George Campbell was Lieutenant Governor, when Lord Northbrook was Governor General of India, that country was very severely struck with famine, but with the railway facilities and the water facilities there were no deaths; they were able to meet the whole emergency. I think it is a very good proof of the advantage of railway communication.

446. That is a very good instance of a through railway opening out a very wide country, bringing grain from very great distances, and supplying the famine-stricken district in a way in which it could not possibly have been supplied otherwise?—It could not possibly have otherwise been done in time.

447. Have you noticed in India any disposition on the part of the inhabitants to emigrate from one place to another since railways have been made?—I am afraid that the disposition has not been great to do so; if they emigrate, it is now to the tea districts from the thickly peopled countries in the Gangetic Plain, but I do not think that the numbers are very great.

448. To go back for a moment to the cost of railways to the State, have you not noticed the large amount of deficiency that there has been in many of the lines which were constructed some years ago?—No.

449. For instance, the railway that I spoke about, the Madras Railway, you are not aware, perhaps, that there is at this time some 5,900,000 *l.* deficiency in its working for the last 25 years?—I have no doubt that that very fact, and facts of a similar kind, would tell in the money markets of England against English capital being sent to India without some guarantee.

450. Do you think that that is one of the main reasons why English capitalists do not advance money to Indian Railways?—I think it is probable now that the best lines are completed.

451. How would you hope to recoup the Government for an expenditure of 6,000,000 *l.* a year for the next 10 years, which means spending 60 millions sterling on railways, considering that the best lines are completed?—Chiefly because I should limit myself to the most probably successful lines, and I should make the capital cost quite one-half of what it was in the case of those lines which have failed to pay; 13,500 *l.* a mile is said to have been the average of all the railways in India. You could make them now at very much less. I was told the other day by a distinguished Indian officer that he himself had just completed a broad gauge line at 6,000 *l.* per mile, and a narrow gauge line at 4,000 *l.* per mile. So that if I took half of the 13,500 *l.* for the metre gauge lines, I should think I was quite within the mark.

Mr. *Kynaston Cross*—continued.

452. Would you mind mentioning to the Committee the names of those lines that have been made for 6,000 *l.* a mile?—I do not know the names of the lines, and I do not think I am at liberty to mention the name of the gentleman who told me, but if it is desired I will give it to the Chairman.

453. I think you have said that when you have made the 1,000 miles of broad gauge in addition to those which are now in working, you would consider the main trunk lines to be fairly well completed?—That is necessarily an assumption. I imagined that 1,000 miles probably would complete the great trunk lines, but I really have no absolute knowledge upon the subject.

454. Could you explain to the Committee where you would place these 1,000 miles?—In the first place, I would make another outlet from Benares to Calcutta, through the coal region, which would be 400 miles.

455. You spoke of the Bombay and Nagpore line as being a broad gauge line; are you aware that one little link, the bit beyond Nagpore towards *Dougargarth is metre gauge*?—I would complete that line on the broad gauge to Calcutta, because it would be a second great through line from Bombay to Calcutta.

456. You would consider it very desirable that it should be broad gauge and not narrow?—Yes; because the further end of it is broad gauge.

457. With regard to the cost of production of wheat, I think you have read a publication known as the Yellow Pamphlet?—I have read several pamphlets, I am not aware whether I have read that particular one.

458. Have you formed any definite opinion as to the cost of the production of wheat in the various provinces?—Yes; the cost of growing wheat in the districts of Lahore, Delhi, Agra, Cawnpore, Jubblepore, and Patna, in 1882 was stated by the head of the Agricultural Department in India to be, as I reckon it, 2 *s.* 5 *d.* per 62 lbs.; that would be very nearly 1 *l.* a quarter, say 18 *s.* 6 *d.* a quarter, or something like that.

459. What is that in Indian currency?—*Rs.* 2 4 *a.*, and I have converted it into English money, at 1 *s.* 8 *d.* a rupee.

460. And that would make it come to very nearly 1 *l.* a quarter?—Yes, very nearly.

461. You have seen the statement put forward by Major Conway Gordon in this Yellow Pamphlet, that the cost of the production of wheat is from 6 *s.* to 7 *s.* per quarter?—I think that was merely the selling value; I do not think that it could be the cost. I think it was just because there was no sale for it. It is impossible to grow wheat at that price with a profit, except on very rich land at a low rent.

462. Are you aware that within the last three years wheat has been three times that price?—I know that when I was at Ahmednuggur in 1879, I went into the wheat market and examined the wheat that was shown me, and the price then was higher than it was in London at the same time.

463. That clearly proved that there was no surplus production of it?—Precisely so in that year.

Mr. *Kynaston Cross*—continued.

464. Could you give the Committee any information as to the average production per acre of wheat in any of the provinces?—I do not think it exceeds 10 bushels.

465. And is it very much less in some cases?—Very often it is; but I may mention with regard to the cost of production in other countries, I was told, to my surprise, the other day that in South Australia a man and a boy can cultivate 100 acres of wheat, and in doing so he cannot produce more than about a quarter of wheat, or eight bushels to the acre; in a very fine season he may have 10, but in a bad season perhaps not above five. But I was told by a banker, who had been for several years in that country, that those sort of people, although there appeared to be an exceedingly small profit upon it, were, generally speaking, doing well. I do not think that you could cultivate wheat cheaper by any other plan.

466. Could you institute a comparison between the wheat cultivation in the Central Provinces and 100 acres of wheat cultivated by a man and a boy in Australia?—The comparison that I made was that I did not think it could be done for less than the cost at which a man and a boy did the 100 acres of wheat.

467. Do you take into account that the man would have to find food and rent and taxes?—Yes; there is the cost of the land, and the interest of that cost, and there is the price of getting to market and the price of the cattle and machines that they use, and their own food, and whatever profit they may be able to make. I do not think they could do it for 12 *s.* a quarter.

468. You do not think that in India they could do it for 12 *s.* a quarter?—I do not think so. I think it is only because there was no sale for it. I believe the statement made by the Government last year, namely, 18 *s.* 6 *d.* a quarter, is more likely to be a true statement.

469. You would not expect at the present prices any very great development of Indian wheat cultivation?—No, I do not think that at the present prices it could pay to bring it to this country. I saw it stated the other day in the newspapers that there had been two million sterling lost upon the import of wheat from India this year to the merchants who bought it.

470. In your opinion the great increase in the export of Indian wheat is very much more due to the good crops of the last three years than to any extension of cultivation, or to improvement of the means of communication?—I have no doubt it is the good crops.

471. Might I ask you one question upon the food production of India: would you put it down at as much as 200 million quarters of all kinds of food grain?—We made a computation for the Famine Commission.

472. I think you assume that 370 lbs. per head would be sufficient?—We made a computation of the total produce, in which we showed that there was a surplus annually of five million tons of grain beyond the whole consumption of the country; but I myself did not assent that there was such a surplus.

473. Supposing that there are 200 million quarters of food grains grown in India, would the difference between a good crop and a bad crop

Mr. *Kynaston Cross*—continued.

be as much as 20 per cent. on that amount?—Quite so.

474. Then there would be a difference of 40 million quarters between a good crop and a bad crop of food grains of all kinds?—I daresay there might be between a bad crop and a good crop, if there was famine over all India, which there never is, and granting a total produce of 200 million quarters, which, I think, is an over-estimate.

475. Is not that four or five times as much as the total export that there has ever been from India in one year?—The total export of wheat has never exceeded one million tons, and one million tons of rice.

476. And how much of other seeds?—I have not an account of the ordinary seeds.

477. What I want to bring out is this: whether the great export of rice and wheat and grain of various kinds has not been very much more due to the very good crops that have been during the last three or four years, than to any development of production in India?—I have no doubt of it.

Mr. *Brodrick.*

478. You drew a comparison between Indian and American railways; can you tell us what the proportion of working expenses on Indian railways is as between goods and passenger traffic?—I have not gone into that; perhaps you will get that from a railway man; I have not gone into those points. I am not in any way connected with railways.

479. Speaking generally, I suppose the passenger traffic is much larger proportionately to the goods traffic of India than it is in America, in fact it is a little more than double?—As between passengers and goods, I do not know, I have not examined it. The through traffic in America is 42 per cent., while the local traffic is 56 per cent.; that is for freight receipts, which I suppose might include passenger fares.

480. What I want to get out is this, that as between thickly populated and thinly populated districts, the passenger traffic is no object in America in comparison with the traffic generally?—No, it is not, because some railways in America run through hundreds of miles where there are no people.

481. But in those places where there is a very small population, it is often the case that the population which brings up an enormous head of cattle, which brings large freights to the railway, is very small?—Yes, that is so in America.

482. But that is not the case in India?—No.

483. The traffic in India is not produced by a very small population?—I should hardly think it could be. In India they do not cultivate the land upon that wholesale scale that they do in America with steam apparatus of all kinds, and also by the introduction of all sorts of labour-saving machinery; that is not done in India, it is chiefly the simplest description of labour.

484. The point that I wish to arrive at is that the comparison by population does not hold good as between India and America, seeing that in America you are not dependent on the population for the freight, and in India you are?—No, I do not think that there is a fair comparison

Mr. *Broderick*—continued.

in detail to be held between America and India, but America, from the great extent of its railways, I instanced as it probably could teach us some lessons that might be useful here.

485. With regard to the broad gauge line which you propose to extend from Nagpore to Calcutta, would there be any estimable local traffic on that line?—I have no doubt that there would.

486. Has it a population of 110 to the square mile on the average?—From 100 to 200.

487. Therefore you have confidence that it would produce considerable local traffic as well as through traffic?—I think it is most likely; but it is more as a through line from Calcutta to Bombay; but although a direct through line, no doubt it will also open up a part of the country which it could serve on its way; so that it is clear that the line would be a great public advantage.

Mr. *Carbutt.*

488. I think you stated that you wished all the railways to be retained under the hands of the Government; do not you think that competition would give a much greater chance to India in every way, that is to say, the rates would be very materially reduced, and the railways would be made more cheaply, and so the traffic would be carried very much better for the public if they were made by private companies who would keep up a certain amount of competition with the Government?—No doubt that would be the case in a country like this, or America, where you have people ready to put their money into railways; the people of India will not put a sixpence into a railway, and you must, therefore, get your capital from England, or from Europe, where the principal capital of the world is to be found, and all the capital that you want for India railways, about 6,000,000*l.* a-year, is but a drop in the bucket of the annual savings of capital in England. Therefore, I should think England is the cheapest market in which to get your capital. I quite agree with the honourable Member that if it were possible to get competitive lines made by private capital in India, I should never think of recommending anything else; but the thing is not possible; you cannot get it.

489. Is it not a fact that the wheat trade from America to this country is cut so fine that a mere matter of exchange will prevent our buying wheat in America, and drive us to buy it in Russia or India?—I think that is very likely to be the case.

490. Is it not also a fact that owing to the competition of America the rates have been reduced fully one-third of what they were a few year ago?—Yes; I stated that the reduction of rate in a certain number of years, which I mentioned, was great. One cent. per ton per mile in America was said to have made a saving to the consumer and to the producer of 64,000,000 *l.* sterling.

491. Do not you think that the same competition would be of service in the Indian railways?—I have no doubt of it, if you could get it.

492. Is it not the fact that at the present time owing to the East India railway belonging to the Government, they draw every particle of

Mr. *Carbutt*—continued.

traffic that they can to that line, irrespective of the advantage to the other portions of India, and that that is the reason for refusing permission for making a line of railway from Gwalior down to Bhopal, bringing the wheat from the North-Western Provinces to Bombay, and also is it not the fact that the Rajpootana line being a narrow gauge line, and thus preventing the wheat coming in that direction, the wheat, instead of being driven on to the west coast, is all driven on to the east coast?—I think if the Government, instead of having the command of only one line, had the command of all the lines in India, their interest would be to make them all work to the greatest advantage.

493. Do you think that if they were worked by Government servants or Government officers in every direction, who know that if once they get out there they never can be removed, they could thereby work the traffic so much cheaper than if they had the competition of railway companies, which would send out officers on the understanding that if they did not carry the traffic in competition with other railways, they would not be able to earn a livelihood?—If the honourable Member will allow me to say so, I have already stated that I agree with him entirely, that if competition were possible competition would be the best; but that in countries where even competition can be had, such as Australia, they have already found that one of the most secure sources of revenue to look to is the future extension of railways made by the State, and then they take very good care to get the best talent that they can in this country by paying adequate salaries to good men to conduct their railway administration, and I do not see why India should not do so. It is a necessity, I think, of India, which does not apply to other countries.

494. With regard to the question of the cultivation of wheat, you were saying that you did not think it could be grown under from 19*s.* to to 20*s.*?—It seems to me very doubtful; but I do not like to set a limit to it.

495. If the surplus is only half a million tone per annum, do not you think that that could be very considerably increased by better cultivation?—I did not say that the surplus was half a million tons per annum. I said that the increase of the population required half a million tons per annum. The surplus, according to the statement made by the Famine Commissioners, is 5,000,000 tons per annum.

496. I understood you to say that there was only a surplus of 1,000,000 tons per annum?—I said that India had exported 1,000,000 at its best time, but we must not forget that the increase of population required 500,000 tons per annum.

497. You were saying that you would propose a line of railway from Calcutta down to Madras along the coast, and you propose that it should be narrow gauge, have you any knowledge as to the cost of narrow gauge as compared with broad gauge?—I am told that a narrow gauge line has been made lately, at 4,000 *l.* a mile, and a broad gauge at 6,000 *l.* a mile.

498. That is 50 per cent. difference?—Yes.

499. Will you take it from me that it would not exceed 10 per cent.?—I must take the fact

as

Mr. *Carbutt*—continued.

as it is stated to me; if it should not be more than 10 per cent. I should make them all broad gauge.

500. On the line from Calcutta to Madras of course you are aware that you have to cross the line of the main rivers, of which there are a large number which would have to be crossed by bridges, which bridges would have to be as strong for narrow gauge as they would for broad gauge, and, therefore, the cost would be as heavy for a narrow-gauge railway as it would be for a broad-gauge railway?—If you had bridges it would; but I venture to say, which I am now very glad to have an opportunity of adding, that I should not bridge those great rivers at present, but use ferries upon them until the traffic develops itself, and at some future time, when it was necessary, bridges could be made. I quite understand that great bridges are needed along a sea-coast like that of India.

501. Do you think that the cost of a bridge would be compensated for by the saving of the disturbance to the traffic which would be involved by having a ferry at every river?—I was thinking of a ferry as it is in America, from what I have seen of it myself. I have crossed a ferry in a railway train where there was no transhipment, but the train ran on the ferry boat, and crossed the river unbroken.

502. With regard also to what you said about the protective tariff from Italy, and their objection to rice coming from India, is it not a fact that rice going to Italy is principally cleaned there, and then sent on to France, as if the Italians grew the rice themselves, of course at a lower duty than rice going from the country where it is grown, or if it was sent from India here to be cleaned, and sent from here to France?—I am not aware of that.

Mr. *W. Fowler.*

503. I want to ask you a little with regard to your remark as to putting railways in thickly populated places, first, without reference to the question of famine. I think I understood you to say that famines have been worst in thickly populated places, and that a railway was more likely to pay for other reasons in thickly populated districts; and, therefore, it would be best to go there first?—I think so for both reasons.

504. If I am not mistaken, Orissa is the single exception, for it is a thinly peopled country in which there was the worst famine know in modern times?—Orissa is not thinly peopled. Orissa is a thickly peopled country; it has in some parts from 400 to 500 to the square mile, and I should propose railways to come through the most densely peopled part of it.

505. With regard to the risk; I think you said that the Government must take the risk, because it was for the benefit of the whole community of India; and I think I also understood you to say that you thought that no money could be practically raised in India for the purposes of railways?—That has been the case, I understand.

506. You also stated that you thought there was a great advantage in having Government control over the whole machinery of railways; I think I understood the view of the gentleman who was here on Friday to be that it would be a very great burden upon the Government of India to have control over the vast machinery of the whole of the railways of India; have you considered it from that point of view?—I quite understand that it would be so. I do not know at the moment who is at the head of the railway department in India. I rather apprehend that the gentleman who represents it on the Governor General's Council is a civilian, but, at all events, I think General Strachey stated that he would recommend that in such a case the administration of the railways should be divided over the provinces, and should not be in one hand, and, therefore, if it were so divided it appears to me that it might become quite manageable; if the very best railway authorities or the best railway administrators could be got to do it. As I have already stated several times, I speak of this as necessary under the exceptional circumstances of India; you cannot get capital in India, and you must get it from this country; and you cannot get it in this country, as I understand, unless some guarantee is given that the persons so advancing it shall not be losers.

Mr. *W. Fowler*—continued.

507. That would not necessarily involve Government control over the whole management, would it?—If the Government took the railways into their own hands, they necessarily would have the whole control of them.

508. At the present moment a great deal of railway business is being done by companies working with guarantees?—Yes.

509. And that on the whole has worked fairly well, has it not?—It has, but it has been very expensive.

510. You told us that it would not be so expensive now, because the railways would not cost above half as much as they did, and that money could be raised at a great deal less interest?—My statement proceeds upon the assumption that you cannot get money without a guarantee of some sort.

511. I quite agree with you; but it does not necessarily follow, as we find from past experience, that because you have a guarantee, therefore you cannot have a working agreement with the company?—No; but I think that if the Government are to run all the risk, they have a right to look to get all the profit; and there is nothing, in my opinion, to prevent the Government of India administering the railways just as well as gentlemen sitting in London, and probably better.

512. When you state that if the Government run all the risk they ought to have all the profit, that is quite an intelligible proposition; but supposing that you could raise the money by a temporary guarantee, and afterwards the Government sharing the profit with the railway companies, would not that be a better mode of working than having all this huge undertaking in the hands of the Government?—I have stated my view of it. I have stated it upon the assumption that the Government must run the risk, and it seems to me that it then becomes simply a question of administration and management divided over the provinces, and not all in one hand. I think it could be managed so.

Mr. *W. Fowler*—continued.

513. I understood from your answer to the last honourable Member, who asked you a question as to the Central Government having the whole of the machinery in its own hands, and the want of development arising from the absence of competition, that there is a danger in that direction, that is to say, the Government having the East Indian Railway are less disposed to encourage anything which might compete with the East Indian Railway at the present moment?—I quite concede that the Government may do so, because they have a special interest in the East Indian Railway; but if they had no special interest in the East Indian Railway they would have no motive whatever for giving a preference to the East Indian Railway.

514. Of course what you say is merely your own opinion. You consider that that danger, which you admit to be a danger, is not so great as to make it dangerous to India, to hand the whole management of the railways over to the Government?—It is a very stupendous business, I quite grant; but it seems to me that if you cannot get capital from this country on other conditions than that it should be made secure; people will not go into it for the security only, but with the expectation of a profit, and if the Government are to be the people who must stand the brunt, they have a fair right, I think, to say we shall at least keep to ourselves any advantage that may be gained.

515. Of course you would have to consider the interests of the whole country and not merely those of the Government?—In speaking of the Government of the country, I mean all India, Indian interests.

516. As regards the metre gauge, I understood you to say that when you had a line, which was as it were entire by itself, going through a poor country, you would not object to the metre gauge, assuming it to be made a great deal cheaper; but that, where it was running into other important lines, you would strongly object to a break of gauge; and you pointed out, as an illustration, going from Calcutta to Madras by, as it were, a single line not joining any other?—I spoke of through lines as not being made in any way with a break of gauge, but I think that does not apply to short lines feeding great lines, and being of a very different class. I quite agree with the honourable Member sitting next to you, that, if the difference was only 10 per cent., I would rather that we had one gauge; but experience shows the difference hitherto to be very much more.

517. You are aware, are you not, that very great inconvenience has been already found in shipping heavy goods in some parts of India?—I think my gallant friend, General Strachey, stated the other day that it did not amount to one half-penny a quarter, or, something like that upon the wheat on the branch from Delhi to Ahmedabad; I have not myself looked into the subject.

518. You said a good deal about the cost of the production of wheat in different countries, especially in India, and something was said about the cost in the Central Provinces; as you did not contradict the statement, I suppose it is an undoubted fact that wheat was sold at a very low price, at a certain date mentioned in this pamphlet, which has been referred to, but you thought that it was merely an accident and not any criterion as to the cost of wheat?—I should be disposed to think so; for if you consider 12 *s.* for eight bushels of wheat, that is to say, 12 *s.* as the total cost, including the capital and the rent and the payment of labour and working stock and seeds, I cannot see how 12 *s.* could possible pay all that, with a production of 10 bushels an acre.

519. Is it not extremely difficult to calculate exactly the cost in a country like India in any particular locality?—In this instance, in my humble opinion, the low cost of the wheat was most likely caused by want of means of getting the wheat to market. I have very little doubt if that place where wheat is now selling at 12 *s.* per quarter were tapped by railways the wheat would rise at once in price.

520. Then it would not be evidence of the cost at all?—No, I do not think it would be a fair evidence of the cost; what I read to you was a careful experiment made by the Government of India to see what the real cost was.

521. But really that statement merely indicated what wheat could be got for at a particular moment in a particular place; it did not tell you what the cost of the production was?—Yes, it did.

522. But is it not the fact, referring to what you said as to the amount of wheat to be obtained in India, which was referred to by the Under Secretary of State, that a very large part of the wheat growing grounds in India have now no railway at all through them?—That is quite so.

523. Is it not highly probable that there might be a very great increase in the quantity of wheat available for export?—I think the only thing that will make an increase in the quantity will be a higher price. A higher price will enable the people to expend more upon the cultivation of the land, and in that way will increase the produce.

524. But, even in the Central Provinces, a man was willing to sell at 7 *s.* a quarter, because he had no means of carriage?—Yes.

525. If he could sell at 7 *s.* a quarter, and he had carriage, he would get a higher price for it, as he would be able to send his wheat forward?—If he got a higher price, he would sell it and grow more wheat.

526. Would not a railway tend very much to increase the production of wheat?—I think it is very likely.

527. You are aware that it is stated by Dr. Hunter, that as a rule, Indian people live very little upon wheat?—I am aware of that.

528. And therefore they export grain?—I do not know whether the honourable Member is aware of the fact, which seems to be very little known in this country, that two-thirds of the people in India live upon grain other than wheat, and only one-third upon rice. There is an idea here that everybody lives upon rice in India, which is a great mistake. Grain, not rice, is the principal article of food amongst the lower orders of the people.

529. They can grow it in very large quantities, as we know from what they send away, but they

Mr. *W. Fowler*—continued.

they regard it as something to sell which they can get rid of, and which helps them to pay their taxes?—No doubt anything that would raise the price of wheat in India would undoubtedly lead to its more extensive cultivation.

530. Can you state how many of the population of the country does one mile of railway supply in different countries?—One mile of railway in France accommodates 2,380 people; in Austria, 3,000; in Russia, 5,200; in Germany, 1,800; in Switzerland, 1,750; in Italy, 5,000; in America, 441; in India, 25,000; in Australia, 500; and in the United Kingdom, 1,900. Practically, the accommodation given in India is 50 times less than in Australia.

531. We have heard a good deal about the contrast between America and India; is it the fact, that in America, they send a railway out into the wilderness, with the idea of developing that wilderness?—No doubt that is so.

532. Is it not the fact that we are only asked to send a railway to the very dense population of India with a view of assisting that population?—Yes.

533. You said something which I could not quite understand with regard to the cause of the greatly increased export of wheat and other circumstances in the last few years; and you said that you thought it was the result, not so much of extended communication as of the accident of good crops?—Good crops and paying prices.

534. I presume you are aware that the export of wheat from India is a very modern thing?—The wheat export is a modern thing.

535. It only began in the year 1873, or thereabouts?—I do not know the exact year, but I will take it from you.

536. Have there not been some very bad years in the interval between that time and this?—Yes; but I think there has been no great export from India except in very recent years; especially in 1878, just at the time of the famine in India.

537. There does not seem to have been a very good crop that year?—It was a good wheat crop in the north of India.

538. The progress of that export has been, has it not, very remarkable?—I think it has been remarkable in this way, that the railways saw the advantage of encouraging it by favourable terms, and that there was a surplus.

539. It may be laid down as a proposition that cannot be disputed, that but for the facilities given by railways, the wheat could not possibly have come to England?—Certainly not.

540. Is it not very reasonable to say that the further extension of railways to other wheat fields might probably have the same tendency?—I think it is very likely.

Mr. *Slagg*.

541. You spoke of the development of trade in other ways besides wheat production which would ensue from increased railway extension; do you find, on the other hand, any displacement of native industries injurious to the people through this railway extension?—I do not know of any, and cannot speak upon that point.

542. With regard to the manufactures which they used to produce in former days more largely than now, can you give the Committee any information?—I questioned very much about that when I was in India, and the native industries certainly have been much interfered with by the introduction of English fabrics.

543. You stated that the best routes are already occupied by railways; from that, I presume, you would argue that the chance of payment from any future lines must be small?—I should think that capitalists in this country would look upon it in that light.

544. And that the commercial community would not subscribe if the lines were not likely to be successful?—I think not.

545. If they are not likely to be successful, ought they to be constructed?—I think that the Government should certainly construct none that they did not expect to be successful until they had completed these, and then, if they were in circumstances to go further, it might be a matter of farther consideration.

546. With regard to your favourable view of State control as against control by private companies; I suppose that does not apply to England?—I do not give an opinion with regard to England. I know that the cost of transport in England is much greater than it is in America, or in almost any other country, I fancy.

547. But this recommendation with regard to State management and construction is one which peculiarly applies to India?—I think it is desirable where the State is to run all the risk.

548. You stated that India and America were practically upon an equal footing with regard to the cost of transport?—So they are, I think, very much, the longer sea carriage of the one being compensated by the longer land carriage of the other.

549. Is it not the case that in America railway carriage has been reduced to the lowest possible point?—Railway carriage in America has been reduced very greatly. But I was talking lately to an old Member of this House, with whom most of the honourable Members of the Committee are probably well acquainted, Mr. Crawford, who is at the head of the East Indian Railway, and he tells me that they have now brought down their cost of transport for wheat and grains of that description, very nearly as low as the Americans; and that they were making great preparations at their delivery station at Calcutta for a very large traffic in wheat.

550. But the actual railway charges are certainly dearer in India now than in America?—I think the honourable Member will find that they now come pretty near to the American rate for through wheat from great distances.

551. Has not the Bombay Chamber of Commerce made a very elaborate complaint upon that point?—Somehow I have not seen that statement, and I do not know at all what they have said.

552. Are you aware that they have made a statement in which they adopt a quotation with regard to American cost of transport, which is given in Major Gordon's pamphlet?—I am not aware of it.

553. There is an agitation in India amongst those who are interested in carrying for a general reduction of tariffs on the ground that trade cannot

Mr. *Slagg*—continued.

cannot be properly conducted unless that is done?—I have no doubt that unless they can carry their wheat to the seaboard at as cheap a rate per mile as they do in America, and it must be at a cheaper rate really from the field of production in India than in America, they can hardly expect to compete with America, which has a much shorter sea voyage from the eastern side of America, but from San Francisco it is quite as long a sea voyage as it is from India.

554. But in the single item of railway transport, you think they might hope to compete?—I think so.

555. I think you said, too, that capital can now be got cheaper for the construction of railways in India than formerly; that of course applies, does it not, entirely to capital raised in England?—Yes.

556. I suppose we need hardly hope yet for any large amount of capital to be subscribed in India?—There has been practically none subscribed for railways.

557. With respect to the commercial classes of Bombay who are now asking for an extension of railways, they can subscribe if they choose to do so, can they not?—I really cannot answer that question, I do not know their position.

558. There seems to be no evidence of a desire on their part to contribute to this extension which they so much demand; I think you also stated that we could hardly hope to get a large extension of railway development in the absence of a Government guarantee of interest?—I think that has been the experience of the past.

559. But is it not the fact that proposals have been made to construct railways in some parts of India in the absence of that guarantee?—But so many conditions have generally accompanied them, that it makes it come to something like a guarantee.

560. You say that wheat is not a paying crop at the present time?—Not to the grower, at 12*s.* a quarter; but with regard to that price I cannot speak from my own knowledge; I only say what I saw in the newspaper.

561. With regard to the habits of the people with respect to food, is it not the fact that where wheat is produced on a farm, the cultivators generally feed themselves from the produce of that farm, whatever the produce may be?—Not in India; indeed I do not say it is so anywhere, not in Scotland, and often not in Ireland; they live generally on the cheaper grains, and sell the dearer, to meet rent and other liabilities.

562. It is possible, in fact, it is customary, is it not, for a wheat farmer in India to export the whole of his wheat produce, and to feed his family upon some other grain altogether?—In India that certainly is the custom. The Indian has to find the means by which he is to pay for the rent of his land, and to pay for labour, and seed, and probably he may find that wheat, being a more costly and profitable grain than any other that he can produce, he can, by selling a comparatively small portion of it, retain to himself a larger portion of the coarser grains which are quite wholesome for food.

563. Do you think that we can found any very great hopes with regard to the increased wheat production from improved agriculture in India?

Mr. *Slagg*—continued.

—I think the only hope for that is in the higher price for their wheat.

564. You think that farmers would lend themselves to improved means of agriculture, if they had the money?—The farmers would naturally grow that kind of grain which would give them the largest remunerative return.

565. I am speaking now of improved means of cultivation which I suppose is of the most primitive nature at present in India?—There are many parts of India, especially where the land is good, and where they have the command of water either by irrigation from rivers or canals, or by wells, where the cultivation is extremely good. I never saw more beautiful cultivation than that of tobacco, and of sugar cane; nothing could be better.

566. Is there not a good deal of manure burnt for fuel, on account of the poverty of the people?—It is burnt because it is the readiest and cheapest fuel. There was an interesting experiment made at the experimental farm at Madras, by Mr. Robertson, who had charge of it. I spoke to him about it, and said I was sorry that he had not thought it worth while to repeat it, but the experiment went to prove this: that he had found a larger return of crop by using the ashes of the burnt manure than by using the same quantity of manure in its fresh state. It is an experiment, in my opinion, of immense importance to India; and I said to him, why did you not continue such an experiment as this, because it is one of great value if you can prove it, and one experiment will not be held to prove it. I can hardly believe, myself, that it could be correct, for I think something must be lost in the process of burning.

567. Have you studied the question of railway development with regard to the mineral products as well as the agricultural?—Yes; I should think that the extension of railways, especially with regard to coals in India, is of immense importance. This very railway that I spoke of from Benares to Calcutta is a line that is expected to cut through a coal district, and it is stated by the consulting engineer, Colonel Luard, that the cheapening of all the coal that is necessary for the railway lines to the north and west of that railway would of itself be a remunerative return for the cost of that railway.

568. Can you say whether there is likely to be a development of iron there?—There is iron there also.

Mr. *Wodehouse.*

569. You expressed an opinion that districts in which the population is most dense, have been most subject to famine?—I think on the whole that has been so.

570. But is that opinion consistent with the opinions expressed in the Report of the Famine Commissioners, of whom you were one?—Yes; it is a very long Report.

571. If you turn to page 34 of Part I. of the Famine Commissioners' Report, you will see that they say that the density of the population is greatest in the districts which are most productive and least liable to suffer from drought?—That, I have no doubt, is correct so far, that unless they were considerably free from suffering from drought they

Mr. *Wodehouse*—continued.

they could not have a very dense population; but there is no doubt of the fact, looking at this map of past famines which I hold in my hand, that in very many cases the richer parts of the country have been struck with famine, and certain portions, for instance, the Central Provinces, had scarcely in all that time been touched in hardly an instance except just in one part in 1868 and 1869, which had been slightly touched, and that is a thinly populated part of the country.

572. But, speaking generally, Bengal would be regarded, would it not, as the richest part of India?—Yes, certainly.

573. I will read to you what the Commissioners say about it: "In Bengal, during the 110 years over which our records extend, four droughts only have occurred, of which two were very severe." "In the North-West Provinces nine droughts are recorded, of which two were intense, and three very serious. The two greatest famines in this part of the country, those of 1783 and 1837-38, were separated by an interval of 53 years, but there was a frequent and highly irregular occurrence of less important droughts. In Bombay nine seasons of drought appear, of which two were extreme. In Madras there were eight such seasons, of which two were excessive. Excluding Bengal, the average interval between the several recorded droughts, great and small, in any one province is about 11 to 12 years, and between those of the severest type about 50 years, but the deviations from these averages are very large, and the records are not sufficiently accurate to give more than approximate results;" does not that point to the conclusion that Bengal has suffered less than other parts of India?—Bengal suffered certainly severely in the famines of 1865 and 1866, and it suffered again in 1873 and 1874. I think that is all that I can see in this record of the famines since 1833.

574. But Bengal, in this paragraph, is favourably contrasted with the other parts of India in respect of liability to famine?—Yes; Bengal is an exceedingly rich country, and, as a rule, it is exceedingly well supplied with rain, and the population is very dense.

575. Was not the famine of 1876 to 1878 in Southern India a famine of extreme severity?—It was very severe.

576. And if you were to postpone the making of railways in that part of India until you had completed all the railways in the richest districts, where the population was most dense, would there not be a risk of another loss of life by famine in Southern India?—There is already a protective series of lines leading from the interior of the country to Karwar and Goa now being constructed, which communicate with the Madras lines, and which I hope to a considerable extent will relieve Madras and Southern Bombay from danger.

577. Would you say that when the lines, which are now under construction, are completed, that part of India which suffered so severely in 1876 to 1878 will have been made safe?—I would not say that; no doubt it will require more; there is no question of it.

578. Would you postpone the construction of those lines?—Yes, I would postpone the construction of those lines until all the more densely populated parts of the country were made safe. You will see that Madras is favourably situated for being supplied by sea. I forget the exact number of tons, but I think there were upwards of 2,000,000 tons of food landed on the coast of Madras, during the last famine, by sea; and, therefore, Madras has an advantage very much beyond all the interior of India in its possibility of water communication; and then there is a canal now constructed all along the coast of Madras from Madras itself to Gantoor, through a country that was heavily struck by famine, by which water transit is got independently of the sea, so that there are facilities in Madras for the relief of famine, which do not exist in the interior parts of India.

579. But the sea communication is affected by the monsoon, is it not, during a part of the year?—During the period of the monsoon no doubt it is, but during the last famine the harbour master at Madras told me that for several months, without the assistance of the new harbour at all, which, in fact, was not in a position to afford any assistance, for several hundred miles along that coast there was no difficulty in landing food, so that for more than half the year a very large quantity of food can be landed.

580. Do you think that the reluctance of capitalists to invest in Indian railways without State aid in some shape or other, is a reasonable reluctance?—Yes, I think so.

581. Still you think there is a scope for productive lines in India, if made by the Government?—I think that the Government are the proper people to take the risk.

582. But the risk is so great that you think private capitalists are not wise to incur it?—I think that the risk may be political as well as otherwise.

583. You think that the reluctance to invest is partly owing to political reasons?—Partly owing to political reasons, and partly owing to the fact that one-half of the mileage of India at present does not yield five per cent.

584. Therefore, whatever the Government undertakes would be subject to a considerable risk of loss?—I would endeavour to meet the risk as much as possible, by keeping to the best probable paying lines, and with the exception of the through lines, making the lowest amount of capital suffice.

585. You stated, in answer to a question from Mr. Fowler, that in America railways are pushed into the wilderness to develop that wilderness, and it is developed by introducing into it a number of energetic European emigrants, is it not?—It is.

586. And, in point of energy and enterprise, there is an immense difference between that class of emigrants, and the native population of India?—There is a very great difference. The natives of India are not at all to be compared with the Americans. The railways are put into deserts, you may say, but the deserts are rich land, and that rich land immediately becomes productive, and all through the prairie countries which extend a long way west from the Mississippi, by being simply stirred with the plough,

Mr. *Wodehouse*—continued.

plough, and sowing the seed, they get a crop. There is no cutting of trees, there is no expensive cultivation required, and hitherto it has sufficed to pay a good return upon such American railways.

587. In short, looking to the vast differences between the two countries, the example of American railway extension is not very valuable as regards Indian railway extension?—I do not think it is of advantage as a point of comparison. I only adduced it as probably furnishing lessons that might be useful for India or any other country.

Mr. *Onslow.*

588. Are you aware that at the present time there is no railway communication practicable between Madras and Calcutta to any port on the east coast?—Yes, I am aware of that.

589. You stated just now that when the famine in Orissa took place, in the years 1865-1866, the danger there was enormously enhanced on account of a cyclone which took place at that particular time in the Bay of Bengal?—No, I understood it was the monsoon.

590. It was almost tantamount to a cyclone; but you are aware, I suppose, that the Bay of Bengal is more liable to severe monsoons and cyclones than perhaps any other part of the east coast of India?—I was not aware of it; but I have no doubt the honourable Member is correct.

591. Do not you think that a railway projected from Calcutta to Madras, as you indicated along the coast, is one of primary consideration, seeing that at the present time there is no railway communication at all?—To my mind, it would be so; and if I might give my own impression, as we came along the coast by sea we saw Ganjam and landed at Vizagapatam, and there I found the town full of people, some in a very thriving state; there was some great festival going on, and I heard there was a great undeveloped country behind it. It struck me that taking Orissa and then a line coming along the whole coast by Ganjam and Vizagapatam, and by the delta of the Godavery to Gantoor (which was the scene of a dreadful famine), passing through and connecting the rich country of Orissa with the richer country of the Godavery and the Kistna, and in that way connecting the whole with Madras, it would be a line of great public importance.

592. As a rule you would say that it is not only the supply of food in the case of famine which would be utilised by this railway; but, as you know, there is a great intercostal trade between those large places, Masulipatam, Vizagapatam, Gantoor, and all those places between which the Indian Steam Navigation Company trade very profitably indeed?—Yes.

593. And, therefore, I suppose it would be in your opinion, irrespective of famine purposes, and for commercial purposes alone that a railway from Calcutta to Madras would be as paying as any in India?—I am not able to answer the question with regard to the commercial part of it, but I am quite sure that it would be quite a famine protection. I am not able to acquiesce with the honourable Member, because I really do not know its commercial capacity.

Mr. *Onslow*—continued.

594. It has been stated that one great disadvantage in the export of grain from India is the break of gauge and, for this reason, that where grain is brought from a certain district to a particular locality on a certain date, very often that wheat is detained at the station without any covering, out in the open, and the consequence is, that the wheat gets full of dirt and dust, and hence it has been alleged, that it is on that account that the price of Indian wheat is less in the English market than that of American wheat. Supposing that the Indian Government at all those stations were to build substantial godowns so as to protect the wheat coming from the different parts of the country, do not you think a great deal of this could be remedied?—I have no doubt that a great deal of it could be remedied. There is no doubt that a break of gauge is a serious impediment to a successful paying traffic, especially in an article like wheat.

595. But do you think that there is sufficient storage in those places to which the wheat is brought, where there is a break of gauge, to secure the safety of the wheat?—I am not aware what convenience of that kind is provided, but even if it were provided, it is costly, and if you have to store it at all in the course of transit, it must add largely to the cost altogether.

596. But surely where you have an influx of wheat into a particular locality it is very much better to pay that extra cost to store it, rather than allow it to lie open?—In the winter time, as the honourable Member knows better than I, the climate is so very certain that for considerable periods it would not take any damage in the open air.

597. But wheat does not always come down in the winter time?—No, but I think it is generally shipped in the dry season, though I cannot speak to that.

598. I could not quite catch what you said just now, but I understood you to say that you proposed that India should spend in the course of the next five years six millions on Indian railways?—Six millions a year; I spoke of four years at the rate of 1,250 miles a year, or five years at the rate of 1,000 miles a year.

599. Do you propose that all that money should be borrowed in this country, or that a part of it should come out of the revenues of India, or that a part of it should be borrowed in India?—One of the reasons which I gave in favour of the Government having to do the whole of the work themselves was that they would be able to arrange their borrowings, exactly as they found it necessary to do; and if they had finances of their own, then of course they should not borrow; but if they were obliged to go to the market, they would borrow in the best market, whether it was India or London; and I imagine that, generally, London is the best market. But it would be quite a question of management.

600. Do you think the London market could well bear borrowing say 50 per cent. of this outlay in the course of four years; do you think that the London market would take up this amount readily?—I should think so, very easily.

601. At 3½ per cent.?—Yes; I said 6,000,000*l.*

602. I say 3,000,000 *l.* thrown on the borrowing

Mr. *Onslow*—continued.

ing market in England and 3,000,000 *l.* out of the revenues of India; do you think the London market would stand that 3,000,000 *l.* annually?—I should think it would stand and doubly stand it without the least difficulty. If it is true, as one of our greatest statisticians has shown, that the annual increase of capital in this country is upwards of 200,000,000 *l.* a year, 6,000,000 *l.* could have but very little effect upon it.

603. Without any sort of guarantee whatever, and only on the credit of India?—Only on the credit of India. India at this moment has its 3½ per cents. at par and a little over par, and I take it that that is the test of the credit of India.

Mr. *Edward Stanhope.*

604. In addition to these 24,000,000 which you think we should spend upon railways in the course of the next four years if you are to provide adequately against famine, you would have to spend a large additional amount also in irrigation works, would you not?—I should rather myself increase the railways that were needed than increase the irrigation.

605. Then you would not spend anything whatever upon irrigation?—Yes, I am contemplating just now an expenditure of 6,000,000 *l.* or 7,000,000 *l.* on railways, besides a considerable sum in the maintenance and continuation of other public works in India.

606. My point is this: is it advisable that we should expend an increased amount of revenue on works of irrigation during those four years?—I do not know that I should spend so much without making more lines of railways. If India has been spending at the rate of 7,000,000 *l.* for some years back upon railways, upon what is called capital railway expenditure, if I am not mistaken, it seems to me that it might have produced more than it has done; but there is a considerable extent of railways which is at present being constructed, and which no doubt must swallow up a considerable amount of money.

607. You advocate the extention of irrigation works as second to railway extension?—Quite second.

608. Then in order to protect India against famine, which may occur, you propose, in the course of the next four years, to spend 24,000,000 *l.* in addition to what we are spending, otherwise; that is to say, you are proposing to spend an additional amount on irrigation works to what we are spending now?—No, certainly not; I spoke of 6,000,000 *l.* on railways as what we are to spend at present or a considerable part of it.

609. Your proposal would be to spend that in addition?—I do not desire to go faster in spending than 6,000,000 *l.* a year in the construction of new lines.

610. However, with regard to the effect of those proposals upon the financial condition of India, I understand you to express no opinion beyond saying, that if the Government of India thinks that they can safely spend 53,000,000 *l.*, you are well within the mark you think in spending 24,000,000 *l.*—It seems to me a sufficient argument for me to use; I am not within the circle to know, or to be able to tell, what the Government of India can do. I am merely saying that you can spend half of what they contemplate, at least.

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Mr. *Edward Stanhope*—continued.

611. When you wrote your report to the Government of India in 1880, you were then of opinion that all the capital that was required for railways could be obtained from the people of India?—If I said so, which I do not recollect, further experience has shown that I was mistaken.

612. And it is only that you now find that you cannot get private capital to provide the money on the usual terms that you come to the conclusion that the State ought to find it?—Certainly.

613. Have you received any further information since you wrote your report to the effect that the growth of wheat is exhausting the soil of India?—I have received none; I can quite understand that wheat, which is an exhausting crop, would have a tendency to exhaust the soil, but I would also say, that, if the price of wheat were considerably raised by facilities of communication by railways, the cultivator who produced his wheat would see it to be to his advantage to enrich the soil; at present, the farmers in India who grow sugar, and are greatly benefited by it, manure their sugar very highly, because it is exceedingly remunerative, and I have no doubt that the same principle would apply to wheat; nobody would think of putting in sugar-cane without very highly manuring it.

614. With regard to the Department of Public Works, you are of opinion, are you not, that the Central Department of Public Works at Calcutta should be abolished?—I do not offer so sweeping an opinion of it as that. I did not mean, certainly, to convey that view, for I have not sufficient knowledge to enable me to offer such an opinion. What I did say was, that if this became a very stupendous business, it might very properly and fairly be divided over each Province, and that you could get first-rate railway men to be at the head of the business in each of those Provinces. I think it is essential that they should have first-rate railway men.

615. I am only reading from the report which you published in 1880, in which you say you consider it a matter of extreme public importance that the general offices connected with the Vice Regal Government should be closed, and each Province should carry on its works itself?—That was because I was anxious to advocate the greater independence of each Province. Instead of being directed by one Central Office in Calcutta or Bengal, each Province should have its own head to direct its own Provincial work.

616. And do you still think it desirable that it should be so?—Undoubtedly.

Sir *George Campbell.*

617. I should like to ask you a little more as regards the railways which you would now recommend; I understand you to say, that you would make railways where they are likely to pay, and you think that the railways which are most likely to pay are those which go through the most populous countries, and you point to the blue upon the map, but I do not think you have told us of any particular railways in those blue spaces which you would recommend. I want to know whether you think that there is room in the great Gangetic plain, and the most highly

populated

Sir *George Campbell*—continued.

populated parts of India, for any new great lines?—I do not know whether all the lines are laid down on this map, but the lines that are laid down clearly shew that already my idea has been carried out, for in the more densely parts of the country there are the most numerous lines of railway. I have no doubt that it would still pay to make lines in the more densely populated parts of the country; but I am not a railway engineer, and have not gone into that minutely; I am only speaking on the general principle.

618. May we assume that to a certain degree the most populous countries are now served by great trunk lines, and that the development would probably be more in the nature of feeding subsidiary lines than of new lines of any very large character?—I think so.

619. Might I ask you this, whether all the lines which you have specially recommended to us do not sin against your own canon; I think you recommended a line to Benares, through a hilly and less populated country, and on to Calcutta, and another line from Rapore and Chatisgarh to Calcutta; and another line from Calcutta to Madras; if we look at the map, are not all those lines through comparatively little populated countries?—The answer that I would make with regard to a second line from Benares to Calcutta, it is the outlet to one of the richest parts of India; it comes down into a country of minerals, coal, and iron, and at present, as is stated by Colonel Luard, in his report, there was a great block at Benares from the want of anything but the one line leading into Calcutta, and therefore although it may pass through a comparatively poor country, you get in the first place a line affording an outlet to one of the richest parts of India, and at the same time tapping great mineral districts, as stated by the consulting engineer of the Government, who reported in favour of this line, and said it would be not only a great advantage to the public, but by cheapening the transport of coal from this part of the country to where it is so much wanted, that the income from that alone would be equal to a return upon the capital in the construction of the line.

620. Are you not aware that almost the whole of that line would run through one of the thinly populated, most hilly, and most unproductive countries in India, except in the matter of coal?—That I do not think militates against the recommendation made by the consulting engineer, which was to give an additional outlet to the Gangetic Plain.

621. Do you seriously think that the East Indian Railway, running as it does along a very flat country, and possessing a second line as it does for a great part of the distance between Benares and Calcutta, could not be made a sufficient outlet for the Gangetic valley?—It has been found not to do so, which the proposed line would, for although it passes through a thinly populated country, it taps a mineral country, and thereby secures a double advantage.

622. Have you ever compared the traffic upon the East Indian Line with that upon the London and North Western?—No; I have not done so.

623. I suppose there would be no difficulty in laying down, if it were necessary, four lines of railway upon the East Indian Line where it does not possess an alternative line, as is now the case, I believe, upon the greater part of the London and North Western Railway?—If you did that, you would find great accumulations at your terminating point, which would be obviated by having different terminating points.

624. I think you have alluded to the recommendations, which I think you made yourself in the Report before us, recommending several railways which are to tap the wheat-producing country or the grain-producing country, in the eastern part of the central provinces, Raipore, and so on; have you at all, studied the extent to which there is a very great grain-producing country there; are you aware that under the proposals which have been made, there would be something like five railways to carry away the grain from that country?—Then, in that case, what we desire is already fulfilled.

625. Have you satisfied yourself that there really is a very large country there that would have work for five railways?—I do not think it is likely to take more than five railways.

626. Do you think that there would be work for as many as five?—I am unable to say.

627. As regards the railway along the coast from Calcutta to Madras, are you aware that the drainage through that narrow strip of cultivated country in Orissa is enormous, or that the rivers are of that character, that for four-fifths of the year you could not have ferries, because there is no water in them; and that for the remaining one-fifth of the year the floods came down on an enormous scale, so that the bridging of that line would be extremely costly?—I have no doubt that the bridging would be very difficult and expensive, but I do not propose to bridge it in the first place, but to use ferries, and if it should occur that there is no water at times, it would not require a ferry.

628. Do you think there is any case in which a river having an enormous body of water at one time and none at another, has been crossed by a ferry?—They have rivers in America which are so crossed.

629. Have they always water in them?—Yes, they always have water in them.

630. But for three-fourths of the year you have no water in India?—There may be physical difficulties of that kind, but in that case a bridge over the water would be needed for only one-fourth of the year.

631. Are there no other great lines which you would propose as likely to be paying?—No, I do not profess to be able to offer any opinion on that point.

632. You said, having regard to the finances of India, you would limit the number of railways that should be made; supposing you were fully satisfied that a railway is likely to pay, is there any reason why we should have any limit; if the railways will certainly pay, is it not the case that the finances of India would in no degree suffer from the construction of those railways?—The only limit that I proposed in such a case was this: that it is important not unduly to disturb the demand for labour in different parts of the country, and that it would be very important

Sir *George Campbell*—continued.

portant in view of the possibility of famine arising that you should, until there is a necessity for it, reserve the making of lines that would form a very excellent source of employment for people who could get no other employment when a famine arrived.

633. You are aware that in India the labour is principally not of a professional kind, but of a local kind, employing men, women, and children, and that in India there is a population of 240,000,000, and probably it would not be difficult if a number of railways were sanctioned to distribute them in different parts of India?—I think it is a question of the lines of communication, and to what extent you believe you could fairly face the question of administration, which must be carefully considered.

634. I think you said that you were very much inclined to decentralize the administration of the railways and other public works, if not to abolish the Central Public Works Department altogether, and to put the responsibility to a great extent upon the Provinces; have you considered what are the resources from which those Provinces can meet that responsibility?—The resources would have to be the resources of India, reasonably and fairly divided amongst the different Provinces; that is to say, the credit of India would bring the capital necessary for well-considered and the most paying lines of railway.

635. As regards that metre gauge I understand that you scarcely give a decided opinion one way or the other, you rather referred to what you have been told, that they could be constructed very much cheaper; have you looked into the question sufficiently to satisfy yourself, having regard to what is the cost of bridging, that it would be very much cheaper to construct railways upon the metre gauge?—I should say decidedly, if the honourable Member who sat here and who has a great knowledge of the subject is correct in stating that the broad gauge can be made for only 10 per cent. more than the narrow gauge, I should prefer the broad gauge, but if it is a question of saving one-third in the cost where there is at present very little traffic comparatively, it would be both safe and prudent in every way to go upon the cheaper cost of construction.

636. With regard to the wheat production in India, you have paid a great deal of attention to that subject, being a specialist yourself; was it your impression that there are very large tracts of India available for wheat cultivation; but that that cultivation is very much limited by the necessity for irrigation and manure?—I take it from the figures which were placed before us that there are very considerable tracts of country favourable for the cultivation of wheat.

637. Did you see any very great tracts of country in which wheat cultivation was possible without irrigation?—I saw wheat which was immensely improved by irrigation.

638. Did you see any great tracts where the production of wheat might be carried on without irrigation?—No, I did not.

639. Does not the necessity for irrigation, and the necessity for manure to supply the exhaustion of the soil when stimulated by water, very much limit the extent to which wheat cultivation can

Sir *George Campbell*—continued.

be extended in India; seeing that it is very different from a country like America, where you have an enormous extent of virgin soil and no deficiency of rainfall?—The Agricultural Department of the Government has lately published an account of certain inquiries regarding the production of wheat, which they have lately undertaken at the instance of the Secretary of State; and from this document it appears that the area under wheat in British India comprises about 20,000,000 acres—that is, six times as much as we have in this country, yielding between 5,500,000 and 6,000,000 tons. The corresponding area in the native territory is said to be about 6,000,000 acres, and yields 1,500,000 tons. That, together, is a very large quantity of wheat.

640. My question is not so much as regards the actual wheat production at the present moment, as the possibility of a very great extension of it?—I am not able to answer that question.

641. May we take it briefly that your view is that the cost of cultivation in India, and a very largely increased export of wheat, must depend very much upon the price in this country, and that if the price is greater in this country it will be likely to extend the cultivation of wheat; but if the price is low in this country, it is not likely to extend it?—I think that that is so, and I think the past experience of past years has shown it to be so.

642. As regards the exhaustion of the soil, you are strongly of opinion that in an old country like India the exhausting cultivation cannot be far extended without the application of manure?—I do not think that the cultivation of wheat can be extended in India unless the price becomes remunerative; and if the price becomes remunerative, as I have already said, the power of applying manure and maintaining the condition of the soil would be increased, just as it is with regard to sugar cultivation.

643. Did you see in India any very large tracts of country which seemed to you to be open for settlement, such as the prairie lands in America?—I heard about large tracts of cultivated land, but I did not travel through those parts; I remember even in Bengal visiting a tract of country where the Great Soane Canal which has lately been made to the south of Benares had been brought into play. An English company had taken a considerable extent of land with trees and jungle on it; it was very good land and they had cleared it of jungle, and they had brought in the irrigation from the Soane, and were making a very profitable return from it. I was told that there was a large extent of country of the same kind within a few miles of that particular country which was equally capable of reclamation; I believe that is so.

644. That was a case where abundant irrigation was supplied?—Yes, where water could be had.

645. And where there was no irrigation before?—Yes.

646. As regards the cost of construction and the railway rates in India, did you come to any conclusion why, speaking generally, with the

Sir *George Campbell*—continued.

very dear labour in America they should be able to construct such an immense number of paying railways, and to carry the traffic itself generally at a much lower rate than in India?—I believe it is by competition and abundance of good land; I think it is the effect of enlightened competition or of "enlightened selfishness," as they put it themselves.

647. I think an honourable Member asked you whether it was not injurious that the Government of India, having an interest in the East Indian Railway, should refuse permission to others to construct such a line as that from Jhansi to Bhopal; have you any reason to suppose that anybody wanted permission to construct such a line on their own account, or that anybody was refused?—I have no knowledge on the subject.

Mr. *Bernhard Samuelson.*

648. I am not quite clear as to the reason which influenced you in fixing the railways which you would construct within the next four years at 24,000,000 *l.* of capital; perhaps you could explain it?—I took it at 1,250 miles a year, at 5,000 *l.* a mile.

649. But why did you take 1,250 miles?—I wanted to make up the 5,000 miles that we, as a Famine Commission, thought were rather strongly wanted.

650. Then you look only to these 5,000 miles?—That is all in the first place.

651. Do you think that 1,250 miles a year would be a good rate of progress?—I think, considering the circumstances of India at present, it would.

652. Those 1,250 miles being considerably more, I believe, than the present rate?—Very much more; the average of the last 10 years has been 400 miles a year.

653. So that it would be a threefold increase?—Yes, threefold of the average of the last 10 years.

654. Further, in fixing the 1,250 miles per annum, there are certain considerations which weigh with you, otherwise you would fix upon a greater or a less mileage per annum?—I was asked to state what my opinion was, and what would be a safe and prudent rate.

655. But I should like to know why you have fixed upon that rate?—I looked at the 5,000 miles, and I thought that if we got that in four years it was quite within what the Government of India itself stated they were prepared to encounter.

656. Why should you not go to the full extent of what the Indian Government are prepared to encounter?—The reasons which I gave were these, that you might disturb the labour market in India by too sudden an increase, and in the second place it would be desirable that you should leave some railways which were not immediately wanted to be a reserve for labour in time of famine, for famine is certain to recur.

657. Those are the principal reasons which induced you to limit the construction of railways?—Yes, and the general fear that seems to be entertained in India as to the finances of the country. I myself do not say that I join in that fear so much as the financial authorities in India seem to do, because India has wonderful advantages over

Mr. *Samuelson*—continued.

most countries. One-half of its average income is got from sources other than taxation; 22,000,000 *l.* is got from land, and nearly 10,000,000 *l.* from opium, and something from tribute; altogether about one-half of the average expenditure of India during the last 10 years has been got from sources other than taxation, and I cannot help thinking that, under a thoroughly good financial administration, India is not at all in an unsafe state.

658. I understand that the question of finance has very little influence upon your mind, but that you are influenced by two considerations; first, that you would not wish to unduly increase the price of labour; and secondly, that you would wish to reserve work for a period of famine?—Yes, those are two main influences.

659. As regards the first of those considerations, namely, the question of raising the price of labour, the area of India is very great?—Yes, certainly.

660. You propose that certain railways should be made, or, at any rate, that numerous railways should be made in the valley of the Ganges, and that subsequently a costly line should be made between Madras and Calcutta?—The line between Madras and Calcutta I only offered as a suggestion for consideration; I have no such knowledge as would enable me in any way to press it upon the Committee. On broad principles it seemed to me one that I might offer as a suggestion, but certainly I should not put it forward as one to be immediately constructed.

661. You would reserve the construction of that line, assuming it to be a line which is desirable, until the lines in the valley of the Ganges had been constructed?—I did not say in the valley of the Ganges; there are a great many lines now in the valley of the Ganges, more, probably, than in any other part of India; but whenever lines leading to great thoroughfares can be profitably constructed, I should leave it to those who are studying the subject to see what should be first done.

662. Let us assume that you are constructing lines through the valley of the Ganges, and a coast line between Calcutta and Madras at the same time; do you suppose that the construction of railways in the northern portion of India would interfere with the cost of labour in the south-eastern portion?—I should expect that wherever lines were being made, and were going on at the same time, even at the commencement you should not begin in one place only, but you would be going on for some years in the construction of lines in the valley of the Ganges, or on the coast, or in different parts of the country, and you would be distributing the labour over the various provinces of the country.

663. Therefore you do not so very strictly adhere to the proposal that lines should be finished in one part of the country before they are begun in another?—No.

664. Because you are not of opinion that in a large country like India the progress in railway making in one part of the country would have much effect upon the cost of labour in another part?—I do not think it would.

665. With reference to what you stated just now about leaving the construction of lines to a period

Mr. *Samuelson*—continued.

period of famine in order that employment might then be given to the people, I would like to ask you, would not those lines be of greater value, if constructed, than the value of the labour which they would afford in their construction in a period of famine?—No doubt they would, and if it was in a populous part of the country, I should like them to have been constructed; but as certain railways might be very useful in the future, and as much more useful lines in the present would be made than in the thinner parts of the country, when a famine comes, you would have a very useful resource in making them in the part where they are then required.

666. But would not that be an inconvenience to the locality?—No, it would not be an inconvenience to the locality itself, because you would not have so many people to feed; it would be the thinly populated part of the country.

667. But you would have facilities for bringing food?—You would have facilities for bringing food through the main lines.

668. Therefore that answer of yours would have to be taken with very considerable limitations?—I do not know that that in any way affects the answer I gave.

669. You would take care in the first instance to have the lines by which food can be brought to the people, and afterwards you would construct other lines which would not be famine lines?—No. I propose to make the earliest lines through the richest parts of the country, and with the largest population, both for the convenience of the people, and for the convenience of feeding them in time of famine; and I would leave the lines through the poorest parts of the country to be the last constructed, because they are the least necessary. I would have no other limitation than that. Further, if a famine came you could very usefully employ the people there in making those lines when otherwise you would have to keep them alive without getting any advantage from their labour.

670. But any lines which would be wanted in case of famine you would not defer?—In case of famine in a dense part of the country, I would carry the food for the most densely populated, from the thinly populated parts of the country. As I have stated, if you have 600 to the square mile in one part of the country, and 100 to the square mile in another, you would have six times the quantity of food to transport to one that you would in the other, and therefore, in the protection from famine, you do well in protecting the richer and more densely populated parts of the country first.

671. With regard to the growth of wheat. I would ask you, in the first place, whether you believe that any increased growth of wheat would take place generally on the part of the peasantry, or by the large proprietors, such as those of whom you spoke just now as making a clearing within a certain jungle?—That was a mere experiment; a drop in the bucket, compared with the whole of India.

672. So that, on the whole, you would look to the peasantry as supplying any increased production of wheat?—That is so; but I think it is very likely that if the general price of wheat were to rise, the peasantry themselves would go into the jungle, and begin to clear, for that would then pay.

673. Then, in a certain sense, the increased production of wheat would not have any adverse influence upon the production of other crops?—It would be a more paying crop substituted probably in part for a less paying crop.

674. Would it be a substitution, or would it be in addition?—Generally, I should think it would be in substitution, except where they took in new lands.

675. But you are not prepared to state what quantity of new land would be likely to be taken in the cultivation of wheat?—No, I am not.

676. As regards the cost of wheat, I think you told us that it was stated by the agricultural department of India as being not less than about 19 *s.* to 20 *s.* a quarter?—That was in 1882.

677. Have you verified the figures upon which that estimate is founded?—It seems to me very reasonable in looking at it.

678. Therefore with your great experience of wheat growing in various countries, you are inclined to look upon that as being correct?—I am.

679. You spoke of various items making up the cost, and you spoke of rates and rent; how much would the rent on an average amount to per quarter in India?—An acre of land producing a quarter of wheat, if it were let at two rupees, would be four shillings, and if it were let at one rupee, it would be two shillings.

680. What is the average rent at which wheat land would let?—I should think that the average rent paid by the cottager who pays it to the zemindar, who again pays it to the Government, might be probably 4 *s.* for anything like a good piece of wheat land.

681. To the extent of 4 *s.*, therefore the cost of cultivation would be fixed; you could not get below it on certain land?—Of course it depends upon the quality of the land; if the rent was 4 *s.*, you could not get below that. I think it would be from 3 *s.* to 4 *s.*, and in some cases as much as 6 *s.*

682. That would have to be set against the great cheapness of labour when you come to make a comparison between the virgin lands of America and India?—The cultivator, as a rule, and his family do the work on the farm in India.

683. The cost of labour therefore being comparatively small?—It must at all events comprehend the maintenance of the people themselves and their cattle, and any interest that there may be on their capital.

684. That is the proportion which would be chargeable on the wheat; but they would grow other crops, I suppose, in addition?—No doubt.

685. Do you not think, on reflection, that 19 *s.* or 20 *s.* is rather a high estimate for the cost of wheat grown under those circumstances?—I think it is a fair and reasonable price.

686. With respect to the question of the construction of railways by the State, I understood you to say, that in proceeding rapidly with the construction of railways, there would be difficulties of administration?—No doubt there would be.

687. Would not those difficulties be very much less if the railways were constructed by companies

Mr. *Samuelson*—continued.

to whom grants of various districts might be given?—One would think so; but I think that experience, so far as I have read it, is that dual control really is even more difficult than if the whole control were laid upon one shoulder.

688. Would it be necessary to have dual control as regards construction?—It has always been found necessary where there are guaranteed lines.

689. If the guarantee is limited to a fixed amount of capital, would not it be to the interest of the companies to construct their lines within that amount of capital?—Certainly, it would appear to be so.

690. And it would not be necessary, I suppose, for the Government to pay the money except as the lines progressed?—I suppose that would be so.

691. And the lines, I suppose, would not require any very laborious supervision?—I think the Honourable Member will get that much better from some of the practical gentlemen who have been engaged in railway construction in India.

Mr. *W. H. Smith.*

692. I think you strongly advocate this extension of railways in India, in order to provide a diversity of employment?—That would be one of the natural consequences of railway intercommunication.

693. You lay stress upon that, do you not?—I think it would be very advantageous.

694. Have you observed in Bengal, for example, where you say famine has prevailed, and where railways exist in larger proportion than in any other part of India, that diversity of employment has been produced by the operation of railways?—I should imagine that in Bengal there would probably be more diversity of employment than anywhere else; there was obviously much more independence among the occupying cultivators, and more wide-awake intelligence, but I am unable to speak of it definitely.

695. Then you recommend it simply as a theory without having any personal knowledge of the fact?—I have no further personal knowledge.

696. Are you able to say whether the effect of railways has been to increase or decrease the population of the district through which the railway passes?—I have not the means to speak of that.

697. So that you do not know whether the effect of railways is to afford a larger or a smaller number of persons for whom the Government must care in times of famine; I want to ascertain whether the railways would not lessen the stress upon the Government in provision against famine, so far as provision for the population itself is concerned, or whether it tends to increase the population, and therefore increase the responsibility of the Government?—If it did increase the population, it would certainly, also at the same time, afford very greatly increased facilities for dealing with it during famine.

698. Has the effect of railways been to make people more self-reliant and more disposed to find work for themselves, and more capable of supporting themselves in time of famine, that is to say, in the time of high prices and in time of scarcity, than before the railways were introduced?—The railways themselves have brought great additional employment, there is no doubt of that, to the localities through which they pass. As to the effects in the way the Right honourable Gentleman speaks of, I am not in a position to be able to answer the question. I was only a short time in India, as he is probably aware.

Mr. *W. H. Smith*—continued.

699. I think you spoke of enlightened selfishness of competition?—I quoted an American writer's phrase, not my own. He attributes a great deal to the enlightened selfishness of competition and management in America for the results they have arrived at.

700. You have been in America, have you not?—Yes.

701. Are you prepared to go at all in the direction which the writer you quote takes, when he supports the view that enlightened selfishness is the first and best principle of management in America for railways?—I think that, as he explains this enlightened selfishness, it has had the effect of finding that the best policy for the railway interest to follow was, not to impede, but, if possible, to influence everything to come by moderate charges, and that seems a very reasonable selfishness, and a very useful one.

702. That is to say, you recognise the advantage of private enterprise in America as having provided for the American continent a railway system best adapted to it; but you see the great difficulty is in applying private enterprise to India?—Yes; because there is not private enterprise in India itself, as there is in America, and so far as I understand from all I have read with reference to Indian investments up to the present time, you will not get capital in London without some guarantee, or something equivalent to a guarantee.

703. It comes to this, that you are prepared to say that an arrangement which leaves the conduct and control of a great commercial enterprise wholly to Government officers, is one which is more successful in its application to a country like India than an arrangement which would enlist enlightened selfishness in the management of those enterprises?—Certainly not; I think it would be much better if it were possible to get enlightened selfishness; but the situation and the circumstances prevent it.

704. You have instanced, have you not, the East Indian Railway as one of the guaranteed lines?—The East Indian Railway is a guaranteed line, and a very costly one, in which there was no risk whatever; there was a guarantee of 5 per cent.

705. But very recently the Government came into possession of the East Indian Line, and they enlisted the company again in the control and management of this railway; if your principle is correct it would appear to me that they ought to have managed the railway, and have worked the railway by their own officers; but I think I am right in saying that they took the Company into partnership, and enlisted what is termed in America "enlightened selfishness" in the management of the railway; do you consider that the Government was wrong in the course they took then?—I suppose the Government acted upon the view that they really had not men whom they could entrust with so large a business, and I do not think that if so large a business is to be

Mr. *W. H. Smith*—continued.

be entrusted to the Government in India, they can do without getting the very best administrators that this country can afford.

706. Then it comes to this, that on the whole you would consider that if an arrangement could be made by which it should be the interest of private enterprise, either to construct or to work the railways in India you would enlist that private enterprise?—If it could be done without throwing the risk of failure upon the Government, certainly I should.

707. If it could by any means bring in the principle of partnership which is brought in in the East Indian line?—I think the East Indian line is somewhat an exception. It was constructed with a heavy guarantee, and the circumstances of the time probably rendered it in the opinion of Government of India, expedient to adopt this system. I do not think it should be taken as an example.

708. I am speaking now of the last arrangement with the East Indian line?—Yes, I quite understand the Right honourable Gentleman,

Mr. *W. H. Smith*—continued.

but I do not imagine that we should take it as a precedent which it would be well to follow in other cases; nor has it been followed by Government in the arrangement recently concluded with the Eastern Bengal Line.

709. Have you any knowledge of the actual results of the working of the Government railways, as Government railways?—I have no special railway knowledge. I speak upon the general subject as a question of economical science which I have studied with care, and after a personal examination in India under circumstances of unusual advantage.

710. So that, in fact, the opinion which you have given the Committee is an opinion formed upon general principles rather than upon any particular knowledge of the results of the working of railways in India at the present time?—Certainly, except in so far as I have had opportunity of observation; my attention was not particularly drawn when I was in India to the working of railways, except in its bearing on the special mission on which I was engaged.

Lieutenant General WILLIAM WARDEN ANDERSON, called in; and Examined.

Chairman.

711. WILL you kindly tell us in what capacity you appear here?—I was sent by the East India Association to speak for them as their representative.

712. Have you any statement to make further than what is contained in their memorial?—The Committee of the Association desired me to come and give any evidence as to what I knew with regard to Indian railways.

713. Then do you undertake to make a statement on behalf of that society?—I have merely to say that in the opinion of the Committee as well as of most other gentlemen connected with India, a great development of railway communication should be made with as much expedition as possible.

714. That is the opinion of everybody; but have you any particular statement to make or any particular plan to propose, or any special evidence to give to the Committee?—Merely to speak upon the memorandum which I gave you.

715. There is a reference in this Paper which you have put into my hands to some proposal which is about to be made by capitalists for the concession of railways in India?—Yes; it is contemplated by certain influential capitalists to apply to the Government for certain concessions, which, if they gain, will enable them, as I understand, to get the capital up, by giving a guarantee sufficient to carry out the undertaking.

716. What are the concessions which are proposed?—That I cannot say, except what I have heard since I came into the House to-day.

717. That is precisely what the Committee would like to know. Have you anything else to tell the Committee?—The part of India with which I was connected was Kattywar, and there the native chiefs have already constructed some railways out of their own capital, and they wish

Chairman—continued.

that the Government should assist them, in allowing them to be joined on to the connecting portions of railway in the north of India, and that the gaps which are existing should be filled up. For instance, there is a line of railway which comes down from North Rajpootana, and the object is to connect the Rajpootana line with the Kattywar system; but the way of doing that is to come down from the Mysana direction down straight to Veerungaum.

718. Were you a resident in that part of India?—Yes, for about 19 years.

719. Then you are, necessarily, acquainted with the native princes there?—Yes.

720. Are you authorised here to make any proposition on behalf of the native princes in that part of India?—I am not authorised to make any proposition on their behalf, but I know that they are quite willing to see railway extension in their own provinces; and from what I know of most of them, they are quite willing to join in assisting in doing it and subscribing towards the same, and there are some capitalists who are ready to undertake the railways there when we can get the thing into proper form. There is no doubt that they, the chiefs, will then take very largely the share capital in the undertaking, so as to join on with the rest of the system in India.

721. What do you mean by putting the thing in proper form?—Certain lines have got to be surveyed still in Kattywar which have not been done, and the preliminaries for them are not yet settled.

722. Is no guarantee looked for on the part of the State?—None whatever, at present; but when it is done the native princes will take shares very largely themselves in the capital.

723. The purport of your evidence from that part of India is, that the lines which you advocate can be made without any Government assistance at all?—In Kattywar they cannot be.

 724. I think

Mr. *Kynaston Cross.*

724. I think you were asked to come by the East India Association?—Yes.

725. The East India Association furnished the India Office with a memorial, a little time ago, asking that a great extension of railways should take place; and in one paragraph in that memorial, in speaking of the public works, they say that they are very inadequate to the growing wants of India, and they ask that the amount devoted to public works at present should "be applied as interest and sinking fund, in order to provide loans for carrying out productive and protective public works raised from the chief capital of Europe;" and they go on to say "a policy which has the sanction of the best statesmen on the Continent, and has been approved in principle by able Indian administrators, notably by Lord Cranborne, when Secretary of State, and the Earl Mayo, when Viceroy." I want to ask you if you can say anything in support of that memorial?—No, I cannot.

726. The East India Association did not ask you to come and speak in support of the memorial?—No, I have not seen the memorial.

727. Then there would be no use, would there, in asking you upon any of the points in the memorial?—If you like to ask me I shall be happy to answer any question that I can answer from my own experience.

728. The Association generally advocates the rapid extension of railways, and they say that "the two-and-a half millions annually assigned for the construction of State railways should be utilised towards raising an equivalent capital to be available for the purpose of facilitating the extensions long contemplated by the existing railway companies." Could you tell us how they propose to raise that capital under the guarantee of two-and-a-half millions?—No, I can not.

Mr. *Kynaston Cross*—continued.

729. Then they further go on to say, "It is only reasonable to suppose that the House of Commons, far from objecting to any guarantee, would, on the contrary, respond to the public opinion already expressed in every quarter." You have not any evidence which would induce the House of Commons to respond to that invitation?—I think that public opinion might induce the House of Commons to do so.

730. Do not you think it would be better for us to get some evidence other than the state of public opinion?—Decidedly.

731. And that evidence you are not prepared to offer?—I have not the evidence at command.

Sir *George Campbell.*

732. You stated that the object of the Kattywar Railway was to unite with the Rajpootana Railway. If that map is correct, it seems to me that it is united already?—The Rajpootana Railway comes down here (*pointing to the map*) to Mysana, and it goes to Baroda, and the idea is to bring it straight down.

733. It is already connected at Baroda?—But you have to make a detour, and it would save a great distance, and it would be a second junction from Mysana.

734. Can you tell us whether the capitalists that you speak of are native capitalists or London capitalists?—London capitalists.

735. You say that the chiefs are ready to subscribe money to make those railways, but have you had any recent communication with the chiefs?—I have been home since 1875.

736. But have you had any recent communication with the chiefs, so as to know that they are now ready with the money?—Yes, I have had a communication recently with one of the neighbouring chief's agents, who is at home now.

Friday, 28th March 1884.

MEMBERS PRESENT:

Mr. Baxter.	Mr. Gorst.
Mr. Bolton.	Lord George Hamilton.
Mr. Brodrick.	Mr. Justin M'Carthy.
Sir George Campbell.	Ms. Onslow.
Mr. Carbutt.	Mr. Bernhard Samuelson.
Mr. Kynaston Cross.	Mr. Slagg.
Mr. Dalrymple.	Mr. William Henry Smith.
Mr. William Fowler.	Mr. Wodehouse.

THE RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

Mr. F. S. CHAPMAN, called in; and Examined.

Chairman.

737. I THINK you were a long time in the Indian Civil Service, and I understand that you are now a Director of the Great Indian Peninsula Railway?—Yes.

738. Will you tell the Committee what experience you have had with respect to the construction and administration of railways in India?—I am a Director of the Great Indian Peninsula Railway, and I am also on the board of the Bengal Central Company, and the Southern Mahratta Company; my experience is limited to those three companies.

739. Had you any experience of Indian railways in India?—No, beyond my having resided a long time in the country. I was for a long time in the service of the Government, and had that sort of general experience that one would get there.

740. Do you share in the somewhat widespread opinion that railway extension in India has not been carried on as rapidly as it ought to have been?—I think so.

741. What, in your opinion, is the best means by which the capital necessary for the construction of those lines in India may be raised?—I do not think that that is a point on which it would be possible to give any very decided opinion. I think that more capital should be raised on the credit of the Government, or by the Government through the medium of companies; but I do not think it is possible to lay down any hard-and-fast rule upon that point. My own inclination is in favour of companies; but I think there is a great deal to be said on both sides of the question, and it is a very big one.

742. You would give to the Secretary of State the option of making what are called State railways, or making arrangements for companies to make them?—I think so, and that he should have an opportunity of using both agencies according to the circumstances of the case.

743. You would be opposed to tying the hands of the Secretary of State to any one, two, or three plans?—Decidedly.

Chairman—continued.

744. In the event of the Government making arrangements with more private companies for railway extension in India, what are the conditions which you think ought to be attached to them?—I have perhaps a very decided view upon that question, and it is this: I do not think that the Government ought to incur any risk whatever in the matter. The situation seems to be this: You have the Government on one side, and you have the promoters of companies on the other, and the British public. The Indian Government has unusual knowledge and opportunities of making themselves acquainted with the probable results of any line that may be made, and it seems to me that it is their duty to impart to the British public, who are for the most part very ignorant on all matters connected with India, the confidence that they ought to possess. The Government of India has a very large department of Public Works; they are for the most part the landlords of the country, they have a large administrative staff, and they have unusual facilities for making themselves acquainted with the prospects of any particular line; and I think, if they have all those opportunities, and if they have confidence that the line will pay, that they ought to impart that confidence to the public, and I believe they can do so without risk.

745. Do you think that in the first instance the Government should fix upon a line to be made, and then ask private companies to make it; or, do you think that the initiative should rest with the companies?—The present arrangements are very satisfactory. I do not know whether honourable Members ever see a publication called the "Gazette of India," but that Gazette contains an immense amount of very valuable statistical and other information. The plan that has been adopted hitherto has been for the Government to lay before the public all the information connected with the different projects; the surveys and the statistics, and the probable traffic, and so forth. I think that they do everything in their power

Chairman—continued.

to educate the public in that way, and I do not see any reason to complain of any want of information on these points.

746. You have no change to suggest in this particular with regard to the present system?—No.

747. From one cause or another, there has been a complaint of unnecessary delay in making lines of great importance; for example, the extension of the Bombay and Nagpore Line to Calcutta, and the line from Bhopal to Gwalior and Cawnpore; can you explain that?—I have no special information about the line from Nagpore to Calcutta, but I have considerable knowledge about the delays that occurred with respect to the extension from Bhopal *viâ* Jhansi to Cawnpore and Gwalior; and, with your permission, I will place before the Committee copies of the correspondence which has taken place on the subject between the gentlemen who are interested in that line and the Secretary of State.

748. Is it the case that it took the Great Indian Peninsula Railways five years to obtain sufficient rolling stock which the directors considered necessary for the proper working of the line?—No, it is a most exaggerated statement.

749. It is a statement which has frequently been laid before the public, and you say it is not correct?—It is incorrect. There was a delay, but I do not impute any blame to the Government officials in the matter at all.

750. Do you attribute blame to any parties?—Briefly this: there was an indent for engines sent home to our board, and it was sent back again to India. There was a good deal of discussion amongst the Government authorities in India as to what mileage an engine should work during the course of a year. Some authorities said that you could get 20,000 miles out of an engine, and a great number of technical details were entered into upon the matter, and delays did undoubtedly occur, but nothing to the extent of five years.

751. In the case of the extension of the Great India Peninsula Railway from Bhopal to Gwalior and Cawnpore, did the directors offer in the first instance to construct the line without any guaranteed interest, only asking the Government to find the land and grant them certain mining rights and other privileges?—Yes; and, if you will allow me, I will refer to the specific offer.

752. Did the Government agree to negotiate on those terms, and then, did the negotiation fall through, because the company thought that a mere grant of land was not compensation sufficient for the conditions sought to be imposed by the Government, namely, that the property should revert to the Government after 99 years, and that they should have a share in the profits after the profits exceeded 6 per cent.?—Yes; they are partly the reasons, but not entirely. It is rather a long story to tell, and I will condense it as much as I can, but practically what happened was this: we came before the Government, and trusting to the repeated declarations of the Secretary of State and of the Indian Government, we offered, as you stated just now, to construct the line without any sort of guarantee, or any sort of subsidy whatever, and

Chairman—continued.

we quoted in our offer that proclamation, so to speak, of the Government saying that they would authorise, and would encourage, people to make lines on those terms. I will quote, with your permission, the policy of the Government as stated by them on that point; it is taken from the Administrative Report on Railways of India for 1880-81, and the words are these: "It is hoped that in any future negotiations it may be found practicable to eliminate the question of any Government guarantee altogether, and to limit the State aid to grants of Government land, or mining rights, or other similar liberal concessions." That was the charter that we got, and upon which the companies were invited to base their proposals.

753. In point of fact that negotiation fell through because they found it difficult, if not impossible, to raise the money on such conditions?—We could have raised the money, and we could have carried out our offer if the Government would let us, but they would not allow us.

754. What reason did the Government assign for refusing their permission?—Whilst our proposal was before the Government some other gentlemen were in treaty with the Government in respect to what is known as the Bengal and North Western line, and the Government drew back from this very liberal declaration of policy to which I have adverted, and said, Indian railways are likely to be very valuable, and we do not see why the public should get all the profit out of them; and therefore they made these gentlemen of the Bengal and North Western Company acquiesce in giving up one-half of the dividend in excess of six per cent. They withdrew, as I tell you, this offer which I have quoted, and made that stipulation with the Directors of the Bengal and North Western, and we had to wait to see what the result of those terms would be on the market. They turned out financially very unfavourably, and the stock went to a discount; and we at once said to the Secretary of State: It is quite out of the question our going before the public with terms which experience has shown they will not accept.

755. That is an additional reason to the reasons which you gave in reply to my first question with regard to this matter, why the negotiation came to an end?—I have no hesitation in saying that had our offer been accepted at the time it was made, and it was made in direct conformity with the invitation of the Government, that line would have been very nearly completed by the present time.

756. In what year was the offer made?—I may explain to the Committee that we commenced to make offers as far back as the 10th of October 1881; that was our first offer, and if the Committee wish me, I will explain to them the very favourable character of that offer that we made to the Government. I think it would be perhaps better that I should tell the Committee in the form of a narrative, as far as dates go, how the negotiations commenced. In the year 1881 we, the Directors of the Great Indian Peninsula Railway, attached such very great importance to make this line, that we went to the Government and said, We have no wish to form a separate company

Chairman—continued.

company at all, we wish to be allowed, in the interests of the shareholders of the Great Indian Peninsula Company, to make this line on 4 per cent. debentures; the figures I have here, and I will quote them if the Committee wish it, but, of course, it is a matter of some detail. We pointed out to the Government that we would recommend to our shareholders to forego a portion of their surplus dividends in order to meet the first charge on those debentures, provided the Government, for their part, and they are partners with us, would adopt a similar course. In that way there would have been no financial loss whatever to the Government in respect to the construction of this line, absolutely no risk or no loss whatever. The form in which we stated it was this: "We, the Great Indian Peninsula Company, are in the happy position of paying a surplus profit of over 5 per cent., and we went to the Goverment and we said, If you will allow us to issue 4 per cent. debentures we will recommend to our shareholders that the interest on those debentures should be met out of our share of the surplus profits, provided that you, the Government, who are partners with us, will adopt a similar course, and, really, I think it was a very sporting offer to make. That offer was made on the 21st of November 1881, in which we went into very great detail, as the Committee will see if I read the letter. Our letter was replied to by Sir Louis Mallet, and our proposal was negatived. The terms were these: "In reply, I am instructed to inform you that after giving full consideration in Council to the representations now made by the Board, Lord Hartington has not been able to alter the views expressed in Sir Louis Mallet's letter of the 27th October last." Those views were that the Secretary of State would not be disposed to enlarge the operations of the Company under any arrangements which would involve any extension of the guarantee of interest or grant of pecuniary aid from the State in any shape. That was the answer that we got to that proposal of ours. We were so very keen about making the line that we fell back upon the resolution of the Government saying that they would encourage companies to make it, and we got to join us in the undertaking Colonel Trevor, who was the Director of the State Railways in India, and Sir Henry Daly, who was the agent for the Governor General and the representative of the Government in that part of the country through which the railway was about to pass.

757. Had you several interviews with the Secretary of State and the Under Secretary of State with regard to the proposition that you then made?—Several; the dates are given in the correspondence.

758. Subsequently you proposed to the Government to give you a guarantee, limited to a certain period of years?—That was after, owing to the negotiations with the Bengal and North Western having fallen through; we then, as you will see from the correspondence, said to the Government, "We think now, in the present state of the market, nothing will satisfy the public but a limited guarantee."

759. When was that proposal made to the

Chairman—continued.

Government?—It was made about a year go, on the 18th of May 1883.

760. Did your correspondence with the Government then close?—Yes, it closed. We have heard nothing more about it beyond being told that the Secretary of State is awaiting the result of the deliberations of this Committee.

761. With regard to several of the Indian lines, do you take it for granted that all the great through lines in India, such, for example, as we have referred to before, between Bombay and Agra, and between Bombay and Calcutta, should be on the broad gauge, reserving the metre gauge railways for mere feeders?—I have no hesitation in saying that I think that all the through communications should be on the broad gauge; that is to say, such an extension as the one we have had so much at heart from the Bhopal line, and I have no hesitation in saying that the Nagpore line should be on the uniform gauge.

762. Would you include the line from Bombay to Delhi by Ahmedabad?—Yes, I would, distinctly.

763. Would you be prepared to make an exception to that general principle that the leading lines should be all broad gauge, in favour of the Mahratta country, where it has been strongly recommended that there should be a general system of metre gauge?—I have no prejudice whatever against the metre gauge. For a self-contained system like the Southern Mahratta line, where it has access to a port, and of which I gather a Portuguese railway company has got a concession, I have no doubt that the metre gauge is very suitable; but I do not think that it should be interposed even in the shape of feeders to trunk lines.

764. Is there any other part of India where you would be inclined to make a similar exception?—I think probably the projected lines to Assam and Chittagong might with advantage be made on the metre gauge, but I do not feel competent to inform you upon the subject.

765. You are aware that a great deal has been said of late on the restrictions imposed by the Government on the management of Indian railways belonging to private companies, and the alleged bad working of the dual control, and we have been told that its adoption checks the development of trade and commerce; do you share at all in this view?—No.

766. Could you suggest any change of plan?—I do not share in the view at all, and I think, so far as my own experience goes, there is nothing prejudicial in the presence of the Government directors on those boards of railways with which I am connected. I think that their views and ours are mostly identical, and I think we work in harmony. I do not think there is anything that I could take exception to.

767. Then you are quite in favour of the dual control?—I do not express an opinion in favour, but I certainly do not express an adverse opinion.

Mr. *W. H. Smith.*

768. I understand that you proposed to the Government that they should guarantee those 4 per cent. debentures?—That was when it was supposed to be an integral portion of the Great

Mr. *W. H. Smith*—continued.

Indian Peninsula, but not when it was a separate company.

769. Did the Public Works Department, in proposing that guarantee to you, know that no liability would be set up?—Quite so, and it was on those grounds and on that abstract principle that the Secretary of State objected, as stated in this letter, and the proposal fell through.

770. The interest being met by the surplus profits over 5 per cent., which are equally divided between the Government and the shareholders?—Exactly so.

771. Have you contemplated that that would give a profit of over 4 per cent. when the line got to work?—We not only contemplated that, but we contemplated that it would be of immense importance to the revenues of the parent line. We should have had a great accession of traffic to our parent line. I think, speaking as a director of the Great Indian Peninsula Railway, we advocated it in the interests of the parent line.

772. And your argument with the Government was, that as they were partners with you, it was to their interest as well as yours to forego their annual surplus profits in order to make the line?—Yes, it was more to their interest than to ours, because of course, as the Committee are probably aware, our interest in the line is not of a permanent character. We shall soon become defunct, whereas the Government were more interested in the permanent prosperity of the line than we should be.

773. You become defunct upon certain terms?—In about 16 years, I think it is.

Sir *George Campbell.*

774. Not necessarily?—We are liable to be.

Mr. *W. H. Smith.*

775. The result of that is that the line is not made, nor any arrangements made for making it?—No; unfortunately it is hung up.

776. I think you have expressed a very strong feeling in favour of the management of a railway by a company?—My view is this. I have no wish to cast any reflection on Government management, for I feel it is as good as our own, but I think, as a general principle, you may say safely that a company go through with their business better than the Government do; and I think, having their time and their attention focussed on that one particular subject, they may perhaps infuse more energy into it than would be the case with the Government, which has divers other undertakings and things to look after.

777. Your officers, of course, must manage the line to a much greater extent than the officers of railways in England, than a board of directors resident in London, can do?—Yes.

778. And, therefore, the control and management of the line, so far as rates, trains, and public accommodation are concerned, must largely vest in the officers?—Yes, but not upon the question of rates; we should not allow the officers any discretionary powers in the matter of rates without our approval. Of course we should be guided very much by their views and opinions

Mr. *W. H. Smith*—continued.

as regards the working of the trains, and the general administration. Of course we must be in the hands of our officials as to that, we cannot help it, and it would be very unwise if we did try to interfere.

779. Then it is not in the power of the officers of the Great Indian Peninsula Railway to make rates, so to speak, in India for a special occasion, or for special traffic?—Not without our approval.

780. That involves, does it not, a delay of three months?—I think we should telegraph, as we have telegraphed, a reduction of rates and alterations; but there would be no delay in a case of emergency.

781. As to the Government officers managing a railway, have they greater or less facilities of that kind?—I am not acquainted with the system under which the State railways are administered, but I should think probably they are about the same, only I really have no specific information upon that point.

782. I think the Chairman asked you a question as to the delay in the provision of engines for the railway, when that occurred was the traffic in the slightest degree impeded?—It was impeded. The indent for those engines was made in anticipation of the traffic, but we were overtaken by an enormous flood of traffic, and when the time arrived we were not in a position to deal with it, in consequence of the delay in those engines. What I should like to deduce from that engine incident is simply this, that had we been a private company, and not under the control of the Government, what we probably should have done when the indent came would have been this; we should have scrutinised very closely the requirements of the locomotive superintendent, and we should have taken the opinion of our consulting engineer, and if we were satisfied that the engines were really required, we should then and there have sent the orders to the makers, and the delay would have been obviated. I think the incident is so far useful as showing, not that I cast the slightest blame upon the Government in the matter, but I think it is useful as showing that delay must be incidental to a dual control. On the other hand, I think that control has its advantages. I think it very often prevents extravagancies; but the particular incident in respect to those engines does point to one of the unavoidable delays that must arise from the dual control. Had we been an independent Board of Directors there would not have been that delay.

783. With regard to the construction of railways, can you suggest any method for carrying out new railways in India by which greater freedom shall be given to a company to develop traffic, and to manage it, and any unnecessary interference on the part of the Government shall be prevented?—I am not prepared to say that there is any unnecessary interference on the part of Government. I think that having such gentlemen as we have associated with us at our Board, as representing the India Office, their advice and experience is extremely useful to us. I do not think that, as a rule, we have any reason to complain of undue interference.

784. Are you prepared to say that if it had been

Mr. *W. H. Smith*—continued.

been possible for the Great Indian Peninsula Railway to have been a private enterprise independent altogether of the Government, there would have been no superiority in the management?—I think it is rather an abstract sort of question. I think where we have gentlemen who represent the India Office, with their great knowledge and experience, we consider that that knowledge and experience are always exercised in a wise direction. Of course there are one or two points about which we occasionally differ. There is the question of the adjustment of expenditure between capital and revenue; but hardly any occasion of difference arises. It is well understood now by practice what those charges should be. Then I think another point is, that the Government Director is disposed, and very naturally disposed, to impress upon us the advisability of having very low rates, and we, looking at it from a commercial point of view, are not perhaps quite so ready to accept his views upon that point. But I may say, speaking not only my own views, but those of my colleagues, that we really have no reason to complain. I think on the whole that we derive great benefit from the presence of those experienced gentlemen.

785. Probably you are aware that the question before the Committee is as to whether railways should be extended in India, and then as to the best method by which those railways should be extended, and therefore it is not quite an abstract question as to whether the system of Government control is on the whole a beneficial one, and we want to find out whether it is possible to improve the conditions under which railways can be made in India, and controlled in India?—My answer to that would be, that supposing the Government had no stake in the matter, I think it would be better for them not to have the control, but assuming that they have a very great stake as they have in those guaranteed railways, I consider that their control is wisely and judiciously exercised.

786. With your knowledge of India, do you believe it to be possible to construct railways without involving the stake of the Government in them by a guarantee in some shape or other?—As I suggested, it is possible to make the railways without the slightest risk to the Indian exchequer.

787. That is not quite an answer to my question. I asked you whether it is possible to make railways in India without involving the guarantee or the liability of the Government; you say it is possible to make railways without risk, but that is quite another thing, would private enterprise take up the railways of India, make them independent of the Government?—Not in the present uneducated state of public opinion with reference to those railways. I myself personally have very little doubt that in the course of time when those recent railways have developed, in the course of perhaps four or five years, there will be very great difference in the estimation on the part of the public with respect to those railways; but in the meantime what I wish to explain is this, that a guarantee such as I propose that the Government might

Mr. *W. H. Smith*—continued.

fairly and safely give, would be of a nominal character; that is my view of it.

788. What do you call a nominal character?—I hope I am not digressing, but I wish to be as brief as I can consistently with my being understood. My view of the matter is this, as I think I explained before, that the Government have unusual opportunities of making an estimate of what the result of a railway will be, and I should say that the Government ought not to encourage any company whatever unless they are satisfied beforehand that that company will yield a good dividend in the course of time. If they are so satisfied, then I think they ought to have the courage of their opinions, and to impart to the public the confidence that they require.

789. How is that confidence to be imparted to the public by any other means than by a guarantee?—I say that the guarantee that I would propose would be merely nominal. I think that the great object should be to construct those railways with as little burden as possible on the finances of India, and I think that that should be the point which they should start from. Then I think in furtherance of that view, all *ad interim* interest, that is to say, interest during construction during the period of lockup, should be paid for out of capital. Then what you require mostly in those lines, as I think the very voluminous statistics that are before the Government and before the public show that, like all other railways, Indian railways require a brief period of nursing and development; you cannot expect to get a revenue at once; and it is just during this period of infancy, so to speak, that I think the Government ought to step in and give a guarantee to make the dividend up to what may be termed a reasonable amount.

790. Will you illustrate that a little; will you give us an idea of how many years this infancy should extend over?—Of course that would vary very much with the prospects of the line. Some lines, probably, will develop faster than others. I should say, speaking roughly, that the Government ought not to encourage any railway or to have dealings with anyone unless they see their way to the line earning, we will say, a dividend of 4 per cent. within 5 years. Broadly speaking, I think that would be a fair way of putting it.

791. So that you would say that the Government should have information which would satisfy them that after the end of five years the line would be capable of paying 4 per cent. dividend?—I beg that I may not be misunderstood as specifying any particular number of years. I think I guarded myself by saying a long period of nursing, and that the length of that period of nursing must depend upon the general prospects and conditions of the line.

7922. Would the Great Indian Peninsula Railway have been made under those conditions?—I think, unquestionably, it would not have been made. Of course all those matters are matters which are not susceptible of absolute proof, but my very decided opinion is that had the Government accepted our offer to make the Bhopal line at the time when we made the offer we should have made it without even the qualified guarantee which I have referred to.

Mr. *W. H. Smith*—continued.

793. It is the fact, is it not, that on the 31st of December 1882, the amount of interest advanced by the Government over and above the earnings of the line, in order to pay 5 per cent. interest to the shareholders of the Great Indian Peninsula Company, was 6,317,000 *l.*?—That may be so, but I have no information before me that will verify those figures.

794. Five per cent. was practically the same thing as 4 per cent.; that is to say, when that contract was made with the Great Indian Peninsula Company it represented the value of money that 4 per cent. represents now?—Yes.

795. Therefore, if you had been describing this 20 years ago you would have said 5 per cent. instead of 4 per cent., owing to the difference in value of money?—Yes.

796. It therefore appears that the Great Indian Peninsula Company have failed to meet the conditions which you say are now necessary to justify the Government in asking a railway company to construct a line upon their undertaking to give them a qualified guarantee?—My answer to that is, that the capital that would now be requisite for the construction of the line would probably be about one-half of that which was required then.

797. What kind of guarantee do you consider ought to be given by the Government; a temporary or a lasting guarantee?—I have thought a good deal over that point, and I think that it should be a lasting guarantee, we will say of a very minimum character, say 3 per cent. And that would have this great advantage, that it would enable trustees to deal with the stock. I think in that respect it might be an advantage; but I think, so far as enabling the Company to make it a success, all that would be necessary would be a temporary guarantee. I hope I have made myself clear to the Committee as to what I wish to impress upon them. My view is this, that the form which the guarantee should take, as I tried before to explain it, is a liability that the Government ought to have the confidence to incur, and if from the information which they possess they have any doubt about it they ought not to touch it at all. There are certain lines of a strategical or protective character that the Government as a Government, independent of all commercial considerations, are bound to make, and I think that those lines should be made on the lowest possible terms on which the Government, on their own general credit, could obtain the money.

798. Then it comes to this, that you are of opinion that no line should be made which within a reasonable period would not pay 4 per cent. upon its cost of construction?—Decidedly.

799. The only exception being strategical and protective lines?—I think strategical and protective lines should be undertaken by the Government themselves upon their general credit, and if they can get the money at 3½ per cent. so much the better.

800. You mean to convey that there are certain railways in India which do not now pay anything approaching the guarantee, and which you would not recommend to be made, unless they were of a strategical and protective nature?—I must revert to my previous answer. I think

Mr. *W. H. Smith*—continued.

to make the analogy at all complete you must look at what the cost of those railways was, and on looking at the circumstances I do not say that they could be made cheaply; but the fact remains that railways now can be made at about one-half of the cost that they were formerly; for instance, in the case of the Bengal Central Railway with which I am connected we have just completed the line at a capital outlay of 6,000 *l.* a mile.

Mr. *Carbutt.*

801. Is that broad gauge?—Yes.

Mr. *W. H. Smith.*

802. The Committee are considering this question with regard to a famine in India, and with a view of preventing famine. You have been in India a great part of your life, have you observed for yourself the effect of railways in the famine districts of India?—Yes, certainly; they have simply revolutionised the country, speaking generally as regards prices, to a most extraordinary extent.

803. What effect has that had upon the population, has it tended to increase or to diminish the density of the population?—I am not prepared to say with any great precision; but I think, as regards the material prosperity of the country, there can be no question about it. I think that railways have done more than all the acts of the Government put together to infuse greater energy into trade, and the effect upon cultivation has been most marked. With a railway passing through a province it has been most marked. It has brought under cultivation large tracts of country, and I think it is inevitable that it should be so.

804. Do you know whether wages have been increased?—I think very much so.

805. Are you able to say whether the people who would be affected by famine have greater resources now on which they can depend in time of scarcity?—I think so; for instance, it has introduced entirely new employments. The railway itself creates a very large number of artificers and others who are now getting comparatively good wages, and in every way, I think, it has infused a degree of "go" and intelligence into the country which has been most remarkable.

806. But you are not able to give to the Committee any positive fact or information as to the rates of wages, and the resources of the people, before and since railways have been made in the districts affected by famine?—I have no doubt that that information would be readily obtainable. There has been a very elaborate census taken recently full of information of that sort.

Mr. *Bernhard Samuelson.*

807. You called attention just now to the contrast between the very cheap rate at which the Bengal Central Railway was made compared with the great outlay which was incurred on the Great Indian Peninsula Railway; are the works on those two railways comparable as regards what the French call *travaux d'art*, that is, bridges and viaducts?—No; the Great Indian Peninsula Railway had an exceptional number of difficulties

Mr. *Bernhard Samuelson*—continued.

difficulties to contend with. It had, for example, a great incline going up the ghauts, where the gradients are very heavy and heavy bridges, so that they are not in any way comparable.

808. At the same time you are convinced that the Great Indian Peninsula Railway, if it had to be made to-day, could be made at a very great reduction from the cost which was actually incurred?—I should certainly say for about one-half the cost, probably; and I may say, with regard to the questions put to me as to comparison, the fairest comparison that I know of is with the Eastern Bengal Railway, which is an extremely prosperous railway. I was looking up the capital cost of that railway with a view of coming before you this morning, and I found that it averaged something over 20,000 *l.* a mile, and it goes through a similar country to the Bengal Central Railway.

809. During what period was that line under construction?—It was constructed for about the same price, and at about the same time as the Great Indian Peninsula Railway and the East Indian Railways.

810. In answer to the Right honourable Gentleman, you admitted that you would have spoken of 5 per cent. 20 years ago as you speak of 4 per cent. now?—I spoke of it as a fair thing.

811. But at the same time may not it make a very great difference in the amount paid whether 5 per cent. had been guaranteed, or 4 per cent.?—I do not believe myself that the Government ever incurred an expenditure of any sort to greater advantage than they did when they incurred that expenditure.

812. What I wish to ask is, whether it is not a fact that if they had guaranteed only 4 per cent. instead of 5 per cent., the amount which they really did disburse would have been very much less?—I do not think it would have been; they would not have got the money, and the railway would not have been made.

813. Would you kindly look at page 40 in the Correspondence regarding railway policy which has been laid before the Committee (*handing the same to the Witness*); at page 41 you will see that the Bhopal Railway is spoken of (App. No. 1, pp. 526, 7)?—Yes.

814. And it is spoken of as one for which capital should be raised by private companies under a limited guarantee system?—Yes, that is the heading.

815. Then will you kindly look at the margin, where you will find it stated with regard to that railway that it is "just about to be taken up by a company formed under the auspices of the Great Indian Peninsula Railway Company; exact terms at present unknown;" I suppose that statement is an error?—We wished to take it up, but we have not been able to do so, although we have made every effort to do it.

816. Is it the case that you consider your negotiations with the Government as being still in abeyance or as being actually terminated?—As in abeyance, as I understand it from the last letter from the India Office pending the views of this Committee.

817. Then that statement is not altogether incorrect?—I should think not.

818. Now, will you kindly turn to page 43; you will find on that page and the following pages to page 45 (App. No. 1, pp. 529–531), a statement of the railways to be left to private enterprise?—Yes, I may say to the honourable Member that this is the first time I have seen this Paper.

819. Will you kindly just glance your eye down the railways which are named in that schedule on those three pages, where you will see that the total estimated capital for those railways is stated to be over 24,000,000 *l.*?—Yes.

820. By "railways to be left to private enterprise" is meant, according to the letter which accompanies that schedule, railways to be made without any guarantee whatever on the part of the Government; I wish to ask you whether you think that there is any probability of those railways, the aggregate capital for which amounts to 24,000,000 *l.*, being made by private enterprise, without any assistance from the Government?—Decidedly, there is no probability at the present time.

Sir *George Campbell.*

821. Did I rightly understand you to say that the Directors of the Great Indian Peninsula Railway Company at one time offered to construct that line from Bhopal to Cawnpore absolutely without any guarantee and without any pecuniary assistance from the Government?—That was so.

822. Did you offer to recommend that arrangements to your shareholders?—The shareholders would have had nothing to say to it beyond the fact that they would have come in as ordinary subscribers to the capital. No doubt it would have been put before them, but they would have had no connection with it at all. It would have been brought out as a separate concern.

823. Was not the arrangement that you offered to your shareholders that they should take the risk of it against their profits?—That was an entirely different arrangement; that was our first proposal, but it was an entirely distinct concern.

824. Was not that the proposal that you recommended to your shareholders?—We made no recommendation to our shareholders. Our proposal originally contemplated the line as being an integral portion of the Great Indian Peninsula Railway, our subsequent proposal was to make it entirely upon a basis independent of the Great Indian Peninsula Railway.

825. Which was the proposal, that which proposed that you should make it without any guarantee, or without any pecuniary aid from the Government?—That was the second proposal, as you will find in the correspondence.

826. When you say that the proposal was to make it an integral portion of the Great Indian Peninsula Railway, you did not consult your shareholders upon it, did you?—We told the Government that we should be prepared to advise our shareholders to forego their surplus profits in order to cover the interest.

827. But you did not make any actual proposal to your shareholders?—No, of course we did not, because our offer was not accepted by the Government, which was a necessary preliminary to our proceeding.

828. Had you any reason to suppose that your shareholders, having such a good thing as they had;

Sir *George Campbell*—continued.

had; having their 5 per cent. profit, and having their 5 per cent. guarantee, would be willing to take the risk of this additional line?—I believe our shareholders have confidence in the way in which the line is managed, and I think there is no doubt that the statistics which we had would have shown them that it would be a very good thing for their interest.

829. As regards the other proposal on the part of the Directors of the Great Indian Peninsula Railway Company, when you offered to undertake that railway, did you offer to make the new undertaking, or did you merely offer to go into the market and get the money; that is to say, if you got the money you would carry out the line, but if you failed to get the money, there were no capitalists on your board who would enable you to carry it out?—Of course, a body of gentlemen like the Directors of the Great Indian Peninsula Railway felt their way, and they did, of course, take the best financial advice they could before going before the Secretary of State.

830. Still they did not, as capitalists, in any degree pledge themselves; they merely offered to go to the market and get the money?—You could not expect anyone to come to any definite terms. We took the very best advice we could, and we had reason to believe that we should have got the capital at that particular moment.

831. There have been one or two cases recently of concessions of railways, where great capitalists have come forward and offered to undertake them?—As to the line coming out under the auspices of great capitalists, I do not suppose they would make any pledge at all beyond giving their prestige to the thing.

832. But your offer was not of that kind?—Our offer was distinctly this. We came before them as a body of gentlemen, *plus* two, of the most experienced officers connected with that particular part of the country, General Trevor, the Director General of State Railways, and Sir Henry Daly, who were to join our Board. We came before the Government with a distinct firm offer to make the railway.

833. I may assume that General Trevor and Sir Henry Daly are not themselves great capitalists, and therefore I want to know what you mean by a firm offer to make the railway?—We took the very best financial advice that we could get about it, and with the different sources of information that the company had, we had no doubt that the money would have been forthcoming.

834. Still if you had failed to get the money for making the line, who was the party upon whom the Government could have come to fulfil the contract?—The result of failure would have been that we should have been greatly discredited, and we were not likely to incur the risk of failure, without being pretty sure of our grounds.

835. The line would not have been made if you had not succeeded in getting the money?—We should not have gone on unless we could have got the money.

836. You say that you are confident that the Great Indian Peninsula Railway could now be made for half the money for which as a matter of fact it was made; that is to say, for half the capital for which it now stands; I want to know what are your grounds for thinking so; labour has increased in dearness, has it not?—I think there are several grounds that would operate in respect to that particular line, and that is one great ground.

837. Is it not the case that labour is dearer than it was then?—I think manual labour is dearer.

838. Do you think that there was a great abuse in the construction of the Great Indian Peninsula Railway, seeing that the expense was so enormously great?—I cannot offer an opinion upon that. I think, like everybody else, the first pioneers of railways had to buy their experience, and they bought it probably rather dearly.

839. It is the case, is it not, that the Great Indian Peninsula Railway, which cost 21,000*l.* or 22,000*l.* a mile, is a railway of a very expensive character?—I do not think it cost as much as that; it cost about 18,000*l.* a mile all round.

840. But it is a very expensive railway, running through a very difficult country, and it is for the most part a double line, is it not?—I cannot say exactly how far the double line is.

841. But it involves very expensive works, and very expensive bridges?—There are a good many bridges on it.

842. Do you think that that railway can be at all compared to a railway such as the Central Bengal Railway running through a flat country?—I distinctly said that it could not be compared; I told the honourable gentleman so just now.

843. Have you looked into the question of the construction of the Eastern Bengal Railway, which has cost so much?—No, not the least.

844. Are you aware that it has to provide for enormous drainage works, and also terminal works at Calcutta and on the Ganges?—I have no personal acquaintance with the Eastern Bengal Railway.

Mr. *Gorst.*

845. A private company, when making such a line as the line from Bhopal to Cawnpore solely for purposes of profit, would not have to submit a plan of their railway to the Government of India for its approval?—I think they would probably avail themselves a good deal of the surveys and plans that the Government had already got in their possession.

846. In laying out your plans as a private company, would you not have regard to profits only; that is to say, would you not lay out your line, and make your line in such a direction as to secure the greatest amount of traffic upon it?—I should, most certainly.

847. In considering those plans, would not the Government of India, besides the question of profit, have to take into its consideration strategical and protective grounds?—Yes.

848. In some of the existing railways in India, the Government of India have diverted the originally proposed course of the line, have they not, for strategical or for protective purposes?—I am not aware, but I should think that very likely they have.

849. If the Government of India insisted upon a line being made in a less profitable direction

Mr. *Gorst*—continued.

tion for strategical or protective purposes, ought it not to make some grant or give some aid to the shareholders of the projected railway on that account?—I do not think that in this particular instance there will be any difference of opinion. We should go at certain points; from point to point about which there would be no difference of opinion between the company and the Government.

850. But I want to arrive at your opinion; you must imagine I presume a line which would take one course for purposes of profit, but which the Government of India might endeavour to divert into another direction, perhaps a slightly different direction, but still another direction, for strategical or protective purposes; how would you propose to adjust the interests of the shareholders and of the Government of India in a case of that kind?—I think that would probably be a matter of special arrangement and negotiation.

851. Supposing that a line was laid out in a particular direction and plans submitted to the Government of India, and that they desired a diversion, what sort of terms would you suggest?—I do not think as a matter of fact that the case is likely to occur. I think that when the line was projected the points to be served would be definitely fixed upon, and I do not think there would be any likelihood of any difference of opinion. I think most companies would probably, if it was a small affair, do their best to meet the wishes of the Government in the matter. I do not anticipate that there would be any difficulty about that.

852. Do you not think that the objects of the Government of India to promote strategical and protective purposes would interfere materially with the laying out of lines where the interest of those who constructed them was merely to obtain a profit?—It is very possible they might; but those two descriptions of lines would probably be quite distinct. I do not think you would find that the interests of the commercial line to be antagonistic to or different from the strategical line.

853. The case that I am putting is that of a commercial line which is diverted to some extent from its profitable course for the purposes of the Indian Government?—I think that the company should have nothing to say to it as a commercial undertaking, unless they were satisfied that it would pay.

Mr. *Onslow.*

854. Is it not the fact that the reason why the railways in India are constructed now more cheaply than formerly, that there is greater competition amongst the contractors?—I am not prepared to say.

855. When railway construction first began in India, those connected with, or interested in, or who had knowledge of railways in India, were very few, and I suppose you are aware that some of the contracts were taken at very extravagant prices?—Probably so.

856. But that is not so much the case now?—No. I think the great works that have been undertaken by the Government, for instance, the docks at Bombay and other works, have brought into play

Mr. *Onslow*—continued.

quite a new class of large capitalists and contractors, who are no doubt carrying out contracts with a very small margin of profit, and there is considerable competition amongst them, which was not the case formerly.

857. Then is not this another reason that there is a far better supervision of the money that is actually spent than formerly?—I should say so very probably.

858. And a far better system of audit?—I should think so.

859. And all those things you think far more than counteract the enhanced price of labour?—I should think so, decidedly; but I suppose really one of the chief causes is the decreased price of material.

860. Then as regards the labouring natives of India, who are being now schooled in the construction of railways, the work which they can actually perform is superior to what it was when the construction of railways first began?—Distinctly. I suppose, for example, that there are a large class of natives who can do the work of platelaying to an extent that could not have been attempted before.

861. In the early days of the East India railways, of course the platelaying was done by English labourers?—Probably.

Mr. *Dalrymple.*

862. Is it not the fact that when the Great Indian Peninsula Railway system is extended from Nagpur to Calcutta, the distance between Calcutta and Bombay will be shortened by about 200 miles?—It will be shortened very considerably. The map will show you, I think, the great angle that it will cut off.

863. Is not there a heavy traffic in grain and seeds that is likely to flow from the surrounding districts?—Perhaps you will allow me to read some rather valuable evidence which I have here as regard the value of the line.

Chairman.

864. Is that in evidence?—No; it is a statement by Sir Lepel Griffin. I wish to place before the Committee what I consider some very valuable evidence as to the great importance of this Bhopal line; that is the line which the honourable Member is referring to now.

Mr. *Dalrymple.*

865. I was merely asking you about the line between Nagpur and Calcutta?—I know nothing about that line.

866. May I ask what is your reason for attaching special importance to the construction of that Bhopal line?—I think, broadly, it is to bring Northern India into more direct communication with the port of Bombay on one uniform gauge. If you look at the map you will see that the Oudh and Rohilkund system crosses the Ganges at Cawnpore, and such a line would bring all the produce of that very vast province with a straight run down to Bombay at a considerable saving of distance.

867. Have you any particular evidence to give to the Committee with reference to the probable estimate for the construction of the Nagpur line?

Mr. *Dalrymple*—continued.

—I wish the honourable Member to understand that I have no special knowledge about the Nagpur line at all, but I can give you information about the Bhopal line.

868. I am going to ask you a question about that immediately afterwards, but can you give me any information about what is called the Jhansi, Gwalior, and Manikpur line?—That, again, is not in our system. Our proposed system was a great trunk line between Cawnpore and Bhopal. The Manikpur line was not a part of our proposal.

869. Will you give us the evidence about the Bhopal section, which you think of importance?—This is the opinion of Sir Lepel Griffin, who represents the Government in that part of India.

870. What is the date of this opinion?—Sir Lepel Griffin attended a meeting of our shareholders on the 15th of June 1883, and what I propose to read to the Committee is a portion of the speech which he made on that occasion. "The country which it will open up from Bhopal to Gwalior as in the lower portions which he knew well, exceedingly rich in wheat, and is well peopled, and certainly there are no great difficulties in the way of railway construction. In the neighbourhood of Bhopal and Bhilsa the production of wheat is so enormous in good years that it lies rotting on the ground, because there are no means of exportation, and he believed that above Bhilsa, and between Jhansi and Gwalior, which he knew well, the country is fertile and well peopled. The principal states through which the line would pass are Bhopal and Gwalior, belonging to her Highness the Ranee of Bhopal, who is a keen advocate for the extension of the line, and his Highness the Maharajah Scindia, who is less fond of railways, but who has at his request, which the Government of India asked him to make, consented to give him the land for this extension free. Her Highness the Ranee of Bhopal most generously and willingly granted the land free in her state without any pressure whatever. As to the value of the line, the opinion of Sir Henry Daly and of General Trevor would probably be quite sufficient for them" (that is to say, the shareholders) "without any words of his. He would however say with reference to an observation which fell from the chairman in which he seemed to imply some doubt as to the real desire of the Government of India to see this line constructed, that although he could only speak for the Government of India, yet he was not aware of any difference of opinion between them and the Home Government as to railway affairs, and he was perfectly certain that Lord Ripon's most enlightened administration with regard to railway development, and his Finance Minister, Major Baring, and his Minister of Public Works, Mr. Hope, were most anxious for this extension, and would be exceedingly disappointed if it were not carried out." That was Sir Lepel Griffin's view. Then if the Committee will allow me, I should like to supplement that by an extract from the opinion of the Bombay Government, who have a more direct interest than probably any other government in connection with this line. This is a report of our shareholders' meeting, and it contains an extract from a despatch which I now propose to read. It is the opinion of the Bombay Government in respect to this line. "In acknowledging the receipt of your letter, dated 19th of April, I am directed to state that the Governor in Council, as at present advised, consider that a line on the 5-feet-6-inch gauge in extension of that under construction from Itarsee to Bhopal, passing by way of Bhilsa, Bassowdd and Lulitpur to Tehree, Jhansi, and Gwalior, and branching off either from Tehree by Mhow, Rampur, or from Jhansi by Calpee to Cawnpore, would be preferable to any other intended, to shorten the railway route between Bombay and the North-West Provinces. These are to all intents and purposes the lines projected by the great Indian Peninsula Railway Company, and advocated by the Agent Governor General for Central India." "Considering the importance attached by the Chamber to the provision of more direct and cheaper communication between Bombay and Cawnpore, it appears to the Governor in Council that a better opportunity of enlisting private enterprise in the extension of the Indian railway system is not likely to present itself than is now offered by the scheme in question, in the promotion of which the Great Indian Peninsula Railway Company and the mercantile community of Bombay are alike interested."

871. Did not the Government of India recommend that that Jhansi to Manikpur line should be made upon the broad gauge, from the consideration that it would connect the proposed railway from Bhopal to Cawnpore with the East Indian Railway?—I cannot speak for the Government of India; but I have seen a dispatch in which they say it would be fatal (I think that is the word they use) to construct it on any other gauge.

872. Although you say that you have no special knowledge of the Nagpur route, would not the same remark apply with greater strength to that route if it is to be hereafter the chief route from Calcutta to Bombay?—I have no doubt it will be a most valuable trunk line; it certainly will be the postal line between Europe and Calcutta.

873. Is there the least ground for alleging that any saving on the first outlay between the broad and the narrow gauge could compensate for the cost of making a narrow gauge line where there is a heavy traffic?—I should say not. I really do not feel competent to give an opinion that would be of any value to the Committee on that point, but I have no hesitation in saying that it is fatal to attempt to interpose a different gauge in great arterial communications.

874. Is there a general willingness to meet your view of adopting the broad gauge for through routes, and confining the narrow gauge to routes through a special district connected with ports like the South Mahratta Railway and the Kattywar Railway?—I have no doubt that for some time to come that the narrow gauge railways being constructed now, such as the South Mahratta, will be very efficient for the traffic for many years to come probably.

875. Are you of opinion that the Government of

Mr. *Dalrymple*—continued.

of India might safely advance rapidly in the matter of railway extension?—Distinctly. I think if I may be bold enough to say so, they have rather up to the present time been wanting in courage in that direction.

876. You would consider that railway extension would supply that variety of employment, variety, I mean, from merely agricultural employment, which is greatly needed for the people of India?—I think that no one who went out to India, as I did in 1849, when there was not a yard of railway in the country, and who sees India under its present condition, can fail to be struck with the absolute revolution that has taken place, mainly, I believe, due to railways.

877. Do you feel that railway extension has received something like a check of late?—Distinctly.

878. What is that owing to?—I have very decided views on that point, and if I am to speak plainly I do not think that the Government have acted up to their profession in giving the encouragement which they said they would give.

Mr. *Wodehouse.*

879. I think you attributed the reluctance of private enterprise in England to undertake railways in India without State aid in some shape or other, to the great ignorance of the English mind about the circumstances of India?—Yes.

880. And you suggested, I think, that means should be taken to enlighten the English mind on that subject?—I think that one mode of enlightenment, and the great educator, is the daily list in the newspaper as to the value of its securities. I think that is the practical educator.

881. Do you think that the means of information requisite for enlightening the English mind are available at the present time?—In that sense, I think it is; but as I think I mentioned at the commencement, there is a very valuable publication which probably few people know about in England, and that is the official Government Gazette, which is replete with most valuable information in respect of all these railway projects, but I do not suppose that the British public are ever likely to read it.

882. Do you anticipate the early advent of a time when private enterprise in England will freely undertake Indian railways without State aid in some form or other?—I do most distinctly, because I should rather like to point out to the Committee that I consider that the depressed value of the shares of those new companies has not one particle of significance in respect to the ultimate success of the companies. I believe, from what I can hear, and from what I know, that railways are now being constructed with an extraordinary degree of rapidity well within the contemplated estimate; so that really in respect of the prospects of these new lines there is nothing in any way to affect their real value. The value at which they now stand is really quite apart from their substantive value as future dividend paying concerns.

883. Then you think that a day will soon come when railways will be constructed in India by unaided private enterprise?—I have no doubt of it, but I think it must be in the course of time.

Mr. *Wodehouse*—continued.

884. And not a long course of time?—No; I should think not.

885. Do you not think that that reluctance of private enterprise is partly attributable to political considerations?—Very likely. I think that prudent people who know nothing about the country have some doubt about putting their money into investments at a distance; and then I think that the Government ought to bear in mind that they have many competitors in the field. Our colonies are constantly coming forward with projects which are very tempting, and they offer good terms, and so, naturally, the English investor does not care about putting his money into an industrial or commercial undertaking in a distant country, when he can probably get equally good or better terms elsewhere on what he believes to be good security.

886. But distance does not generally deter an English investor?—No.

887. To go to another point, you stated just now that the Indian Government have not been so active as they might have been in promoting railway extension, and that they have fallen short of the professions which they made; to what professions do you refer?—I have already quoted what the Government said they would do, and what we offered to do.

888. And it is upon that statement which you have read that you found your opinion that they have not acted up to their professions?—I think it is more satisfactory to a witness to give you definite evidence, and that is the definite evidence I now give you.

889. Have you any other evidence to that effect?—Of course I have my own general opinion, but it is more satisfactory to myself and to the Committee that I should base my opinion upon a specific instance, and I do base it upon that instance.

890. You rest it upon one instance?—If you ask me my opinion, I do not think that there has been any encouragement given on general grounds, but I prefer to base that opinion on the specific correspondence which I have now handed to the Committee.

Mr. *Slagg.*

891. I think you said, with reference to this Gwalior line, that the Governor of Bombay, the Governor General, and all the commercial public were thoroughly convinced as to its desirableness?—The strongest unanimity was expressed on all sides.

892. Then, so far as the authorities in India were concerned, this railway would have been made?—No doubt; it would probably have been completed and opened by this time.

893. You have found all the difficulties in the Department of the Government in England?—Yes.

894. You consider, therefore, that the obstructive force which has been spoken of exists in England, and not in India?—Distinctly in this instance.

895. How do you account for the unwillingness of the Department of the Government here to carry out what is the obvious wish of the Indian Government?—That is rather a delicate

Mr. *Slagg*—continued.

question, and I am prepared to answer it if I am desired to do so; but I do not think it is advisable that I should enter upon it.

Chairman.

896. I think it is quite a fair question; will you be so good as to answer it?—I wish to speak with very great diffidence on the subject. I do not wish to make any kind of attack upon anybody, but I do feel myself that the grounds of the opposition were of a threefold character. I think in the first place that there are many gentlemen whose opinions are entitled to very great respect at the India Office who do not like the system of constructing railways by what we term the private enterprise system. I think they are quite entitled to their views, and I do not wish to quarrel with them. I think that is a general ground which I put as ground No. 1. Then, if you ask me the specific objections to this particular project, I think they were twofold. I think in the first place that our project would have militated possibly against views of a different character, that is to say, I believe some of the authorities at the India Office contemplated supplying this particular province of Bundelcund by a metre-gauge system of railways, and they thought that our project would be of an antagonistic character to that. And I also think that one element of disfavour was that we were looked upon as somewhat inimical to the East Indian Railway which is the property of the Government. They said, "You people have no business to come here and cut into the East Indian Railway." My answer to that was, first, that there is room enough for both of us.

Mr. *Slagg*

897. You think that the development of railway enterprise is now difficult on account of what we may call the obstruction of the Secretary of State's Council?—I would hardly like to say that. I have endeavoured to give as frank and as explicit an answer to a somewhat difficult question as I could give.

898. At any rate we may gather this from your explanation, that the difficulty of railway extension so far as the Government of India is concerned resides in the attitude of the Council of the Secretary of State?—I have no hesitation in saying that in respect to this particular project which I have referred to before the Committee I can come to no other conclusion. We had the Viceroy and his agent the Governor of Bombay, and the commercial community. In fact, we had every single authority of a local character giving us their utmost countenance and support, and therefore I can only conclude with you that the opposition was at Westminster and not in India.

899. In point of fact the English Governmental view of railway advantage in India is in conflict with the Indian official view?—I am not prepared to say that, except as regards this particular project which we are discussing.

900. I wish to be a little clearer than I am at present as to the terms which you eventually proposed to the Secretary of State in Council with regard to the construction of this line; I am not quite clear as to whether your final proposal

Mr. *Slagg*—continued.

really dispensed altogether with a guarantee in any form?—Our final proposal was a guarantee; it was rather complicated, but I think it will be apparent to you that we made a very distinct offer, as I said, based on the declaration of the Government that we would make this railway without any guarantee at all. That offer was not accepted by the Secretary of State, and in the meanwhile other negotiations had been made with another company, the effect of which was to depreciate these particular classes of investment.

901. You are in favour on the whole, are you not, of those enterprises being thrown open to private competition?—I think this, that if gentlemen who are interested in these undertakings will take the trouble to master all the figures and statistics, and satisfy themselves that it will be a successful undertaking, they should be encouraged to come forward and make it.

902. Is there not additional expense imposed through the double management which is required by a private company?—I do not think so to any appreciable extent.

903. You have spoken very warmly of the advantages which railways have hitherto conferred upon the Indian people; do you find that railways tend to distribute the population in an advantageous manner?—Very frequently; I will give you one instance of it. In the town of Bombay which, as perhaps you are aware, is a very large commercial centre, where there have been large docks and factories and all sorts of enterprises carried on, it is most extraordinary to observe the migratory character of the population who are brought down to Bombay by the railways, and who return to their homes when the season is closed for them to work.

904. And relief is thus given to the pressure on the soil?—To a very marked extent.

905. And it is your opinion, and within your experience of railway extension in India, that the general condition of the people has greatly improved?—I think unquestionably. There was very curious direct evidence to that effect when the famine occurred. The enormous hoards of silver ornaments and other things that arrived down at the Mint for being converted into rupees disclosed a great amount of accumulated wealth in the country.

Mr. *William Fowler.*

906. I gathered from what you said as regards the limit laid down by the Committee of 1879 to the borrowing powers of the Government for the purpose of railways, you would be entirely opposed to any such limit?—I think so; I think it is inexpedient to lay down any limit.

907. As to the engines, is it the fact that you have very recently had authority to order 100 engines?—Yes, I think there are about 100 in the indent that has gone forward.

908. I understood you to say that if you had entirely your own way in the matter you would, no doubt, have ordered them gradually, and therefore to greater advantage?—Perhaps so. I do not myself wish in any way to bring forward that engine incident as a matter of complaint. I think it was an inevitable incident in the dual management.

909. If

Mr. *William Fowler*—continued.

909. If I understand you rightly, the last offer which you made was that you would recommend your shareholders to give up their portion of the extra profit, provided that the Government would give up its portion of the extra profit?—Excuse me, that was our first offer.

910. But, as I understand, you have said that it involved no loss to the Government?—It would have involved no loss in the sense of any disbursements: it would have been a temporary foregoing of their profits. But you must please bear in mind that we were equally ready to forego our profits.

911. But still it was a giving up of profits?—Yes.

912. Is your statement about it perfectly accurate?—Perhaps not.

913. I think I understood you to say that you at last offered to accept a limited guarantee?—What we offered was this; it was really very much the case of the Sibylline books: We came before them with a different offer according to the time, and our last offer was that we should get a limited guarantee during a period of 10 years, that is to say, we should get a dividend of four per cent. guaranteed to us to make up any deficiency.

914. With regard to this question of guarantees, you have said that you thought that when the public were better advised and better informed they would be willing to enter upon private enterprise of railways without a guarantee?—I hope so.

915. And you think so in time?—Yes.

916. Is it not the fact that this moment it is practically impossible to raise money for railways in India without the guarantee of the Government?—I think so distinctly, and what I would suggest to the Committee would be that they should ask some of the influential brokers who have been parties to these negotiations to give them their opinion upon this point. My experience, of course, is not worth much, but it amounts to this, that it is not an easy thing at all to place a large quantity of this sort of capital on the market.

917. You mean, of course, without a guarantee?—Even with a modified guarantee. With respect to the Southern Mahratta line, which is perhaps the most recent case in point, I think the terms of which are very fair and liberal on the part of the Government, the broker who brought that railway out said to me, and he told the Government so, "If you are looking to this as one transaction, and you do not intend to repeat it, you have made a very good bargain, but you cannot expect this to go on again a second time."

918. Is it not the fact that the Bengal and North Western loan was a failure in this sense, that although it was shared by two of the largest financial houses the public would not take it?—I believe the public did take it; it went off, I believe, very well, and I believe that the railway is in as good a condition as ever it was, and, as a railway project *per se*, perhaps better. I have no special knowledge, but I have been told that it is being carried on very well indeed; but the

Mr. *William Fowler*—continued.

fact remains that the shares, on which 4 *l.* have been paid, are now to be had for about 3 *l.* 10 *s.*

919. I have heard it said that for a long time the original subscribers had to take the whole thing on their own hands?—Yes, that is very probable.

920. It went off very slowly?—I should think it very likely, but I have no special knowledge upon the point.

921. Does not it come to this, that if the Government were to stand out and say, We will wait until private enterprise will do this business, they would probably have to wait for years, and suspend all their operations?—Unquestionably, and the prosperity of the country would be delayed to an extent that would be absolutely appalling compared with the advantages that would be conferred.

922. Have you anything to tell us as to what you think the most advisable form of guarantee?—I personally think that our Bengal Central terms were fair enough, and that went off very satisfactory; but I prefer myself a guarantee to take the form of an assured dividend after opening, for it is a very serious business for a railway immediately on its opening to be left to run on its merits. That is just the critical time of its existence, and, I think, it ought to be nursed for a considerable period; and, I think that the guarantee should take the form of a subsidy up to a certain amount, every shilling of which should be repaid to the Government when the corner was turned.

923. Have you at all looked into the question of borrowing in India and in England, as regards borrowing in silver or in gold?—I think it is very immaterial. If you borrow in silver, you have to pay a higher price.

924. Practically, would it be possible to obtain silver loans?—You will not get the reserve silver of the Indian people to take any part in these undertakings. Of course the borrowing in silver is a mere nominal borrowing; it does not represent a payment on the part of the people who use silver.

925. In your opinion, practically, would it not be an exceedingly difficult thing to put on the market a rupee loan?—It is not only extremely difficult, but adds to the complexity of the whole business; and I should like, with the Right honourable Chairman's permission, to point out that hitherto this matter has not been managed with the most admirable distinctness and simplicity, and if you go and confuse the matter at all, it has a most prejudicial effect. People do not understand it. If you say that you are going to take a rupee loan, repayable in sterling, it frightens them, they do not understand it. You cannot be too simple in whatever terms you arrive at.

926. Something was said by yourself, I think, with regard to the condition of the wheat cultivation in the neighbourhood of Bhopal, and you read some extraordinary statements by Sir Lepel Griffin on that subject; have you looked at all into the question which was raised before us last Tuesday about the cost of wheat cultivation in India?—I think there must always be more or less of conjecture about it. I know that

Mr. *William Fowler*—continued.

the Indian Revenue officers have paid a great amount of attention to the question; but any estimate that you arrive at must always be very unreliable.

927. You said something as to the powerful opposition which was raised in India by the Government at Westminster by reason of the fact of the Government owning the East Indian Railway; is there not a feeling in favour of the East Indian Railway and of any scheme which would help the East Indian Railway rather than any other, and does not that point to the difficulty that there is in the Government having the partial ownership of railways; and do not you think it would be far more advisable that the railways should be all rather held by companies than by the Government, so that there should be a real responsibility to promote them on the part of the Government?—Of course it would, to my mind, be a fatal objection to any Government who viewed an opposition proposal from the point of view of the owners of a railway; I think they are bound to look to the general prosperity of the country, regardless of the interests of the particular line which they may happen to own. I do not suppose that the Government would admit that they ever did so; but, you remember, I merely alluded to that as a conjecture; I do not know it as a fact, but I gathered that they did not like our coming there, because, when you come to look at that part of India, it is a very evenly balanced point whether the traffic will go in one direction or the other.

928. Something was said about dual management; is this a correct statement of the case, that you have an agent or manager invested with certain limited powers to act on the part of the directors?—Yes.

929. Your point is that the Government have an engineer called a consulting engineer acting on the part of the Government of India, and that the agent of the company can practically do nothing in the way of expenditure without the concurrence of the consulting engineer, and the two, of course, sometimes differ, do they not?—I think there is no doubt of it, but I do not think there is any serious conflict.

930. I want to know whether, as a matter of fact, there has been any difficulty in the matter?—No, I have not heard of any. They have what they call conferences, which does away with a great deal of correspondence. They come and talk the matter over, and they are generally able to come to an agreement.

931. Of course, if it was necessary frequently to refer to Simla or to London, it would be very inconvenient?—Yes; but as a matter of practice these difficulties do not occur, I think.

Mr. *Carbutt.*

932. To revert to the question of the locomotives, do you know that it was currently reported that the company had to pay 300 *l.* per locomotive extra and above the cost price, so as to get them done in a short time?—I think it very probable that they had to pay more than they would have paid if the order had been carried out gradually, because although I have no definite knowledge on the subject, I am aware that all the shops were very full of orders about that time, and I should

Mr. *Carbutt*—continued.

think probably the price had increased, but I am not prepared to say positively.

933. Do you imagine that having to pay the extra price for getting them in a short time was due to there being a different gauge on the railway in India, compared with what it is in England, and that if the railway had been on the ordinary gauge of 4 ft. 8½ inches, they would most likely have been able to get 50 locomotives shipped in a month, which would have arrived in India in time for the traffic, and which would have been very much less costly?—I think that the difference of gauge had nothing to say to it. I think there was a very great demand for engines at that particular period, and I think it would be the same with any class of engine, either the metre gauge or the broad gauge.

934. Do you not think that if the Government of India had said to any of the leading railway companies in this country at the time that there was a famine going on, that they wanted locomotives, could they not have got them if they had taken the ordinary 4 ft. 8½ in. gauge?—I cannot say how that would have been.

935. Do you not think that any break of gauge is a very great objection in the management of railways in India, and that it has proved itself so?—I have already said with respect to through communication that I think it is distinctly objectionable, and also with respect to the feeders to those main communications.

936. Has not this break of gauge been the cause of delay in many of those railways being constructed; and in many cases has not the gauge been altered three times during the construction of a line?—I have no knowledge on that point.

937. With regard to the cost of the construction of the earlier lines, were they not constructed by contractors who went out from London?—I believe so.

938. Was it not generally understood that they based all their prices upon the prices that they would have to pay at the time in England?—Very probably

939. Most likely they would have had to pay something like 3*s.* or 3*s.* 6*d.* per man here, whereas when they got out to India they found that they got labour for a penny or twopence, and that was one reason why they found the railway so very expensive?—Very likely.

940. The Right honourable Gentleman the Member for Westminster, when he was putting a question to you as to the interest that you are receiving on the Great Indian Peninsula Railway, reminded you of the great loss of back interest; of course you are aware that there is a very large amount of back interest lost?—Yes.

941. But if you take the cost of these railways, and if you add the extra cost that has been paid for buying up the East Indian and one or two other railways, if you add to that all the back interest, and if you add to it all the loss upon exchanges; are you aware that at the present time those railways are earning nearly 4 per cent., that is 3·90 per cent. including all the back loss and all the money that has been paid for buying the East Indian Railway?—I was not aware of it, but I have no doubt that the figures

Mr. *Carbutt*—continued.

figures are correct; I have not gone into the calculation myself, but I think it is a very remarkable fact, and it is a very encouraging fact.

942. Does not that warrant us in saying that if these railways, notwithstanding all these disadvantages, can earn practically 4 per cent. it ought to encourage us to go on very largely increasing the number of railways in India?—I think so.

943. Coming to the question of management; I do not know whether you have much knowledge of the management of Government lines, but are they not principally managed or partly managed by military engineers who have been sent out from this country, in many cases not knowing anything whatever of the subject?—I really do not know; but I fancy that they have got a very good body of men, not only military engineers, but a very large number of civil engineers in their employment; but I have no special knowledge upon the subject.

944. General Strachey gave us as his opinion the other day that if we had railways to build and the Government wanted to launch a company in this country, the only thing was to make it worth while for speculators to make something out of them; are you of that opinion, or do you think that some statement ought to go forth as to the chances of a railway earning a proper dividend, or being a stable line?—I think that every one must take their chance. I do not think that you can prohibit speculators or anybody else from trying to make a profit, nobody would go into these things unless they could see their way to a profit.

945. Have you any experience with regard to the working of narrow-gauge lines?—None whatever.

946. You referred to the cost of construction of the Bengal Central Railway as being 6,000*l.* a mile; is that line opened?—Partially.

947. You have no experience as to the cost of working that line, have you?—I should hardly like to say very definitely.

Mr. *Brodrick.*

948. Reverting for one moment to the Bhopal and Gwalior Line, of which you said a good deal, what course do you propose to take about that line now?—I really have been so repeatedly at the India Office about it, that I do not care about going there again; but our position is this, we have received a letter from Sir Louis Mallet, dated the 31st August 1883, saying: "I am directed to inform you that Her Majesty's Government having decided to move that the subject of provision for the extension of railways in India shall be referred to a Select Committee of the House of Commons next Session, Lord Kimberley does not deem it expedient, pending the result of that inquiry, to enter into an arrangement with you upon the basis proposed in your letters." That is how the matter stands at present.

949. But to what extent are you of opinion that money could be raised for that line without a guarantee?—I do not think it could be raised at the present moment without a guarantee. I think the money market has received such a severe blow that it will take some time before it

Mr. *Brodrick*—continued.

recovers, and I do not think it will recover until these new lines show what they can do.

950. What do you think is the reason why your shareholders were not willing to take over that line?—I think no one can speak with any degree of certainty as to these matters; you cannot tell what the tone of the money market may be, or what the feeling towards Indian investments may be for any two months consecutively, it varies very much. If the shareholders saw their way with any degree of certainty to getting 4 per cent. for their money, I have no doubt that we should get the money on a guarantee for a limited period.

951. Only for 10 years?—We proposed 10 years, but I should like to explain to the Committee that I do not think it is advisable to lay down any particular term of years. I think that if the Government were satisfied that the railway would be successful there would be no risk on their part in giving a guarantee for rather an extensive period of years. I believe it is a matter of indifference with the Government whether they guarantee 10 years or 20 years, if they are satisfied that at the end of four years the line will pay 4 per cent.

Mr. *Kynaston Cross.*

952. You wish to lay it down as a principle that the Indian Government should not undertake any guarantees for railways unless they are pretty well convinced that within a certain definite number of years the line for which they borrowed the money or guaranteed interest should pay at least 4 per cent.?—I am speaking entirely of commercial lines. I think that they will probably have to undertake a very large number of lines which will not be paying lines. My view is that those lines you should undertake yourselves, on the best terms that you could get the money, and on your general credit.

953. You propose that the Indian Government should survey the country, should satisfy themselves that the lines would pay more than 4 per cent., and then should hand them over to the public who would subscribe for them?—That is our general view, I think, and that is what they have done. As a matter of fact, in the case of the Bengal Central Line, we had your surveys, and all the advantages of your statistical information placed at our disposal, and then those gentlemen who took up the project satisfied themselves that it was going to be a good thing, and we went in for it.

954. You mean that the Government in the first place should take all the trouble of surveying the country and giving you all the statistics, and then when you have checked the Government statistics and found that they were right, you would be willing to make the line under certain conditions, one of the conditions being that you would also at the back of all this information have a guarantee from the Government?—I beg to tell you that you made us pay for every shilling's-worth of information that you gave us in respect of the proposal; we had to pay you for the surveys and everything of the kind. We got nothing for nothing at all; you have made us pay for all that. We came before you and the terms offered us at that time, I think,

Mr. *Kynaston Cross*—continued.

think, were very satisfactory. Then you were not satisfied with those terms, and you stepped in, and you said, "Let us in our turn make a profit out of this railway." I think it would remove a very great deal of doubt and mystery if a clear understanding were to be arrived at on the general principle whether the Government are to look to these railways as a direct source of revenue to themselves or whether they will be content with the great indirect advantages which the country gets. I think that that is a preliminary that you should make up your minds about.

955. I take it that you ask us to make up our minds on this point, that if a line will not pay 4 per cent. in a given number of years, we should not undertake it?—My proposition is this: that you should make up your minds that the railway will be a paying concern eventually, and that if you have made up your minds upon that point, that, as regards the finances of the country you have no real risk, you should then give a solatium to the public, without which they will not give you their money.

956. I presume you think that the Madras Railways, which were constructed under a guarantee, would come within the designation which you speak of?—I have no special information about the Madras Railway, but I have always been told that it was a very unfortunately constructed line with regard to avoiding the places of traffic, and so forth.

957. But still they would naturally be constructed under the advice of the Government engineers, would they not?—Yes.

958. Do you think that it would have been better if they had had other advice before they were constructed?—I really know nothing about the Madras Railways. I am told that they are always held up as a sort of caution against going in for Indian Railways, but I have no personal knowledge about the Madras Railway at all.

959. Have you any knowledge of the Scinde, Punjaub, and Delhi Railway?—No.

960. Your knowledge is principally confined to what you have laid before the Committee with regard to the Great Indian Peninsula and the Bhopal and Gwalior?—And the Bengal Central and the Southern Mahratta.

961. I think you said that the payments of interest during construction might be added to the capital account?—I think so.

962. And that would cause no burden upon the revenues of India?—No direct burden, inasmuch as the shareholders would have to provide it.

963. That is always supposing that the line were a good line?—Yes, I started from that point, that if you are not satisfied that the line will pay, do not have anything to say to it.

964. Then it becomes all the more incumbent upon the Government of India to satisfy itself that the country through which the line is to be made is one which will provide a traffic which will pay the required interest?—I think so, and I have always thought so; in fact, all these projects which I referred to as being published in the Government Gazette contain the amplest details upon this point.

965. If they do not think on consideration that a sufficient amount of traffic will come out of the district, you would not advise the Government to make the line?—I would not, not as a commercial line. Of course, as I said before, any mere strategic or protective line probably the Government, as a Government, must make.

966. With regard to the line that you mentioned, the Bhopal and Gwalior line, did you receive any estimate of the amount of produce that was likely to come out of this district?—I do not know that we have had any very definite information with respect to quantities, but we have had unmistakeable and reliable information of a general character.

967. Had you any information with regard to the cultivated area of the district through which the line goes?—No, and for this reason; that it is mostly through foreign territories, and perhaps you know that that sort of statistical information is not very readily obtainable in those parts; there are no revenue surveys.

968. You have formed, perhaps, a general idea of the large quantity of food grains to be moved from this district or from any of the districts?—I have no doubt, from the information that we have had from the very high officials that I have quoted to-day, that the local traffic would be very valuable and very great; but our chief object was a through communication to Bombay; that it would bring the north of India into direct communication, on a uniform gauge, with the great seaport of Bombay; not so much to obtain local traffic as to get the traffic of Northern India with a continuous run down to Bombay.

969. Then your object was not the advantage which that railway would derive from going to a particular district and tapping that district for the sake of the grain, or for the sake of the communication which would be secured to the different ports on that system; but you desire to have it as a link in a great competing chain between the North-west and Bombay?—That was our primary object; the other was subsidiary.

970. Just one word about what the India Office has done to you; you said that you proposed, in the first instance, to construct this line under a certain limited guarantee, did you not?—I am afraid that I must have been very indistinct in my evidence. We proposed, in the first instance, to construct it as an integral portion of the Great Indian Peninsula, of which the Government are part owners with ourselves. I wish to make this point as clear as I can, so that I hope you will not consider me tedious if I go over the ground again. Our negotiations upon our original proposal, which we thought a very favourable one to the Government, and which we should not repeat now, I think terminated in this way: "I am desired to say that the Secretary of State would not be disposed to enlarge the operations of the Company under any arrangement which would involve any extension of the guarantee of interest, or the grant of pecuniary assistance from the State in any shape." I think there were certain gentlemen at the India Office to whom the name of a guarantee was very hateful, and, perhaps, properly so.

971. You propose, as I understand, to make it entirely without any guarantee?—After that, we

Mr. *Kynaston Cross*—continued.

we wrote to the Government again reiterating that offer. We apologized for not having written on the first occasion with what we call "adequate cogency," and we sent this long letter, which appears at page 2 of the Correspondence (App. No. 1, p. 488), setting forth in considerable detail the great advantages of this proposal. Then we were told, in reply to that, that our communication had received very full consideration, and it having received that consideration, Lord Hartington was not able to alter his previous view. We got as far as that as regards the joint undertaking between the Great Indian Peninsula and the Government. Then when that was negatived, we came before them again, and we said, we have it in writing upon your authority that you will give every encouragement to private enterprise on certain conditions. Now we for our part are ready and willing to fulfil those conditions.

972. I think you quoted that from a document which you received from the Indian Government?—I quoted from a published document called the Administration Report on Railways in India for the year 1880-81.

973. That is not a communication which you received from the India Office?—No.

974. Or from the Government of India?—No, it was a communication available for the general public. It was a sort of manifesto of policy on the part of the Government, contained in this Administration Report.

975. On the manifestation of the policy of the Indian Government contained in the Administration Report, you base your charge against the India Office of not treating you very well?—Distinctly.

976. You spoke, I think, of the spirit of antagonism to private enterprise which was manifested on the part of some Members of the Council?—I beg leave to say that I did not volunteer any opinion at all; I was asked by the honourable Member what the facts were, and I stated them with considerable reluctance; I did not volunteer any opinion of the kind.

977. You thought that the opposition to the Bhopal and Gwalior line was because it would interfere with the interest of the East Indian Railway?—I think that was one reason; if you wish me, I will give you my reasons for saying so.

978. Are your views founded on conjecture, or upon any written document which has proceeded from the India Office?—If you wish to know what they are founded on, I will tell you them very succinctly. It was a very important part of our project that we should get access to Agra, which, as you know, is the great centre of the Northern Indian trade. There is a State line of railway between Gwalior and Agra, and it was very essential for the success of our undertaking that we should have running powers over that line. When we came to converse with the India Office we found that they were most reluctant to grant us those running powers. We should have thought that they would have welcomed us most heartily, and have said, by all means make use of our railway; instead of which, we found that they were not at all desirous to give us those powers, which powers were essential to the working of our line; we could not stop short of Agra. I adduce that as one definite instance; I do not wish to speak indefinitely.

979. The proposition being at present in abeyance, you would not feel inclined to renew the last proposition which you made to the India Office with regard to the construction of the Bhopal and Gwalior Line?—I think we must bide our time; I think at the present moment it is indispensable to the vitality of our proposed line to keep it in connection with the projected lines. If you wish me to speak plainly, I think you have not given any of those people who were disposed to take an interest in the development of Indian railways the encouragement that they expected, and that I think they were entitled to; and the result is, that they are not disposed to take them up. At one time, when the Bengal Central was brought out, there was a very real and active desire on the part of some of the most influential people connected with the City of London to co-operate with the Government in these matters; but when gentlemen have lost a great deal of money I do not suppose that at the present moment they are inclined to go in for anything of the kind.

980. Have they lost any money through any change which has taken place in the Government policy?—Most distinctly they have.

981. Does not the success of their undertaking depend upon the income which will be derived from the railway when it is working, and not upon any communication between themselves and the India Office?—I do not wish to weary the Committee, but I am very desirous to clear up this point, and to make a distinct statement, and I wish to support it if it is agreeable to you to do so. I base my observations on the terms of the Bengal and North Western; I have no interest whatever in the Bengal and North Western; I am not a director in it, and I am not a shareholder; but I unhesitatingly say that the terms that the Government exacted from this company were concessions in this sense, that all the concessions were made by the company to the Government; they did not even give them a fair neutral position.

982. Then you would say that the India Office were very wrong indeed in accepting from the Bengal and North Western Company certain terms on which they would make the line, which were to the advantage of the Indian Government?—I say this, and I do not wish to be misunderstood about it; I consider that the Indian Government were very unfair to exact the terms insisted upon with the Bengal and North Western.

983. Did they not make terms with two great financial houses?—I think the two great financial houses have discovered their mistake by this time, as shown by the fact that the share for which they subscribed 4 *l.* is now worth 3 *l.* 10 *s.*

984. Would you propose that in any arrangements which are made between the Indian Government and the great financial houses, there should be some subsidiary method by which the shares should be always maintained at par?—No, most distinctly not, but I think they should have a fair chance; I think that you burdened this company, as you attempted to burden us, but the thing fell through, with terms which were

Mr. *Kynaston Cross*—continued.

were not fair or equitable, if you wish to know the truth.

985. Do you think that those great financial houses were very much to blame in taking those shares?—I think the great financial houses acted in this way: They were entering upon an entirely new field of operations, and you would have found them most valuable allies if you had gone on with them; but directly you found that the Bengal Central turned out to be a success the Indian officials stepped in and said: Let us share in the success; let us not be so liberal in the terms that we give.

986. Then the complaint that you make about the Indian Office is that they have looked after the interest of India rather too closely?—No, I go beyond that. The complaint that I make against them is this: that they did not deal with these Indian railways in the spirit of statesmen, but in the spirit of people who were conducting a specific bargain. That is what I say.

Lord *George Hamilton.*

987. You have made a very valuable suggestion as to the form of guarantee which you thought the State might suggest to the companies. Did I rightly understand you that the guarantee was to run for a limited period, and that after that period had expired the company were to repay the State?—Yes, my proposal was that any advances which the Government made should be repaid with interest out of the surplus profits over 5 per cent., and in that way we maintain that the Government would not incur any real loss at all. It would be a mere temporary advance.

988. Would such a proposal do you think get much support amongst financiers?—I venture to say that at the present moment there is a want of vitality about all these undertakings.

989. No doubt it is quite clear that it might be to the advantage of great trunk lines, say, like the Great Indian Peninsula, to build branch lines, which possibly would not pay very well in themselves, but would be a source of profit to the main line; do you think that branch lines could be constructed upon that principle?—I think distinctly that if this principle that we propose had been adopted and the Bhopal extension were made as an integral portion of the guarantee system, it would have been a great success.

990. In that case would it have a guaranteed capital, the same as the capital that was guaranteed to the Great Indian Peninsula?—To a limited extent. We could get our four per cent., if not more.

991. Could you build branch lines then on the new system of guarantee?—You could not amalgamate them with the existing companies; they would have to be separate companies.

992. Could they be worked in any way together?—Distinctly they could.

Mr. *Bolton.*

993. With respect to your first offer to construct the Bhopal Line, I think you said that it was without a guarantee of any description?—Our first offer was to make it a portion of the Great Indian Peninsula, and our second offer was to make it without a guarantee.

994. Except that you were to get some land and some mining rights?—We just quoted the words of the Government proposal.

995. Those conditions were valuable, I presume?—I believe there is some idea that there is coal in those regions, but as regards the land, I should like the Committee to understand that the land concession is a very valuable one in one sense only; in fact, we could not go on unless we got a concession of land; but as a financial concession it really is insignificant except in the presidency towns.

996. And the mining rights?—I know nothing about the mining rights.

997. But that was a condition?—It was a general condition not applicable to that particular line. The Government in their manifesto of policy said that they would give mining rights, and there was no allusion specially to mining rights in that particular project.

998. Did you make any conditions as to controlling the rates on that line?—I think we should have unquestionably been bound to submit to certain maximum rates, as on the part of the Government they would not hear of having any unrestricted rights over the rates.

999. For example, you would not have consented to take a mileage proportion of a through rate fixed by another party from the north-west of India to Bombay?—Our proposal was this: the Great Indian Peninsula has certain maximum rates within which they may work, and we proposed that those rates should be applicable to the new line.

1000. Did those maximum rates govern the through rates?—Of course; we have different local rates.

1001. But you want to extend the power of the Great Indian Peninsula Company to exact the maximum rates over this portion of the line?—Yes, the maximum rates authorised by the Great Indian Peninsula.

1002. So that it would not practically have increased them?—No, not at all.

1003. Do you not think you would have reduced the rates payable to the Great Indian Peninsula Railway, and increased the rates in mileage proportion on your line?—I do not think we should have done that at all; I do not think that there was any intention of doing it.

1004. Do you not think you would have done it?—I do not think so.

1005. Supposing, for example, you found that this line was much more costly to make than you expected, and that the surplus over the guarantee on the Great Indian Peninsula was disappearing, would you not rather have taken a profit on your line, and fallen back upon the guarantee for the Great Indian Peninsula?—I do not think so; I can give you the figures as to what the probable earnings would be, if you care to hear them.

1006. You would have had that power?—We should have had the power, as I understand, to have worked within the maximum rates of the Great Indian Peninsula; but I do not think we should have been foolish enough to favour this one particular portion of the line at the expense of

Mr. *Bolton*—continued.

of the other; I think it would have been silly of us to do so, for this reason: that when you come to that part of India the competition for traffic, east or west, is very keen indeed, and that of itself would have controlled our rates. We should have defeated the very object for which we wished to come into the district if we had put on higher rates.

1007. But it was a very small proportion of the whole through rate, and a very small proportion of the distance to the whole through rate?—Quite so.

1008. Therefore you might have exacted your pound of flesh without stopping the traffic?—I do not think that there would have been any desire to do anything of the kind, whatever our powers might have been.

1009. You could have done it without any cost to yourselves?—I suppose we could have done it.

1010. And you could have done it so as to secure that this line paid decent dividends, because you were paying 5 per cent. upon the Great Indian Peninsula, and therefore if you reduced the earnings of the Great Indian Peninsula you increased the earnings of this section of the line?—There would probably have been power to do so, but I do not think there would have been the slightest possibility of that power ever being exercised.

1011. Do you not think that it may have been in the mind of the Secretary of State the reason for his being disinclined to sanction this proposal?—I do not think so; and I also think that if that matter had been raised, we should have fallen in with any restriction to our taking such power.

1012. Then as to the third offer which you said, I think, was a limited guarantee, in what respect was it limited; I could not see the limitation when you mentioned it?—The limitation was this: we asked for two alterations in the substance of the contract. In the first place the Government said to us, We are going to act the part of ground landlords, and at the end of 99 years the whole thing is to lapse to us. That was a restriction which we did not like, and we asked for it to be removed, and then we asked them to give us this limited guarantee of a dividend of 4 per cent. for 10 years after opening.

1013. The limit was as to time?—Yes, the limit was as to time, and as to amount to 4 per cent.

1014. I think the suggestion you make is, that railways should be made by private companies upon a nominal guarantee; in other words, that the Government should satisfy themselves as to the traffic to be obtained from a particular line that is proposed, and, having done so, they should enter into a guarantee. If the information proved to be correct, the guarantee would be merely nominal; if it failed to be correct then the guarantee would be real?—As against that the actual loss would, of course, fall upon the shareholders of the new company; there would be no guarantee after 10 years, but the future loss would fall upon the shareholders.

1015. Then it is your proposal that the Government guarantee should be only for 10 years?—I would rather not bind myself to any particular number of years; my view is a nursing period to get the concern into a going state.

1016. You think that the proposal is such as would bring us all the money necessary to extend the railway system in India?—I would rather not give an opinion about that at the present moment; I think I have already suggested to the Committee upon that point that they had better get special knowledge.

1017. Would you allow me to revert for a moment to the proposal which you made for the construction of the Bhopal Railway; would you have had any security against rival railways under your proposal?—I do not think we should have cared about that; I think we should be quite sufficiently strong to have run upon our own merits; I do not think we should have asked for any security of that sort.

1018. Then you did not?—We did not, certainly.

1019. But you did ask for running powers over another line?—For this simple reason, that Agra is a centre of the trade of Northern India, and that Gwalior, where we were to stop, was only a town in a native state where there was comparatively no trade, and our proposal was that we should be allowed to get access to Agra, which I think was a very reasonable one; but, as I told you, it met with great opposition in the India Office.

1020. Can you give the Committee any suggestion as to the cause of that opposition?—I think you will probably have those gentlemen before you, and you had better ask them directly; I fear that I may have already gone too far, but I have tried to substantiate my views.

1021. Would you elaborate a little your expression of your view as to a fair chance being given to the financiers of this company?—My view is this: when the Bengal Central came out, and turned out so very great a success under the auspices of those great financial houses, I think that the mistake that the India Office made (and I have no doubt that they would recognise the mistake themselves now that the mischief has been done) was that they wished to impose more onerous terms on those people, and they did impose more onerous terms upon them, with a very unfortunate result, so much so that I do not suppose any of those gentlemen would care about entering upon any of these operations again.

1022. You think that the representatives of the Government ought, on entering upon a negotiation of that kind, to look after the interests of the financial houses as well as the interests of the Indian Government, in order to arrive at a conclusion?—I wish to be very clear upon that point. I think I started with saying that the Government ought to make up their mind if they wished to make a direct profit out of those undertakings, and they wished to make a profit in respect to this line that came out subsequently, the Bengal and North Western.

1023. If they are to make no direct profit by them, if they are simply charges for interest for money invested, would it not be far better for the Government to make those railways themselves?—That is a matter of opinion, and my opinion is the contrary. I have already told the Committee that I consider there are very great

Mr. *Bolton*—continued.

advantages in the direction of private companies; they induce greater energy, and they concentrate their attention upon the one particular project that they have in view.

1024. Therefore the Government, or rather the country, must pay for it?—I do not think so; we would not go in for a thing of that sort without getting a profit.

1025. You were speaking of the dual control not being good in every case, and I think you said that the dual control worked so well that you were not adverse to it; how are the rates fixed?—There is a certain maximum rate fixed in the original agreement within which we may work, and the tendency is daily to lower those rates. At the same time the rates are extremely low, in my opinion.

1026. Can you lower those rates without the consent of the Government?—The Government is always too ready to lower them. Their policy is to lower the rates for the benefit of the country, and we say that they should not do so unless it were beneficial to the Company.

1027. Having lowered them for particular reasons, are you at liberty to raise them again without reference to the Government?—I should think so; and I think I may say distinctly that, so long as we are within the maximum fixed, we may do so.

1028. If it is a question of lowering the rates from the maximum, you do not apply to the Government?—No; the Government directly acquiesces.

1029. But you know that it will acquiesce?—Yes, undoubtedly; in fact, that is the one point on which pressure is brought to bear upon us by the Government directly.

1030. If you wanted to raise the rates again, because you thought it your interest to do so, would you do it without reference to the Government?—I think we have one object in view, and that is to create the best dividend we can.

1031. If you thought that by raising the rates you would create a good dividend you would do it without being controlled by the Government?—Probably we should, so long as we were within the maximum limit.

1032. You have said that the dual control caused inconvenience and delay in providing those engines that we were speaking of; would not the same thing almost happen if you were desirous of increasing your rates; might you not be a great deal under the maximum?—Yes; I think the fair way of putting it is this, that the control of the Government is very beneficial in the way of checking extravagance, for it is looked into very minutely; the whole thing has to go through the different departments of the Government, and that unavoidably occasions delay. But, as against this, you have the advantage of this minute supervision and a very fair administration.

1033. Sometimes one may be of opinion that this expenditure of money in one hand would be beneficial, and others on the other side might take the opposite view; how do you settle a difference of that kind?—The Government have the distinct power of control. We have to suggest the best arguments we can, and I think as a rule those gentlemen with whom we are associated are generally reasonable men, and they say, well, if this expenditure is beneficial, let it be incurred.

Mr. *Bolton*—continued.

1034. Generally speaking you find that they are rather inclined to go with the Company in extending their communications?—I think they always take a very sensible view of all matters.

1035. What reason have you for thinking that the Government could form an estimate of the value of the traffic that is likely to be created on particular routes; have you found that their estimates in all cases have proved to be right?—I cannot say so; I think that in the first place as regards the capital outlay you may be pretty safe in accepting the estimates of the Government. Then with respect to returns, the Government have the best machinery in the shape of Commissioners and Collectors and Revenue Boards who have a vast amount of local knowledge, and which they can tabulate.

1036. Was a preliminary estimate made of the probable traffic on existing lines before they were gone into?—I should say not; of course that is a matter of history extending over 30 years ago; I do not know how they managed it in those days.

1037. You are not aware that any such estimate was made?—No.

1038. Do you find that estimates made in this country are generally trustworthy?—I know nothing about this country so far as railways go.

Sir *George Campbell.*

1039. I understood you to tell us that the Government had rejected the offer of the Great Indian Peninsula to construct this Bhopal line without pecuniary assistance; on looking at the papers which you have put in it seems to me that the fact is exactly the contrary, because on the 5th of May 1882 you made this proposal and there were correspondence and interviews at the India Office, and within exactly two months on the 5th of July the Government assented to your proposal, therefore it was not that the Government rejected it, but that you went from your proposal. I want to know the fact?—I can explain it. The letter that I have placed before the Committee are merely put in as a sort of comment upon the interviews which took place between the correspondence. When we had this interview that you refer to we were told by the India Office that we must submit to the terms not of our proposal, but practically to what were the terms of the Bengal and North Western, and therefore we delayed closing with the offer in order to see how the Bengal and North Western would succeed, and when it collapsed we had to come to the Government and say that matters had altered.

Chairman.

1040. In fact, the Government did not accept your offer, but they accepted it under conditions?—Yes.

Sir *George Campbell.*

1041. I find in the correspondence that after the Government had accepted your conditions on the 5th, on the 10th of July the Great Indian Peninsula Company write, not making any objection whatever, "I have the honour to acknowledge

Sir *George Campbell*—continued.

ledge the receipt of your letter of the 5th instant, regarding the proposed formation of a Company for the construction and working of a line of railway to connect the Great Indian Peninsula Railway with Cawnpoor and Gwalior. I am requested to inform you, in reply, that Major General J. S. Trevor, R.E., Mr. Chapman, and Mr. Watt, have been appointed representatives to negotiate and settle with the gentlemen who have been nominated by the Secretary of State the terms of a draft contract, and this deputation will be happy to attend such an appointment for the purpose as may be fixed by you." "A meeting was accordingly held at the India Office on the 27th July 1882, between the deputation above-

Sir *George Campbell*—continued.

named and the representatives of the Secretary of State, when points to be embodied in a draft contract were considered, and the deputation were informed that a draft contract would be forwarded to the promoters." It was not until some months afterwards that the letter came to say that you had gone from your proposal?—There is really no mystery about it at all; it is very plain, if the Honourable Member will kindly bear this in mind, that, at the interview, the Government did not accept our terms, but imposed upon us the terms of the Bengal and North Western Company in the draft contract sent us, making those terms a necessary condition of the undertaking.

Major General R. STRACHEY, R.E., C.S.I., F.R.S.; further Examined.

Mr. Bolton.

1042. YOU were in the room, were you not, whilst the last witness gave his evidence?—A part of the time, and I heard some of the things that he said.

1043. Would you like to offer any explanation as respects the refusal to allow him to construct the Bhopal line?—I heard him very imperfectly, and if you will allow me to say so, I would rather be asked questions; I am ready to answer any questions that you may wish to put to me.

1044. Were you aware of the fact that the Great Indian Peninsula Railway Company did offer to construct the line between Bhopal and Gwalior as an integral portion of the Great Indian Peninsula Railway?—I was.

1045. And that offer was refused?—It was.

1046. Do you know why?—Because the Secretary of State declined to add to the guaranteed capital of the Company, and the liability which it would have involved.

1047. Then there was a second offer without a guarantee, on certain conditions?—Yes.

1048. And that also was declined?—Not absolutely. A discussion took place upon it.

1049. But it was declined, was it not?—The Company eventually withdrew it. After the discussion had gone on for some time, they said that they could not proceed without a guarantee.

Chairman.

1050. Because the Government sought to impose conditions that they would not accept?—The negotiations were dropped.

Mr. Bolton.

1051. The conditions which were imposed with the offer were such that the Government could not accept them?—Practically, yes, you may put it in that way. I should say that the negotiations were never absolutely broken off; there was a discussion between the Government and the promoters which went on for some time; they did not like what we proposed, and we did not like what they proposed, and, as I say, eventually, when certainly half of the arrangements had been come to, and the general heads of agreement had been settled, they withdrew, because they said that they must have a guarantee.

Chairman.

1052. Is that quite correct; you said that they withdrew because they said they must have a guarantee; were not the negotiations with regard to the second and third offers broken off without any reference to a guarantee; and then a fourth proposal was made by the Company, after the negotiations had been broken off, that there should be a guarantee?—It is very difficult to carry all the details of such a negociation in one's head; it may have been so, but I think my account is correct.

Mr. Bolton.

1053. I think in the evidence which you have given to this Committee, you have expressed a very decided opinion as to the great advantage which the existing system of railways has been to India?—There is no doubt of it.

1054. And also your opinion that the extension of the present system will enhance that value?—Certainly.

1055. Would you give the Committee the advantage of your experience, and tell us how you think the extension of railways in India may be best accomplished?—Of course that is an extremely large question, and in attempting to answer a question of that sort one must consider what is the actual condition in which things are. The condition at the present time is, that we have a number of large undertakings which have been carried out under a guarantee of interest by the Secretary of State, a guarantee which involved a very heavy liability on the revenues of India, and that liability for interest became so heavy that the Government determined that it was impolitic to add to it. The guaranteed interest has to be remitted to this country at the cost of the Indian Revenues, and the general result is, that at the present time, what may be called the whole of the profits derived from the Indian railways, is swallowed up by the loss by exchange on this remittance.

1056. Practically you are now exactly where you started, because you were speaking just now of the enormous liabilities cast upon the Indian Government to pay the guaranteed interest; but then you tell us that the guaranteed interest is now fully paid by the surplus revenues of the railways?—About.

1057. Consequently the Government, as respects the railways and their liability for guaran-

Mr. *Bolton*—continued.

teed interest, are now just where they started, as if they were under no liability at all?—Approximately.

1058. But I think you have told the Committee that there is a surplus of interest over the guarantee amounting to a million sterling per annum?—From the way in which the Indian accounts are kept the receipts of railways are credited in the Indian accounts in rupees, while the loss by exchange appears as a separate item of expenditure under that head; during this last year for instance, the loss by exchange on the remittances from India to England, for the purposes of the Secretary of State, has amounted to upwards of three millions, and that, as I say, appears as a separate head of charge in the Indian accounts. But a million of that, or rather more than a million, is in reality required by reason of the remittances which the system of railway construction in India has involved, and therefore, although there appears to be on the face of the Indian accounts a surplus of a million, it is eaten up by the charge for the remittance.

1059. If it went forth to the public from this Committee that the Indian railways were now yielding to the Government a profit of over a second million a year, it would be misleading?—Quite so.

1060. Practically there is no profit whatever?—No absolute profit.

1061. Then the guarantor is left to pay the fixed rate per cent. without reference to exchange or anything else?—Yes.

1062. The Government undertaking to pay the 4 or 5 per cent. the onus is placed upon them in this country?—Yes, certainly.

1063. Consequently all that disappears; what we were basing our expectations on for further railways or for guaranteed railways does not exist?—Perfectly so; and it was for that reason, I have said more than once, that this particular surplus did not appear to me to be a justification for the Government going on spending more borrowed money upon railways. I said that there is a certain sum that we can safely appropriate from the total revenues of India of the year, to discharge the interest on borrowed capital, but that it is not right to appropriate any specific item or portion of this revenue for the purpose of adding to those railways.

1064. We may say now that the Indian Government is free from responsibility as regards the guarantee to existing railways?—Approximately.

1065. The difference is not worth speaking of one way or the other; you have got a million of apparent profit, and your loss on exchange is another million, therefore the one balances the other?—There is one matter which has not been pointed out, and it is this: that last year we had a million surplus railway income, but then last year was an extremely advantageous year for railway working, and it does not at all follow that this year we shall have the same amount of profit. There is considerable fluctuation; and I am informed (I will not say positively what the precise amount is) that on the Great Indian Peninsula Line there has been a falling off in the receipts since the 1st of January, which is the last return which we have got, of about 160,000 *l.*

Mr. *Bolton*—continued.

1066. There may be a reduction in the cost of working, and no falling off in the gross receipts?—I think the chances are that the relative cost of working has rather increased than diminished.

1067. But the cost of maintenance surely has decreased?—No, I should doubt that extremely. I am talking of this particular line of railway and of the fluctuation in the traffic.

1068. But there may be another traffic which has increased?—I am merely talking of the uncertainty.

1069. Still, when you speak of those uncertainties that occur, they are only to a limited extent; you do not expect them to continue?—But 300,000 *l.* or 400,000 *l.*, which I think quite possible, is a considerable fluctuation.

1070. But it may be 300,000 *l.* or 400,000 *l.* the other way; the railways have in your experience gone on increasing their expenditure?—Last year was an exceptional year.

1071. Are there many years when the receipts have gone back?—Frequently.

1072. Have they gone back considerably?—Yes, on some occasions, decidedly.

1073. After all the Government, even with that reduction of 500,000 *l.* from the net receipts, would be better off now than they were a few years ago?—Certainly.

1074. So that the strain upon the Indian revenues would be considerably less?—I quite admit all that.

1075. Do not you think that under all these circumstances you would now rather increase the amount which the Government might spend annually, and that you might set aside, I think it is from two and-a-half millions to three and-a-half millions?—Yes, that is my opinion, that an additional million might be spent and make the amount three and-a-half millions. I should explain that what I call the two and-a-half million limit is two and-a-half millions of money borrowed for what are called productive works generally, and of the two and a-half millions a portion is applied to irrigation works.

1076. What proportion would be applicable to railways?—I think it is either two-thirds or three-fourths. I think practically, however, one may say that the possibility of extending irrigation works is not very great, and according to my understanding of the position of matters I should say that the whole million would go to the extension of the railways.

1077. That would give two and-a-half millions applicable to railways?—Yes, or a rather larger sum of borrowed money applicable to them.

1078. That is the amount of interest that you would be prepared to guarantee annually?—It is the sum which might be spent annually for railway construction.

1079. And that would enable you to borrow at 4 per cent. a very large sum of money?—That is quite true if the sum named were spent as interest instead of as capital.

1080. Quite enough to extend your railways very considerably?—Yes.

1081. Then the question arises, how would you

Mr. *Bolton*—continued.

you suggest to us that the railways should be extended with the greatest possible rapidity?—I did not say that the two and-a-half millions would be actually applicable to payment of additional interest on capital expended on railways. It does not appear to me that you have a right to capitalise it.

1082. Why not, if you are prepared to set it aside annually?—But I am not prepared to set aside annually an addition to the liabilities of India to that amount, that is a different thing entirely.

1083. How are we to use this two and-a-half millions?—Spend it.

1084. And not use it as a guarantee for borrowed money?—No, that has never been done.

1085. Your guaranteed returns of four or five per cent., as the case may be, depend upon railways in existence?—I do not quite catch your point.

1086. You have guaranteed interest upon the money expended in making the present railways?—It is true the revenues of India were liable 12 or 15 years ago for a charge of something over two millions.

1087. Liable for guaranteed interest?—Yes, and that was paid year by year.

1088. And now you are not liable for it?—That is quite true.

1089. I understand you to say that you are now prepared to guarantee to the extent of two and a-half millions?—No, only to authorise or guarantee the outlay of so much capital.

1090. You have guaranteed to pay four or five per cent., as the case may be, upon the capital to be expended, to the extent of two and a-half millions of interest?—I cannot admit that.

1091. What is this two and a-half millions to be set aside for?—It means that the Government borrowed two and a-half millions, on which it will have to pay interest at four per cent.

1092. And you were liable before, as I understand, to interest amounting to two and a half millions a year?—We were.

1093. But now that India is becoming much richer than she was at that time you are afraid to continue that guarantee?—We are.

1094. Even to a small extent?—Even to a small extent, on the old plan.

1095. In fact, you would not guarantee at all?—The question of guarantee is a different thing altogether in my mind from the question of paying interest on capital; there is a great distinction between the two.

1096. What is the difference between deciding to pay in perpetuity four per cent. interest on a fixed sum of money and giving a guarantee to pay that interest?—Of course there is no difference whatever between a simple guarantee to pay interest on any given sum and the actual paying of interest; it is a self-evident proposition. But what I meant by the guarantee of interest to a railway company is a totally different thing from that. At all events in the way in which it has been dealt with up to the present time a guarantee of interest to a railway company has been this: that they shall be in a position to spend a more or less unlimited sum, on which the Secretary of State guarantees payment of

Mr. *Bolton*—continued.

a fixed rate of interest, and at the end of a fixed time (in the case of the old guaranteed railways it was 25 years) if he wants to obtain possession of the railway he has to pay its market value. Now the value of such a railway is entirely created at the risk of the revenues of India. The companies have no risk whatever, and not only have they no risk but they receive for the transaction a handsome dividend on the capital which they invest. That sort of arrangement is one which I protest against in the interest of the people of India.

1097. On the ground that the profit goes to the Company?—It goes to the Company who have absolutely done nothing to deserve it, and the whole risk, whatever it is, is taken by the State, and therefore I object to it.

1098. What is your suggestion in lieu of it?—Of course there are other objections besides. Under the old system there is no question at all that extravagance was stimulated, and inasmuch as the Government had virtually no control over the actual amount of expenditure, it went on and on, and for a long time there was a constant creation of Guaranteed Stock which was put upon the market in England.

1099. Then your objection to it is this, the possibility of extravagance in the construction of lines?—That is one objection, but there are a great many others.

1100. Are there so many that they cannot be removed?—That is my opinion, for what it is worth.

1101. How do you propose that the extension of railways should be effected in India?—There are two ways of doing it; one is that the Government should borrow itself and make the railways itself. As I said the last time I was here, so far as the actual cost of construction goes, I do not see myself that there is any advantage whatever to be got by making railways otherwise than by the direct action of the Government.

1102. Then supposing that plan adopted, to what extent would you suggest that the Government should go each year in the construction of railways?—Perhaps you will allow me to say that I just spoke of what has gone on up to present time, but I do not think that it is necessarily impossible to make an arrangement with a company under which the evils of the old system of guarantee should be got rid of.

1103. In your examination the other day, you rather expressed an opinion favourable, on the whole, to railways being made by companies?—As a matter of convenience to the Government.

1104. Now we are upon the whole system of State Railways, to what extent would you go in that direction?—In order to explain my views about that, I should say that there is one great difficulty in the unlimited construction of railways by the State, namely, that it seems to me not desirable that the public debt should be increased indefinitely. If the Government continues to make directly the whole of the railways that are to be made in India, and the whole of the money is to be borrowed directly it is raised as a portion of the public debt, while from the very nature of operations of that sort there is

Mr. *Bolton*—continued.

only from time to time a limited quantity of capital which is found practically to be available for investment in that form. Therefore I think what is desirable is that we shall see if we cannot induce capitalists to put their money into Indian railways in a different form, and other than that of an absolute addition to the public debt.

1105. But you are rather departing from my question and from your former answer. I understood you to express a preference for the construction of railways by the State from borrowed capital, and now, I think, you condemn that?—No, I say there are two ways of doing it, either by the State or by private companies.

1106. I want to take the State first and the companies afterwards; and I want to ascertain which of those two systems you prefer. I think you have rather condemned the State system on the ground that it would add too much to the public debt?—I say that is one of the difficulties.

1107. Do you condemn or do you approve of it?—It seems to me, so far as it has gone, to answer very well, but it cannot go on indefinitely; it is a question of degree.

1108. Then that brings me back to my first question: to what extent would you go now in the extension of railways in India; your suggestion just now is that the extension should be made by the Government; at what speed would you proceed?—I do not think I actually suggested that it should be made by the Government, although that is one possibility.

1109. Assuming it to be so, at what speed would you go?—As I have said, I think it would be safe instead of the State borrowing, as they actually have done up to the present time, two and a half millions, that they might borrow three and a half millions; but in addition to that they could make arrangements with companies which should not be financially so onerous, but within that sum; that is to say, within the amount of interest that would be payable on that sum.

1110. That is to say, you would propose that the Government should set aside each year three and a half millions, of which two and a half millions should go towards the construction of railways?—Yes.

1111. A portion of it to be spent upon the construction of railways under State management entirely?—Quite so.

1112. And another portion, as much as possible, to be set apart to pay the interest of the expenditure by private companies in making railways for the Government?—No, that is not so. This money that we borrow we do not apply, and we never have applied, and, so far as I am able at the present time to see, I should not be disposed to apply, in paying interest on other capital to be borrowed. If I have authorised 100 *l.* to be spent in the making of railways, I certainly do not mean by that that 2,000 *l.* or 2,500 *l.* should be spent.

1112*. Then the making of railways by companies would not add to the apparent debt of the Government?—It would not.

1113. It would not increase the amount?—That is quite true. You may say that it is an artifice for obtaining capital without adding to the public debt.

Mr. *Bolton*—continued.

1114. Then you would only invest a part of the two and a half millions in loans to those companies?—It is not exactly that. Instead of borrowing it from the public, and adding it to the public debt, you would borrow it from the company.

1115. If you did borrow it. You might have a surplus from the revenue; but, at all events, you would have to get this two-and-a-half millions, and, having got it, or a portion of it, it would be the interest of the Government, or of the Government officials, to expend it in making railways, and the balance of it would be entrusted to private companies?—No; it would relieve me from the necessity of borrowing. The liability to pay interest is the same whether the money is borrowed directly, and added to the public debt, or whether it is borrowed from a company.

1116. Any way, the total amount to be expended in the railway capital of the country would be 2,500,000 *l.*?—Yes.

1117. That would make, at the very outside, 400 miles per annum?—Yes, more or less; it would be about that.

1118. Do you think that that would extend railways as rapidly as is desirable?—I think myself, that if we could make an arrangement which should enable us to induce the companies to provide a larger sum than what we have been talking of, larger than the 2,500,000 *l.*, so that the public debt should not be increased, the revenues of India would be able to bear an increased charge for interest without risk.

1119. In addition to this 2,500,000 *l.*?—Yes; in addition to the interest on the 2,500,000 *l*

1120. To what extent would you go in that direction?—That is just one of those questions which appear to me impossible to answer, it is a question of which I would say *solvitur ambulando*, you must wait and see what happens.

1121. What sort of conditions would you impose upon the companies, or what privileges would you concede to them?—My impression is this, that if a company undertakes a railway in such a fashion they virtually have no risk, it should suffice for the Government to give them a minimum rate of interest on the capital that they advance.

1122. *You would guarantee them interest?*—I would give them interest on their capital.

1123. I understand that we are now upon the third plan?—If a company comes forward and says, "We will accept the entire risk, that is a different thing altogether." I am not now discussing that. The arrangement which I have suggested is, that we should endeavour to get the companies to lend money to the Government for railway construction, at a reasonable rate of interest, and to undertake the working, the company receiving in consideration of undertaking the trouble of working the railway a certain portion of the net receipts, with the object of inducing them to do all that was possible to develop the traffic.

1124. Anything during construction?—During construction also if it is necessary; if the rate of

Mr. *Bolton*—continued.

of interest which we give them is not sufficient to induce them to wait until the railway is in operation, that is to say, to wait until they get a portion of the surplus profits, you might give them a little more until then.

1125. If a company comes forward proposing to make a line between two points, which line we will assume is to cost 3,000,000 *l.*, you would, in addition to the two-and-a-half millions, recommend that the offer of the company should be accepted, and you would guarantee to that company the payment of interest upon it during construction at all events, and probably for some time afterwards?—As I said before, always within certain reasonable limits; but I should not think it necessary to restrict an expenditure of that description, to the same extent that I should think it necessary or desirable to restrict the expenditure of money directly borrowed and added to the public debt.

1126. "Reasonable" is so indefinite a term that I should like to know what you call reasonable?—I do not think I can go further than what I have said repeatedly, that you must look year by year to the actual working result of the whole railway system in relation to the general financial position of India.

1127. What rate of interest would you be disposed to recommend?—Whatever is necessary.

1128. Whatever is necessary to induce companies to come forward?—Yes. If you find that you have to pay too much for the money you cannot do it, but if you can get the money cheaply you can.

1129. Supposing, for instance, that companies came forward and offered to make a considerably larger extension than 500 miles, say 1,000 or 1,500 miles per annum, requiring in fact a guarantee from the Government equivalent to the whole amount which they are disposed to spend upon railways per annum, would you recommend that the Government making of railways should cease, and that the making of railways by private companies also should cease, and that this plan should be adopted in preference to either of the other two, to the extent of the amount which the Government are willing now to spend annually upon the making of railways?—I do not know that I exactly apprehend the honourable Member's question.

1130. You have put before us three proposals for the expenditure of money upon railways: the first is that the State should make the railways, and the second that the companies should be guaranteed by the State to make the railways to the amount of nearly 2,500,000 *l.* per annum; and then you would also suggest that a further plan should be adopted, that the companies should be allowed to make the railways if they will find the money, the Government guaranteeing interest during construction and for some time afterwards, and I think you express a preference for the last plan. Supposing that the companies came forward upon your last plan willing to construct railways to an extent which involved a guarantee of interest equal to the 2,500,000 *l.*, would you recommend that the first two plans should not be adopted and the third plan should be adopted to that extent?—I think not; I think that you have overlooked this important fact,

Mr. *Bolton*—continued.

that if I spend capital in the year 1884, the interest on which will amount to 2,500,000 *l.* in 1885, that interest will not be covered, that is to say, I should go on for an indefinite time adding 2,500,000 *l.* to the charge for interest on the public debt.

1131. That is not my idea in the slightest degree; the 2,500,000 *l.* of guaranteed interest would be sufficient to make all, or very nearly all, the railways which you recommend; the 2,500,000 *l.* and the other 1,000,000 *l.* which I have in my mind, for which shares do not exist, would have been ample for the whole; you see that that would make about 15,000 miles of railway; I do not mean that you should use the 2,500,000 *l.* interest one year, and 5,000,000 *l.* on the next, and 7,500,000 *l.* the next, but all the claims upon you might not exceed the 2,500,000 *l.*, because you see that that would enable you to guarantee something like 62,000,000 *l.*, so that you might then make 12,000 or 13,000 miles of railway?—As regards the financial position that the Government would have to accept, that would be pretty nearly going back to what it was 15 or 20 years ago.

1132. And that is what you would want now, except that you would like some guarantee of some sort or other, or some security that there should not be extravagance in the construction; you think that the first lines were constructed most extravagantly, and you require some guarantee that that extravagance should not continue?—Yes.

1133. But the principle that was in force some years ago, is the principle which occasioned the difficulties?—No, not at all; there was no principle 25 years ago, except that of giving unlimited guarantees.

1134. Granted that there is to be some guarantee as to the cost of the line so as to prevent extravagance, you would then prefer that system to any other?—If we could be absolutely certain as to what the railways would cost.

1135. But the companies would take the responsibility off your shoulders?—That is the whole point at issue.

1136. I understand you to say that supposing the companies came forward and offered to find the money to make a line between certain points on condition that they were secured interest during construction, and for a certain time after, you would prefer that system provided you could guard against the extravagance which was so common in the construction of the first lines?—No; I beg your pardon. I should guard against extravagance in the first construction of railways; but there are a great many other difficulties also, and one which I should attach very great weight to is, that I do not think it would be possible to fix the company to any specific amount of capital. Supposing it were arranged that not more than a certain sum of money was to be spent upon a railway, after that money was spent, supposing that it was all spent, the company would come to the Secretary of State and say, we have been deceived, you must allow us more; it is a reasonable expenditure; virtually the Government would be forced into extending the guarantee. All I can say is, that such is our experience.

Mr. *Bolton*—continued.

1137. How is it that you suggested that as the best plan of the three?—You misconceive me. The plan which I have recommended, and which I think would work well, is one under which the company shall lend the money that I speak of to the Government, and that the expenditure should then take place under the control of the Government and not at all at the discretion of the company. Then the company would be in all matters that related to the expenditure of money, the agents of the Government; they would be the paid agents of the Government, and it would be an agency for the construction of State railways.

1138. That is simply your plan to prevent the extravagance to which you have alluded?—It is quite so; but that is not what I call private enterprise.

1139. Have you any other plan to suggest for the extension of railways in India?—There is real *bonâ fide* private enterprise.

1140. Do you think that there is any chance of their coming to the aid of the Government?—I do not think so; but I wish it to be understood that I do not object to it in any way.

1141. But you do not think that any one would be, shall I say, weak enough to construct a railway in India without a Government guarantee?—No; but I think India is a long way off, and I think in the condition in which the Indian currency is now, people would not like to go and convert sterling currency into rupees, and run the risk of the rupee becoming still less valuable than it is now.

1142. I think you spoke of a short line in the North-west, which had been made at the joint expense of the shareholders and the Government?—Yes.

1143. That is a system, is it not, which you would like extended?—I think that it should be fostered in so far as circumstances will admit of it. I think it is a desirable sort of thing.

1144. Does that line enjoy any special privileges?—No.

1145. Is it under Government control as to rates?—It is in reality worked by the Government on behalf of the shareholders.

1146. Is there any guarantee to the shareholders?—I think that it was done something in the sort of way that I spoke of; that the money was taken from the shareholders on the understanding that they would get 4 per cent. It is virtually money borrowed from the shareholders with a guarantee of 4 per cent.

1147. Of which the Government provide one-half?—Yes.

1148. That is practically the third scheme which has been suggested?—It is in another form.

1149. Now, with regard to the management, does any difficulty in the working arise through the dual control which exists?—I do not know that any evil results are complained of.

1150. Delays would occur, one would think?—To some extent, no doubt.

1151. Could you suggest any improvement upon the present system?—My impression is that although a certain amount of friction occasionally arises, I think things go on very well now. I do not think there is any serious cause of complaint.

Mr. *Bolton*—continued.

1152. Is there no difficulty as to the rates to be charged, the Government desiring very much lower rates than the company wished to charge?—They are all tied up by the old contracts. I should say, first of all, that under the old contracts after the Government had fixed the maximum the company were entitled to have such rates as would give them a dividend of 10 per cent.; that is to say, that the profit should be 10 per cent. The Government might fix the maximum rates in that sense, but these having having once been fixed, the Government have no right to interfere further. In most railways the maximum rates have been fixed, and the consequence is that virtually the Government has given up the power of control. There may be a certain amount of pressure exercised. The Government expresses its opinion that this thing is right and that another thing is wrong; but in a general way there is no absolute power. Of course on its own railways the Government does as it pleases.

1153. With respect to the gauge, you made a statement which I confess rather astonished me, but perhaps you are quite right notwithstanding, and that was to the effect that the cost of a break of gauge was equivalent to the cost of 10 miles extra?—I believe it is really the case.

1154. Could you go into the details of that calculation?—No, it is only what I have been informed; I have not got the figures.

1155. Have you gone into it?—I have been informed by the managers of our metre gauge railways that when a break does take place, the transfer of goods, say, to the Delhi and Agra from the metre gauge line to the East Indian broad gauge is about equivalent to 10 extra miles.

1156. That merely means the transfer from one railway to another?—Yes.

Mr. *Carbutt.*

1157. Is that for labour, or is it the actual cost of the transfer?—It is the actual cost of the transfer.

Mr. *Bolton.*

1158. Do you think that that is all the additional cost?—I am not aware what other cost there is.

1159. There must be a duplicate rolling stock, and there must be duplicate engines, must there not?—I do not think so. Supposing you have two lines; I will take the East Indian Railway and the Rajpootana Railway. The East Indian engine cannot run for ever, and the East Indian waggon cannot run for ever; and if the transfer did not take place from the East Indian waggon and the East Indian engine ran over the Rajpootana line you must have an additional stock, or an equal stock of vehicles and engines for the metre gauge lines that they have to run over.

1160. Do you mean equal stock to do the same work; there must be a great delay taking place in the transfer of a thousand tons of wheat from one set of waggons to another?—Not very great.

1161. What

Mr. *Bolton*—continued.

1161. What do you call very great?—I really cannot say.

1162. It must take some days?—No, certainly not. The Chamber of Commerce at Bombay have given their opinion as to the inconvenience of the break of gauge that takes place at Nagpoor from that line in the Central Provinces, and I think they say that the delay is 24 hours; but a delay of 24 hours between the time that the wheat is brought to the market, wherever it comes from, and the time when it is sold at Mark-lane, I should think is not very important.

1163. It was not that that I referred to; I meant the delay of the rolling stock?—All that I can say regarding that is, that I believe that it does not actually increase the cost of working on the metre gauge line as compared with the other.

1164. Taking the extreme north down to Bombay, what is the time taken by a goods train, do you know; or what would be the time if there was no break of gauge; would it take 24 hours?—Possibly.

1165. Would not that break of gauge be equivalent to a double journey in respect of time?—Perhaps it is so.

1166. Therefore the rolling stock is delayed the whole time doing nothing?—No, I think not.

1167 What is it doing?—There would be a delay certainly.

1168. As an effect of this transfer from one railway to the other, there must be an extended system of sidings, which would not be necessary if the trains ran through?—Of course the whole question depends upon the amount of traffic and the proportion of goods transferred.

1169. You could not, of course, effect the transfer on the main line?—No.

1170. Therefore there must be a good many sidings!—Yes, there must be sidings and special platforms.

1171. Then the additional sidings would cost something?—Yes.

1172. And that is another expense?—Yes.

1173. Has that been taken into consideration?—I am not prepared to say that it has: what I say is, that we have complete evidence respecting the cost of transport on a metre gauge line. Take the Rajputana line of which we were talking; the cost of transport of 1,000 tons of freight on that line is virtually not in excess of the cost of 1,000 tons of freight over the Great Indian Peninsula.

1174. Notwithstanding the fact that there is a transfer from one set of waggons to another in the course of the journey?—No.

1175. Then there must be mismanagement on the one side or the other?—That may be, but all that I have to deal with is the facts of the case; do not suppose that I suggest for an instant that if there was no break of gauge there would not be certain advantages obtained.

1176. You heard, I think, Mr. Chapman's evidence as respects the Bhopal line; one reason he gave us for making the proposals to the Government to make that line without any guarantee at all was that he would then get a through line without a break of gauge?—Yes.

1177 By which I understand him to mean that he would control the traffic from the north by that line to Bombay?—Quite so.

Mr. *Bolton*—continued.

1178. You do not agree with him in that?—Not altogether.

Mr. *Slagg*.

1179. You stated the other day with regard to the paying position of the railways, that there is a net surplus after paying interest, not only the interest upon the capital which is really producing interest, but upon the whole of the capital of every description which has been spent upon the railway; does that include the arrears of interest of every sort?—No; according to our Indian system of accounts, the interest charge is written off year by year; that is to say, the interest charged on the debt of all sorts, including the ordinary debt, or the debt incurred for Productive Works, appears as a charge and is written off.

1180. When you say that railways are now earning in that sense, it is irrespective altogether, is it not, of these arrears of interest?—Quite so.

1181. What do you estimate those arrears of interest at, roundly speaking?—I cannot say positively. I can tell you as regards the guaranteed railways what it is. I have got the figures as regards the guaranteed railways. The amount that has been paid by the Government in excess of the net earnings, excepting the East Indian, 25,343,000 *l.*; and the East Indian besides that, is about 3,400,000 *l.*; so that it is about 29,000,000 *l.* altogether. That is for the guaranteed railways. Then there will be a considerable sum, I really do not know that I have ever made a calculation, but it is a considerable amount, on the State lines.

1182. So that at the present moment railways do constitute a considerable charge upon the finances of India?—No; they have constituted it in times past.

1183. But why do you not estimate it?—Because all that is done with.

1184. Not if we are paying interest on those arrears?—But we are not. Fortunately that has been paid out of the revenue, and there is an end of it.

1185. With regard to the loss by exchange; do you calculate that in your estimate of the position of the railways?—No; I explained that to the Committee to-day.

1186. You made the remark that on the whole the railways are successful; do you mean that they have been successful in improving the general condition of the people?—I thought that there was no question at all as to their enormous value to India. But besides that, when I speak of their being successful, I mean that they have been carried out without creating an increasing charge on the revenues of India. The arrangements have been such that the growing income of India has more than compensated for the growing charge.

1187. Do you consider that the condition of the inhabitants of the country, physically and materially, has been greatly advantaged by the railway system?—I have no doubt of it at all.

1188. Do you consider that the present railways occupy the best trade routes?—They occupy the principal trade routes; there is no question at all of that.

Mr. *Slagg*—continued.

1189. But there are still routes which are very capable of yielding a great amount of traffic?—Every additional mile that you make makes it more and more problematical as to the early financial success of the new railways; I think that this map, if you look at it, will give a very good idea of the possibilities of Indian railways in the future. If you observe, the area coloured blue has a population of above 600 to the square mile; the pale blue has above 500, and the red has from 400 to 500, and you will see that the whole of these practically run south of the Himalayas, along the Ganges, between Calcutta and the Punjaub. There is more of this blue colour here than in any other part of India, except in very small tracts. In the great central portion of India there are something less than 100, or between 100 and 200 to the square mile, which represents in reality a very sparse population, and it represents comparatively the whole of the country.

1190. What would be your main guide in selecting or advising routes for new railways; would it be population or wheat culture, or what would be the principal considerations which you would have in your own mind?—Certainly whatever you have in view as the object to which any new railway is to be applied, whether it is for the advantage of trade and commerce, or for the protection of the country from famine, you preferably would go through a country that had a reasonably large population. The smaller population, the less probably would be the value of a railway to any place. But there are also great main lines that would be marked out by the physical features of the country; because that is one of the things to attend to; you often go over very difficult countries that are more or less thinly peopled. Then you would have to establish a connection between the large towns; but I may say that, to a very great extent, the progress of railways in India has now gone so far that its main features have already been marked out, and what we really have to do is rather to follow on those lines and fill in between them.

1191. In reference to your opinion in favour of private enterprise, would you, in that case, include entire private control of the lines, or would you, in all instances, impose a certain amount of Government partnership in the control?—If you are speaking of absolutely private enterprise, I think that a very small amount of control would be necessary; a certain amount of what I may term police control would be proper. I do not attach very much importance myself to the control of rates, because, practically, maximum rates do not affect anybody.

1192. Do I understand that you advocate trusting to private bodies and to an absolutely irresponsible management of railways without restriction as to rates?—No, I would not go so far as that. I think, for instance, that companies must agree to allow junctions to be made, they must agree to be reasonable for through traffic, they must attend to the police, and they must give facilities for the working of the telegraph, and things of that sort. The question of tariff depends entirely upon the position of the railway; but I think it is a safe sort of thing to have an authorized scale, and that there should be something to indicate what the rates ought to be; and finally, I think, with a view to the possibilities of the future, that as any railway is more or less in the nature of a monopoly to the owners of it, I think there should be a reasonable power on the part of the Government to come in and buy it up. But if the enterprise is really independent, and if people really accept the whole risk, and do the thing themselves entirely, then I think if the Government came in it should give them a fair value for their property.

1193. Would you leave the administration and decision in those cases in the hands of the India Office, or would you desire a joint council for those purposes with the authorities in India?—I think all that is to be said with regard to that is that the Government of India is conducted under Acts of Parliament under which the Secretary of State is the ultimate authority for controlling everything done in India, and, so far as I can see, I do not think that it is at all desirable to interfere merely for the purpose of railway construction with the general authority which the Secretary of State possesses under those Acts of Parliament.

Mr. *William Fowler.*

1194. I should like to emphasise a little what I understood you to say; that notwithstanding all the waste that you spoke of in the system of guarantee as originally started, you find that the general results of the railway system have been most beneficial to India?—There can be no question of it.

1195. And further than that you were anxious for a more rapid development?—Most certainly.

1196. You spoke of private enterprise as being the proper mode, but practically an impossible mode, as I understood you, in answer to Mr. Bolton, you admitted that it could not be left entirely to private enterprise?—Yes, although *bonâ fide* enterprise would be highly desirable.

1197. You were asked a question the other day by the Right honourable the Member for Westminster, and you gave *him* an answer which I only want to clear up; you said you thought that money was raised in the London money-market in this sort of way that speculators get hold of the stock: "If the stock will go to a premium for the first six weeks that is all they care about, and that is what enables the capital to be raised." Then Mr. Smith said at Question 84: "Are you quite certain that you are right in your view about that; can you get capital from speculators only unless there is behind the speculator someone who has sufficient confidence in the investment as a permanent investment to take it off his hands." And you replied, "Yes, I think so." May I ask on what you base that opinion?—I think if you read on you will see that Mr. Smith asked several other questions after that. I, perhaps, expressed myself a little too unguardedly at first, but I do think, and I repeat it, that it seems to me that the essential thing in order to get a railway company of this description formed is to get a certain number of capitalists who are prepared to accept the risk of floating it on the market. Of course it is perfectly true that before you can arrive at that state of things those gentlemen must believe that they will be able to hand on the stock to somebody else; that I quite admit. I think this is equivalent to what I said in answer

Mr. *William Fowler*—continued.

swer to Question 67, "There must be a reasonable expectation" underlying that.

1198. You are asked in Question 85: "You can get it from the speculators alone, you think?" and you said, "Surely; what has happened with the Nizam's railways;" do you know what has happened with the Nizam's railways?—Yes.

1199. What has happened recently with the last issue, the one that has just come out; are you aware how it was taken up?—I am perfectly; I was talking of that.

1200. Do you know how it stands on the Exchange?—Yes, perfectly.

1201. The public did not take it?—Exactly, but speculators took it.

1202. Speculators took it, but you do not suppose that they will repeat the operation?—They were disappointed. But that is an illustration which I give to show that if you can get a body of speculators who have confidence themselves, they can float the thing. Of course in that particular case they were disappointed. And in the same way, if I may give another illustration, the Bengal North Western Railway was put out in something in the same sort of fashion.

1203. You do not call Messrs. Baring and Rothschild speculators, I hope?—They are, in a certain sense, speculators, I suppose, as you and I may be speculators; everybody who puts his money in such an undertaking is a speculator.

1204. But that is an operation not likely to be a success?—If you burn your fingers you do not do it again; that is what checks speculation.

1205. You desire to get money for railways by reasonable proposals to the public, and what you really want is to attract private investors by such operations as will be likely to pay them?—Yes, exactly.

1206. Not a mere man who buys one day and sells the next?—Certainly.

1207. Have you at all studied the question about borrowing in silver or gold?—Yes.

1208. Do you not think it possible to borrow in this country upon a silver basis?—None of our difficulties as regards railways would have arisen if it had not been for the unfortunate position of the Indian currency; but I do not perhaps precisely understand how you mean by borrowing in silver in this case.

1209. Supposing you brought out a rupee loan in this country, would it float?—That has never been proposed that I know of. As a matter of fact, rupee loans have been very largely taken up in this country indirectly. The payments have always been made in India. It is notorious that one of the last rupee loans was taken up by a French house; I think almost the whole of it.

1210. With regard to the question of exchange, is it not the fact that the more you develop the country, and the greater your exports become, the better your position will become?—It may.

1211. Because the greater the exports the greater the demand for those remittances to India; is not that obvious?—It may be so, but the converse holds good too. In proportion as the investments of English capital in India increase, the necessity for remittances from India will increase, and therefore, of course, *pari passu*, you must have an increase in the produce.

Mr. *William Fowler*—continued.

1212. The increase of exports has been much more rapid than the other, has it not?—That is doubtful; my impression is that it is rather the reverse.

1213. Is it not the fact that the great difficulty of Indian finance commenced almost identically as a matter of time with your leaving off the old system of guarantee, and the payment of large sums of money in to the Government by railways; have you looked into that question at all?—Yes, that is an old story. It is perfectly true that so long as the old guarantee system led to the payment of capital into the Secretary of State's treasury, it enabled him to meet the charges for interest. But then that is obviously a thing that cannot go on for ever.

1214. That is perfectly true, but the trouble that you get into is with your rupee?—Yes. Supposing that we had been going on from that time steadily at the same rate as before, we should now, instead of paying 5,000,000*l.* a year interest, be paying 10,000,000*l.*

1215. You would lose *pro tanto* on the exchange?—Yes, and we should have had the added burden of the responsibility of conducting the whole of that enormous exchange operation.

1216. I do not quite understand what the difference would be between that operation and the operation which you just now said you approved of, of paying 4 per cent. interest. I believe we find all the money on this side, and I want to know what the difference would be, because you would have a certain revenue to find in England; probably it would be very small if the railways were successful, but still you would have to find a sum of money to pay the interest?—The difficulty is got over by paying them the interest in rupees.

1217. Still you must give an exchange to produce a certain revenue here?—But our difficulty is not in finding the rupees, it is in finding the sterling.

1218. You must give them as many more rupees as will make up for the loss in bringing the money over?—Yes.

1219. Is not that as broad as it is long?—No, I do not think it is; that is the whole of my argument. I quite admit that it is a controverted point, and there are a great many people who do not admit it.

Mr. *Carbutt.*

1220. With regard to the strategic lines, of course you have read Mr. Juland Danvers' report the year before last, in which he says, referring to the Indus Valley Railway, "It has been of great service during the Afghan War; it has been a great saving of life and suffering," and he goes on to say, "It is extremely doubtful if reinforcements could have been pushed over this tract at the time of year (July and August) without its assistance. In any case, the aid afforded by the line can best be gauged perhaps by bearing in mind that one single railway train did do with comparative ease in one day of 16 hours what it would have taken 2,500 camels to do in a fortnight." If that is the case, does not it follow that for every 100 miles of railway that you may make for strategic purposes you thereby increase the security of money very considerably, or if you do not in-

Mr. *Carbutt*—continued.

crease the security, you could do with fewer troops than you could otherwise have done?—You cannot carry that argument too far, but there is no doubt that with the help of railways, a military force is much more available; but the military force in India is not merely intended to be massed and to be used at fixed points. You must have a certain amount of force spread over the country. I think it is generally understood now, that whether you have more railways, or whether you have not, practically it would not be possible to diminish the existing force.

1221. But do not you think that India would be more secure because you could move the troops better?—Naturally. Also along our north-west frontier, which is the dangerous frontier of India, there is no question that the value of those railways is very great, and the probability is that we shall have to make more.

1222. To that extent, therefore, they are a saving of so much money to the revenues of India?—I do not know exactly that they are a saving to the revenues of India. You are spending them, perhaps, but you are getting something for your money.

1223. You said just now that our annual earnings, above paying the interest, was rather more than a million, I believe nearly a million and a half, and then you went on to say that you were losing a large amount of that by exchange?—Yes, that is so.

1224. Is it not the fact that notwithstanding the railways have cost so much larger an amount of money than they could now be constructed for, notwithstanding a great many strategical lines have been made, even if you take into account the loss on the exchange, and if you take into account the loss of money that you have paid in buying experience, the railways are paying 4 per cent.?—Not including the loss by exchange. I think you must set off the loss by exchange.

1225. Have you the figures before you?—No; the loss by exchange comes under a different head altogether.

1226. I have taken the whole thing out; I have taken the loss by exchange, and added also the extra outlay for the East India Railway?—If you have satisfied yourself on that point, all I can say is that I have not.

1227. Let me put to you another question; have you had any practical experience of the working of railways yourself?—No; I merely judge by what I am told.

1228. Can you give us any experience as to the working of railways in India by means of our military engineers doing commercial work; many of them going out not knowing what business they are likely to have to carry out?—The men who go out in that sort of way are not put in charge of railways at once; the military engineer officers who have the charge of these State lines are men who have had very considerable experience, and have been out in India for 14, 15, or even 20 years some of them, and, like other people, they learn by experience. I do not know that they are less capable of learning than their neighbours. What I think one can judge by, and what it is reasonable to judge by, as to the efficiency of the working, is its actual result in money. As I have said, I am prepared, if the Committee care to go into the question, to show that the actual cost of the working of those lines, worked by the State, particularly the metre gauge lines, although the contrary has been roundly asserted, is not a bit more than the cost of working on the older railways.

1229. Is it not a benefit to England that we send those men out, and thereby relieve the English Government from paying their rate of pay, and thereby saddle the Indian Government with their rate of pay?—No, that is a delusion; the staff of Indian officers that is kept up in India is kept up specially for India, and if they were not required in India they would not exist, or be a burden on the English finances at all; it is a separate establishment entirely.

1230. I do not want to go into this question of gauge very deeply, but I made an assertion yesterday which the Under Secretary of State for India objected to, and I want to know whether your opinion is that the difference between the narrow gauge and broad gauge is only 10 per cent.?—I should say that it does not correspond with what I consider to be the facts at all.

1231. What difference do you make in the break of the gauge?—I should say that at the present time, with the present cheap materials, you might be able to make an ordinary broad gauge line for 8,000 *l.* or 9,000 *l.* a mile; and I should say that the corresponding estimate for a metre gauge line would be, perhaps, 5,000 *l.*, 6,000 *l.*, or 7,000 *l.*

1232. Would you take the figures from me that the Eastern Bengal Railway, 125 miles long, taking 12 rupees to the pound, has cost, including plant, rolling stock, locomotives, bridges, stations, and all such works, and all preliminary expenses, and establishment charges, 6,000 *l.* per mile?—Not the Eastern Bengal Railway, certainly not.

1233. I mean the Bengal Central?—That is a totally different thing.

1234. Is not that a broad gauge line?—It is a broad gauge line, but it is not fully equipped, it has no rolling stock, or comparatively none.

1235. But the rolling stock is charged to it in my estimate?—I know nothing about your estimate. It has no rolling stock, neither has it workshops, the whole thing is in its infancy. That you may lay down a line of rails for 6,000 *l.* a mile, I think is not improbable.

1236. But including locomotives, stations, workshops, and buildings, and everything of that kind?—As I say, it is not completed, and that Company does not work its own line; the line is worked by the Eastern Bengal Company.

1237. The figures which I have had put before me are, including rolling stock, stations, buildings, plant, and everything to complete the line, and taking it at 12 rupees to the pound it comes to 6,000 *l.* per mile?—Possibly.

1238. If you take the Nagpoor and Chaatisgurgh State Railway, which is one of the narrow-gauge lines, that is a small line 148 miles long, and if you take it on exactly the same ratio it turns out that that line was made for 5,480 *l.* a mile, which makes a difference of 520 *l.* per mile between the narrow and the broad gauge?—Of course, you can take those figures, and I can say that the East Indian Railway cost 22,000 *l.*, the Madras Railway cost 13,000 *l.*, and the Great Indian Peninsula cost 20,000. I say that the figures are not comparable, and if you take that railway

Mr. *Carbutt*—continued.

railway as an illustration of a possible extremely cheap broad-gauge line, I can give you an equally extremely cheap metre line.

Lord *George Hamilton.*

1239. There is a Report of a Committee which I took an interest in in 1879; a good many of us were on it, and I was Chairman, and you objected to a limitation upon the amount to be expended annually on public works; do you object to the form of limitation or to the amount?—I do not exactly understand to what the noble Lord is alluding.

1240. That Select Committee made a Report by which they suggested that there should be a limitation on the capital expenditure connected with Public Works, which should be limited to borrowing 2,500,000 *l.* a year; do you object to that limitation on account of the shape which it takes or on account of the amount?—The objection that I took to that particular limitation at that time was that I thought it was excessive. In the nature of things a Government cannot go on borrowing money without having some sort of programme, and settling how much it is going to borrow from year to year. You cannot leave it merely an open question to anybody who wanted a railway to say, Go and borrow. There must be some sort of limit, and therefore no doubt as the finances of the year have to be arranged at the commencement of the year, it is necessary to settle how much is going to be borrowed. Practically at the time that that Committee's Report was published, the Indian Government had been borrowing about 3¼ millions a year. My opinion upon the restriction to 2½ millions was that it was overdone; but my views regarding the limiting of Public Works expenditure of that description were overridden.

1241. You will admit that there ought to be some limit upon the expenditure?—In many cases I say that you must have a limit.

1242. Do not you think it better not to have too low a limit, which will perhaps be a little below what you can spend in a good year, and rather above what you can spend in a bad year, so that your policy may be continuous?—My own idea is that the Secretary of State and the Government of India between them feel sufficiently the responsibility which is on them to carry on the financial administration of India in a proper way, to be trusted to settle these sort of things themselves; and I do not think myself that it is desirable or necessary to state any fixed money limit.

1243. Just see the position in which you put yourself if you do not lay down a definite policy. We are now in a period of prosperity, and there is a great pressure on the Indian Government to embark in a heavy expenditure; you assent to this, and you create a large establishment without any limit; but by-and-bye there may come a time of depression, and will you not then be subject to considerable difficulty?—I perfectly admit that it is not only desirable, but it is necessary to be extremely cautious in going into expenditure of this description and borrowing money for such purposes; there is very considerable risk.

1244. Assuming that a different figure was put down than 2,500,000*l.*, would you then object

Lord *George Hamiltoun*—continued.

to the suggestion of the Select Committee of 1879?—If you were to put it at 3,500,000 *l.*, or something of that sort, instead of 2,500,000 *l.*, it seems to me that it might still be objectionable if that were to be prescribed as the absolute limit.

1245. The suggestion was an absolute limit as regards borrowed money, but all the surplus revenue, from whatever source it was derived, might be applied to productive public works?—It was rather more than that. At all events, it was interpreted in a more severe way than that. But my objection was not so much to the mere form of that Report of the Committee of the House of Commons, but to the manner in which the Report was afterwards acted upon and made in its application far more rigorous by the India Office.

1246. Assuming that there must be a limitation, is it not a better principle to lay down, that you should annually borrow a certain sum, such a sum as the Indian Government could borrow without inconvenience, rather than put a dead weight on the finances in the shape of allowing so much interest to be charged for productive works, because these are the only two principles of limitation which one can imagine?—I think myself that in the practical financial administration of India, what you have to do is to consider both these points; you have to consider first of all what is the sum of money that you can borrow, or what it is expedient that you should borrow; and then you have to look at the actual result of the whole of your operations up to date; what is the real net result of those operations, and what should be the burden on the Indian finances; therefore you have to consider them both.

1247. Still caution must be necessary, because if you have a bad year, say a famine, of course if you have to spend more money in this year, it is also accompanied by a curtailment of the revenue?—Quite so, but, as I said before, the real necessity for caution in the other direction is proved by what is happening now. I think also this shows that, if there is anything in the shape of over restriction, it is followed by a disposition to ask extravagantly for further expenditure. What I want is to hit off somehow or another the happy mean, and to avoid extravagance or niggardliness.

1248. Therefore you would have the programme drawn up in such a way that in an exceptional period of depression it might be modified in the way that I suggest?—That is my impression.

Mr. *Kynaston Cross.*

1249. It used to be considered, I think, when you were in India that you were very much in favour of a great extension of public works?—Yes; I have been told that my views were extremely extravagant and ruinous, and all that sort of thing.

1250. You have not seen any reason to suppose that the extension which you have advocated has been detrimental to India at all?—On the contrary, I consider that I am one of India's great benefactors. At the present time I may add that I am looked upon by many rather as an obstacle in the way of progress.

Tuesday, 1st April 1884.

MEMBERS PRESENT:

Mr. Arthur Balfour.
Mr. Baxter.
Mr. Bolton.
Mr. Brodrick.
Sir George Campbell.
Mr. Carbutt.
Mr. Kynaston Cross.
Mr. Dalrymple.
Mr. William Fowler.
Mr. Gorst.
Lord George Hamilton.
Mr. Justin M'Carthy.
Mr. Onslow.
Mr. Bernhard Samuelson.
Mr. William Henry Smith.
Mr. Edward Stanhope.
Mr. Wodehouse.

THE RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

Mr. HENRY COKE, called in; and Examined.

Chairman.

1251. I UNDERSTAND that you were connected with India for many years, and you resided for some time in that country?—Yes.

1252. Will you tell us in what capacity you served in India?—I went into the Public Works Department of Bombay first as one of the original Civil Engineers appointed by the old Court of Directors; I was in the Public Works Department when the Great Indian Peninsula Railway and the Bombay and Baroda Railways were promoted in India; I was not employed on the works, but I was in the neighbourhood where the works were going on; I subsequently was in the Education Department, and had a great deal to do with the education of the natives of India for engineering work.

1253. You had some connection, had you not, with the college at Poonah?—I believe I may be called the father of the Engineering College at Poonah; I began it with a small class under Lord Elphinstone's Government; I left it in its present position as one of the leading institutions in the Education Department.

1254. Whilst you were in India you travelled a great deal over the country, and you knew a good deal about the earlier promotion of railways in India?—Yes.

1255. And you appear here as the representative of the Liverpool Chamber of Commerce?—Yes, I left the Government service after 10 years; I went into mercantile business; I have been in Liverpool for 15 years, and have been much connected with the Chamber of Commerce, who have selected me to come here and express their views upon this matter.

1256. Is the trade of Liverpool specially concerned with the extension of railways in India?—It is estimated that Liverpool is the port of import for the greatest amount of Indian produce. Almost the whole of the cotton, much rice, wheat, oil seeds, wool, dye-stuffs, jute, and most of the larger articles which are exported from India,

Chairman—continued.

come into Liverpool in great quantities, that market becomes the point of distribution, not only for England, but for Europe, and it is felt in Liverpool that whatever tends to increase that branch of the Liverpool trade is advantageous to Liverpool, not only so, but in the case of the produce which comes into Liverpool and is sold for use in Lancashire the value of it you may say goes back to India in British ships, and in English manufactures; and, therefore, Indian trade is of vital importance to England, in so far as India takes back from England what England buys from India, which is not the case with most of the rest of the world.

1257. Then Liverpool, for the majority of articles, is the greatest distributing emporium for the exports of India?—It is.

1258. With the exception, of course, of tea and jute, and some other articles which are more largely imported into other ports?—Yes, I am aware of that.

1259. In your opinion, I presume, there would be an immense increase in the production of the articles you have mentioned if railways were more extended in India?—The Chamber of Commerce of Liverpool came to that opinion, especially basing that opinion upon the movements in wheat during the last five years.

1260. Would you be so good as to lay before the Committee the statistics with reference to wheat; what has been the development of the trade in wheat during the last five years?—I bring you not an estimate, but an official statement on that subject. I have before me the Statement of the Trade of British India with the British Possessions and with Foreign Countries for the last five years, which was presented to both Houses of Parliament, beginning in 1878, and bringing it down to the date of 1884, the following are the figures for the export of wheat for the five years, commencing 1878-79. In 1878-79, 1,044,000

Chairman—continued.

1,044,000 cwts.; in 1879–80, 2,195,000 cwts.; in 1880–81, 7,444,000 cwts.; in 1881–82, 19,863,000 cwts.; in 1882–83, 14,144,000 cwts.; and for the 10 months of the official year, ending January last, the exports were 19,500,000 cwts.; and it is estimated that for the 12 months the exports will be about 23,000,000 cwts. in 1883–84, as against 1,000,000 in 1878.

1261. Can you tell us what the total export of wheat was in 1875–76?—I have not gone back so far as that, but it was insignificant; I am sure of this, that at that time we did not know much about the trade in Liverpool.

1262. Has there been any great advance in the price of grain in the European markets that has stimulated such an enormous increase?—It will be seen that in the year 1880–81 the export was 7,000,000 cwts.; I leave out the odd figures for argument; and in 1881–82 it was 19,000,000; that in one year the export of wheat jumped from 7,000,000 to 19,000,000 cwts.; that was no doubt caused by a decrease in the American supplies that year; the price of standard No. 1 Bombay wheat in Liverpool that year was ranging about an average of 10 *s.* 6 *d.* per cwt., and there is no doubt that that great stimulus in the price brought out the wheat. Allow me to say that that was in 1881–82, but since then the price has fallen 20 per cent.; the wheat which was then selling at 10 *s.* 6 *d.* is now selling at 8 *s.*, and yet the exports from India are going on in the large proportion of increase that I have before mentioned.

1263. Is it your opinion now, supposing the price of wheat were to fall considerably lower still, if railway accommodation were extended in India the trade would go on prosperously?—I think that Indian wheat will be able to compete in the English market with that of any other wheat-growing country.

1264. Are you of opinion with some gentlemen who have written pamphlets and made speeches on the subject, that if railways were considerably extended in India the United States wheat would not be able to compete with the Indian wheat?—I have read the yellow pamphlet, but I had drafted a letter which was sent to the Secretary of State with much the same arguments before that pamphlet appeared. This was the letter which we wrote to the Secretary of State arguing for a reduction of railway rates in India. "The wheat itself has gained much in the estimation of English and Continental buyers on account of its improved condition and superior character. On the ground of quality it has therefore every chance of success, and it only remains to be seen whether the carriage can be cheapened sufficiently, and the irregularity of the supply overcome. American wheat is brought from Chicago to the seaboard, a distance equal to that of Delhi from the two great ports, at an average price of 10 *d.* to 11 *d.* per 100 lbs., whereas the same quantity costs about 1 *s.* 9 *d.* by the Northern Indian Railway."

1265. Will you tell the Committee whether, generally speaking, you concur with the writer of that pamphlet?—I do.

Chairman—continued.

1266. Would not an increase in the export of wheat tend to diminish the export of other articles from India?—I think not, because as the railways extend into districts not yet tapped, they will reach new sources of supply the further railway extension is continued, the more sources of supply will be found, and therefore it will be a long time before India is fully developed in any branch of her trade. I may mention, as a matter of fact, on the authority of this document, that in the Bilaspar district of the Central Provinces wheat in 1876 was selling at 5 *s.* 7 *d.* or 6 *s.* 6 *d.* per quarter, and that in January of last year, it had risen to 32 seers per rupee, that is double the price. The writer states that prices have, in fact, doubled through the construction of railroads, which has brought Bilaspur into communication with external markets. What is said about Bilaspur we hold will apply to all the rest of India.

1267. Have you anything further to say with regard to the wheat supply?—I wish to read a resolution which was passed on Friday last at a meeting of the Liverpool Corn Trade Association; I thought it would strengthen my hands if the people who are engaged in distributing the wheat throughout this country expressed their opinion upon that subject:—It was moved by Mr. Harvey Woodward, seconded by Mr. Hubback, and unanimously resolved, "That inasmuch as the better qualities of East Indian wheat are highly appreciated by English millers, who are specially adapting their machinery to its manipulation and thereby increasing its consumption, this Committee strongly supports the extension of the railway system in India as being calculated to further develop this important and growing source of supply."

1268. Indian wheat, as I understand, is not used alone, but mixed with wheat from other countries?—It was so until the present time. Now that the millers are finding out the value of Indian wheat they are altering their machinery so as to be able to use it alone.

1269. Going to another branch of the subject, have you, as representing the Liverpool Chamber of Commerce, considered the question of what annual sum, with due regard to the Indian finances, might be expended by the Government in extending railways in that country?—That point was discussed, and we came to the resolution that the Government of India should be the proper judges.

1270. Do you mean the Government of India, in India?—Yes, the Government of India, in India.

1271. But you are aware that the Government of India is controlled by the Secretary of State here?—Then we thought that the Secretary of State here would get his evidence from and trust to the officials in India, who know a great deal more about the railways there than people in this country, who get their information from newspaper articles.

1272. You know that the Government of India have proposed a scheme for laying out upon railways a sum of money amounting in the next five years to about 50 or 60 millions?—I do.

Chairman—continued.

1273. Do you think that the Secretary of State should, without further investigation, sanction that scheme?—I think he ought. If you appoint a Governor General and a Council to go out there and to study the question particularly, I think that confidence ought to be placed in that Government.

1274. Would you tell us where the money is to come from, or where, in the opinion of those who send you to represent them here, ought the capital to be raised?—In the first place, we think that the capital could not be raised in India. The natives themselves prefer hoarding their savings in gold and silver ornaments to investing them in public loans; they are not yet sufficiently educated for the purpose.

1275. And the Indian merchants, I believe, are not very fond of putting their money into Indian railways?—I find that there has lately been some expression of opinion on that subject. My answer to that is, that European merchants employ their capital in moving the enormous trade of the country, which amounts to 140 millions per annum; I do not see any reason for supposing that they are to make railways as well as move the produce.

1276. We want to get at the question of fact; do they not, as a matter of fact, invest large sums of money in India in railways?—I believe they do not; but I suppose you will allow me to state the reason for my belief.

1277. You have stated the reason, and you were going on to tell us in what manner you think capital ought to be raised for the construction of such vast undertakings?—I think we have had very good evidence in the history of the last 30 years that the guarantee system is the best. At the time the 5 per cent. guarantee was given, money was worth 5 per cent., but now money is worth only 4 per cent., without any further loans being issued by the Government, any individual or any capitalist here, or trustee who has money to invest, can go to the Stock Exchange and invest it in the Government Indian loans, or in railway loans guaranteed, so as to yield 4 per cent. The Great Indian Peninsula, which I think pays from 6 to 7 per cent., stands at about 145, or equivalent to 4 per cent. The Scinde, Punjaub, and Delhi Railway, which has a guarantee of 5 per cent., but which does not earn 5 per cent., is selling at what is equivalent to 4 per cent.; and the Government loans are standing in India at slightly below 4 per cent., therefore we think that if the Government were to go into the market here with a loan, I do not say all at once, but with a reasonable time between one loan and another, they would get whatever they required for the making of Indian railways by a 4 per cent. guarantee, provided investors had the chance of making something more, say up to 5 per cent., by the earnings of the railways before the Government began to divide with them. The Committee who drafted the resolutions sent to the Secretary of State put it in this way: "That this Committee further recommend that the railways should be constructed partly by the State and partly by private companies under Government control both as regards construction and management, with a guarantee of, say, 4 per cent.; any surplus over 5 per cent. to be divided between the Government and the shareholders"; they think that the prospect of making 5 per cent. out of the earnings of the railways would induce a great number of people to put their money into Indian railways.

Chairman—continued.

1278. Do you not think that the sanctioning of such a large proposed expenditure as from *50 to 60 millions in the next few years upon* Indian railways would have a disturbing effect both upon the money market in this country, and upon the labour market in India?—In the first place, with regard to the disturbance of the money market in this country, we find Colonial loans, American loans, and loans for all the world being raised here from 5,000,000*l.* to 10,000,000*l.*, constantly. I have not made out the exact amount, but it can easily be ascertained, what the London Stock Exchange or the capitalists in England lend to the world. It is immaterial to them whether they lend it to one place or to another so long as they are sure of their interest. I know this, that the public generally in England will trust the credit of the Indian Government much rather than the credit of a great many foreign Governments with whom they invest their money.

1279. Even to the large extent which I have indicated?—I think that 50,000,000*l.* in five or six years is a comparatively small sum for the London market to find.

1280. That, no doubt, is true; but do you not think that there is something exceptional in the state of India which would prevent such large loans being floated in a year or two?—You will understand that I do not propose such a thing to be done in one year; I should think that in five years it would be a very easy thing to do.

1281. Then I understand that you think that railways for protective or strategic purposes ought to be made by the Government?—By the State.

1282. But that other railways should be entrusted to private companies with a guarantee?—I think that whatever the Government could do, whether protective or productive, they should do for themselves; but it would be impossible for the Government, with their Public Works Establishment, to carry out the large operations of extending railways in all the different parts of India where they are required.

1283. Would you propose to enlarge the Public Works Establishment?—I should not, at least, not to any great extent, for this reason, that when the Government get loaded with an establishment it is very difficult to get rid of it; one of the great causes of expenditure in India is the constant pensioning of their military establishments or civil engineers. I think it is only three years ago that they pensioned off a number of civil engineers at high retiring allowances in order to get rid of them; if they brought on an establishment again for the purpose of making railways, which would extend over five or ten years, they would have to provide for their retiring allowances.

1284. Then

Chairman—continued.

1284. Then you are in favour of both systems?—Yes; I am in favour of both systems.

1285. Take now the case of railways constructed by private companies, is it your opinion that the Government, at this moment, in India, exercises too much or too little control over the management of those companies, or do you approve of the system as it at present exists?—The first letter which I read brought out a communication from the Great Indian Peninsula Railway Company protesting against the Government interfering with their system of earning their interest. I think that the Government of India ought to have sufficient control over the railways, to compel the railways to do what is for the benefit of the country, always bearing in mind the interests of the shareholders as well.

1286. I think, if I mistake not, that the Liverpool Chamber of Commerce have taken a great interest in the questions that have arisen between the public in this country and the railway companies?—They have been at that subject for the last 20 years.

1287. Are they afraid of the same state of things arising in India, of which they complain in this country, as to the little control in the interest of the public over the management of great undertakings?—The merchants of Liverpool connected with India think that it would be a most dangerous system to hand over the traffic of India to the tender mercies of the railway companies without a firm hold by the Government. We think that if the Government invite public companies to make new railways without a guarantee, they could not possibly exercise that control over the railways which they would exercise if they gave a guarantee. But as the guarantee would merely be what Mr. Chapman calls a nominal guarantee, for the railway would be certain to earn the interest, it would be a great advantage to the country if the Government gave the guarantee and kept the control in their own hands. The question of the relations between the public and the railway companies has been before a Select Committee, whose Report is now to be in the hands of the Board of Trade to decide what should be done; but as to the rates there has been constituted a tribunal in this country, namely, the Railway Commission, to settle the rights, so far as they can, between the public and the railway companies.

1288. Do you contemplate that loans for the extension of Indian railways should be raised in London?—I think if they could raise any money in India it would be advisable to do so, provided that they do it on the same system and at the same rate that they would get the money in this country.

1289. Do you think it is likely that they could get any considerable portion in India?—I do not think they could.

1290. Therefore you think that they must fall back upon sterling loans in this country?—I think so.

1291. Have you anything to say to the Committee about the great loss in exchange to the Indian Government which is necessitated by that system?—Some years ago that question was considered by the Chamber of Commerce of Liverpool, who took a very active part in the inquiry and went to the Chancellor of the Exchequer, and a deputation went also to the Secretary of State for India, upon the question of the relation of silver to gold, but it appears from the action of different nations that that is a point which must be allowed to settle itself. We have now had six or eight years' experience of this fall in silver. Some Indian merchants think that the loss by exchange has been more than repaid to India by the immense impetus which has been given to exports. It used to be stated in India some 15 years ago that the natives would not grow cotton to send to this country under 140 or 150 rupees a candy; at one time when it fell below that price there was a diminution in the supply, but since the rupee has become worth only 1*s.* 8*d.*, the native has been getting 180 rupees for his cotton, and he has continued to grow cotton and to increase the growth of oil seeds, wheat, and everything else, because he gets a greater number of rupees for his produce. I think it is a very nice question, and a problem which only the India Office or the Government could work out, that if the taxpayers of India lose from three to four millions a year in remitting money to pay interest upon loans in this country, how much the country has gained by the enormous increase of exports.

1292. Did the gentlemen whom you represent ask you to state any opinion with regard to the gauge of railways?—Yes, they have a very strong opinion about it.

1293. Will you tell us what they think?—They think that on all the great trunk lines the through communication should be on one gauge; they do not care whether it is the metre gauge provided sufficient trains are run, but it is the break of gauge that is so much objected to.

1294. Is there no objection to the metre gauge if the railways are mere feeders?—On what may be called local railways, there is no objection to it.

1295. Are you aware that the break of gauge at Ahmedabad on the Rajputana line between Bombay and Delhi, is much objected to?—Yes; before it was laid down as a metre gauge line the protests from the Bombay merchants who expected to benefit by the construction of that railway were very loud, and they are suffering now from it.

1296. Do you think that that railway should be made broad gauge?—I think it ought to be.

1297. Take the proposed new line from Bhopal to Gwalior and Cawnpur, what do you say about that?—That certainly ought to be on the broad gauge; it connects the East Indian and Great Indian Peninsula Railways, and we think that the line from Nagpur direct to Calcutta should also be on the broad gauge.

1298. Are you aware that a portion of that line has already been laid down metre gauge?—I think that is like the Great Western Railway, and Brunel over again. Brunel thought that the systems of this country should be broad gauge; he laid down what was called the broad gauge between Exeter and Plymouth, and in a few years they had to take their line up or lay a narrow gauge; I believe in this case that either

Chairman—continued.

the metre gauge will have to be laid upon the present broad gauge lines, or the broad gauge will have to be laid upon the metre gauge lines.

1299. Surely you do not advocate that the broad gauge line should be taken up and converted into metre gauge?—No, but you may put down another line there, so that the smaller carriages could run a double line; I say that that is really what it must come to sooner or later.

1300. You think that upon the proposed new direct route from Bombay to Calcutta, *viâ* Nagpur, there should be no change of gauge?—I do.

Mr. *Broadrick.*

1301. With regard to the guaranteed interest, have you considered at all the question of a guarantee for a limited number of years?—Yes, I have, and I think that if there is a guarantee for a given number of years, when that guarantee lapses the company would be thrown upon its own resources to collect an income to pay the interest, and if that were the case the Government could not claim to have that control over the railway which they would have if the guarantee were unlimited, or until the line was purchased.

1302. Quite apart from the control that the Government would have of the railway, do you think it probable that investors in India would be induced to advance money under those circumstances?—No, I do not think so.

1303. You are not of opinion that if the Government were able to give a permanent guarantee, that would be a way out of the difficulty?—It might be tried, but it is only a matter of opinion whether it would succeed or not, and my opinion is that it would not.

1304. You do not advocate any system which would not give the Government the ultimate control of the guaranteed railways?—No, I do so as representing those people who eventually have to pay the rates, out of which the interest would come. We are in the position of the public now fighting the directors of the Suez Canal. We pay the money and we want to have such a system that the hands of the Government shall not be bound. The whole contention of the railway companies in this country has been that the Government should have no power in the matter; a monopoly or a concession has been granted to them, which should not be interfered with.

1305. That would, practically, if you carried it out to the full extent, be a great check upon private enterprise, would it not?—Not if they got their 4 per cent., and were allowed to earn their 5 per cent.

Mr. *Carbutt.*

1306. With regard to private enterprise is it not the fact that at the present time the Government are rather taking up the East Indian Railway as against other railways, because they have full control over the East Indian Railway, and therefore are preventing traffic coming across the country down to Bombay and are taking it down to Calcutta?—Perhaps I had something to do with that in pointing out that the Great Indian Peninsula Railway Company were charging such high rates that it prevented the grain trade coming down to Bombay; in fact the rates were prohibitory. The Government then, for the benefit of the country on their own line, reduced the rates, and when they reduced the rates the traffic began to pour down that line, and the Great Indian Peninsula were obliged to lower their rates also, and they have lost nothing by it. It is a good thing to have partly State railways and partly Companies railways, because the experience which the Government gains upon their own lines is very profitable in determining what policy they shall adopt towards the guaranteed lines that are under their control.

Mr. *Carbutt*—continued.

1307. Do you consider that if the Government grant a railway they grant a monopoly, and that they have no power whatever of granting the making of another line which may compete with this line in the end?—I think it would be very bad policy on the part of the Government in India, indeed worse than it has been in this country, for the Government to grant two railway companies permission to go along the same country and to work against one another, the result of which would be that in the end those two railway companies would be obliged to amalgamate. If one line was built for five millions which would be sufficient to carry the traffic, and the competing line was built for five millions, the traffic in the end would have to pay the interest upon the ten millions, whereas under proper management five millions would have been sufficient.

1308. With regard to the break of gauge we were told that a break of gauge only cost something equivalent to 8 or 10 miles extra haulage; do you believe that it is so; do you think that break of gauge only costs that amount?—I think what it costs in actual money is not the way to reckon it; it is the delay, inconvenience, and loss in weight, as I said, in the movement of the traffic.

1309. Do you think it is so little as only 8 or 10 miles?—I cannot answer that question.

1310. I think you proposed a double railway, that is to say, a narrow gauge upon the broad gauge?—I did not propose it; I say that if they go on in what I call this suicidal system of making metre lines to join the broad gauge lines, sooner or later it must come to that.

1311. Would it not be far cheaper to take the bull by the horns, and alter the metre-gauge lines into broad gauge lines?—I certainly think so, because the traffic will increase, and I think that the broad gauge lines will carry a great deal more traffic, and for that reason you will develop the traffic to a much greater extent by making the lines broad gauge to begin with.

1312. With regard to the management of railways, I suppose you are aware that many of the railways in India are managed by military men; do you think it a very favourable way of managing railways that military men, who probably have had no experience in railway management, should go out there and take charge of the railways, and the conduct of the traffic?—There is no class of people in England who think they know their business better than all other professions know theirs than engineers. Whether a man is an engineer, or whether he is a traffic manager,

Mr. *Carbutt*—continued.

manager, in this country, he will probably tell you that only a man who has been brought up to it can know the business. That is the greatest mistake possible. I think that a military man who goes out to India and gets his experience there is just as good a man for the management, and perhaps better, than a civil engineer.

1313. Would you do what they are doing at the present time with the military men; pay the military man his full military pay, and give him extra pay for managing the railways, more than you would give another man who was doing the same work; that is to say, would you pay the same salary to the two men for doing the same work?—When the Public Works Establishment was fixed (to go back a long way) in 1867, the Government had to arrange, the rates as between the civil engineers and the military engineers they put the civil engineers on certain grades with the military engineers, fixing the civilian pay, and the pay of the military men at so much civilian pay, and so much military pay. I thought it was quite just, because a military man was liable to be sent away from his grade to do military duties. It was intended thereby to retain a class of men for military duty, and to make use of them at other times for civil duty. It was a very reasonable view, and no civil engineer could complain of it.

1314. You say that you would continue the same staff of Public Works Department; do you mean to say that you would continue Cooper's Hill College here, and continue educating engineers, and keep sending out a fresh supply, notwithstanding all the loss of money that Cooper's Hill College has been to this country?—Cooper's Hill ought not to be a loss to the country if it were properly managed here. There is no such school of engineers in England as Cooper's Hill College. If the Government were to make it a general college, and to give 10 appointments, or 20 appointments, as may be thought necessary, to be competed for by all those who might be passing out in the year, there would be a great inducement for pupils to go to Cooper's Hill for the final competition. It would be like a fellowship at a University.

Mr. *W. Fowler.*

1315. You made some remark with regard to the wheat question, and you said, as I understood you, that the great fall in price which had recently occurred had not hitherto considerably reduced the exports?—It has not.

1316. Will you just explain to us why you think that that is so?—The fall since 1880 has been from 10*s.* 6*d.* to 7*s.* 9*d.* per 100 lbs. It is very remarkable that in 1880 the average price for No. 1 quality was 10*s.* 7*d.* in Liverpool and in England generally; in 1881 it was 10*s.*; in 1882 it was 10*s.*; and in 1883 it was 9*s.*; and now it is 7*s.* 9*d.* per cental.

1317. But you have not gone on to explain what is the cause?—There is the fact.

1318. I only want to know whether you have any explanation to give us of that state of things?—We have this explanation to give, that in the last three or four years, notwithstanding what you may call the stagnation of railway construc-

Mr. *W. Fowler*—continued.

tion, they have made and opened between 500 and 600 miles per annum. This extension has tapped a district which could never export wheat before, and that is the main reason why this wheat has been brought to market.

1319. But, of course, one may assume that a man would not send his wheat down unless it paid him?—No; I have shown from what I read in this document that in the Bilaspur district they used to sell their wheat for home consumption, when they had no idea of external markets, at between 5*s.* and 6*s.* per quarter.

1320. Then I understood you to say that now it is doubled?—It is doubled now, but then double 5*s.* or 6*s.* a quarter will only bring the price up to 12*s.* a quarter; but 12*s.* a quarter will pay them very well, and if we can keep the freight and the railway charges within reasonable limits, that wheat even at the present low price will come here.

1321. I presume you are aware that there has been a great discussion upon that question as to what the actual cost is?—Yes; I know that there is a great deal of difference in the different parts of India, according to the soil, and according to the supply of labour; in fact, it could not be arrived at at all satisfactorily.

1322. You are aware that one of the Chief Commissioners of the Central Provinces disputed that proposition about the cost of wheat in the Province of Bilaspur?—Mr. O'Connor's book says that that actually was the case in the district in the year 1876.

1323. The mere selling price at the particular moment when there was no railway would be no indication of the actual cost to the cultivator, would it?—By no means.

1324. There was a great discussion upon that point, and I want to know whether you have any fresh light to throw upon it?—No one can say what the actual cost is. In the Guizerat district where there are 20 feet of black soil the cost would be one thing, and in the Sholapur district where they have two feet of clay, it would be another thing; so that all over India the cost must vary.

1325. Have you watched the market in England lately at all, so as to know whether this export of wheat from India to England is still going on on the same scale?—I am in the market myself receiving consignments by every ship.

1326. Notwithstanding the great fall which has taken place here you still will be able to receive great quantities from India?—Great quantities. Last week one vessel arrived with 16,000 bags; that is 32,000 cwts.

1327. I understood you also to say that the feeling of the trade with regard to Indian wheat was one of increased approval?—Very much so.

1328. You complain, I suppose, of the bad cleaning that goes on in India, or do you receive the wheat in a better condition than you used to do?—The natives do not clean their wheat as well as they might and could do; but worse than that they mix it, they will require some education and will perhaps have to go through the same losses that they had to go through with regard to cotton before they learn that they must not mix red wheat with white wheat; the

Mr. *W. Fowler*—continued.

Government are taking very active steps to educate them in that direction.

1329. With regard to the condition and character of the wheat, have you read Mr. MacDougall's report?—Yes.

1330. Do you agree generally with the sentiments which he has expressed upon this subject?—Quite so. I myself go through the Liverpool corn market on corn market days and see a great many of the millers; I may tell you a case which I think ought to be known. An old-fashioned miller in North Wales who would only use English or American wheat, received from his agents in Liverpool a thousand bags of No. 1 Bombay wheat against his orders. He used it and it brought out such good flour that he wrote back to say that he never wanted anything else but Indian wheat. That shows you how prejudice is being overcome.

1331. I think I need not trouble you more upon that question excepting to ask you whether the condition of the freight market is not extremely favourable, and increasingly favourable for the import of Indian wheat?—*It is so.*

1332. In your opinion is it likely to continue so?—That is a very difficult question to answer, because it depends upon a great many circumstances.

1333 Knowing a great deal about the Indian trade, I want to know from you whether that is really the case?—If a number of steamers were wanted for any public expedition the freight market would rise fourteen or fifteen shillings at once. I know that in the last three years an enormous quantity of new tonnage has been turned out, and that fresh tonnage will probably keep the freights low for a long time.

1334. With regard to the raising of money you expressed, did you not, a dislike to the idea of a limited guarantee, because you thought it would involve less control by the Government of India over the lines?—I did so.

1335. Would it not be perfectly possible to have a limited guarantee with a reservation of the same power that they now have for an indefinite period?—I do not think that capitalists would be willing to give the Government full control over them if they had to stand all the risk and the Government got most of the gain.

1336. Do you think that capitalists are so inquisitive that they go minutely into the question beyond say ten years' time?—I think that the syndicate who were issuing a loan or bringing out a company of that kind would be very likely to let it be known what all the favourable conditions were, and that the people who were putting their money in would be very anxious to know what were the unfavourable conditions of that contract.

1337. In that case the only unfavourable condition would be that the Government would not have the power that they now have with other lines?—The Government have power over the lines now because they give a 5 per cent. guarantee, but I think if the Government give no 5 per cent. or no 4 per cent. guarantee it could not be expected that the public would give their money on the same terms.

1338. You are, of course, aware that the greatest obstacle is the fear of increasing the gold

Mr. *W. Fowler*—continued.

liabilities of the Government of India?—I suppose it is.

1339. Have you thought much upon that question?—I have.

1340. Are you not afraid of that?—I am not afraid of it, because I think the advantage to India in the development of the Indian resources, as I said before, would counterbalance this loss upon the Exchange.

1341-2. You said something about the mode of payment of the superintendents of railways; is it not more a question whether a man is a good man, or what his particular origin or profession may be?—It is so. Whatever he is, and whatever his profession may be, if he is a man of good sound sense he will soon learn his business thoroughly. I think that was the opinion which Lord Palmerston held.

Mr. *Bolton.*

1343. With regard to the break of gauge I must have misunderstood you, but I think that on the main lines you said that the feeders may be narrow gauge?—I said so.

1344. But would that not involve a break of gauge?—The feeders of the railways now are country carts; you must draw the line somewhere. Having to carry their produce on country carts 50 or 60 miles, the gain that it would be to a locality in sending goods by means of a conveyance which would require one unloading would be very great.

1345. There is no doubt that narrow gauge railways as feeders would be preferable to the country carts, but the question is whether in your opinion you would prefer a narrow gauge feeder with all its advantages of cheapness of cost, or a broad gauge feeder?—If we could be quite certain that the traffic of any district would pay the guarantee for a feeder on the broad gauge, I think it would be better to have the broad gauge for the feeder.

1346. Do you think it necessary for the feeder itself to pay its own expenses?—Yes, I think it ought.

1347. Does not the feeder add enormously to the traffic on the main trunk line?—Yes.

1348. Might not the profit on the main line be more than commensurate to the extra cost of the feeder?—I scarcely think so. The main line ought not to be made to pay for losses on the feeder, at least, if that could be avoided; if the feeder could pay for itself on the broad gauge, by all means have it broad gauge; but I think that the line should be drawn somewhere.

1349. Supposing the narrow gauge lines to be cheaper on the whole than the broad gauge lines in working and maintenance, and so on, you would rather have feeders on the narrow gauge than feeders on the broad gauge?—I think I answered that before.

1350. You expressed a view, did you not, as I understood at all events, that it would be desirable, if practicable, to raise some portion of the capital in India?—I did.

1351. Have you in your own mind any plan by which that could be effected concurrently with the raising of capital in England; in other words, to give the investors the option of investing

Mr. *Bolton*—continued.

ing in India or in England?—Yes, I would give them an opportunity of investing in India.

1352. How would you arrange for that?—I think that the notice which is given by the Government, that on a certain day they will receive tenders in India for a crore or for two crores of rupees, has been tried very often, and has not been quite successful; perhaps the people do not understand it, I should open at the interior treasuries subscriptions to railway lines in India, and try it in that way, let them come in as people choose to invest, somewhat in the nature of savings banks in this country.

1353. Would you fix a different rate of interest?—No, I think I would give 4 per cent. just the same.

1354. Do you think the people would invest in a rupee loan?—They would out there.

1355. At 4 per cent. interest?—Yes.

1356. If you have 4 per cent. interest with money got in London, it is nearly equivalent to 5 per cent. with rupees?—It is the same thing as the 4 per cent. to them out there. If you had 4 per cent. in India, and had to send it to England, it would be a different thing.

1357. Consequently would you not require a higher rate of interest for a rupee loan?—No, I think 4 per cent. on a rupee loan is just as much out there as 4 per cent. on a sterling loan is here.

1358. Supposing that you have an investment of 100 rupees at 4 per cent. in India, you receive 4 rupees for that loan, and if you invest the value of 100 rupees in the English loan, you will receive 4 per cent. in England?—Yes, on the value of 100 rupees.

1359. Therefore you lose by it?—No.

1360. Consequently I think you will find that to put the two investors on a par the investor in silver who receives his interest in silver would require to have something like 20 per cent. additional interest?—That is if he had to send his money to England.

1361. If he sold his bill in England, or if he sold his dividend warrant, he would receive so many more rupees, would he not?—I do not quite follow you; my idea of your question is whether a 4 per cent. loan in India payable in India in rupees would not be more disadvantageous to an investor there than a 4 per cent. sterling loan in London.

1362. He is paid in both cases by a dividend warrant; the one is payable in Calcutta in silver, and the other is payable in gold in London; if he sells his dividend warrant in London, would he not receive more than the same number of rupees at the same rate of interest?—But I do not suppose he would draw upon the Secretary of State for India for the payment of his dividend warrant in the rupee loan.

1363. But wherever he is drawing it makes no difference, does it?—No.

1364. With respect to the guarantee system, might not the difficulty which you have suggested be met by giving to the Government the power of acquiring the railways by taking up the loan or buying up the railways at some fixed premium?—I think it would be advisable, whether under a guarantee or not under a guarantee, that the rights should be reserved to the Government to buy the railways at the market

Mr. *Bolton*—continued.

price of the railways at a given time, the same as they did in the case of the East Indian Railway not long ago.

1365. They found that a very costly process, did they not?—Yes, they found it a costly process; but they got their *quid pro quo* in the development of the country.

1366. But might they not also get their *quid pro quo* in the development of the country if they retained the option of purchasing the railways at a fixed premium after a given number of years?—That is a matter of detail and arrangement with the company.

1367. Do you think that that would prevent people subscribing to the line?—I think it would tend to limit it; it would most certainly limit the variation in the value of the stock.

1368. Do you suppose that, with a 4 per cent. loan, which I think is the rate you indicated, they might raise the money?—With a chance of 5 per cent. I have always qualified what I have stated with regard to the 4 per cent. by saying that it must be with a chance of 5 per cent.

1369. With a chance of 5 per cent. and half of any surplus over?—Yes.

1370. Do you not think that a loan at 4 per cent., with the right of the Government to acquire the railways at, say 120 or 125, would meet the case?—I think that that would clog the operation in such a way that speculators who go in to take up loans of this kind with a chance of a rise in the value of the stock would be deterred from going in for it, because, if they knew that they could never get more than 120, although the traffic might develope so that 100 *l.* stock might be worth 145 *l.*, as is now the case with the Great Indian Peninsula, they would know that the Government would come down and take it away from them at 120, and therefore that would limit investments in it. I think that they should be allowed to develope the railway system and let the country take the chance, because they would get the benefit.

1371. With respect to the dual control, you expressed an opinion that the Government should control and compel the railways to do what is best for the public, with proper consideration for the shareholders?—I did.

1372. What in your mind is a proper consideration for the shareholders in this case?—I think that when they get to 6 per cent. or 7 per cent., and the traffic is developing, the Government ought to have the power to alter the maximum rates, and I think that maximum rates which are fixed long before it is known what may be the effect of the railway upon the development of the traffic, are not fair maximum rates, when the traffic becomes very abundant.

1373. Do you not think that that would deter investors?—I do not think it would, because the Government, under the present system, have got some control by law. I would advocate an extension of the old system. If the Government could get a little more control than they have under the old system, I think they should get it.

1374. That would be practically the action of the Government to prevent shareholders receiving so large dividends as they might other-

Mr. *Bolton*—continued.

wise receive?—I do not see that shareholders have any right to expect that the country is to pay them unreasonable dividends any more than the Suez Canal shareholders should get 25 up to 30 per cent. Of course those who pay the rates will then come in and clamour for a reduction.

1375. Is not that rather a contradiction of your recent remark?—Will you kindly tell me how.

1376. Inasmuch as you thought that if the Government had the power to take over the railways themselves at a premium it would deter the investors; your present proposal is that the Government should step in and compel the railways to carry at rates below their maximum?—No, I did not say that; I said that the Government should retain power to alter the maximum.

1377. Is not retaining the power to alter the maximum the same as retaining the power to compel them to take less than the maximum?—What you would propose would be a hard-and-fast line that 100 *l.* of stock should never be worth more than 120 *l.* My idea was that the Government should have some means of exercising an option with reference to that point.

1378. But you do not think that the two cases are at all parallel, do you?—I do not think so.

1379. You say that the railways would be certain to earn the interest, and therefore the guarantee would be nominal; if that is so, what is there to prevent private enterprise making all the railways?—Will you allow me to say that you must have misunderstood what I said upon that point, I have got it written down. I said we believed that whatever amount the Government determined to spend in the construction of railways through well-inhabited and fertile districts, interest would be earned upon it.

1380. Why should there be any need for a guarantee at all in those fertile and well-inhabited districts?—I think Mr. Chapman said the other day that in making a railway of that kind it would be a nominal guarantee, and I agree with him, because through well-inhabited and fertile districts a railway would be sure to pay four per cent. If you ask me why the Government should guarantee four per cent upon railways of that kind through such districts, I should say, To protect the public, who might otherwise be charged such rates as would pay very high interest to the company.

1381. Then it would be very advantageous in your view to those other people who might be interested, though not to yourself; that is to say, you would leave the others if they pleased to make the railways without a guarantee, but you yourself would not be inclined to invest in railways without a guarantee?—No, excuse me, I am speaking now from the point of view of the Indian Government. I think you asked me if this railway would be certain to pay its interest, what need would there be of a guarantee.?

1382. I mean for the purpose of inducing investors to make the line; for the purpose of inducing the public to advance the funds necessary to make the railway?—I do not quite know what reply to make to that question.

Mr. *Bolton*—continued.

1383. I understood you to say that certain railways, if they were made, would be certain to earn the interest, and therefore there would be no need for a guarantee, and it would be only nominal, as you said?—It would be only nominal, certainly.

1384. Upon that I ask you, such being the case, what necessity is there for a guarantee at all?—So that the Government might keep their control over the railway both as to management and as to rates.

1385. But they might have that control without, might they not?—I do not think so.

1386. They have it in this country, for you fix maximum rates, and you lay down certain rules by which railway companies are to be guided; and that might be done in India, might it not?—But the railway companies of this country evade them.

1387. That is an open question. I maintain that they do not; at all events the courts of law are open to all parties?—Individuals cannot carry on their business with the risk of having to go to court about everything.

1388. How would it be managed on your principle; would it not be necessary for the trade to go to the court or to the Government?—They would go to the Government.

1389. Is not that the same thing?—But there would be no litigation. We should not be going into a litigation which might take a man from the county court up to the House of Lords, and spend all his time and all his money. The Government would be the court of reference then.

1390. Your evidence amounts to this, that the Government should, at the origin of a railway, fix the maximum rates which the company are entitled to charge?—Yes.

1391. And at their pleasure reduce those rates?—With power to alter and vary those rates.

1392. Do you not think that that would deter investors, who would receive a guarantee for a limited number of years?—Not if they had the chance of getting five per cent. To a certain extent it would deter people from going in who expected to get 10 per cent., but it would not deter those people from going in who were satisfied with five or six per cent.

Mr. *Wodehouse.*

1393. You say that you desire a large extension of railway communication in India to be carried out in the space of four or five years?—Yes.

1394. Do you think that the increase of traffic would keep abreast with so rapid an extension of railway communication?—I will not go so far as to say that the railways will pay their interest, or their guaranteed interest in one, two, or three years after they are made; I think that like all new railways in an undeveloped country they must work up to a certain point before they will pay their interest; they would not pay at first; it might take five years.

1395. I think you said that a large increase in the growth of wheat in India would not diminish the export of other produce?—Yes, I think so.

1396. Do

Mr. *Wodehouse*—continued.

1396. Do you think that India is capable of a rapid growth of produce of all kinds?—I think, as I said before, there is an opportunity for a very rapid extension in all the articles that are produced in India, from the fact that a great many districts are not yet worked, because they have no means of sending their productions to market. I think my answer to that question was that it would increase the export of wheat, and not tend to diminish the export of other articles. I said it would be a long time before India reaches her full development in any branch of trade. Of course there will be a line to be drawn somewhere, but we cannot see it yet.

1397. Is the increase of general produce that you anticipate to come chiefly from the better cultivation of the land now under cultivation, or from the cultivation of land which is now waste?—From both. We may take it that there are districts near the railways which have been producing wheat and cotton in abundance for a long time, and that when they find the production falling off they will irrigate more, or they will manure more; lands already cultivated will be better cultivated, and those which have not yet been cultivated will be cultivated, and the produce will tend to increase the volume which comes down to Bombay and Calcutta.

1398. Do you think that the natives of India are quick to learn better modes of cultivation?—No; I question whether they would not do as well with their simple aboriginal plough as with a new one.

1399. Would not that tend to retard the increase?—Of course it would increase more rapidly if they introduced new modes of cultivation, but if you leave them on the same lines as they are, I have no doubt that they will increase, only slowly.

1400. You seem to condemn the Secretary of State for not sanctioning the proposals of the Government of India with regard to railway extension?—I think there was no occasion to limit them in the way the Government of India have been limited.

1401. You thought that the Government of India had considered the subject fully, and that the Secretary of State should therefore have trusted to their discretion, and sanctioned their proposals?—I think so in the main.

1402. But might you not say that of every proposal that comes before the Secretary of State from the Government of India, that it is a subject which they have well considered?—I think that financial questions are so local that the Government of India should be allowed more control over finance than over general political questions. Considering that India alone is liable for all her expenses, and that the Parliament of this country is appointed by the English taxpayers, I think that only a limited control over the financial arrangements of a different class of taxpayers altogether should be exercised in this country. Still that is going into a very large question.

1403. In short, you would wish to reduce the control reserved to the Secretary of State over the finances of India?—I think that depends entirely upon what confidence the Government have in the Viceroy for the time being.

Mr. *Wodehouse*—continued.

1404. You are in favour of the construction of railways by the State, so far as its establishment and resource permit?—Yes.

1405. Then I suppose you believe the construction of railways by the State to be as efficient and economical as their construction by private companies?—I do not see why it should not be so; I have had an opportunity myself of seeing the work done by the Government establishments of engineers as compared with the work done by railway engineers; you will be good enough to remember that I am talking of 25 years ago; although we might have been more slow in our operations we did quite as solid work, and did it as cheaply as the railway engineers.

1406. Would you desire to see the Government railway establishment increased, if the difficulty as to pensions could be removed?—I should doubt very much whether it would be advisable for the Government to undertake all the work that is required to be done even, although you could remove that difficulty. I would not extend their establishment. I think the two systems working together would be a very good check, the one upon the other.

1407. I think you said that you were connected at one time with the Poonah Engineering College?—Yes.

1408. Is that a valuable institution?—Yes, very. Many of the natives that were trained there are now holding responsible positions as executive engineers, and a great many of them have turned out native contractors.

1409. Then all the students at the Poonah Engineering College do not take service under the Government?—I do not know what they are doing now, but in my time the Government used to give 12 appointments every year for what was called the subordinate grade of the Public Works Department to those students who had passed a certain standard; and, as I said, if at Cooper's Hill College they were to adopt some such system as that it would draw students very much to that college. I had also what was called a mechanical branch for the education of mechanics, such as superintendending carpenters, masons, and so on. From these were selected 12 persons annually for Government appointments, but a large number of pupils at the college who eventually did not succeed in getting Government appointments were spread over the country, and took service in private mills and other works, so that it was of very great value to the country.

1410. What do you wish to say about iron?—The Chairman of the Metal Trade Association in Liverpool requested me to state that at this moment, there is a very great lull in the iron industry in this country, due to the stoppage of the great development of railways in America. I can give the figures if necessary. Ship-building also having stopped in this country at the present time, and railways having stopped in America, it is a very good time for entering into the purchase of iron for railway construction in India.

1411. So that it could be obtained with exceptional cheapness at the present moment?—Yes.

Chairman.

1412. That extends to other materials, as well as iron, does it not?—Yes, certainly.

Mr. *Dalrymple.*

1413. You spoke of the system of mixed gauge on through lines as suicidal; do you think that there is any increased realisation of the suicidal character of that mixed system?—I think that the experience of working it has convinced them that their previous opinion was mistaken.

1414. Do the block of traffic, and the increased expense and trouble of transfer impress the admirers of the mixed gauge?—I think that it has increased the anger of their opponents.

1415. Is there any hope that the desirableness of confining the metre gauge to local railways will be acknowledged?—I should think there is; I think it would be unreasonable to ask that short local lines of from 30 to 40 miles should be made on the broad gauge.

1416. Do you think that those who were favourable to the metre gauge to the extent of having a mixed system even on the through lines, have changed their opinion?—I do not know. Perhaps I may ask what the honourable Member means by a mixed system on through lines.

1417. What I mean is, that those who were admirers of the metre gauge carried their admiration to such an extent that they did not mind having small portions of metre-gauge line even in the midst of an arterial line, thereby breaking up the traffic; do you think that the admirers of the metre gauge, as I asked you just now, to the extent of having breaks of line, have in any degree changed their opinion?—I must answer that by saying that I have not been fortunate enough to know any admirers of that system; but I may say that when Sir Richard Temple, who was the Governor of Bombay when the Rajpootana Railway was made on the metre gauge, addressed the Chamber of Commerce in Liverpool, he touched upon that point very gently, and acknowledged that there were two opinions about it; he fully expected that we who had to use the railway would be of a different opinion to himself. I may say that that is the only time that I have had the privilege of hearing any admirer of the metre gauge speak on the subject.

Mr. *Onslow.*

1418. Your remarks have been confined chiefly to the exportation of wheat from India by the further development of the railway system; I suppose that other articles of agricultural produce would probably be exported to a larger extent than they are at present?—Yes. I mentioned wheat as one article, but there are a great many others also. I do not wish to take up the time of the Committee by enumerating them.

1419. Would you mind stating to the Committee what other articles you think would be exported to a larger extent than at present by the further development of the railway system?—Oil seeds, particularly. The increase in oil seeds from 1880 to 1883 was from 1,702,000 to 4,000,000 cwts.; in 1881 it was 2,156,000; and in 1882, 3,199,000; and in 1883, 4,254,000 cwts.

Mr. *Onslow*—continued.

1420. From what part of India did those come?—From Central India chiefly, and from various parts of India; in fact, it is an article, I believe, of very general production; a great deal of it comes to England to the oil-crushing mills, but it chiefly goes to the South of France.

1421. Can you mention any other article?—There are a great number of smaller articles like myrabolams and shellac, but the principal article of export is cotton. I do not think that there would be any very great development in cotton, because that depends so much upon the American crop. Opium we know about. There would be an enormous development in rice if the Burmah Railway were made, and the financial department could take off the export duty. Oil seeds and wheat I have mentioned already, and the other principal articles are jute, hides, indigo, and tea. I think, arguing from the three principal articles that I have mentioned, you might very reasonably expect that there would be a considerable increase in the production of all those districts which are not yet served by railways.

1422. You stated just now that the natives of India adulterate the wheat; that is to say, they grow other seeds with it; but is it not the fact that the reason for that is, that in case there is a failure of the wheat crop, the other cereals might come up and might be productive?—No, that is not it. They bring the white wheat from one part of India, and the red wheat from another part. The white wheat is worth now 8 *s.* per cental, and the red wheat is worth 5 *s.* 6 *d.* They put into the mixture just a sufficient quantity of the red wheat as they think will be allowed to pass as No. 1 and No. 2 standard.

1423. But is that done by the natives; is it not probably done by the merchants in Bombay or Calcutta?—The native merchants do it. The native merchants buy the wheat from the producer, as they buy all other produce from the producer; then they bring it to Bombay, or some market, and sell it to European merchants.

1424. But that adulteration does not take place by the agriculturist?—No; it takes place in the handling by some class of native merchants. I cannot undertake to say who do it, but I know that what is shipped to me comes direct from the native merchant, and there I find this mixture.

Mr. *Edward Stanhope.*

1425. You spoke of a certain reduction of the Indian Engineer Staff that took place some time ago, and I think you assumed that the principle of the reduction was to diminish the permanent establishment, and that if afterwards it was desired to extend the construction of public works, the engineers should be employed for the particular contract?—I was not aware that that was the resolution of the Government of India on the subject.

1426. But would not that afford easy means of extending the option of the Government in constructing additional public works without adding to the permanent staff and the consequent pension?—Of course the Government could employ engineers for a particular purpose for one, two,

or

Mr. *Edward Stanhope*—continued.

or three years, in the same way that private companies employ them, but it has not been the custom to do so before.

1427. Would you state to the Committee what sum you think ought to be expended upon railways in the course of the next four or five years?—I am sitting here as the representative of the Liverpool Chamber of Commerce, and the Liverpool Chamber of Commerce consider that the amount of capital which could be economically expended by the Government should be left to the decision of the Government of India, who know more about it than any individuals or any associations.

1428. And, therefore, if the Government of India recommend 50 or 60 millions, the Liverpool Chamber of Commerce would approve of it?—We should.

1429. And you would then contemplate at the end of that period of four or five years a further large expenditure upon railways?—That would depend upon the circumstances of the time, I think.

1430. Looking ahead so far as that, do you think that the requirements of India in respect of railways would be completely met by an expenditure of 50 or 60 millions in four or five years?—I think that a reasonable time should be given for those railways to develop, or rather, for the traffic to develop, so as to pay the interest upon the 50 or 60 millions, before they went on to further enlarge the system; but it is impossible to say what might be the appearance of things five or 10 years hence. Most people in mercantile business who have expressed opinions 10 years before about what would take place 10 years afterwards, have found themselves so completely at fault after 10 years, that it is better not to express any opinion upon the subject.

1431. Let us take four or five years; do you imagine that if 50 or 60 millions, in addition to what is required for other purposes, were borrowed by the Government of India, either by themselves or through the agencies of companies in England, that amount could be got at four per cent.?—Yes, I think it could, with the chance of making five per cent. out of the earnings of the railway. I think it could be got easily.

1432. Supposing that the State were going to borrow money itself to construct railways, could it get the money at four per cent., do you imagine?—There is a question about that, because there is an abundance of four per cent. Government loans to be got already.

1433. Let us take four per cent. interest upon that 50 or 60 millions; that would be more than two millions a year?—Yes.

1434. And that amount would have to be provided out of the finances of India until the railways were in a condition to pay the interest upon the amount out of their earnings?—Precisely so.

1435. Are you sufficiently acquainted with the finances of India to say that it would be easy for them to provide two millions a year during the next four or five years?—I cannot say.

1436. How would you propose that they should provide it?—In the first place, by developing the country, there would be an increase in the land tax, which would be a very profitable

Mr. *Edward Stanhope*—continued.

source. If they got the railways into the districts which are uncultivated, or where they are unable to sell their produce, there would be a great rise in the land tax.

1437. But taking the time whilst the lines are being constructed, how do you propose that the Government of India should provide the additional two millions a year?—Out of the 2½ millions that they already have.

1438. Out of the 2½ millions that they will borrow?—But they have got a portion of that out of their revenue already, and they could borrow whatever is sufficient to make up the 2½ millions.

1439. Is it not the fact that it will almost always be necessary for them to raise the 2½ millions by loan?—I think if it was found to be necessary it would be advantageous, and no loss to the country to do so.

1440. Has it not been usually necessary to raise the full amount of 2½ millions by loan?—I think not; I think Mr. Cross will say that it has not; that you have balances of revenue which you have applied to it without exercising your borrowing powers to the full extent.

1441. Are you aware that one of the greatest difficulties of the Indian Government at the present time is the necessary transmission of 16 million pounds a year, or thereabouts, for the payment of their home charges?—Yes.

1442. And are you aware that every year, practically, that is a source of more or less anxiety to the Government?—Quite so.

1443. And you are also probably aware that for many years they have failed in being able to transmit the full amount?—I was not aware of that.

1444. That being so, would not the additional necessity of remitting two millions more very much increase the difficulty of the Indian Government in that respect?—I think it would be only half a million; and I would ask to what extent do you think that would increase the loss by exchange.

1445. I am not putting that at all; I start with this proposition, that the Indian Government has now to transmit 16 millions a year to this country for the payment of the Home charges, and if they borrow this sum they will also, in addition, have to transmit two millions of it?—Yes.

1446. Will not that enormously aggravate the difficulty which already exists in the way of the Government of India in transmitting that large amount to this country?—I think that is not treating the matter quite fairly, because in the first place we only propose that the Government should spend about 10 millions a year. In the first year they would want to send the interest upon 10 millions; in the second year they would want to send the interest upon 20 millions; and by that time perhaps the first 10 millions would be earning for itself.

1447. Do you seriously mean to tell the Committee that in the second year the 10 millions which were spent in the first year would be earning enough to pay 4 per cent.?—I am not going to make it a mathematical problem, but I certainly think that something would be coming from it.

 1448. I understand

Mr. *Gorst.*

1448. I understood you to speak about the export duty on rice from Rangoon; do you think that the amount of rice exported from India is seriously affected by the export duties?—I am not engaged in the export trade of rice myself, but I have had this from merchants in the East India and China trade with whom I am associated in the chamber of commerce. They say that it is a very considerable bar to the development of the rice trade. I think 10 or 12 years ago we represented to the Secretary of State the great desirability of removing that export duty, and he promised that it should be done whenever the financial position of India would allow of it.

1449. Are there any other products of India, the development of which is seriously checked by export duties?—I think not. I think there was an export duty on wheat not long ago, which has been taken off, but it was a great check. I think rice is the principal thing now.

1450. Have you considered the new plan of raising capital for railways by the construction of the works by companies for the Government like the Southern Mahratta line; have you considered that plan of raising capital for railway extension?—I have not considered it.

Sir *George Campbell.*

1451. I want to know whether you have had occasion to study the question, which are the districts which produce the bulk of the articles to which you have alluded, wheat principally, and oil-seeds; and whether there are now sufficient trunk lines to tap those districts without the addition of more trunk lines. Take wheat, for example; have you ascertained which are the principal districts producing wheat, or which might produce the wheat sent to England, or might produce more wheat?—I know it generally, but I do not offer any evidence about that. I say that that is a question on which the Government of India must furnish information.

1452. Have you formed any opinion as regards any particular trunk lines which are required other than those now existing?—The two particular trunk lines which the public would like to see made now are the Bhopal, Gwalior, and Cawnpore extension, and the direct line from Nagpur to Calcutta.

1453. Do I understand you to say that you are distinctly against the proposal which was made by the Great Indian Peninsula Railway Company that their line should be extended on the terms which they proposed to Cawnpore, but at the same time do you say that upon general grounds you think that this is a line that ought to be made?—I think so.

1454. If the Rajputana line was turned into a trunk line do you still think that between the line from Agra to Bombay, by way of the Rajputana line and from Allahabad to Bombay by way of Jubbulpur, there still is room for an intermediate trunk line, taking in view the whole of the interests of the country and of the Government, as representing the country, and owners of the existing trunk lines?—Looking at the map, I should say it is a line that is very much required. I have not any personal knowledge of the fertility or the population of that district, but it would be easy to draw a line from the proposed trunk line to the Great Indian Peninsula trunk line and to the Rajputana line, to see what the distance would be between the one and the other.

Sir *George Campbell*—continued.

1455. Are you aware that Cawnpore is a large grain market?—Yes.

1456. Have you studied the question whether the grain which is bought and sold at Cawnpore is principally east and west traffic, or whether the amount which now comes from Oude *viâ* the Oude and Rohilkund Railway to Cawnpore, and which would seek direct export to the sea *viâ* this new line, is very large?—We know very well what the Delhi wheat is, and that is the wheat which is grown about Cawnpore and Delhi.

1457. But Cawnpore and Delhi are a good many hundred miles from one another?—All the wheat which is grown in that district is a different kind of wheat to what is known as Bombay wheat and Southern wheat.

1458. Have you ascertained what proportion is grown in the Delhi district, and what proportion is grown in the Cawnpore district?—No; I do not know that.

1459. Then as regards the through line from Nagpur to Calcutta, you are aware that the wheat district is already tapped by a line of narrow gauge; have you any reason to suppose that there would be any very heavy goods traffic upon the line from Calcutta to Nagpur, and so through to Bombay?—I would fall back upon that answer which I gave before, that these are all questions on which local knowledge is particularly required, and that local knowledge should be got from the Government officials on the spot, who I consider would be very much more capable of judging than any private individual.

1460. You have not individually formed an opinion that that is a trunk line which is required?—No, I am speaking of that merely looking at the map.

1461. Looking at the map does it seem to you that a great trunk line between the two seaports of Calcutta and Bombay would, *primâ facie*, be a very necessary line, supposing that the intermediate country is not in itself one which would furnish traffic?—That is exactly what I said, that we should depend upon the local authorities for information.

1462. Is there any other trunk line which occurs to you as specially requiring to be opened?—No.

1463. Have you formed any opinion as to whether there is any great field for making branch lines from which those trunk lines may be fed?—Speaking from my local knowledge between Kandeish and the South Mahratta country, this I do know, that in the Belgaum, Sattara, and Kollapur districts it was most difficult when I was out there for the natives to get their produce to market, and that the making of the branch line of 50 or 60 miles through this country that they are making now, will open up a very rich district in communication with the trunk line of the Great Indian Peninsula Railway, and I assume that

Sir *George Campbell*—continued.

that the same would be the case in a great many other parts of India.

1464. You have no personal knowledge, have you, of the Gangetic Valley?—No, I have not.

1465. Knowing, as you do, that the population is very much larger, and the produce very much greater, in the Gangetic Valley than in the Deccan District to which you have alluded, I suppose we may assume it to be your opinion that if branch lines would pay in that country *à fortiori* they would pay in the Gangetic Valley?—Quite so.

1466. As regards the question of raising the money, are you aware that up to the present time it is the fact that the Government of India are able to raise money very much more cheaply by a direct loan than by guaranteeing interest upon little lines; is it not the fact that when the Government of India could easily obtain money in the market at 4 per cent., they were obliged to guarantee the railways 5 per cent., with the chance of an additional profit into the bargain?—I am not aware that that was so.

1467. Is it not the case that the Government of India can now borrow in the open market at 3½ per cent.?—The answer that I have written down to that question is, "or if public companies be allowed to take their earnings up to 5 per cent. before they begin to divide with the Government, then perhaps a trifle less than a 4 per cent. guarantee might induce English capitalists to construct the required railways." I was not aware of the fact that they could borrow money on their direct credit cheaper than through the guaranteed companies.

1468. Do not you think that the effect of this system of guarantee has been that the Government have, as a matter of fact, guaranteed money a good deal more expensively than they could have borrowed it directly?—I think when the Government guaranteed 5 per cent. at the origin of the railway companies they were paying 5 per cent. for their own loans.

1469. I think you alluded to your view that the Government might, with great advantage, open the treasuries to small loans, which the natives of India might be willing to lend at a reasonable rate of interest; had you in your time in India any knowledge of the system of open loans which once prevailed?—I do not think that that was done in my time.

1470. You are not aware that it was at one time the practice in India to maintain a system of open loans, under which those loans would take the place of savings banks in this country; and the Government were actually able to get money in driblets, those driblets amounting to a very considerable sum in the whole, at something even below the market rate?—I think that would be a very advisable thing for the whole country; it would give the people an interest in the Government, which they could not have without such a system.

1471. As regards military engineers, are you aware that a system is now introduced under which all the appointments are now open equally to civil and military engineers practically for the same pay?—I am.

Mr. *Samuelson.*

1472. You were asked by Mr. Stanhope as to the question of loss by exchange, and the increase in that loss which would arise if the remittances to this country of interest were considerably increased, but is it not the case that if large sums were borrowed in this country, a very considerable portion of those sums would have to be transmitted to India, and that, *pro tanto*, the balance to be remitted from India to this country would be very much reduced?—Quite so.

1473. And that would go on during the whole of the time that money was being borrowed in this country?—It would be a saving of the loss on exchange for so many years.

1474. A portion of the money, of course, would be spent in this country?—Of course.

1475. But the balance would have to be remitted to India?—Quite so.

1476. And just as that balance was greater or less, so the amount which would have to be remitted during that time from India would be less or greater?—I should say that that question will answer one that was put to me before. The gain by exchange, or the saving of the loss of exchange while that capital was being remitted, would quite compensate for the loss in the remittance of the interest from India, until such time as the traffic began to earn that interest.

1477. We will say that for five years there would be a considerable saving on the exchange?—Yes.

1478. And that after the end of that five years a turn would take place?—Yes.

1479. But against that you would have to set the earnings of the railways at the end of the five years?—Quite so.

1480. That would be a fair representation of the case, would it not?—It would be a very good calculation to make.

1481. You made a very broad statement with reference to the value of the rupee in India; you said that the rupee was worth 2 *s.* to the native; would you kindly explain to the Committee what foundation you had for making that statement?—I have this foundation for it, that when I was in India and drawing my pay from the Government, a rupee was worth 2 *s.*; it used to purchase certain articles, and it used to be worth so much for one's living. I went out again in 1879, when the rupee was worth only 1 *s.* 7½ *d.* I found that the rupee was then quite as valuable, and that a man could live in India as comfortably on 500 rupees a month, when a rupee was worth 1 *s.* 8 *d.* in England, as he did when the rupee was worth 2 *s.*, provided of course that he was satisfied with the productions of the country.

1482. Then it affects the productions of the country, but not imported articles?—Yes, not imported articles.

1483. As the consumption of imported articles by the lower class of natives is very small, they are not much affected by the increased price of imported articles?—That is so.

1484. Although you cannot account for it, you found that to be the case?—It is not only my experience in India, but it is my experience in France, where they have high protective duties on foreign articles. If you go into the interior

Mr. *Samuelson*—continued.

of France you can live quite as cheaply, because you would then only consume articles that are grown in the country.

1485. Perhaps you have some experience of Russia?—I do not know about Russia.

1486. In fact you consider that if a native is getting 180 rupees for cotton, whereas formerly he got 140, that that is not merely a nominal but a clear gain of 40 rupees to the native?—I would put it in this way, that if we had to go back to 2 *s.* per rupee, cotton for the last two or three years would have been worth about 140 rupees per candy, which would have limited the extent of the growth very considerably; but whereas they have been able to get equivalent to 180 rupees a candy, it has not interfered with the growth.

1487. But you consider that this 40 rupees is a clear gain to the native?—He does not know anything about loss by exchange.

1488. He would if he felt it?—He would if he felt it, certainly.

1489. He does not know it, because he does not feel it?—Just so.

1490. You stated that you were not able to say what was the cost of growing wheat in India, because it depended so much upon the difference of the soils; but we have been told that the agricultural department of India have estimated the cost of growing wheat at 20 *s.* per quarter; would you say that that was a full, or a fair, or an exaggerated estimate?—I should not express any opinion contrary to what has been said by the agricultural department of India. I should say that on a matter of that kind the statement of their opinion must be taken as the soundest that you can get on the matter.

1491. But if the average cost of wheat in India should be as much as 20 *s.*, you can scarcely expect that the price of 12 *s.*, which you named, could be anything else but a price which must be due to exceptional circumstances?—It is stated as a matter of fact that wheat was sold in the Bilaspur district at such a price.

1492. Do you believe that at that price it pays to cultivate it?—I should think not.

1493. Because after all the question of competition between India and other countries must ultimately depend, must it not, upon the price at which wheat can be grown?—That is a very difficult point to express an opinion about, as to what will pay the cultivator. If a man grows more wheat than is wanted in the district, he has no market for it, and the balance over and above what he can sell in the market is worth nothing to him, and he will be glad to get 5 *s.* or 6 *s.* for it; it is all profit.

1494. But would he continue to grow it if it did not pay?—He would continue to grow it for the requirements of the district; he must grow a certain amount of food for the district, for his own family, and for his retainers. According to my knowledge, what was done in those villages was this. Several families would own and occupy so much land which they and their families would work, and they would get people to help them, and would pay them back in kind, and keep them and feed them. In those outlying districts, the idea originally was not to cultivate for sale, but to cultivate for food for the villagers. Now a new system has come in, by the increase of railways, and they can sell their wheat in external markets.

Mr. *Samuelson*—continued.

1495. In fact if we were told that the average cost of the cultivation of wheat is 20 *s.* a quarter, that would apply rather to cultivation on a large scale; I suppose a cultivation specially for export, than to any surplus quantities which might be grown by native cultivators?—I cannot say how they arrived at it, probably by an average.

1496. You have shown distinctly that the exports have increased from India, and you have attributed that to the development of railways?—Yes.

1497. Do you believe that the exports have increased because less has been retained in the country, or because the produce of the country has been increased?—I think that the produce of the country has been increased. I think you may say that the two things have happened, less has been retained, and the produce has been increased.

1498. More is due to increased production, less relatively to the export of what was previously retained?—Yes, less relatively.

1499. You have no doubt whatever that the entire quantity of producing raised in India has been greatly increased by railways?—I have no doubt of that.

1500. And that, you believe, would continue if railways were further developed?—I believe so.

1501. You spoke about the low price of iron; are you acquainted with the prices of iron?—Only generally.

1502. Are you aware that the price of steel is less than one-third of what it was when the Great Indian Peninsula Railway was made?—I am aware of this fact, officially stated, and I was requested to convey the information by the Liverpool Metal Trades Association; that the price of steel rails now, which will last three times as long as iron rails, is the same as the price of iron rails five or six years ago.

1503. That would apply not only to rails, but also to bridges and all other work in which iron is used?—Bridges and viaducts have fallen in price, but I mentioned steel rails as an article of which the price has fallen more than of anything else.

Mr. *W. H. Smith.*

1504. You said that the East Indian Railway Company did not at all avail itself of the depreciation in the value of the rupee; are wages higher than they were?—I think not; but it is very difficult to answer a question of that kind about the rate of wages, because they vary so much all over the country. I may give you my own personal knowledge of what it was in 1856; the lower servants used to be paid six rupees a month in the interior, and before I left India in 1868–69 they were getting eight rupees a month; wages had then risen independently of any fall in the exchange, and I believe that they remain at about the same price now. Agricultural labour in most districts, as I said before, is not calculated in money, but in food.

1505. So

Mr. *W. H. Smith*—continued.

1505. So that you have no information to give on the question of wages, which would be of any value?——

Mr. *Kynaston Cross.*

1506. With reference to a question put by Mr. Carbutt about the engineers and Cooper's Hill, I think you said that if the same plan were followed there as that which was followed at the Poonah College it would be advantageous?—That is my opinion.

1507. Are you aware that Cooper's Hill is thrown open to the whole of the profession of engineers?—I saw that that was done lately.

1508. Are you aware that 13 appointments in the Public Works Department are made from amongst the most advanced and best of those students?—That is what I suppose should have been done.

1509. And if you were told that two or three students from there also were appointed to the Telegraph Department that would follow out our expectation?—Quite so.

1510. I think Mr. Fowler alluded to the break of gauge on the Oude and Rohilkund line, which I think you said you did not know anything about?—I do not.

1511. Are you aware that it crosses the River Ganges, and that the bridge is not yet made?—That would account for a break of gauge.

1512. And with regard to the terms of purchase, you said it would not do to fix the terms of purchase; do you know anything about the contract with the Bengal Central Railway?—I said those were matters of detail and of agreement between the railway companies and the Government, and that it was merely a matter of opinion whether it would be desirable or not to put in a condition that the Government should have power to buy it after a certain time at any given sum.

1513. That is a matter of detail which you would not like to make a recommendation upon?—Not at all.

1514. I think you said that there would be a very great advantage in the development of the growth of products in India because the imports would go in British ships, and the return in British goods, which is not, you said, the case with the greater part of the rest of the world?—Yes, I said so.

1515. Would you elaborate that answer a little; just tell me in what way we send our returns to the rest of the world other than the manner in which we send them to India?—I think that is a consideration or a problem which the Government might very well institute an inquiry about; it is getting into a very large question. There are two ways of making our remittances to the rest of the world; one by produce, and the other by stock exchanges and bourses. If we have to remit 20 millions to America, and they do not take it from us in goods, they may buy their own shares here with their 20 millions; you cannot tell how those balances are settled between country and country unless you have the returns of the bourses as well as the transactions in goods.

1516. But is it not the fact that the exports from this country to India, to balance the imports

Mr. *Kynaston Cross*—continued.

which come from India, are paid to a considerable extent in silver and in gold?—They are.

1517. You would not call silver and gold British goods?—No.

1518. Is it not the fact that we send, in proportion to our trade to India, more silver and gold in return for the articles that we get from there than to any other country in the world?—I know that we send an excess over and above drawing 16,000,000 *l.* a year; during the last five years, nearly 15,000,000 *l.* of gold was imported into India.

1519. Do you know how much silver?—I do not know exactly how much silver.

1520. So that really our import trade from India is to a large extent balanced by the exports of the precious metals from here to India?—To a great extent.

1521. Do you think that the great development of any trade in cereals, which one might hope for by the development of railways, would necessarily be balanced by the exports from this country?—I think it very probable that the return would increase the exports from this country in addition to the exports of gold and silver; I cannot say that it would do so to the full extent.

1522. You base your request for a greater extension of railways in India on the great increase in the export of wheat in the last few years; you said that from 1878-79 to 1883-84 the increase had been from one million hundredweight to about one million tons?—Yes, about that.

1523. I daresay you are aware that shortly before 1879 there was a very much larger export of wheat than in that year?—I have not gone back to that.

1524. Would you be surprised to know that in 1878 there were 6½ millions hundredweight of wheat exported, because I think you said that the wheat trade was hardly known before 1879, and that is what I wanted to bring to your mind?—What I said was that the wheat was hardly known to the millers who use it in this country.

1525. We are not speaking of the question of millers, we are speaking of the question of the export of wheat from India, and I want to ask you whether you know that in 1878 the export of wheat was 6½ millions hundredweight?—I have not gone back to that period.

1526. Then I think you said that there was an enormous increase in the export of rice?—Yes, for some years.

1527. Are you aware that in 1873 the export of rice was the heaviest export from India, except in the last two years?—I did not know that; I have not gone into those remote figures.

1528. With regard to seeds, I think you said there was also a very great increase in the export of seeds?—Yes.

1529. Are you aware that the export of seeds in 1876 was the heaviest export on record except 1878?—I was not aware of that.

1530. Do not you think that these facts rather bear on the case when you say that it is the late development of railways which has caused the great export of produce?—It bears upon the question, certainly.

 1531. Has

Mr. *Kynaston Cross*—continued.

1531. Has it an important bearing?—Yes, it has an important bearing.

1532. Then I think you said that the cost of the carriage of wheat on the North Indian Railway was equivalent to 1 *s.* 9 *d.* for the same quantity and the same distance, as would be charged about half the price on an American Railway?—That was said in a letter which I read.

1533. You spoke of the price of wheat at Bilaspur in the Central Provinces; you said that some years ago it was 6 *s.* a quarter, and that it was now, from the approach of railways, very much higher in price?—It is double.

1534. But you also said that wheat was never conveyed by cart for more than 50 or 60 miles?—I do not think I said that. I said supposing it was carted 50 or 60 miles. I think that observation came in with reference to the feeders to the railways.

1535. Do you know how far Bilaspur is from any railway station at present?—I have not measured it up. I know that the railways do go down into the Bilaspur district.

1536. Do you know that the railway is 130 miles from Bilaspur at the present time?—I do not know. From Bilaspur it might be 130 miles, but there is a district of Bilaspur, which extends towards the railway, and which perhaps will feed the railway. I am taking my statement from the official report.

1537. You spoke about the price being much higher now than it was?—For the reason that the railways have extended in that direction.

1538. If you were told that the price of wheat in the Central Provinces in 1878-79 was 8 *s.* 3 *d.* per cental, and it was 4 *s.* 2 *d.* per cental in the year 1882-83, would that at all bear out your ideas of the increase in the price of wheat?—No; it would militate against the argument.

1539. With regard to the price of other grains, you would argue that in the same way?—Yes, I would apply it in the same way.

1540. In fact, it would rather go to prove that it was not from the approach of railways that the price had fallen so considerably, but it was the greatly increased crop?—That might be so; probably it might be the two together.

1541. Would there be any other reason?—It would have been worth nothing at all if there had been no railway there.

1542. Then the advance in price which you thought had taken place by the railway, of course has not taken place by the railway?—If I had known that I was to have been cross-examined in this way, I should have said, assuming all things to be equal.

1543. But we are not assuming things to be equal; we are inquiring into facts?—This we do know for a certainty, that when there is a good crop in India, and there are no means of transporting it to market, the balance over and above what the natives want is worth nothing.

1544. Then I think you said that you are willing that the Indian Government should spend 50,000,000 *l.* or 60,000,000 *l.*; you think that they would be justified in spending from 50,000,000 *l.* to 60,000,000 *l.* in a few years?—I said so.

1545. Making altogether in five years an expenditure of 12,000,000 *l.* a year?—About 10,000,000 *l.* a year, I think.

1546. £. 10,000,000 a year for five years would be 50,000,000 *l.* sterling?—Yes.

1547. Considering the increased amount of home charges, because the money would principally be borrowed in England, it would be 2,000,000 *l.* a year at the end of the time.

1548. And I think at the same time you said that you would not recommend the building of railways unless they would within five years produce such an amount of revenue as would discharge the indebtedness incurred on their account?—No, I think not. I said when there was a reasonable prospect of their developing in such a way as to pay it; but I would not limit the construction of railways to such lines as would pay the guaranteed loan immediately the line was constructed.

1549. What time would you give for such development?—It ought to begin to yield after the first year two per cent, and in the third year three per cent., and four per cent. in the fourth year; that is as much as could be expected.

1550. Have you had any experience of railways which have been constructed within the last 10 years?—No, except the large lines.

1551. Would you divide the branches, and have them independent of the large lines?—I should take the Great Indian Peninsula published accounts of what the receipts have been upon that large line.

1552. They have materially increased in the last four or five years?—That line has been paying what I call a fairly reasonable rate of interest during the last five or six years, and the tendency of the Government has generally been that of reducing the rates to the people who use the railways.

1553. What I want to ask you about is not so much the Great Indian Peninsula and the large trunk lines, but do you know any of the lines which have been opened within the last 10 years, and which, within five years from the time of their opening, have paid as much as 4 per cent.?—I question whether any of them have; but that is a branch of the subject which I only know as an ordinary member of the public.

1554. When you stated that you would not make lines unless they would within four years pay a reasonable rate of interest on the amount which we have to incur in order to enable us to make them, you base your idea upon this, that you would receive dividend within those four or five years?—I think I said that that was one of those questions which the Government of India ought to advise the Secretary of State upon; and that they should advise lines through districts in which railways should be constructed, after having collected information which would satisfy them upon that point.

1555. Supposing that the Government of India having before them the absolute certainty that few lines that have been opened within the last five years have paid so much as 5 per cent., would you say that the Government of India were justified in estimating that the lines which they would make in the future would pay more than 4 per cent.?—I should not like to criticise such an authority as the Government of India.

1556. If,

Mr. *Kynaston Cross*—continued.

1556. If, in looking through the list of railways which have been made by the Government you found that few of those which have been opened within the last five years pay as much as 5 per cent., would you not then venture, being in the position of the Secretary of State, to criticise the recommendations of the Government of India?—I think I should be inclined to call for further information.

Mr. *Carbutt.*

1557. Mr. Cross made a statement about the export of rice, that it had been larger in 1873 than it has ever been since, except the last two years; was not that the year when there was a famine in India, or the anticipation of a famine?—I do not know that.

Sir *George Campbell.*

1558. You have had a good deal to do with this question of rates with regard to the Great Indian Peninsula Railway; have you thought of any method by which, supposing a new Trunk line were made from Cawnpore to join the Great Indian Peninsula at Bhopal, and from Calcutta to join with the Great Indian Peninsula at Nagpur, the Great Indian Peninsula Railway could be prevented from charging exorbitant rates upon the new traffic?—That is just one of those points on which I think the Government of India ought to have control over the railways to settle the question.

1559. You are aware that at present the Government have not the control of the Great Indian Peninsula Railway?—Yes, and I think that is a very good reason for including it in all future agreements with railway companies.

Major General J. S. TREVOR, C.S.I., R.E., called in; and Examined.

Chairman.

1560. CAN you inform the Committee what connection you had with railways when you were resident in India, and of what Indian railways you are now a Director in England?—I joined the Railway Department in 1855, when I was a lieutenant in the Royal Engineers, as assistant to the Consulting Engineer in Bombay, and I have been connected with railways ever since, and I wound up my career in India by being Director General of Railways. Now I am connected with the Bombay and Baroda Railway Company, and I am a Director of the Southern Mahratta Railway, a Director of the Rohilkund and Kumaon Railway Company, a Director of the West of India Portuguese Railway, and a Director of the Bengal and North Western Railway.

1561. Will you state to the Committee the respective positions at the present moment of the guaranteed railways and of the State railways in India; as a rule, are the former not entirely the possessors of the great trunk lines, while the latter may be more correctly termed feeders?—Yes, that is the case, except in the Burmah State Railway, to which there is access by sea at Rangoon.

1562. That is the rule, although there are exceptions?—I do not know of any other exception than that of the South Mahratta Railway, which is a guaranteed railway.

1563. I take it for granted that you are opposed to a narrow gauge being made on any trunk line; and if they are made they should be continued as subsidiary lines which feed the main lines?—I am opposed to a break of gauge. I think that a great mistake was made in making the Rajpootana Line on the metre gauge; but now it is made I think we ought to make the best of it. So far as break of gauge goes, it is often the case that you do not derive any advantage from it, even if it is a branch of only very small length.

1564. Even if it may be properly described as a feeder?—Yes, even if it is a short feeder it is a very doubtful case. When I was in India we

Chairman—continued.

worked it out in one or two cases, and we found that the loss on the working expenses more than covered the saving by difference of gauge.

1565. When you say you worked it out, and it more than covered the difference, will you tell the Committee what the facts are, so as to guide the Committee to a decision in this matter?—The only case which I can refer to now particularly was in Northern India. A line was proposed to be made from Cawnpore to Kalpee; that was a railway which was intended as a feeder. There was no proposal at that time to carry it on towards Jhansi. The construction of that feeder was intended to have been on the broad gauge, and if we had worked it as part of the East Indian Railway system on the broad gauge, the difference of working expenses, if between such working and working on the metre gauge, was so considerable, that the line brought out better results on the broad gauge. Then I think I may mention this. By making the feeder on the broad gauge we could run it on a straight line into the East Indian Railway, and the length of the railway was shortened in consequence. But if we had had to make it on the metre gauge we should have had to run into the centre of traffic at Cawnpore, and this made the relative position that if we built on the broad gauge, we should have 25 miles to make, and if on the narrow 35 miles.

1566. So that on the whole you may be said to be opposed to the making of metre gauge lines?—No, I cannot say that. I should not like to say that I am altogether opposed to it.

1567. How far would you go in that direction, because you say that in the case of feeders to the main trunk lines they might be made upon the broad gauge?—Only in the cases where the broad gauge and the metre gauge are not connected together, otherwise you must have a break of gauge, and that is very inconvenient.

1568. But there may be parts of the country, such as the Mahratta country, where it would be proper to make metre lines only?—The Southern Mahratta system goes on to the port of Marmagaon,

Chairman—continued.

and I do not see any objection to its being made metre gauge. In Burmah the metre gauge has been a distinct advantage, and in Northern Bengal also.

1569. Taking it for granted that the old lines cost far more than they ought to have done, from the inexperience of the Government, and other causes; do you think that private companies can now build lines quite as cheaply as the Government?—I do not see any reason why they should not; I am talking of the guaranteed railway companies that exist.

1570. Do you think that it would have been better if the Government had encouraged the companies to build feeders to their respective systems, instead of building those feeders themselves?—Yes; I think that the Government have needlessly discouraged companies that wished to undertake those feeders.

1571. Could you give the Committee instances to prove that?—The Bombay and Baroda Company wished to have extended their line to Rutlam, and would have done so if difficulties had not been thrown in their way. Then there was the little line to Raimud, on the Sohade, Punjaub, and Delhi Railway, which was one of very great importance, but it was never sanctioned until lately.

1572. Were both of those extensions discouraged by the action of the Government?—The Government discouraged any extension of the guaranteed system.

1573. In what form did that discouragement take place?—They refused to sanction any proposals to make them from guaranteed funds.

1574. How was the money raised eventually in that latter case?—The money was raised by debentures; it was not raised upon shares.

1575. The Government interposed such obstacles that in one instance the extension was not carried out at all; and in the other case a delay occurred; is that so?—Yes; the Raimud line has only lately been completed, and in the other case part of the Baroda Railway scheme was carried out after a good deal of correspondence.

1576. Can you give the Committee any information regarding the sums set aside for making, what are called productive and protective State lines in India?—When I was in India there were 2,500,000 *l.*, or 250 lacs, assigned to productive public works, and out of that I think about two-thirds, or 184 lacs was spent in railways.

1577. Have you formed the opinion that the development of State railways will require such a large sum that few, if any, new lines could be afforded out of the resources of the Government?—With those 184 lacs, which was all that was assigned for State railways, we had to spend money in developing the lines that were then existing; we had to buy stock as the traffic increased, and also to undertake little branch lines, which the provincial governments guaranteed interest upon, so I could never see my way to carry out any new big undertaking at all.

1578. Will you give the Committee the benefit of your opinion in what manner the grants to railways should be allowed; under what heads of expenditure they should be divided?—The money allotted came principally from the Productive Public Works Grant. The protective

Chairman—continued.

public works, intended to be taken out of current revenue for the year, never came into operation when I was out there. Besides these two heads the guaranteed railway companies provided all funds needed for the improvement of their lines. Then the native chiefs made their lines, and the local governments did the same, out of local funds. The Government of Bengal made one line out of their provincial balances. The Government of India used to find funds for the little salt railways, for the East Indian Railway Company, for the frontier railways, and also for the little bit of the Bhopal Railway which was in British territory, about 12½ miles long.

1579. Did the expenditure upon the first two of those heads which you have described generally prove remunerative; do those railways pay their interest?—They are beginning to pay their interest very well on the whole. When I left India the Rajputana line was not paying, now I believe it is paying very handsomely. They had only just completed the link to Bombay when I left India.

1580. Do you advocate a very large and sudden increase of expenditure in making new railways in India?—No.

1581. Do you think that any expenditure should be proceeded with very cautiously?—Certainly, so far as making new lines is concerned. I think there should be every caution used, unless you intend to involve the railway system in loss.

1582. Great spasmodic efforts in that direction would probably, in your opinion, lead to waste and loss to the railways themselves, and the investors of money in Indian Railways, the general public, would disapprove of them?—Certainly.

1583. We have been told that with few exceptions the leading lines are now made; do you think that there are many openings left, and now that the great trunk lines have been made, that private enterprise is likely to find profitable investment in other lines?—Very few, I think. There is the Chittagong line, with an extension to Assam.

1584. Could you mention any other lines to the Committee which you think might be undertaken by private enterprise?—There are not very many lines now which are not already taken up.

1585. You think the chief companies should be encouraged to make new branches themselves?—Yes. I think that the railway companies should be encouraged to put in any extensions of their lines that they think desirable; and, in the same way, I think that Government should make feeders or extensions of the State railways; such feeders will always pay.

1586. But you would have that done gradually without fixing upon any great plan for extension?—Certainly.

1587. Do you think that there ought to be any hard-and-fast line laid down by the Government upon which branch lines are to be encouraged?—You cannot lay down any hard-and-fast line. My impression is that private companies should be called on to provide the capital, to pay out of capital interest during construction, to pay for land, and to quote low rates for the carriage of certain articles of produce,

Chairman—continued.

duce, and that the Government should, in return, after the line is completed, agree to make up their dividend to a rate to be defined for a fixed number of years, any advances made by Government for interest being refunded when the earnings of the line exceeded 5 per cent.

1588. Would you continue to the Government the power of purchasing the line after a term of years?—Yes; say at 25 years' purchase of the income, after 25 years; very much the same terms as have been put down for the Bengal and North Western.

1589. We have had a good deal of evidence with regard to the dual control exercised by the Government through its officers with regard to railway companies. Some of the witnesses have told us that they thought that the Government exercised too much control, and we have been told to-day that that control might, so far as the interests of the public were concerned, be very beneficially increased; have you formed any opinion upon that point?—I think that during the construction of the railway the control of the Government in India is, on the whole, beneficial. The railway directors here are practically in the hands of their agent out in India, and they have to depend on him for all the information that they get, and if we get Government officers supervising the line we get a kind of independent supervision of the whole concern, and the directors have an opportunity of hearing what is going on from two sides.

1590. Do I correctly understand you to say, that you would limit the control to the construction of railways?—No; after a line is completed, I think that the Government should do as they do at the present time, fix certain maximum rates, and then allow railway companies to work within those maximums, in the manner they deemed most beneficial to the railway. I feel that there is not too much supervision of that kind, and I think that the presence of the Government directors on the boards of the guaranteed companies is a great help. They bring knowledge to us from all the different companies, and their information is very useful.

1591. Mr. Coke said, I think, that he was of opinion that when a railway paid from 6 to 7 per cent. profit, the Government might then be allowed to step in and reduce the maximum rates; is that your opinion?—Under the present contracts with the guaranteed companies, Government are allowed to reduce the rates when net earnings exceed 10 per cent., but none of them have reached that, and the power has never been exercised. I believe that in England there is some right of that description, that if dividends exceed a certain amount, the companies may be called upon to reduce their rates.

1592. Looking to this matter of railway management in India from that point of view, do you think that it should be more concentrated so as to ensure greater uniformity of system?—Certainly, I consider it of very great importance that the railways should be managed as much as possible together, that wherever lines are mainly feeders of systems, they ought to be managed as part of such systems. There are a great many hindrances to passing goods from one system to another, and all this causes trouble and

Chairman—continued.

confusion, and therefore the less you have of it the better.

1593. Do you think that there is great need for reform in the Indian railway management?—I do not know that there is great need for reform in the management, but I think concentration is the direction which reform should gradually take.

1594. Have you any other suggestions in your evidence in chief which you would like to make to the Committee?—No; but I should be happy to answer any questions which the Honourable Members may wish to put to me.

Mr. *W. H. Smith.*

1595. Can you give the Committee your opinion as to the advantages or disadvantages of the management of traffic by companies as compared with the management of traffic by the Government on Government railways, both Government railways and companies' railways, so to speak, having been under your control in India, have they not?—Yes, I have had to deal with both of them.

1596. What are the advantages of companies compared with the Government, and the Government as compared with companies, in the management?—I do not know of any very great advantage where the Government railways are managed in a proper commercial manner; but occasionally they are not so. I think when I was there a good deal of what I thought defective Government management arose from the State railways having just been completed. We were just finishing some of them, and we had to start working with a staff practically the refuse of what we could pick up from the guaranteed lines. I am not talking of the heads of departments, but of running and station staff, and this led to a good deal of complication; but now that the Government have got an experienced staff the the management is, I believe, as good as in most of the guaranteed railways, and in some cases I believe it is better.

1597. So far as regards the object of developing the resources of the country is concerned, is the Government management better or worse than the companies' management?—I should say there was very little difference between the two.

1598. The interest of the company is to obtain the greatest amount of traffic possible, and to give facilities for the carrying of the traffic?—My experience does not bear that out altogether; but if you work State railways as other commercial enterprises, I do not think that any Government management would give greater facilities than guaranteed companies, unless Government were prepared to make sacrifices of money. The great point in every railway is to make the most money it can, and the railway rates have to be regulated on that principle. Some articles of produce, such as wheat, you have to quote for at very low rates, just a bare margin of profit; for others, you can demand more, and those principles must regulate the traffic rates on Government railways as well as those of companies.

1599. Are there different principles applied to the management of State railways, as compared with those which are managed by private com-

Mr. *W. H. Smith*—continued.

panies?—No; I think we adopted the rules and rates which we found most suitable, and guaranteed railway companies very much followed out the same system; of course, the rates are not the same, but the rules do not materially differ in State or guaranteed railways.

1600. It is conceivable that there might be a very different set of principles operating with the managers of State railways from those which were followed in managing private companies?—I do not think there would be any difference in the managers, but I think there might be a difference in the Government. I think the Government might decide matters from points of view quite unconnected with the railway.

1601. Has there been any attempt to lower the rates?—Not yet, but it is quite likely to come in the first famine.

1602. That is to say, it is quite probable that on the occasion of famine, the Government might direct State railways to carry traffic at a lower rate than a private company would carry it?—They might order them to carry at a rate which would not pay the expenses, and they could not give that order to a guaranteed company without making good the loss. In one of the famines, the Government ordered one of the railway companies to carry goods at a very low rate of freight, but the difference between that and their published rates the Government made good.

1603. That course indicates perfectly well what the Government would do if a famine occurred in a district traversed by a State railway?—Yes.

1604. You argue from that, that the Government would be induced to order its own servants to carry at a rate which would not repay the cost of conveyance?—Yes; I think that the interests of the railway would be sacrificed to the general interests of the public.

1605. Then coming to the future construction of railways in India, it has been stated that the action of the companies depends upon the policy which the Government think it right to pursue?—There is room in building railways for both guaranteed companies; I think that if the guaranteed railway companies will build feeders to their systems or extensions they should be allowed to do so, raising money on debentures. I believe that the last 3½ per cent. debentures were floated by the companies at 99; Government 3½ per cent. loan is, I think, about 2 or 3 per cent. premium; this measures the difference of cost. As a good many guaranteed companies pay surplus profit, they would share in any loss of interest during construction. Government should build lines themselves also.

1606. You think that a guarantee in some shape is absolutely necessary in order to procure the construction of railways in India?—I do not think that any of the railways yet to be built would pay sufficient to induce the British public to go into them; if the public go in I think they would be bitten. The two best lines I know of in India are the two which have been taken up by the Eastern Bengal and by the Bengal North-Western Railway Companies. They are both lines very easy to construct; they run through populous countries, and if there is a chance of any new railway company, those two have it.

Mr. *W. H. Smith*—continued.

1607. Witnesses who have been before the Committee have expressed the opinion that the Government should not be asked either themselves to construct a railway, or to guarantee a railway which would not pay at least 4 per cent. interest on the capital employed upon it when it got to work; is that your view?—No. The Government have to make railways for the development of India, and they must bear certain risks in carrying out the work, or else they would leave the poorer parts of the country entirely without a railway; but I think that the Government should proceed quietly in carrying out lines in unproductive districts, bearing in mind the risk they run of loss.

1608. You are of opinion then that those which you have spoken of as being protective railways, will not for some time to come pay an interest of 4 per cent. upon the capital outlay?—Some have paid 4 per cent. interest on their cost very soon, others will be longer about it. There is a difficulty in giving an opinion about the productiveness of railways. Quoted statistics of traffic are very seldom worth the paper on which they are written.

1609. You place no reliance on the estimates of the probable productiveness of the railways which were spoken of as protective railways?—Excepting that if those protective railways go through populous countries, and are cheap to build, then in all probability they would pay.

1610. But notwithstanding that you would advocate the making of railways in India at a reasonable rate of progress, what would you call a reasonable rate of progress?—I think the present amount is about 1,800,000*l.* a year, besides what is spent on guaranteed railways, and the East India Railway, I think, if you exclude completed State railways in the same way as you exclude guaranteed railways, and the East India Railway, and also exclude feeders of those railways that must pay, the 1,800,000*l.* now allowed ought to be sufficient for all new lines.

1611. You think that the expenditure of 1,800,000*l.* a year upon the construction of new State railways in India would be sufficient?—Exclusive of lines that are made as feeders to existing systems, and in addition to what you could get made by private companies or guaranteed companies.

1612. That seems to include a great deal, does it not, because you propose that the Government should still guarantee the capital on railways which would not be productive?—No, I do not say that; I think I must have been misunderstood.

1613. You advocate the construction of railways by companies which were not guaranteed?—Yes.

1614. You say at the same time that very few railways remain to be constructed which would be productive?—Those two statements I intended to qualify one another. There are very few places left in which you could give a guarantee with any great advantage. I do not see any use in guaranteeing a company to construct lines over a country in which they will earn but very little.

1615. In other words, there are very few districts in India in which they would be profitable?

Mr. *W. H. Smith*—continued.

profitable?—Precisely so, but there are several constructed by the Government which will yield a pretty fair return as feeders to existing lines; but as regards independent lines it is a question of years when they will pay; it depends upon the country.

1616. You advocate the construction at a cost of 1,800,000 *l.* a year of these unprofitable lines, for the sake of developing the country?—I have mentioned that figure simply because it is the present sum, but I am not clear you should go as high.

1617. You would not spend so much as that, I presume?—I am not in an official position, and I should not like to express an opinion.

1618. Do you consider that there would be a public advantage in the construction of those railways, for the development of the country and the protection of the country from famine, more rapidly than the sum of 1,750,000 *l.* would permit as a capital outlay; would you consider it right to apply any portion of this 1,750,000 *l.* as interest for the payment of capital raised by companies?—No; but the scheme of construction which I mentioned would cost considerably more than 13½ millions, because feeders and improvements of existing lines would be all additional.

1619. As parts of the existing systems?—Yes, as parts of the existing systems.

1620. So far as the past practice of the Government is concerned, you would reverse the policy of discouraging the extension of guaranteed lines?—Yes.

1621. You would say that the old lines of railway should be encouraged to extend their systems?—Yes.

1622. With capital raised by debentures?—Yes.

1623. Of course those debentures were guaranteed by the Secretary of State in Council?—Yes.

1624. It is another form of guarantee, is it not?—Yes, it is another form of guarantee, but it does not involve any future increase in the share capital. If you raise the money on shares, the Government have got to buy them at the end of the lease at the average price of the previous three years; therefore, as traffic develops, and the shares go upwards, the higher the price Government to pay.

1625. Will you explain the difference between a guaranteed debenture of 3½ per cent. for the construction of a feeder to an existing railway, and the guaranteeing of an interest of 3½ per cent. on the capital of a new company to make that feeder?—The difference is that the interest upon the debentures of a guaranteed company has to be met out of the revenue of that company before a dividend is declared, and if the company is earning a surplus profit, the Government only pay half the interest on the cost, because the shareholders pay the other half.

1626. Still the Government is liable for 3½ per cent.?—If you take the instance of the Baroda Railway for once, last half-year, we cleared our guarantee for both halves of 1883; but if we had built a feeder costing 200,000*l.* or 300,000*l.*, we should have had to meet the whole of the interest on that sum out of our surplus revenues, of which half belonged to the shareholders, and the other half to Government.

1627. The Government would only have lost one-half of the profit?—Yes; they would only have had to pay half the loss occasioned by the new line.

Mr. *Samuelson.*

1628. Unless a railway company thought that they would obtain some profit from making a line upon debentures, I suppose they would not make it?—Certainly not.

1629. Then if they did make a profit, would not that enhance the value very much?—Yes, in time; but in the interval they had incurred the risk.

1630. If it enhanced the value of the shares, and the Government bought the line at the end of a given term, they would have to pay an increased amount, would they not?—The construction of a line by a railway company would not enhance the value of the shares a bit more than if the branch had been made by the Government as a State railway, because the construction of a branch only enhances the value of the trunk line inasmuch as it brings traffic to it, and the State railway would have answered the same purpose; the company would have run no risk in the construction, whereas, if they constructed the feeders by debentures raised upon their security, they would have run the risk.

1631. If they thought they were going to run any risks, they would not construct the line on that principle, I suppose?—If they thought so; but of course people occasionally take risks in all businesses, and if they take the risk they only do so in the hope of succeeding.

1632. If the risk were considerable they would not do so?—Certainly not; they would never construct unprofitable feeders.

1633. Therefore you may say that, in the long run, they would only undertake such lines as would advance the value of their shares?—Certainly.

1634. For which the Government will ultimately have to pay if they take advantage of the purchase clauses?—Yes, but that price would not be heavier than if those feeders had been built by the State.

Sir *George Campbell.*

1635. You have had very great experience both in your official position in India as Director General of Railways, and as a director in this country of many Indian railways; at the present moment are there no trunk lines which you, as an individual, are prepared to recommend as lines which ought to be made?—From my knowledge of the country, I think that a line from Bhopal to Cawnpur *viâ* Jhansi is about as good a line as you can make, and about the most profitable, but you can hardly call it a trunk line.

1636. What I want to know is this: take the railways existing from the Gangetic Valley to Bombay, viz., from Allahabad by way of Jobbulpur, and from Agra by way of Rajputana, and supposing that we got rid of the difficulty of break of gauge, by introducing the broad gauge upon the Rajputana line, would you still think

Sir *George Campbell*—continued.

that there was room for an additional through line from Cawnpur?—Yes, certainly.

1637. Without any detriment to the public interest, taking into consideration the existence of those other two lines which are owned by the State?—Yes. Certainly, I do not know anything about America, but I always look upon the position of Calcutta and Bombay with regard to the North West Provinces as very much the position that New Orleans and New York hold in connection with Chicago. I do not know that you would consider lines to those ports in active competition.

1638. You are aware that in America a great many people hold that the great through trunk lines have been overdone, and are cutting one another's throats?—People have said so, and I daresay it is so, but there are four of them if I remember rightly.

1639. In America is it not the case that however the shareholders may suffer, the public benefit?—Yes, certainly.

1640. Would not the case be materially altered when the position is what we have in India, that the Government already have two trunk lines from the Upper Gangetic Valley to Bombay, and it is proposed to interpose a third?—The only places that the traffic can compete are the terminals at Agra and Cawnpur, but there is a great deal of country between Agra and Cawnpur and the Great Indian Peninsula Railway.

1641. Is there a very great traffic in the country between the Jumna, Bhopal, and Scinde?—Personally I am only acquainted with the line between Agra and Gwalior, and that is an unbroken sheet of cultivation, and I am told it is an unbroken sheet of cultivation also between Jhansi and Cawnpur. I believe the valley of the Betwa after you get into it, after leaving Bhopal, is not bad; some parts of it are poor; but the only very poor part of the district is between Jhansi and Gwalior.

1642. Is not the whole line from Gwalior to Bhopal through a comparatively poor country?—From Gwalior to Jhansi it is poor, and from Jhansi to Lalitpur it is not very rich, but it is not bad.

1643. Is it not a narrow valley, with hills on either side?—Not that I know of; I have not been over that country, but I have read reports about it. Perhaps you know the new line goes through Bhilsa; Bhilsa has rather a large grain market for that part of the world.

1644. And tobacco too, has it not?—I cannot say.

1645. Is there any other line that you think ought to be made?—I did not come here to advocate any line in particular; there are several which I should like to have made, but I do not know that I have any particular feeling in favour of one line or another.

1646. I merely want to know what other lines you think India most requires?—I should much prefer leaving that kind of question to be answered by the Government of India for the time being, because I really do not know. I think that a line towards Assam would probably be very useful towards developing the country; but I should look at the fact that you would have to construct it with the knowledge that it would not be producing adequate interest for several years.

Sir *George Campbell*—continued.

1647. Have you formed an opinion in the case of the direct line from Calcutta to Nagpur, whether that is a line which ought to be made?—I do not believe in any line between Calcutta and Bombay, but I believe in the extension of the railway going on from Nagpur towards the Chatisgarh district as far, probably, as Bilaspor. It may go a little farther than that, and bring a good deal of traffic, but the greater portion of the receipts of that line will appear in the returns of the Great Indian Peninsula Company.

1648. Are there any districts specially liable to famine which you think still require that railways should be made, and in which the risk of famine is such as to justify railways being made?—I suppose Bundelkund is about as fit a country as any.

1649. You think that for the purpose of saving the country from famine, the Bundelkund Railway ought to be made?—Yes; most of the other districts have been dealt with. You are aware that the Southern Mahratta country in the Bombay Presidency is being opened out into railways.

1650. You said just now that supposing a line such as the Chatisgarh line were made, most of the profit would go to the Great Indian Peninsula Railway?—Yes.

1651. I understand you to be of opinion that a very large number of branches of existing lines might with advantage be made?—Yes.

1652. And you think that with the existing lines and with the guaranteed companies, it is best that the guaranteed companies should be allowed to extend their lines and form branches?—If they will do so.

1653. I want to know how you are to get over the difficulty that most of the profits of those extensions will go to those guaranteed lines. Take the Great Indian Peninsula Railway as an example; how does the Government of India stand with regard to the rates and charges upon the Great Indian Peninsula; you see that when a railway exceeds a 10 per cent. dividend the Government under the contract can step in and lower the rates; but there is at present a maximum rate fixed, is there not?—Yes, a very high one; but it is never worked up to.

1654. Is it practicable that within that very high maximum rate the Great Indian Peninsula and the other guaranteed railways are entitled to charge a very high rate, which the Government have no power to control?—Yes, that is the fact.

1655. And you cannot prevent their taking advantage of a famine in order to charge those very high rates for corn to the famine districts?—They can charge any rate; but the Government can reduce the rate to the public by making good the difference.

1656. But you cannot prevent the railway from taking advantage of the necessities of the public in time of famine to charge a very high rate for their own profit?—You cannot prevent it.

1657. If the system which you advocate were adopted of allowing guaranteed companies to extend their railways by means of branches, would

Sir *George Campbell*—continued.

would you not be much more subject to that evil, as those guaranteed railways representing those private interests would be able to charge those high rates in time of famine, without any control remaining in the hands of the Government?—I am afraid that is an evil which you cannot get over. Whatever branches are made, whether by the Government or by the guaranteed companies, that evil exists. All that I argue is that it is better for the guaranteed companies to make them, because they share in the risks of the enterprise.

1658. You do not see any mode of getting over the difficulty to which I have alluded?—I do not see any mode.

1659. As regards future and new lines which are to be made by the Government or through the agency of companies, I think I may gather from your evidence that you are of opinion that there really are great advantages in making the lines direct by the Government?—Very great.

1660. The Government can get money cheaper if they make the line directly than by guaranteeing it?—Yes.

1661. Have you ever considered the advantage of the Government having control over the rates, in order that the public may be served at the cheapest possible rate, and that in time of need, grain may be cheaply conveyed to famine districts?—You can obtain that result under new guaranteed companies. If you subsidize a company you might bind it down to carry grain at very low rates.

1662. Therefore, what I understand is that you would not propose to have companies under the existing system, but you would have an improved system of guarantee?—Yes; even the Bengal and North Western, which is not aided by Government, is bound to carry grain at one-fifth pie per maund per mile.

1663. There would always be some risk of friction and difficulty in this dual control, would there not?—Not so far as those grain rates are concerned, where you bind down the company to carry at a special rate.

1664. At all events, there would always be certain drawbacks about a dual control?—I do not know about that; the control over the rates of the guaranteed lines now is very small.

1665. On the other hand, do I correctly understand you to advocate making the railways, to a considerable extent, rather by guaranteed companies than directly by the Government?—I advocate their going on concurrently. I do not advocate the preponderance of either the one or the other; I recommend whichever is the most convenient and cheapest. If the Government would not raise sufficient funds to carry out all the railways that they want, I should not object to giving a guarantee to some one or two lines.

1666. But you would not go beyond that?—No.

1667. You have alluded to certain advantages which there may be in a single control sometimes, but on the other hand there are distinct advantages in the guarantee system?—The principal advantage is about the supply of funds. The Government are very apt, when there is a good deal of pressure put upon them, to undertake a great many more lines than they ought, and the result

Sir *George Campbell*—continued.

is that the money is distributed in driblets amongst a lot of lines, whereas they give to a company a grant, such as is necessary to get their line done rapidly. In the instance of the South Mahratta Railway we should have about 100 lacs of rupees to spend in the course of the current official year; but I think the whole grant for productive State railways for India is only 1,850,000 *l.*, so that one advantage of that railway being in our hands is that we shall get that railway done very much quicker than the Government could have got it done.

1668. Because you get the funds more easily?—Yes; the Government funds are distributed over the whole railway system of India, and as the railway system is created by pressure from local Governments to get lines made for them, naturally the Government of the day yield to the pressure, and more lines get sanctioned than the Government can carry out with the funds at their disposal, and the money has to be divided out into driblets amongst them all.

1669. Is it the limitation which is placed upon the Government borrowing for railways, if the hands of the Government were free, and the Government desired to borrow in the open market 5,000,000 *l.* or 6,000,000 *l.* a year for railways judiciously selected, the Government of India would have no difficulty in getting the money?—I am no judge of the London market; but I should not think it was advisable to go and borrow 5,000,000 *l.* or 6,000,000 *l.* every year in the open market; we should destroy our credit if we were to go on borrowing.

Lord *George Hamilton.*

1670. Either directly or indirectly?—The injury to credit seems to disappear when you borrow indirectly.

Sir *George Campbell.*

1671. Did I correctly understand you to say that you were a director of the Bengal and North Western Railway?—Yes.

1672. Which has been undertaken without a guarantee, I believe?—Yes.

1673. Will you tell us the exact terms with regard to the carriage of grain?—There is a rate at which we are to work. We are to carry grain and seeds at the rate of one-fifth pie per maund per mile, and that applies to salt and some other things.

1674. As regards passengers, what are you to run at?—Two pies for the third-class.

1675. Have all the shares of that company been issued?—Yes, all.

1676. What has been paid upon the shares?—£. 4.

1677. What are the shares?—£. 10.

1678. Have the works been undertaken throughout that line?—The main trunk line, 300 miles, extending from a point opposite Patna, to Baraitch in Oude, is going on rapidly, and we hope to get it done by the end of 1885; the Ratpee Bridge will be finished by that time. Those 300 miles are not the whole of the concession; we have a branch line to Benares, which we have not yet begun; it is rather difficult in its character, and we are examining to see how it can be done cheaply.

Sir *George Campbell*—continued.

1679. The whole of the main line is now under construction, is it not?—Yes, and 80 miles are open, or will be in a very short time.

1680. Taking the average of Indian railways, and allowing for the average number of bridges, and not taking lines which are specially exempted from bridges, what, according to your view, is the relative cost of the construction of narrow and broad gauge lines?—I always put the difference of cost at between 1,500 *l.* and 2,000 *l.* per mile; some people put it lower.

1681. You take the difference to be as about three to four?—I can tell you what the difference of cost would be, but I cannot tell you the proportion.

1682. Supposing it is said that there is only 10 per cent. difference, what would you say to that?—You cannot deal with per-centages; for instance, take the Bhopal line, there is a great bridge at Kalpee, which has to be built, and which will cost from 26 to 30 lacs of rupees; the difference between the broad gauge and the metre gauge in that case would not be above one lac or two lacs of rupees.

1683. You are identified with the line between Cawnpore and Bhopal; would you tell us what would be the cost of the line between Cawnpore and Bhopal on the broad gauge, and also on the narrow gauge?—I think it would be, for 400 miles, at 1,500 *l.* per mile, about 600,000 *l.* I am not sure that the difference would be quite as much as that, because, if the line is worked in connection with the Great Indian Peninsula, we would not require to stock it so much as if we had to stock it separately and independently as a metre gauge line.

1684. Supposing the railway to be constructed, how about the relative cost of working; say that the line had 100,000 tons a year to convey, what would be the relative cost of working it upon the broad and narrow gauges?—That is a very difficult question to answer; but you must start with the assumption that every train on the metre gauge carries just one-half that the train on the broad gauge does; therefore so far as running charges are concerned, with the exception of coal they are very nearly double per ton on the metre gauge to what they are on the broad gauge.

1685. The running cost would be doubled?—The running charges, with the exception of coal, would be doubled; but you must not forget that the running charges of a line are a small proportion, about one-third or one-fourth of the whole of the charges of working the lines. Trains are not always full besides, and if loads are small, the metre gauge trains can carry them; and the coal burned being less, the metre gauge working cost is less.

1686. Take a line of 100 miles of railway, the general traffic of which does not exceed, though it may come up to the point of the metre gauge railway; upon the whole, which railway would be the cheapest, the broad gauge or the metre gauge, with the same quantity of traffic?—Roughly, what I state is this: If the traffic is sufficient, and not more than can be carried by two metre gauge trains each way daily, the metre gauge is much the cheapest; but in the case of four or five metre gauge trains being required daily, the broad gauge becomes cheaper. One has to bear in mind that very nearly all the Indian railways are single lines, so that their carrying power is exceedingly limited; and my impression is that with the broad gauge line, when the traffic gets from 1,000 to 1,200 rupees per mile per week, you very nearly get to the limit of its carrying power; whereas on a metre gauge route you will very nearly get to the same point with 400 to 500 rupees per mile per week.

1687. You did not include additional interest upon construction when you spoke of the expense of working just now?—No.

1688. With regard to the speed of the metre gauge as compared with broad gauge, take the Bengal and Northern Railway running up to the Dharjeeling Hills, what is the *maximum* speed at which you can safely run upon the metre gauge as compared with the broad gauge?—I believe they can run very fast pretty safely, but expediency is another thing. The actual running speed, I think, reaches about 18 to 20 miles an hour. When I was in India none of the broad gauge lines ran above 23 miles an hour.

1689. Do you think that it would be safe and expedient to run quicker than that?—Trains have been run quicker, and have not gone off the rails; but I do not think it is expedient.

1690. But taking the Bengal and Northern Railway as being the main line which connects the great City of Calcutta with the hill stations, if it was a broad gauge line, have you any doubt that very fast express trains would be run upon that line?—Perhaps I might give you a rather peculiar answer to that question. The fact is, that when you leave Calcutta at 3 p.m. you get to the Ganges river at sunset; you go across the river in a steamer, in which you dine; then you get the train on the other side of the river, go to sleep, and wake at daylight at the bottom of the hills, and then you go up by the Dharjeeling Railway; I do not know that any extension of broad gauge would do you any good in that case.

1691. Apart from that particular instance, the metre gauge cannot be run at so great a speed by a long way as the broad gauge?—It cannot be *run so fast*; you always run more slowly.

1692. You are not now officially connected with the Indian Government, but still you have been, and you have seen the other side of the question, and what I want to understand is this; the policy upon which the Government proceed, and which they consider a very great object, is to get the private companies, as far as they can, to construct the lines; then how is it that the Government at this moment are buying up the private companies?—I think it is desirable to terminate the old contracts whenever the Government have an opportunity.

1693. Because those contracts are, you consider, of an onerous character?—Every year the value of Indian railway property is increasing, and if you allowed the contract of the Eastern Bengal to run on for another 25 years, instead of its shares standing at about 150, they may be

at

Sir *George Campbell*—continued.

at 200. I think the Government would be very wrong not to terminate the contract.

1694. Is not it the fact that the Eastern Bengal shares stand very high, and at this moment the Government are subsidising and promoting railways which are practically in competition with them?—The Eastern Bengal Railway shares are high, but the Bengal Central will not come into competition till the former line becomes Government property. The argument about competition between guaranteed and unguaranteed lines weighed heavily with me when I was in India, in connection with the Eastern Bengal and its flotilla.

1695. An argument against giving guarantees?—Yes. It was in connection with the Bengal Central. The Eastern Bengal Railway were then running steamers to Dacca, and the Bengal Central came in competition, but luckily the Eastern Bengal Railway Company has died out.

Mr. *Gorst.*

1696. How long ago was the contract made between the South Mahratta Company and the Indian Government?—Two years.

1697. Is that contract unique; is there any other contract of a similar character?—It is a contract on new lines altogether for a guarantee, and it is unique.

1698. No other railways in India having had a guarantee of that sort before?—None that I know of.

1699. Have you any general opinion upon a contract of that kind, whether it would be applicable to all new railways which are guaranteed?—I do not think it is a bad contract; the only thing is, that the Government cannot clear their interest until we earn 4¾rds per cent.

1700. Do you mean that you think that the Government have not made good enough terms for themselves, because a witness here said he thought that the Government were a little too hard upon the company, and that they had stood out for rather too hard terms?—I do not see that the terms are hard.

1701. So that all the money so advanced to the railway is really owed to the Indian Government?—Yes. It is all paid into the Indian Government Treasury.

1702. It is a particular mode by which the Indian Government borrow money?—Yes, for the time being; but they let us have as much as we want.

1703. The Indian Government is liable to repay the whole of the capital subscribed?—Yes, at the end of six years, by our giving a year's notice.

1704. In the meantime it pays 3¼ per cent.?—Four per cent. for the first seven years of the contract, 3¼ afterwards.

1705. Is it 4 per cent. all the time?—Only for the first seven years.

1706. I thought that half per cent. was the guaranteed profit on working?—For the first seven years.

1707. You are paid 3¼ per cent. on the capital guaranteed, and a profit upon the working of the railway of at least half per cent.?—Government gives 3¼ per cent. irrespective of profits; in addition we get one-fourth of all net earnings.

Mr. *Gorst*—continued.

1708. When the railway is worked, how much profit does the Indian Government take?—Three-fourths.

1709. Then if your quota of profit is more than half per cent., you get the benefit?—Yes, we get the benefit.

1710. In how long a time can the Indian Government put an end to that contract?—I think at the end of 30 years, not before. We can put an end to it at a year's notice after the end of five years.

1711. Are you right in what you have told us, that you can put an end to the contract at any time after the fifth year by giving a year's notice?—Yes.

1712. And the Government of India can only put an end to the contract at the end of 30 years?—Twenty-five years, I see is the term, and at subsequent intervals of 10 years.

1713. Then the railway always remains the property of the Indian Government?—Yes, after 25 years, and until then we have a right to a quarter of the receipts.

1714. Then the railway is not your property?—You may call it a lease; I do not care what you call it. If the person who has power to work takes a quarter of the receipts, I should call it a beneficial lease, but you may call it by any name you like.

1715. What advantage did the Bengal North Western get from the Government?—The land.

1716. What right have the Government of India to purchase it?—They can purchase it at the end of 25 or 30 years. I give that subject to correction.

1717. Upon what basis do they purchase it?—At 25 times the net income. It is practically 4 per cent.

1718. Has the Bengal North Western also any other contract, or is that the only one of the kind that exists?—There is a little railway of which I am chairman, to Naniatal, which has a contract and a subsidy, and there are others, Assam, Dharjeerling, &c.

1719. When was the Bengal North Western contract made?—About 15 or 18 months ago.

1720. Will you tell me what is the nature of the contract between the Bengal Central and the Government?—I have read it, but merely as a shareholder in the Bengal Central.

1721. Then there is no other railway company in India which is in the same relation with the Government as the Southern Mahratta and the Bengal North Western?—The contracts are not all alike, but there are others, such as the Dharjeeling Hills Company, the Rohilkund and Kumaon Company, and the Assam Railway Company.

1722. Is not this a new scheme of aiding railway companies to raise capital?—Yes, it is a different form of guarantee.

1723. And of a different nature altogether?—Yes, the great objection to the old form of guarantee was that 5 per cent. was a sufficient return to the shareholders for their capital invested in the concern, and that they took little or no interest in its commercial success. To rectify that evil Government have given us a very low rate of guaranteed dividend, and they have given us a

Mr. *Gorst*—continued.

quarter of the profits all round, without waiting any fixed sum to be earned; I think it is a very good contract, and on a very good principle.

1724. Do you think that that principle should be extended to other companies formed for the construction of any other railways that are wanted in India?—Yes, I think it might; it depends very much on circumstances; it is rather an expensive mode of Government guarantee.

1725. Why?—I think it would be cheaper in a good part of India to subsidize a guarantee 4 per cent. for some years after completion; but the Southern Mahratta must earn 4¾rds per cent. before the Government could clear their liability.

1726. Could you give us any information as to the relative profit of the different classes of passenger traffic, first, second, and third?—There is a heavy loss on the first.

1727. Take a railway like the Bombay and Baroda Railway, do you think that the first-class rates are as high as they can be?—No, I think not; they are 12 pies a mile, and you might raise them to 18 or 24.

1728. But you might raise your rate?—Yes, because we should drive them all to second class, and that would be worse.

1729. Is your second class unremunerative?—I daresay it pays something, but we earn our money on the third class; you may say the same for Indian Railways without exception.

1730. Is it true that on Indian railways you make a heavy loss upon the first class?—I believe so; I do not know any that make a profit.

1731. You make a heavy loss on the first, no profit on the second, and you make all your profit on the third?—Yes, we lose pretty heavily on the mail service, and it is the mail service that carries the first-class passengers.

Mr. *Wodehouse.*

1732. You said that the mode of guaranteeing which is adopted in the case of railways, was in your opinion an expensive mode?—*It is* expensive; there is no reasonable prospect of the Southern Mahratta Railway earning very much, but that was the reason for which it was granted to us.

1733. But you do not approve of the old form of guarantee, in which the shareholders of the line had practically no interest in the economical working of the line?—*I do not approve of it,* but I suppose that it was the best that could have been devised at the time.

1734. Is there any third form of guarantee that you think would be more economical for the Indian Government and at the same time practicable?—I think the Southern Mahratta form is very good, if you could get the money subscribed on a little better terms.

1735. Then it is not the form of the guarantee that you object to, but you think that the Government paid rather too much?—No, not for that line. You have to adjust the figures to the different parts of the country.

1736. So that if the Government proposed to make a line of railway in a rich part of the country, would you recommend them to adopt in

Mr. *Wodehouse*—continued.

any general sense the same mode of guarantee which they have adopted in the Southern Mahratta case?—I am not quite sure some sort of subsidy or guarantee of interest after completion for a certain number of years is not better.

1737. What do you mean by subsidizing?—Giving a certain sum of money for a given number of years towards meeting interest, or guarantee a certain dividend for a certain number of years after completion

1738. That guaranteeing them a certain interest after the completion of their line, is in substance the old system of guaranteeing to which you yourself pointed out there are fatal objections?—That would depend very much on the rate. The old guarantee was 5 per cent., and for many years no railway company earned 5 per cent. The East Indian Railway was the first who did so, but the old shareholders felt very little interest in it, because they were sure of their 5 per cent., and did not then look for more; but if you guarantee a low rate of interest on which there is a reasonable prospect of the shareholders getting an increase at an early date, you will find that they will take a considerable interest in the line.

Mr. *Bolton.*

1739. You rather, I think, failed to give us some particulars as to the relative cost of working the broad and narrow gauge; could you give us your view as to the relative cost of maintaining those lines?—I do not know that we have had fair experience yet of metre gauge lines. Broad gauge lines are getting renewed.

1740. Generally speaking, do you think that narrow gauge lines could be maintained at the same cost as broad gauge lines?—I suppose you refer in proportion to traffic receipts, not mileage.

1741. I mean per mile of road?—It will vary per mile; metre gauge will be per mile cheaper because rails are lighter, but if expenses are converted into traffic the probability is it will become heavier, because the rails being light they will wear out earlier, and the sleepers being small will decay faster. Another drawback in the metre gauge is, I think, that the stock is too light, with a view to reduce dead loads.

1742. Would not that add to the cost of maintaining metre gauge lines?—Yes, if you reduce your dead load in stock, that simply means weakening your stock, and the result is that your maintenance charges will be much greater in the end.

1743. Then the cost of maintaining the narrow gauge as compared with the broad gauge, mile with mile, would be greater?—I think it would be greater in proportion to traffic.

1744. Would it not per mile also, if the rails wear out sooner, and require renewing oftener?—Provided it was the same load, it would.

1745. A slight deflection of one rail would be felt sooner upon a narrow gauge than upon the broad one; any wearing out of the rail would be felt sooner?—Yes, the metre gauge carriages are a good deal wider in proportion to the gauge than the broad; the overhang is greater, and that of course increases the tendency to accident as well as wear and tear.

1746. The cost of maintenance in that respect would

Mr. *Bolton*—continued.

would be greater. Now as to the cost of maintenance per ton carried there is no question about that, I presume?—I do not think there can be; I think it must become heavier in the end; I do not say that it has yet become so, because the lines are new; but I think it will in the course of time.

1747. I did not quite follow you in your recommendation of a plan to be adopted for the extension of railways; you proposed, I think, that the Government should continue a moderate guarantee?—I think I hardly said so; my plan simply was that if a guaranteed company choose to build any extensions, I would permit them to do so, raising the money on debentures.

1748. And the Government should have the right of purchase at a fixed number of years?—Yes.

1749. Which you put at 25?—Twenty-five has been the usual figure, so I said that.

1750. If money was raised at 4 per cent. the Government would have the right to purchase at par?—Unless the railway was earning more.

1751. Of course the Government would naturally purchase when it became 4 per cent.?—I mean that they should have the right to purchase at the end of 25 years, at the rate which the railway was then earning.

1752. Your proposal was not that they should purchase at the end of 25 years, but that the Government should have the right and purchase at any time at 25 years' purchase?—I meant at the end of 25 years.

Mr. *Kynaston Cross.*

1753. I think, generally, you have proposed that the Government should have the right to purchase at 25 years' purchase on the net earnings of the line?—Yes, on the net income of the line at the end of 25 years. I am practically copying the Bengal North Western contract.

Mr. *Bolton.*

1754. Would not that be in effect to give the Government the right to purchase at the par value of their guarantee?—Yes.

1755. Do not you think that that would tend to retard contributions towards making railways on the part of the public; that it would discourage investors?—It might a little, but I think it is very desirable that the Government should have the power of acquiring lines in case they are mismanaged, or their control is needed for public purposes.

1756. But do not you think that 25 years is rather an unfair condition for investors; too short a time?—I do not think they are bad terms.

1757. You see investors would have no inducements to put money into that class of investments, because the return would be uncertain; no one would invest for 25 years; there would be no security for one thing, because the first interest would be 4 per cent., and he might get back the principal immediately?—But supposing the line was earning 6 per cent., then he would get 150 per cent. for 100 invested.

1758. If that was so, but it does not do so; we have not had much experience of lines earning 6 per cent.; practically, I think your proposal would be that the Government should have the right at any time of purchasing on paying that number of years' purchase money?—Yes, at fixed periods.

1759. I will go a little further; you suggested that our trunk lines, such as the Great Indian Peninsula, should have the power of building feeders?—Yes.

1760. And that they should build trunk lines with the ultimate purpose of building a feeder?—If they chose.

1761. It would be exceedingly unfair, would it not, if the company had that power without any limitation at all, because their receipts now are in excess of your guarantee; but if you went on building feeders, you would practically build them at the expense of the guarantee. In other words, the Government would retain the rate of interest, unless they had the right to acquire those branches, and even the trunk line whenever they thought proper; you could go on increasing, *ad infinitum*, the value of the trunk line and feeders, and we must acquire them at the end of 25 years if we acquire them at all at a very high price?—If they were built by a guaranteed company they would fall into Government at the termination of the lease to the guaranteed company.

1762. We are now speaking of something new, of the proposal, or the suggestion which you made, for the extension of railway building in India by means of new companies, and these companies you propose should be guaranteed a certain rate of interest with the option to the Government to purchase the line at the end of 25 years at a certain fixed number of years' purchase on the annual receipts?—Yes.

1763. But then they are authorised during those 25 years to use the receipts of the railways for the extension of feeders, which would improve the position of the line very much, and they are practically extending the line at the cost of the Government, and making the Government pay the increased value at the end of the term?—I think you misunderstood my proposition. I spoke of the guaranteed railway companies as they existed, that, if they chose to have feeders to their system, I should not discourage their construction, but at present they have been discouraged. When I talked of companies to be formed hereafter, I never dreamt that they would touch feeders.

1764. Taking the existing railways at the end of a fixed number of years, will the railways fall to the Government?—Yes.

1765. On what terms?—The Government take the debentures as they stand, and pay off the shareholders by giving them an annuity based on the average value of the shares for the period of three years.

1766. Is not that exactly the same thing; if the Government allow you on the trunk lines to extend your feeders you add to the value of the property which they have to pay you for at the end of the term?—You add to the value of the property, no doubt, but you take the liability of their debentures. The debentures are not written off, you must remember.

1767. But the debentures are paid out of the receipts of the parent line?—Yes.

Mr. *Bolton*—continued.

1768. Which parent line is guaranteed by the Government a minimum rate of interest during all this term?—Yes.

1769. Consequently you could build all those feeders or as many as you pleased at no cost to the parent line, because the Government is still bound to continue their guarantee of interest?—Yes.

1770. And at the end of the time those feeders will then have become more productive probably, and the Government would have to pay a much larger sum for the parent line and the feeders than they would have had to pay if they built those feeders themselves?—I do not see that at all, because if the Government build the branches or feeder lines themselves, their value as feeders to the trunk line would be just the same as if the company built them.

1771. Supposing they built them as feeders to some opposing trunk lines?—I do not know where they are; I can only tell you the facts; and I say I do not know where the opposing lines are; all have been built on the same system.

1772. Are you opposed to the Government borrowing money for the purchase of the capital expended on railways?—No, only I do not think it would be very prudent to go too far.

1773. To what extent would you go?—I said about one-and-three-quarter millions at the present time.

1774. Not further than that?—No. They borrow now two-and-a-half millions for railways and irrigation.

1775. Whatever the revenue is they pay it off, do they not?—I do not know.

1776. Four per cent. on 2½ millions is 100,000*l.*; are you opposed to extending them to that amount?—No, I have not calculated it out; I said simply that so far as new lines are concerned, I would allow them to be carried out up to the sum that is now assigned, but that so far as feeders of existing State and guaranteed railways were concerned, they would be certain to pay, and we might borrow more freely for their construction.

Mr. *Carbutt.*

1777. Did I rightly understand you to say that you rather objected to the Government making railways as independent railways, and that where they are already constructed they should make branch lines?—No; what I said was, that if guaranteed companies would like to make feeders to their systems I should not discourage them, but I do not say that they are the only persons that are concerned in making them.

1778. I think I understood you to say that we ought not to go on building railways very largely, because many new lines have not paid. I believe it has been given in evidence that no line made within the last 10 years has paid 4 per cent.?—That is not correct.

1779. Are you aware that if you take all the railways in India and divide them by all extra cost that would have to be paid in buying them up, and divide them also by the loss on exchange; all the railways in India are paying nearly 4 per cent., or 3·9 per cent.?—It is a very good result. I am not quite sure that English railways would stand that test.

Mr. *Carbutt*—continued.

1780. If they are doing that, is not that rather a reason for going on building more railways?—But this is the result of several years.

1781. The railways are only just constructed?—The East Indian Railway was commenced about 30 years ago.

1782. With regard to the difference between metre gauge and broad gauge you were saying that there would be a difference in the cost of construction for bridges between narrow gauge and broad gauge?—There is a difference.

1783. I do not see where you get the difference in cost because of the fact that the bridge has to carry itself, and because the difference in the weight of the train is so very slight that it would make no difference in the cost of the bridge?—The girder work is made slighter and the piers are a little bit shorter, but not much.

1784. Following up the questions of Mr. Bolton as to the cost of working, is it not the fact that on all the narrow-gauge lines, if you were to take an average of all the 11 lines, you are carrying only 53 tons per mile by goods trains?—I daresay say it is so.

1785. And on broad gauge lines you are carrying 93 tons per mile?—I have no doubt that you are right in your figures; but I cannot infer from that what conclusions you would draw.

1786. The conclusion that I would draw would be that as the whole of the expenditure on the broad gauge over the narrow gauge is 20 per cent., you are carrying per ton per mile 75 per cent., so that it would cost very much more, and carry on the traffic over your narrow gauge lines than over your broad gauge lines?—I do not think we have got any figures to support any conclusions of that description; the metre gauge lines are all lines with small traffic, whereas some of the broad gauge lines have very heavy traffic, and working expenses in proportion to receipts turn largely on the quantity of traffic carried.

1787. There is no doubt that the working expenses, that is the cost of maintenance, locomotives are tremendously increased on your narrow gauge lines over the broad gauge lines?—I said just now that a metre gauge train carries half the load of a broad gauge train; the running expenses are much more, therefore, for the mile.

1788. A locomotive is much sooner knocked up, is it not, on the narrow gauge than on the broad gauge?—I cannot speak from experience.

Lord *George Hamilton.*

1789. Then I suppose we cannot expect as good results from the railroads which are about to be constructed as from those that are already constructed, and in working order?—My expectation is that when the feeder lines are better developed, the results, taking the Indian Railways as a whole, will be better.

1790. And that although the main trunk lines have been made, yet if they are judiciously fed, the results in the future will be better if anything than in the past?—Looking at feeders by themselves, they may not appear to be remunerative, but taking the whole receipts you will find them better.

1791. Have

Lord *George Hamilton*—continued.

1791. Have you any objection to express an opinion upon the policy of the Indian Government as regards railway construction?—I left them three years ago.

1792. Have you read the last Despatches that have been sent home?—No.

1793. I should like to ask your opinion on one sentence only which came home in a Despatch from the Government of India, dated the 23rd January 1883, regarding the policy which was in force when you were in India. They say, "The essence of the present policy is that the railways constructed by the State should, generally speaking, be self-supporting. The essence of the new policy is that the railways constructed by the State need not, and often will not, be self-supporting." Is that a policy which you would like to embark in to any large extent?—I rather defined my position just now. What I said was, that if you embark in new lines, not feeders to existing lines, the probability is that some will not pay, but you must face that in the interest of the country, but it is a policy which you would have to pursue very cautiously. On the other hand, there are other lines which could and might be built very freely as feeders to the existing lines, upon which returns are certain.

1794-5. As regards those lines, most of which are called famine protective lines, have you any opinion about the possibility of averting famine by a great extension of railway lines?—It is the only means of feeding the people when a famine takes place.

1796. Would it not entail an enormous expenditure to guard the Indian community against famine?—It is a question of years to carry out such a policy as that; you can only do it by degrees.

1797. Could you, even with an unlimited expenditure, avert famine and scarcity of food?—It must be a very large expenditure; you cannot avert scarcity of food, but you can avert people being without food by bringing it in from other provinces.

1798. Of course it entails a great expenditure upon the Government to have to bring food and to have to pay for it?—Of course, if the people have not the means to earn it, you must feed them or allow them to die, whichever you like.

1799. Supposing that the Indian establishments embarked very largely in the policy of constructing lines which were non-remunerative, would not that policy affect the construction of remunerative lines by private companies?—Indian railways would not look a promising investment if the Indian Government work generally produced unprofitable results.

1800. Therefore it would be rather a discouragement to private enterprise to embark in railways if it was known that those railways that the Indian Government were constructing were not paying?—Yes, but I know very few lines that would be constructed by private enterprise.

1801. I think you said that borrowing six millions in a year in the open market would, in your opinion, be rather excessive?—I am no authority on affairs of finance. I thought, perhaps, that if you had to borrow a large sum for a war immediately afterwards, your credit would not be as good as it might be, but I do not know much about it.

1802. And when I asked you, directly or indirectly, you said that the advantage of indirect borrowing was that the amount disappeared?—People do not seem to know so much about it when it is borrowed through a company as when it is borrowed by the Government directly; it appears in a different form.

1803. Supposing you were to borrow through a company sufficient money to construct a railway of some length, if the whole of your capital is subscribed at home where it is being gradually called up, they would?—Yes, they would if it was called up by instalments.

1804. Therefore, one of the advantages of that system is, that no matter what may be the fluctuations of the money market, the Government are or ought to be able to continue the prosecution of that railway for whatever sum may have been agreed upon?—Yes.

Mr. *Kynaston Cross.*

1805. I think you stated just now, in answer, I think, to Mr. Bolton, that several lines that have been made lately do pay considerably more than the 4 per cent. which has to be paid on the money borrowed for their construction?—Yes, some of them do; for instance, the Burmah Railway, and the Northern Bengal. I am speaking now of what was the case when I left India. I do not study the accounts now. They were paying when I left, or immediately after.

1806. The only ones I asked about were those which have been open within five or ten years?—Yes, those lines I mentioned have only been open two or three years.

1807. Then it would not be at all fair to assume that lines which have been open in the last four or five years do not pay the whole of the interest that has been borrowed on their behalf?—Some pay and some do not pay.

1808. I should like to make that quite clear. Mr. Boulton put a question to you on the Southern Mahratta Railway; you do not mean that 25 years' purchase applies to the Bengal North Western, or any given amount?—No, not any given amount.

1809. Twenty-five years' purchase on the earnings of the line would have to be paid?—No. There is a little difference. I can give you the terms if you like, exactly. Under the original contract with the Bengal North Western Railway Company, it was provided that of all profits in excess of 6 per cent., a moiety should be handed over to the Government; the Government have abandoned that claim, but in their clause for the purchase of the line they have not abandoned it, and therefore, if we were earning 7 per cent., the Government would be able to buy that line at 25 times 6½ per cent.

1810. With regard to the Bengal Central, which is guaranteed for a certain length of time, the purchasing clause, I think, gives you the right to demand 25 years' purchase on certain earnings, does it not?—I am only a shareholder in the Bengal Central, but the terms are 25 per cent. premium; the Government can buy it at the end of a certain number of years.

1811. I should like to ask you a question about

Mr. *Kynaston Cross*—continued.

about the difference between the metre and the standard gauge to elicit from you an opinion as to whether it is possible to put a third rail on any of the standard gauge lines for the purpose of running metre gauge trains over those lines?—It is possible, but it would be very objectionable, because it would be reducing the present carrying power of the railways. A metre gauge train runs at a lower speed than a broad gauge train does, and if you put a metre gauge in you reduce the carrying power of the whole system to that of the inferior line.

1812. Would it not be an advantage to admit metre gauge upon communication broad gauge lines?—The only object in putting a metre gauge line down would be to run metre gauge trains, and if there was only one operation, it would not be worth doing.

1813. Supposing for instance you wanted to get down to Bombay from the Rajputana-Malwa system, and you had the opportunity of bringing down a metre gauge rail there, would it not be possible to put a third line from the junction of the narrow and the broad gauge, and from that junction to bring down the metre gauge train?—That would reduce our carrying power. Our traffic now in the height of the season has reached the amount of 800 rupees a mile per week on the Baroda Railway.

1814. Is not 700 or 800 rupees per mile per week very heavy traffic for a broad gauge line?—More can be done.

1815. What do you say can be done?—I said just now from 1,000 to 1,200, I am not sure which is the maximum. I think the East Bengal has been the heaviest I said the narrow gauge is about from 400 to 500.

1816. Are you aware that 100 *l.* per mile per week is a very heavy traffic in comparison with English lines?—But the Indian traffic comes in rushes; we have a very heavy traffic for a few months, and then we stand idle; that is the explanation; I wish we had equal traffic all the year round; it would be a very good thing for Indian Railways.

Mr. *Bolton.*

1817. Are you quite sure that the traffic has been carried to that extent?—I am almost certain between 1,000 and 1,200 rupees a week on the Eastern Bengal Railway.

Mr. *Kynaston Cross.*

1818. The traffic would be forthcoming at the same time, and the plan which has been suggested of laying down a third rail upon the broad gauge would not at all expedite the flow of wheat and other produce to the port of Bombay in the wheat season?—It would retard it.

1819. I should like to ask your opinion as to the line which is to be made from Manikpur to Jhansi; I believe it has been settled that there shall be a metre gauge line there; do you know the district?—I have never been over that district, but I know something about the railway; I used to have to write letters about it.

Mr. *Kynaston Cross*—continued.

1820. What would you say as to the convenience of a metre gauge line there?—I find it very difficult to give a reason why the line should be made on the metre gauge; if that line was made on the broad gauge, and carried up to Gwalior in case of famine, and in case of a pressure of traffic, broad gauge trains could run from the north-west, from Delhi and Agra, and use that line as an alternative to the present line to Allahabad and Cawnpur, and it might defer the necessity of doubling that line. I do not know what the length is; I suppose it is about 250 miles from Manakpur to Gwalior. The difference of cost between a broad and metre gauge road would be for this length about 400,000 *l.*, but against this saving would have to be set an increase in the charge for rolling stock, and a very large increased annual expenditure for working. If it was handed over to the East Indian Railway Company, they would work it as part of their system and with their own stock, which would have to be but slightly increased. The only ground for the metre gauge is that it forms part of a system of railways that is to come from the Central Provinces and from the Chatisgarh District; but the traffic does not run in that direction; the traffic runs towards sea ports, and this line would be a feeder to Calcutta, just the same as the other lines that are proposed from Bhopal to Gwalior and Cawnpur would be feeders to Bombay.

1821. You think it would be an alternative line which would relieve the East Indian glut of traffic at times?—Yes, it would be longer, but still it would relieve it in times of emergency.

1822. None of which would be sent on the metre gauge line?—No, because the break of gauge is one obstacle, and another would be the different management.

1823. I should like to ask your opinion of the proposals of the Indian Government; you are aware that they ask that a sum of 50 millions sterling should be spent upon railways in the next five years?—I did not know it before you mentioned it.

1824. You have been in India lately, have you not?—Yes, I left it in 1881.

1825. If such a proposition had been laid before you in 1881 would you have considered it extravagant or reasonable?—My experience of Indian life is that it is no use making plans for future expenditure for policy changes with individuals, and of these none stay long enough in office to carry out an extensive scheme. The best thing is to settle what you can do with the means at your disposal, and not define what is to be done hereafter by your successors in office.

1826. If the Indian Government really propose to spend 50 millions sterling in four or five years, do you consider that a reasonable or an unreasonable proposal?—I think it an unreasonable proposal to spend it in that period; it is a great deal too much; you will never get the full benefit of your expenditure.

Friday, 4th April 1884.

MEMBERS PRESENT:

Mr. Baxter.
Mr. Bolton.
Mr. Brodrick.
Sir George Campbell.
Mr. Carbutt.
Mr. Kynaston Cross.
Mr. Dalrymple.
Mr. William Fowler.
Mr. Gorst.
Lord George Hamilton.
Mr. Onslow.
Mr. Bernhard Samuelson.
Mr. Slagg.
Mr. William Henry Smith.
Mr. Wodehouse.

THE RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

Mr. THOMAS CRAIGIE GLOVER, called in; and Examined.

Chairman.

1827. YOU are a Public Works Contractor in India, I believe?—I am.

1828. I understand that you have been 42 times in that country?—I have.

1829. You have paid 42 visits to India?—Yes.

1830. And you have just returned from that country?—I have.

1831. How many years experience have you had as a contractor under the Public Works Department?—I have been in India altogether 23 years, and in business as a contractor about 20 years.

1832. Will you tell the Committee the different contracts which you have carried out in India?—Until within the last few years I carried out numerous and extensive works in connection with the municipality of Bombay; I also built bridges on the Great Indian Peninsula Railway.

1833. What was the nature of the works in Bombay; were they docks?—The drainage works across the flats; the Crawford markets and slaughter-houses in Bandora, and other large works in connection with the municipality. I built three large bridges over the Great Indian Peninsula Railway; in Bombay I built the Mowke Mulla Viaduct on the Bhore Ghaut, on the Great Indian Peninsula Railway, which is one of the highest viaducts in India. I built the Taptee Viaduct, about three quarters of a mile long, close to Bhosawul, on the Great Indian Peninsula Railway. I built about 40 miles of broad gauge line on the Bombay, Baroda, and Central India Railway, between Veerangaum and Wudwan; the reclamation of the foreshore of Bombay, now the property of the Bombay Fort Trust, which work extended upwards of 10 years; also 70 miles of doubling, a part of the Great Indian Peninsula Railway between Egutpora and Bhosawul; about 250 miles of the Rajputana State Railway between Agra, Ajmere, and Nusserabad, on the metre gauge, including a large viaduct over the river Jumna, at Agra; 74½ miles of the Scindia State

Chairman—continued.

Railway on the broad gauge, from Agra to Gwalior, including one of the largest viaducts in India over the River Chumbul. I constructed the Bombay Docks, called the Princes Dock, which I completed some months before my contract time; and I am now constructing, on the broad gauge, the Bhopal State Railway, which joins the Great Indian Peninsula Railway at Itarsi, running north to Bhopal, crossing the river Nerbudda; it includes a large bridge across the river Nerbudda, seven miles of Ghaut work, and many other minor works throughout India, which I have not enumerated.

1834. Therefore, you have had a very great and varied experience in the making of public works in India, especially railways?—I have.

1835. Have you executed all those works within your contract time?—In every instance, I have finished my contracts by my contract time but one, and that was on the Rajputana Railway, caused by the Government being compelled to remove a part of the permanent way for the famine in Bengal; it was no fault of my own, but caused by that; with that exception, all my contracts were completed within the contract time.

1836. Did you make the whole of the line from Ahmedabad to Ajmere?—From Agra to Bandikui junction on to Nusserabad and Ajmere, and there I stopped.

1837. Have you constructed railways on both the broad and narrow gauges?—I have.

1838. Have you in any instance made both gauges in the same district?—Yes; there is the Western Rajputana Railway leaving Agra and going west, which I have just mentioned, and the Scindia State Railway leaving Agra also, running south to Gwalior, in the same district.

1839. The Committee are very anxious to get a pretty full statement regarding the relative cost of the broad and narrow gauges in various districts; a good many statements have been made without being exactly verified; from your

Chairman—continued.

long experience probably you can give us the exact relative cost of the two systems?—In connection with your last question as to the two gauges in the same neighbourhood, I have quoted the Scindia and the Rajputana lines. In the case of the Rajputana line, leaving Agra towards Ajmere, the cost was about 66,500 rupees per mile on the narrow gauge, including the bridge across the River Jumna at Agra.

1840. Not including rolling stock?—No, not including rolling stock, but the actual construction; it also included stations. In the Scindia Railway leaving the same place, Agra, on the broad gauge, the cost per mile is 117,000 rupees; that includes a large bridge over the Chumbul, which cost 25 lacs. I may mention that the Scindia Railway is fenced throughout, and this is including fencing. The Rajputana line is only partially fenced. As I have heard a good many arguments about the broad and narrow gauge railways, and I have heard comparisons when the one gauge was a thousand miles away from the other, but I think there is only one means of getting at the actual cost or the comparative cost of both gauges, and that is by taking two different points where the material to be dealt with is of the same cost and on the same conditions, in order to give you an idea as to a fair average, I have gone into the cost of constructing the proposed line between Bhopal, Jhansi, and Gwalior, and from Jhansi to Cawnpore. I went over the country last year with the view of tendering for the contract, and from my notes I prepared a statement showing the cost of the two gauges as near as I could in a short time without any details; and from those figures I find that the narrow gauge will cost per mile 65,500 rupees, and the broad gauge 85,300 rupees per mile; that is the actual construction without rolling stock.

1841. Have you any other instance in point which you could state for the information of the Committee?—No, I have the particulars of these if you would like me to read them.

1842. You think that that fairly represents the difference in cost between the two gauges?—On that particular line, that is as nearly as possible the actual comparison of the two gauges. I may mention, as the Committee may have heard, that the difference of cost is only caused by the quantity in the one case being less than the quantity in the other at the same rates, but that is not so, as will be apparent in two or three items. In constructing works in India, as a contractor, we have a very large item under the head of general expenses, which includes staff, staff bungalows, depreciation of plant, interest on capital, and sundry items. When that item is dealt with in a dock contract where the work is concentrated in a small area, it is reduced to a minimum; it never exceeds 6½ or 7½ per cent. on the actual cost of the work, but the moment that amount of money has been expended on a broad gauge railway, we have always to add from 15 to 16 per cent. to the cost under that same head. Then again, when that same item has to be dealt with on a narrow gauge railway, where the outlay is much less per mile, the same amount of supervision has to be expended on it; it is increased to 23 or 24 per cent. under the head of general

Chairman—continued.

expenses; that item effects the cost of construction of the line, and the cost of the ballast; with these exceptions, the other items are in proportion to the quantity, but it has nothing whatever to do with the rolling stock.

1843. Is the comparison which you have just given, with reference to the projected line between Bhopal and Gwalior and Cawnpur, applicable to other parts of India?—Certainly not, because in other parts of India you have to deal with the class of work you meet with, and the cost of haulage and a different class of material, may be; quite different conditions altogether.

1844. Would there be just the same difference between the two gauges of railway in other parts of the country?—If we were in another part of India where the country was hilly and irregular, I should say that the difference between the broad and the narrow gauge would be greater, that is to say, the cost of the narrow gauge would be less in comparison than the broad, from the fact that having sharper curves, reduces the cuttings and the banks to a minimum.

1845. Broadly, am I right in saying that you, from your long experience, would recommend that on all the great plains between certain towns in India, railways should be constructed on the broad gauge?—In the north of India, most certainly.

1846. Where do you think that narrow gauge lines might be conveniently laid down?—Where they can adopt the system by itself. I would quote the Kattywar district, a little district by itself, the narrow gauge could be built with advantage. In Southern India, where the country is limited, I should also say it is adapted for that part, and in British Burmah in the same way.

1847. Then you think that there are parts of India where a system of railway, on the metre gauge might be conveniently and properly adopted?—Certainly, the parts which I have just mentioned.

1848. You would be very much opposed, I presume, to a break of gauge on the main trunk lines?—Yes, if we can possibly avoid it, most certainly we should avoid it, especially in the north of India, where the broad gauge is already adopted.

1849. Do you think that lines on the metre gauge would be objectionable even as feeders to the broad gauge in Northern India?—Most certainly.

1850. Have you any personal experience with regard to the cost of haulage of materials under the two different systems, the broad and the narrow?—I have not gone into the matter generally of the haulage of goods. My own experience of haulage is in connection with my own contracts for carrying ballast for my own lines; the average cost of haulage of my ballast by train on the broad gauge is 1 *a.* 6 *p.* per 100 cubic feet per mile; on the narrow gauge the haulage of 100 cubic feet, the same distance, is, on the average, 2 *a.* 4 *p.*

1851. Break of gauge is a very costly affair, is it not?—Break of gauge means, to begin with, from 2 *a.* to 3 *a.* per ton for break of bulk, and then over and above that the railway company will have to suffer in the following items: the cost

Chairman—continued.

cost of special staff and assistants for transferring the goods from the narrow to the broad gauge, the cost of delay through a large number of waggons being detained during transhipment, and in the case of famine or sudden pressure of traffic, the ordinary number of waggons on the narrow gauge would be insufficient to meet the demand, and so assistance can be obtained from adjoining lines.

1852. In your opinion, I presume, it would be quite inadmissible to build a railway from Bhopal northwards to Gwalior and Cawnpur on the metre gauge?—I think it would be suicidal to attempt it; you would have three points of break of gauge, Cawnpur, Gwalior, and Bhopal.

1853. In your opinion it is absolutely necessary that it should be broad gauge all the way?—It is so, most certainly.

1854. Would you say the same of a direct line from Bombay to Calcutta *vid* Nagpur?—Most assuredly, from Nagpur to Chatisgarh and on towards Calcutta.

1855. A part of that line, I understand, has been constructed on the metre gauge principle already?—It has.

1856. Do you think that that must be taken up?—I should certainly, if I had anything to do with it, recommend that.

1857. Would you recommend the same process with regard to the railway from Ahmedabad to Delhi?—It is a long distance; it is 1,000 miles.

1858. That would be a more serious matter?—You would either have to double the line or to alter it from narrow to broad gauge.

1859. A great portion of the traffic that now goes from Bombay by Ahmedabad to the north by that line would be diverted by the Bhopal and Cawnpur if a railway on the broad gauge was laid down in that country?—I would not like to say; I do not know about that.

1860. Can you tell us what you are at present engaged upon?—I am now constructing the Bhopal State Railway from Itarsi, on the Great Indian Peninsula, up to Bhopal.

1861. Have you any heavy works on that contract?—There is a bridge across the River Nerbudda, a large viaduct, and seven miles ghaut work immediately north of the bridge, entailing very heavy work indeed.

1862. What will be the eventual cost of that line?—It will cost about 54 lacs, about 92,600 rupees per mile.

1863. What is the distance from the junction of the Great Indian Peninsula to Bhopal?—Fifty-seven and a half miles.

1864. When will that 57 miles be completed?—By the middle of June.

1865. Can you tell the Committee the distance from Bhopal to Cawnpur?—From Bhopal to Jhansi it is 175 miles; from Jhansi on to the junction of the East Indian near Cawnpur it is 127 miles.

1866. A good many questions have been asked in this room with reference to the country that that railway is to traverse, I think, without any satisfactory answer being given; can you speak to the country?—I went through it last year very carefully with the object of tendering for the railway, and I took my notes as to the supply

Chairman—continued.

of building materials, I also took notes as to the crops throughout the different districts, and the population of the villages, and what proportion of the country was cultivated right through.

1867. Is it a populous district?—Very; for an unopened country, I was surprised to find it so populous.

1868. Is it well cultivated?—Very well cultivated, with the exception of a few parts.

1869. Are the people pretty well off, or comparatively poor?—I could not say they were well off. I met several carts at Lulitpur going to Cawnpur with some grain. It had happened that they had more than they required themselves. I asked them why they were taking it to Cawnpur, and they said that they did so simply to keep the bullocks in food; it cost as much to take the grain to Cawnpur to get it sold as it did to keep the bullocks alive, they had no other market for their spare crop.

1870. You do not share the opinion that it is a poor country?—Certainly not.

1871. What are the principal crops?—Gram, wheat, and dahl are the three principal items of the crops right through from Bhopal to Jhansi; and from Jhansi to Cawnpur, it is one field of wheat and gram.

1872. Would it be very difficult to construct a railway through that country?—Certainly not; I have a statement here of the numerous girder bridge openings which I would be glad to put in, with the cost of them.

1873. Will you state it generally to the Committee?—The largest bridge of importance is one west of Cawnpur over the River Jumna, the Kalpee crossing; that is the only large bridge of any importance in the contract, and I estimate that it will cost 27 lacs of rupees. I have estimated that it will take about 12 spans of 200 feet each. I have adopted 200 feet spans in this estimate, on account of the expensive wells it will have to be founded on; there are two wells to each pier, and I have estimated that each well will be 25 feet in diameter.

1874. Is that the only great work on the line?—There is another, the Betwa crossing; those are the only two important works; the Betwa is less important, because it is on a rocky foundation.

1875. Do you believe that that line would pay if constructed on the broad gauge?—I do not know any part of India where a line could be more profitably worked, or return the interest of the money sooner than in that country.

1876. You would give that line the preference to any other, which you would recommend to be made at the present moment?—I do not know any part of India where a line would pay sooner than in that district I have just mentioned.

1877. When you say it would pay sooner, of course you mean pay a fair interest in a short time?—In the shortest time after construction; it would pay interest, I should say, within two years afterwards.

1878. How long will it take to construct that line?—I have it in my own mind that if I could start the construction at three different points, I

Chairman—continued.

could finish the contract, including the bridge, in three and-a-half years.

1879. You are of opinion that it would take three and-a-half years to construct that railway, and in two years it would pay?—I estimate so.

1880. Would it pay 4 per cent.?—I should say so.

1881. Have you had any difficulties or disputes in carrying out your contracts in India?—I have had several disputes with engineers who were in direct charge of the contract under the Government. I have had no dispute with the Government of India officials in Calcutta; on the contrary, I have always found them to be most fair in their dealings with me; but from the subordinates in charge of the contract, I have met with great obstruction sometimes.

1882. Are we to understand that you are of opinion that there is too much interference on the part of the officials of the State with railway companies and railway contractors in India, as a rule?—I think that the public works system under the Government is very complicated; I mean that there is too much red tape. I think my experience is, that Government engineers have less practical knowledge than engineers I have met with under the Great Indian Peninsula and others engaged under private enterprise.

1883. Have any of your works been retarded in consequence of these interferences?—Very much, in several cases.

1884. Have you any suggestion to make to the Committee to remedy this state of affairs?—It is the complicated system of the Government that is the cause of it, and the want of practical knowledge on the part of some of the engineers. Others I have met with who are not obstructive at all, but men with practical knowledge and experience, and we have no trouble with them; it is only in cases where they do not possess practical knowledge that I find it.

1885. Then this system of obstruction is the exception, rather than the rule?—I find it almost general in the Government State lines. I should say that that gives me more trouble and more annoyance in carrying out a railway under the State than under private enterprise.

1886. You said that the fault lay with the officers on the spot?—On the part of the executive officers; for instance, the engineer in chief and the executive officers in the district in charge of the contract.

1887. Do they not act under instructions from head-quarters?—They have instructions; for instance, they have the specifications, some call the specification their Bible, and misapply it.

1888. Then your complaint is not against the code of instructions or the mistakes of the officials at head-quarters, but that those instructions are imperfectly carried out by individuals on the spot?—Yes, by pressing too hardly the conditions of the specification which were never meant to be used in that way; the conditions are very useful in case of disturbance or quarrel with the contractor, but they ought not to be distorted or made use of as in instances that I could point out, and it has struck me very much indeed that those have been from want of knowing better.

1889. In addition to the information which you have just given us from a professional point of view, perhaps you would be prepared to tell the Committee your opinion as to the general subject of our inquiry; and first, I would ask you, do you think that the present financial position of India warrants the extension of the railway system at a considerable more rapid rate than has taken place in the last few years?—I should certainly say yes.

1890. Are you in favour of this Committee recommending any fixed sum to bespent on new railways in India, or would you leave the Secretary of State an unfettered discretion?—Of course, as a contractor, I would say yes; but there is no doubt that in India, it is a known fact, that directly a line has been opened, the revenue of the country is increased in proportion. In India the railway makes the country, not as it is in England, where the country makes the railway. In India it is a well-known fact, that when a railway is made, the country at once gets rapidly cultivated all about for miles and miles, whereas before the line was made it was barren country; notably, the line which is built west of Agra through Bandikui to Ajmere and Nusserabad, that is not now the same country it was five years ago.

1891. Several witnesses have told us that they think there is a danger of going too fast in this matter, in making new lines in India at such a rapid rate as to affect the money market, and bring down the price of Indian securities, and that there is a greater danger of going too fast than of proceeding too slowly; do you share in that opinion?—Certainly not. I cannot see the least relation between the one and the other; I cannot see how it should.

1892. The Government of India have recommended that from 50 to 60 millions should be spent in making new railways in India in the next five years; do you think it is possible to do that?—It is perfectly possible.

1893. But would it be judicious?—I do not see why it should not; I certainly should say it would.

1894. Would not such an expenditure as that affect both the money market and the labour market?—I do not know about the money market; it is out of my business altogether; the use of capital is entirely out of my business.

1895. With regard to labour, what would you say?—Of course it would affect labour; it would put up the cost of labour.

1896. Very considerably?—I should say so. The great advantage in making railways just now is that the permanent way material, girder ironwork, is cheap.

1897. This is a very favourable time, is it not, to make new lines?—Very favourable indeed.

1898. We were told in this room, at our last meeting, that most of the great trunk railways, those that are likely to pay in India, have been made, and there is not very much room for new lines that would be likely to pay a fair rate of interest; is that your opinion?—No, certainly not. India is a very large territory, and there is great scope for thousands of miles to be constructed in India yet. They have not begun to open the country up yet. You have no idea of the extent of the district yet untouched and untapped.

1899. Could you inform the Committee of any other

Chairman—continued.

other lines, apart from those that we have rather minutely referred to, as between Bhopal and Cawnpur, that you think ought to be made, and made speedily in the interests of the public in India?—A line running through the Rewah State, tapping the coalfield, a very important district. I have a map which I produce, showing the coalfields in India (*producing a map, and explaining the same to the Committee*). If this country were opened up, it would supply the whole of the North Western Provinces of India with coal.

1900. Will you state to the Committee precisely the line which you have just mentioned for developing the coal traffic?—From Murrawarra, east of Jubbulpur to Bilaspur, and then from there to Raipore, Nagpore, and Raneegunge.

1901. That is a second line which you recommend; will you tell the Committee any other lines which you think from your experience ought to be made and would be likely to pay?—I have not gone over any other districts than those I have just mentioned, and I really cannot speak of any other lines in India.

1902. Can you give the Committee any information with regard to the country between Calcutta and Madras; that is a vast territory in which they have no railroads at all?—No. I have not been down there at all. I cannot speak to that part of India.

Mr. *Carbutt.*

1903. You were saying that the line from Bhopal to Jhansi, you thought, would pay in two years time; did you mean that the local traffic would pay or the through traffic?—The local traffic only I was referring to.

1904. And it would get through traffic besides, would it not?—I was speaking principally there of the local traffic, from what I have seen in the country itself; it is thickly populated and so full of villages all through, that it only wants opening up.

1905. I did not quite understand what you said about the carting of grain into Cawnpur; are we to understand that it does not pay them to cart grain except to get food in return for their cattle?—Just to keep their cattle at the time of year when they do not require them. They take their extra grain to the nearest market, just to keep their cattle in life. That was so in the particular case which I referred to.

1906. You think that if they got a railway that would take their food land; the uncultivated land would be more valuable?—The villagers told me that they have no interest in growing more than they require themselves, as they have no market to take it to. That is in the Lallitpur district.

1907. When you were referring to the great cost of building, did I correctly understand you to refer to the cost of the bridges?—Principally.

1908. And that adds materially to the cost per mile?—Yes.

1909. Are you aware that at the present time the cost of bridges in England, at any rate for the ironwork, is cheaper than it has ever been?—I am aware of that fact.

Mr. *Carbutt*—continued.

1910. That being the case, it would pay at the present time, even though you raised the value of labour in India, to build railways?—Yes.

1911. And you said you thought that it would increase the value of labour out in India?—It would.

1912. To what extent if you spent 10,000,000 *l.* a year against what you are spending now?—I should say that it would almost double the price of labour.

1913. What would it be per day?—Coolies now getting one and a half annas per day no doubt in a year or two would get three annas.

1914. Has the making of railways already raised the price of labour in India?—Whenever a railway is constructed it always increases the cost of labour 50 per cent.

1915. The increased rapid rate of making railways would not account for the whole of the increased cost of labour, would it?—Yes, certainly it would, because the supply of useful labour in India is limited; I should say that masons, a very important class of men, are few in number comparatively, if they were required to be used all over India at one time would increase the rate of pay very much indeed, local labour, it must be remembered, can only be got for six months in the year, when they are not working at their own crops in their fields. After March we never count upon local labour; it is of little use to us in India.

1916. What do the masons get per day?—It varies from nine annas to 12 and 14 annas per day.

1917. Of course that is a great increase upon what they formerly got, before we went out there?—Yes, certainly.

1918. Am I to understand that if the Government only continued to spend 4,000,000 *l.* a year the price of labour would not go up at all?—I do not think so much.

1919. Do you mean to say that if they spent an additional 4,000,000 *l.* or 5,000,000 *l.* they would get double what they are getting now?—No, it was not the masons I was referring to before; the coolie labour rate is from one and a half to three annas, but I do not think that the masons who are getting from 8 to 12 annas now would double their wages, perhaps they may increase from 20 to 30, but not double.

1920. Is it not the fact that you do all your works out there with nearly all Indians and but a very few English; in the case of some of the largest bridges that have been built there have been only four or five Englishmen, and lately superintendents and managers have been Indians?—All my superintendents are Englishmen or Scotchmen, and the actual workmen, even in constructing the largest bridges in India, are natives.

1921. The bridge that has just been finished near Attack, I understand that there were only three or four Englishmen, and the rest were Indians; was that so, do you know?—I do not know the details of that case; but it would be very much the same in my own works; the whole supervision is English; the actual labourers are natives.

1922. And even if the Government spent rather more money in making railways, and increased

Mr. *Carbutt*—continued.

creased the rate of wages, the whole benefit would go to India?—Yes, to India, certainly.

1923. You complained of the supervision of the Government engineers; do they ever ask you to go beyond what the specification states?—They apply the conditions badly.

1924. Do you mean that they compel you to make a railway according to a specification, which you think ought not to be carried out?—I could give you an example. In this present contract of the Bhopal State Railway, we had some very heavy works on the ghauts; very high banks 60 feet and 80 feet hight, and cuttings about the same depth. In tendering for the contract we had to estimate to tip the cuttings into the bank. There was one bank in my contract called No. 27 bank. On a side long hill (a side slope), we were carrying out this bank according to the contract, when the executive engineer ordered my subordinate engineer to carry it out by carrying the materials to the bottom, and make it up in layers, instead of tipping it from the top. My executive engineer knew that that was against the conditions of the specification, and he referred the matter to us. In the meantime the work was going on as before. The engineer in chief referred the matter to us. We met together on the ground, the engineer in chief of the Government and ourselves, as it entailed a deviation from the specification. He admitted that it was beyond the specification, and he wished us to fix a rate for it. We submitted a rate of five rupees per thousand. This he rejected, as being excessive. We then said, "We will carry on the work, and leave the matter of rate to be settled by the Government of India, and we will take whatever they choose to give us for the work to be carried out, according to your new plan." He replied that he would not agree to that, and that if we did not take what he offered us, two rupees instead of five, we were to stop the work. We addressed a protest to him against stopping the work; he would not listen to us; but wrote and reqested us to stop the bank forthwith; that he would carry out the bank himself; and he quoted a clause in the specification by way of showing that he had power to do this. We objected to his doing this, and denied that he had a right to do it. We then stopped the work under protest, and he put his own labour on it; that is to say, the men that I had actually engaged, some of them our own workmen. I had imported, he engaged, my contractor, a man who had got advances from me. He put those men on the bank, under one of my contractors; I then appealed to the Government about it, and stated that it was equivalent to a breach of contract on the part of the Government. It was then referred to the agent of the Governor General at Indore; he had an investigation; he called the engineer in chief and myself before him at Indore; and when he heard the whole case, he told the engineer that he was wrong in applying this clause, and that he had no right to take the work out of my hands, and forthwith ordered the engineer in chief to remove his men. This was one of many cases where the engineers have misapplied the specification.

Mr. *Carbutt*—continued.

1925. But did you get paid in the end?—We got paid in the end; it was referred to arbitration, and we got what we first asked, five rupees per thousand.

1926. May I ask whether this engineer was a military engineer or a civil engineer?—In this case he was a civil engineer.

1927. Do you mean to say that they are harder upon you out in India than they would be in this country?—I have not done any work in this country under Government engineers; but I know this, that in India my experience on Government work is such, that, with the same conditions under which a private enterprise company would carry out a given contract, I would put 10 per cent. on my rates, if I were going to do it under the State, because of the obstruction we meet with from the Government officials.

1928. Then the cost of the whole line would be 10 per cent. extra because of the Government engineer, instead of its being the engineer of the company?—Yes, on my rates, because of the worry and the delay through stoppages in the works for nothing, from the want of practical knowledge of the engineers.

1929. By how much per cent. better would a railway be when it was finished under a Government engineer than it would be if it was under the engineer of an ordinary railway company?—I myself would put on 10 to 12 per cent. on my rates to cover the worry and delay and the obstruction.

1930. Supposing that you had put on 10 per cent. extra, would a railway made under Government supervision be any better than if it were made for a private company?—Very far from it. I will give you an illustration of that if you will listen to me for two minutes. In this present contract where I am now engaged on the Bhopal Railway, there is a large viaduct across the River Nerbudda. It was found two years ago that it had not sufficient water-way, that the water rose too high, and the engineer hit upon a scheme of increasing this water-way, by adding on a span of 60 feet to the south end of the bridge (the bank there was 40 feet high). This was to increase his water-way by keeping the slope of the bank inside the original bank of the river, and in order to economise he has built this new pier (which gives this viaduct 60 feet additional span), upon a deposit of sand on a bed of concrete; that bed of concrete is about 15 or 20 feet above the bed of the river, and it may go away like a pack of cards in five minutes any monsoon. This was the very same Government engineer I have already referred to. I officially protested, as a contractor, against this foundation. I am responsible to the Government for it, and if the bridge gave way my name as a contractor would suffer. But it was no use; I had in the end to submit. There it is; and the engineer thus made his arrangement for more water-way for the bridge, foundering his pier upon a bed of sand.

1931. Was he a military engineer or a civil engineer?—A civil engineer. I have met with very experienced Royal Engineers, and I have met with very experienced civil engineers in all my contracts. I do not mind if the engineer

Mr. *Carbutt*—continued.

engineer is ever so particular, provided that he has a practical knowledge of the work going on; but without a practical knowledge there is nothing but friction from years end to years end, which means money to me.

1932. Am I to understand that that civil engineer had no practical knowledge?—He was an engineer who had been about 13 years in the Government service, I do not suppose that he had had any former practical knowledge in India until my contract; he has been on surveys I have no doubt.

1933. As you compute the difference between broad gauge and narrow gauge as amounting to something like 1,640 rupees per mile, have you any idea what it would cost to alter a narrow gauge line to a broad gauge line?—I have not gone into that; but the bridges would all require to be rebuilt.

1934. Is it not the fact that some railways have been laid out, even narrow gauge railways, with bridges adapted on broad gauge line?—That I do not know. It is not so in the case of any of those that I have made for the Government. They are confined solely to narrow gauge, and the piers of all the bridges on the Rajpootana Railway have got cutwaters put up and down the stream, that a number of bridges will require to be built alongside the old ones to make a double line.

1935. Do you think it was strong enough to put cantilevers out so as to give extra breadth to the bridge?—Certainly not, and a great many of them are founded upon wells.

1936. Could you give us no idea of what the extra cost would be?—No, I have not gone into that.

1937. Are you aware that during the construction of several of those narrow gauge railways the plan whether they should be narrow gauge or whether they should be broad gauge was three times changed?—That I do not know. I know that the one I am making just now, the Bhopal Railway, was originally intended to be narrow gauge, and it was altered to broad.

1938. Do you find that you can easily teach the Indians how to do the work, such as rivetting and all that class of work for bridges?—Yes, equal to any English rivetters.

1939. Do you not think that if those men had some education you could bring them up to be foremen and managers of gangs of men?—I have several native foremen in India; Lascars, for instance, are my girder directors to a great extent.

1940. Are you of opinion that you could utilize Indian labour very much more than it is utilized at the present time?—Most certainly.

Mr. *William Fowler.*

1941. You said something about the price and quality of native labour, and you supposed that there would be a considerable advance of the lowest price of labour if there were a more rapid extension of railways; but would it not be a very great advantage to the people to have that additional amount of demand for labour?—No doubt.

1942. It would not be all loss. Would you kindly state in English money what is the ordinary rate of wages for a coolie?—One and a half anna, that is about 2½ *d.* a day.

1943. Therefore the increased price of labour would be 9 *d.*?—About that.

1944. You spoke a good deal also about the rapid development of wheat cultivation in those districts where railways have come; have you watched at all the cost of raising wheat?—No, I have not gone into that; it is quite beyond my province.

1945. You used an expression which is rather a remarkable one; you said that the railway meets the country; do you apply that generally wherever you have been?—Wherever I have been in India it is my experience. The country before the railway is made was very little cultivated indeed round each village; where a railway was built the cultivation spread in a most remarkable way.

1946. You have been more towards the north and north-west, I think?—My works have been principally west of Agra, in Western India, from Agra south to Bombay, very much confined to that part of India. Bengal I do not know anything about.

1947. Something was said about the relative importance of the rise in the price of labour and the cost of materials; that is to say, you would have a rise in the price of labour, and you would at the present moment have an extremely low cost of materials?—Yes, in the case of the home materials, especially iron; iron is unusually cheap at the present moment.

1948. Have you gone at all into the effect of those two items as to how far one compensates for the other?—I have not gone into that question.

Mr. *Slagg.*

1949. You stated that cultivation spread in districts supplied with railways; will you tell the Committee that the general prosperity of the people has largely improved through the districts through which railways have been extended?—Certainly, in a very marked degree.

1950. Did you compare their condition in the most recent times with any particular former specific period, in order to make the comparison?—No, I did not.

1951. You think that the general condition of the people has improved through the instrumentality of railways?—Yes.

1952. Of course there would be much larger employment of people in agricultural pursuits as cultivation increased?—Yes.

1953. Have you found that railways, on the other hand, displace any of the native industries in connection with carriage?—Certainly not. I am not aware of anything of that kind in India.

1954. Then you are of opinion that railway extension is an unmixed advantage to India?—There is no doubt of it, throughout the whole of India in every case.

1955. With regard to the employment of natives, of course you employ natives on rough works of construction; but could you tell the Committee up to what height in the scale of railway administration and management you find it possible to employ native agency?—The natives of India are employed, for instance, as office

Mr. *Slagg*—continued.

clerks or booking clerks. We find them most intelligent and very steady, and we prefer them as a rule to English booking clerks. And overseers in the same way; we have a great number of overseers, and we find them much more industrious, much more steady, and much more to be depended upon than English overseers; in fact, I have a large staff of trained natives; on all my works are natives.

Chairman.

1956. Are you speaking of natives of unmixed blood or Eurasians?—Pure natives. I have got some of both classes; both Eurasians and pure natives.

1957. Are the Eurasians very extensively employed on Indian railways?—Yes, and natives also.

Mr. *Slagg.*

1958. Do you not employ them in any higher grade that that of inspector?—No; we never have them higher than inspector in the actual construction of the works. We have engine drivers, drivers of portable engines, locomotive drivers, guards, and station masters, who are natives.

1959. But you do not employ them at all on the higher branches of management?—No, we do not.

1960. Is there no opening for them?—Next above the native inspector come our engineers, they are all English engineers; we could not put natives in those posts, because they have not practical knowledge.

1961. Do the railway stations also supply a large accession for the employment of natives? Yes.

Mr. *Bolton.*

1962. Your opinion, I think, as to the effect of railways upon a country is, that before a railway is made, the cultivation appears to be limited to the actual food requirements of the people?—That is so.

1963. And that railways afford them a means of finding a market for the excess?—Yes.

1964. So that at present, in the absence of any railway, there is no means of getting their products to market?—Away from the present existing railways there is none.

1965. And that is a great benefit which railways have given to India?—Decidedly so.

1966. Your opinion is also, I think, that a narrow gauge railway should only be made where the probability of traffic is not very great, and where the system is, I may say, isolated?—Quite so.

1967. But wherever a break of gauge happens, or is likely to happen, there you would not have narrow gauge?—No, certainly not, beyond the parts I have just mentioned.

1968. You have given us some indication of the extra cost of haulage that there might be upon narrow gauge lines, and also the extra amount of general charges relatively to the cost of narrow gauge compared with broad; have you any knowledge or any experience at all of the extra cost of working traffic generally upon the narrow gauge system as compared with

Mr. *Bolton*—continued.

the broad?—No, never beyond my own ballasting.

1969. That must be the same, must it not?—I should think, judging from my own knowledge, that it takes two narrow-gauge locomotives to do the same amount of work as one broad-gauge locomotive. The rolling stock of the narrow gauge in India, to begin with, is far too small for the gauge; they might carry much more than they do.

1970. Is that due to the different construction of narrow-gauge lines?—It is due to the design of the waggons. I think that the waggons might be made to overhang more than they do, and to carry more dead weight.

1971. That is not the fault of the gauge, I presume?—No, it is not.

1972. You have told us, have you not in effect, that it would be practically impossible, except at very great cost, to turn a narrow-gauge line into a broad-gauge line, that the cost would be almost equal to that of making a new line?—So far as bridges are concerned, it certainly would be so.

1973. The works might not be quite as much as they would be originally, but they must be very nearly so?—There would be very little difference. You would require to make new bridges altogether in many cases.

1974. What would be the additional cost of laying down an additional rail for the broad gauge, in order to prevent break of gauge, so as to enable the narrow gauge engines to run along the broad gauge track?—I have not gone into that. I would require to consider that question.

1975. Could you give any indication of it at all?—I should say roughly, that it would cost about 10,000 rupees a mile to lay down an additional rail for the narrow gauge.

Mr. *Kynaston Cross.*

1976. Do you call it an additional line added on to a broad gauge line?—Yes; and that would entail an expense of about 10,000 rupees a mile.

1977. One-sixth of the total cost?—Yes. You have two distinct sizes of rail to begin with. The broad gauge rail is probably 5 inches deep and the narrow gauge rail, 3½ inches deep, and the intermediate rail, being a much shallower rail, has got to be provided for.

Mr. *Carbutt.*

1978. Would you lay the rails at the same height?—Yes. By taking the narrow gauge rail as a rail of the same height, I should say that it would increase the cost to about 15,000 rupees per mile.

Mr. *Bolton.*

1979. Would you consider the adopting of a third line a better mode of working the traffic than the present system of changing the load from one truck to another, so as to obviate the disadvantages of a break of gauge?—I should say that it would in the end, because the rolling stock could be utilised more generally on both lines in case of a famine or a rush, which they cannot

Mr. *Bolton*—continued.

cannot do with a break of gauge. They could use the rolling stock from one line to the other.

1980. And carry the produce to its destination?—Quite so.

1981. We have been told here that the narrow gauge traffic is carried at a lower rate of speed than the broad gauge traffic; are you aware of that?—Yes, I know that to be so.

1982. That of course would be inconvenient?—Yes, it entails more waggons and more staff. Each train carries only about half of what a broad gauge train carries, which means double engine drivers, double guards, and double stokers, doing the same amount of work.

1983. But the inconvenience that was suggested here was that the lower rate of speed of the narrow gauge railway (I am supposing now a third track) would prevent the traffic of the broad gauge being carried at the same speed; do you agree with that?—It would hamper the broad gauge most certainly.

1984. You are acquainted with the working of railways, I presume?—Yes, I am.

1985. Have we not the same thing in this country in respect to mineral trains, that they have to give way to passenger trains?—No doubt you have; it is a matter of arrangement.

1986. Could not that be overcome in India by the addition of a few passing places?—It would entail more crossing stations than they have now.

1987. That would settle it all, would it not?—Yes.

1988. Do you think that on the whole that system of working would be preferable to widening the narrow gauge, or continuing the present system of the transfer of traffic at a junction from one set of waggons to the other?—That of course depends upon what extent of the narrow gauge you have to deal with, and upon what extent of broad gauge you have to deal with.

1989. And it would depend upon what extent of traffic is brought up?—Yes.

1990. But where there was traffic of any moment, which do you think would be the best for the traffic, continuing the present system or adding a third track to the broad gauge, or increasing the gauge of the narrow?—That all depends upon where you apply it. Each case in India would be different from another.

1991. What circumstances would cause you to prefer the one to the other?—Where there were lines of no great length I should certainly prefer a third rail to a break of gauge, where the line is perhaps not over 200 miles long.

1992. But where either the one or the other was a shorter distance than 200 miles you would adhere to the present system?—I say that under that distance I prefer a third rail to a break of gauge.

1993. Where it is longer you would not?—I would not.

1994. You were asked as to the effect upon the revenues of India of the development of railways to the extent of 10,000,000*l.* per annum; I suppose you do not feel that you are a very high authority upon that point?—Certainly not.

1995. But you are quite satisfied that there is still room for a considerable addition to the

Mr. *Bolton*—continued.

number of trunk lines in India?—In Northern India I consider that the country has not begun to be opened up yet.

Mr. *Wodehouse.*

1996. I think you stated that the construction of a railway raises the rate of wage in a district by about 50 per cent.?—It does.

1997. When the construction of a railway is completed, is there a great fall in wages?—We never get labour down again, I am sorry to say; when once it is up we never get it back again.

1998. Then you think that the rate of wage produced by the construction of railways is a permanent rate of wage for the whole district?—Certainly.

1999. And that, adds to the general comfort of the population of that district?—Quite so.

2000. Have you never known an instance of complaints made by native carriers of the effect produced upon their industry by the displacement of their carts by railways?—No, quite the opposite. My opinion is that that class of men are more engaged than they were before a railway is made through a district. Before that they were only employed during the farm season, and during other parts of the year they are idle.

2001. Then they too are large gainers by the introduction of railways into their district?—Certainly in bringing goods to the station; as the country opens up, their requirements increase, and the works increase.

2002. In many respects, you say you prefer natives as your employés to Europeans?—Yes, at certain employments.

2003. What caste natives do you mostly employ?—Different castes; the high caste men are generally employed as clerks and overseers, and the lower caste men again are employed more as erectors of iron work, masons, blacksmiths, and carpenters; the next lower caste, again, are coolies, and so on.

2004. I suppose a native, as a rule, is more sober than a European?—Very much more so.

2005. That is a great advantage, is it not?—I have very seldom known a native to be out of his post owing to drink.

2006. But is a native as trustworthy as a European in money matters?—No.

2007. Has a native the same faculty of command over large gangs of labourers as a European has?—More so; the native gang men will respect a native overseer more than they will a European.

2008. Even if he be a low caste man?—They are very seldom low caste men; each caste has got overseers men.

2009. I think you said you advocated the metre gauge for Kattewar, but the Kattewar system must at some point come in contact with the broad gauge, must it not?—Yes, certainly it entails a break of gauge; after the whole district has been tapped by the narrow gauge, it must entail one break of gauge.

2010. At that point, the inconveniences attaching a break of gauge would arise?—Certainly.

2011. Yet you still prefer the metre gauge

Mr. *Wodehouse*—continued.

to the broad gauge for Kattewar?—Certainly it is quite sufficient for the traffic, that they will ever have in Kattewar; it is a confined district, and nothing more than a small traffic which the narrow gauge can carry through.

2012. Even though the inconvenience of the break of gauge is felt at the point where it joins the broad gauge, you would consider it bad economy to lay the broad gauge in Kattewar?—Certainly; it would be throwing away money to put a broad gauge in a place like Kattewar.

2013. You have found fault with a particular Government engineer who had obstructed you in the execution of a contract; but I suppose in your experience you have had other Government engineers who were perfectly easy to work with?—I mentioned that same point; I have had many engineers who have had practical experience, and I have had the greatest possible pleasure in doing business with them. Where an engineer can tell you what he wants, even if he is very strict as to the quality of the work, I have no difficulty with him. It is in cases where there is a want of practical knowledge, where they do not know what they want, and cannot tell you what they want, but object to everything you put before them, that the difficulty arises. Those are the men it is impossible to work with. It means capital to me, the work being frequently stopped and objected to.

2014. But is it possible to obviate the occasional appointment of an officer who is not particularly fitted for his work?—I have never met with an engineer of that kind, or have I been obstructed in any way in the case of works carried on by private enterprise; for instance, I never met with any obstacle in my works in the Bombay Docks, which entailed the most difficult class of work to carry out; I never had the slightest bother there with the most difficult engineer, who was most strict to deal with. I never had the slightest hitch of any kind; and on my works on the Great Indian Peninsula I have never had the slightest trouble.

2015. Therefore, with a competent and practical engineer to deal with, you have had no increase of difficulty?—No, never.

Mr. *Dalrymple.*

2016. Did I rightly understand that you were engaged on the Bhopal Railway?—I was.

2017. Is that a line *viâ* Manickpur to Jhansi and Gwalior, with a branch from Jhansi to Cawnpur?—No; the Bhopal line, upon which I am engaged at present, is from Itarsi, and it terminates at Bhopal; there it stops.

2018. Is that a line through Lalitpur, with branches to Jhansi and Cawnpur?—It is only in contemplation at this time.

2019. What is the estimated cost of the construction of the line that you are engaged on just now?—The cost per mile is 92,600 rupees.

2020. Is that an average cost?—That is the average, including the Nabudda Bridge.

2021. Is it an average cost of railway construction in India?—This is the cost on this particular line.

2022. Is that a high average?—It is high in this case, because the Nabudda Bridge is there.

Mr. *Dalrymple*—continued.

2023. Where does it run from?—It runs from Itarsi about 120 miles west of Jubbelpur, north to Bhopal.

2024. Has there been any question of a broad gauge on that line?—It was formerly intended, I am told, to be narrow, but afterwards the Begum of Bhopal, who found 50 lacs of rupees towards the construction of it, refused to find the money unless it was made broad gauge.

2025. Then she took an enlightened view about the gauge question?—I do not know that. She was jealous because Scindia had his line made broad gauge to Gwalior; and she would not be under Scindia and have a narrow gauge through her territory. That was the real cause of it.

2026. Then it was not from any enlightened view of the subject on her part?—No, that was the real cause of it.

2027. Has not a break of gauge between Bombay and Delhi been adopted without a due estimate of the requirements of the traffic?—That I do not know.

2028. You were not connected with that line in any way?—Not at all.

Mr. *Onslow.*

2029. I suppose you would agree that the Government of India must exercise a very strict supervision over the contractors for those lines?—Most certainly.

2030. I suppose you are aware that in former years, owing to the want of that supervision, the contractors, both European and Native, scamped their work to an enormous extent, and the work had to be done over again; and the consequence was that in many cases there was, on particular lines, double the outlay that was actually necessary?—As to scamped work, I am not aware of that being the case. I have known a portion of the Great Indian Peninsula come to grief, not through scamping, so far as I am aware, but from the faults of the specification.

2031. You mentioned to us one or two instances of what you called red tape on the part of the authorities; but it is rather the normal condition of affairs in India, is it not, that contractors should fall foul of the Government engineers?—Perhaps the honourable Member will tell me what he means by "falling foul."

2032. I am talking of a few years ago; I hope matters have improved since; but as a rule, contractors do not get on very pleasantly with Government officials, do they?—I have got on most pleasantly with practical men. In all my former contracts up to the present moment, I have had the greatest possible pleasure in working with practical men under the Government. It is only in a few cases where men who have not had practical knowledge have obstructed the works; it is very hard for practical men to be told that they are doing bad work.

2033. You do not find red tape carried out by experienced officials?—No. An experienced officer knows how far to adopt a specification, where to apply it, and where to stop applying it; he can apply his own intelligence along with the specification. I will give you an instance of the complicated

Mr. *Onslow*—continued.

complicated state of things between the Government of India and myself in passing my contracts. My Scindia contract was finished about four years ago, but there was some objection raised by the engineer to the foundation of a paltry weighing machine at Gwalior, entailing about 700 rupees. The machine was supplied by the Government, and I fitted it up according to the terms of my contract. That machine went out of order, and they repaired it and charged me the sum of about 700 rupees for the repair of it. I thought that absurd and refused to pay it. The machine was their own; I only fitted it up. And that was the cause of the Government refusing to pay me the remainder of my security money until three months ago. There was half a lac of rupees balance, owing to me by the Government, held as security for the fulfilment of my contract, and I only got it repaid three months ago. It lay in their hands for four years simply because of this horrible weighing machine which I had nothing to do with beyond fitting it up; and after all this delay they cancelled the 700 rupees and gave me my half a lac of rupees.

2034. It was not your fault at all that the machine came to grief?—No, I had nothing whatever to do with it. It was simply because the engineer thought that as I was the contractor I was responsible for the maintenance of this machine which was supplied by the Government.

2035. As that went on for four years I presume there was an enormous amount of correspondence between you and the Government?—Any amount of it.

2036. Have you had any experience in irrigation work in India?—No, none at all.

2037. You do not know whether the price of land in irrigation districts has increased owing to the amount of money that has recently been spent in irrigation works?—I do not.

2038. Or whether it has increased *pari passu* with the labour on railways?—That I do not know.

Sir *George Campbell.*

2039. With regard to the metre gauge, supposing that you were free to choose the narrow gauge to be used as an alternative to the broad gauge, is the metre the particular width which you would select?—It is a very convenient width for a light railway through a country not thickly populated, where there are not very heavy long leads for your haulage.

2040. Supposing Indian railways to be made on the English gauge of 4 feet 8½ inches, would you have thought that at all a desirable gauge to have selected?—It would have been better, I think, for the whole of India.

2041. You think that, for a small gauge, the metre gauge is a pretty good gauge?—I think it is very good, if they would make the waggons big enough.

2042. With regard to this Rajpootana line, of which you have made a great portion, do you know whether experience has not shown that there is much through traffic between Delhi,

Sir *George Campbell*—continued.

Agra, and Bombay by that way?—That I do not know.

2043. With regard to the proposed line from Bhopal to Cawnpur, I think you told us that the country is a populous country and a well-cultivated country, one which would give the expectation of local traffic; have you examined the statistics of the districts of Bhopal, Saugor, Lalitpur, and Jhansi, through which that line passes, and ascertained whether, as compared with mileage, it is a populous district, or very much the reverse?—I will show it you. I have got a map here, showing the position of every village in that part of the country, and you will see by a glance at this map whether it is thickly populated or not.

2044. Take the Bhopal district; do you know what the population to the square mile is there?—I do not.

2045. Then the Saugor district; have you ascertained what the population to the square mile is there?—I have not, only what I have observed in going through the district. This map will show you at a glance what the population of the district is (*producing a map, and explaining the same to the Committee*). This is taken from the Government map of four miles to the inch, and every black dot is a village.

2046. You have not examined the figures as to what the population of the Saugor districts and the other districts is?—No, I have not.

2047. I suppose it has come within your observation that a very great part of the country between Bhopal and Jhansi is comparatively a hilly country, and the cultivation is very different from what it is in the Gangetic Valley?—Only a very small part of it is hilly. The only uncultivated part there is between Karwi and the Narian River.

2048. You are also aware, I suppose, that the most highly cultivated parts of the route between Bhopal and Cawnpur are between Jhansi and Cawnpur?—Yes, certainly, that I may call one field of cultivation.

2049. And the greater part of that is, by one means or another, accessible to the Great Indian Peninsula?—Not by the trunk road.

2050. And by a very fine road between Kalpee and Cawnpur?—There is a very good road between Jhansi and Cawnpur.

2051. As good a road as it is possible to have in the shape of a mail road?—It is a passable Indian trunk road.

2052. Then the Jumna running through this district is also to a certain extent navigable, and very large boats go from Agra to Allahabad?—Yes.

2053. So that the most cultivated part of that district is not at present without the means of communication, and the wheat of that district, I suppose, does at present get to the market almost as easily as it could by means of a railway?—It is cultivated close to the road only. When you go back from the road a few miles, it is not cultivated along that line road between Jhansi and Cawnpur.

2054. Then it is not a broadly cultivated district?—Certainly not.

2055. I suppose when you cross the Jumna,

Sir *George Campbell*—continued.

the whole country is cultivated?—Between the Jumna and the East Indian Railway it is.

2056. The district between Jhansi and the Jumna is not cultivated many miles back?—All close to the road is cultivated; but if you go inland from there four or five miles it is not so; it is much less cultivated.

2057. Do you attribute that cultivation to the road?—Yes.

2058. You say, do you not, that you think the local traffic alone would suffice to make a railway there?—I should say so.

2059. Do you not think that we should come very much in competition with two other trunk lines between the Gangetic Valley and Bombay?—I do not think so. There is sufficient local traffic to keep it going.

2060. Would it not also take much through traffic from the other lines?—That I do not know.

2061. As regards the complaint which you make against the supervision of the Government engineers, do you know any reason why the Government engineers should be worse than the companies' engineers in that respect; is it that the Government engineers are more economical and that the companies' engineers are more free with the companies money?—No, it is not that; I think it is just because they are more arbitrary in their dealings with us than the companies' engineers. They hold up the specification as their Bible, that is a very common remark.

2062. Are they more strict in keeping you to the letter of the specification than the companies' engineers?—No, but they apply it badly.

2063. Do you mean that the companies' engineers will apply the specification in a more liberal manner?—Yes, they will deal with the points of the specification in a more business-like manner than some of the Government engineers.

2064. They do not take it so literally?—Just so.

2065. Is it not your experience that there have been a good many contractors who have needed very sharp looking after?—I cannot tell you that; I cannot speak beyond my own door. But two blacks will not make a white.

2066. Have you any observation to make as to what happened with regard to the construction of the Great Indian Peninsula, that a very large proportion of the bridges upon that railway had to be pulled down again because they were not sufficiently strongly built?—Yes; but what was that caused by? It was not scamped work, as someone said a little while ago, certainly not. I had to rebuild several miles myself on the Great Indian Peninsula Railway, and in very few cases did I find any scamped work. It was the fault of the specification.

2067. Speaking generally, was not the excuse of the contractor who built those most insufficient bridges, that the engineer had not looked as sharply as he ought after his work, and had passed the work, and it was then too late to complain?—I do not think that; I never heard of it.

2068. At all events, it is the case that the Great Indian Peninsula line, having been built by a company, and by a contractor under a company, a very large proportion of the bridges had to be pulled down again and rebuilt?—Some of them had, no doubt.

2069. Had not a great many of them?—It was caused in this way: in those days engineers did not know the materials they had to deal with in India. I know that in one case, on the Great Indian Peninsula Railway, they used a class of stone which looked to be quite hard when it was quarried, but when it was exposed to the monsoon and then to the sun, crumbled to dust. Those are all experiences we get as we go forward, but in those days the country was being opened up for the first time, and they did not know how to deal with some of the materials that were in India.

2070. Was it not the case that in those days it was alleged that the work was scamped by the contractor, that an investigation took place by the Government?—That I do not now.

2071. You say that in India it is not the country that makes the railways, but the railways that make the country. I presume you will admit that there are a good many countries in India, Bengal and the north-west, which were pretty populous and well cultivated before the railways were made?—That is where the country was already cultivated, but I have heard people in India say, We cannot make a railway through this district, because there is no cultivation, whereas in those cases, and in all other parts of the country, when opened up by a railway, it is cultivated.

2072. We have had some witnesses before us who have expressed the opinion that it is only in well-cultivated and well-populated countries that railways can be made with prudence and with any likelihood of paying; I understand you to hold, on the contrary, that what has been found to hold good in America also holds good in India, that by making a railway into a hitherto uncultivated country, that country will be cultivated and will be developed?—That is so.

2073. I want to know whether you have seriously come to the conclusion that that is the case with regard to very large tracts in India as it is in America, or whether it is not the case that India being a very old country, which has had a very large population for thousands of years, the population have generally found their way into the countries which are best cultivated, and whether you can say, from your own personal observation, that there are very large tracts in India which only want the means of communication to be very highly developed?—I think so, judging from what I have seen myself in the districts in which I have built lines.

2074. Your principal experience, as I understand, is in Rajputana; is it your opinion that the Rajputana country through which the Rajputana line passes after it leaves the Valley of the Jumna, and before it gets into the rich Gangetic districts, is a country which may be very largely developed and very largely cultivated in consequence of a railway running through it, or is it a very dry country?—It has already become developed. I passed through that country myself last year the first time for five years since the making of that railway, and I scarcely knew it.

2075. I want to know whether that larger development

Sir *George Campbell*—continued.

development is confined to the demand which is caused by the immediate presence of railway stations, or whether you think that it is capable of a very great extension of cultivation such as you have in America?—I have made inquiries where I have been, and one or two told me that it was purely caused by the railway, the increased opening up of the country, and the increase of the crops.

2076. Do you think that the country of Rajputana is a country which will bear a very large population?—I do not know why it should not; it is a very fertile country.

2077. Is the rainfall sufficient to justify the expectation of very large crops?—That I do not know.

Mr. *Samuelson.*

2078. You gave the cost of a bridge over the Jumna, leaving out the Kalpee crossing, as 27 lacs; what proportion of that would be for the material, that is to say, for the iron in the bridge?—About 11 lacs of rupees for the iron work.

2079. Would that include freights?—The freight and on the spot; not erected, but delivered on the site.

2080. That is a very large proportion of the whole?—Yes, 11 lacs out of 27.

2081. Therefore, an increase in the cost of material would, in that case, very much increase the cost of the work?—Certainly; that is the item of the bridge, in fact.

2082. If you assume any increase in the cost of labour it would not go very far towards balancing it?—No, it would be a very small item compared with that.

2083. So that if the construction of a work of that kind were delayed until the price of material was much higher it would cause a very great increase in the cost of the whole work?—A very heavy increase.

2084. That would apply to all the bridges, I suppose?—Yes, certainly.

2085. On the other hand you say that if the construction of railways were to proceed very rapidly that would put up the price of ordinary labour of the lowest class?—Yes.

2086. You gave us the increase in the rate of day wages; if the wages were higher, and the labourers, I suppose, better fed, would they do more work in a day?—No, that would always be the same.

2087. So that there would be an absolute increase?—Yes.

2088. But if railways were made at the same time in different parts of India, in parts very distant from each other, would that cause a great tendency to increase the price of labour in any one part?—It would be just the same.

2089. It would not matter where they were made?—Not in the least. The labouring classes in India, for instance, the coolies and masons, who go all over India wherever the works are going on, are they spread about the country.

2090. Are you speaking now of coolies?—No, I am speaking of local labour. Coolies can only perform coolie labour, and they move about India, a sort of gipsy tribe, the same as navvies.

2091. Is a large proportion of the work done by those navvies, trained men, or by coolies?—We principally depend upon those Wuddars, as

Mr. *Samuelson*—continued.

we call them; a gipsy tribe for our earthwork, &c. The local labour we have to train in every district through India.

2092. You do not rely solely upon the labour which you find in the locality?—No.

2093. But are they gangs moving from place to place?—Yes, they come; we sometimes send and get them as we want them.

2094. Is there a tendency to increase on the part of gangs of that sort; I mean do you find that labour more available now than it was formerly?—I do not think there is any difference in that respect. There is always a certain number moving about.

2095. So that if a large amount of public works were undertaken at one time, there would be an absolute scarcity of labour of that description?—I do not think there would be a scarcity, but the price would go up. They would see that we were dependent upon them, and they would simply put up the prices.

2096. You are quite clear that being better fed they would not do more work for it?—Certainly.

2097. And their piece-work price would increase, I presume, just the same as the day-work price?—Yes, just the same; there would be no distinction whatever.

2098. I was going to ask you a question about the coal fields which you spoke of in the neighbourhood of the Rewah Railway; are you practically acquainted with the value of coal, generally speaking?—I merely speak of the coal I am using there myself, which cost me in Agra 25 rupees per ton from the Bengal Coal Company.

2099. Is that English coal of the highest class?—No, it is Bengal coal.

2100. Where is that got?—From the Bengal Coal Company; from the Bengal district about Raneegunge.

2101. That is further off than the coal fields which you spoke of just now?—Yes, near Calcutta.

2102. What is the calorific effect of that coal as compared with English coal?—It does not give the same results as English coal within 30 per cent.

2103. Is it a rich bituminous coal?—It is not so rich as the English coal.

2104. Do you know anything about the quality of the coal in the district you spoke of just now?—I do not.

2105. Do you know whether the coal in the district which you spoke of is a coking coal or a dry coal?—That I do not know.

2106. Do you know whether there are iron mines in that district?—No, I do not know.

2107. You spoke just now about the difficulty you had in recovering your caution money on account of a mishap to a weighing machine; do you not think that there was a little red tape on your part in the matter?—No, I am not aware of any; I think when the contract was finished and the line was open for traffic, surely it was sufficient for the Government to hand over to me my security at the end of my maintenance,

2108. Supposing that you had given up the 700 rupees you would have got the money?—I did it on principle. If I were to hold myself

Mr. *Samuelson*—continued.

liable to maintain a machine supplied by the Government in one case, it might be alleged against me afterwards that I held myself responsible to the Government for the repairs to all Government material.

2109. Does it not appear as if the Government were not inclined to give way on the question of principle too?—They were found on reference to head-quarters to be in the wrong. I was not bound to maintain the machine supplied by the Government. I was fighting the principle whether or no a contractor was to be held liable to repair a machine supplied by the Government.

2110. In the same way it may be that for the sake of principle the Government sometimes stand out on questions of this sort, rather than on account of the amount involved?—Of course the Government would like very well to throw the responsibility on my shoulders if they could; but that does not do.

Mr. *W. H. Smith.*

2111. I think you said that, other things being equal, if you were called upon to tender for a line which was to be constructed by the Government you would ask and require 10 per cent. more than from a private company?—Certainly.

2112. Would that be irrespective of the particular engineer under whose directions you would work?—I speak of my own personal experience generally with the Government, and the extra red tape. Then there is another item of delay on the part of the Government in paying our monthly certificates. The Government are very often about from two to three months behind in paying the money for work actually done. I have also in many cases half a lac or three-quarters of a lac of rupees worth of work done and not returned by the Government engineer monthly. That is a common occurrence; and that means capital of mine lying dead, which is loss of interest to me.

2113. So that the system, apart from the individual, involves a greater cost to the contractor, and therefore a greater cost to the public?—Quite so.

2114. That system is, of course, capable of rectification?—No doubt, if they rectify it, and also put engineers with practical knowledge in charge of carrying out the works.

2115. But the fact remains that a Government railway costs more to make than a company's railway?—No doubt about it.

2116. You carry out your railways for the companies under the supervision to a certain extent of Government engineers, do you not?—My dealing is directly with the company's engineer.

2117. But the Government engineer must pass the work before the line is opened?—Yes, before it is opened for traffic.

2118. You say that the work done for a company is done more satisfactorily and cheaper than when it is directly for the Government; why should that be so?—From the fact that they always have experienced engineers on the staff of the railway companies.

2119. Have they always experienced engineers on the staff of the railway companies, and not

Mr. *W. H. Smith*—continued.

experienced engineers in all cases on the staff of the Government?—I said not always. I have met with some very experienced engineers in the Government. I do not class them all as having no experience. On the contrary, I have had the greatest pleasure in working with many Government engineers.

2120. Can you mention any particular case of a line which has cost more, having been constructed for the Government direct, than it would have cost if it had been constructed for a company?—I do not see how I could possibly bring forward any case of that sort.

2121. You alleged this, that if you were called upon to tender for 100 miles of railway under certain conditions and prices, you would, owing to the circumstances which you have stated, put on 10 per cent. on the price at which you would be willing to take the contract for a company?—From 10 to 12 per cent., most certainly.

2122. Do you know whether there are other contractors in India who take the same course?—I think I may refer to one firm who were obliged to leave India on account of the friction with the engineers; Messrs. Hood, Winton, and Mills, who built the Indore Railway, a very able firm, and they were compelled to leave India and give their contract up, on account of the constant friction with the Government engineers.

2123. Have you carried out many contracts for the Government?—Yes, I have.

2124. And for the companies?—Yes.

2125. Do you expect to enter into future contracts with companies and with the Government?—I hope so.

2126. Are you acquainted with the conditions under which railways are worked in India?—I am not.

2127. You could express no opinion as to the comparative cost and efficiency of the management of State railways and of companies' railways?—Not at all?—That is quite beyond me altogether.

2128. You have stated that a very large addition to the railway system in India ought to be made; are you able to point to any particular railway or district in which the traffic would be so promising as to tempt private enterprise to make such a railway without a guarantee?—The only part of India which I can speak fully upon is the one I have been myself over last year, between Jhansi, Gwalior and Cawnpore; the others I have not gone over, so that I cannot speak pointedly as to them.

2129. Would that line offer sufficient inducements to capitalists to warrant the construction of a railway without a guarantee?—I should say so.

2130. You would advise your friends who are capitalists to make the line?—I should invest myself very heavily in that line, whether I make it or not.

2131. Whether you made it or not, you would invest yourself in the line from Bhopal to Gwalior?—Certainly.

2132. Could you mention any other district in India in which a line could be made under similar conditions?—I could not; I have not gone over any other districts with a view of tendering.

2133. You

Mr. *W. H. Smith*—continued.

2133. You spoke of a line through the coal country?—Merely generally as a country which should be opened up for the benefit of the coal to be used in the North Western Provinces. At present coal is a very heavy item, and it would be largely used in the North Western Provinces.

2134. And would be a great benefit to the country to have a more rapid construction of particular railways in India?—Very great; but apart from the coal, a very large agricultural district would be opened up.

2135. Do you know what distance right and left of a railway the influence of the railway ceases so far as cultivation is concerned?—I am not in a position to answer that question.

2136. You have spoken of tapping the country by a railway, therefore we should like to know how far on either side of a railway the country is tapped?—That is a question which I am sorry I cannot answer.

2137. In answer to a question by an honourable Member just now, you said that the effect of a railway, so far as you could see, was distinctly to increase the local traffic?—It does; but I have not gone into the country to ascertain how far away from the railway it affects the opening up of the country.

Mr. *Kynaston Cross.*

2138. Would you like to say anything further about the giving way of the bridge that has been referred to?—I was under the impression that it was scamped work, but when I went into it I was convinced that it was not scamped; it was the fault of the specification. Engineers in those days were unacquainted with the materials that they had to deal with in the making of bridges, notably the Mowkee Mulle Viaduct, which gave way. I discovered there that the contractor had used sand from the bed of the nullah to make the mortar. I analysed the old mortar most carefully, and I discovered that they used this sand. The sand was not really gritty and hard, but when exposed to moisture and rubbed in your hand it decayed like clay, the bad sand spoilt the mortar; that was the cause of the Mowkee Mulle Viaduct giving way, and many of the Great Indian Peninsula bridges in a very similar way; they used local sand instead of some specially imported sharp clean sand, or Bugerie, as is done now.

Sir *George Campbell.*

2139. Had it not been subject to the usual supervision?—Yes.

Mr. *Kynaston Cross.*

2140. Was it according to the specification?—Yes.

2141. And passed by the engineer?—Yes. Our experience now is such that one would never use such a sand in the mortar.

2142. You mean to say that it was simply the want of experience in the engineer, who did not understand the materials with which he was dealing then?—Yes; at that time no one thoroughly understood it, but we would never think of using it now.

2143. With regard to your experience in the case of the uncivil engineer whom you mentioned,

Mr. *Kynaston Cross*—continued.

are you of opinion that it was an unfortunate selection, or was it the usual thing?—It was a most unfortunate selection; I was unfortunate in getting such an engineer.

2144. Did this particular officer act from over zeal or from ignorance in your case, in your opinion?—Perhaps it was a mixture of both.

2145. Could you suggest any way in which engineers should be more practically trained than they are at the present time?—Yes; I think that every engineer on works of construction in India should have had experience either in India beforehand or in England.

2146. You would recommend that young engineers who go out from here should undergo a course of practical instruction before they have substantial charge given to them in India?—Certainly. The engineer that I referred to had had 13 years' experience under the Government, but not in construction in India.

2147. You spoke of the native engineers; do you know that there is a college in India established for the purpose of educating and training those men?—Yes.

2148. Have you had any experience of engineers who came from that college?—Yes, I have had one or two from it measuring and laying off work, which they have done very efficiently.

2149. Have they had much practical experience before coming to you?—No; they come to me as surveyors first, and I afterwards train them.

2150. You have been in the habit, have you not, of collecting together considerable gangs of men to do your work?—Yes.

2151. Have you any difficulty in keeping those men together?—In my recent contract I had great difficulty through fever epidemic. Where our works were in the jungle, after the rains the dead vegetable matter gives out poisonous gases which float about the air and cause fever. A few of the men died, and gangs of them ran away.

2152. Are they generally men from the district in which you happen to be working, or do you generally move the gangs about from place to place?—We have always imported the backbone of our labour for earthwork and ballast wherever we are.

2153. From what particular district does this class of labour generally come?—Some come from Cawnpur and Allahabad and Lucknow, and then, again, down in the South of India, from Sholapur; they are the same class of people.

2154. You spoke very strongly of metre-gauge feeders to broad gauge lines being objectionable; would that apply to the lengths of feeders above 60 or 70 miles, or would you place any limit on the length of a possible metre-gauge feeder?—I should say that in Northern India, on account of the immense territories to be traversed, any railway would bear feeders. You know a feeder in India means 100 miles.

2155. Supposing it were 50 or 60 miles?—I would never put a narrow gauge feeder of 50 miles to join a broad gauge system.

2156. Supposing that it were 200 miles?—Then it should be broad guage.

 2157. Supposing

Mr. *Kynaston Cross*—continued.

2157. Supposing that the country was so sparsely populated, or that it were such a very unproductive district that two trains passing per day would be all that was needed, what would you say?—Then the line should not be made through there.

2158. Do you think that there are no districts in India in which that is the case?—There are parts of India which the people never can cultivate, and I would never advise a railway going through a district like that. I am speaking generally of the districts of India that are densely populated, and which could be opened up and where cultivation could be increased, and where at present cultivation is confined to their own requirements.

2159. You spoke of densely populated districts, and you spoke of Bhopal and other districts in Central India; do you know the population of the districts?—I merely judge from the number of villages I saw in going through the country and the number of people I met with.

2160. Do you know that there are not more than 120 to 140 of population per square mile?—No doubt; and I believe that is caused simply because there is no local labour employment for the population. The villages would increase in size when the country is opened up.

2161. But how do you reconcile the two statements; you say that the district is already thickly populated, and still it has only 120 to the square mile, and then you say that it is not thickly populated because it is not opened up?—There may be 120 to the square mile, but they only cultivate close to a road to keep themseves in life, you may say. Beyond that they have no inducement to work, and they spend half the year idle.

2162. I do not quite understand how you say that the district is thickly populated, but that still there are only 120 to the square mile?—That I do not know. I was speaking of the number of villagers I met with in going through, and I say it is very thickly populated as districts go in India.

2163. I think you said that it was one field of grain?—From Jhansi to Cawnpur it is one field of grain.

2164. What becomes of that grain?—I may say that that field is confined to a few miles only from the roads at present.

2165. Then there is plenty of available land outside of them?—Yes.

2166. Which might easily be cultivated?—Yes, and which would be cultivated.

2167. You made a remark about the increase of revenue always following an increase of railways?—Yes, that is what I have understood from the figures I have seen, comparing the increase of the miles of railway with the revenue in India.

2168. What kind of revenue do you refer to?—I am speaking generally.

2169. You do not know of any particular branch?—No, I am speaking of it generally.

2170. You have no knowledge yourself on that point?—Not at all, except just what I see in the papers.

Mr. *Kynaston Cross*—continued.

2171. You do not know that the land revenue has increased through railways being placed in any particular district?—I do not know about the land revenue in particular. I have seen it generally spoken of in the papers.

2172. You would be rather astonished, would you not, to know that the land revenue remains very much the same?—Yes, I should.

2173. In fact, you do not speak from your own knowledge; you only speak from hearsay?—From what I have seen in the papers, that is all.

2174. I think you said that the country west of Agra has greatly improved since the establishment of the railway there?—Yes.

2175. Is there not a considerable amount of irrigation in that part of the country?—There is a little irrigation carried on there, but I do not know that it is to any very great extent.

2176. Have not considerable irrigation works been established there within the last 20 or 25 years?—Not west of Agra; south of Agra there are some irrigation and canal works carried on up to Agra, but I do not think west of Agra.

2177. But you have no experience of it yourself?—No, it is quite beyond me.

2178. You spoke of the price of labour and of materials; could you give the Committee a general statement of the cost of rails per mile on any of the lines that you have made or are making?—I can give you my present estimate of broad and narrow gauge. My estimate for narrow gauge permanent way per mile would be 17,960 rupees; that is just the rail and the fastening, fish-bolts and fish-plates.

2179. For laying down two rails?—Yes, and fastenings a rail of 41 lbs.

2180. Then, I think, in reply to Mr. Bolton, when he asked you whether it would be advantageous to place a third rail upon the broad gauge, you said it would cost a certain figure, what was that figure?—I said 10,000 rupees for a small rail, and I think I said 15,000 rupees for a high rail, same as broad gauge.

2181. Then those two rails on the narrow gauge would cost 17,000 rupees a mile, and a rail placed on a broad gauge railway, even though it was of the same size as the narrow gauge rail, would cost 10,000 rupees?—10,000 rupees for the narrow gauge rail, but a broad gauge rail of the same size would be 15,000 rupees per mile.

2182. You say that two rails of narrow gauge would cost 17,000 rupees per mile?—Yes.

2183. And one rail would cost 10,000 rupees?—Certainly, because it would entail extra work in laying down a single rail to what it would cost laying a double rail. You have got packing to do in the one case, and not in the other, besides the extra cost of points and crossings at the junctions.

2184. Then there would be very little advantage in laying down a third rail on any broad gauge lines?—I should say not.

2185. Are the sleepers on the broad gauge lines prepared in such a way that they will accept easily a third rail?—Where there is a wooden sleeper, certainly. Where you have pot sleepers you never could do it.

2186. Are many pot sleepers used on the trunk lines?—Yes, the East Indian Railway adopt them very

Mr. *Kynaston Cross*—continued.

very largely, and the Great Indian Peninsula also.

2187. Are there many iron sleepers used on the trunk lines?—Steel sleepers are being used now.

2188. Those sleepers on broad gauge lines I suppose are not prepared in such a way that they could be easily placed under a third rail?—No, they could not.

2189. Can you give the Committee any information as to the proportionate cost of the iron work and the other work on an Indian Railway at the present time?—I have not got that taken out, I am sorry to say.

2190. Or on any line that you propose to make?—I have not got the details of it here; they are all slumped together, it includes the girders and the machinery at the stations.

2191. That is material which comes from England. What will its cost be?—I should say about one-third of the total cost of the line would be for English material.

2192. That one-third is about one-half the price that it was 10 years ago, is it not?—It is.

2193. Is it one-half the price delivered in India?—It is less than one-half the price now.

2194. What is the proportion; is it 40 per cent. of the price?—I may say about one-third of the cost.

2195. Then one-third of the material is at one-third the price it was 10 years ago?—No, it is half the price certainly. A third of it originally cost about one-half of what it did ten years ago.

2196. Then what proportion does the cost of the remaining two-thirds bear to what it was ten years ago?—It is a little more (the labour has of course increased) I should say, perhaps, 10 or 15 per cent. more.

2197. Then two-thirds, that is 66 per cent. of the cost is increased by 10 per cent. ?—Yes, certainly.

2198. And 33 per cent. of the cost is less than one-half what it was 10 years ago?—Yes.

2199. So that you gain 17 per cent. on the one and you lose 6·6 per cent. on the other?—Yes.

2200. That is to say, the net total cost of the line, as compared with 10 years ago, is 11 per cent. less than it was?—Yes; working out those figures I have just given.

2201. You said that the wages of masons would not increase in the same proportion as the wages of coolies?—I do not think they would.

2202. But could you get a very large number of additional masons if they were wanted?—Perhaps not a very large number. If there were railways going on all over India at one time I suppose that item would be a very difficult item to deal with; but if you confined it to so many miles each year it could be done.

2203. Are the masons in India at the present time pretty well employed?—No, not at present. They are getting very low wages now; no work is going on of any importance; the only line going on just now in my district is the Manickpur and Jhansi line.

2204. Do you know the amount of railway construction which is going on at the present time?—In Northern India, which is all that I

Mr. *Kynaston Cross*—continued.

am aware of towards the North-Western Provinces, I think there is only one line in progress.

2205. You do not know that there is actually not less than 2,000 miles of line being constructed at the present moment?—That is in Southern India, and those are all narrow gauge lines.

2206. That does not affect you in the north of India?—It does not affect me at all.

Lord *George Hamilton.*

2207. You gave some very interesting evidence as to the recent friction between the Government officers who superintend the work and the contractors, and I think you attributed that rather to over zeal or ignorance on the part of the Government officers?—A little of both, I said.

2208. Is it not the fact, that by finding out and remedying their mistakes the officers get the necessary experience?—At my expense.

2209. People can only get experience at somebody's expense?—It is very hard that it should all come upon me.

2210. Assuming that they have got their experience, the same friction will probably not again ensue; assuming you got a fresh contract, it would be under officers who had obtained experience?—Certainly not, for I very seldom get the same officers again; that is the annoying part of it.

2211. You have been engaged in contract work for a good many years?—Yes, for 20 years.

2212. Is the friction less or greater between the contractors and the superintending officers than it used to be?—I know of no difference at all. If you get the same class of engineers without practical experience it is just the same now as it was 20 years ago.

2213. Does it depend upon the man, or is it the system?—It is just the want of knowing where to stop his demand; he thinks that by objecting to everything you give him, he will get something good in the end, whether it is good or bad; that is my experience; I am talking now of inexperienced engineers.

2214. Now that they have got their experience, do not you find from your point of view that they are more moderate in their demands?—Certainly, I say that when I meet with a practical engineer, I have the greatest pleasure in the world in doing business with him, because he knows what he wants and he can tell you what he wants; I have no objection to a strict engineer so long as he can tell you what he wants.

2215. If all the other contractors with the Indian Government are a sintelligent as yourself, it is an evil which will to a certain extent remedy itself?—Certainly; if the Government supply men with practical knowledge to superintend the construction of the works, it will be removed at once.

2216. Practically the knowledge that they are deficient is the knowledge of construction?—Yes, a practical knowledge of construction. A man may be a very intelligent engineer, and able to make a survey and design a bridge and a station, and so on, but put that man on construction,

Lord *George Hamilton*—continued.

he cannot deal with the different classes of materials we have got to put before him for his approval. I always give the Government the benefit of my practical knowledge in carrying out works in India, and when I make a suggestion for the good of the Government I like to have it adopted, and, if it is not adopted, then it is the fault of the Government and not mine, if anything goes wrong.

2217. What would be your remedy, because the Indian Government must have somebody on their behalf to supervise the work of the contractors?—The only remedy is for the Government to see that their own officer who is put in charge of a contract should have had a practical knowledge of dealing with building materials. There are not two parts of India where you get the materials the same, and it is only through practice that a man is able to dispose of them and to deal with them. A man who is only a surveyor or a designer cannot possibly be expected to be able to deal with a material that he knows nothing at all about; that is the difficulty.

2218. Those engineers, I suppose, are put to all sorts of work in order to gain experience, so that a man who had been superintending the construction of railways might the next year, when the railways were finished, be sent off to different work?—That is another mistake of the Indian Government. A man may be in charge of irrigation works, and he may be for some years attached to the Irrigation Department, and after going home on leave he comes out again, and he is placed in the Railway Department, and he knows nothing of what he is dealing with; it is quite a new school to him altogether; and that is a common thing in India.

Mr. *Kynaston Cross.*

2219. Do you say that from your own experience?—Yes, from my own experience.

Lord *George Hamilton.*

2220. The first railway you built was the Rajputana, was it not?—I was on that first for the Government.

2221. You built that, did you not, under the superintendence of one of those engineers?—There were several. We had a staff of eight or ten engineers.

2222. You estimate that it cost the Government 10 per cent. more than if it had been constructed under the supervision of a guaranteed company?—Excuse me, if you wish it, I could give you my reasons; I would not do the same thing again.

2223. Are you aware that that line has given a quicker return than any line in India?—Certainly, that would be so, I will not say at my expense, but I know that I lost several lacs of rupees on the masonry, and on two or three other items in that contract.

2224. Would it not be possible for the engineer officers to say that this supervision, which you consider so irksome, has actually resulted in a better class of work?—Never that I am aware of.

2225. Do not you think it is shown that the cost of maintaining the permanent way, the bridges and embankments, is less where the work has been

Lord *George Hamilton*—continued.

supervised by Government officers?—I am not aware of that at all.

2226. Assuming that they could prove it to be so, would not that to a considerable extent nullify your objection?—Certainly not; maintenance has nothing to do with construction; I am speaking of the construction of a line; maintenance is school boy's work.

2227. Of course the less the annual cost of maintenance and repairs the better the line will pay?—If a line is easily maintained it shows that it has been properly made. If it had been improperly made it would cost more to maintain.

2228. I do not wish to use this expression in an offensive manner, but if a man scamps his work, and the line cost less in construction, it would annually cost more to maintain?—It all depends upon where the scamping takes place.

2229. As a principle you admit that do you not?—Of course if the masonry is scamped it will require rebuilding sooner.

2230. In giving the evidence, which you have very fairly and impartially given, your opinion is that this extra expense is not due to the officers insisting upon your putting in any better work, but rather that they were over punctilious?—Decidedly, they were over particular, trying to get what is almost impossible, you may say.

2231. I think you said that you found a considerable difference between the Government engineers and the engineers who were employed by the guaranteed companies?—Yes; for this reason, that in the guaranteed companies every engineer on the staff had been on the works before and had had former experience.

2232. They had both Indian and English experience?—Yes.

Chairman.

2233. Who appoints the engineers to superintend the contractors in making those railways?—The Government of India.

2234. What department?—The Director General of State Railways, I think.

2235. In your opinion, ought the Director General of State Railways in India to lay down a rule, that no engineer who had had no previous experience in India in the construction of railways should be employed to supervise a contractor?—Certainly.

2236. But how are the younger men to get their experience?—One would not object to young ones here and there.

2237. But how are the young men to get their experience; should they simply be subordinate to the Government engineer and have nothing to say to the contractor?—There are always assistant engineers on each contract, and he is not supposed to have much experience; in fact, no experience at all. He is getting experience there under the executive engineer, I do not consider him anybody at all to effect us.

2238. But you think there ought to be a rule laid down by the Director General of State railways in India that no executive engineer or engineer in chief should be appointed to supervise a contract unless he has had previous experience?—Quite so.

2239. That rule does not exist?—No, it does not exist.

2240. You

Chairman—continued.

2240. You think that if that rule were laid down and acted upon you would get quit of the friction about which you have expressed yourself so strongly?—At once.

Mr. *Carbutt.*

2241. You said that there would be a reduction in the price of iron-work that went out from here, and of all home materials; but am I to understand that that reduction of two-thirds or one-half of the cost applies to rolling stock, or that it only applies to the permanent way of the line?—That is all; just the permanent way, the girders, and that sort of thing.

2242. In addition to that, there would be a saving in the rolling stock, and things of that sort?—Yes in proportion, certainly.

2243. You stated that if the Government of India spent 50 millions of money, as is suggested, there would be a large increase in the revenue?—Yes.

2244. Are you aware that for the last four years the Government of India have spent above four millions a year in building railways, so that they would be spending six millions a year more than they have hitherto been spending; and what I want to know is what difference the increased cost of labour would make in the cost per mile; would it make any difference in your contracts?—It would scarcely be noticed in a small population. The value of coolie labour is very small, I do not say it would not be perceptible. It would not effect much in the cost of construction.

2245. If you were to tender for the construction of a hundred miles of railway, and the Government said, we think of spending four millions this year, and next year we intend to spend 10 millions, that would not make any difference whatever in your contract?—Very little indeed.

2246. It would not affect the amount of railway that the Government could get for their money in India?—Not materially; it would not affect the total cost to any great extent.

Mr. *Fowler.*

2247. With regard to the increase of cultivation, have you watched at all upon the Great Indian Peninsula, the change that has taken place in the cultivation near that railway?—Yes; and it is very great indeed.

2248. Can you specify any particular locality?—The district between Nagpur and Bhusawal, where I was working myself for many years making the line there; it is quite a new country altogether now.

2249. Was that a country where there was a large population before?—Just a fair average number, but the cultivation is enormously increased.

2250. Has the population increased largely too?—That I do not know.

2251. But their condition has improved very much?—It has very much improved, certainly.

Mr. *Bolton.*

2252. Would you tell me if you can, what you think would be the difference in the cost of maintenance per mile upon the broad and narrow gauge?—It would be the same identically.

2253. Consequently for the traffic carried over it for the same amount of tonnage the cost per ton would be very much greater on the narrow than on the broad gauge?—Yes.

2254. I presume that the cost of signals on both classes of lines is the same?—There is very little difference.

2255. Is there any difference at all?—They are just the same.

2256. I suppose they do not use interlocking apparatus, signals, and points?—I do not understand.

2257. You do not put them in yourself?—They are independent of each other. The signals are worked quite independently. The semaphores are separate from the points.

2258. Do you know what the general staff expense, as I may call them, are, for the staff, the porters, the lighting, and so on; they would be the same in both cases, would they not?—Just the same.

2259. Therefore the cost per ton of traffic carried, would, in proportion to the total amount of work carried, be practically greater per ton per mile on the narrow gauge than on the broad gauge?—Yes, and in the very same way with the staffs working the trains; you have the same guards, the same drivers, and the same stokers, but you are carrying a much smaller tonnage on the narrow gauge than on the broad gauge.

2260. If only half the tonnage is carried, the cost of carrying per ton per mile would be doubled?—Yes, certainly.

Sir *George Campbell.*

2261. With regard to the fall of the bridges and viaducts on the Great Indian Peninsula, I understood you to attribute that to bad mortar?—In some cases to bad mortar, and in other cases, as I mentioned before, to the fault of the specification.

2262. Do you think that India is so new a country that inexperience is a sufficient excuse for bad mortar. You have had opportunities of looking at native buildings; are you aware that native works built many generations ago are as hard as rock, showing that the native contractors in those days used far better materials than almost any that are used at the present day?—Yes; but I have also seen native work a hundred years old that has crumbled away in my hand.

2263. Have you not seen some very good?—No doubt I have; but those are works carried out by natives themselves, who were acquainted with the materials they were dealing; whereas the works on the Great Indian Peninsula were carried out by engineers who were not altogether ignorant but who were inexperienced at the time in dealing with those materials.

Mr. Hyde Clarke, called in; and Examined.

Chairman.

2264. You have practised as a civil engineer, have you not?—I have. In 1836 I laid out lines in the North-west, of which the Glasgow and South Western Railway now forms part.

2265. Are you well acquainted with Indian railways in particular?—Yes, I took part in the negociations for the establishment of railways in India. In 1847 I published, at the request of Sir Macdonald Stephenson, Mr. Chapman, Mr. Heath, and Mr. William P. Andrew, a work entitled, "Practical and Theoretical Considerations on the Management of Railways in India." In this I examined the economical question, whether railways in India could pay, or whether they could compete with river navigation. The results have proved the accuracy of the calculations. In 1849 I reported to the Honourable East India Company on a telegraph system for India. In 1858 I took up the subject of communication by railways with the hills, and obtained, through Mr. W. Ewart, the Committee of the House of Commons on Indian Settlements, which sat in 1858 and 1859. I published in 1858 a book on Colonisation Defence and Railways in our Indian Empire. In 1882 I reviewed the 20 years of progress of this measure in a paper before the Statistical Society.

2266. Have you any practical suggestion to make to the Committee regarding our order of reference, which is to advise the Secretary of State with regard to the mode of extending railways in India, with due regard to the finance of that country?—My suggestion is that extension should take place on a large scale, because the effect would be to increase the resources of India, and more particularly by raising the prices in the manner described by the last witness; that has been my experience in Asia Minor and over Turkey generally, and I have seen it working out likewise in America.

2267. When you say "on a large scale," do you consider that the proposal of the Government of India to spend from 50 to 60 millions in the next five years is not too extensive?—certainly not.

2268. You think there would be no difficulty in raising a sufficient capital for that purpose?—Certainly not; I may remind the Committee that for the last 16 years I have been connected with the Council of Foreign Bondholders, and that I have had opportunities of seeing the operation of the money markets here and in other countries, and I consider that, so far as raising money, the

Chairman—continued.

sum of 10,000,000 *l.* a year is quite within the capacity of the money market.

2269. You think that railways to that extent might be made to pay a good dividend?—I do, taking in consideration all the necessary elements of such a question.

Mr. W. Fowler.

2270. Have you anything to say to us with regard to prices in connection with this question of railway?—Yes, my experience is the same as that of the other witness, particularly his observation with regard to India, that in the last 40 or 50 years prices have very materially risen, and that where wages were a rupee or two rupees a month 40 years ago, they are now four rupees or eight; and that wherever you bring a district into access to a market having a large area of distribution, you must necessarily raise the prices; India is not different from other parts of the world; it takes place in all similar countries.

2271. That would not have a very direct bearing, would it, on the subject of our inquiry?—It has this bearing, that whereas at the present moment there is a very natural timidity as to laying out capital on railways without a good prospect of an adequate return, by being able to get a higher rate of freight on goods and a higher rate of fare for passengers, you necessarily thereby get a return apart from the number of passengers or the weight of the goods you carry. The Committee are very well aware that the same number of passengers in India, and the same number of tons do not produce the same amount as they do in Europe, in North America, or in Australia.

2272. I suppose you mean that the condition of the country would largely improve, and would tend to increase the profits of the railway?—I mean not solely that, but that there would be a positive alteration in the rates of wages and commodities, and in prices generally that must necessarily be the case.

2273. An increase of wages of course would enable the people to travel more?—Yes; the same sort of thing took place in Scotland at the beginning of the railways. You must adjust your fares to what the people are able to pay; and while they had a third class in England in those days, they were obliged to have a fourth class at a lower rate in Scotland, just as they have a fourth class on the East Indian Railway.

Mr. Wm. Martin Wood, called in; and Examined.

Chairman.

2274. You have been many years in India, have you not?—Yes, continuously.

2275. When there, had you an opportunity of watching the course of railway construction, and did you interest yourself in railway finance?—Yes, as editor of a daily paper.

2276. Will you give the Committee your

Chairman—continued.

opinion as to what ought to be done in the present circumstances of India with regard to the making of new railways?—I may mention that it was at the beginning of 1865 when I went out, and from that time till about 1869, the system obtained of giving a 5 per cent. guarantee. Scarcely any railways were projected except under

Chairman—continued.

under that condition. About 1867-68, Lord Lawrence's Government went into the matter very fully, and the result that they arrived at was that there should be a change made of some kind. I may just remind the Committee that a tabulated statement of the lines that had been proposed, as it was said, by the provincial governments at that time amounted to about 49½ millions altogether.

2277. Would you give us your opinion with regard to railway extension in India at the present moment?—That is a general question, but it may be answered it in this way: I have been strongly of opinion that there should be a large extension not only of railways, but of all other public works in India, and my feeling is in favour of a reasonably rapid extension of railways.

2278. What would you call a "reasonably rapid extension of railways" in India; would you be content with the present rate of progress, namely, 6,000,000 *l.* or 7,000,000 *l.* a year, or would you be prepared to say that 10,000,000 *l.* or 12,000,000 *l.* ought to be spent per annum in making new railways?—I think 6,000,000 *l.* or 7,000,000 *l.* is rather over what is being expended now; but if we were to fix a figure, I should certainly have no objection to going up to 10,000,000 *l.* Perhaps it might be allowed me to qualify that in this way: I refer to that expenditure only in connection with other public works expenditure; but if it is not permitted me to allude to railways along with other public works, 10,000,000 *l.* is a very considerable sum, being an addition of 4,000,000 *l.* to what is now being spent; and if railways carefully selected and well adapted to the different parts of the country could be decided upon, I do not see any objection to an expenditure up to that extent. (*See* Appendix).

2279. Do you think the Government of India ought to select the lines of railways themselves, or leave that to companies?—The Government of India must in any case have a deciding voice in the matter. It is very well indeed for the Government to receive suggestions from private companies, and from private enterprize in the matter, but each proposal that it has to consider should be received with considerable caution and subjected to a very careful examination.

2280. Do you think that the bulk of the railways in India, the great trunk lines, ought to be made by private companies under guarantees?—I was going to mention that my attention was drawn very forcibly to the subject in consequence of the practical failure of what we have called the guaranteed system of construction under the old companies. As you are aware, Lord Lawrence's Government took up that question, and they proceeded to organise a State Railway Department, which was developed and carried out under Lord Mayo to a very large extent; and notwithstanding the defects which accompanied that, it was no doubt an improvement upon the almost haphazard construction of guaranteed lines. It would be well to notice those proposals which were the basis of the new department of railways under the late Lord Lawrence's Government; there were 25 altogether, and as I said the expenditure involved was about 49,000,000 *l.* It is useful to refer back to that, in order to compare it with what

Chairman—continued.

has been done since; of course that set of proposals has been extended very much in many directions, while some of the proposals then made have been disregarded.

2281. Have you anything to state particularly with reference to the coast line from Madras to Calcutta?—I may say that I have given a good deal of attention myself, as much as a layman can do, to the question of the proper alignment of railways, and I would say briefly that the proposed coast line from Madras to Calcutta is in my opinion an excellent example of a line that ought not to be made. There is nearly every possible objection to it, so far as I can judge on general grounds, and as to the physical circumstances of the country.

2282. You do not think that even looking at it from the point of view of famine, and as a line for the prevention of famine, it is a proposition which ought to be entertained by the Committee? No, I do not see that it should; there may be short portions of it capable of being used for that purpose, though I do not remember either in the Ganjam famine, or, more especially, the Orissa famine of 1866, that it could have been of much use. I may instance that, because, as the line goes through Orissa, that famine district in Orissa is only 100 or 150 miles from Calcutta, and it could have been reached with good highways, but there were no roads that were passable in the rains. I do not see that that part of the railway would apply to famine purposes in that district at all. There are other objections also which I could easily point out.

2283. You heard what the first witnesses said with regard to the gauges in certain parts of Northern India, that certain railways should be almost all of them broad gauge, and that the narrow gauge should be confined to thinly populated parts of the country where they might very well be adopted; do you concur in that view?—I do not. I take almost an entirely opposite view on that point; I prefer the position taken up by Lord Mayo's government at the time, and that was that from north and west of the Vindhayas, there should be certain new railways, and and those lines were sufficiently extensive and important to form of themselves a complete system of metre gauge lines. That, as you are aware, was invaded by the change in policy which made the frontier line from Lahore to Peshawar and the Indus Valley lines on the broad gauge, which thus spoilt the continuity of the system. Then, as we have just heard, Scindia insisted on having a broad gauge line constructed in the middle of Central India, so that it has been broken up very much; but the Rajputana line has been made upon that plan, and has been a very considerable success. I may mention, going back a little, that I advocated the extension of the line from the Bombay and Baroda Railway up to Delhi many years before that route was undertaken.

2284. On the metre gauge?—That was before the question of the gauge had distinctly arisen. It was very much needed that Rajputana should have a railway, and they intended at that time to go a different route. They proposed to go by way of Neemuch and Nassirabad; I may mention that I remember the effect of the report

Chairman—continued.

of Colonel John Trevor, of whom you have had before you I believe. He surveyed the line all the way down from Delhi to Baroda, and the conclusion that he came to, on going over it, was that it could not be made to pay on the broad gauge. At that time I may mention that the question of gauge had scarcely arisen, and every project was considered in relation to the guaranteed and "standard" system.

2285. I suppose you are aware that the break of gauge at Ahmedabad has been found so inconvenient, that it is proposed to take up the metre gauge and make it all broad gauge?—I am aware that there is a scheme of that kind, but the Committee can scarcely realise perhaps the amount of popular prejudice that prompts such proposals. As I say, the complete system as planned in 1869, has been innovated upon in this way so as to be greatly to the disadvantage of the whole; I may say that the whole subject was gone into in the broadest possible manner by Lord Lawrence's Government, and it was demonstrated that the large aggregate saving on the metre system was sufficient compensation for all the disadvantages. I have here various memoranda and particulars, made by Government or other competent engineers, on the relative cost of the two descriptions of lines. I was going to mention more particularly a summary by Mr. Guildford Molesworth, and here I might remind you of an important change that was made with regard to railway management by the Government of India, which was the appointment of a consulting engineer, in the person of Mr. Molesworth, a man of previous railway experience, as you are aware; he had made the railways in Ceylon. That appointment, I consider, has had a very considerable effect in enabling the Government of India to keep a better control over projects that have since been made.

2286. Have you any other suggestion to make to the Committee with regard to the terms of their reference which is as to the best mode in which the extension of railways in India can be made?—I do not know that I can say more than that so long as you secure an efficient and active Government control, the proposals by private companies might be considered.

2287. You are rather in favour, are you not, of the Government making the railways themselves?—I think there have been considerable advantages in it, and that modified by an intelligent and careful adaptation of the contract system is perhaps, on the whole, the best mode of carrying out the desired object.

2288. Do you concur, on the whole, in the memorandum of Lord Lawrence?—Yes, more especially in the enlargements and improvements that have been made since the practical knowledge of Mr. Molesworth and other similar men has been brought to bear upon the subject.

Mr. *Kynaston Cross.*

2289. You would leave the whole thing to Mr. Molesworth?—No; I mentioned the introduction of Mr. Molesworth as that of one practical railway man. I know from going over many of his papers with regard to particular projects, that he must have had, and has had, a very important influence in systematising and otherwise discriminating the control of the Government in these matters.

Mr. *Kynaston Cross*—continued.

Mr. *Slagg.*

2290. You have studied the question of the relative value of railways and canals with regard to inland traffic, more especially in relation to bulky products; could you give the Committee any views upon that subject from your practical experience?—I have seen the difficulties that railways have had to contend with in the conveyance of bulky products at particular seasons; they are inadequate at times in many districts to convey nearly anything like the large quantity of bulky products that could be grown, and that would be grown if water were available to make it grow. And with regard to that, if I were to give a more specific reply, it would be this: the cost of carriage by railway ought to be put down as low as possible, but there is a minimum below which you cannot go; that minimum has, I believe, in many instances been reached in India, and certainly it has been over-passed in America. Below that the cost of conveyance by canal, by inland water transit, is almost immeasurably lower. And when you look at the immense distances in India, and the aggregate cost of railway carriage where you cannot get over the difficulty of fuel for the locomotives, the difference between that and the easy conveyance by river and canals is enormous in its aggregate effect.

2291. Then you think that the attention of the authorities ought to be turned in many cases rather to canal extension than to that of railways?—I would not put them into competition: but I say when you are asked to spend 20,000,000*l.* a year upon railways, I think that that is utterly unreasonable, not so much that the sum is large, but because it is wanted for other purposes, and could be laid out much more in accordance with the conditions of the country.

2292. You have studied the industrial and commercial effect of railway expenditure in India, what observations have you to make upon that branch of the subject?—The industrial effect of making railways, as Mr. Glover has shown, beyond the disbursements, is to increase the price of labour, and of course to add to the income of the people very much. You have to go on to the time when interest on the capital has to be paid; there is a period during which the line is under construction before it can pay, and that has to be debited against the income; and in considering the interest that has to be remitted for the capital, that is a serious consideration. Still, as I have endeavoured to show in various communications, if public works generally will pay 7 or 8 per cent., or 8 or 9 per cent. in the course of a few years, that will soon compensate for that sacrifice; but, comparing the expenditure on railways with the expenditure on waterworks, you will see that a very much larger proportion of the outlay is in the country itself, in the case of waterworks. In the case of railways a large proportion goes of out the country, and that makes a very important and serious difference to the industrial condition of India.

2293. At the same time it is an advantage to India

Mr. *Slagg*—continued.

India if railways pay over and above the guarantee?—But not as compared with irrigation and canal work paying; because whatever railways will do in the way of conveying produce, it must be remembered that they cannot make produce grow, whereas the water can, and will do.

Mr. *Bolton.*

2294. Have you had any practical acquaintance with the construction or management of railways and canals?—I cannot say that I have, but I have during my time known all the chief engineers, and many of the public works men in all parts of India, and especially the engineers and the agents of the two large lines on the Bombay side. I know the subject in that way as a layman.

Mr. *Bolton*—continued.

2295. Then, the statement that there was a great aggregate saving in metre gauge railways was not from your own personal knowledge and practice, but from information that you have acquired from others?—That was the conclusion of successive Governments, I believe, which I cited; I have also had it direct from practical men, and I have memoranda here to that effect.

Tuesday, 29th April 1884.

MEMBERS PRESENT:

Mr. Arthur Balfour.
Mr. Baxter.
Mr. Bolton.
Mr. Brodrick.
Sir George Campbell.
Mr. Carbutt.
Mr. Kynaston Cross.
Mr. Dalrymple.
Mr. William Fowler.
Mr. Gorst.
Lord George Hamilton.
Mr. Jackson.
Mr. Onslow.
Mr. Bernhard Samuelson.
Mr. Edward Stanhope.
Mr. Wodehouse.

THE RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

Mr. JAMES BULLEN-SMITH, called in; and Examined.

Chairman.

2296. YOU were formerly a merchant in Calcutta, were you not?—I was.

2297. And for some years you were a member of the Legislative Council there?—I was.

2298. How long is it since you left India?—Between six and seven years ago.

2299. Have you seen the memorial from the East Indian Association with reference to railway extension in the country?—Yes, I have.

2300. Do you attend here in your private capacity, or as representing that association?—I was asked to attend on behalf of that association.

2301. Generally speaking, do you believe that you represent their views?—Generally speaking, I concur in the prayer of the memorial. I was not a member of the council of the association at the time that that memorial was drawn up.

2302. Do you think that the time has arrived for a further great extension of railways in India?—I think that more might be done than has been done.

2303. More might be done than what has been done in recent years?—Yes.

2304. You are of opinion, I believe, that the Government should ultimately be the owners of the whole of the railways in India?—That is my opinion.

2305. And that no arrangement should be made with any private company in future, which had not a provision to that effect?—That is my opinion.

2306. How do you think that the new lines which you advocate should be constructed; should they be built by the Government, or by companies with or without guarantees?—My own opinion is in favour of lines, or groups of lines, being formed by companies under agreements with the Government.

2307. What sort of agreements would you have?—Such agreements as have hitherto been current; agreements as to dates of resumption, and so forth.

2308. Do you think it would be possible to any considerable extent to have railways constructed in India by private companies without a guarantee?—I do not think it would be.

Chairman—continued.

2309. You think that experience has rather taught us that it is in vain, at all events for the present, to look for the construction of railways in India on the part of private companies, only giving them certain advantages, such as the land through which they pass?—I do not think that is sufficient.

2310. Supposing that the Government of India were to propose certain new railway works under a guarantee, do you think that that guarantee should be for a limited term of years?—No, I think to be effective it must be permanent.

2311. And let the Government eventually assume possession of them?—Quite so.

2312. Of course it is rather a puzzling question where the capital should be raised; have you any strong opinion of your own or as representing this association regarding that point, whether it should be raised in England, or attempted, to a certain extent, to be raised in India?—I have no opinion as representing the association for I am not cognizant of the question having been discussed by them; but I have a very strong opinion of my own that the capital can only be raised on this side.

2313. Then you think that there is nothing before us but to face, and face boldly, the inevitable question of the loss of exchange?—I think that the capital cannot be found in India.

2314. Have you been cognizant of any scheme for gathering up the savings of the people of India by opening offices throughout the country, or elsewhere, with a view of inducing them to invest their surplus capital; and do you think that such schemes are feasible?—Speaking from memory, I am not aware of any; and judging by the past such an investment does not commend itself to the people of that country.

2315. What annual sum do you think could be raised without detriment to the finances of India

Chairman—continued.

India easily in this country in the way of loan for making new railways?—When you say without detriment to the finances of India, that is rather a hard question to answer, but I think that considerably more might be spent annually than has been spent.

2316. I will put my question in another form, leaving out in the first instance the expression "without detriment to the finances of India;" what annual sum do you think could be easily raised in the London market for the extension of railways in India?—It would be difficult to name an exact sum, but my own opinion is that a very much larger sum than has been spent during the last three or four years might be raised. Mixed up with that would be the question of not only what India would bear, but what the effect here would be of raising a very large sum annually, and apart altogether from what India could bear that would have to be considered. Believing as I do that very violent movements in exchange and so forth are to be deprecated if possible, there would have to be prudence shown in not raising such a very excessive sum as would unduly send up the exchange, and perhaps interfere with the export trade from India.

2317. Then you do not agree with some gentlemen who have told us, that there is no difficulty whatever in raising in the London market any sum that was thought proper for making new railways in India?—I think with the guarantee of India the money might be raised in the English market, but looking at it from an Indian point of view, I do not think it would be a prudent thing to raise so much year by year.

2318. Looking at the terms of our order of reference by which we are directed to have a due regard to the finances of India, you think that great prudence, circumspection, and caution should be shown in any recommendation in favour of a certain annual sum?—I do; I think there is a tendency in some directions to go much faster than I think is prudent, looking at the case all round.

2319. In short you think that the Indian Government, as a whole, have, up to this time, not gone fast enough; but at the same time you think that there is a disposition to force them to go too fast?—In some quarters I think there is.

2320. You are in favour of the happy medium?—Yes, I think there is a medium of course.

2321. Could you mention any figures which you think it would be a prudent thing to spend?—Speaking roundly I think, looking at the developments of the country, and at the reduced cost at which railways can be made, and the materials can be obtained, I should be disposed to say that we might double or treble the expenditure of the last few years without doing any harm. It is a very difficult question to answer, but that is my opinion.

2322. Doubling or trebling is a very large increase?—Putting it in millions, say five or six or eight millions. When I spoke of doubling or trebling I had in view the 2½ millions which is now supposed to be the right sum.

2323. How many millions do you contemplate pending in a year on new lines?—I think it might be trebled; I think you might spend seven millions.

Chairman—continued.

2324. So that if it were shown that the expenditure by the Government during the last three years was 15 millions, you would recommend that that amount should be increased by 50 per cent.?—About that; I should have in my mind something not exceeding 10 millions per annum, and most probably rather under than over that figure.

2325. Do you think the Government of India should fix upon the schemes to be adopted and then get companies at once to undertake the work, or should companies be allowed to initiate the projects?—I think on the whole I should prefer the Government selecting the schemes and for this reason: that I think the time has come when the railways in India should be made as far as possible on a scheme or system, so that hereafter there may not be the evil, which has been seen in this country, of so much competition.

2326. I suppose you would advocate all the main lines in North India, especially those in the plains, being broad gauge lines?—Yes, the main lines certainly.

2327. And the metre gauge to be confined to small systems through hilly districts and to poor places?—Yes, and feeders.

Sir *George Campbell.*

2328. As regards raising capital in India, do not you think it would be possible to raise a considerable amount of capital annually in India?—I do not think so.

2329. What do you understand to be the real result of the present system under which about two crores and-a-half have hitherto been raised in India; what proportion of that money has been really Indian money, and what proportion has been money of this country remitted for the purpose of being paid into the Treasury of India?—I should be disposed to say that a comparatively small proportion of it is really Indian money; I mean that I do not think the natives of India are large or permanent investors in our loans.

2330. Are you not aware that in former days the Government of India did raise large loans in India?—I believe they did, and I believe they could raise loans still; but I do not think they could raise loans regularly to such an extent as we are now contemplating.

2331. Are you aware of the amounts that were raised in former days when the resources of India were not nearly so largely developed; were they not very considerable?—Not, so far as I know, to that extent regularly; I understand that what is now being contemplated is a regular amount year by year.

2332. Certainly, up to the time of the extinction of the East Indian Company, was not the whole of the money that was raised by the Government of India, raised in India and really Indian money?—No, I do not suppose that even then it was all Indian money; but it is not within my knowledge that in those days any such amount of loan was raised regularly from year to year as is now contemplated. And also I do not see why India should not come to the cheapest market; it seems to me that if the best is to be done for Indian railways, Government must go where they can borrow cheapest, and

Sir *George Campbell*—continued.

that the inducement held out would not be sufficient for India.

2333. Is this market very much cheaper than the Indian market at the present moment?—Very much cheaper.

2334. Is it not the case that any money that can be raised in India, cannot be raised under 4 per cent.?—A loan at this moment is absolutely impossible. The minimum rate of the bank of Bengal now is 11 per cent.

2335. You have not been lately I presume in India?—Not for seven years. I believe the rates of money in England and India are gradually approximating to each other, yet what you may call the normal rate of money for purposes generally is beyond all doubt considerably higher on that side than on this.

2336. Are you aware that two or three generations ago the Government used to raise a great deal of money at 4 per cent. under the system of open loans?—I am not aware of that.

2337. Your experience does not go back to the olden time of open loans?—It does not.

2338. Is there at present any considerable absorption of Indian capital in industrial enterprise of any kind?—No, I do not think that new enterprises, spinning and so forth, are mainly or even largely carried on by Indian capital. I think it is mainly capital found in this country, at least speaking for Bengal; speaking for Bombay, I believe there is more found there; for instance, in the case of the jute and cotton mills on the Hooghly, which are now very numerous, I believe that a very scant portion of their capital is Indian.

2339. How is it with regard to tea and indigo?—The tea is almost exclusively European cultivation, and the indigo is exclusively European, with the exception of a certain portion of the north-west production which is in native hands.

2340. Do you think there is any accumulation of capital in India?—There is accumulation of capital in India no doubt, but it does not go in those channels.

2341. What does it go in?—That style of business does not commend itself to the Shroffs and Bunniahs and those kind of people. It is not enough return for them.

2342. If there is an accumulation of capital, what does it go into?—That I am not prepared to say, but I believe the correctness of what I say is verified by the share lists of those new companies which are open to the world. Native names in them are conspicuous by their absence.

2343. Coming to that, do you think that there is less available capital in India than there was two or three generations ago?—No, I cannot say that.

2344. Then in regard to the borrowing in England, do you think that that does involve an inevitable loss by exchange?—So long as the accounts of India are kept on the present system, at a taken rate of exchange, at a book rate; of course it involves an inevitable loss, but circumstances might cause the exchange to improve somewhat.

2345. I suppose there would only be a real loss in the event of a progressive depreciation in the value of silver as compared with gold?—That depends upon what you call a real loss. Of course if I now take an arbitrary rate which does not exist, and has not existed for years, and put it against the rate at the present day, I show a very large loss.

2346. But what I mean is this, if you borrow your money in England and remit it to India at the rate of 1 *s.* 7 *d.*, and get back your interest again at the rate of 1 *s.* 7 *d.*, I suppose there is no loss?—No, I should say there is no real loss.

2347. On the other hand, if two or three years after the rate became 1 *s.* 6 *d.*, and two or three years later 1 *s.* 5 *d.*, and so went on lower and lower, then there would be a real loss?—Distinctly.

2348. And the tendency, at least of late years, has been towards a progressive depreciation of the value of silver compared to gold?—In the last 18 months, or two years, it has been more steady, I think.

2349. Have you followed up the subject of railways in India, and what has been going on there during the last seven years since you left India?—Yes, I have given it some attention.

2350. Are you prepared to point to any lines, or class of lines, which ought to be made?—The one that I have thought most upon is one through the Central Provinces, carrying on the existing line from Nagpur towards Calcutta, by way of Seetarampur or in some other direction, partly for its own sake, and partly because it seems to me if such a line was made, it would be the beginning of something to be done, namely, lines down towards Orissa and Cuttack from it; that is my idea.

2351. Are you aware that the line now proposed by the Government of India after surveys joining at Seetarampur, would hardly connect with Orissa and Cuttack?—It would not connect itself with them, but I look upon any line running right through the continent as being a beginning, so to speak, as a natural kind of basis of lines going south I should suppose; I speak of course without any engineering knowledge.

2352. Do you think that a through line from Calcutta to Bombay by way of Nagpur would be justifiable in the present state of finances; would not it be a luxury considering we have already an efficient line to Bombay though somewhat longer?—It is an efficient line; but it is a very long line all the way round; I think it is a line which might be undertaken.

2353. Do you think it is a line which would pay?—Not at once; you would have to wait for it gradually.

2354. Do you think there is a reasonable probability that it would pay in a reasonable time?—I think it might; it must also be remembered that there are enormous indirect advantages which a line through that country would bring to the Government.

2355. What are the indirect advantages to which you refer?—There is our experience that a railway makes trade; you have not only to deal with what you find existing at the moment, but it actually makes trade; I believe that that was very conclusively shown on the Jubbulpur line, between Jubbulpur and Allahabad.

2356. Do you know anything of the country between

Sir *George Campbell*—continued.

between Seetarampur and the Central Provinces?—Not personally; but I have read surveys of it.

2357. Are you aware that at present that is a very wild country occupied by the wildest aborigines?—Yes, partly so.

2358. Is there any reasonable probability of a large trade springing up within any reasonable time in that country?—I should hope so by degrees from a large extension of cultivation of the land, and there would be increase of the land revenue.

2359. Then as regards Orissa and Cuttack, there is a very considerable sea communication with Orissa now, is there not?—At certain seasons of the year, with the fair monsoon.

2360. Do you know what the state of the ports is, and whether it is possible to get there by sea in a monsoon?—I think not at all, or only with very small vessels, so far as my knowledge goes.

2361. Are you aware that at present communication by canal is being established with Orissa?—It is so, to Midnapur, a very good communication; I do not know how far it now goes.

2362. Are there any other lines which strike you as important lines, which ought to be made?—I have not given my attention to detailed schemes.

2363. Have you formed any opinion whether small branch lines to existing trunk lines, would be likely to pay?—I think they would; I should expect they would pay very handsomely if well chosen.

2364. Have you had occasion to make any comparisons between the bullock traffic and the railway traffic for short lengths?—I have lately had a small line about 20 or 25 miles long brought under my notice, which is being constructed to join the East Indian Railway, just about Seetarampur, being constructed by private capitalists.

2365. Where does it run to?—It runs to Tarakeesa, a large shrine about 22 miles distant in the Hooghly district.

2366. Has that line begun to work?—It is not yet open. From the figures I have seen, and which have been carefully prepared, I think they warrant the projectors in believing that it will be a very paying line.

2367. Do you know anything of the Bengal Central Railway?—I know a little of it; I have not any connection with it.

2368. Have you noted the traffic returns; I am informed that the traffic returns have not been very good yet?—I believe they have not been so good as was expected, but they are improving gradually; there is a progressive increase; they do grow I am told.

Mr. *Bolton*.

2369. You have expressed an opinion I think, have you not, that the Government should own all the railways?—Ultimately I think they should.

2370. What is your reason for that opinion?—To begin with, I think it was early thought that for strategical or other reasons, the big lines of communication should always be in the hands of the Government; and I think that the Government having begun to be the owners by purchase of that big main line, should continue; I think it is just that they should be the owners.

Mr. *Bolton*—continued.

2371. Do you think that the traffic would be better and more economically managed?—I do not say that; it is not for that reason at all.

2372. Then it is for military reasons I presume?—I think the Government should reserve to itself the power of becoming the owners of the line when they can. One reason would be that I am asking them to bear the guarantee of an inevitable loss for some years.

2373. You expressed an opinion favourable to a narrow gauge railway in connection with a broad gauge, and some system of feeders?—Yes, I think so.

2374. Have you made any calculation as to the relative cost of the two systems?—I have not myself; but I know as a matter of fact that the narrow gauge is considerably cheaper; and I believe that in districts where such lines are laid down where the traffic is not so heavy, it would be foolish to adopt the 5 feet 6 gauge, if the meter gauge is sufficient to carry the traffic.

2375. You think it would not make the traffic so much more expensive by the break of gauge as to more than compensate for the additional cost?—No, I should not think so.

2376. But you do not know what the additional cost of a broad gauge line is; and you do not know what is the extra cost of the break?—I could not speak positively upon that.

Mr. *W. Fowler*.

2377. You said something about borrowing in silver in India as against borrowing here in gold. Is it not the fact that you will have to pay such higher rate, as you said if you attempted to borrow in silver, quite apart from the conditions of the money market, and have you made any allowance for that danger with regard to silver?—I think I said that I do not think that the borrowings in silver in India would possibly be such borrowings as we contemplate.

2378. But apart from that question would not it be a much higher rate to pay, because you would have to provide for a possible fall in silver?—That would not affect the borrowings in silver.

2379. Supposing that you borrowed in silver here?—But I did not contemplate any such thing as that.

2380. That has been sometimes suggested, but you have not thought of it?—I have not thought of it, nor would it seem to me desirable.

2381. You said something about the effect upon the exchange of borrowing here; but would not the effect upon the exchange of borrowing in gold here and paying the money by the Government be rather favourable than otherwise, and diminish the drawings upon the Government here?—Distinctly. Therefore I say that in fixing upon the amount to be raised regularly year by year, some limit would have to be made to that effect; otherwise a very excessive movement in exchange would have to be encountered.

2382. That is to say, you think it is an advantage borrowing in gold here, that you would thereby improve the exchange for a time?—That would not be the object of doing it, but the effect would naturally be *pro tanto*.

Mr. *W. Fowler*—continued.

2383. It would diminish the drawings for a time, but, ultimately, you would have to draw more to pay the interest on the borrowing?—Yes, but for the moment *pro tanto*, the drawings would be diminished of a certainty.

2384. With regard to the Central Provinces, you did not make any reference, except a general one, to the development which it would involve of the wheat trade; have you considered that point at all?—I have seen the figures of the wheat trade in the Central Provinces, but I have not any special information upon the subject; I have had the official figures shown me.

Mr. *Carbutt.*

2385. I would ask you: If the railway companies who projected the lines were assured that they should not be interfered with by the Government in any way whatever, and if it was always stipulated that the Government should not buy them up, do you think that the railways would be made without any guarantee by the Government; that is to say, if you did away with all Government interference would anybody go in to make those railways not under Government inspection, especially as to through traffic, you think it is possible that we could get railway companies to do it?—I do not think that that would make any difference.

2386. You do not think it is the question of the Government interference that deters people from investing their money in India?—No, I do not think so.

2387. You have said that you would spend three times the amount that the Government have hitherto been spending?—As I said before in my answer, I have before me the amount of 2¼ millions which as I understand is now laid aside specially.

2388. The amount spent by the Government last year was 3¾ millions, and in the previous year 3¼ milllions, in the year before that 5¼ millions, and in the year before that 4¼ millions?—Yes, I am aware of that.

2389. In the year 1879-80 the Government spent 4,518,000 *l.*; in the year 1880-81 they spent 5,340,000 *l.*; in the year 1881-82 they spent 3,763,000 *l.*, and in the year 1882-83 they spent 3,758,000 *l.*?—Probably taking the average of those figures, and making such an addition to it that I spoke of, something like a sum not exceeding 10,000,000 *l.* would be required I think.

2390. And you are in favour of spending 10,000,000 *l.* a year?—About that. The question is a very difficult one to answer to name a definite amount, but with my present knowledge I do not think that I should be afraid of borrowing up to that amount.

Lord *George Hamilton.*

2391. Would you spend this money entirely on new railways which would be likely so prove remunerative?—I should say with the exception of any railways which the Government might consider absolutely necessary for famine purposes, I do not see that the Government should be asked to make lines which hold out no prospect in the future of being remunerative.

2392. You are aware that to give anything like immunity from famine, an enormous sum of money would have to be spent on famine railways?—Perhaps not so large a sum as is thought, now with what has already been done.

Lord *George Hamilton*—continued.

2393. Still I assume that you would not be disposed to spend any large proportion of this borrowed money in works which were not likely to be remunerative?—No; primarily speaking, I should like to see it spent upon works which promised at all events gradually to become remunerative.

Mr. *Kynaston Cross.*

2394. Would you say what proportion you would like to be spent on works which would not be likely to be remunerative; out of the 10,000,000 *l.* which you would advise the Government of India to borrow, what proportion would you spend upon famine lines?—I think I should be content with the famine figure as it stands now, 2,500,000 *l.*, and the rest to be given to railways.

2395. But are you aware that there are no such famine figures as 2,500,000*l.*?—Whatever it is, it is called the famine reserve.

2396. The famine reserve is 1,500,000 *l.*, and 2,500,000 *l.* borrowed money is spent upon public works of all kinds?—Yes, that is so, I believe.

2397. You represent I think the East Indian Association?—Yes.

2398. I want to ask you if you wish to endorse all the assertions in the memorial which that association has sent forth?—No, I do not.

2399. There is one sentence, to which I want to draw your attention in the memorial, which asks that the two and-a-half crores of rupees annually assigned to public works should be used not as capital for the making of railways, but as interest for the guarantee of a capital sum to be borrowed, which would cover the interest on about 62,000,000 *l.*; I want to know if you would at all approve of a proceeding of that sort?—I entirely dissent from the views of the Chamber of Commerce of Madras and Bombay as mentioned in that memorial to that effect, if, as I understand, they advocate such a large loan at once.

2400. So far as the East Indian Association Memorial endorses the views of the Bombay and Madras Chambers of Commerce, you entirely dissent from it?—I dissent from it, certainly.

2401. What in your opinion would be the effect of large borrowings in England in sterling on the rate of exchange?—The effect would be undoubtedly upwards I conceive.

2402. Would a rise in the exchange be a disadvantage to India?—That depends upon whom you are to consider. Of course it would be a great gain to a large number of people who are now drawing an income from India; in getting it home in sterling they would gain.

2403. But what would be the position with regard to the Indian himself, who had to get hold of the money to pay his taxes with?—I cannot see that he would be any gainer; it might possibly be the other way; that is to say if the exchange goes up, very much less can be paid for the produce there. A man who is limited has to take everything into account, the cost of the freight, and the exchange also, and it is quite clear that if he finds the exchange rising

Mr. *Kynaston Cross*—continued

rising upon him, he must reduce his prime cost, to the extent that that reduction falls upon the first grower of the stuff he gets less for it, and to that extent he suffers by the rate of exchange rising.

2404. Then the effect of a rise in the exchange from 20 *d.* to 24 *d.*, would be that the cultivator who had produce to sell for export would have to take a proportionately less price for it?—There can be no doubt that the raw produce would bring less; on whom it would fall is perhaps a little more difficult to say.

2405. But still it would fall on India?—Undoubtedly.

2406. And to the full amount of the variation?—It has been proved very fully of late years; for instance, taking the single article of indigo which I know more about, being entirely in European hands, prices have been obtained for indigo during the last few years by this low exchange which would never have been obtained if the exchange had been high under the same circumstances; in fact the exchange is an important factor in the cost.

2407. So far as the export of produce is concerned, and so far as the people of India are concerned who want to obtain rupees to pay their indebtedness and to pay their taxes and rent, it is very much better that they should have a low rate of exchange than a high rate of exchange?—I think on the whole it is.

2408. In fact it would be a gain?—Yes, a gain in that way, that the produce of the country commands a higher price.

2409. How about the taxes that the people have to pay in rupees; if they have to give less of their produce for the rupee with which they pay their taxes and their rent, of course they have more of their produce left to sell, have they not?—Of course they are better off all round if they get more for their produce.

2410. Then you come to the conclusion that a fall in exchange is distinctly an advantage to the cultivating class in India?—Yes, I should be disposed to say so, to the people generally, I think. Silver is money; it is wealth; it is everything in India; and if silver has been got more cheaply during the last 10 years, it is impossible but that it must be a gain to the country to get its medium cheap.

2411. Then the idea which is current in England, that the depreciation of silver is a great loss to India, you think is arrant nonsense?—I cannot see how it is a loss to India; but as I said before, it is a great loss to certain classes connected with India.

2412. You are connected with the East India Railway, are you not?—I am.

2413. Reports have been current as to the great scarcity of wagons to bring down the grain on the East India Railway during the time that the grain season has been at its height; can you tell me whether those reports are founded on fact, or not?—It is a fact that last year owing to the very superabundant harvest in the North-West Provinces the quantity of produce which came down was very much increased, and there was, for a time, a considerable block at Howrah, but I should say that [illegible] was not the fault of the railway, but

Mr. *Kynaston Cross*—continued.

arose from the lack of facilities on the part of Calcutta in taking delivery of the stuff; the mouth was too narrow to receive it. We have had at Howrah many hundred wagons unloaded, and unable to be unloaded, because the cargo boats could not be brought to take it away as quickly as delivery could be given.

2414. It was much more the fault of the port authorities, and it would be better to develope the port facilities for the export of produce, rather than to increase your railway accommodation?—"Fault" is perhaps a strong word, especially considering how much has been done in the port of Calcutta lately; but as a matter of fact the improvements in the facilities, which have been very great, have all been on the other side, on the Calcutta side of the river; so that when our produce arrives, until recently, there has been comparatively little chance if its getting away quickly; that is to say, the landing and shipping arrangements have been in a very incomplete state. There is no deep water on that side of the river for a steamer or vessel of any size to come there to receive cargo; it cannot come alongside, so that it is still a question of cargo boats at Howrah.

Mr. *Carbutt.*

2415. Is there no deep water on the east side?—The jetties are all on the east side, except one jetty made by the railway for their own purpose. On the east side the improvements are very great.

Mr. *Kynaston Cross.*

2416. With regard to the fluctuations of exchange, I think you said that if you borrowed here largely it would advance the rate of exchange considerably, and that that would be very disadvantageous to trade?—I do not know whether that is what I said, but what I meant was this, that in deciding the amount to borrow that would be one of the elements for consideration, not to bring about an undue, or very rapid, dislocation of the exchange. Believing, as I do, that all very sudden and violent movements in such things are to be regretted, I think that supposing that 20 millions were put upon the market suddenly in one year and regularly continued for two or three years, we should have to consider what would be the effect upon the exchange. It might be to materially decrease the exports of India, and that is not what I should think was at all desirable.

2417. The Government of India have not been borrowing anything in England for the last few years, but supposing we were to borrow 10 millions, what would you say?—In giving the figures, which I did with much diffidence, I had that in view as one of the great reasons for not going too fast.

2418. Although you said at first that you thought it might be three times the present amount, assuming the present amount to be 2½ millions, you told us that 7½ millions would be enough, and you afterwards advanced that sum to about 10 millions?—Speaking very roundly, I said that 10 millions was the maximum; but it is not a million or a half million that would make the difference.

2419. In considering the effect which an increased rate of exchange would have upon the railway traffics in India, if you had an advance in exchange

Mr. *Kynaston Cross.*—continued

exchange from 20 *d.* to 2 *s.*, the rate of carriage paid being fixed in rupees, would not the advance in the rate of exchange be equal to the advance in the railway rates in India?—Of course if your rate went to a figure which made the purchasing of Indian wheat prohibitive, one would expect to find your carriage fall off very materially.

2420. I asked to question in order to obtain your opinion; if the rate of exchange goes from 20 *d.* to 2 *s.*, that is an advance of 20 per cent.; would not an advance in the rate of exchange to that amount have the effect upon the Indian railways of an advance of 20 per cent. of the rate of carriage?—I fear I do dot quite apprehend your question.

2421. It would be equivalent, would it not, to an advance in the railway rates?—It would be an increased cost falling on the wheat. As I said before, the sterling limit per quarter is made up of all items, and it matters not where you put it. If you put it on the exchange it must come off something else.

2422. For those reasons which you have stated you rather deprecate any measure which would materially advance the rate of exchange?—I would deprecate any sudden and violent advance.

2423. If the rate were advanced slowly would it have a better effect?—Then we must be prepared for a certain amount of fluctuation, but it would be less injurious, I think.

Chairman.

2424. I understood you to say that in your opinion borrowing 7½ to 10 millions would not have such a sensibly injurious effect upon the exchange as would deter you from recommending borrowing to that amount?—That is my opinion.

2425. You apprehend that if it were increased to 15 or 20 millions you think that it would have an injurious effect?—I should rather be afraid of it; I understand you now as speaking of annual borrowings.

Lord *George Hamilton.*

2426. Supposing you commenced by borrowing say 7½ millions in one year you would relieve the drawings of the Indian Government to that extent, would you not?—Yes.

2427. And you would have this country to borrow from, would you not?—Yes.

2428. If in any one single year you ceased to borrow in London that would increase the drafts of the Indian Governments by 7½ millions?—Yes.

2429. Would not that involve great fluctuations of exchange?—No doubt as those drafts increased the exchange would drop; but I understand the idea is to borrow regularly for some time.

2430. Then I might push it a little further. You have given us very valuable evidence as a merchant. Is it not the fact that what merchants most fear is not a steady fall or a steady rise, but a sudden fluctuation in the standard of value in which they have to make their purchases?—Yes; I said before that I think very sudden and violent fluctuations are very much to be deprecated.

Lord *George Hamilton*—continued.

2431. Would not there necessarily be violent fluctuations if you were for any number of years to borrow 7½ millions a year in London, and you were compelled through financial agencies or otherwise to suspend that borrowing?—No doubt we might have to face a sudden fall.

2432. So that if we are to borrow in London we ought carefully to take into consideration those facts of the case?—Quite so. What I meant to convey to the Committee was that brought about as this fall of exchange has been very largely by the greatly increased amount of Council drawings, anything which tends largely to diminish those drawings would of course have an opposite effect.

2433. But those drawings have increased because the system of raising loans in England has ceased?—There are other reasons also. The Home requirements have increased immensely.

2434. And then the interest on all our loans has to be met?—Yes

2435. And that would occur again?—Yes, it would as I say it is a matter which has to be faced at some time or other I am afraid, in connection with large borrowings; I do not see how it can be avoided.

Mr. *Carbutt.*

2436. Supposing that you stop at an expenditure of 7½ millions of money, you have not to remit the whole of that money; you would only have to remit two-thirds, because you would have to pay for the material in this country, and to pay for the freights in this country, and therefore to that extent you would only have to provide two-thirds of the amount of money?—Yes, a considerable expenditure would be incurred in this country.

2437. And to that extent there would not be a strain upon the remittances?—Quite so.

2438. You said that produce was delayed in coming down the East Indian Railway because it had not sufficient port accommodation at Calcutta; is it not the fact that they are building a bridge across the river to bring the grain to the east side of Calcutta?—I was speaking in reply to Mr. Secretary Cross's question; I was speaking as to the state of facts which occurred last year, but there is a railway bridge being built about 30 miles above Calcutta.

2439. Will not that relieve you very materially, so that you can get your traffic down?—I should presume that a great deal of the traffic would go across the river, but I do not know what the arrangements of the Government of India are.

2440. But they are building the bridge?—Yes, the railway company are building that bridge by the orders of the Government, but I do not know what the ulterior arrangements are to be, and as I say it is 30 miles above Calcutta.

Mr. *Bolton.*

2441. You have expressed your disagreement with the recommendation of the Bombay Chamber of Commerce as to the amount to be expended on railways?—Yes, I think it goes too fast.

2442. But you have also expressed an opinion I think that we might expend 7½ millions as a minimum, and 10 millions as a maximum annually; how long would you continue that?—I cannot answer that question; one needs to see the minimum,

Mr. *Bolton*—continued.

schemes and projects before one is prepared to answer that question.

2443. If you were to continue that for eight years you would then arrive at the maximum sum suggested by the Bombay Chamber of Commerce?—But that maximum is proposed to be spent immediately, as I understand.

2444. Then your objection mainly is to the expenditure of 60 millions in one year, and not to the expenditure of 60 millions on the whole in the course of eight years?—I think it is much too large a sum. It seems to me that the chambers' resolution contemplates spending much too large a sum in that short time.

2445. If it was extended over eight years it would then be in accordance with your view?—If the projects calling for it were needed.

2446. Do you think that the projects are too extensive for the good of India?—I have not seen what the projects are.

2447. You said that borrowing largely would be disadvantageous to trade, inasmuch as it would cause a rise in the rate of exchange, and that the whole cost of the rise in exchange is paid by the native cultivator?—I do not think I said that. On the contrary I think I said that it would be difficult to say exactly where the loss fell, divided, as it would be, amongst the people, and it would be difficult to say where the exchange reached the cultivator.

2448. In so far as it did reach the cultivator, it would be a loss to him?—Yes, I should think so.

2449. Is the cultivator a purchaser of imported articles?—Yes.

2450. To the extent to which he is the purchaser of imported articles, would it not also be a gain?—Yes.

2451. Assuming that the rate of exchange affects the price of exports it *pro tanto* affects the price of imports?—Clearly it would cheapen them.

2452. So that what he loses on the one hand to the extent of his purchases, he is gaining on the other?—Yes, but then his clothing would be a very small sum in relation to his produce.

2453. But so far as it went he would be a gainer?—Clearly.

2454. And then the increased importation which might follow a low rate of exchange would lead to an increased exportation also?—There is no doubt that that is so. We have suffered from an excess of importation; but that increase of importation will go on so long as nothing occurs to check it.

2455. Still it has gone on increasing?—Yes, it goes on increasing rapidly.

2456. But the total amount of trade goes on increasing, and the more you increase it so much the better for the native?—Certainly, he gets his piece goods cheaper.

Mr. *William Fowler*.

2457. We have heard a great deal in the course of the last few years of the terrible loss to India by exchange, but I understand you to say that looking at it all round you greatly doubt whether that loss is as great as is believed; if you take the whole country of India and the Government into account who share that loss, but the people on the other hand gain largely by a low rate of exchange?—India has been receiving during those years its silver very cheaply, and therefore it seems to me that it must in some form or other be a great gain to that country.

2458. And that compensates to a considerable extent for the apparent; loss to the Government?—Yes, I look upon the loss to the Government as only apparent it is only a loss beause of the arbitratory figure that is taken in the account.

2459. There, so far as India is concerned, you think that that is a matter of not very great importance?—I do not think it is. My meaning is, that while with a low exchange the Indian Government has to pay more to provide for its sterling requirements, there are advantages to the country of India generally, which may be taken as a set off.

Mr. GEORGE LORD, called in; and Examined.

Chairman.

2460. You are a merchant in Manchester and Bombay, and have been President of the Chamber of Commerce in both those places?—Yes; it is 20 years since I left Bombay. I have also a firm in Liverpool.

2461. Are there any special circumstances which have come under your observation upon which you could offer an opinion to the Committee in connection with the good which railways have done in India and which you should like to state to the Committee?—I daresay the circumstances which I should mention in support of the statement that railways have greatly benefited India are very well known to most of the members of the Committee, but perhaps there may be some details illustrating it which might be useful. Take, for instance, the article of cotton which is one of the largest exports from Bombay; before the Bombay, Baroda and Central India Railway was con-

Chairman—continued.

structed the quality of the cotton was very poor indeed, and the diffrence in price between the average Bombay cotton or the best Bombay cotton and middling Americans at that time was about 1½ *d.* in the pound, taking the price at 6 *d.* Now the best kind is within one eighth of a penny in the pound or ½ *d.* in the pound of the value of middling Americans, and that I take it has been brought about largely by the facilities afforded by the railways. Since the construction of the railways the presses which were formerly in Bombay have been removed into the districts, and the European merchant has been brought into contact with the grower and has induced him in the first place to improve the growth, and in the second place has assisted him to clean the cotton and to get it well to market; and this is a very important factor in the trade because it enables the importers of East Indian cotton to compete with the importers of American cotton,

Chairman—continued.

and that of course is a direct gain to the country. We have another illustration in the case of the line which was constructed lately between Ahmedabad and Ajmeer, continuing on to Delhi. Since the construction of that line a great portion of the cotton which formerly found its way to England through Calcutta goes through Bombay.

2462. Notwithstanding the break of gauge?—Yes, notwithstanding the break of gauge. I do not think at the present time that interferes very materially, because the volume is not yet sufficiently large. My point was that inasmuch as it goes through Bombay instead of Calcutta, because it can be laid down in England at a lower cost, that of course is a gain, not as putting Bombay in competition with Calcutta, but as, to that extent, assisting Indian to compete with American cotton in England. I think that in the case of wheat and oil seeds, a similar improvement would follow the construction of railways in the districts, not to an equal extent in the manipulation, but to a greater extent in the carriage, carriage being a more important factor on a cheap article. In the matter of piece goods I think that the construction of railways has added very largely to the increased consumption both of imported English goods and of goods manufactured in Bombay and Calcutta. I remember that in the year 1861 Colonel Baird Smith, who was sent up to report on the state of trade in the districts, made a point of it that the consumption of Manchester goods was large wherever there were roadways, either railways or canals or common roads; and we have observed the same in watching the trade from that time up to the present. Then there is the employment of labour in India in connection with those railways there are 185,000 employés, of whom 177,000 are natives; that is about 95 per cent. Then the consumption of Indian coal is something like 450,000 tons a year, and a very large quantity of wood. So that apart from the protection or the relief afforded in cases of famine I think that the extension of the railways has greatly benefited India, both its trade and its people.

2463. What districts of India do you still consider are now in need of new railways?—With regard to the railways which I think should be first constructed, I should say at once that I adopt some portion of the recommendation of the Bombay Chamber of Commerce, because it commends itself to my judgment; I think that the line which is of the first importance is that from Nagpur; what is known as the Nagpur and Bengal line.

2464. The opening of that line would be of immense advantage to Bombay, would it not?—Not only to that port, but to all India, for a portion of the produce would go to Calcutta, some in one direction some in the other.

2465. But the opening of that line would divert a large portion of the traffic which now goes to and from Calcutta to Bombay, would it not?—I doubt very much whether it would, because on looking at the map I find that some portion of the country would be nearer to the East Indian Railway than it would be to the Great Indian Peninsula Railway. I have a map here which I have marked, and it appears to me that it would be better to send the produce from some portion of the country to Calcutta than to send it to Bombay, notwithstanding the long sea distance from the former port to Europe.

2466. No doubt it would increase in that way the trade to Calcutta; but would it not divert a portion of the trade which now goes to Calcutta to Bombay?—So far as the line is already constructed to Chattisgurgh, and I am told that it has been recently completed as far as Ripur, but that you would know better than I do. That is about all the produce which I should expect to find its way to Bombay, and I think that on the construction of the line from Ripur the produce drawn from the Ripur district eastward would probably find its way to Calcutta.

2467. Then you place that line first and foremost as a line which is most desirable to be made in the interests of the whole of India?—That is my opinion. I have a good deal of correspondence here from gentlemen who have been over the country and know it very well, and from all the information that I can gather, that part of the country seems to me to yield wheat which ought to be very cheap, and tobacco, and wood for building, and a variety of produce.

2468. You have not travelled over that country yourself, have you?—No, I have not.

2469. Is there any other line of railway which you think ought to be made?—The next line is a line from Bhopal on the broad gauge (that is the standard gauge I should say) from Bhopal to Jhansi and Gwalior, with a line from Jhansi to Cawnpur.

2470. You place that only as second in importance to a direct railroad to Calcutta *viâ* Nagpur?—No, I think it almost the more important line of the two on account of its connection with Delhi and other places, and I would prefer getting this net work of railways first joining the Great Indian Peninsula with the East Indian line through a tract of country rich in wheat and cotton.

2471. Would that be the direct line from Bombay to the North-West Provinces?—It would be a direct line.

2472. And as such would it not compete very greatly with the present line by Baroda, Ahmedabad, and Jaypur?—But the Baroda and Jaypur is such a long distance round; it would compete with it, but what I think is that with the increase of produce which you would have in consequence of the facilities afforded you would be found employment for both lines in a little time.

2473. That implies competition; you think there is ample room for both?—I think so.

2474. The completion of the line from Bhopal to Cawnpur would not interfere in any material manner with the present line by Ahmedabad?—It would interfere with it to a certain extent, because at the present time (and that is the anomaly of it) this very cotton that I spoke of, known as Bengals, we are bringing all round by Agra, Ajmere to Ahmedabad, instead of bringing it down direct through this line; still I think there would be traffic sufficient for the Ahmedabad and Ajmere line.

2475. You would place that first, and the Nag[illegible]

Chairman—continued.

line second: what is the next?—From Godra to Rutlam it is a short line, a little to the east of Ahmedabad. At present there is a line only from the Bombay and Baroda and Central India to Godra, and I would continue it to Rutlam.

2476. With the exception of the two main lines which you have now told the Committee ought to be made, are there any other lines which in your view should be made as subsidiary?—The line that I last spoke of is a very important line although it is a small one, but if I were to express my own opinion it would be that all those three lines should be undertaken simultaneously and at once.

2477. Are there any other lines which you would propose?—There are no other lines that I feel specially qualified to advocate, but I have read the reports of the Famine Commission and the Indian Government letters, and the lines therein recommended appear to commend themselves to the general judgment as a protection against famine.

2478. Have you anything to state to the Committee upon the question of gauge?—Only that I think there should be no break of gauge; I think it was a mistake making that line from Ahmedabad to Ajmere on the narrow gauge, and I was on a deputation that waited upon Lord Salisbury on behalf of the Manchester Chamber of Commerce, to urge that line being made on the broad gauge, but I believe the reason was that there was a little link from Ajmere to Delhi, which was already constructed on the narrow gauge, it was in a time of great financial exigency after the famine, and the line was made on the narrow gauge; but some day, I think, notwithstanding the competition, that line is of such great importance that it will be re-constructed on the broad gauge. I also think that the line between Nagpur and Chattisgarh or Raipur, which has already been constructed on the narrow gauge, should be taken up and relaid on the broad gauge, and that there should be a broad gauge line direct from Bombay to Calcutta by Nagpur.

2479. Then I understand that you concur with the witnesses who have told us that all the railroads in the great plains of southern India, and all the main lines of communication, should be on the broad gauge?—I do.

2480. What is your opinion as to the mode in which these new railways should be made, whether by the State or by private enterprise, aided or unaided?—I have such confidence in the railways ultimately paying that I should be very pleased to see the State constructing and owning the railways, but I see that there are considerable practical difficulties in the way. One has been pointed out, namely, the difficulty of getting together a sufficient staff, and of supervising all those operations by the Government, but to my mind a greater objection than that is this: that if the Government attempted to construct these lines at all rapidly, and to borrow the money, on any occasion of a deficit owing to a famine, or a war or anything else, the railways would be stopped, the borrowing powers of the Government would be taxed probably to meet the current expenditure, the progress of railways would be interrupted; I think we have to dismiss for the present the idea

Chairman—continued.

of unaided private enterprise as impracticable. I have come to the conclusion that the capitalists of England would at present and until they have greater experience, not send their money to be invested in India for the dividends which it is probable they might get. I think they would consider that there was too much risk. In India there are so many modes of employing money lucratively in loans upon good security, and in works and mills, and other ways, that I think, for some time at all events, private enterprise would not undertake the construction of railways, and therefore I fall back upon the construction by companies with modified guarantees by the Indian Government, such for instance as that given to the Southern Mahratta Company.

2481. You think that that is a good arrangement for both parties?—I do.

2482. And that more might be done in India pretty extensively and shortly by such a system as is adopted with regard to the Southern Mahratta line?—Of course the more you borrow the less you have to draw from, so that perhaps in a little time you might get two or three millions, the question is whether you would get ten or twenty millions immediately on the same terms, but I do think that in that direction, and if it were necessary by perhaps increasing the terms a little, and giving a little more inducement in certain lines, where the inducement to private enterprise might not be quite equal, the money would be got.

2483. You admit and appreciate, as I understand, the many advantages to be derived from the Government making the railways itself, but yet you think that the balance of argument is in favour of persevering in the present system of having the railways built by guaranteed companies?—That is my opinion in the present state of the case.

2484. About the vexed question of exchange, and where the money ought to be borrowed, you have heard Mr. Bullen-Smith's valuable evidence, what is your opinion upon that subject?—I have read, and I have no doubt that all the members of the Committee have read Mr. Westland, the Comptroller General's Minute upon this subject, and I agree with him, that the money available in India for such purposes is not great. It has been largely drawn upon by investment in other directions, by mills and companies of various kinds, the increase of volume of the trade of of India requires at present increased capital, and the employment of a very great amount of capital; but I think, notwithstanding, that there is money available in India which might be got to some extent; I think that the reluctance to lend it when the Government was borrowing to make up deficiencies of revenue arose, in some measure, from the scare resulting from the serious losses incurred by the Indian banks. The Indian banks borrowed money in England on deposit at certain notice, and sent it out to India for temporary employment, which money was recalled at the caprice of the lender, serious losses in exchange were incurred in consequence, and I think that that deterred parties in India from subscribing to the loans as freely as they

Chairman—continued.

they otherwise would have done, but I think they would recognise that investing money in India in Railways, with a guarantee, was not investing it in rupees or in silver, it was investing it in commodities, in rails and land, property which would be valuable, and which would not be liable to fall. The value in rupees of their property would rise, if silver fell, and I think that the money would be got in India, to a certain extent, for the construction of railways from the natives, but the great bulk would have to come from England.

2485. You are of opinion that anything that could be got in India would be trifling in comparison to what would come from England?—Not trifling.

2486. But insignificant; how much do you think might be got?—I think that money would be got; it is difficult to put a figure, these things are all matters of opinion; but I take it that perhaps one-fourth of the money might be got out there; I have an idea as to what has prevented the flow of money into the exchequer when it has been called for, but this is not quite an analogous case, I think that some money would be forthcoming, and if you like to have a figure, I may put it at a fourth.

2487. Putting the money to be raised in India at one-fourth, what is the whole sum that you think it would be judicious and wise on the part of the Government to spend on new Indian railways annually for some time to come?—The sum that I had fixed upon, and again it is simply a matter of opinion, is 10,000,000 *l.* sterling per annum, raised in India and in England.

2488. Do you think it would be wise and prudent in the present state of the Indian finances to attempt to borrow about 7½ millions in this country annually?—I think so.

2489. You do not think it would have an adverse effect on the exchange?—I think it would have but a slight effect. The interest upon such a sum is only about 350,000 *l.* a year.

2490. You do not think it would have a great effect upon the Exchange?—It would have some effect upon the Exchange. When I spoke of 350,000 *l.*, of course I meant upon the 10,000,000 *l.*, but supposing we had 7,500,000 *l.* borrowed in England, I take it that nearly one-half of that would go out in the shape of material which would be paid for in this country, and therefore the question of the exchange upon that at the time would not enter into consideration. The exchange would come in with respect to the dividends. The other portion, I suppose, would be sent out; and very probably, if we raised 2,500,000 *l.* in India, probably 2,500,000 *l.* or 3,000,000 *l.* sent out annually from here would serve to construct railways in India, to pay for earthworks, labour, and everything else there, and I do not think that that would have such a very important effect upon the Exchange, although it would have a certain effect.

2491. It would have a certain effect, and that effect in the main would be to the advantage of the Indian taxpayer, would it not?—That is a large question. The Indian taxpayers are composed of various classes; they are not all cultivators of the soil.

Chairman—continued.

2492. But the great bulk of them are cultivators of the soil?—The great bulk of them are, that was drawn from the last witness by one of the honourable Members, and I was waiting for that question. The cultivator does consume certain articles, of which he would get a larger quantity if the rupee were worth more to him.

2493. My question was, whether on the whole it would be an advantage to the great majority of the population of India who are engaged in agriculture?—It would be a disadvantage to them in the first place, and during the transition, but I apprehend that if we got to a permanently higher level of exchange the cultivator would get the great bulk of it back, I think that even the Government would have to modify the land tax and the taxes in other ways, because the Government in collecting this money has to spend a great portion of it in articles of which it would get a larger quantity for those rupees; and I think there would have to be some amelioration on the part of the Government. The loss in the first place would fall upon the cultivator.

2494. So that on the whole, even admitting that Parliament in the first place ameliorated the first loss which would fall upon the cultivators by the alteration in the exchange, do you think that the advantage of making railways on a greater scale in the next few years in India, would be greater proportionately in benefiting the great mass of the people?—Yes, for this reason; as I said, in this district which I propose should be crossed by railways, the Nagpur cultivator, if you make him a railway and raise the price of his wheat very materially, can afford to sell it, and you will raise the price of wheat very much more than you will diminish it by any advance in the rate of exchange. I have some correspondence here giving the prices. I will not weary you by referring to it, because I know that you have this information before you; but wheat is described in that district, 200 miles from any railway, as worth something like 20 *d.* per 200 lbs. at one time, and if you raised the value of that wheat to a price which the merchant who exported it to England could afford to pay, the advantage would be very great in comparison to any little reduction which might subsequently follow from a rise in the rate of exchange.

Mr. *Carbutt.*

2495. How would you propose to raise this 2½ millions in India; would you propose to raise it from the commercial classes in the large towns, or would you propose to issue shares of a very small amount, say of 5 *l.*; and by that means endeavour to get possessed of the money which is hidden away in the up-country?—I have suggested that railways should be made by private enterprise, with a Government guarantee; so that I should proceed something on the lines I have indicated. I should issue shares in India simultaneously with shares in England, fixing their price in rupees, and making the amounts moderate, and thereby I think you would get a good amount, particularly the lead having been taken in England for a certain portion. For instance, if you got half or three-quarters of the capital subscribed in England

Mr. *Carbutt*—continued.

land you would get a portion in India by the small shares suggested.

2496. Then I understand you to think that out of 10,000,000 *l.* which you propose to raise every year, you could get 2½ millions in India, and therefore that would not have to be sent out there?—I think so.

2497. Then the proportion which would have to be sent out from this country would be to the amount of one-third short of that which would be spent in the construction of the line, including freight?—I have not a technical knowledge, but I am told about half, that would make 5,000,000 *l.* that would have to go out from here in materials.

2498. We should only have to remit 2½ millions?—That is the rough calculation that I should give.

2499. Do you believe that this 2½ millions that we should so remit annually would materially affect the rate of exchange?—I think it would not affect it very materially, and I have data for expressing that opinion. I have here a statement of the increase of the trade of India during the last five years, and I find, taking the conventional rate of exchange at 2 *s.*, the imports were, in 1878-79, 36 millions, and in 1882-83 they were 50 millions. I will not follow the figures through; it is remarkable how steady the increase has been; that 50 millions is an increase of 14 millions in the imports. Then we had in exports in 1878-79, 60 millions, and in 1882-83, 83 millions, so that whilst the imports increased 14 millions, the exports increased 23 millions; the balance of trade being in favour of India. The increase of exports over imports during that period has reached nine millions sterling per annum, taking the conventional rate of exchange at 2 *s.*, and at 1 *s.* 8 *d.* exchange you get 7½ millions actual sterling money that would have to be remitted to India, that is to say drawn in bills from India on Europe or remitted to India, and we have not found a very great advance in the exchange resulting; the exchange has been very steady; during the last few years we have had one temporary drop to 1 *s.* 6 *d.*, but generally speaking it has been steady, and lately ascending. The gross balance of trade is 33 millions in favour of India in conventional rupees, or 28 millions actual sterling money.

Mr. *Kynaston Cross.*

2500. Have you included bullion?—We have excluded both bullion and government stores, so that the balance in favour of India would amount to 28 millions in merchandise, and it appears to me that to add 2½ millions a year to make it into 30 millions is not a very great matter as affecting the exchange. I know the question has been considered, what will you do after this which is called a beneficial effect upon the exchange has ceased. My answer to that is, and I base it upon some figures which I have here, that the increase of your export trade from India would in such ratio exceed the increase in the imports as would prevent such a relapse or fall in exchange as was expected, always supposing, of course, that we have no cessation of the coining of silver in America or other upsetting condition. Of course we are

Mr. *Kynaston Cross*—continued.

discussing this matter purely from an Indian point of view. I do not pretend to enter into the bi-metal discussion here, but treat it merely as a question of Indian finance.

Mr. *Carbutt.*

2501. You recommend that the Government should not make railways, but that private companies should make them; is that on the ground that railways are better made by private companies than by the Government, or that they are better worked?—I put it first that there would be a very great difficulty for the Government to organise a staff to supervise the work sufficiently to undertake constructing lines on the scale proposed, and therefore it would follow that there would not be probably, in the first place, as great efficiency as under private enterprise. But I do not think that a sufficient objection; my main objection is that I fear a discontinuance of the work of the extension of railways, and the progress of new lines through financial exigencies arising from famine and so forth.

2502. What I want to know is, have you any experience as to the working of railways between those worked by the Government and those worked by private companies?—No, I have no practical experience; it is 20 years since I left India.

Mr. *William Fowler.*

2503. With regard to the effect of railways on the export of goods, would not it be probably certain to increase the export of goods from India?—Certainly.

2504. That is a very important item in the consideration, is it not?—Yes.

2505. And it affects, of course, the question of exchange?—It would affect it, as I have shown.

2506. You say that as regards the cultivator the difference in price of the article would be far more to him than any possible evil resulting from a rise in the exchange?—Much greater.

2507. You have some figures, I think, to put before us as regards wheat?—No, I have a letter stating what the value of wheat was in a particular district, which I could give you if you wish it.

2508. That is in the Central Provinces?—In this district, where I propose that the railway should be continued from Chaatisgurgh on to the East India Railway. "Before this light line was made," that is the small line from Nagpur to Chaatisgurgh (it has gone as far as Raipur, but it is in the district of Chaatisgurgh), "in the remoter parts, some 200 miles from a railway, wheat used to be worth to the grower about 20 *d.* for 200 lbs. weight, and during one season, when famine was raging in another part of India, it was stated by the local authorities that immense quantities of food wheat, rice and oil seeds rotted in the ground, useless and valueless for want of transit." Of course that would then be brought by trains to the shippers.

2509. That I suppose is the point to which you specially referred as regards the making of railways finding a market for the produce?—That is so.

Mr. *Bolton.*

2510. I presume that the cultivators, in fact in the absence of railways, had no inducement to grow more than actually necessary for their own wants?—They had not.

2511. And any surplus they wasted?—The state of the case is that in the absence of railways, there is no inducement for the cultivator to grow more than he needed for his own consumption, or what he could dispose of immediately around him; I say that that is so as is shown by the quotation which I have given you in a district where there was no railway.

2512. I think your opinion as to the extension of railways goes to this length, that the railways generally which have been suggested, I think, by the Bombay Chamber of Commerce, will cost on the whole something like 60 millions, is not an excessive amount?—The only difference of opinion between me and the Bombay Chamber of Commerce is that I think 20 millions a year to spend is a very large sum; they ought to have said 10 millions, and then I should go in for the whole scheme.

2513. You do not object to the total amount of railways that are suggested, but to the rapidity of construction that they suggest?—*That is so.*

2514. You are also of opinion, I think, that the southern Mahratta arrangement might be taken as a model?—I am.

2515. That is a 3½ per cent. guarantee, I believe?—Four per cent. for seven years, and 3½ afterwards, and one-fourth of the profit in excess of the guarantee.

2516. You are of opinion that one-fourth of this proposed amount might possibly be raised in India?—I think it might.

2517. Would you fix the same rate of interest for a Indian loan as for an English loan?—Yes, I would adjust any difference in the price of the shares: if you give the shares at the exchange of the day, you must give the same interest in both countries, and I think it is not unlikely that some of the shares might probably be subscribed for in India by English capital.

2518. You would not make a rupee loan and a sterling loan, you would make only one loan?—There would be no loan in it, there would be shares under a system of private enterprise guaranteed; there would be shares issued simultaneously in India and in England.

2519. Where would you make the dividend payable?—On the rupees on the Indian shares in India.

2520. Would you anticipate anyone subscribing at the same rate of interest to a rupee loan as to a sterling loan, taking into account the present state of exchange?—I think it is possible. At present you see the exchange tends upwards, and with the prospect that it will do so.

2521. But a person would make a certain loss for the moment?—That is a matter of opinion: I daresay for myself, I should not probably subscribe in India, but natives might.

2522. Why should they subscribe in India, because if they got their dividend warrant payable in London, 5 per cent. upon the 100*l.*, and if they sold that warrant in the Calcutta market they would have so many more rupees than they would have if they raised it in Indian rupees, payable in rupees?—But

Mr. *Bolton*—continued.

supposing on the other hand the exchange advanced.

2523. That would be your view of it advancing before we get an equivalent?—No; if you got your dividends in India on a larger amount of rupees, and the exchange rose, you would get the advantage.

2524. But under present circumstances the holder of the rupee loan would be a great loser, as compared with the holder of the sterling loan?—It would be shares, and the apparent loss might be arranged in the price of the shares.

2525. That comes to the same thing, that is to say, you would get 75 per cent. in one case, and 100 per cent. in the other?—Yes.

2526. Consequently the money borrowed in India, would practically cost the Government 1 per cent., or something per cent. more than the money borrowed by the company?—Yes, the company would get a sum equivalent in rupees.

2527. But it would cost them more in interest or dividend; if they got an equivalent in rupees, they must pay more in interest, and if they pay the same rate of interest, they would get fewer rupees?—No. If you take it in this way, that if you had 100*l.* worth of shares in England, and you converted it into rupees at 1*s.* 8*d.* exchange instead of 2*s.*, you would get one-fifth more than 100*l.*; you would get 1,200 rupees, and you would get the same rate of interest in both countries on the respective amounts.

Mr. *Kynaston Cross.*

2528. Could you put out a loan at the same rate of interest as you could in England?—Yes.

Mr. *Bolton.*

2529. You have given us your opinion that it would be necessary to pay a higher rate of interest for the rupee loan, or to receive less than the loan itself?—In issuing the shares originally you would have to adjust them so that certain shares would be so many rupees in India, as compared with so much sterling in England, and inasmuch as the dividends would be declared by a percentage, say of 6 per cent., or whatever the percentage was upon the larger number of rupees in India, that would be equivalent to the same percentage upon the smaller amount of sterling in England, and in that way it would adjust itself: you would get so many rupees in your dividend but the operation of that percentage, when you remitted it to England, would give you a sterling equivalent.

Mr. *Kynaston Cross.*

2530. Always supposing that the exchange remains the same?—Yes, always supposing that the exchange remains the same. Then you would fix your exchange when arranging the stores at the rate of the day, say, 1*s.* 8*d.*; and if it rose, the rupee holder would get a benefit, and if it fell he would make a loss.

Mr. *Bolton.*

2531. But you must have a rupee share and a sterling share?—Yes.

2532. You

Mr. *Dalrymple.*

2532. You have no doubt whatever as to the remunerative results of those railway extensions that you have mentioned?—I have none, judging from what has happened in the case of the railways already made, and from the great expansion of trade that is now going on in the districts that have been tapped by railways.

2533. Do you consider that there is a great trade still waiting to be developed?—I do. I think that the country is waiting for railways to be opened up for the trade to be largely increased. The increase in the wheat trade during the last three years has been from 300,000 tons in 1880, to nearly 900,000 tons in 1883.

2534. I suppose you would consider it a disastrous arrangement if the narrow gauge were to be adopted on such arterial routes as those you have mentioned?—I should.

2535. And yet I believe the Bombay Chamber of Commerce in their memorial which you have mentioned, are apprehensive that the Indian Council should sanction breaks of gauge?—That is the fear that they entertain.

2536. And that fear is still entertained?—Yes.

Mr. *Onslow.*

2537. Would you be adverse to the Government of India buying up any of the railways which are now managed by private companies?—No, I think that we should prefer their doing it for the reasons that I gave at first. The reason that I gave against the construction of new railways by the State does not hold in case of railways already constructed.

2538. Would you kindly explain the difference?—The difference is this: as I stated before, there is the question of the organising of a staff to make the railways, which you have not in the case of a railway already made. Then in the case of a railway being constructed by the State: on the financial part of the question you would be obliged to issue a loan which would be called up at a certain time, and which would have to go on to enable you to meet the engagements which you have entered into, whatever the other financial requirements might be.

2539. If private companies can organise a staff easily, surely the Government could as easily organise a staff?—Speaking now of three or four railways that might be made, each of those would be granted to different companies, and each company would have its own officers and staff, or put it into the hands of what may be called a construction company. Then in the case of the Government, there is another objection, that if you were to have a sufficient staff of engineers and other employés put permanently on to the Indian establishment to make those railways, you would have to pay them after the railways were constructed and completed. That is a very serious responsibility, if you take them from Cooper's Hill and elsewhere, and you put them on, and you do not keep them on after the work has ceased. In the case of companies that does not apply.

2540. I presume that, in your opinion, the Indian Government must, provided they take over the railways belonging to private companies, take care of their staff of engineers, and the whole of the working staff?—Probably the would as a matter of convenience.

Mr. *Onslow*—continued.

2541. Those engineers belonging to the companies would die out. How would you propose to fill their places?—The case that you have now put is the case of mechanical engineers and employées on the railways to work the traffic. The case that I was speaking of was that of the staff to construct the railways.

2542. But when those engineer officers belonging to private companies die out you must fill up their places with Government engineers and officers?—Yes; but the two classes of engineers are distinct, the one is for the construction of the railway, and it is that that I object to; I have no objection to the other. We must have the Government engineers and employées to work the lines.

2543. Then your objection is merely as to the construction?—Yes, purely so.

2544. When you were in India, had you any experience in irrigation works?—No.

2545. But in your opinion, for commercial purposes, and for the prevention of famine, the prosecution of railways is more beneficial than the prosecution of irrigation works?—You see the railways have the double advantage of conveying the food to the people and the people to the food. In the case of this very line from Nagpur to the East Indian line, if you had a famine, or whether you had or not, as you developed the country the population would flow from the densely crowded parts in Bengal and Behar, probably into the interior. I think that railways are of greater value in times of famine as being more rapid in their operation. Of course with regard to irrigation works I do not condemn them in the least, but it is quite a different branch, and it is one that I am not prepared to express any opinion upon, I believe they are very desirable in many parts of the country, but I do not think that they would enter into competition with railways, such as I am referring to.

2546. Looking at the state of the finances of India, are you of opinion that the Government of India could spend these 10 millions annually on railways and at the same time go on prosecuting irrigation works at the same rate as at present? The Government would not be spending 10 millions, it would be merely guaranteeing the interest upon it. On the plan that I have proposed, I think that an extra charge of 350,000 *l.* a year on the revenue of India is not of very material importance.

2457. But that 350,000 *l.* would be going on annually?—Yes; but it is not an addition altogether, because you know already we are borrowing 2½ millions.

2548. You think that this annual payment of interest on this large sum for the prosecution of railways would not in any way interfere with the duty of the Government of India in carrying on irrigation works?—I think it would not. I think that in the finances provision might be made for such an addition as I have indicated without deranging any branch of the finance very materially.

2549. The finances of India, you think, could stand the burden of both?—I think so.

2550. And without in any way adding to the taxation of the country?—Of course, if

Mr. *Onslow*—continued.

we had a famine, then it would not hold good; but the financial position that we have had for the last year or two, in times apart from famine, I think warrant the expression of opinion which I have given.

Sir *George Campbell.*

2551. I understood you to say that a large amount of the North Western Provinces cotton comes now by way of Ajmere; is that so?—Yes.

2552. Do you know the countries from which that cotton comes?—I have not been there, but a good deal of the cotton that I have shipped has come from there.

2553. Do you know the districts in which it is produced?—My impression is that it is produced between Cawnpur and Agra.

2554. Would you be very much surprised to hear that almost every pound of cotton exported by Agra is produced north of Agra and not in the Cawnpur direction?—There are presses at Cawnpur, and I think that cotton is grown within a very short distance of Cawnpur.

2555. Have you yourself any personal knowledge concerning the quantity of cotton that is grown within 50 miles of Cawnpur, or within 100 miles?—I have seen statements, in fact, I have myself been in correspondence on the subject. I am speaking now from memory, and I have an impression that within 100 miles of Cawnpur cotton has been grown.

2556. Have you never heard that the Aligurh district is a great cotton district, and the district north of Aligurh?—Yes, I am aware that a good deal of cotton is grown north of Agra.

2557. And is it not the case that as regards all the cotton grown north of Agra your statement that the line by Cawnpur would be a saving of distance, would not apply, but, on the contrary, that the cotton would have to go a long way round to be shipped at Cawnpur?—There is a short line from Agra to Gwalior, and I think that that would be a shorter route for all the cotton grown in the neighbourhood of Agra than the present route by the Rajpootana line.

2558. Without reference to a break of gauge?—Yes.

2559. Would it be so much shorter as to justify a double line?—The map shows that very clearly, I think.

2560. About the Nagpur and Calcutta line, may I ask you who your informant is with regard to the price of wheat having been 20 *d.* per 200 lbs., or at all events whether he is a man who has any real personal knowledge of the country?—He is a merchant in Calcutta.

2561. Do you know whether he has ever visited this Chaatisgurh country?—I cannot say that he has, but I am under that impression.

2562. I suppose you are aware that not one pound of grain goes now from Chaatisgarh to Calcutta?—That is quite possible, because there is no means of taking it.

2563. Do you think that your correspondent has any practical knowledge of the subject?—I do; I have evidence that he has.

2564. Does he give a date for that extraordinarily low price of wheat?—He states that before this line was constructed between Nagpur and Chaatisgarh, the price of wheat was 200 lbs. for 20 *d.*

Sir *George Campbell*—continued.

2565. Did he give you any particular date, or is that the price habitually?—No, he does not give the date.

2566. You know something of Indian weights and measures; are you aware that the price there mentioned is about a rupee for two and-a-half maunds; did you ever know anything in your experience approaching to that price?—No, I have not done any large business in wheat; the only business that I have done has been in wheat from Bombay, which of course I could not give without the figures.

2567. Your correspondent gives no date, he merely says generally?—No, it is merely generally.

2568. As regards the guaranteed companies, have you any opinion that it would be necessary to provide any means of preventing private companies from establishing a high monopoly of rates?—Yes; I think that the Government should take power in guaranteeing a certain dividend to control the rates; I am very strongly of that opinion.

2569. Have you formed any opinion as to how that is to be managed; would you give the Government discretionary control over the rates, or would you fix a maximum, or what would be your plan?—I do not think that we could fix an arbitrary rate, but we might have a Railway Commission, something like we have in this country, that might take cognizance of those questions, upon which I would have merchants and Government officials and railway officials.

2570. As regards that Cawnpur and Bhopal line, that would come into competition not only with the line by Agra and Ajmere, but also with the line with Allahabad and Jubbulpur?—No doubt.

2571. Are there any other particular articles of produce which you think would come a very much shorter route by that line than by the other two lines?—No, I am not aware of anyone.

Mr. *Kynaston Cross.*

2572. I should like to ask a question about the price of wheat as quoted by your friend; I think it is the Nagpur district that he refers to?—Yes, that is to say, the district lying between Raipur and Nagpur.

2573. In 1878–79 are you aware that the price of wheat at Raipur was 56 rupees to the ton?—I am not aware.

2574. I have in my hand the Administration Report of that district for the last five years, and the prices given in 1878–79 at Raipur are, wheat, 56 rupees a ton; in 1880, 56 rupees; in 1881 it fell to 38 rupees; in 1882 when the railway opened, 28 rupees; and in 1882-83, 37 rupees. I want to know how you reconcile those figures with anything like those stated by your friend?—I only give you the figures as they were given to me.

2575. They were only given to you for that statement, and not to base any calculations upon?—No, they were given to me in connection with this extension of railways as a fact, showing the necessity for the construction of railways in these districts.

2576. Under the idea that there was always surplus produce there?—Yes.

2577. Then

Mr. *Kynaston Cross*—continued.

2577. Then if you had it brought to your mind that the average price in 1878-9 in the Central Provinces was very much higher than the average price in 1882-3, would you come to the conclusion that there was any such very great surplus at Raipur?—I confess that I should be quite at a loss to understand it, because I should have thought that the opening of the line to Bombay would have greatly advanced the price, and it did not do so; outside that statement that you referred to, I thought that wheat would flow eastwards to Calcutta, and I can only account for it by thinking that the railway distance to Bombay was so great as to make it practically useless.

2578. Would it not rather prove that the crops for the last two or three years have been very large, and that there had been a large surplus, whereas in the year 1878-9 there was not a large surplus?—No doubt that would account for it.

2579 And that would rather militate against the argument of there being always very large surplus supplies of wheat there, ready to come out?—If you have a railway, and you have a country that will grow wheat, surely you will have the cultivation of wheat for the market.

2580. No doubt; I only put the question to you as a possible explanation of the fall in price. To pass on to another subject, which is of more interest perhaps to this Committee, you said that serious losses had been incurred by the Indian banks in holding rupee paper?—No, I put it in this way, that serious losses had been made by Indian banks from borrowing money in this country, and sending it out to India to be employed, I do not say in rupee paper, but variously sometimes on loans or in various ways, and no doubt to some extent, and perhaps to a large extent, in rupee paper, and then at the caprice of the lender being called upon to have it returned suddenly to this country when the rate of exchange had fallen very materially; there is no doubt that the losses have been very serious.

2581. Because the securities had to be realised at a lower rate of exchange than that at which the money had been lent?—Yes, the proceeds of local loans in Bombay and Calcutta and Madras, or of investments in rupee paper, had to be returned to this country at a low exchange to be paid to the depositors, and there was a loss.

2582. And that has militated against the issue of loans in India at the present time?—I think so. I think that it has begotten an apprehension of great risk and of possible great loss by people subscribing to loans which interferes with the Government getting the money.

2583. The custom having been in the last few years that people in this country subscribed to rupee loans?—Very largely.

2584. And they have lately ceased to do it because they are afraid of that result?—Yes.

2585. Do you think that that fear has arisen from the fact that the Government instead of borrowing in sterling preferred giving a higher rate of interest in rupees, and so showed their fear of a fall in silver?—I do not think so; I think it has arisen from the fact that a loss has been incurred, that the exchange has fallen, and

Mr. *Kynaston Cross*—continued.

that those who have invested have sustained a loss, and others have seen that, and it has got generally known.

2586. It is the fact that a great fall in the price of rupee paper has taken place without any fall in the exchange, and that at the present time the exchange is higher than it was two years ago, whereas rupee paper is 8 or 10 per cent. less?—Yes.

2587. There is no question of the realisation of the rupee securities?—But it still arises from the same circumstances, that the banks are fearful of having any large amount of their capital in India, or of remitting to India, amounts which they borrowed in England at 5 per cent., to be employed there at 7 or 8 per cent.; and therefore they have run their balances to a very low point, when formerly they had large balances in India, and they kept their reserves largely in rupee paper; but to the fear that has prevented their continuing to do so, I attribute mainly the anomaly of the 11 per cent. bank rate in Bombay and Calcutta, and of 1½ per cent. the actual value of money in London.

2588. You attribute that, I think, to the fact that although they lend money at 1½ per cent. in London, they dare not sent it out to India, because they are afraid that they would have to realise at an uncertain rate if they wanted to remit the money home?—That is what I meant, and therefore the balances or the reserves in Indian financial quarters have been run very low.

2589. And therefore the reserves being very low in financial quarters, you think it impossible to get now rupee loans in India at a moderate rate of interest?—At the present for Government purposes as loans against deficits, I think so.

2590. Not loans against deficits, but loans for the purpose of making railways?—Yes, loans to the Government in the form of loans; I think it would not be in the form of capital, but the parties subscribing would get shares in railways.

2591. So that if instead of issuing Government loan scrip, the Government were to issue Government railway shares, you think they would get a subscription at a higher rate in India?—I think they would on this ground, that if the rupee fell in value in India, the price of the share as measured in rupees would assuredly rise, because any competing line would have to be made largely of English materials, which would have to be paid for at a depreciated rate; that is a point which I have considered, and I draw the distinction there. In the one case, anyone going to the Government with bonds or scrip of course would get rupees, and in the other case he would hold shares, which shares, if the rupee fell in value, would rise in value.

2592. Is it a fact that any Indian railways are held to any extent in India?—I am not prepared to answer that question, but they hold other property, such as mills.

2593. What is the current rate that an ordinary Indian investor requires as an inducement to invest money?—It is a very difficult matter to answer that, you know that the commercial rate is 8 per cent., and there is no difficulty in lending money upon good security at 8 per cent.

 2594. Therefore,

Mr. *Kynaston Cross*—continued.

2594. Therefore, at once you would say it is not likely that the Government could borrow largely in India any Indian money at all?—Not very largely, but to some extent they might, because I think the native, as he does in the case of cotton mills, would be prepared to run a certain risk for the prospect of a possible greater gain and his dividends rising to a high point.

2595. That would be on the anticipation of his dividends rising to a very high point?—Yes.

2596. Do you know any instance of any Indian Railway dividends rising to a very high point?—There is 10 per cent. in one case, the Central Bengal.

2597. Are you aware of the way in which the profits of the guaranteed railways are reckoned in India?—No, I am not.

2598. Are you aware that the expenses on railways of the guaranteed interest is debited to Railway Account, at a fixed rate of exchange, or at least, that the guaranteed interest is debited to the Indian Railway Account, at a fixed rate of exchange?—No, I am not.

2599. And that very often it happens that this fixed rate of exchange does not, by any means, represent the amount of rupees which are required to pay the interest in India?—No, I am not aware of that.

2600. Granted that the Indian guaranteed interest comes to 4,200,000 *l.* a year, which has to be paid in England, that sum would be debited to the Indian Railways, or a sum equivalent to it at a fixed rate of exchange, instead of debiting the account for the number of rupees which would cover the 4,200,000 *l.*; are you aware of that?—I am not aware of it.

Mr. *Kynaston Cross*—continued.

2601. Throwing the accounts out to the extent of at least a crore of rupees annually by that method?—I am not aware of it. I have not studied the internal accounts of railway companies at all, but in answer to your first question; I have here the figures with regard the Central Bengal, which paid last year 10·52 per cent.; the East Indian, which paid 8·80 per cent.; and the Great Indian Peninsula, which paid 7·29 per cent.

2602. Reckoned in the way that I have mentioned?—I was not aware of that. I merely took the figures as given me.

Mr. *Bolton.*

2603. That arrangement which Mr. Secretary Cross has referred to would not affect the Indian revenues, supposing that the money was raised in India?—Inasmuch as I have not followed the particular point, I am not able to say.

2604. I think the point which has been put to you is this, that the Indian Railway accounts are debited at 2 *s.* a rupee, whereas in remitting they are required to remit it at 1 *s.* 8 *d.*, or a less sum, and therefore a very much longer number of rupees is necessary than appears on the face of the accounts, but that would not apply if the capital was raised in India, because the dividend of the capital raised in India is payable in India?—Precisely so; it would not apply to that.

Mr. JOHN K. BYTHELL, called in; and Examined.

Chairman.

2605. YOU are a merchant carrying on business in Bombay and Manchester, are you not?—Yes.

2606. I observe that the questions which you wish to be asked are almost identical with those that have been put to Mr. Lord, and therefore I will ask you generally, in the first instance, is there any respect in which you differ from the evidence which you have heard given by him?—In one or two respects I differ from him, and perhaps you will allow me to give the substance of a few notes that I have made in the room on what Mr. Lord has stated.

2607. We want to know in the first place wherein you differ from Mr. Lord, and secondly, could you give us any additional evidence which you think would be of interest to the Committee?—I am anxious to direct the attention of the Committee to the fact that as 125,000,000 *l.* were spent between 1860 and 1884, being an average of about 5,000,000 *l.* yearly on railways in India, which are now paying as a whole, and as nevertheless the deficit, which was until within the last five or six years immense, being for 14 years from one to two millions every year, is now changed to a surplus averaging for five years 650,000 *l.*, and budgetted for the current year as 1,000,000 *l.*; and as during the five years ending 1864, 6,400,000 *l.* were spent annually, while the deficit grew from 600,000 *l.* to 1,600,000 *l.*, and as the expenditure

Chairman—continued.

was not stopped when the deficit was over 2,000,000 *l.*, and as this deficit of 2,000,000 *l.* has, in so short a time, been changed into a surplus, although the expenditure in the interval has been about 50 millions sterling on capital account, I consider that some considerable increase on the average of the last few years, which I see by the budget this year has been nearly 6,000,000 *l.*, is not only wise but imperative, until at any rate famine protection has been secured; I think too that we ought to remember that this result has been arrived at in spite of the fact that all the strategic lines are included, and lines, the making of which has been a mistake, not paying anything, or losing money.

2608. Your point is, if I may put it that notwithstanding the very great and unnecessary cost at which some of the earlier railroads in India were made, and notwithstanding that others of them were made more recently for strategic purposes, and others have been made which never could pay, still the average result has been such as you think amply to justify the Indian Government in now going on making new lines to a great extent?—Yes, and I think that we should take into consideration that it is impossible in carrying out any great scheme like this to avoid making some mistakes. I see, taking the corresponding year 1882 (and the figures which I have now been referring to, are chiefly from Colonel Staunton's

Chairman—continued.

Staunton's Report of 1882) that 43,000,000 *l.* of English railway capital paid no dividend; 6¼ millions did not pay over 1 per cent., and 12 millions did not pay 2 per cent.

2609. But there is this material difference, that none of those lines were guaranteed by the Government?—No; but what I want to point out is that mistakes are inseparable from any great railway scheme, whether undertaken by the Government or by private enterprise, and also that the average earnings of Indian lines, in spite of all those mistakes, are very large, and are 5·37 per cent. against only 4·73 per cent. in England. It was not only that the lines were so expensively constructed, but so many mistakes were made. For instance, the Great Indian Peninsula Railway climbing the Ghauts had to be made several times at a cost of over 70,000 *l.* a mile because of engineering mistakes. The engineers did not understand the monsoon currents, and the thing was washed away, and all the bridges had to be rebuilt between Bhosawal and Nagpur.

2610. The fact that we have gained great experience in the last few years, and the other fact that materials are extremely low, you think ought to encourage us to be a little more bold in extending new lines?—Yes, having this surplus in hand I think you have a proper reserve to justify an increased expenditure, and so long as you have districts which are liable to famine, and which are almost entirely isolated now, that surplus revenue from the railways should be treated as a reserve, and not appropriated in the meantime to lessen taxation in other shapes and forms.

2611. Have you anything else to say in addition to what Mr. Lord said?—Merely with reference to trade. I will not go into figures, but there is one point which I wish to draw attention to, that it is to my mind very much better indeed to stimulate this wheat cultivation in India, a country which takes our own products in return, instead of letting America supply our wheat, being paid as she is with our gold, as she tries to exclude our manufactures. I do not mean to say that I would make railways in India which were not for the good of the people, but still at the same time it is an incidental benefit to this country, which, as representing the Manchester Chamber of Commerce, I think it is right to point out; I wish also to point out that it is only possible by railways that this wheat trade could be developed. And with regard to what Mr. Secretary Cross said about the prices of wheat in 1869 and 1880 in the Raypur district, it occurred to my mind that when the Commissioner of the Central Provinces, some ten years ago now, was urging the Government of India to let him make that railway on to Chaatisgarh, he said that there were, I think, scores of thousands of tons, or at any rate an immense quantity of wheat, there lying rotting in the district for want of facilities, and it was within his the Commissioner's own knowledge that the people in those districts dreaded a good crop more than a bad one, because if they had a good crop they could not raise the money to pay their assessment. And with regard to the comparison of prices referred to by Mr. Cross, I think the year 1878-79 was the first year mentioned, which was the first year after the great famine in India of 1876 and 1878.

Chairman—continued.

I do not know how far that affected the Raypur district, but all the grain that could be got in India had been carried away to Southern India, so that it is quite possible that those very low prices referred to by Mr. Lord were at the time that the Commissioner of the Central Provinces said that the grain was lying rotting, as there was no value for it.

2612. You think the figure quoted by Mr. Lord of 10 millions a year to be raised partly in India, and partly in this country, a judicious one?—After reading the Bombay Chamber of Commerce memorial my idea was that an increase of expenditure of something like four millions a year, on the average expenditure of the past few years, was not unwise, looking to the great increase of the revenue, and to the fact that we have so many districts needing famine protection.

2613. You agree that the Nagpur and Bhopa Railway is of first and foremost importance?—No, I think that the Nagpur and Bengal is of the first importance, because it goes through a tract of country away to the south from the East Indian line. And, looking at the map it is apparent how the district has been neglected. I see that the Lieutenant Governor of Bengal, in a letter complaining of the delay in sanctioning railways, states as a matter of fact that Orissa is now almost as isolated as it was during the famine of 1866-77, when I think one million people died.

2614. Is that the only respect in which you differ from the evidence given by Mr. Lord?—With respect to the extensions I think that is the only thing, speaking from memory; but I think also that a line from Vizapatam up to Raypur ought also to be made. All this district is a district in which they have suffered from famine in previous years, and it now is almost as much isolated except for the canal which Sir George Campbell referred to, which I suppose cannot be nearly constructed yet, or the Lieutenant Governor of Bengal would not say that Orissa is nearly as much isolated now as in 1866. There are two other figures with regard to the trade advantages which I was just about to state if you will allow me, in addition to what Mr. Lord said; I have seen it stated in India that every 20 miles of cartage adds 1 *s.* to the cost of wheat per quarter, and with regard to the saving to people in the transit of their goods, I see that the Government of Bombay calculated in connection with this Southern Mahratta Railway scheme, that from one place to the sea at present, some 60 miles distant, 20 rupees for cartage per ton was being paid; whereas the railway would bring down the produce to Bombay and the sea for 10 rupees; at another place, a distance of 100 miles, cartage to the sea coast 30 rupees, and the railway rate to Bombay would be 12 rupees, and that from another place, 130 miles, the present rate of cartage is 40 rupees, whereas the railway would bring it to Bombay for 20 rupees. That was the rate of cartage to certain parts on the coast, not to Bombay, where the produce was shipped; and from those parts the freight had to be paid in native craft afterwards, so that on that calculation, irrespective of dividends, the saving must be

Chairman—continued.

very great to the people of the country. I am very strongly of opinion too that the Government ought to keep sight of the fact that they are landowners, and that the land revenue has undoubtedly been greatly increased of late years by the increase of railways. I saw it stated that there are something like nine million acres of culturable land in the Punjab, which probably would be brought under cultivation if railways were made. And of course, where they have no permanent assessments, the land tax will be increased when the railways have been made, in consequence of the advance in the price of produce. If you would allow me, I should also just like to mention that when you have to deal with a district such as that of the Bengal and Nagpur Railway, 10 millions of money would be spent if you had a famine, in your attempt to save life, in the absence of railways, and there would again be a fearful loss of life, although the Government of India spent unlimited money. Any big famine would probably cost nearly 10 millions of money. The Southern India famine, which lasted from 1876 to 1878, I see cost 10 millions, and yet five millions would make this railway. There have been 10 great famines during this century.

2615. Have you anything further to state?—I wish to refer particularly to the question of the State guaranteed railways and the question of rates. I have been continuously for some 15 years in Bombay fighting to get the Great Indian Peninsula to charge reasonable rates along their line, and therefore, though I think it is better for the Government of India to give concessions to companies, inasmuch as I am afraid that they would not continue the construction of railways steadily from year to year if the money were all borrowed in the name of the Government and not raised by shareholders, I am very strongly of opinion, and it is my hope, that this Select Committee will very strongly recommend that the power to fix rates in connection with any new concession shall be retained by the Government and shall never be given up under any circumstances whatever. If you will allow me I will give you, very briefly, a few figures which will show very clearly what the giving up of that power means in the case of the Great Indian Peninsula; I have heard that in the original contract there was a provision to the effect that that company should charge such rates as the Government might from time to time approve, or words to that effect, but somehow or other, maximum rates have been fixed by the Government, and now the Great Indian Peninsula, with 26 millions of capital, on which the Government paid away, before the railway began to pay, something like six millions in interest, is in such a position that the Board can snap their fingers at the Government. And the India Office and the Government of India together have so to speak to go with their hats off to the Board to get any rate reduced. That railway has a practical monopoly of a large portion of the Deccan, and the maximum rates are so high, that although they are not charging anything like, in some cases, one-half of them, still their rates are enormous as compared with any other line in India, and I maintain that their rates are very injurious indeed to the cultivator in the Berars and other portions of the Deccan.

Chairman—continued.

2616. And you think that the Government ought to retain power from time to time to revise and fix the rates?—Yes, at any time.

2617. And that it is a bad plan to fix a maximum which may not be applicable in succeeding years?—Yes. Indian cotton is now one-half the price it was in the year 1869, roughly speaking, and yet the Great Indian Peninsula Railway Company are charging us more money for carriage than they did in the year 1869.

Mr. *Gorst.*

2618. What are they charging?—I have got a few figures here. I have taken Oomraoti, a well-known place in the cotton trade; in the year 1869 their rates were, inclusive of cartage in Bombay, 38 rupees 8 annas 11 pies per ton; our present cotton rate to Bombay is 43 rupees 15 annas 2 pies per ton, so that they are charging something like 12 or 14 per cent. more money from Oomraoti for carrying cotton now than they did in 1869, when cotton was worth quite double the money that it is worth to-day.

Mr. *Carbutt.*

2619. Is that double the money here, or in India?—Here, and in India and everywhere, all cotton is half the price it was in 1869 in all parts of the world. I have just taken out one or two rates that you may see what other lines are charging. From Oomraoti, which is a distance of 419 miles, in round numbers, they are charging 44 rupees to the station in Bombay; by the Bombay and Baroda Railway, they are carrying from Wudwan, which is 389½ miles, only 15 rupees; we are paying from Broach to Bombay 203½ miles, 7 rupees; and by the new line from Agra to Bombay through Rajputana, with transhipment at Sabarmati, 847 miles, only 40 rupees, which is more than double the distance as compared with Oomraoti, and yet four rupees less than the cost in that case. Now with regard to Calcutta, taking East Indian rates for comparison, from Calcutta to Delhi the rate is 38 rupees on 954 miles, against the great Indian Peninsula, 44 rupees for 419 miles. Then from Agra to Calcutta by the East India Railway, 841 miles, the rate is now 34 rupees per ton only, and from Cawnpur, 684 miles, it is only 30 rupees.

Chairman.

2620. Is it only the Great Indian Peninsula that charge those excessive rates?—So far as I can make out it is only the Great Indian Peninsula.

2621. In all India?—I have gone through the books of the leading companies; I have not taken the small lines; it is a question that I have been agitating for a great many years, and those rates in some cases have been greatly reduced. Then as regard Manchester goods, the charge on piece goods to Jubulpur from Bombay, 613 miles, is two rupees two annas six pies a maund, in order to compete with the Calcutta carriage, which is only two rupees eight pies, Calcutta being however 784 miles against 613. But as they come nearer to Bombay on their own line, where there is no competition, the rate to places

Chairman—continued.

places which are 120 miles nearer to Bombay than Jubulpur, is two annas in the maund higher than to Jubulpur. That is an undoubted fact, but I will give you another comparison; I have taken Nagpur which is 520 miles from Bombay; the rate to Nagpur is two rupees six annas ten pies per maund, which is equal to just about 66 rupees per ton. The East Indian rate for the same distance is one rupee five annas eight pies, or 37 rupees a ton; that is to say, it is 37 as against 66 on Manchester goods at this present time for a similar distance.

Mr. *Gorst.*

2622. When you say the same distance do you mean the same distance from Calcutta?—The East Indian charge for a similar distance on their line on any part of their system a certain rate per ton per mile for goods, and I have worked it out; the East Indian rate for a corresponding distance on their lines is 37 rupees against 66 for 520 miles on the Great Indian Peninsula.

Chairman.

2623. Your complaint is solely directed against the rates of the Great Indian Peninsula?—No, I bring this forward to show what little control there is over rates, and that the Government has no more power over them than I have.

2624. But is there an exception in the case of the Great Indian Peninsula Railway as against all the others, that they have a different sort of agreement with the Government?—The Great Indian Peninsula have had that clause abrogated which gave the Government the power to interfere; maximum rates were fixed, and those maximum rates are more than double those excessive rates which I have mentioned; the Bombay and Baroda have got a maximum rate, but in their case they have sea competition all the way, and therefore their rates are kept exceedingly low; I believe that the maximum rates were given to the East Indian Railway before the Government bought it, but then they had the Ganges competing all the way, and that may perhaps have kept their rates down. And in the same way with grain rates the Bombay Chamber of Commerce has been fighting the Great Indian Peninsula Board for the last few years, and have been trying to persuade the company to carry grain at reasonable rates, but practically with no avail. Any little changes that have been made are quite insignificant. The Chamber of Commerce on the 19th August last gave this comparison: they took out eight places on the Great Indian Peninsula, where they were charging from 5·70 to 9·42 pies per ton per mile, while the Rajhputna and Malwa, and Bombay and Baroda for through traffic were charging from 4·95 to 5·84. The Indus Valley, the Northern Punjaub, and Scinde were charging 4·68 to about 5·26. Then to take an example from the East Indian line, I find that their rate is somewhere about about five pies only. But the lowest Great Indian Peninsula rate is 5·70, and that is only the through rate to Jubulpur; to places on their system where there is no competition like the Berars, they are charging rates which are something like 70 per cent. higher

Chairman—continued.

than the Jubulpur rate and 70 per cent. higher than what the other lines I have named are charging, and yet I see that the Government of India report on the wheat question say that it is in Berar that the smallest yield of wheat is obtained, only seven bushels per acre, and yet to that very place the Great Indian Peninsula, having the monopoly, are charging something like 9 pies a ton per mile for carriage.

2625. On the whole, with the exception of the Great Indian Peninsula, are the rates for merchandise charged by the various railways in India moderately satisfactory to the mercantile community?—There is the undoubted fact that they are very much higher than America is charging for wheat; for instance, there has been some agitation for a further reduction on the ground that the rate through the Suez Canal for steamers is very much higher than the rate of freight from American ports to England. It is weighting India very much in the competition with America to charge much higher rates than are charged by the American railways. The lowest rate in India is very much in excess of the New York rates. The lowest Great Indian Peninsula rate, for instance, 5·70 pies per ton per mile, is about 1 *s.* per quarter for every 100 miles of carriage, and it is stated in this yellow pamphlet by Major Gordon that the ordinary rate from Chicago to New York is $. 0·64 in summer, $. 0·743 in winter, and has been as low as $. 0·265

2626. That is the Great Indian Peninsula; what is the East Indian rate?—The through rate on the Great Indian Peninsula is 5·70 pies to Jubulpur, and on the other lines the charge is, roughly speaking, about 5 pies; not a very great reduction on that, of course, because the through rate to Jubulpur is, to compete with the East Indian, tolerably low; it is when you come to the Berars, where there is no competition, that they put 70 per cent. on to the through rate. I have taken this Great Indian Peninsula Jubulpur rate per quarter for comparison with America, and not the local traffic rate which is 70 per cent. higher.

2627. I gather from your statement that although it is the Great Indian Peninsula which is chiefly complained of, you still think that there is room for a reduction in most of the Indian railway rates?—I think it would stimulate production very much indeed if the rates on wheat could possibly be reduced.

2628. And you have some doubt in your own mind whether that could be done without leaving a loss to the railway?—It is not that I have a doubt, but it is a matter that one does not like to express a strong opinion about it without going into figures. It is alleged by those who have been agitating this matter that the increase of trade would amply make up for any first loss to the revenue.

2629. Is that your view?—I think that there would be increased traffic if we had further reduced rates.

2630. At all events you think it is well worthy the consideration of the board of directors of other railways as well as of the great Indian Peninsula, whether they cannot reduce the rates so as to stimulate traffic?—I think so, and I think that I can give you one very notable example. The Bombay and Baroda line runs

Chairman—continued.

along the coast and it had sea competition the whole way until the Rajputana narrow gauge line joined it, which was only four years ago. It was made with the idea of being taken to the north-west, but it was open to Ahmedabad about 20 years ago and it stopped there, and the Rajputana line was made to come down to it, but in the years when they only had the traffic in competition with the native craft they charged very low rates indeed; and yet the line paid on the whole remarkably well; it paid not very much worse than the great Indian Peninsula with its excessive rates.

2631. Your main object in this portion of your evidence, as I understand, is to impress upon the Committee that the Government should retain the power to check the charges by the railway companies, and to fix them and reduce them from time to time?—Yes, that they should have absolute power to alter them, when, in the opinion of the Government, the rate of charge in any one district is opposed to the cultivation of the land.

2632. You think that that object is not accomplished by fixing maximum rates to begin with?—Fixing maximum rates may remove all power from the Government hands in the matter.

2633. Have you anything more to tell us on that subject, which is a very interesting one to the Committee?—No, I think I have given you all the information at my disposal.

Mr. *Gorst.*

2634. Is the complaint against the Great Indian Peninsula a general one, that all their rates are high?—All round, they are the highest so far as I could make out, in India, on everything. They seem to have gone on the principle of trying to keep the rates as high as they possibly could.

2635. Can you compare the respective cost of construction of the Bombay and Baroda and the Great Indian Peninsula?—Yes, the Great Indian Peninsula has been a more expensive line to construct, but the difference after all is not so very great.

2636. Of course, as you say, the influence of a reduction of rates would be to encourage traffic; there is no doubt about that, but are you prepared to say that the reduction of rates would increase the remuneration of the traffic?—I think that they could decrease their rates very much indeed without decreasing their revenue, at any rate, because I believe it would lead to a largely increased traffic. I will give you a case in point, if you will allow me. In 1873 I got a letter from the Great Indian Peninsula manager in Bombay, complaining of my having attacked him on the score of the piece goods rates, and that drew my attention to it, and I found that they were then charging from Bombay to Nagpur, for what they are now charging 66 rupees a ton, 138 rupees a ton. The charge upon a piece of 8½ lbs. shirtings was then equivalent to 8 annas, and the result of the discussion was that the correspondence went home to the Board, and they reduced their rates nearly one-half then, because so much publicity was given to it. But although that reduction was made of one-half on piece goods, and the rates on grain have been reduced (although they are still excessively high), yet their revenue has increased. So I argue that if they followed that policy still further, if they would remove the injustice to the land-

Mr. *Gorst*—continued.

owners and the ryot, in those producing districts, for it is a great injustice to the ryot to have to pay these excessive rates, they yet would earn a good revenue.

2637. Was not the bargain that was made with the Great Indian Peninsula by the Government of India, that the company were to be at liberty to charge what rates they liked, so long as they did not exceed a certain specified maximum?—Precisely so. But I want to point out what the Government have done in the matter and the result.

2638. How could they get out of the bargain with the Great Indian Peninsula without compensation?—I do not say that they could get out of it; but one reason why I mention this is that I not only wish this to be brought out as a warning for the future, but that it is only by publicity in this way that we have ever got any reduction in anything from the Great Indian Peninsula, and I am in hopes that the evidence I am giving here to-day will have some effect upon them.

2639. There is a sort of chronic war, is there not, between the merchants in Bombay and the Great Indian Peninsula Railway Company?—Yes; I will tell you of a case. The agent in 1868 made a carting contract for cotton at two rupees a ton in Bombay, and carted down to the market, a couple of miles away. A little later there was a contract made at a lower rate, until in 1874 they were paying 10 annas, but still they charged two rupees. In the meantime the trade had changed, and most of us did not want our cotton carted. I was paying them probably as much as any other individual in the place, in the shape of railway carriage, and I did not want my cotton carted; but they said, "You must pay two rupees whether you have it carted or not." I said, "If you will give me the two rupees we will take the cotton from the station direct to the ship, but if we must pay the carting you shall cart it, because it is a little more convenient to have it at the market." I represented to the agent and the traffic managers of the two railways in Bombay and to the Government, but we were quite powerless, so we had to call indignation meetings, and go to the Government of India, and the Government of India put the matter before the Law Officers of the Crown, who said that it was an utterly illegal charge, and it was given up.

2640. Was it a terminal?—No, it was not a terminal; they had five rupees terminals besides; this was carting; I think it is five rupees a ton that they charge now for terminals on cotton, That is an exact example of how, having this power in their hands, they are treating people, not only the trader but the cultivators; I do not complain so much on behalf of the trade. I do not think that it makes so very much difference to us merchants so long as we all pay the same rates of freight. I am looking upon it from an imperial point of view. The country guarantees interest on 26 millions of money, and paid six millions in guaranteed interest, with the idea of developing an immense tract of country over which some 1,400 miles of railway are made, but their object in making that railway is to a great extent frustrated. The idea was to benefit the cultivator and give him cheap access to the coast, but instead of that the great Indian Peninsula try to mulct him as much as possible.

2641. Surely

Mr. *Gorst*—continued.

2641. Surely the enlightened interest of the Great Indian Peninsula Board is identical with that of the Government of India, and that interest is to get as big a traffic as they can?—So you would say, but it seems a very queer example of such a policy to be charging more for cotton now than they did in 1869, now when cotton is only one-half the value, and when the fear is that the enormously increased cultivation of cotton in America will drive Indian cotton out of cultivation altogether.

2642. Then you are of opinion that the directors of the Great Indian Peninsula Company are keeping up rates which are not only injurious to the country but injurious to their own shareholders?—I think so, decidedly. One would think it to be the intention of the Great Indian Peninsula Company to drive the cotton cultivation to America which with these enormous rates they soon will do.

Mr. *Balfour.*

2643. Do not you think that this plan which you suggest of giving the Government absolute control over the rates in future railways will make it rather difficult to get a good contractor for making a railway; would it not make it rather difficult to get good terms for making them?—I think there was such a clause in the contracts with the original guaranteed companies, and if they got it once I do not suppose they would have much difficulty in getting it again.

2644. Would not the people who might otherwise come forward and provide money for railways very naturally say, the Government have absolute control over our rates, and the mercantile community in England and in India will exercise pressure upon the Government to lower the rates quite irrespective of our interest; and it is therefore a great risk for us to hand our money over, and for other people to settle the rates at which that money is to be reimbursed?—I think if the Government gave a guarantee they would have no difficulty in enforcing such a clause.

2645. Your contention would be that the Government are more competent to decide what proper rates are than the railway companies themselves?—Than a Board sitting in London, certainly.

2646. Are the rates in India decided upon by a Board sitting in London?—Completely; the Great Indian Peninsula rates are, I know.

2647. And you think that the Government in India would be more competent to decide upon the proper rates from the point of view of the railway shareholders than the railway directors, even though sitting in London?—I think that if the Government guarantee the money the shareholders would trust them to keep the rates on a fair basis. They would know very well from their experience of the working of the State railways, that the Government do not go and put down rates so low as to cause a loss on the working of the railways, and I think that the shareholders would trust them.

2648. But the revenue of the shareholders does not depend entirely upon the Government guarantee. I do not know how far the Indian Government may be concerned in the modes of pressure that are exercised upon Western Governments, but it would be rather a serious thing

Mr. *Balfour*—continued.

to hand over to the Government of any western country an absolute control over the rates of a railway which did not belong to them?—But as soon as the Government guarantee a fair rate of interest, which alone is sufficient to ensure the placing of the capital in this country, you may say that the railway almost belongs to the Government. There is not very much difference between borrowing money and paying interest on it, and guaranteeing the same rate of interest to a company.

2649. Then, of course, shareholders would all know that so far as Indian Railways are concerned there is no expectation of their getting more than the guaranteed interest?—I do not think they would do that, because they have the fact that on the East Indian Railway, and on the Bombay and Baroda, where the rates are very low compared with the Great Indian Peninsula, there is a surplus beyond the guaranteed interest now.

Mr. *Brodrick.*

2650. Then your system would utterly break down, would it not, except in cases where they applied for a guarantee?—I am inclined to think that it is better for the Government to borrow the money for the railways as a State undertaking if they cannot get that control over them.

2651. It has been suggested to the Committee by some witnesses that a guarantee of four per cent. for 10 years would produce the requisite amount of capital, provided that the companies had full freedom in the management of their own property, your system would utterly stop that?—If they could not get that done, it would be very much better in the interests of the people of India that the Government should not give a guarantee, but borrow the money and make the line; because what is the primary object? It is to feed a miserably poor and ever increasing population, and not to give a power over an immense tract of country in these competitive days and days of low prices, to a board in London who do not consider those people at all in the fixing of their rates. I doubt whether a railway is of very much advantage in such a case.

2652. Do not you think that perhaps it would be a fairer thing to the shareholders, and to the public generally, as it is a national object to get railways made in India, to enable the Government to intervene as regards rates after a definite rate of interest has been paid; supposing that a railway were allowed to pay 5½ or six per cent. interest, if it rose to that amount, that then the Government should be able to control the rates?—The objection to that principally is this: that you might land yourself in no end of law suits in connection with that matter, because a question arises which has arisen so often in such cases, like the case of the Liverpool Corporation in their dealings with the gas company. In the neighbourhood where I live there have been Chancery suits with the gas company in consequence of the agreement entered into, to the effect that the price was to be reduced when a certain dividend was earned. It is an agreement which it is almost impracticable to carry out, because of the disputes as to what is capital and what is revenue.

2653. Do you think that it would be impossible to subscribe a large amount of capital in

Mr. *Broderick*—continued.

Manchester if the Government were to guarantee four per cent.?—I do not think that the control would make much difference, because four per cent., the Southern Mahratta rate, is a good rate relatively, looking to the value of money, as good I think as five per cent. was when it was guaranteed 30 years ago; and yet they had then a clause in their contracts that the Government should have control in some form.

Mr. *Onslow.*

2654. Is it not the fact that on nearly every railway in India it is the carriage of goods which pays and not the carriage of passengers?—I have not gone into that question with respect to figures, I know broadly that something like 59,000,000 passengers used the railways last year, but I have not compared the respective receipts.

2655. I will put a case to you which is not very likely to happen, but supposing that you were to guarantee to a company 4 per cent., and that there was to be an increase of traffic and an increase in the carriage of goods in any year, so that the company could afford to pay 4½ per cent., the Government, according to you, might come down and say, Oh, your rates are a great deal too high, and you must lower them to pay what we consider a right and proper half year's dividend, say at the rate of 4 per cent, do not you think that your shareholders would naturally, to use a common expression, growl because the Government had interfered with what they considered a legitimate profit?—Yes, they would growl certainly at any reduction which reduced their profits.

2656. Do not you think that that would be an inducement to others not to come forward at any future time to advance money upon the same terms?—I go upon the fact that they got the money for the old guaranteed railways upon terms giving some control, and I think they can do it again; at any rate, I argue that it is well worth trying.

2657. The guarantee to the East Indian Railway Company being 5 per cent., do you think you are right in saying that the Government have any control over their rates?—I can only say that I was told by the Secretary to the Public Works Department in Bombay, several years ago, that the original contract with the Great India Peninsula Railway, said that they should run trains at such times and charge such rates and fares as the Government from time to time approved. I have not seen the contract myself.

2658. That is as regards passengers, but I do not think it is so as regards goods?—You will get that information from the India Office, for I have not seen the contract.

2659. Do you think you were right in saying that the Government has a control over the rates of traffic?—They have maximum rates as fixed by the Government, so that Government had the power to fix rates, for they have fixed them.

2660. There is a great deal in what you say, but at the same time it is the same thing in England, where a railway company has a monopoly and the rates are higher, the merchants growl just the same, but they can do nothing?—But in England the Government are not the landowners.

Mr. *Onslow*—continued.

They do not assess each portion of the land as they do in India.

Mr. *Kynaston Cross.*

2661. And they do not guarantee the railways?—No.

Mr. *Onslow.*

2662. But that does not affect the monopoly?—The Government have such a direct interest in the railways in increasing cultivation, and thereby giving employment to the people, and in having an increased land revenue, that if they cannot get that power, my own very strong opinion, after seeing the working for nearly 20 years of the Great India Peninsula, is that they should borrow the money and build the lines as state lines.

2663. What I fear is that if your plan is carried out it would deter capitalists from coming forward and lending their money if they found that the Government of the day could from time to time, say every year or every half year, alter the rates for goods, and thereby diminish their dividends?—That might be objected to, but I think they would get the money in the present state of the money market with a guarantee.

Mr. *Dalrymple.*

2664. Has your attention been drawn to the exactions by native chiefs in the way of customs and transit dues?—Yes; that is very often the case in India. The Government of the day issued a special resolution about it in 1868, and the Chamber of Commerce at Bombay, and other people have often been agitating the question.

2665. Is there any hope of those exactions being abolished?—I think they are being reduced, but every one of our municipalities began to do the same thing, and the Government of India have had to step in with a very strong hand, and stop their levying transit dues for municipal purposes.

2666. Those exactions are very vexatious, are they not, if the railway passes through several jurisdictions within a few miles?—Yes, but I cannot speak of that from my own knowledge.

Mr. *Jackson.*

2666*. With regard to this question of the power which you seem so anxious that the Government should possess, you do not complain, I think, very much of any other lines except the Great Indian Peninsula?—The Bombay and Baroda, as I have said, have water competition the whole way, and if they charged a high rate they would not get any traffic to come by them.

2667. In the cases of those other companies, you seemed to intimate that you think the Government have some control?—No, I say, I thought they had in the case of the East Indian Railway since the purchase, but that is a mere expression of opinion. I say that the Government did fix the Great Indian Peninsula maximum rate, and the result has been what I have said.

2668. Are you sure that it is in consequence of the Government having fixed the rate?—There is no doubt of it. Even as far back as 1872, I had a talk with Lord Northbrook, when he was Viceroy, but he said, "the power is gone out of our hands, we cannot do anything."

Mr. *Jackson*—continued.

2669. Do you think that the lower rates on the other lines which you have mentioned, are the result of any pressure put upon them by the Government?—No; I have explained, I think, that the Bombay and Baroda compete with the sea traffic the whole way, and that the East Indian Railway have the Ganges River competition the whole way and that may be the reason why their rates have been kept reasonable. With regard to the other lines, the examples which I gave in the case of the Indus Valley and the Scinde, Punjaub and Delhi Line, they have the Indus competition the whole way down, and I also gave the example of the Rajputana and Malwa Line, which is a Government line

2670. Then you think it is the effect of competition in other cases and not the effect of any pressure on the part of the Government which has reduced the rates?—It is undoubtedly the case in the matter of the Bombay and Baroda, because they had always been urging me personally to give them our cotton to carry, when we were bringing it down by water, and they made low rates to get it

2671. You think that if a competing line were made to compete with the Great Indian Peninsula, probably their rates would also be reduced?—There is no doubt about it, but that is practically impossible; I do not suppose anybody would find another 20 millions of capital to make a competing line with the Great Indian Peninsula, seeing that a single line over nearly the whole of that system can carry the traffic.

2672. We have had some evidence to show that, if this line from Nagpur to Calcutta were carried out, there would be competition with the present route?—There might be competition to that one district of Chattisgarh, round Raypur.

2673. Have you any limit to the making of lines in the other parts of the country?—As soon as you have a competing line to Calcutta, the great Indian Peninsula have this in their favour, that freights from Calcutta are higher because they have a longer steamer journey from Calcutta. One thing that enables the Great Indian Peninsula Company to refuse to put down the rates is that we get long steamer traffic from Bombay

2674. I think we have it clearly from you that the lower rates on the other lines are one of competition, and not to any pressure which is exercised on the Government?—I think so, on the other companies' lines; I mean the guaranteed lines. It does not refer to the State lines.

Mr. *Bolton.*

2675. You do not allege, I think, that the Great Indian Peninsula Railway Company is charging more than they are entitled to charge by their powers?—No; by the maximum that they have got they could charge more than double the rates that they are now charging in many cases.

2676. Do you say that they are doing an injustice to the trade and the natives by charging those high rates?—I consider that they are, because the Government surely did not fix those maximum rates with the idea, at the time, of having them so excessive rates charged At the

0.61.

Mr. *Bolton*—continued.

same time, we do not blame the Board except for wrong policy in the company's interests I suppose they think that they have only got to look at the shareholders' interest. What I mean is that the whole thing, as it now stands, is a great injustice to the Indian tax-payer.

2677. How do you make out that it is an injustice to the Indian taxpayer; it is only a difference in the original bargain, is it?—It is not exactly a difference in the original bargain, because those absurd maximum rates were fixed after the capital had been subscribed.

2678. Are you quite sure of that?—Yes. The list that I have seen was fixed about 1868.

2679. Can you tell us the circumstances that led to the alteration in the original contract?—No, you must apply to the India Office for that.

2680. Are you sure from your own knowledge, that after the original contract was made it was altered in favour of the Directors of the Great Indian Peninsula Company?—No; all that I am sure of of my own knowledge is this. I have seen a letter from the Government of India to the Governor of Bombay stating that maximum rates have been fixed, and that within those rates the Great Indian Peninsula Company can manipulate them as they may choose; and therefore it is quite evident that those maximum rates were fixed after the line was opened or after the concession was given; but what the exact terms were I do not know.

2681. That being so, to whom is the injustice done?—Injustice is done to the cultivators in those districts, inasmuch as such a large proportion of the price that is obtained in Europe for the produce that he grows is mulcted by the Great Indian Peninsula Railway transit; much more than in other districts.

2682. Although they expended their own money in making this line on the conditions laid down by the Government, with power to charge considerably higher rates than they are actually charging?—As I say, I do not so much blame the Board in the matter as I blame the Government for giving them the concession at all.

2683. You said that it was an injustice?—I think I guarded myself by saying that I did not blame the Great Indian Peninsula Board in the matter, but that it is a great injustice to the Indian taxpayer that this guarantee should be given with this result.

2684. I rather understood from your remarks that you did blame the Great Indian Peninsula Board?—I blame them for what I consider bad policy. They appear to try to squeeze everything they possibly can out of the traffic, and not do as we do in my companies in this country do, viz., try to create traffic.

2685. And you think that by lowering the rates they would increase the traffic?—I feel absolutely certain of it, for every time that we have had a reduction of rates the traffic has increased.

2686. To such an extent as to more than compensate for the reduction in the rate?—Of course that is a strong way of putting it, but I think they could reduce the rates considerably, at any rate without injury to their own interest.

2687. If they do not improve their position how is it an advantage to them to make

Mr. *Bolton*—continued.

rates?—*Of course if the Board of Directors never* try to develop the trade and make experiments of that kind, it is more a matter of theory, but my theory is that they could develop their traffic by charging lower rates, and yet do as well for the Railway. Of course that is a matter of opinion.

2688. You have expressed a preference on the whole for lines to be made by the State, failing the possibility of having lines made under a guarantee which should place in the hands of the Government a complete control of the rates to be charged?—Yes certainly.

2689. Failing that you would have lines made by the State?—Certainly.

2690. On what terms should they manipulate them?—I do not see myself that there is much difference between the Government borrowing the money at 3½ per cent., as they could do at the present time, and giving a guarantee equivalent to something like 3½ per cent. to the taxpayer.

2691. Should it be always 3½ per cent.?—I would leave it to the Government to work it for the good of the country. You have got what you might call a paternal government in India which, during all my experience, whichever party is in office, has done it best for the country, and I think I could trust the Government to do that.

2692. Would you expect the Government to go in the direction of reducing the rates whenever the dividends paid by the Great Indian Peninsula Railway exceeded 3½ per cent.?—I am not prepared to lay down a policy of that kind now; but I maintain that the Government, being the great landowners, and having to consider the welfare of the people of India who have got no political power, are much more likely to do what is good for the people than a board of directors in London, with a power to fix rates as they choose.

2693. You must have some object in proposing State lines instead of private lines, and I think that your object is to have lower rates of carriage?—To have control so as to prevent excessive rates.

2694. And that control would be used in lowering the rates whenever practicable?—I do not say that, but to prevent excessive rates, and I would let the Government be the judge.

2695. In the event of a through rate of carriage from Bombay to Calcutta, for instance, either by the present line or by the proposed line via Barrar, that one line would probably pay, while the other would not be paying, and would you have the Government average the whole of the lines in India or that each line should stand on its own bottom?—I think that the Government should use its own discretion in a matter of that kind, and as a rule the Government ought not to try to take out of a paying line in any district the cost of a mistake in another district.

2696. Your object, in fact is to get cheap carriage, and you do not care how it is done?—My object is, that the people should have improved communication. I am now arguing it from a trade point of view; I am arguing it from an Imperial point of view for the good of the people.

Mr. *Kynaston Cross.*

2697. I think your object is to tell us that the Government cannot make railways without a guarantee and if they do give a guarantee they must have the control of the whole of the rates?—Yes.

2698. Mainly, as Mr. Bolton said, with the object of having cheaper carriage?—Or of preventing excessive rates of carriage.

2699. And of developing the exports?—Yes, and of feeding and giving employment to the people.

2700. That development of exports would, to some extent, have to be paid for by the taxpayer if the railways did not pay their own way?—Yes, but would to some extent have to be done; but the revenue has *increased so rapidly* of late years, that I should be hopeful of seeing the railways of the whole country self-sustaining, including even what you might call the bad lines and the mistakes.

2701. But until they are self-sustaining if you do it with the object of developing the exports, is not that very much equivalent to giving a bounty on the export of wheat at the expense of the Indian taxpayer?—That might be so, of course, in some particular cases; but we have got the facts before us, that low rates for wheat and other goods, as compared with the Great Indian Peninsula, are on some lines giving handsome dividends.

2702. Taking it as a whole, you say that the Government ought to have the control of the rates, and that the rates should to be so fixed as to induce as much export as possible, and if there is not enough dividend earned by the line it has to be made up to 3½ per cent. or 4 per cent. by the Government. How is that in any way different from granting at the expense of the Indian taxpayer a bounty on the export of wheat from India?—I am not arguing that the rates should be put down to a point so low as not to pay, but that the Government who guarantee the money should look into the circumstances of each case, and I would trust the Government of India to judge of that.

2703. Would you direct the Indian Government, so far as they could, to obtain sufficient rates of carriage to enable them to pay at least a stipulated dividend on the lines?—Where there is a good traffic there is no difficulty about that. Most of the trunk lines are now paying more than that on their present rates, and I think reducing those rates on most of the trunk lines would not injuriously affect them at all.

2704. *Your object in coming here* is not to talk to us about development, but to advise us to make three or four large new lines of railway, and, to begin with, to spend ten millions a year; and what we want is that you should explain to us how you hope to get sufficient income by the traffic which will come along the lines which you propose to make, to pay for the guarantee?—On that ten million are included the lines which the Government of India class as protective lines and I think, speaking from what I have seen of the Government of India's opinion, and the Famine Commissioners' Report, that there are many lines which need be made for famine protection. Then in the case of the State undertaking that duty, I do not think that paying lines like the East Indian line or the Rajputana one, for instance, should charge high rates in order to make up the deficiency on their protective lines.

In

Mr. *Kynaston Cross*—continued.

In any deficiency there would be no doubt a good deal of protective expenditure.

2705. That 10 millions extended to five years would be 50 millions sterling, and the interest upon that, at 4 per cent., would be two millions a year?—Yes.

2706. What proportion of that two millions a year would you propose to charge upon the revenues of India?—What I argue is, that in spite of the expenditure of nearly 30 millions during the last five years, the surplus revenue has very much increased, and the position of the railway interest has improved enormously, and I argue from that that the railways which are now under construction will, during the next five years, be gradually opened, and you have good ground therefore for supposing, that even if you spend say 50 millions during the next five years, against 30 millions during the last five years, your financial position at any rate will not be made worse.

2707. Do you think it can be said to be so, considering that some of the lines which are now being made are essentially famine lines, and those that have been generally made for the last few years have not been so?—Some of those that are termed protective lines will earn a revenue. I believe that the Bengal and Nagpur line will earn a revenue very quickly, because it goes through a rich country.

2708. We are speaking of an expenditure of 50 millions, have you made any estimate or have the Bengal Chamber of Commerce made any estimate of the revenue which is likely to arise from the expenditure of 50 millions on these special lines?—No; but I read the Government of India's argument as to their proposal to spend something less than that, and, judging by the figures that we have, for of course I have not got access to minute calculations, it appeared to me that if we spent 50 millions, taking the Government of India's own figure, we should not be any worse off than we are now.

2709. The Government of India propose to spend 32 millions, with some reasonable expectation of getting a dividend from it, and the Bombay Chamber of Commerce have arrived at the conclusion that you may spend 50 millions in the same time, and get a reasonable dividend upon it; is that the argument?—The Government of India said that they had very carefully kept within the mark, and they believed that their calculations would come out very much better; and I believe they will, too. I believe that the Government of India might reasonably propose a great increase, looking at the experience of the past five years, which I need not repeat now.

2710. You think that the Government of India have not taken nearly a sufficiently sanguine view of the railway lines which they propose to make?—They say so themselves, and I am inclined to agree with them.

2711. Have you anything to say on the subject of the reason why money cannot be borrowed in India?—That is rather a complicated question, and I have written out the following statement: "As regards raising the loans which would be necessary for pushing on railway extensions on a larger scale, there is no use looking to India for any such increased resources. There is ample evi-

Mr. *Kynaston Cross*—continued.

dence that the steady 2½ crores per annum thrown upon India for a number of years back has overtasked her power of absorbing these rupee loans, a large portion of which have consequently had to be thrown on the London market. Until the Indian market has been allowed some rest from the recent steady rupee borrowing, it would be a fallacy to suppose that it could absorb any further rupee loans. These could only be placed at such a price as would permit of their transfer to the London market through the medium of the exchange banks and other remitters, and the price the loan would bring would depend on the price which English investors and speculators would be willing to pay for it here. As regards this latter it is an undoubted fact that rupee loans have been growing in disfavour on this side in consequence of the uncertainty as to their yield of interest in sterling; and also the uncertainty as to the present, and particularly the future, sterling value of the principal, in consequence of the unsettled state of the silver question. The result is that, while other good investments are eagerly sought by the public at rates yielding 4 per cent. and under, rupee paper can only be bought at a price which yields about 4¼ per cent. for 4 per cent., and 4½ for 4½ per cent. paper, on the basis of the present rate of exchange. The present price of 4½ per cent. paper in India is exactly par. The announcement of a new rupee loan this year would undoubtedly send the price down; but even supposing that a rupee loan could be raised at 4½ per cent., this is quite 1 per cent. higher than the rate at which the India Council would have no difficulty in placing a sterling loan in London. The advantage of such a saving as this is so great that it will require very strong and very substantial reasons, reasons which are not merely theoretical or imaginary, to justify the Indian Government in forcing their rupee loans on an unwilling market at such a loss, instead of borrowing in the cheapest market which is open to them. The reasons which induce the Indian Government to favour rupee as compared with sterling loans are chiefly two: first, the desire to keep down the amount of the Secretary of State's drawings in India, which would be swollen by the annual interest payable on sterling loans, because any augmentation of these drawings tends to lower the rate of exchange, and to increase the loss sustained under that head; second, the desire not to commit India, with its silver currency, to liability for heavy sterling loans repayable in gold. The first of these reasons loses all its force if it is conceded that any further rupee loans would have to be absorbed by this country, since the only difference would be that the interest drafts on this stock would in the one case be sold by the holders in competition with the Secretary of State's drawings, and in the other case would be added to the latter's usual drawings, the amount drawn on India in respect of interest would be equally the same, and the effect on the Exchange therefrom the same also. The second reason is a perfectly sound one so far as it goes. The question is, is it powerful enough to override so great an advantage as a saving of one per cent. in the annual rate of interest. Suppose the one per cent. per annum thus saved

Mr. *Kynaston Cross*—continued.

is treated as a sinking fund and applied towards the gradual redemption of the loan, it would suffice within measurable time to extinguish the principal altogether, surely the most effectual means which could be adopted for preventing the increase of Indian liabilities, whether sterling or otherwise, and that too without any tax on her revenues, beyond what permanent rupee borrowing would cost. The foregoing remarks have reference merely to the usual 2½ crores or so of yearly borrowing. Should the more rapid extension of railway works necessitate larger borrowing, it need scarcely be said that the reasons in favour of resorting to the London market are immensely strengthened. In fact neither the Indian nor the London market would endure larger amounts of new rupee loans, except at rates which would be ruinous to the credit of the Government of India, and sterling loans would have to be resorted to not as a matter of choice but of necessity. Looking at this question from all sides the most economical, and at the same time the most statesman-like course appears to be for the present, at least, to raise what loans are required in England, treating the saving of one per cent. per annum as a sinking fund for their gradual redemption. While proceeding on these lines for the present, there is nothing to prevent rupee loans from being again resorted to at a future time to whatever extent changing circumstances might render expedient.

Perhaps you will allow me to say with regard to break of gauge, that I very strongly deprecate breaks of gauge; I think that the metre gauge ought to be confined to self-contained systems, and not brought into connection with lines to such parts as, Bombay, Calcutta, and Madras, and also taking all things into consideration it appears to me that the working of broad gauge traffic is cheaper in the end.

2712. As stated in the memorial of the Chamber of Commerce?—Yes. General Strachey in referring to the slight cost of transhipment at Sabarmati, never refers to the fact that the Bombay merchant has to suffer a loss on weight of one per cent. in transhipment at Sabarmati, and that there is a certain change by the sun in the hot weather, and the rains in the rainy season. I have myself been to wait 16 days for cotton coming down from Agra.

Mr. DONALD GRAHAM, called in; and Examined.

Chairman.

2713. YOU and your partners carry on a very extensive business at Calcutta, Bombay, Karachi, Glasgow, London, Manchester, and Liverpool?—Yes.

2714. You have been yourself for many years in India, have you not?—Yes.

2715. You have heard the evidence which has been given in this room by the other gentlemen on behalf of the Manchester Chamber of Commerce?—Yes, most of it.

2716–17. I suppose you generally concur with the statements they have made?—Substantially; but I would like to say with regard to the construction of railways, that I go a little further, I think that it should be done by the State.

2718. Therefore you do not concur with Mr. Lord who thought that the balance of evidence was in favour of guaranteed companies?—No, I do not agree with that view.

2719. That is an important point of difference?—Yes, and my reason is that I think that the object of the railways is to develop the country, and that object the State recognises, and would keep it in view, whereas a private company would naturally be bound to its shareholders, and rather look for good dividends, and therefore I think there would be a clashing of interests, under which the country would suffer; I also think that it is a good commercial investment for the State.

2720. Has that clashing of interests manifested itself already to some extent?—Mr. Bythell has just described what has occurred with regard to the Great Indian Peninsula Railway; my experience bears out what he has said, and I quite agree with what he has said upon that point.

2721. Would the making of all those railways by the State not necessitate a vast corporation for the management of those railways, and add enormously to the business of the Government of India?—I think that should be a separate department; as regards the accounts of the department, it would be an advantage to have the accounts kept entirely separate from the other financial arrangements of the country.

Chairman—continued.

2722. You would have a separate department of the Government of India to attend to the construction and management of the railways alone?—Yes, I think so; that is my idea.

2723. Do I understand that you would keep the railway accounts in the hands of that department, and not bring them at all into the general assets of the Government of India?—Yes; subject, of course, to the control of the Government of India, but keeping a separate account. I think that the surplus revenues might be set aside to meet interest on loans; on fresh loans.

2724. Have you read the very admirably written Minute of Lord Lawrence on that point, in which he advocates the view that you have now brought before the Committee?—I am sorry to say that I have not had the advantage of reading it.

2725. Do you represent a widespread opinion amongst the mercantile class of India?—I believe a great many agree in that view; of course, there are varying shades of opinion.

2726. I ask you the question, because most of the witnesses that have come here have taken the opposite view, and I am anxious to find out whether that view is held by comparatively few?—I am not able to say definitely as to that; I merely give my views, and of course the Committee must take them for what they are worth.

2727. You are aware, are you not, of the decision

Chairman—continued.

decision of the Parliamentary Committee of 1879?—Yes.

2728. Do you think that the circumstances of India are so much changed that the Committee might very well recommend a departure from the limit of 2,500,000*l.*?—Yes, I think there are several reasons for it. The first is the general prosperity of the country, especially shown in the state of the finances as compared with 1878-79; secondly, the great development of trade which the existing railways have brought about, both as regards the internal trade of the country and the foreign trade; thirdly, the sound position of most of the lines now in work: and, fourthly, the opportunity as regards cost seems most favourable. Money is cheap, whilst iron materials, and freight have never been so low.

2729. Without in the least degree doubting the wisdom of the decision of the Committee that year, you think that circumstances have so much changed that the hands of the Government of India might be set free in this matter?—That is my view.

2730. What do you think about the 10,000,000*l.* a year which was recommended to be spent by former witnesses?—My conclusion was that 8,000,000*l.* would be about the amount, and I arrive to it in this way: the prospective surplus in 1884-5 is 1,000,000*l.*, and that, if set aside, would give the interest on 8,000,000*l.* for three or probably for four years, and if that went on from year to year it would provide interest for that period for 8,000,000*l.* annual borrowing, and I am supposing in the fifth year that the works would become self-supporting; the surplus revenues would thus on the average be sufficient always to meet the interest on the loans.

2731. Have you seen the proposal of the Government of India?—I have, but I only saw it on Saturday.

2732. That goes rather beyond your views, does it not?—No; so far as I have been able to follow it, it does not.

2733. It is proposed by the Government of India that the State should meet all the loss out of the lines that are to be considered productive?—I do not think that a good policy.

2734. Although you think probably they could expend judiciously the sums mentioned, you think in that respect that their recommendation is not wise?—I do not think so; I think that the State ought to own the whole of the lines as well as the non-paying lines. I understood from the Government of India's letter that the proposal was that the State should only build the famine lines and the military lines, and that the commercially good lines should be handed over to private companies; it seems to me that it would be better for the State to own all the lines, the paying ones as well as the non-paying ones.

2735. Do you think it would be judicious if they spent the amount of money recommended by the Government of India in the period?—I am not quite sure what the period is.

2736. Do you think that there is scope in India at present for an expenditure on the part of the Government of 32,000,000*l.* and of 20,000,000*l.* by private enterprise?—Of course that depends upon the importance of the lines to be constructed. I do not feel able to express any decided opinion upon that, because I am only judging from what I have read. I cannot speak from personal knowledge of any of those lines which are now proposed.

Chairman—continued.

2737. What is your view of the gauge question; do you think that the main lines of India should be broad gauge?—I think a break of gauge a great evil and that it will lead to great trouble and complication in the future. I think that small separate systems may be all right on the narrow gauge lines, but to have a mixed system, I think, is an unmitigated evil, and will be found to be so in future more and more as time goes on.

2738. You believe all those narrow gauge lines will have to be taken up?—I believe that the Rajputana Main Lines will certainly have to be taken up and relaid on the broad gauge.

2739. And that it would be a most unwise policy on the part of the Government to build other railways on the metre gauge to be connected with the broad gauge?—I agree with that.

2740. You heard the lines specially recommended by the other two gentlemen?—Yes, so far as I am able to speak of them, but I do not know them from personal knowledge: there is only one work which I should like to mention, and that is the Sukkur Bridge over the Indus, which I do all the more, because I do not see it mentioned in the programme by the Government of India. I understand that it was sanctioned years ago and was actually commenced, but I have been informed from India that the work has been stopped on account of want of funds; I think that is a work which would pay itself in a very short time; the expense of the elaborate arrangements for ferrying waggons across the Indus must be something enormous; I think that stopping a work once commenced must be very bad economy, and, therefore, I think that a work once begun should be done and made revenue earning as quickly as possible.

2741. You heard the information which Mr. Bythell gave with regard to the administration of Indian railways; have you anything to add in corroboration of his remark, or any remarks of your own on the subject of the connection between the State and the railways throughout the country?—I entirely agree with what he said about the State having control. I think that the State ought to have entire control, and that is one of my chief reasons for advocating the State construction of railways.

2742. Do not you think that he went too far in saying that the Government should at all times be able to step in and reduce the rates?—That is very strong, but I agree with it. It has been suggested that that would tend to prevent outside people from subscribing, but I would trust the Government of India to make such an arrangement as would not be unjust to the shareholders. Of course, so long as the Government have a share in the profits, it would be the interest of the Government not to reduce the rates below a paying point, that is, supposing the plan of construction by guaranteed companies is adopted.

2743. You attach great importance to the Government of India having control over the goods traffic on the railways that they guaranteed?—Yes, I do.

2744. Have you any other observation to make upon the administration of Indian railways, either

Chairman—continued.

by the Government, or in connection with the Government?—There is one thing that occurred to me with regard to what has been said about the advantage of interesting private enterprise in Indian railways, and that is this: it is well known that in America a great deal of the traffic has been stimulated and promoted by what they term dispatch companies. Those are companies working as it were within the railway companies; those dispatch companies hold their own rolling stock. They pay a certain haulage charge to the railway companies, and they hunt about for traffic, and they make their own bargain with the merchants; I do not know whether that plan is practicable in India, but I think it is worth mentioning.

2745. You think it is worth the consideration of the Government of India?—I think it is worthy of their consideration, owing to the fact that it has worked so successfully in America.

2746. Do you agree with Mr. Bythell that a portion of the capital, he said one-fourth, might be raised in India?—I do not think so, I think that only a small fraction could be raised in India in rupee loans. Practically, wherever you issue loans, whether in India or in England, the money is sure to come from London, as, even if the loan is issued in India it is taken up by the Indian Exchange Banks, who get their money from London. Excepting a small proportion, the money must come from London, which I think is the practical experience of the past.

2747. Have you anything to add to what you have already told us with regard to exchanges?—I think that a good deal too much is made of the exchange difficulty. It seems to me that it would not have so much effect as is generally supposed. I think it would act in this way, that if 5,000,000 *l.* or 6,000,000 *l.* was borrowed in this country, there would be so much less Council drafts which would cause a gap in the balance of trade, and this would have to be made up in some other way. If 5,000,000 *l.*, less Council drafts, were drawn, 5,000,000 *l.* would have to be made up in piece goods, or copper, or gold or silver, or otherwise to adjust the balance, and so far as this created a demand for silver it would raise the price of silver, and so far affect the rate of exchange, but that is all.

2748. You think that the money would be raised in London; whatever may be the disadvantage of it with regard to exchange, we must face it?—I think so; it must come from London. There is no reason why a certain amount should not be issued in India tentatively, from time to time, and according as it was taken up without lowering the value of the stock. If the native chiefs could be got to invest their money in that way, it would be a great advantage both financially and politically; but I do not think there is much chance of it.

Mr. *Kynaston Cross.*

2749. You said that you would keep the railway accounts quite separate from the general finance account of India?—Yes.

2750. And you based your demand for a great extension of railways on laying aside a certain proportion of the profits every year, to be used in paying interest on the money that you borrowed?—Yes.

Mr. *Kynaston Cross*—continued.

2751. Are you aware for how many years there have been any net profits?—I was going on the prospective profit of this year which was indicated in the Budget.

2752. If you had borrowed all the money in London, and had to meet the interest claims at the rate of 12½ rupees to the £., would you have any profit on the Indian railways at all. You have now to remit a large sum of guaranteed interest?—Yes.

2753. But you have now a material loss by exchange in dealing with those remittances, and, if the whole of the expenses of the guaranteed interest were debited to Indian railways, are you aware that that nominal profit of a million sterling would be turned into a loss of 200,000 *l.* a year?—No, I was not aware of that.

2754. Are you aware that the accounts of the Indian Government with regard to railways are written at a fixed rate of exchange?—So you mentioned a little time ago. I did not know it before.

2755. Supposing that you were so to alter the face of the account that, instead of there being a profit, the account showed a loss, would that in any way influence your opinion?—Yes, it would.

2756. In fact it would entirely take away the foundation on which you build your opinion?—Yes, it would to a considerable extent.

2757. You stated that you could calculate that, in the fifth year from the making of a railway, it would be paying interest on the capital which had been incurred, leaving a balance?—Yes, that was the date which I noticed, and which was referred to in one of the letters, I think, of Lord Hartington, in which that was put down as about the time that it was expected.

2758. Can you point to many railways which have been made in India, and which within five years have been paying?—No, I cannot; I am only going on that general assumption.

2759. And if you had not very good reasons to suppose that this interest would be forthcoming within the five years, would that also modify your recommendations?—Of course it is a mere surmise altogether; it is impossible to say what their returns would be in five years.

2760. Supposing that they were not as you think them to be, that would modify your argument, would it not?—Yes.

2761. Supposing that the returns for interest did not come in for 10 years, you would say then that you had better not go on investing money at the rate of 10 millions a year?—I have always said that railways have been so great a benefit to the people that it is worth a certain risk, considering the advantages to the country.

2762. But you would limit that risk by your experience of the past?—Yes, certainly.

2763. You would say that if you found that a railway within five years of its starting came into paying full dividends, you would hope in future to be able to get the same result from it, but not otherwise?—Yes; that would depend, of course upon the district, and no doubt traffic is increasing very much now. Indian produce has received a stimulus of late years which it never had before.

2764. Do you know what the traffic has been the last three or four months?—I have heard that it has fallen off, but I have not seen the returns.

2765. Can

Mr. *Kynaston Cross*—continued

2765. Could you give me the reason for this falling off?—The reason is that the produce market has been so bad in this country, but that is only temporary I hope: it has been over-done on account of the large crops all over the world. I have no doubt that has been at the root of it.

2766. Would you not rather expect that the produce carried along the Indian railways this year would be less rather than more?—I should think less

2767. And that also would tell against the argument of the railways paying interest in five years?—Yes, but I think we must look forward to steady increase on the average. The chances are that the next year or the year after there will be a great increase again.

2768. Would you, from your own knowledge of the country, put down the great increase which has taken place in the last three or four years to the increase of cultivation or to the advantages of good crops?—I think partly to the advantages of the means of cheap transit, and cheap ocean freight very much.

2769. And not much to the increase in cultivation?—I cannot tell as to that; I say cheap transit for a variety of reasons; for instance, there is a new article of produce coming into use in this country which has never been in use before, called "dal;" that is a kind of beans which is exported in large quantities, and that is entirely brought about by cheap transport.

2770. You spoke of the State constructing and working the whole of the lines; you are aware that at present we have on the staff of the Public Works Department of India about 900 engineers; have you made any calculation as to the number of engineers that would be required to compass the work that you propose for the 10,000,000 *l.* a year?—No, I have not. But, however the railways were constructed, they would require engineers from somewhere, whether they belonged to private companies or to the State

2771. If they were constructed by the State would it not be necessary greatly to increase the number of State engineers?—Yes, no doubt.

2772. You would not recommend that the work should be done by contract?—I do not know: that is an open question, and it is one which I have not considered.

2773. You would guard yourself against the great increase in the number of civil engineers which would be requisite to construct the lines?—Yes; if it could be done by contract it seems to me that it would be as well.

2774. Then you would modify your recommendation?—No, I would not modify my recommendation as to the State building the railways, but I do not see why the State should not do it by contract.

2775. You would rather not increase the number of civil engineers?—I think it would be desirable not to do so.

Mr. *Carbutt.*

2776. Mr. Secretary Cross put a question to you about the amount of money that was surplus at the present time in case the dividends were remitted here at 12 rupees to the pound, that is 1*s.* 8*d.*; as he put the question, I understood him to mean that there would be no dividend paid?—As I understood him, he said no surplus.

2777. Are you aware that if the money which has been spent upon railways in India now, if you include the money that has been paid in loss of interest, and in paying to the East India Railway, were paid per mile, all the railways in India still pay on an average above 4 per cent.?—I have no doubt that is so, though I am not aware of the exact figures.

2778. So that even notwithstanding what Mr. Secretary Cross pointed out, that there would be no surplus, there would be a surplus if you take the money at 4 per cent. instead of at 5½ per cent.?—Yes, of course, there is another thing to be considered, namely, that the new railways will never cost anything like what the old railways cost.

2779. Is it not the fact that many of the new lines that have only been opened a very few years are beginning to earn fair profits?—I believe so, but I cannot speak of that from personal knowledge.

Mr. *Kynaston Cross*

2780. Will you be kind enough to read a paragraph which I have marked in the letter from the Government of India, at page 97 of the correspondence in the Appendix (*handing the same to the Witness*)?—"Deducting from the net revenue of 7,47,23,613 rupees, the payments made to the Companies of 73,37,146 rupees on account of surplus profits, &c.; the balance, 6,73,86,467 rupees would amount to 4·05 per cent. on the capital outlay; plus the balance of interest charges, or 1,66,44,63,424 rupees, or to 3·90 per cent. on the capital outlay, plus the balance of interest charges, plus the premium paid to the East Indian Railway, or 1,72,99,63,424 rupees.

Mr. *Onslow.*

2781. You expressed a fear just now that the Government of India would not construct the bridge over the River Sukkur; you say that you are a conversant with that part of the country; would that bridge be a commercial benefit, or, would it be purely political?—I think both, but chiefly commercial.

2782. In your opinion why would it be a commercial benefit?—Because at present the wagons have to be slided down the bank into the river and put on a ferry and then taken across the river, and then hauled up the bank again on the other side.

2783. What is the railway that adjoins it?—The Scinde, Punjaub, and Delhi across the Indus. It must be an enormous expensive process.

2784. Is there much transit of goods between the Punjaub and across the Indus at that point?—Enormous.

2785. Irrespective of the goods coming by Karachi?—Yes, it is from the Punjaub to Karachi.

2786. In your opinion that railway communication if conceded and it carried on would be a commercial benefit?—Yes: I have no doubt that it would stimulate traffic, but I do not know to what extent.

Sir *George Campbell.*

2787. I understand that no part of that Indus

Sir *George Campbell*—continued.

Valley State Railway seems to pay handsomely, whilst the Punjaub and Scinde does not pay at all?—I do not know the reason; there is one point to which allusion has been made to day, and to which I would like to refer, I mean the question of transit duties; I think it is very important, and if it is within the scope of the inquiry of this Committee, I think it should be taken notice of.

Mr. *Dalrymple.*

2788. Your attention has been drawn to the exactions by native chiefs in the way of customs?—Yes, last year I passed through Amritzur, and the native merchants there were complaining very much of the charge; it is very trifling, but the process of laying it is very obstructive. Every bag of grain that passes through Amritzur pays tax to the local municipal government, and it is very much complained of. It is assessed

Mr. *Dalrymple*—continued.

under the name of octroi duties. Nominally transit duties are prohibited; but the municipalities always contrive to charge duties on goods in transit.

Sir *George Campbell.*

2789. Much the same thing as the coal and wine duties in London, are they not?—Yes, I think so.

Mr. *Dalrymple.*

2790. But there are also exactions by native chiefs?—Yes, I think so, but I do not know of my own knowledge. I am now speaking of municipalities of towns under the English Government.

2791. Is there a movement towards getting them abolished?—I do not think there is, excepting in Bombay, and the large cities where the Chambers of Commerce are the able to watch proceedings of the municipal authorities.

Friday, 2nd May 1884.

MEMBERS PRESENT:

Mr. Baxter.	Mr. Gorst.
Mr. Bolton.	Lord George Hamilton.
Mr. Brodrick.	Mr. Jackson.
Sir George Campbell.	Mr. Onslow.
Mr. Carbutt.	Mr. Bernhard Samuelson.
Mr. Kynaston Cross.	Mr. Slagg.
Mr. Dalrymple.	Mr. William Henry Smith.
Mr. William Fowler.	Mr. Wodehouse.

The RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

Mr. ROBERT HARDIE, called in; and Examined.

Chairman.

2792. YOU are Secretary, are you not, to the Bank of Bengal?—I am.

2793. You have yourself been some years in India, have you not?—Yes, I have been about 19 years in India.

2794. You are very familiar, I daresay, with the question which the Committee are now considering?—Perhaps I know something about the financial part of it.

2795. Does your position enable you to judge with regard to the extent to which Government loans in India have been taken up in the local markets?—Yes, I think it does.

2796. Are you of opinion that those loans have recently been mainly absorbed by England, or by India?—They have been largely absorbed by England; I think mainly so in recent years.

2797. Going back a few years, it was not so, was it?—I think it has always been more or less so since the enfucement of the Indian Government loans for the payment of interest in England began.

2798. You have something, have you not, to state to the Committee as to the effect produced upon the Indian Loan by the Bill, with regard to silver, which was introduced by Mr. Bland in America?—Recently apprehensions have arisen as to the probable suspension of the Bland Bill, and those apprehensions have operated to prevent people in England taking up loans in silver.

2799. Are there, in your opinion, some causes at work which will make it more difficult for the Government of India to get loans in the country itself?—Yes, I think so.

2800. What was the effect on the local markets of the last loan of the Government of India?—The last loan fell almost entirely on the Indian money markets, and has caused a great rise in the rates of interest. Capitalists in England did not subscribe to the loan, owing to the apprehensions which I have referred to about a further fall in the value of silver.

2801. Is it your view that the practice which has been adopted of borrowing in India is not advantageous to the country?—It is advantageous to borrow to a certain extent, but not to the extent, I think, of the 2½ millions per annum, which is now the amount of the loan which the Government annually raises.

Chairman—continued.

2802. You have no objection to borrowing in India to a certain extent?—I think it is an advantage to borrow in India to a certain extent. There is no doubt that there is always a certain amount of investment going on in India in Government loans.

2803. Could you specify the amount which you think it would be wise and prudent to borrow in India?—I think the figures of recent years indicate that probably about a million of the 2½ millions is absorbed in India itself.

2804. Therefore, you think it would be better not to offer more than that million annually in the Indian market?—That depends very much upon circumstances; I think it is quite impossible to lay down any fixed rule.

2805. Then you do not recommend any alteration in this respect; you only express an opinion that it would be better to keep the amount as moderate as possible?—At present, the decision is to borrow annually in India 2½ millions, which, in my opinion, is far beyond what the Indian market can absorb.

2806. I think what you recommend is, that there should be no such hard-and-fast line?—I think that the Government should preserve freedom of action to either borrow in England or in India, or in both places, as may, at the time, appear desirable. But there is one very important point with regard to future Government loans; and that is, that the Government has decided not to give further loans to local bodies, such as the Bombay Municipality, the Calcutta Municipality, the Bombay Port Trust, and the Calcutta Port Trust; and the loans of these bodies will, in future, compete with Government loans.

2807. Could you give us a little more information upon that latter point; would you somewhat more fully explain to the Committee what has taken place with regard to the loans to local bodies, and the

Chairman— continued.

the effect that that has produced upon the Government loans in general?—Until the last two or three years, local bodies obtained all the money they wanted from the Government itself; they had not been borrowers in the open market, and consequently their loans had not competed with the Government loans; but I understand that these bodies have been refused loans from Government, and now contemplate borrowing a sum of money equal to one million, or one million and-a-half sterling in the local markets.

2808. So that if there has been a difficulty in the past for the Government to get money in India, it will be still more difficult now?—It will be still more difficult if those bodies are forced to go into the local markets for money, because their loans will compete with Government loans.

2809. You are distinctly of opinion that the Secretary of State should be left with a free hand to borrow where he chooses in the open market?—Yes; I think he should preserve freedom to borrow where he chooses.

2810. What is the public opinion in India, so far as you are aware, as to the increased expenditure upon railways in that country?—I believe that public opinion in India is generally in favour of a very largely increased expenditure for the extension of railways; as much as 20,000,000 *l.* sterling a year. I believe the Bombay Chamber of Commerce has made a recommendation to that effect.

2811. But that is the opinion of only one chamber of commerce on the point; can you say what the general public opinion is?—There is no other public opinion but the opinion of Europeans, I think, with regard to a question of that kind.

2812. Do not the natives take any interest in the question at all?—A very slight interest; they do not subscribe capital to such schemes to any extent.

2813. I know that they do not subscribe generally, but the Committee have heard in various ways that amongst the intelligent natives of India there is an opinion, which is conspicuously set forth in their newspapers, that the recent movement in favour of a much more rapid extension of the railway system is one promoted solely by British merchants, manufacturers, and contractors; and that not only is it not sympathised with in native circles, but the latter fear that it would lead to loss and additional taxation, and I want you to inform the Committee whether you think that there is much, if any, truth in this representation?—I do not know whether there is any truth in the representation or not, but I think that the natives of the country benefit immensely by the development of public works which has taken place under the British Government.

2814. That is hardly my point; I want to know whether there is not an opinion amongst the natives of India against any large extension of railways; I do not ask whether they are acting against their own interests or standing in their own light in taking such a line, but is there such an attitude assumed by a considerable and influential portion of the native population of India?—Not that I am aware of.

2815. Therefore, you attach no importance to the variety of newspaper articles both in English and

Chairman—continued.

in the vernacular which have reached this country, representing that this probable largely increased expenditure upon railways in India is certain to bring about additional taxation?—I would attach importance to the opinion of any intelligent native to that effect. I do not know at all whether that opinion is held by any large number of natives. I think that natives may, however, fairly hold the opinion that anything like an extreme extension of railways will result in increased taxation.

2816. But is there an opinion against a rather more rapid extension than has taken place of late years?—I think not. I would suppose that the native opinion referred to, as opposed to the extension of railways, probably refers to the expenditure of 20,000,000 *l.* sterling per annum. I think most people would be apprehensive that such an expenditure would result in increased taxation.

2817. You are not yourself in favour of such a rapid extension as is proposed by the Bombay Chamber of Commerce?—Certainly not.

2818. What do you think are the objections to an annual expenditure of some 20,000,000 *l.*?—One great objection would be that it would probably seriously raise the rate of exchange, and that would disorganise Indian trade. The Secretary of State's drawings on India would be largely reduced or suspended, because I presume that the money would be paid in to his credit here; the trade demand for remittances to India would thus be thrown upon silver, which would doubtless rise much in price and very injuriously affect the Indian export trade.

2819. Do you think that that objection has been largely overlooked by the merchants in Bombay who have gone in for such a large expenditure?—It seems to me that it is almost entirely overlooked; I have no doubt that the expenditure of such a large amount upon railways would bring about increased exports; but it would be some years before that would take place.

2820. Do you think that India has suffered from the fall in the value of silver?—I think she has benefited very much from the fall in the value of silver.

2821. Do you speak of the country at large?—Yes, the country at large.

2822. Whilst individuals have suffered, the country at large has benefited?—Yes, I think so. The individuals who have suffered are Anglo-Indians on salaries, and with savings in India; they have suffered severely.

2823. With regard to the best means of carrying out the extension of railways in India, what is your view; do you think that private unaided enterprise is likely to do much for the extension of the railway system there?—I do not think that private unaided enterprise is likely to do anything to speak of in the way of extending the railway system.

2824. Why?—Because it appears to me that the prospect of a fair return for the money is not sufficiently certain.

2825. Putting aside unaided private enterprise, and believing, as you do, that the railways ought to be considerably extended, is it your opinion that the works should be undertaken by the State

or

Chairman—continued.

or by private companies with some sort of guarantee?—I am, on the whole, inclined to think that the plan of private companies with a guarantee is the most suitable.

2826. Whilst admitting that there are a great many advantages on the side of the former, you think that the disadvantages counterfail, and that it would be better on the whole to go on with the guarantee system?—Yes; the State, of course, would reserve the right to share in surplus profits, and the right of control in the management of the railways.

2827. Are you strongly of opinion that the State should exercise a very considerable amount of control in the management of the railways?—Yes, I am of that opinion, but at the same time I think that care should be taken not to make the terms of the contracts too onerous for private companies.

2828. We have had some evidence to the fact that the charges on Indian railways, more especially the Great Indian Peninsula, are very much too high, and prevent the development of trade in the country, and that therefore it would be desirable that the Government from time to time should step in and insist upon lower rates; what is your view upon that point?—It is decidedly desirable to reduce the rates as low as possible, but I have no personal information that rates are much too high. Of course it would obviously be to the advantage of the country, and it has been contended that it would be to the advantage of the railway also, if the rates were lower.

2829. Would you have power given to the Government of stepping in from time to time and interfering with the rates and reducing the rates of railway companies on behalf of the public?—I think where a guarantee is given the Government in regard to future railways should exercise that power, because the shareholders presumably should be well satisfied with the amount of the guarantee, provided that the guarantee is of a fair amount.

2830. Would you state to the Committee whether you think that great care should be taken at the beginning on the part of the Government to see that the rates were fixed on a moderate scale, or whether they should have power reserved to the Government, from time to time, still further to reduce the rates to a scale that would be advantageous to the public without being unjust to the companies?—I think that where a guarantee is given the Government should exercise this power decidedly.

2831. Do you think that there would be any difficulty in making all the railways that are desirable at present in India, if the Government were to grant a fair guarantee for a limited period of years?—I am rather doubtful if sufficient capital would be forthcoming under the inducement of a guarantee for a limited period of years.

2832. Forthcoming for what; do you mean for making all the railroads?—Yes, for making all the railroads

2833. But you think that whilst with a limited guarantee some few lines might be made, in order largely to extend the railway system, you think it would be necessary for the Government to give a permanent guarantee?—Yes, I think a permanent guarantee would be necessary.

Chairman—continued.

Mr. *Carbutt.*

2834. May I ask how long is it since you left India?—About two months ago.

2835. Then your opinion with reference to the native subjects of India not having a very strong opinion upon this subject, of course is valuable; you mixed freely with the natives of India, and you know what their feeling is?—I have not seen a native paper for the last two months I am told now that these papers have articles against the large extension of the railway system; I was not aware before that they were opposed to it.

2836. You do not attach much importance then to native opinion as expressed in those papers?—I attach a certain amount of importance to it; it is an opinion that is entitled to consideration, for the reason that apprehensions exist in native quarters apparently that a very large expenditure on railways may result in the country being burdened with increased taxation.

2837. Then if a loan were offered in India by whom would it be taken up; would it be taken up by the Anglo-Indians, by the English out there, or by the natives?—The Indian Government loans are not taken up for investment to any great extent at any time by natives. So far as I recollect, the public debt held by natives altogether is not more than 90 millions out of the total debt of about 90 millions.

2838. Do you think there is any probability or any possibility of inducing the natives of that country to take a part in those loans if they were issued in very small shares, say 50 rupee shares or 100 rupee shares, with a chance of the dividend being paid at the local post offices or at the Government offices?—There is not the slightest probability of loans being taken up by the natives in that way.

2839. Do you think that any of the native merchants or natives in any of the large towns away from Calcutta and Bombay have any savings at all; do they make any savings?—They make savings, but they can employ them at very much better interest than 3 or 4 per cent. in Indian Government paper; they have large savings, in my opinion.

2840. When you said that if we adopted the opinion of the Chamber of Commerce of Bombay, and spent 20 millions, it would raise the rupee to 2 *s.*?—I presume that the 20 millions sterling would be raised in England by loans, and would be paid to the Secretary of State in England, thus obviating his drawing on India, in which case silver would be in great demand for remittance to India and would rise greatly in price.

2841. Then to that extent it would benefit the officers of the Government who are paid in rupees?—It would be a great benefit, of course, to all Anglo-Indians who are paid there in rupees, and who remit money to England.

2842. Do you think that the opinion in favour of a very rapid extension of railways is at all tinged by the fact that their stipends or their salaries would be increased to a very large extent?—

Mr. *Carbutt*—continued.

tent?—I think not; the recommendations from the Bombay Chamber of Commerce come from merchants and not from men who are in the receipt of salaries.

2843. You expressed an opinion that the Government should retain power over the railways to reduce the rates, and that they should also have power to keep the dividend down to the fixed guarantee (if it happened that that fixed guarantee was 4 per cent.), but would not it be better to borrow the money at 4 per cent. without giving them any chances of profit at all? If you tell them that, you will not give them a chance of a profit; the moment that you get beyond 4 per cent. you reduce the rates?—The Government itself would then give up its share of the profits.

2844. But you would give no inducement whatever to the railway companies to work cheaply if you told them at once that you would not allow them to make a profit beyond the guarantee of 4 per cent, or whatever the fixed sum was, because, as I understand, you are in favour of this, that the moment the railway earns 4 per cent., the Government should step in and say you must reduce your rates?—I am not in favour of that, but I think it would be justifiable on the part of the Government to exercise control with reference to rates in the case of the companies to whom it gave a guarantee, say, of 4 per cent. per annum.

2845. I understood you to advocate that the moment the profit touched the guarantee, they should be satisfied with the guarantee?—I did not intend to convey that impression, because I presume that the Government as well as the company would be interested in making some profit beyond the guarantee.

2846. What I wanted to obtain from you was whether you were in favour of offering some premium to the railway companies, to induce them to work them as cheaply as possible for the benefit of the country, but if they did not have any share of the profit, they would not have any inducement to work cheaply. You have said that you were not in favour of spending 20 millions a year, could you give the Committee any opinion at all as to what amount of money you would be in favour of the Government expending?—I hardly consider myself qualified to express an opinion about that.

2847. Would you be in favour of expending 10 millions a year?—I am not prepared to express any definite opinion. I think it would be difficult to spend even 10 millions a year judiciously upon the construction of railways.

2848. But my question was rather whether expending 10 millions a year, half of which would most likely be paid in this country for material, would alter the value of the rupee?—It would clearly affect the value of the rupee, and consequently the Indian trade; the result would be that India would get less money for her exports, as the exchange or the price of silver rose, and in that way she would be able to buy less imports.

2849. From your knowledge as a banker, supposing that only one million were expended, would that affect the value of the rupee?—

Mr. *Carbutt*—continued.

It would have some effect; it might not be apparent, but it would have some effect.

2850. When would the effect take place, because that would be a guide to the Committee as to the amount of money that we should recommend should be expended?—I am afraid I can at the moment express no opinion upon that point; the amount of money that should be expended should apparently depend upon the extent that railways can be made with sufficient prospects of proving remunerative or being otherwise advantageous.

2851. I am only asking you as to the value of the rupee, and when the increased value of rupee would take place; that is to say, if we raise 20 millions, the rupee would go up to 2 *s.*, but supposing you only raise 2½ millions, would the value of the rupee then affect the exchange?—It would. For instance, it was estimated that the Secretary of State's drawings on India this year would be about 18 millions; presuming that a loan of 2½ millions is raised in England instead of in India in the next few months, there is no doubt that the exchange would be appreciably affected by the reduction of the Secretary of State's drawing to that extent, or from 18 millions to 15½ millions; it might be affected 1 per cent. or 2 per cent; it is impossible to say how far exchange might be effected by the reduction of the Secretary of State's drawings by one, two, or three millions, as the rate of exchange also depends on the extent of the supply and the price of silver.

Mr. *William Fowler.*

2852. I gather from what you have said, that, speaking generally, a fall in the exchange is beneficial to the Indian cultivator?—Yes.

2853. How far do you carry that argument, is it a benefit without any compensating evil?—No, he suffers to the extent that he buys imported goods; presumably, fluctuations in the exchange alter the price of those goods.

2854. But it is more important, is it not, to him to sell his produce at a good price than it is to pay money for things which he need not buy unless he liked?—It is more important that he should sell his produce at a good price.

2855. But it is difficult to say how far the exchange might fall and not be good for the cultivator in India?—Quite so, in the same way as a rise of prices in England is considered advantageous to the producer. A fall in the exchange or a fall in the price of silver operates to produce to the Indian cultivator a rise of prices of all articles of export.

2856. Prices in India itself have not changed very much, have they?—They have changed very much, but the changes appear to be more owing to the seasons than to the fluctuations in the price of silver so far. Apparently the fall in the value of silver has not much affected the prices in India of commodities which are not exported.

2857. I mean as between the Indian people themselves?—No.

2858. It is more when you come to deal with foreign countries?—Yes; it must be held that the fall in the exchange tends to raise the prices in

Mr. *William Fowler*—continued.

in Indian currency of all commodities exported to foreign countries.

2859. There is a great benefit in railways, is there not, in extending the amount of exports, and bringing to the market a great quantity of produce?—A very great benefit.

2860. And that you regard as very important? Yes, as very important.

2861. So that you are in favour of extending the railway system?—Yes, decidedly in favour of it.

2862. So long as we do not go too fast, and thereby make great fluctuations in the exchange? Quite so.

2863. But you have not any definite opinion as to the amount which might be safely borrowed in a year?—No.

2864. Are you aware that in a case like that a very large amount of money would be spent in England in buying materials, that they would buy engines, rails, bridges, and other things in England; we have evidence, I think, that something like half the money would be spent in England; that would make a considerable difference in your view, would it not?—It would.

2865. But that is a point with which you are not familiar?—I know that that must be so.

2866. Does not that make a material difference in the question of the amount?—Yes. In the event of loans for 20 millions per annum, half to be spent here, the Secretary of State's requirements would only be satisfied to the extent of 10 millions, or, in other words, his drawings on India would only be reduced to that extent.

2867. Then if, as we have been advised, we might safely borrow 10 millions, if we spend five millions here there would be only five millions affecting the exchange?—Yes.

2868. You used some expression of this kind, that extending railways would ultimately, but only slowly, increase the exports; but does it not sometimes increase them very rapidly in some parts after the lines are opened?—I presume that if an expenditure of say 10 millions a year were going on on railways a large portion of them would be under construction, and not contributing at all to the exports.

2869. But every year there would be a considerable number opened, far more than are open now?—Quite so.

2870. When a railway is once opened it has an important and immediate effect upon the exports, has it not?—It depends entirely upon the country which it goes through.

2871 In many parts of the country it has a very important influence on the rapid increase of exports?—Yes.

2872. Have you had any experience as regards the increased extent of cultivation?—No, I have had no experience of that.

2873. I did not quite understand what you said about the bargain with the railway companies. If I understand it rightly, you meant that supposing there had been a 5 per cent. guarantee, the shareholders would have no right to complaint if the Government were to say, "We are going to abandon our share of the profits, and you must abandon yours, because we have given you a handsome guarantee?—That is my opinion.

Mr. *William Fowler*—continued.

2874. Would not that be rather what we should call "rough" upon the shareholder if you were to turn round upon him in that way?—If you turned round upon him in that way without any notice or previous understanding it would be very rough upon him; but if the guarantee was given originally on those conditions it would be otherwise.

2875. Have you any opinion whether money could be raised without some hope of profit beyond the 4 per cent.?—Considering that the Secretary of State can borrow, in England, at 3½ per cent., I think it is fair to suppose that even very large sums of money could be raised at 4 per cent. without any hope of further profit.

2876. Even for railway enterprise; and in that case you assume a permanent guarantee?—I assume a permanent guarantee.

2877. We have had a suggestion made that it should be a limited guarantee; in the case of a limited guarantee I apprehend you would agree that there must be a share of the profits as well as a limited guarantee?—Decidedly.

2878. If the Secretary of State made up his mind that in future he would only have a limited guarantee he must be willing to submit to higher rates for the purpose of insuring something in the way of profits?—That is my view.

2879. It must come to that, and, therefore, you must either have a permanent guarantee, or a limited guarantee, and then that would involve, as a rule, higher rates?—Quite so.

2880. You would not propose that the Secretary of State should reduce the rates very rapidly on the existing lines?—I do not see how he can do that; as I just remarked it would be rather rough upon the present shareholders to do so.

2881. For instance, the Bombay and Baroda, and the Great Indian Peninsula railways appear to have got very high rates?—Yes.

2882. If you were suddenly to alter the rates that might involve a very great reduction of profits?—Yes, and would be very hard upon shareholders who had bought shares at present prices.

2883. But at the same time is it not also the fact that there is very strong evidence to show that the rates in some cases are much higher than would be suitable if that bargain had not already been made?—I have no personal knowledge of that.

Mr. *Slagg*.

2884. I think you said that you are antagonistic to a very considerable extension of the railway system in India, on account of the fear that it might promote undue taxation upon the people?—Yes, I take that view.

2885. Do you consider that the present railway system has that effect upon the people?—Not at present.

2886. Do you ever hear any complaints from native quarters that the present railway system does constitute a burden upon the people?—No, I am not aware of any.

2887. I think you said that there were very large demands from the municipal bodies in India for loans?—Yes.

2888. What rate of interest is generally offered for those loans?—It is only within these last two or three years that they have come on the markets

Mr. *Stagg*—continued.

to borrow, and their loans being so far for limited amounts the circumstances of the money market have enabled them to borrow at 4½ and 5 per cent.

2889. Is money easily obtainable from native sources for those loans?—No.

2890. Where is the money supplied from?—Principally from Anglo-Indians and by banks.

2891. In India?—Yes.

2892. Then there are some investors in India willing to invest in railways?—Yes, but I should say that the amount of those loans on the market in India is very small up to the present time: it is likely to be very much larger in future.

2893. Do you expect that those municipalities will experience any difficulty in getting capital in India itself?—I think they will experience great difficulty.

2894. Have you any knowledge of the export trade of wheat and other things from India?—No, I have no intimate knowledge of the export trade. I am only conversant with the figures of the exports in the statistical returns.

2895. You have not studied the effect that the export of wheat has had upon the actual interests of the cultivator?—No, I have not studied that question.

2896. Do you consider that on the whole the interests of the cultivator are best served by a largely increased export trade?—I can only suppose that they are best served by that.

2897. Do you think that the natural form of thrift which has hitherto prevailed in India in the direction of storing grain is not very much broken down by this system of indiscriminate export?—I have no personal knowledge of it; but I have heard it said that it is so.

2898. And that considerable risk is thereby incurred on the part of the people in times of scarcity through the fact that the food supply is removed, which cannot be replaced by the rupees which they have received in exchange for the food?—I can only say that I have heard that alleged.

2899. Do you consider the general condition of the people of India, so far as you know it, to be really improved of late years?—Yes.

2900. Do you attribute that to the railway system, to a great extent?—To a great extent I do.

2901. How have you arrived at that conclusion; by what evidence?—By the increase of business from a banking point of view. The volume of business has increased immensely in recent years.

2902. But is the volume of business a test of the prosperity of the inhabitants themselves, and I may add, do you think that the producer or the middleman or the importer is the person who derives most benefit from this increase of trade?—I cannot say who derives most benefit; it seems to me that they all share in the benefit. I can only suppose that an increasing business means increasing prosperity.

2903. Do you think that the original cultivator gets his full share in this transaction?—I am quite unable to say.

2904. You have no means of judging?—No; I have no means of judging.

Mr. *Bolton.*

2905. What, in your opinion, would become of the supplies of food raised as the honourable Member has suggested to you in excess of the local requirements, if it had not the means of transport?—I can only suppose that they would be lost; they would not be used.

2906. Do you suppose that the native cultivator would endeavour to cultivate more than is actually required for home consumption, if he had no means of getting rid of any surplus at a profit?—I think that would be the position he would take, that he would not cultivate more than he required if he could not sell his surplus.

2907. Consequently the facilities for export cannot be a disadvantage to the cultivator; or, in other words, he would not retain the supply to meet a possible famine at some future time?—I think that is very probable, and that facilities for export stimulate the industry of the people.

2908. Therefore, in the event of a famine, they would not be likely to have a supply over the local requirements if the possible facilities for exports did not exist?—It is quite probable.

2909. Does not that follow, as a matter of course, from your argument?—Yes, it seems to.

2910. When you speak of Indian loans, you refer, I presume, to loans raised in rupees upon which dividends is payable in rupees, and the repayment of the loan is in rupees?—Yes.

2911. You also spoke of the evil effect upon Indian loans, of the possible suspension of the Bland Bill; how does that fear arise in consequence of the Bland Bill being suspended; how is the Indian investor affected?—Because if the Bland Bill is suspended it is supposed that a further fall in the value of silver will take place.

2912. But seeing that the loan has been contracted in silver, and that the dividend is payable in silver, and that the repayment of the loan is in silver, how can that be?—I think I must have been misunderstood; I referred to loans coming on the market, and not to loans that already exist on the market.

2913. You think that the subscriber to those loans must require to remit the money from India to some foreign country, otherwise how does a fall in the price of silver affect him?—It does not much affect the people in India; it is the people in England that I referred to; they are reluctant to change their gold into a silver security, with the possibility of a further fall in the value of silver.

2914. Consequently, the raising of Indian loans in silver is in effect the same as raising Indian loans in gold?—To the extent that they are taken up in England.

2915. And I think you say that to a very small extent they are taken up in India?—The estimate that I make is that probably about a crore is absorbed in India annually out of 2½ crores; that would leave about a crore and a-half for England.

2916. You think that two-fifths of the loan might be raised in India?—According to that estimate, it would appear that that sum could be raised.

2917. Do you think that on the part of the subscribers of that two-fifths there would be any dread

Mr. *Bolton*—continued.

dread of a further fall in the value of silver to prevent them subscribing freely?—I think so; it was so in the case of the last loan.

2918. Even on the part of those who had not to change their gold into silver for the purpose of subscribing?—The fear does not exist in their minds so much, but still it has an appreciable effect upon their minds; they fear that Government loans will continue to fall in price, owing to English investors not subscribing to them, and that this will increases the pressure of the loans on the Indian market.

2919. Would you prefer on the whole to raise loans in India in gold, and to make the dividends payable in London in gold?—I should say that if loans are to be raised in gold they should be raised in England and not in India.

2920. It is immaterial where they are raised if they are raised in gold; but you would on the whole prefer a gold loan, whether raised in India or in England, to a silver loan, owing to this fear of a further fall in the price of silver?—That depends upon the difference in the rate of interest. At present, apparently, a silver loan cannot be placed in London except at a rate of interest that will yield to the investor 4½ per cent. after providing for loss by exchange.

2921. That, I presume, is because he dreads a fall in the price of silver, which would reduce practically his 4½ per cent.?—Yes; not only the interest but also his principal.

2922. Assuming that difficulty, would you recommend that all loans, while this panic, if I may term it so, of a fall in silver lasts, should be raised in gold?—I am rather inclined to take that view; at the same time it seems to me that Government, even if it wished to do so, could not borrow in silver at present except on prohibitive terms as the Indian markets are just now quite unable to absorb further Government loans.

2923. To the extent of two-fifths?—Not even to that extent at present, as very little of the last loan has yet been absorbed in India, and the holders are greatly pressed in carrying their holdings on loans at very high rates of interest.

2924. Loans raised in gold just now of course do not involve a great loss in exchange; the loss arises when the loan has been raised at a higher rate of exchange. We will assume that the exchange just now is 1 *s.* 8 *d.*; if a loan was raised in gold at present in India the Government would not be losers by the remittance of the dividends to London at 1 *s.* 8 *d.* There must be a fall before they would become losers?—Yes.

2925. Consequently the loss now upon loans raised in this country is comparitively nothing compared with that upon loans raised a few years ago when the exchange was about 2 *s.*?—That is so.

2926. It is on those loans that the loss has arisen, and not on the present loans; is not that so?—I would put it in this way; loans raised now would not involve a loss to the exchange, where the rate of exchange does not fall below 1 *s.* 8 *d.*; assuming that to be the present rate, I have not made the calculation, but it appears to be so.

2927. You have suggested that in your opinion the best way of carrying out the formation of railways is that they should be entrusted to private companies under a perpetual guarantee?—Yes, I think so.

2928. Would you give those companies any interest in the surplus profits, or any share in the surplus revenue over the guarantee?—That depends very much upon the amount of guarantee. A guarantee of 3 or 3½ per cent. would appear to require that they should have some interest in the surplus profits hereafter; but a higher guarantee might satisfy them altogether.

2929. Then what would be the advantage of entrusting the making of the railways to private companies; if they do not share in the surplus profits what inducement would they have to work them cheaply if they are perfectly sure of their interest in any case, and cannot increase it by good management, or diminish it by bad management. I admit that it is a difficult question.

2930. Does not that occur to you?—It is difficult, I admit, but I am rather inclined to hold the opinion that perhaps railways might be managed in the same way as port trusts are managed in India.

2931. How is that done?—By a board of men appointed by the Government.

2932. By paid officers?—Partly paid.

Chairman.

2933. But you have not gone into this question?—No; I admit that I have not thought very much about it.

Mr. *Wodehouse.*

2934. You said, I think, that there was no native opinion as to the extension of railways in India?—I said I was not aware of any particular native opinion with regard to the extension of railways.

2935. Is there any appreciable native opinion as to the development of Indian resources in any other way?—No, I have not heard of any.

2936. Then you regard native opinion as practically dead to the development of Indian resources, whatever direction might be taken?—No, I would not go that length.

2937. Are there any other undertakings which are more attractive to the natives of India than the extension of railways?—No, I am not aware of any. In Bombay, however, cotton mills have been erected and are carried on largely by natives.

2938. The circulation of Indian newspapers is very small, is it not?—I really do not know the extent of their circulation; sometimes I hear that it is small, and sometimes I am told that it is very large amongst the natives.

2939. You stated, did you not, that private enterprise was deterred from undertaking railways without State aid, because of the uncertainty as to a sufficient return upon the money invested?—Yes.

2940. Do you think there is any scope left in India for remunerative lines?—Yes, decidedly.

2941. In the selection of lines to be hereafter made, do you think that the first consideration with the Government should be the hope of remuneration or the prevention of famine?—I should think the prevention of famine should be the first consideration.

Mr. *Gorst.*

2942. You stated that the conditions of the guarantee should not be too onerous; have you in your mind any particular cases in which the terms imposed by the Government have evidently been too onerous?—Yes, there is a general idea that the Government is disposed to be very onerous in its terms. In the case of the Bengal and North Western Railway, it exacted a share in the surplus profits over 6 per cent., which it however afterwards conceded, I believe.

2943. The Right honourable Chairman asked you some questions about native opinion in India, and read to you an extract from a vernacular newspaper. Do you know anything of the people who write those articles in the vernacular newspapers. Do you know who they are, or what sort of people they are?—Yes.

2944–5. Are they people who are entitled to call themselves the exponents of native opinion; do they represent the opinions of a great many people, or only their own?—I think they represent only their own opinions in most cases.

2946. Have you yourself ever had much direct communication with the natives?—Yes.

2947. With what class of natives?—With respectable traders in Calcutta, and native bankers.

2948. Do you speak Hindostani?—No; very little.

2949. Then you have only had conversations with such natives as speak English?—Yes.

2950. Have you ever had any conversation with the masses of the people; with the cultivatore?—Never.

2951. Only with the traders class?—That is all.

2952. The Bank of Bengal has got branches all over India, has it not?—Yes.

2953. Does the Bank do business principally with the European, or with the native traders?—In the interior of the country principally with native traders.

2954. What sort of people are the depositors in your country branches; do you ever have any depositors belonging to the producing class; the cultivators themselves?—I may say never.

2955. Do they save money?—I believe they save money, but I really cannot speak about that.

2956. Do the native depositors in your bank all belong to the trading classes?—Nearly all; but native traders do not generally bank with the English banks; we have very few native accounts.

2957. I understood you to say that most of you business in the branch banks was done with natives?—That is in lending them money, and buying their bills.

2958. In point of fact there are very few natives of India who ever lend their money to you?—Very few.

2959. When a loan is raised by the Government in India itself, what sort of natives contribute to such loan; what class of people?—The native bankers and traders in the Presidency towns principally. Native States also contribute sometimes largely.

2960. When you said that you thought it would be disadvantageous to borrow beyond a certain amount, did you mean that there is only a certain number of those people who would take it, and that it is injudicious for the Government to ask for more than they are ready to lend; supposing that those native bankers were willing to lend two millions or three millions to the Government, would you still say that it was injudicious for the Government to borrow that amount?—I would not say that, but I see no probability of native bankers lending that amount.

2961. Do you not consider that it would be judicious for the Government of India to borrow from those natives to the utmost extent that they are willing to lend?—I think it is quite right for the Government to borrow from them to the utmost extent that they are willing to lend.

2962. Then I understood you to say, in answer to the Right honourable Chairman, that a large loan raised in England, for the purpose of expending it in railway construction in India, would injuriously affect the exchange?—It seems to me that it would have that effect.

2963. Could you explain to me how, because I do not understand it. Supposing a large sum of money were raised in England from English capitalists for railway construction in India, about one-half of it is spent in England on railway material, is it not?—Yes.

2964. That would not affect the exchange, would it?—That would depend upon the amount.

2965. Surely whatever amount was bought in England with English money, and sent out to India, and charged to India, would not affect the exchange. Supposing they purchased a certain number of tons of rails, bought with English money in England, and those rails were sent on to Bombay, that would not affect the exchange would it?—No; I was not referring to that.

2966. Coming to the other part, the part spent in India, how would the part that is to be spent in India be transmitted to India?—The part that would be spent in India would go to the credit of the Secretary of State here, and reduce his drawings to that extent on India.

2967. Would that injuriously affect the exchange?—Yes, it would do so to the extent that it increased the demand for remittance in silver, and so increased the price of silver.

2968. Surely the less the Secretary of State draws in India the better the exchange?—That is, if you assume that a high exchange is the best exchange.

2969. Would not the effect of this loan in England for railway construction be to raise the value of the rupee in exchange?—*Decidedly*; that is what I have been saying.

2970. I understood you to say that it would lower it?—No; I do not look upon a rise in the exchange as necessarily a benefit to India.

2971. It would make the rupee worth more money in the exchange with England?—*Yes*; I said that very large loans in England annually, might possibly put the exchange up to 2*s.* for the rupee. If that should be the case, I cannot admit that it would be an advantage to India.

Sir *George Campbell.*

2972. I understood you to say that you think that cheap silver is a benefit to India, but supposing that the cheapness was carried to the extent

Sir *George Campbell*—continued.

extent of the rupee coming to be worth only 1 *s.* or 6 *d.*, would it be on the whole beneficial, or would its diminished value in exchange be injurious?—If silver fell to 6 *d.*, I suppose it would cease to be considered a precious metal. I cannot suppose any such fall to be possible; the same reasoning might be applied to gold; the supply and demand and purchasing power of gold are also liable to great fluctuations. It was at one time supposed that gold might become superabundant and unsuitable as a standard of value. Every fall in the price of silver tends on the one hand to limit the production of silver, and on the other to increase the quantity of silver required for currency, or to pay for the exports of silver using countries.

2973. Is your experience confined to Calcutta, or have you ever had an agency in the interior?—It is confined to Calcutta.

2974. Have you ever had dealings with the native bankers and moneyed men in Calcutta?—Yes; very large occasionally.

2975. Is there no public opinion of the moneyed class in India, with which you have dealt, and of whom you have any knowledge; have they any strong views upon the subject on which you have been examined to-day?—With regard to the construction of railways, I never heard strong views expressed by natives.

2976. You said that the natives would not lend their money to the Government, because they could do very much better with it; in the case of a native in Calcutta who has got money to invest, how can he use it?—He lends it upon produce, upon securities of all kinds, getting 8, 10, and 12 per cent., the rate depending upon the bank rate. For instance, I have no doubt natives in Calcutta just now find no difficulty in lending their money upon good security at from 10 to 15 per cent.

2977. Are there not a good many natives who wish to make permanent investments which they could depend upon?—There are a good many, but native bankers or native traders do not put their money into Government securities as permanent investments.

2978. Is there not a very considerable amount of India 4 per cent. rupee paper amongst the natives?—There is a considerable quantity of rupee paper held by natives.

2979. What class of natives take up that Government paper?—Native chiefs, rajahs, zemindars, and natives who are non-traders retired with their savings, or who are employed on salaries in offices.

2980. May we assume that a native, who is not engaged in trade and commerce, has a difficulty in securing a good investment at a higher rate?—He has greater difficulty in securing a good investment at a higher rate than others engaged in trade.

2981. And a good many of them have such difficulties that they are willing to lend their money to Government at 4 per cent.?—Yes.

2982. I understood you to say that the Government could not raise a silver loan at less than 4½ per cent.; does that apply merely to the present moment, or to recent years; is it at all the rate at which the Government have been in the habit of raising money?—I refer to the

Sir *George Campbell*—continued.

price of rupee loans in London at the present moment; I think that the 4½ per cent. loan in India just now is at a discount.

2983. That is liable to be paid off at a short period, is it not?—Not for 10 years.

2984. What rate is the 4 per cent. loan selling at now?—About ninety-six, I think.

2985. Has not the Government, within recent years, borrowed in Calcutta at 4 per cent., or even under?—Yes.

2986. What should you say was the average rate at which the Government of India have borrowed in Calcutta within the last 10 years; is it below 4 per cent., or is it considerably above 4 per cent.?—On two or three occasions 4 per cent. loans went at a considerable premium, that is to say, the rate was under 4 per cent. I think after the Afghanistan War the 4½ per Cent. Loan was floated at 94, 95, and 96.

2987. In time of peace, would not the Government ordinarily be able to borrow money in India at 4 per cent.?—It is very difficult to say. The fact is that those loans which were placed in recent years at favourable rates, were largely subscribed for by English investors in England.

Mr. *Samuelson.*

2988. You spoke of the very high rate of interest prevailing at this moment in India; does the Bank of Bengal receive deposits?—Yes.

2989. Do the native bankers receive deposits?—Yes.

2990. What is the normal rate allowed on deposits by Indian banks?—The Bank of Bengal allows no interest on deposits. The Indian exchange banks allow 2 per cent. on current account balances, and 5 per cent. on fixed deposits.

2991. Five per cent. then is the normal rate?—Yes, for fixed deposits.

2992. Subject to what notice?—Twelve months notice.

2993. What is the rate on good security by way of mortgage in Calcutta?—Ordinarily 7 to 8 per cent.; on mortgage of house property, for instance.

2994. So that the class who understand putting out their money to advantage can get from 5 to 7 per cent.?—Yes.

2995. And more likely 7 than 5?—Yes, I should think so.

2996. Consequently the extent to which money can be borrowed in India at 4 per cent. must necessarily be very limited?—Yes, it is very limited.

2997. With regard to the question of loss by rupee loans, I suppose it would arise in this way, that a lender in England purchasing rupees at 1 *s.* 8 *d.*, would run the risk of receiving his interest at the rate of 1 *s.* 6 *d.* or 1 *s.* 5 *d.* only?—That is so.

2998. And it is that which makes people afraid, and causes them to exact a higher rate of interest than if the loan were in gold, and the interest were payable in gold?—Yes, and also the fear of depreciation in the principal of their investment as well.

Mr. *W. H. Smith.*

2999. Are you aware whether the Govern-

Mr. *W. H. Smith*—continued.

ment have at any time gained by borrowing in silver in India, as compared with a loan which might have been raised in England in gold?—I am not aware.

3000. You say the difference in the rate of interest which is now paid is about 1 per cent.?—Yes, taking the present prices of rupee loans.

3001. So that a loan raised in India would carry a charge of 1 per cent. more to the taxpayer in India than a loan raised in England in gold would?—Yes.

3002. In making that estimate have you taken into account the low rate of exchange at which the rupees would have to be converted into gold to pay the interest in England?—I have only taken the difference in the rate of interest. I have made no calculation such as you indicate. I only say that at present to borrow in silver, the Government would probably have to pay 4½ per cent. per annum, whereas if they were to borrow in gold they would probably have to pay only 3½ per cent. per annum.

3003. The 4½ per cent. rate depends upon the uncertainty which prevails as to the value of the rupee converted into gold?—Yes.

3004. And a lower rate of interest is obtained, because at whatever this rate of the rupee may be, the investor in England knows that he will have a fixed sum in gold here; is not that so?—Yes.

3005. Then as a merely financial operation, looking at the interests of India alone, you under the present conditions of finance distinctly advise that loans should be raised in England and not in India?—At present I am of that opinion.

3006. Can you look forward to any alteration in the condition of financial affairs in India which would make a change desirable within the next three or five years, not looking forward beyond that period?—If there were any certainty as to the continuance of the Bland Bill, circumstances would no doubt alter.

3007. In other words, if you could be certain that the exchange would not fall still lower the money could be borrowed in India at a lower rate?—Yes, at a lower rate possibly than 4½ per cent., as subscriptions to rupee loans would no doubt be resumed by English investors in England.

3008. That shows upon the evidence which you have given already, that there is a permanently higher rate of interest on capital in India than there is in England?—Yes, in fact, capital is in very limited supply in India.

3009. And you would be prepared to put that difference with regard to the investment in Government securities at how much; would you say 1 per cent. in its effect upon a loan raised in India?—I do not think that any loan could be raised in India just now even at 4½ per cent.

3010. I think you said that there was a very small amount of available surplus capital seeking investments of this character, or to be tempted year by year; that is distinctly your opinion; at any rate of interest in India?—Distinctly, a very small amount. In fact, I think about 25 millions of the rupee loans issued in India since 1858, are now held in England, and are enfaced for payment of interest in England. The rupee debt has increased since 1858 about 40 millions.

3011. So that the remittances have to be made from India to pay interest in one way or another, whether the loan itself is raised in England or India?—Quite so.

3012. And the debt, therefore, due by the people of India to England is the same substantially, whether it is a rupee loan or whether it is a gold loan?—Yes, substantially it is so.

3013. With regard to the financial conditions of India, I think we understood you to say that the Bank of Bengal receives a very small amount of deposits from natives, but lends a large sum of money to natives?—Yes, that is so.

3014. So that the indebtedness of the native population to the Bank of Bengal, which derives its working capital and its resources from the English traders, is very considerably in excess of the investments or deposits of the natives?—Yes, very considerably in excess.

Mr. *Kynaston Cross.*

3015. I think you said that you considered the present position of the Government of India as to borrowing in India was disastrous, inasmuch as it involved a much higher rate of interest charged?—I do not say disastrous; it is inexpedient.

3016 Meaning that it is a higher charge upon the revenues of India?—Yes.

3017. You are aware that the recommendation of the Public Works Committee that sat in 1878-79 was, that loans for public works should always be raised in India unless the Secretary of State in Council should be satisfied that the difference between the rate of interest in England and India is so considerable as to afford a full compensation for the disadvantage that will inevitably attend borrowing in this country; could you fix in your own mind any difference in rate which ought or ought not to be paid between borrowing in England or India?—I would find it difficult to state any difference; at the same time I think that it would be more advantageous for India to issue in England a 3½ per cent. gold loan than to issue a rupee loan in India at 4½ per cent.

3018. You would say that the insurance that would be paid by the Government of India against 4½ per cent. as against 3½ per cent. in England is much too high a rate?—It becomes excessive when there is a difference of 1 per cent.

3019. Would you say that there was any advantage in borrowing in India when the rates more nearly approximate to each other?—It seems to me that there is only an advantage in borrowing in India to the extent to which loans can really be absorbed in India.

3020. You are no doubt aware that the reason which actuated the Government in borrowing in rupees in India was of two kinds, both political and financial?—Yes.

3021. And you would say that the political advantage is that the natives would have a direct pecuniary interest in the finances of the State?—Yes.

3022. And for that you would advise borrowing in India?—I think there would be an advantage in borrowing in India to a moderate extent, to the extent that India really requires public securities.

3023. Then the financial advantage would be that the Government would discharge its liabilities

Mr. *Kynaston Cross*—continued.

ties in the same medium in which they were contracted?—Yes.

3024. That of course would be a distinct advantage?—Yes.

3025. Because it would relieve all anxiety with regard to exchange?—Yes.

3026. You are of opinion that the first of these advantages has only been very partially secured, by the method of borrowing, that is to say, you are of opinion that the political advantage of the natives holding a considerable amount of money has only been very partially secured?—It has been secured to the fullest extent possible; it has been secured to the extent that the natives were willing to take Government securities.

3027. Which is measured by the subscription of about a crore and a quarter of rupees on each loan?—I should think that is in excess of the amount taken by natives.

3028. Now as to the second of those advantages, the advantage of the repayment of the loan in the medium in which it is borrowed and the payment of interest in that same medium; do you think that that has been to any great extent secured?—It has been secured to the full extent with regard to rupee loans, because although rupee loans come to England they are only liable to discharge in silver, and the interest is payable in silver.

3029. There is another advantage which is claimed, which is, that that interest will not come into the exchange market; you would not say that was the case with regard to loans that were held in England?—Certainly not.

3030. Then, whether the loan is issued to English investors in rupees or in sterling, of course the interest would come into the exchange market in the same way?—Yes; the effect upon the exchange is the same as if the Secretary of State drew for the interest himself.

3031. Is it exactly the same as if the Secretary of State drew the whole amount himself?—I think it must be held to be ultimately the same.

3032. But does not that put the Secretary of State in the position of competing with another seller?—Yes, it does that.

3033. And would you say that when two sellers have money to dispose of, even though the amount may be the same, there was any advantage in having the sale of the commodity in two hands?—There is no advantage in having it in two hands; it is rather a disadvantage.

3034. You would say, that if the whole were in the hands of the Government, irrespective of the chance of a fall in silver, it would be better than having it in the hands of the Government and of private individuals?—It would I think.

3035. Can you give any reason why the rate of interest is so high in India at the present time?—The reason is owing to the last Government loan having fallen entirely upon the Indian money market. Capitalists in England abstained from subscribing to it, and it is now largely held by people on borrowed money. The Bank of Bengal's resources have been very largely availed of in giving advances against the security of the loan; this has resulted in pressure on the bank, and a great advance in its rate of interest.

Mr. *Kynaston Cross*—continued.

3036. Then, the effect of the banks having taken this rupee loan in India, is that they have locked up their funds, and that they cannot use their funds for the usual trade operations?—The loan, I think, was largely taken up by natives in the bazaars on speculation. They did this by borrowing from the presidency banks against the security of the loan.

3037. In fact, they have made a bad speculation with the presidency banks, and have locked up their funds in such a way that they have to charge a very high rate of interest?—Yes, they have made a bad speculation. The presidency banks have only lent them money on ample security.

3038. The rate of interest being very low here, and very high in Bengal, can you give us the reason why funds do not flow from here to Bengal?—In the first place, there is the uncertainty about the value of silver, which operates to prevent people in this country sending money to India. In the next place, it is supposed by many people that the present stringency in the Indian money markets may be only temporary, in which case, if they sent out their capital now, they would be disappointed of employing it at the present high rates of interest, say, two months or three months hence.

3039. Which would be the stronger reason of the two, in your mind?—The latter reason. I do not think that the fear of a fall in the value of silver would operate so much as the other reason.

3040. If the Government showed itself a little less frightened about silver, do you think that would have any effect upon the issue of another silver loan; you are aware that the Indian Government, for some time, have refused to issue anything but silver loans?—Yes.

3041. It is, therefore, supposed that they are frightened at the idea that there is going to be a further fall in the value of silver; what would be the effect upon the public mind if the Government instead of, as now, issuing silver loans, issued their loans in sterling; would it have any re-assuring effect, or not?—It would have a re-assuring effect, and, no doubt, would be followed by a considerable rise in the price of rupee loans.

3042. Enabling the Government to get out a rupee loan at a higher rate at lighter terms, perhaps, than in London?—I am doubtful of it. The circumstances of the Indian money market just now are not in favour of a rupee loan; certainly not at all this year.

Mr. *Bolton.*

3043. When you spoke of the absorption in India of a million per annum of rupee loans, did you mean absorption by the speculative natives in the bazaars, or by the natives who were holding it permanently as an investment?—I meant natives and Europeans holding it permanently as an investment.

Lieut.-General C. H. DICKENS, called in; and Examined.

Chairman.

3044. I THINK you were a long time in India, and you have been concerned with Indian public works?—Yes, I was 38 years in India, and I was Secretary in the Public Works Department for several years.

3045. Are you connected with any Indian railways?—I am now chairman of the Bengal Central Railway, which was formed in 1881, and of the Bengal and North Western, which was formed in 1882.

3046. You were examined, were you not, by the Parliamentary Committee of 1878-79, with reference to Indian public works?—I was; and at that time I gave my opinion that the expenditure on reproductive works in India might go on at the rate of four and a-half millions a year, of which I suggested that three millions should be for railways.

3047. Is it your opinion that circumstances have altered considerably since then, and that it would be judicious now to go on rather faster than was recommended in 1879?—I think that the recommendation adopted by the Committee of 1879 was for a smaller amount; it was for two and a-half millions, if I recollect rightly, and I have no doubt that that rate might be increased.

3048. Without finding fault with the decision that was then come to, or with the recommendation of the Committee, you think that the state of the Indian finances is such that the Government might quite prudently, and with a due regard to the finances of India, spend more money than was then recommended?—That is my conclusion; but I could not lay down any particular scale of expenditure. My opinion is that the method of fixing the amount which should be spent should be something as follows: I think that there should certainly be no extra taxation for the extension of railways in India. I think that a calculation should be made of the probable reasonable growth of income and reduction of charge from the existing railways (taking also those in course of construction) during the next five years. I think that a portion of that being set aside as a reasonable allowance for increase to the general revenues, the balance should be considered not as set aside absolutely, but as a reasonable measure of the amount that might be applied to the extension of railways; that is to say, in providing the interest and so forth. I think that a forecast of operations should then be prepared, and that the projects for fresh construction should then be brought in the order of their importance within the limit which was arrived at in that calculation. This forecast, I think, should be revised from year to year, still in each revision looking forward five years, and striking an average on the five years; so that the revision should in no case lead to any sudden expansion or hasty reduction of the outlay. I think that uniformity in the rate of outlay is very important towards cheap construction. I think it will probably be found that the most important lines to begin with would not necessarily be the most paying lines, but to be able financially to proceed with reasonable speed, a large portion of the outlay should be on paying lines; the most quickly remunerative kind of outlay would probably be that on feeding branches to existing lines; the branches might not pay in themselves, but they would pay in the traffic which they would bring upon the main lines, which increase of traffic would probably be nearly all profit. Then I think that the rate of progress should be limited, not only by the financial restrictions which I suggest, but also in the interests of cheap construction. An expensive system of railways would, I think, be a very doubtful advantage to India. One of the most important elements in cheap construction, I think, is a sufficient proportion of engineers having Indian experience; if the staff and contractors be without Indian experience, I have no doubt that the cost will be very largely increased. Bearing these points in view, I think that the details should be left to the Secretary of State, after considering the views of the Government of India and other authorities.

Chairman—continued.

3049. On that point of the experience of engineers, I should like to ask you this question: we had very important evidence given to us during the last week upon this subject, and we were told, both in that and in various documents which have been submitted to us, that much inconvenience and loss have been caused by a want of experience on the part of the engineer officers appointed by the Government to superintend the construction and management of railways in India; is that your opinion?—No, I could not say that that is my opinion in general.

3050. The statement made in this room was that officers were employed by the Indian Government to superintend the construction and management of railways who had had no experience whatever on railways in any subordinate capacity before, and it was recommended that there should be a distinct rule laid down that no executive engineer should ever be appointed who had not had previous railway experience; how would you regard that recommendation?—I think that would be a very good rule so far as you can carry it out, but, at the same time, if the department are suddenly called upon to provide for the construction of railways they must get the best men they can find upon the spot, and they may not be able to get engineers of the most desirable qualifications.

3051. You think that it would be a very good rule if it could be practically put in force, but you are afraid that there might be exceptions?—I have no doubt that that has been the rule which has been acted upon as far as possible; there may, of course, be exceptions where difficulty has been met with in finding suitable officers at the moment.

3052. But you do not agree in the opinion that great inconvenience and public loss have been caused by it?—I do not think that has been so.

3053. You would be surprised to hear that a great contractor said that he always added 10 per cent. to his offer in consequence of such great inconvenience being caused by the interference of

Chairman—continued.

of incompetent officers?—I have heard that that was said; but on the other hand I think you will find that a number of engineers of Indian experience would rather be without a contractor at all.

3054. That is another point; I am taking it for granted that they employ contractors, and I wanted to know whether your opinion coincides with that of a witness who has given us very clear and definite evidence upon the subject; you are not of that opinion?—I am not of that opinion.

3055. Have you formed in your own mind any idea, acting upon the plan which you have most clearly sketched out to the Committee, what would be the annual sum that might be judiciously expended on making new railways in India?—I do not think I could lay down any annual sum; I suppose the kind of calculation which I have just suggested, if based upon the existing figures, might lead to an outlay of something between three millions and five millions a year.

3056. But that is rather less, is it not, than they are spending in that way now?—I understand that at present it is two and a-half millions a year.

3057. Are you not aware that the two and a-half millions is for all public works?—I am not in a position to go upon existing figures.

3058. In your opinion, ought the new railways to be constructed by the State or by Companies?—I think that the Government has got a very efficient Railway Department at present, and that it would do perfectly well using the members of its own Department. I think at the same time it might do very well using companies acting under guarantee; but I think that the best arrangement would be to employ both agencies.

3059. You think that there is room for both?—Yes I think there is room for both.

3060. And that they would not clash with each other?—No; I think they would benefit each other; there would be some kind of emulation between them.

3061. From your knowledge and experience do you think that there is a great scope for the extension of railways in India?—Yes, provided that economy is exercised in the construction.

3062. You are not of the opinion that we have heard expressed in this room that the principal lines of railway have been made, and that there is comparatively little else left to be done?—No, certainly not. I think that construction at the present day is much cheaper than it used to be, which is a very important point.

3063. You spoke in your opening remarks about a forecast. Would not the joint employment of State agency and that of the companies be somewhat difficult in working out a forecast of that kind?—I think not; I think I could form a very reasonable estimate of the amount that the companies would spend from year to year, and of what their earnings would be.

3064. You think that the Government should proceed to say, We will make certain railways ourselves, and others that we have included in our plan we will offer to companies?—Yes.

3065. Have you any suggestions to make with regard to the steps that ought to be taken for

Chairman—continued.

getting the capital adequately subscribed?—I think there has been a good deal of misapprehension, owing to the use of the term "private enterprise," which has acquired in official circles in India a meaning which implies the existence of what has no existence in real life. The real thing to be dealt with is not a set of merchants which would embody the official idea of private enterprise, but a very large and miscellaneous public, looking out for safe and sufficiently profitable investments for their savings and profits. All the vast sums of money raised in London for various undertakings are raised on the basis of the demands of that large investing public, of which typical examples may be the thrifty retired shopkeeper, or the careful professional man, and of course there are trustees also who are a very important class of persons to consider. This investing public has not, as a rule, its money always ready, but has to wait to save, or to make it, or to have an opportunity of changing its investments. The regular machinery for providing new investments for this public consists of the financial houses which float new undertakings, the dealers who sell shares or stock by retail, the brokers who act as agents and advisers to the investors, and finally the investors. Of course, on all occasions of floating new companies there come forward, besides this regular machinery, a host of irregulars in the shape of speculators of all sorts, but those are not the class of persons to be considered one way or another; they are merely the accidents of the occasion. In all this there is hardly anything of the nature of what is called private enterprise in official circles. It is essential that new stock should go to a premium as a mark of its being in favour with the public; if not the financial houses who launch the project have their funds locked up until they can sell it, and the market can take no more stock of that kind. If it goes to a sufficient premium they get rid of it and are ready for fresh operations. There are plenty of Government loans, foreign and colonial, which will give an investor a safe 4 per cent., uncomplicated with the uncertainties of railway working. Therefore, I think, to make sure of floating new companies, probably a 4 per cent. guarantee will be necessary.

Mr. *Kynaston Cross.*

3066. You have perhaps one or two more remarks that you would like to make on the various methods by which money has been raised for different railway extensions in India?—Yes; I think that in the case of railway projects which are not likely to pay more than 4 per cent., it would be desirable to adopt some such terms as have been given to the South Mahratta Company.

3067. Will you kindly inform the Committee what the terms which were given to the South Mahratta Company were?—So far as what I have got to say is concerned, they consist of a 3½ per cent. permanent guarantee and a ½ per cent. temporary guarantee, I think going on for seven years, and a quarter of the total net earnings of the undertaking, which would be in addition to the guarantee.

3068. I presume

Mr. *Gorst.*

3068. I presume the guarantee would be paid first?—I am speaking of the net earnings of the undertaking after the working expenses are paid.

Mr. *Kynaston Cross.*

3069. The net earnings being the net receipts after the expenses are paid without considering the guarantee at all?—Quite so.

Mr. *William Fowler.*

3070. Do you mean that they would get 4 per cent. guarantee?—Yes, 4 per cent. at present.

3071. And also one-fourth of the total net earnings?—Yes.

Mr. *Kynaston Cross.*

3072. You cannot give us any official information about the South Mahratta line; you only recommend that some plan of that kind might be followed with regard to the establishment of other railways?—Yes; I think if it was a simple 4 per cent. guarantee with one-fourth of the net earnings, the stock would go to a premium, whereas at present it is barely at par.

3073. I think you said you are chairman of two railway companies, the Bengal Central and the Bengal and North Western; those companies are not established on precisely similar terms, I think?—Not at all; I am speaking now of the terms that I would suggest for railway projects, which are not likely to earn above 4 per cent., and the reason why it appears to me that those terms, or something similar to those of the South Mahratta are desirable is this: that if you give a simple guarantee of 4 per cent. without any interest to the company in the profits of the line, you do not secure the co-operation of the company in cheap construction and working, and in the development of traffic; and although it is somewhat more expensive to the Government if companies are to be employed for such lines, I would in that sort of way make use of them.

3074. Are there any other plans which you think might well be followed with regard to those lines which you think may not be profitable?—I think that is all that I have to suggest on that point. With regard to lines which are likely to pay 5 per cent. or more, it seems to me that a simple 4 per cent. guarantee, much in the old form, would be best. It has been shown that the public will not come forward without a guarantee, and that the European merchants, judging from the recommendations of the Chambers of Commerce, in India, look to the Government for a good deal of control over the working of railways. The proposals made in 1881 were that the Companies should be offered all the profits if they would take all the risks. The investing public have declined the risks, and the Government should now, I think, make a point of accepting the risks and the control, and insist on taking as large a share of the profits as is consistent with raising the money and securing the co-operation of the Companies in the economical construction and working of the lines.

3075. What are the best means which you would suggest?—I think that an ordinary 4 per cent. guarantee, with half the profits to the Company, would do very well; but possibly it might

Mr. *Kynaston Cross*—continued.

be better to give the Companies the whole of the profits up to 5 per cent., and only one-third above 5 per cent. On the whole I think that would probably be more advantageous to the Government and equally attractive to the Companies; or perhaps the division of profits might be left to be considered in each case according to the nature of the undertaking. The Government would of course secure the right of purchase at certain fixed periods, and I think a simple valuation of 25 years' purchase of the average profits of the Company would give satisfaction.

3076. Of the average profits of the Company for five years previous to the time of the Company being taken over?—The average annual profits of the five years previous. After the period of 99 years the railway might lapse to the Government, as in the existing contracts.

3077. You propose that the lines should revert to the State after 99 years?—Yes, in the same way as in the existing contracts. I think the arrangement is, that the fixed property lapses absolutely to the State, and the movable property is taken over at a valuation.

3078. Are you aware of the existing contracts with guaranteed companies, by which they are enabled to debit rupees at a fixed rate of exchange?—Yes.

3079. Do you think that that has been an advantage or a disadvantage to the Government of India?—I think, probably, a disadvantage, as things have turned out.

3080. And you would be very careful in future to guard the Government of India against making any fixed contract rate for which the companies should be able to pay in rupees to the Indian Treasury?—I think that is rather a difficult point to consider; and it is one which I am not prepared to give any definite opinion upon; but no doubt the Government should secure itself in that matter.

3081. In a very different way from the way in which they have secured themselves in the case of existing guaranteed railways?—Yes; I think they might probably make some arrangement. I am really not prepared to give any very definite advice upon that; but I think they might probably make some arrangement, so as to make it dependent upon the exchange. I would not put such an arrangement in the contracts as in the rupee clause which has been inserted in the South Mahratta contract, which is that the Government should pay rupees to the Company in India sufficient to produce the required sterling sum.

3082. That is not what I *meant*; what I meant was this: in the old guaranteed contracts the companies have a right to debit rupees at the rate of 1 *s.* 10 *d.* and 2 *s.* when they are only worth 1 *s.* 8 *d.* to the Government, or they may go down to 1 *s.*?—Yes, and in one case the rupee is taken at 2 *s.* I think.

3083. Supposing that the rupee fell to 1 *s.*, would not the position of the guaranteed companies be this: that they might be receiving enormous surplus profits from the very fact that they had this very contract to pay in their rupees to the Government at 2 *s.* when the Government was only receiving 1 *s.* for the rupee, the difference being charged in the Indian accounts as loss from exchange?—

Mr. *Kynaston Cross*—continued.

exchange?—Exactly so; but on the other hand, if you left an uncertainty at all in the minds of the investing public you would produce some apprehension in the market. It is a matter which is to be very carefully considered. Upon the whole I am not prepared to advise the Committee in any way.

3084. This is a matter which you have to consider as the chairman of two railway companies?—Quite so; but we have not got so far in the working of those companies as to come to that point, otherwise than is provided in our contracts. In one contract it is provided at the current rate of exchange from year to year.

3085. You think that a just contract, do you?—We have accepted that contract.

3086. Will you tell the Committee the difference between the two bargains which you have made with the Government in the case of the Bengal Central and the Bengal North Western?—In the Bengal Central case we have a Government guarantee for five years; that is to say, the Government pays us four per cent. interest during construction, or for five years. On completion of the line the guarantee lapses, or if the line is not completed in five years the guarantee extends to the five years.

3087. And the shares of that company are really at a considerable premium in the market?—Yes; then the Government have the right to purchase at 25 per cent. premium. The interest paid to us by the Government is to be repaid by half the surplus profits over 5 per cent. until the debt is extinguished. After that the company is left without any claim on the part of the Government to receive any part of those profits until the time of purchase comes, and then of course the company has to make over the undertaking, if the Government requires it, at a fixed value.

3088. Does that line lapse to the Government at the end of 99 years?—Yes.

3089. Without any payment except for the rolling stock?—Yes, without any payment for the fixed property.

3090. Do you think it is possible to establish many more companies on precisely the same system?—I think so, if there is a considerable expectation of good profits from the working of a line of that kind.

3091. Do you know many districts in India where such undertakings would permanently pay?—I cannot say many, but I think there are some.

3092. You would recommend the Government, therefore, to accept tenders from companies, such at the Bengal and North-Western, when they can do so where there are districts which would be suitable?—I should hardly say that; I think the Government would do better if they gave a permanent guarantee and claimed a share of the annual profits.

3093. Will you explain the difference between those terms and the terms that were made with the Bengal and North-Western?—The Bengal and North-Western has no guarantee at all.

3094. How was it undertaken by the promoters?—The Government has the right to purchase at the end of 30 and 50 years, at 25 years' purchase of the companies average earnings in the last five years.

Mr. *Kynaston Cross*—continued.

3095. The question I asked was, how was it that this line was undertaken by the promoters without a guarantee?—It was in the belief that the Indian railways were sufficiently popular in the market to make those terms acceptable to the public.

3096. Was it not based on the belief that Indian railways would pay sufficiently well?—Certainly. Our belief was that the public would accept the fact that the Indian railways would pay sufficiently well; however, as a matter of fact, they have not done so; the shares are at a considerable discount.

3097. Then you would say that it was not possible to establish any more companies on the Bengal and North-Western system?—Certainly.

3098. The Bengal and North Western Line is, I think, a narrow gauge line?—Yes.

3099. And the Bengal Central is a broad gauge?—Yes.

3100. Can you tell us what the cost per mile for each of those lines will be when complete?—According to our latest estimate, the Bengal Central will cost about 6,000 *l.* a mile, and the Bengal and North-Western will cost something under 4,500 *l.*

3101. Is the country through which they go somewhat similar, or does it differ?—There is a considerable difference; but I think on the whole that the difference is not material, as regards to cost of construction.

3102. Would those two lines have formed the basis of a fair comparison of the cost, as between the metre and standard gauge?—I think they would. The Bengal Central goes through a more expensive country perhaps; but then we have not had occasion there to provide for workshops, or for the terminus in Calcutta; and the ballasting is arranged on a plan which is under trial, and which may require to be supplemented by some further outlay. On the other hand the Bengal and North-Western Line is something like 500 miles up the country, and the rails from England have to be transmitted that distance, which adds considerably to the expense. I think on the whole, that taking all things together, they compare fairly well.

3103. Then they might be taken as a criterion of the cost, as between the metre and the standard gauges?—I would scarcely say as a criterion, but as a fair example of the comparative cost.

3104. Then the difference would be about 33 per cent.?—About as three is to four, you may say.

3105. Have you gone into the calculation of the comparative cost of working the traffic upon those lines?—No.

3106. Have you any experience of it?—I can only judge by the examples of other lines; I think whilst the traffic is small, there would not be any material difference; but for a large traffic, I have no doubt that the broader gauge would be more profitable.

3107. You say whilst the traffic is small; what limit would you put as the gauge of the smallness of the traffic?—I do not think I could assign a limit.

3108. What proportion of carrying power of

Mr. *Kynaston Cross*—continued.

the narrow gauge would you call a small traffic?—I do not think it is a thing which one can lay down very precisely, but I should say, as long as the traffic was below 10 *l.* a mile a week, you would find the narrow gauge work cheaper than the broad.

3109. Have you made any calculation as to the cost of moving a ton or 100 tons, or any individual quantity, along a narrow gauge line as compared with a broad gauge line?—I have not; but I have no doubt that the Committee will be able to get an opinion upon that from the consulting engineer.

3110. With regard to the plan on which railway extension should be based, I think you said that a certain portion of the growth of income and consequent reduction of charge should be set aside to meet the interest on loans which you would borrow for railway construction?—Yes; not absolutely set aside, but I would say, should be used as a measure.

3111. Do you mean the growth of income, and consequent reduction of charge, or the reduction of charge simply?—I think you may say simply the reduction of charge, because I understand that the calculations made show that on the whole, taking the exchange into consideration, there is no absolute profit from the railways as now working; but I am quite sure if you go back 10 or 12 years you will find that there was a very large loss upon the railway working which now has ceased.

3112. Then your plan would be merely this, that given that the cost of the railways in 1872 was two millions a year to the State, it is now possibly only a million a year to the State?—I think probably now they cost nothing to the State.

3113. You say there has been 3½ millions apparently of profit in the last five years?—That is not allowing for exchange.

3114. After allowing for exchange, what would you say it was?—I do not know what the loss on exchange was in 1872; probably it was not very much then.

3115. What I want is to get at the measure that you would use, which would enable you to estimate what might be borrowed?—I should say something like half or a little better than half the net reduction in charge, or increase of income, whichever way you prefer to put it.

3116. If the net reduction in charge is a million you would say that we might apply half a million a year towards the interest of railways, which would enable us to borrow a sum which capitalised upon that would be very considerable?—Either to borrow or to apply to the guaranteed companies and so forth.

3117. You spoke of the lines which are most likely to be paying, being the feeders of the existing lines; we have had similar recommendations before this Committee in which it was indicated that those lines might be made on a different gauge from the parent line; what would you say to a recommendation of that kiud?—I think sometimes it might be on a different gauge, but on other occasions it would be more proper to use the existing gauge, that is to say that sometimes you might have narrow gauge feeders to broad gauge lines; but unless they are very short and the traffic is likely to be small, I should prefer to use broad gauge feeders to broad gauge lines.

Mr. *Kynaston Cross*—continued.

3118. Even if the amount of traffic was likely to be very small would it not require that on the narrow gauge lines you should have an entirely distinct set of rolling stock?—Yes, certainly.

3119. Would that pay on very short lines?—If the lines are very short or not of sufficient extent to be able to work by themselves it must be more economical to adopt the broad gauge.

3120. But would you give us any rule by which we could judge whether it was more economical or not?—I think each case must depend upon its own merits.

3121. There are a great many objections to mixing up broad and narrow gauge lines are there not?—Yes, no doubt.

3122. It would be necessary to have separate workshops, would it not, for those little narrow gauge lines?—I think not.

3123. How would you move your narrow gauge engines, when they become disabled, along the broad gauge lines to your workshops?—Of course all engines to be used on narrow gauge lines have to go up broad gauge lines now.

3124. Are they carried up?—Yes. If necessary the workshop authorities could establish temporary workshops on some occasions, or depute workmen to do the repairs.

3125. The Chairman asked you with regard to some complaints which had been made by a contractor as to the interference with the construction of railways by Public Works engineers, are you aware of the particular instance in question to which Mr. Glover referred?—I am not aware from personal knowledge; I have heard the circumstance mentioned.

3126. Then you say I think that the Government could well undertake the whole work of the extension of railways?—I believe so.

3127. Is the Public Works Department strong enough to do that?—It would require some increase I have no doubt.

3128. Are you aware of the number of engineers that they have on the Public Works staff at the present time?—Not now. I knew more about it some years ago.

3129. Are you aware that the Committee of 1878–79 recommended that a very large reduction of the Public Works staff should take place, and that in consequence 300 engineers were pensioned off at a considerable expense to the State?—Yes.

3130. Would you advise that the staff should be increased again now?—I think it might be increased. At the same time as I say I think you would do very well by employing companies to execute the railways.

3131. Are not the disadvantages of having to pension off a large number of public servants so great as to induce you to think that it would be very objectionable to increase the Public Works staff?—I think it was a pity that the reduction was made and my own opinion was that the reduction ought not to have been made at that time.

3132. You think that the Committee of the House of Commons were rather foolish in their recommendations?

Mr. *Kynaston Crose*—continued.

recommendations?—I would not put it in those terms of course.

3133. You would say that it was not always good for a House of Commons Committee to interfere with the Government of India?—I would not put it in that way either; but I think that the data would not have led me to the same conclusion that the Committee came to. That is all I can say.

Mr. *Samuelson.*

3134. What is the gauge of the Bengal Central?—Five and-a-half feet.

3135. Do I understand that the guarantee of 4 per cent. is only during construction and that there is no guarantee whatever after the line is completed?—Yes.

3136. Is that the only line which is being constructed on those terms?—I believe it is.

3137. Would it not be necessary that a company should be well assured of the success of the undertaking before they consented to terms of that kind?—I think so; I think that the premium at which the Bengal Central stands is quite exceptional depending upon the opinion which has been formed in the market of the prospective traffic.

3138. Of course I cannot ask you whether that opinion is justified, but I would ask you whether you believe that many undertakings could be carried out upon the same footing?—I think not. I think that the public has a very limited knowledge of India, and in this case I think they happened to appreciate the circumstances. In other cases they would not probably do so.

3139. Or perhaps they had great confidence in the parties who brought out the scheme?—That may be so; but I think probably it is from the circumstance of the local knowledge having passed from Calcutta, to the London money market, rather than from anything else.

3140. You stated that the action of the Indian Government upon the recommendation of the Committee of this House in discharging a great number of engineers may have been somewhat improvident?—I do not know that I can put it in that way, but I merely say that if I had had to decide the question I should not have decided in that way.

3141. Have the companies any difficulty in engaging engineers, to use a vulgar term, by the job?—I think at times they might have some difficulty.

3142. At present they have none?—I do not suppose that they have much difficulty, but I should fear some difficulty in selecting a staff with Indian experience. In the case of the two companies of which I am chairman, our chief engineers in both cases are selected from the Government service and the Government have allowed us their services.

3143. So that however great might be the supply of engineers in England it does not follow that good men for the Indian service could be readily obtained?—I think there might be a difficulty if there was a very large extension of railways.

3144. Would there be any more difficulty on the part of the Government than exists on the part of private companies to engage engineers for the construction of a railway, without their having any further claims upon them as to pension or otherwise?—I think the Government might have greater difficulty in some respects, that is to say, with regard to getting engineers of standing and experience. The Government has a series of young men now joining its service who will no doubt acquire experience in time, and some of them have acquired experience already; but if it came to the selection of a chief engineer I think as soon as the men that the Government now has at its disposal were exhausted they would probably not like to take any more from the outside.

Mr. *Samuelson*—continued.

3145. Why not?—It would interfere with their service and they might find a difficulty in arranging terms with their engineers.

3146. Why should an engineer of eminence be less willing to serve the Government than to serve a private company?—I do not think that engineers would be less willing to serve the Government, but I think there might be some difficulty in arranging terms to suit the Government service.

3147. In what way?—The Government generally goes upon certain regulations and rules, and probably the terms upon which they would get engineers to join them would be something entirely different.

3148. Why should not they adopt their terms to those that would be acceptable to a private individual?—They might do so. I do not see any objection to it, but I rather see difficulties in it.

3149. Do you think they would be insurmountable?—Not at all.

3150. If they could be surmounted would you consider it advantageous to employ engineers on the same terms as the companies would do?—I think so.

Sir *George Campbell.*

3151. I think you told us in general terms that you thought perhaps a large proportion of the expenditure might be upon feeder lines; can you point out, with your great experience of India, any considerable main line which you think ought still to be made?—I think a line might be made from Chittagong into Cachar, and possibly ultimately extended to Assam.

3152. Have you yourself paid attention to the considerations which would affect that line?—To some extent I have.

3153. Do you think it would pay?—I think so if it were cheaply made.

3154. Do you know anything of the port of Chittagong?—I have never been there, but I know it from reading reports upon it.

3155. Do you understand that it is a good port?—It was reported upon by the engineer, Mr. Robertson, who went out somewhere about 1873 or 1874, and he said that it was capable of taking a very large traffic.

3156. Do you understand that, so far as that district is concerned, a line from Chittagong to Cachar it would be an easy line to make in an engineering point of view?—Not altogether an easy line, but I think it might pay.

3157. Can you tell us of any other line?—I am afraid I cannot give you any information that would

Sir *George Campbell*—continued.

would be at all as reliable as what you would get from the India office, because I have not the same means of comparing one line with another that they have there.

3158. Are you aware of any late recommendations of the Government of India upon that point?—No, I am not.

3159. One line which has been very much pressed upon us is a direct line from Nagpur to Calcutta; do you think that that would be a paying line so as to justify the expenditure?—I think it might pay, but I should not think that the prospects were very brilliant.

3160. Do you know the country?—I know the country merely by report.

3161. Do you know anything of the proposed line to pass through the Rewa coalfield from the neighbourhood of Bhilaspur through Saugor, passing through the newly discovered coalfield?—Yes, I have thought about those lines, I think that lines in that country might pay; but it did not appear to me that the selection was a very good one.

3162. Do you know anything of the new Rewah coalfield, whether the coal is superior to other coal in India?—I have heard that it is equal at least to the best Indian coals, and it lies favourably for working.

3163. Have you paid any attention to the proposed line from Cawnpur to Bhopal, which has been pressed upon us very much?—Yes, I should think that line ought to pay from the through traffic.

3164. From the through traffic rather than from the local traffic?—Yes, I think so.

3165. Would not that through traffic be a good deal in competition with two other lines from Allahabad and from Agra?—Yes, I suppose it would, but I should say, merely speaking from general opinion, that probably there is room for both, or room for all three.

3166. Would not it increase the traffic which goes by the great Indian Peninsula which is already guaranteed by the Government?—Some part of the traffic would no doubt go by it.

3167. As regards feeder lines, you would say that certain feeder lines could be constructed with advantage?—Yes.

3168. With regard to the construction of railways, you expressed the opinion that they might, with great advantage, be constructed partly by the Government, and partly by companies; can you give us any sort of principle upon which you would distinguish the lines which you would keep in the hands of the Government, and those which you would entrust to companies?—No; but I certainly would not go upon the principle of giving the Government establishments nothing but unpaying lines.

3169. Would you think it desirable to hold in the hands of the Government the main trunk lines of communication?—No, I simply go upon the principle that if you have a Government establishment you should employ it upon paying lines as well as upon non-paying lines with a view of keeping it efficient, and preventing the comparisons which are often made in which the Government establishment is set down as inferior, because it is employed on lines that do not pay.

3170. Can you understand the policy under which the Government are buying up the Eastern Bengal Railway, whilst they are subsidising other railways to compete with it under private companies?—I am not aware that they are to compete with it.

3171. I refer to the Bengal Central Railway in one direction, and a local branch to Bhagwan in the other direction?—I do not myself think they would compete with it.

3172. Will not they tap the water traffic of the Eastern Bengal in two places?—No. Above at Bhugwangola they might, to a small extent, but I think that a great part of the traffic passes the Eastern Bengal before it comes to the Bengal Central.

3173. Do you understand the principle upon which the Government are buying up the Eastern Bengal Railway whilst they are subsidising private companies for the same region?—I suppose the principle must be, that it pays them well to purchase the Eastern Bengal, and that they expect to improve their financial position by doing so.

3174. You cannot carry the principle beyond that?—No.

3175. As regards non-paying lines, is it your opinion that it is desirable to make any lines that will not either directly pay the full interest, or will, at all events, pay a tolerable return jointly with the indirect improvements which may be considered as paying to the country?—There is a certain risk about the construction of railways in India, and I think they should accept the risk of a certain amount of non-paying lines along with the paying lines.

3176. In what sense would you accept the risk of a certain amount of non-paying lines; can you distinguish any lines which may be called barren lines, and which are never expected to pay, but which are made in order to obviate the chance of famine?—I think it is better not to draw broad distinctions of that kind, but to let the Government determine which are the best railways to undertake from time to time.

3177. As regards the forecasts which are to be made, is it your opinion that, under all the circumstances of the country, estimates which are made beforehand are at all reliable?—I think they are generally reliable if they are made with care. I do not think that they would be reliable in every individual case, but I think that general results would be very reliable. That has been my experience certainly.

3178. With regard to irrigation works, do you think that it is so?—I cannot speak with regard to irrigation works, because I have not the latest information about them; but up to the date at which I left India I found our forecasts to be very fairly correct.

3179. With regard to the employment of engineers, you say that you think it very desirable to have engineers who have both experience in railways, and also large Indian experience?—Certainly.

3180. But, as between the two, is not a knowledge of the country, and of the people and the habit

Sir *George Campbell*—continued.

habit of working with them at least as important as a very high knowledge of technical engineering?—I think the two things are both of them so valuable that I could scarcely set the one against the other.

3181. Do you find that the Government engineers have arrived at that combination of Indian and engineers' experience?—I think at this moment we have engineers of most excellent Indian service as well as railway experience.

3182. In the case of engineers taken on by the job, are you not likely to meet with cases where men taken up in that way do not work well with the natives?—You must select your men carefully.

3183. With regard to finding the capital for railways, I think you said that in order to float companies it is necessary that the shares should in the first instance go to a premium in order to give a profit to the middle men, if I may so term them, who float the companies?—Yes.

3184. The practical result of that is, is it not, that in order to float companies you must pay a certain toll to the promoters who float the company, and it is a considerable toll?—It is to a certain extent more expensive to the Government to give such concession as will carry a premium.

3185. Is it not practically the case that the Government can borrow directly a good deal cheaper than they can raise money through the system of guarantees either directly or indirectly?—There is no doubt about it.

3186. The Government can borrow as they require in the open market at about 3½ per cent. whereas, in order to guarantee a company, they are obliged to give 4 per cent. and some incidental or possible advantages besides?—Yes, certainly.

3187. Have you at all considered the plan, which was suggested by a witness who has been here to-day, of putting railways under something in the nature of one of the port trusts in India, that is to say, under a public body or trust, who should manage them as an intermediate stage between direct Government working and private companies making?—I think you would have great difficulty in arranging it.

3188. It has been tolerably successful with regard to the Port Trusts of Bombay and Calcutta, has it not?—Yes, because they have got people on the spot who are interested in them, and who pay attention to them.

3189. Do you think it would be much more difficult with regard to railways?—Yes.

3190. As regards the prospect of profit on the railways with which you are connected, how long has the Bengal Central been running?—Only a few weeks.

3191. We have been told that the traffic is not quite as large as was expected; is that the case?—The traffic is but small at present, but we have got the problem of the drawing of traffic from the river to the rail. We have always expected that there would be some difficulty in it.

3192. Is a part of the Bengal and North Western Railway open?—Yes; about 70 miles we have got open.

3193. Have you had an opportunity of testing the traffic on it?—We have had three or four weeks' traffic receipts which have been very various. We have had a *mela*, or fair, which has given us a very good start.

3194. Is the work going on throughout the whole of that line; is it all under construction now?—Nearly all of the main line and one of the branches is very far advanced.

3195. So that that line, from what you have told us, seems to be a good example for future companies. It will be contributed?—I suppose so.

3196. The arrangements are such that it is probable?—Yes.

3197. With regard to the comparative cost of the broad and narrow gauge, would you say that the cost may be taken to be as three is to four?—In one particular case it might be so; but I think it would probably be better given as about 1,500 *l.* to 2,000 *l.* in favour of the narrow gauge.

3198. Not as a proportion, but as a fixed sum?—Yes, as a fixed sum which, on the whole, would be a better measure to give.

3199. In the prices that you have given of the Bengal Central and the Bengal and North Western, does that include rolling stock and stations?—Yes.

3200. And everything else?—Except what I mentioned at the time when giving my answer, that we have no workshops on the Bengal Central.

3201. But it includes a complete complement of rolling stock and stations?—A sufficient complement to start the line with. Of course, as the traffic develops, you have to increase the rolling stock.

3201*. The Bengal and North Western Line is on the narrow gauge, and is to cost 4,500 *l.* a mile, I think?—Yes.

3202. Has it wooden sleepers?—Yes.

3203. The narrow gauge involves, does it not, a very much lighter rail and a cheaper style of stations?—The stations are somewhat cheaper.

3204. And altogether cheaper plant and material?—No, I think not. I think you might say that the works are equally permanent.

3205. Supposing that the rails were made the same, and the stations the same, and the fittings the same, what would be the comparative cost of light and broad gauge?—I could not give a figure; but the whole advantage you get is in the economy of the rails and sleepers, and lighter engines and lighter rolling stock. The narrow gauge requires less substantial rails and sleepers.

3206. I see it is asserted that you could combine lighter engines and lighter rolling stock with the broad gauge; is that so?—Practically, it has never been carried out on any large scale.

3207. Do you think it possible to do so?—Not with advantage.

3208. Would it be possible to retain the advantages of the cheap gauge, and to secure uniformity of gauge by making branches on the broad gauge with light rails, working very light engines?—I think that you would sacrifice more than you gained on the whole; you would sacrifice the possibility of developing of a large traffic without

Sir *George Campbell*—continued.

without increasing the weight of your rails and of your engines.

3209. You would gain uniformity of gauge, would you not?—Hardly, because you could not send your heavy rolling stock on the light rails.

3210. What would you lose; would it not be more expensive than the narrow gauge?—Yes, it would be more expensive, certainly.

Mr. *Brodrick.*

3211. Do you contemplate those feeders, of which you speak, being broad or narrow gauge?—I left that open for consideration; it would depend upon circumstances.

Mr. *Jackson.*

3212. You say that you think the Government might make a certain portion of the lines, and intrust the others to private companies; are you of opinion that the Government ought in all cases to indicate the lines which are to be made?—I think it is best that the Government should do so; but I would not absolutely bind the Government not to accept any lines but those included in its own programme.

3213. Not to accept but to indicate what lines should be made by the companies, for instance?—What I understand is that the Government would make a programme showing what lines it wished to have constructed, and it might offer those lines to companies; but that, on the other hand, the companies might suggest certain lines which they would wish to have, and in that case I would have the Government to consider whether it should so far alter its programme as suggested by the companies, or whether it should restrict the construction to the programme.

3214. Is the information obtainable in as convenient a form to the public or firms who might desire to promote companies in any way as it is to the Government officers?—I think it is not; but I think it is desirable that it should be put forward when the Government have the means of doing so.

3215. Do not you think that the public would be more likely to subscribe to those lines to be be made by companies if the lines have been indicated and recommended by the Government as lines suitable to be made?—I think so.

3216. You spoke of the debt on the Bengal Central being paid off by half per cent. per annum, as I understand, when the profits were over 5 per cent.?—Half of the profits over 5 per cent.

3217. In speaking of the debt, what do you mean in that case; do you mean the amount of money which shall have been advanced by the Government as interest during construction?—Yes. The Government is to get back the whole of its interest if the company makes over 5 per cent. It does not constitute a debt except when the company earns over 5 per cent. A separate account is kept, and it is liable to be repaid by the company in that way, but in no other way.

3218. You spoke of the Bengal Central having a guarantee during construction, but I think you also spoke of its being for five years certain?—No, the guarantee is up to a certain date, that

Mr. *Jackson*—continued.

date being five years, unless the line is completed previously, and then the guarantee ceases.

3219. That is to say, that the Government guarantee during construction ceases when a certain portion of the line is made?—No, it ceases when the line is completed and opened for traffic throughout.

3220. Will it be constructed within the period of five years?—Yes, certainly.

3221. You told us that 70 miles, I think, of the Bengal and North Western have been made; what is the total length of the line?—The total length of what we have got in hand under construction now is 302 miles.

3222. You were asked a question about the cost of rolling stock; have you any idea of the cost of engines?—Yes, in round numbers, I might say about 1,600 *l.* for a narrow-gauge engine, and about 2,600 *l.* for a broad gauge engine.

3223. Not of the same power, I presume?—No, but suitable for the work of the different lines.

3224. But do not they sometimes increase the cost of narrow gauge engines by an attempt to increase the power and to get it within the gauge?—Possibly they do, but we have not any engines of that character.

3225. You seem to be of opinion that in all agreements made for the construction of new lines there ought to be power to the Government, in the first place, to give a guarantee, and in the next place, that there should be power in the Government to acquire the lines after a certain period at a price to be agreed upon?—Yes.

3226. Would you think, supposing that at the termination of those agreements the Government took over the lines, there would be any difficulty likely to arise by reason of a large extent of loss in future times?—I think the probability is that the Government would not take over the lines, but would make fresh agreements with the company on the basis of the state of the traffic, and the works at the time.

3227. In what way a fresh agreement. Assuming that the Government has given a guarantee of 4 per cent. with power to purchase, as you have suggested, at the end of 35 years, or whatever the period may be if the line should become a paying line, what arrangement would you contemplate that the Government would make?—I think it is very possible that the Government might continue the employment of the company, and that it would not require to exercise its right of purchase.

3228. Continuing also its guarantee?—Yes; but on the other hand the Government might find it advantageous to make a change in the arrangements to take possession of the line, and get rid of the company altogether.

3229. Supposing that the lines became profitable under their working, and would seem to be a good financial operation for the Government to take over the lines, would you anticipate any difficulty in working out the general system under Government supervision and control?—I think that could be perfectly well done; but it might be inconvenient.

3230. I should like to get clearly what your view

Mr. *Jackson*—continued.

view is with regard to extension. You stated that you would not take into account the net reduction of charge, as you thought that Indian railways ought not to be constructed so as to entail additional taxation upon the Indian people; do you think that the rate of construction might be carried on up to the point at which it entailed no tax upon the Indian people?—I think it would be safer for the Indian Government to have a certain margin to go upon.

3231. You think that any surplus which may accrue might under your system of calculation be relied upon to pay the interest?—Yes, I think there is a growing revenue from railways, and that growth may be calculated to go on.

3232. I think you said in answer to the honourable Under Secretary for India that you would not hesitate to spend a capitalised sum of that amount?—Yes, I said so.

Mr. *Wodehouse.*

3233. You spoke of the importance of Indian experience in engineers with reference to cheapness of construction; do you think that the cost of construction has been enhanced hitherto by the insufficiency of our Indian experience?—I think that the cost of construction of the old railways under guarantee was very much enhanced by that reason.

3234. Do you contemplate a reduction in the cost of construction from further accumulation of Indian experience?—No, I do not think you can rely upon much in that way now, but no doubt the cost of construction of Indian railways has been reduced very much since the first guaranteed railways were constructed.

3235. But you do not contemplate a further reduction of expenditure?—No; I think I could hardly say that.

3236. You referred to the difficulties that the Government might have in employing engineers for the job without right to pension?—Yes, I think, if you could get men for that purpose with Indian experience, good men, you might construct the railways as cheap as you would by a Government establishment, but I think if you got engineers simply with English experience and English contractors you would have a rather expensive series of lines.

3237. Would there be a difficulty in employing engineers from outside and placing them over the heads of engineers in the Government service?—There might be some inconvenience, but I have no doubt that could be got over.

Mr. *Bolton.*

3238. You said I think that if companies were employed to construct railways they would require a 4 per cent. guarantee?—That is my conclusion.

3239. Do you mean that that is the average, or would it be in all cases necessary to have 4 per cent. guarantee?—I could not say exactly that in all cases it would be necessary, but I think that would probably be the simplest arrangement, if a 4 per cent. guarantee should be considered the rule.

3240. The arrangement with the Bengal Central can hardly be called a 4 per cent. guarantee, can it?—Certainly not.

Mr. *Bolton*—continued.

3241. There were some peculiar circumstances connected with it; have you looked at the details of the agreement?—I do not think it was anything in the agreement, I think it was merely an idea that the line was likely to be a paying one.

3242. With respect to th Bengal Central, of course you have not any experience yet what its receipts will amount to?—No.

3243. But in reckoning the profit, are you entitled to set aside a certain amount of sinking fund?—No, we should have to do that out of our own share of the profit.

3244. I think the Government have the right to purchase in 30 years; and the line will take, I presume, nearly five years to complete, which is the time stipulated?—It will take less than that.

3245. Practically, at 25 years, you must not only pay a fair interest for the 30 years, but you must also repay the shareholders the first cost of line, as the Government, I think, receives the line at the end?—If they purchase at the end of 30 years they pay 25 per cent. premium.

3246. At the end of 30 years you must repay the whole interest and the profit?—No, I think not. Supposing it happened that the line did not pay more than 5 per cent., it would repay the Government nothing, and still be entitled to get 25 per cent. premium on the capital.

3247. Provided that they take it?—Yes, provided that they take it; but of course they might not take it.

3248. Then they have not the right until the next five years to have their 25 per cent. premium?—Yes; if the Government then elect to purchase.

3249. Do you think it would be generally practicable to induce subscriptions for the formation of lines on the terms of the Southern Mahratta line, assuming that to be 3½ per cent. perpetual?—I think it would be better to give 4 per cent perpetual, and I think it would be worth the while of the Government to do so

3250. How would you meet the demand of the public for reducing the rates of carriage, because I presume that in any arrangement for a perpetual guarantee there would be a list of maximum rates?—Yes; the present contracts include maximum rates, and I think the arrangement for reducing them should be that when a railway pays a certain amount of dividend, the Government should have a right to insist upon those maxima being reduced.

3251. Would you allow the company to share the profits with the Government, or would you give all the surplus to the Government?—I think the company must have a share of the profits; otherwise you would not be able to obtain their co-operation in cheap working and cheap construction.

3252. With respect to the gauge; have you any practical experience of the working of two gauges on one system?—No.

3253. You do not seem to anticipate much difficulty in expense consequent on a break of gauge?—No doubt there would be a certain amount of expense. It has been set down at sums varying

Mr. *Bolton*—continued.

varying from five to 20 miles additional carriage according to circumstances.

3254. Does that apply simply to the expense of working the traffic?—No. I have seen a calculation made by an engineer who has had large experience, in which he took the whole cost, first of the capital outlay necessary to provide the transfer, secondly, the detention of wagons while the transfer was being made, and thirdly, the actual manual labour of shifting the traffic; and that worked out to an equivalent to eight miles of carriage at the ordinary rates, or as high as 20 miles where the goods were carried at specially low rates.

3255. You do not include in that the extra expense which must follow from two systems of that kind in respect of repairs and new stock?—Yes; everything of that sort was included.

3256. That must be rather an intricate calculation, I should think?—Yes.

3257. Could you put it in?—I could not. The Committee may have an opportunity of examining the officer himself, or I could obtain it from him if you wish it.

Mr. *Slagg*.

3258. You say that the public will not now come forward without a guarantee, and that, in fact, they will not take the risk?—That is my belief.

3259. Then that pre-supposes that there is a risk of some sort with regard to the future of railway construction?—I think there is a decided risk, and more especially if you consider each individual project by itself; but the risk is very small if you take it as the Government does over the whole of the lines, and in that case the errors of calculating the profits in one case would balance those in another, and you may arrive at a very safe calculation altogether.

3260. Still, according to your view, there is a risk?—Yes, certainly, and that risk is magnified in the eyes of the public.

3261. You mean that the public overrates this risk?—I think so.

3262. But the risk, substantial as it is, you think the Government would be justified in taking?—Yes, certainly.

3263. The Government, of course, mean the people of India themselves?—Yes.

3264. And any loss would eventually fall upon the Indian taxpayer?—Yes, upon the Indian revenues.

3265. Would it not fall principally upon the land tax?—Yes. That is not a question to go into now, but my idea is that the land revenue is not a tax but a share of rents.

3266. Then you think that the Government would be justified, although the English investors might not like the risk in imposing that risk upon the Indian taxpayer?—Yes.

3267. Are you alive to the present position of the money market in London?—In a small way; I am not an expert in that matter.

3268. I think you said that you considered 4 per cent. a fair guarantee for the Government to establish?—Yes.

3269. Do you know that money could be obtained now easily at nearly 3 per cent. in London?—Yes, I suppose it might.

Mr. *Slagg*—continued.

3270. So that, if the Indian Council could deal on terms which are freely open to any persons operating from a City point of view, they could really effect those financial operations at something slightly over 3 per cent. at the present time?—It is possible. But when I say a 4 per cent. guarantee, I mean that the guarantee should be for shares or stock. Of course, a good deal of money may be raised by debentures at whatever rate the Government can get such debentures.

3271. Then, as to the Government engineers, I think you consider that Parliament was unwise in discharging the engineers; do you think that those Government engineers are superior to the engineers that can be obtained by your contractors at any time?—I could not say that, but I think there are a very small body of contractors in India for Indian work.

3272. But there is no difficulty whatever at any time, is there, in getting a full staff of competent engineers for Indian railway work?—I think as long as you keep within moderate limits in construction it is so.

3273. Is there any reason to suppose that that is a less economical way than maintaining a large staff at the Government expense with pensions and privileges?—I think there is a great deal to be said on both sides. I think with a Government staff you have men who are accustomed to Indian work, and who know the natives better and work better with the natives. I think there are great advantages in that way.

3274. Still it is a matter in your opinion which is open to question?—Certainly it is open to question.

Mr. *William Fowler*.

3275. You said something about non-paying railways; you do not like the idea of making railways merely for the purpose of avoiding famine?—I suppose it would not be merely for that purpose. I suppose it would be partly to develop the resources of the country.

3276. A witness mentioned the other day that the present Governor of Bengal recently stated that Orissa was just as much isolated as it was in 1867 when a million people died; does not it strike you that there has been some neglect in making railways approaching that country in all that time?—I am not quite sure that it is as much isolated as it was. Of course, the Governor of Bengal has better means of judging than I have; but you have got canal communication, or at least it was contemplated that you should have canal communication in Orissa, and there are steamers now running towards Orissa through the canals.

3277. But as far as railways are concerned they are still isolated?—They are still without railways.

3278. Would not a railway from Calcutta in that direction go through some very fertile country also?—Yes, there would be some; but there is a very great deal of heavy drainage to cross, and the lines would be expensive.

3279. Is not the making of railways for preventing famines a financially good operation apart from the question of saving life?—Yes.

3280. Because those famines have been enormously expensive have they not?—Certainly.

3281. Do

Lord *George Hamilton.*

3281. Do you think that you can give India immunity against famine except at enormous expense?—Certainly we cannot.

3282. Then for many years it would be impossible to ward off famine by making railways?—Yes, to ward off famine, but you might mitigate the evil effects of famine very considerably.

3283. That is assuming that a famine occurs in districts where you make railroad?—Yes.

3284. But a famine may occur in a district where there is no railroad?—Yes, certainly; but if you cover India with railways, to an extent which I think might be managed within reasonable financial limits, I think you will go very far towards preventing any very disastrous effects from famines.

3285. You have expressed an opinion that I was rather sorry to hear hostile to the recommendations of the Committee of 1879; we had the advantage of hearing you on that occasion, and I think I may say that you supplied us with most of our data; you have spoken to-day of the discharge of engineers consequent upon that report; but was it not the fact that the Indian Government, quite independent of that report, recommended a large discharge of the Public Works staff?—I think so.

3286. So that that reduction would have taken place quite independently of that Report?—The reduction was said in the question to have taken place in consequence of the Report of that Committee, but that has been since I have had any connection with Indian affairs, and I am not able to verify it.

3287. Speaking of the employment of engineers you were asked the question if it would be possible to get in engineers from outside for the job; it would not be possible to do so, would it, except at a very great cost?—No, I think that any engineer of eminence in England would expect to be paid very highly indeed for going to India, and after you have got him there I do not think you would find him better than the engineers on the spot with local training.

3288. Therefore the policy with which you had a good deal to do was to set up a training college here, and to get young men, and give them the best possible education, so that they might become eminent engineers, and the Indian Government might have the advantage of their services at a moderate remuneration?—Certainly.

3289. Is that system working well do you know?—So far as I know it is; but my connection with the Public Works in India has ceased; I merely hear casually what happens from intercourse with other Government officers, and so forth; I have no official means of forming an opinion upon that subject now.

3290. With regard to the limit which you would place upon the construction of Public Works, your idea is that in proportion as the earnings of existing railways increased, so fresh capital should be borrowed?—Yes, either borrowed, or raised on guarantee, whichever was decided upon.

3291. You attach great importance, do you not, to the adoption of as continuous a policy as possible in the Public Works?—Yes, I think

Lord *George Hamilton*—continued.

there have been a great many losses from sudden reductions and sudden increases.

3292. It is impossible otherwise properly to regulate your establishment?—So it appears to me.

3293. Is not your proposal open to this objection, that in a good year the earnings would be large on railroads, and you have to increase your establishment and borrow largely?—No, I have guarded myself against that by saying that the calculation upon which the money for new works would be based must be taken from the average of five years.

3294. Would not that practically come to the same thing as fixing a certain annual sum, which may be borrowed and devoted to the construction of Public Works?—Yes, to some extent; but you would by this have the means of testing, as you go on every year, reducing or increasing, avoid working to a fixed sum which might be either too large or too small; you do not fix it for five years; you fix it for the one year, with the intention of revising your calculation every year, and then going on upon the same principle again.

3295. I do not see the difference; supposing you settled to borrow a certain capital sum every year for the next five years, that would entail an additional payment of interest; you propose to meet that interest out of the increased earnings of the railways, do you?—Yes; supposing you found that your increased earnings did not come in as fast as you expected, then you would make a proportionate reduction, not a very violent one, but a proportionate one, so as gradually to come down to a lower figure, if you found it necessary in the end.

3296. But is not your proposal exactly the same as borrowing a certain sum for a limited number of years?—It does not seem to me to be so; it does not work out in the same way upon my understanding.

3297. Under that system the sum must fluctuate more or less from year to year?—Yes, certainly.

3298. Then your establishment must fluctuate?—To a certain extent.

3299. But if you borrow a given sum for a given number of years your establishment would not fluctuate?—It would have that advantage certainly, if you could make quite sure that you were going on for the five years without any change; but I think probably at the end of five years you might require to make a very violent change one way or the other, and I would rather do it gradually as I go on.

3300. Your recommendation to the Committee of 1879 was that a certain sum should be annually borrowed over and above the surplus revenue?—Yes.

3301. At that time as you are aware the Indian Government was rather in financial difficulties, and therefore the sum fixed was low?—Yes.

3302. I am assuming that you would now go considerably beyond the two-and-a-half millions?—I think the calculation I have suggested would work out beyond that.

3303. Then, if a recommendation was made by the Committee simply to increase the sum to

Lord *George Hamilton*—continued.

whatever amount you thought fit, that would meet your wishes, would it not?—Certainly; but if I were responsible for the finances of India I would rather have an opportunity of revising it every year.

3304. Then your policy must change from year to year?—Not violently. If you go upon the average of five years you cannot make any very violent changes.

3305. You are strongly of opinion, from your Indian as well as your London experience, that the Government of India cannot rely upon public companies to supply any large amount of capital except with a substantial guarantee?—Yes; and I think further, that the Government of India ought, in the interests of the people of India, to keep a large amount of the profits of railways, and not give them all over to the companies.

3306. You had, I think, a good deal of experience of the original guaranteed companies when you were Secretary of the Public Works Department?—Yes.

3307. I suppose it is with the knowledge and experience which those lines furnished, that you wish to act very cautiously with regard to borrowing through private companies?—Yes, that is to say, no doubt the fault of the old guarantee system was that the rate of interest turned out afterwards to be much higher than the money could be raised for in the future, and the companies had a right to get it, and therefore for a long time while the profits were below 5 per cent. the companies had no interest in looking to cheap construction or cheap working.

3308. I think you said, in answer to a question that was put to you by the honourable Member for Manchester, that the Government here, if they employed the ordinary financial agency in London, could borrow at 3 per cent.?—I have no knowledge of that. The honourable gentleman knows better than I do on that subject.

3309. Your Bengal and North Western Railway, I think you said, ran through a rich country?—Through a very populous country with a great deal of produce. The people are not rich, but there is a large population and a very great deal of produce.

3310. It is as favourable a district as could well be found for the experiment of private companies constructing lines?—I think so, but I regard it as a district which is quite an unknown region to the people in England as a rule; not like the Bengal Central, for instance, which is near Calcutta, and a country with which English people are more familiar.

3311. Assuming that the Indian Government found that they could, through their own resources, construct all the railways that they thought necessary, would you recommend that the country should wait, or that the Government should employ private companies?—I think that if the Government could not, through its own establishment, construct all the railways required, they certainly should employ private companies, and I think they would do it cheaper by giving the guarantee than by a plan, which was at one time approved and expected to succeed, of getting the companies to accept the risk and take all the profits.

Mr. *Onslow.*

3312. Is not it the case that under the old system of guarantee there was an enormous amount of waste of money, for this reason, that the promoters knew they could get their 5 per cent., and there was no inducement of any sort or kind to economy in construction?—That is certainly so.

Mr. *Onslow*—continued.

3313. Under your proposal of a 4 per cent. guarantee, how would you propose to rectify that?—My idea is that where railways are likely to pay over the 4 per cent. guarantee, they should have a simple guarantee, with a division of the surplus profits, and in case the railways were likely to pay over 4 per cent., the company would have an inducement to make surplus profits, and consequently they would not be open to the objection that exists in the case of lines which are likely to earn less than 4 per cent. For such lines I would go on some such system as has been adopted in the case of the South Mahratta Company, where the company gets, in addition to its guarantee, one-fourth of the net profits of the undertaking altogether irrespective of any surplus over the guarantee.

3314. But in the case of the East India Railway, and other railways of earlier date, the companies have divided profits over 5 per cent., and therefore, according to your argument, or your theory, there was the same inducement then for them to save as there is now?—No, there was not, because the prospect of getting anything over 5 per cent. was so distant that nobody expected it at all.

3315. It was laid down in the contract that they were to get 5 per cent.?—That is quite true.

3316. Since the Government of India found out what a waste there was on those lines, are you of opinion that the system of audit and the system of supervision now in operation would under your proposal of a 4 per cent. guarantee tend to provide against a waste of money, like what there had been in former years?—I think so, certainly. The companies have now an interest in getting surplus profits.

3317. The Government supervision and the Government audit in those days were both of them very lax, were they not?—That is to say, they were very inexperienced.

3318. Is it your opinion that Indian railways have paid on account of their passenger traffic, or on account of the profits that they have made from carrying goods?—The lines that pay best pay chiefly upon their goods.

3319. We had a witness at our last meeting who said that, in his opinion, whenever any fresh contract was made for any new railways the Government ought in that contract to lay down maximum rates; if any fresh contract was made, would you propose that there should be maximum rates, and that power should be left with the Government of varying from time to time the rates of that particular railway?—I think that there should be maximum rates, accompanied with a power of altering the maximum on certain contingencies of profit hereafter.

Sir *George Campbell.*

3320. A witness, who was examined on the last day, told us that he was informed by the experienced secretary of a railway company, that the original bargain was that the Government should

Sir *George Campbell*—continued.

should have the power to fix the rates, but that that power could only be exercised in fixing a maximum rate at once, and that in the case of the Great Indian Peninsula that power was exercised, and the maximum was fixed a great deal too high, and that the power had in that way departed from the Government; is that a correct statement of the case?—I am afraid I cannot answer that question.

3321. Cannot you tell us what was the nature of the contract with the existing guaranteed railways with regard to that?—I have forgotten it; I cannot carry it in my memory.

3322. Can you tell us, in the case of the existing contract with the Bengal Central and the Bengal and North Western as regards rates, what is the power of interference which is reserved on the part of the Government?—We have got maximum rates fixed.

3323. Is no power reserved to any authority to alter those rates subsequently?—No.

3324. Do you think that that is safe, looking at the possible change in the value of money, and the change of circumstances?—I think an arrangement might be made in future contracts for the Government to alter the rates under certain circumstances.

Mr. WILLIAM BIRKMYRE, called in; and Examined.

Chairman.

3325. YOU are, I understand, a Manufacturer in Bengal?—Yes, I am senior and sole managing partner of Birkmyre Brothers.

3326. What class of goods do you manufacture?—We manufacture jute, gunnies, wool sheets, cotton packs, &c.

3327. Is that a business which is very largely increasing in Calcutta?—Yes.

3328. How long has your firm been connected with India?—Ten years.

3329. I understand that in the year 1874 you removed the whole of your establishment from Scotland to India?—Yes, 10 years ago, we did.

3330. What did you take out from Scotland?—Our machinery.

3331. How many workers do you employ?—We employ about 5,000 natives, 200 criminals, and seven Europeans. I may add, by way of explanation, that about one-third of our workers come from great distances, and are known as up-countrymen. I lay special emphasis on this, because many people suppose that the natives are stationary and will not emigrate; but like any other nationality, I have always found that if you give them an inducement in the way of employment, they will emigrate.

3332. Is the work in mills and jute factories popular with the natives?—Yes, whenever a mill is erected the ryots leave the land, and domestic servants their situations, for this class of work.

3333. How many hours per day do they work?—The mills are wrought from sunrise to sunset, averaging twelve hours per day; but as we employ our workers in shifts, each worker does on an average, all the year round, eight hours per day.

3334. Do you find it sometimes a little difficult to manage them?—We treat them fairly, and we have no difficulty in managing them.

3335. There are works, are there not, in the neighbourhood of Calcutta, where they have experienced a difficulty?—Occasionally there has been a misunderstanding elsewhere, but we have had none.

3336. You have also taken some interest in the question regarding the wheat trade of India, have you not?—Yes, in its relation to railway business.

3337. What induced you to take up that subject?—Two years ago I learnt, accidentally, for the first time, from Principal Young of Jubbulpur, that wheat was selling at Bailaspur

Chairman—continued.

year after year at 5*s.* to 6*s.* per quarter, and that other cereals were so cheap as to be almost valueless. Shortly thereafter, in arguing with a friend against reciprocity, it occurred to me that as England was in a measure converted to free trade by the Irish Famine, so one method of converting the Americans was through the purses of their farmers by Indian railways and Indian wheat. I mentioned this to Major Gordon, who at my instigation, wrote that yellow pamphlet, in the commercial details of which I assisted him.

3338. Have you any views which you wish to state to the Committee regarding the further development of India?—So far as I can judge, one of the most undeveloped resources of India is her saleable labour. To give you one example coming under my own personal knowledge; my gatekeeper in Scotland receives 68*s.* per month, upon which he barely lives, whereas my gatekeeper in India receives 13*s.* 6*d.* per month, upon which he saves about half of his salary. When I sell the labour of my Indian gatekeeper in the market of the world, how much wealthier a country is India? I may say that there is an enormous margin still to develope in this cheap labour. In the neighbourhood of Bhilaspur coolies are now to be had at the rate of 1½*d.* per day. The cowrie is still a coin largely in use amongst the natives. I may also add that if England was as much debarred from selling her labour in the markets of the world as India is, there would be famine here every year, instead of as in India, occasionally.

3339. To go back more particularly to our order of reference, do you think that railways could be extensively extended in India without State assistance?—No, I think not.

3340. Do you think that it has been sufficiently proved that the Government must aid in some mode of fashion?—Yes.

3341. Have you anything to say about the metre gauge?—Yes; I say, generally, that there are five gauges in India, but for the purposes of this inquiry there may be considered as being only two, the standard gauge of 5 ft. 6 inches, and the metre gauge of 3 ft. 3 inches, and 3 ft. 3-8ths inches. The metre gauge is about 14½ inches narrower than the tramways in Paris, and narrower than the tramways at Westminster Bridge.

3342. What is the opinion with regard to the metre gauge amongst merchants?—It is particu-

Chairman—continued.

larly unfavourable in the case of those who have had experience of its operation.

3343. Do you mean unfavourable for the certain reasons which have been already set before the Committee?—Yes.

3344. What view do the natives themselves take of the metre gauge?—As far as I have had experience with them it is very unpopular with the natives. I have heard it described by them as "the wretched line."

3345. Then you would not advise any extension of the metre gauge lines?—No, not except as feeders in very isolated districts, much in the same way as tramways in a city are feeders to a railway.

3346. Do you recollect when the Rajputana and Malwa lines were constructed whether the commercial community remonstrated against making them on the metre gauge?—Yes.

3347. Was any attention paid to their remonstrance?—No, it was ignored.

3348. Was there a similar remonstrance when it was proposed to make the Punjaub line on the metre gauge on the part of the military authorities?—Yes.

3349. And that was attended to?—Yes.

3350. Have you any particular information which you wish to lay before the Committee regarding Indian railways?—Yes, I think that railway finance should be kept more distinct from the finances of the Empire. For instance, Sir Auckland Colvin, our Finance Minister, in his financial statement for 1884-85, states that the net result to the State from its connection with railways has been a net gain during the past five years of 3,270,843 *l.* This I at first accepted as a fact, but lately my confidence in it has been somewhat rudely shaken by finding that this alleged net gain excludes the loss by exchange and other charges, the loss by exchange on railway transactions alone amounting to nearly 1,000,000 *l.* per annum. The statement of this net gain to the Government, unqualified as it appears in the financial statement, is, I consider, calculated to mislead, it being based on an altogether incorrect assumption that the rupee is equal in value to 2 *s.*; and the whole effect on my mind is the more disturbing because I cannot make out from the other part of the financial statement how much this loss on the whole railway account amounts to. Further, I cannot separately trace the amount of the furlough and pension allowances of the officials employed on the State Railways. As in the case of loss by exchange it appears they are lumped together in the total expenditure of the Empire, and the State railways are in no way charged with these items of expenditure.

3351. Do you think that the railway account should be kept entirely separate?—Yes; an account should be kept as a merchant keeps his books, separately for every railway, and for the railways as a whole.

3352. Do you concur with the preceding witnesses, most of whom, I think, have told us that, looking at the general state of Indian finance, the time has now come when the Government might raise the limit somewhat and spend more on railways?—Yes; for instance, making railways or any large work in driblets is a most

Chairman—continued.

expensive proceeding. The Rajputana and Malwa Railway was begun in the year 1870, and it took 10 years to construct, the total length being 1,116 miles. Had it been constructed in three years instead of 10 years, the country would have had the full benefit of it seven years earlier instead of a very partial benefit of it, as it was opened in sections during construction. What I propose is this: give us in the next seven years what the present limit would give us in 20 years.

3353. Would you think it right to raise a good deal of this money by way of taxation, or should you borrow it?—I would clearly borrow the whole of it.

3354. In what market would you borrow?—In the very cheapest market.

3355. Where would you borrow now?—To-day I would borrow in London because it is the cheapest market.

3356. That would naturally increase the home charges?—Yes; but as we borrow for a fructifying estate you would in the end more rapidly meet the home charges. Indian experts in finance who understand the Indian Balance Sheet, which I cannot, will tell you that the amount of remittances for home charges is increasing, and yet the taxation in India is decreasing, and that we were never more lightly taxed than at present, although the home charges were never greater. When Europeans borrow permanently, they do so in Europe because it is the cheapest market.

3357. You do not think that there will be any increased difficulty in England owing to these home remittances?—No, quite the reverse; for during construction we would remit largely to India, and those remittances would *pro tanto* reduce the usual burdens. If 10,000,000 *l.* were borrowed in this country annually, 6,000,000 *l.* of that amount would require to be remitted to India, which would reduce the usual burdens to that extent. On the other hand, when exchange rises the natives pay less for their European goods, and those natives who are served by the existing lines would get less for their produce; but against that those situated on the new lines would get a market for their produce, which hitherto they have not had.

3358. But still there would certainly be a considerable period before the lines are constructed or yielding any revenue at all?—The manner in which I would meet that difficulty would be in the commercial method, that when these lines are under construction the interest accruing should be added to the capital account, the same as was done in Bengal and North Western Railway Railway Company.

3359. What is your view with regard to the State making railways itself, or letting companies make them on a guarantee?—I think there is ample room for both.

3360. Did you hear the evidence of the last witness?—Yes, I heard his evidence and I agree with it.

3361. Generally speaking, do you agree with the evidence of General Dickens?—Except that, I think the Government, where they give a guarantee, should have absolute control of the rates. My proposal is, give a guarantee with half profits and retain the absolute control of rates.

3362. You do not think it would be sufficient when

Chairman—continued.

when a railway started that the Government should fix the maximum?—No.

3363. But you believe it is necessary in the interests of the public that the Government should at any time be allowed to step in and reduce the rates in a manner which would be just to the railway, and at the same time a benefit to the public?—Clearly so. The fact of the Government being half-partners in the excess of rates, is a guarantee that they will look at the matter fairly.

3364. You attach great importance, do you not, to this control?—Very much so. Low rates simply mean an increased area of country served by a railway.

3365. And you think that the instances of Indian railways which charge too high rates stand greatly in the way of the development of the trade of the country?—Greatly. If the Committee had the time to spend with me in inquiring into this subject, I could show that the advance of rates on the Great Indian Peninsula Railway, which took place on the 1st of May 1881, diminished about 10 miles on each side of the railway the country served by the railway. The advance of rates upon this Great Indian Peninsula line on the 1st of May 1881, varied at the different stations from 3·36 per cent. to 21·79 per cent. I wish to hand in for the information of the Committee the present rates of the Great Indian Peninsula Railway (*delivering in the same*).

3366. Do you mean that in some cases the advance was 3·36 and in other cases 21·79 per cent.?—*Yes; the result of agitation was* that they made a slight reduction last year after the wheat season, but to-day those are the rates showing the increase and the decrease at the respective stations. At Harda you will observe the increase remains 20·42.

3367. Has the question of gauge any connection with this question of rates?—Yes; the broad gauge can carry goods cheaper than the metre gauge.

3368. Have you formed any opinion as to the lines that are most urgently needed in India?—I would prefer to leave that to the Indian Government, who have surveyed the lines, and have collected all the necessary information regarding them. It is a question which really I am not competent to deal with.

3369. You would rather not suggest any particular lines?—No, I think it does not come within my province.

3370. Are there any general considerations which, in your opinion, have had an influence in checking railway and commercial development?—I think that if there were more gentlemen on the Indian council having practical experience with the working of railways (I believe there are none at present), it would be better for India, and it would give more confidence to commercial men in India. That is the chief thing I would mention.

3371. You would leave the choice of lines to the Indian Government?—Quite so. They have full information, and I would leave the choice of lines and the question of gauge entirely with the Indian Government.

Chairman—continued.

3372. Would you leave to them the question whether they should be made by the State or by companies?—Yes; they are on the spot, they know the circumstances, and their information is more reliable, at first hand and not at second hand.

3373. You would leave to the Indian Government, controlled by the Secretary of State, the amount annually to be spent, without any limit?—I would fix a limit for the next five or six years.

3374. What in your view would be a moderate sum?—I would say not to exceed 10,000,000 *l.* per annum, but at the same time I would not say to them for the first year that they should spend 10,000,000 *l.*; the increase would require to be carried out judiciously, with due reference to the money market and the supply of labour, and all other considerations involved. At the present moment if we ask the Government, why do not you spend more public money on railways, the answer is: We can spend only 2,500,000 *l.*; that is all we are allowed to borrow.

3375. Is there any really strong feeling amongst the native population of India against the extension of railways?—I have never heard of any such feeling.

3376. You do not believe in this cry that they are liable to be much more severally taxed if the railways are increased?—No, I have heard that to-day only for the first time. I have arrived from India only about 10 days ago.

3377. Are you able to read the Indian vernacular newspapers?—I cannot do that, I am sorry to say.

3378. Have you any other suggestions that you would like to make to the Committee?—I do not think that the fear of a depreciation in silver should deter the Government from borrowing in the cheapest market. I would say further, that generally speaking the country beyond a distance of 40 miles from the present arterial railroads is unserved with railways; that is to say, 40 miles on each side is the limit to which the present railways serve the population on an average; so that a railway 80 miles parallel to the present one would on an average throughout India tap a new country.

Mr. *W. H. Smith.*

3379. You have stated that you would propose to spend in seven years what the Government contemplates spending in 20?—Yes, provided, of course, it could be done judiciously.

3380. A sum not to exceed 10,000,000 *l.* in one year, and of course judiciously spent?—Yes.

3381. Are you prepared to face an increase of taxation in India in order to meet the interest which may not be earned by the railways in order to carry out those works?—If commercially paying lines are made, upon our experience of the past there would be no loss, on the other hand rather a profit.

3382. What is the commercial experience of the past?—I will just read exactly what the experience actually has been. The Rajputana and Malwa Line, 1,116 miles in extent, completed in 1881, earned in that year 5·5 per cent.; the Rangoon and Irawaddy Line, 161 miles in extant opened in 1877, but making two years' allowance, say in 1880, earned 4·23 per cent.; in 1881, 5·16 per

Mr. *W. H. Smith*—continued.

per cent.; and in 1882, 4·97 per cent. The Patna Gya Linea, 57 miles in extent, opened in the year 1879, earned in the year of opening 3·58 per cent.; in 1880, 6·56 per cent.; in 1881, 5·11 per cent.; and in 1882, 5·33 per cent. The Northern Bengal Railway, 280 miles in extent, completed in 1879, earned in 1880 3·20 per cent.; in 1881, 4·41 per cent.; and in 1882, 5·33 per cent. The Tirhoot Line, 85 miles in extent, completed in 1879, earned in 1880, 4·49 per cent.; in 1881, 3·70 per cent.; and in 1882, 3·94 per cent. The Cawnpur and Ferrukhabad, 86 miles in extent, completed in 1881, earned in 1882 3·74 per cent. Those are taken from the latest returns of the Director General of Railways.

3383. Are you of opinion that there are many railways to be made in India which will produce like results?—I think so.

3384. But you are not able to indicate them to us?—I am a merchant, and not a railway expert, but I say that if the future is to be anything like what the past has been, with a judicious selection of lines (and I think we can trust the Government of India to make a judicious selection, as they have already done), there will be no fear of the results. And I may also add that the Under Secretary of State, in his last Budget speech, states, "that the net profits upon railways were 5·37 per cent. on the capital employed."

Mr. *Samuelson.*

3385. Irrespective of exchange?—If you show the exchange at the correct rate it reduces the capital account of the railways, because at present a fictitious rate of exchange is taken; supposing 60,000 rupees is taken to make a line of railway in India, the Indian accounts show the capital cost as 6,000 *l.*

3386. At all events you say this; that it would be to the interest of India, and you are prepared to run the risk of spending annually, for the next seven years, three times the amount which was

Mr. *Samuelson*—continued.

contemplated in the construction of railways in India?—Yes, certainly.

3387. You are prepared to confirm the opinion that the industries of the people of India would be benefited to a very great extent?—Yes.

3388. And you think that it may be wisely done?—Yes.

3389. I think you said that the country served by the railway was 40 miles on either side?—Yes, on an average.

3390. You would consider a country served by a railway, which had a railway within 40 miles of it?—Yes, I think so, on an average; I would allow a little latitude, and say 50 miles.

3391. You spoke of 1¼ *d.* as the wages for a coolie?—Yes, in the neighbouring villages of Bhilaspur.

3392. Is that for an able-bodied man, who would have to support himself, and buy his own food and clothing?—Yes.

3393. What is the effect of railways in increasing the rate of wages of men who are near a railway in India?—In the neighbourhood of Calcutta, for instance, we pay our coolies about 8 rupees a month; that is about 4 *d.* or 5 *d.* a day.

3394. Is the cost of living much greater?—Yes, the cost of food is greater; indeed the cost of everything is greater.

3395. May I ask you whether your manufactures find their market in Bengal or where?—All over the world.

3396. But your raw material is found there?—Yes, it grows there.

3397. You have found, I take it for granted, that the transfer of your manufactures to India has been satisfactory to you?—I do not regret it.

Sir *George Campbell.*

3398. With regard to those criminals whom you said you employed, have the Government of India taken to letting out their criminals?—No, we send our work to the gaol, to be there sewn by the criminals.

Tuesday, 6th May 1884.

MEMBERS PRESENT:

Mr. Baxter.	Mr. William Fowler.
Mr. Bolton.	Mr. Gorst.
Mr. Brodrick.	Mr. Jackson.
Sir George Campbell.	Mr. Onslow.
Mr. Carbutt.	Mr. Bernhard Samuelson.
Mr. Kynaston Cross.	Mr. Slagg.
Mr. Dalrymple.	Mr. Wodehouse.

THE RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

Mr. WILLIAM BIRKMYRE, re-called; and further Examined.

Mr. *Bolton.*

3399. IN your former evidence you expressed an opinion with reference to the rates charged on Indian railways, and that you had a great desire, as is natural, that those rates should be maintained at a very low figure?—Yes.

3400. You proposed also, I think, that it would be desirable, in your opinion, that the railways should be made by Companies in preference to being made by the State under an absolute guarantee, and one-half of the profits of the year over the guarantee; how do you reconcile those statements; how would you propose that that interest in the success of the railway, which alone I think would be a sufficient spur to the companies to make railways pay, should be maintained, as they would only, under any circumstances, receive one-half the profit?—In excess of the 3½ per cent. They would first of all get an absolute guarantee of 3½ per cent., and then the profits in excess.

3401. It would pay probably therefore, in the hands of the Indian Government, to reduce the rates as they thought proper?—To make the rates as they thought proper; in other words, I hold that since they have an absolute guarantee, they have no reason to complain, provided the Government should work all the railways free.

3402. If they are satisfied with 3½ per cent.?—Quite so.

3403. Do you suppose that under those circumstances the capital would be obtained?—Yes.

3404. You would not contemplate that the company really should make additional profits, because the object is to maintain the rates as low as practicable, compatible with the earning of 3½ per cent. guarantee?—That is for the Government of India to say.

3405. But do you expect that the Government would say that they should earn any profit over 3½ per cent. under those circumstances?—The Government of India are themselves half partners in the concern, and they are naturally desirous of a profit as well.

Mr. *Bolton*—continued.

3406. But they would be urged by their traders, such as yourself, for example, whenever the profit showed an indication of rising above 3½ per cent., to reduce the rates?—There would be that tendency for the development of the country, of course.

3407. Do you think that under those circumstances capital could be got?—Easily.

3408. I think you said that the advancement of the rates by the Great Indian Peninsula Railway Company, of which you gave us the details, was equivalent to a cessation of traffic to the extent of 10 miles on each side of the line?—Yes.

3409. Is that merely an opinion, or have you ascertained it as a matter of fact?—The Commissioner of the Central Provinces, in a communication to the Chamber of Commerce of Bombay, dated the 12th of September 1883, estimates that the average distance from which wheat is carried to Nandgaon station is 50 miles, and the average cost of carting a quarter of wheat is 3 *s.* 1 *d.* In the same communication he states that the Deputy Commissioner of Hoshungabad gives the average distance from which wheat is brought to Harda as 25 miles, with a cost of cartage of 2 *s.* 6 *d.* per quarter; and the effect of a reduction on existing rates at Harda would be that 10 more miles on each side of the railway would receive railway service; the advance was 1 *s.* per quarter, and that limits the service by 10 miles on each side of the railway.

3410. That is the evidence upon which you made that statement?—Yes.

3411. You have also told us that 1¼ *d.* per day was the wages paid to an able-bodied coolie in villages neighbouring to Bilaspur?—Yes; in the district villages of Bilaspur.

3412. Do you know that as a fact?—When I learnt that that was the rate of coolie wages I was incredulous, but on making special inquiry, through a channel in which I had implicit confidence, the result I found as stated.

Mr. *Slagg.*

3413. I think you said in your pamphlet that you advocate, in order to encourage the wheat traffic, a guarantee to Indian railways. Are you aware that the Indus Valley Railway, which only pays 2 per cent. towards the 4 per cent guarantee, is one which the Punjaub Administration reported to be throwing a large number of boatmen out of work?—The Indus Valley is a military line. My appearance here is on behalf of the commercial community, as I stated on Friday, and what they desire is to make commercial lines which will be no burden to the country.

3414. Then as to the Central Bengal Railway, is not that said to be competing with the boatmen on the Ganges?—It is not completed yet, I think; it has only been open for a very short time; only for a few weeks, I should say.

3415. I think you also said in your evidence that you had lately been enlightened on the point of the loss by exchange in the last five years; if it turned out that the supposed rate of earnings of Indian railways really constituted a deficit, would that in fact modify your views which you previously expressed as to the extension of railways by 20,000 miles?—No; if commercial lines only are made I do not think there would be any increased burdens on the taxpayers of the country.

3416. Because you have the fullest confidence that they will provide for the guarantee, and something more besides?—Yes; because railway construction is now much better understood than it was before, and we need not pay such a large guarantee as was previously paid.

3417. I think you said that the native public and merchants were prepared to pay for railways; have you any evidence of native opinion on the subject?—I do not think that I said that the native public were prepared to pay. The only way that I have of ascertaining the native public opinion in India is through extracts given from the native newspapers into European newspapers published in India; and I have seen no such extracts as would lead me to believe that there is any anxiety at present in the native mind upon the subject of the extension of Indian railways.

3418. With regard to the comparison with the American railways of which, I think, you have made a great point in your interesting pamphlet. Are you aware that the American railways carry 270,000,000 passengers and 290,000,000 tons of goods, whilst the Indian lines carry only 9,000,000 tons of goods and 48,000,000 passengers, that is, taking the present existing lines; does not that make a very great difference, and rather destroy the comparison between the two systems?—I did not compare the traffic carried upon the respective systems in the pamphlet; I merely mentioned the fact that America, with a much sparser population, was far ahead of India as regards railways.

Mr. *William Fowler.*

3419. I think you said, on page 12 of your pamphlet, or, more strictly speaking, Major Gordon's pamphlet, something with regard to the selling price of wheat at Bilaspur. I suppose you are aware that that has been disputed by the Government of India in some of their papers; and perhaps you will give us your authority for that statement?—The authority is simply the Government of India itself; the Gazette of the Central Provinces

3420. Have you an extract with you from that paper?—I gave the extracts last year to Mr. Cross, and I think Mr. Cross will confirm what I have said, and will bear out the prices which I have stated as to the rates at which wheat was selling in the Central Provinces.

3421. I suppose you would not at all state that the selling price was an absolute indication of the cost of production?—Not at all; but I am prepared to give an estimate to-day of the cost of production.

3422. If you would give it to us it would be interesting to the Committee, I think?—In this communication, which I have already referred to, from the Commissioner of the Central Provinces to the Chamber of Commerce, he estimates that on land adjacent to lines of railway, on an average the cost may be taken as 11 *s.* 8 *d.* per quarter.

3423. How does that compare with what is supposed to be the Dakotah cost?—The Dakotah cost is in an unopened district in America as against an unopened district in India. Bilaspur is an unopened district, and Dakotah is an unopened district in America, so as to make the two comparisons fair; but the rate that I have given now on the authority of the Commissioner of the Central Provinces, 11 *s.* 8 *d.* per quarter, is in what may be called an open district, which has communication with lines of railway.

3424. Is the conclusion that you come to from that favourable or unfavourable to the price at which India can raise wheat?—I think highly favourable.

3425. Will you just work that out a little more; I do not quite understand the way in which you put it. You say, as I understand, that the price, as calculated by the Commissioner of the Central Provinces, is in an open district of India?—In a district served by railways.

3426. The Dakotah price is in districts not opened up?—It would compare with Bilaspur, which also is in a district not served by railway.

3427. But the cost price in Dakotah would not be increased by railways coming into the district?—Labour generally rises.

3428. I notice that in page 13 you use this expression, "Summing up these facts, it would appear that wheat can be raised at Bilaspur, in India, at from 5 *s.* to 6 *s.* a quarter, against 12 *s.* to 13 *s.* at Dakotah, in America;" you did not make any distinction in the character of the districts in that remark at all?—I think, if you begin a little further back, you will find that it refers to the unopened districts of India.

3429. That I admit, and there is something in it; but I do not think it goes so far as you appear to make it; I do not wish to prolong this, but I think the cost price is really a very important matter?—I think that, in page 12, you will

Mr. *William Fowler*—continued.

will see it says, "comparing this with the prices of wheat in the unopened districts of India."

3430. Then it comes to this, that you think that wheat can be raised, according to the official evidence, in the Central Provinces at 11 *s.* 8 *d.*?—Yes.

3431. Have you calculated what it would cost to bring it by railway in the ordinary way to the coast?—I have not got an estimate of that. I did not expect to be examined upon that question to-day, or I would have brought evidence on the point.

3432. Are you aware at what rate Indian wheat is selling at this time in England?—I do not know particularly.

3433. Would you be surprised to know that within a few days Indian wheat has been offered in England at 30*s.* per quarter?—35*s.* is the last quotation that I heard; but the market is so depressed that I am not surprised that it should be 30*s.*, for the poorer descriptions, I suppose.

3434. In answer to Mr. Bolton, I think, you said that you thought money could be raised in this country at a very low rate of interest, if it was guaranteed by the State, and without any share of the profits at all?—I believe it could; but it could be raised more easily with a share of the profits.

3435. Do you mean with a permanent guarantee, or a limited guarantee?—A permanent guarantee.

3436. Supposing there is a share of the profits, does it not become very difficult for the Government to reduce the rates because the money has been raised upon a certain estimate, say to-day, and then you may find that, in order to compete with America, you have to reduce the rates, and thereby reduce the profits?—Hitherto, we have always found that a reduction of rates means increased dividends.

3437. Up to a certain point it may be so, but that is a question of degree?—I will give you an example of it; the rates upon the East Indian Railway were, in 1872, 29 rupees per ton, and the total tons carried in that year were 458,608, and the net per-centage of earnings upon the total capital outlay was 5·25. In 1882, when the rates were reduced to 21 rupees, 1,581,925 tons were carried, and the railway earned 8·56 per cent. on the total capital outlay, the number of miles during each year being about the same.

3438. That is very true up to a certain point; but supposing the shareholders get accustomed to very high dividends, and do not like to see them reduced, you would not put the proposition that you can always go on reducing indefinitely?—There is a limit, of course, and that, I think, should be left with the Government of India, being part shareholders.

3439. Then you have got a partner in the affair?—By all means, the Government is a partner.

3440. And your partner has a right to object, has he not?—Clearly, but seeing that they have an absolute guarantee of 3½ per cent., I think when the Government give that on the one hand,

Mr. *William Fowler*—continued.

they are quite entitled to have an absolute control on the other hand.

3441. You mean to say that as a man cannot lose up to 3½ per cent., he must take his chance as to what the Government may do with him for the rest?—Quite so. There is so much capital seeking employment, that I think it would be invested for a 3½ per cent. guaranteed dividend is a very fair dividend.

3442. You must remember that people have very different views as regards investments, on the other side of the world, from what we have here?—As it is a guarantee in gold, it is equal to a guarantee on this side of the world, and whatever it is, the Indian Government guarantee it, not an association of individuals, and the Indian Government security stands very high.

3443. I do not dispute that for a moment; I want to ask you with regard to one observation that you made, as to the results of railways as a matter of profit and loss; it may be perfectly true, may it not, that a railway may not show a very large dividend to the shareholders, and yet be an enormous benefit to the neighbourhood and the country which it passes through?—Yes, to the country, certainly.

3444. And therefore to the Government?—Yes.

3445. Therefore it would be a great mistake, would it not, to be too much guided by the mere question of profit and loss, as shown by the dividends?—Yes.

3446. I think that is fully set forth in your Paper, but have you any further remark to make upon that question at all?—The parties in all countries who benefit by railways chiefly are the landowners, and in India the land belongs to the State, and that means generally (I cannot go into details) an increased rent for their land, and increased prosperity for their tenants.

3447. But the Government do not often raise the rents?—Then their subjects get a still greater benefit. If they do not raise the rent it is a personal benefit to the farmers.

3448. As a matter of fact, there is a great increase of revenue, whether it goes into the hands of the Government or of the country?—Yes, and the State gets a benefit by it.

Mr. *Slagg.*

3449. May I ask you if you include the landless labourer in those persons who get the benefit of it?—Yes, the landless labourer benefits.

3450. How is he benefited?—He gets more employment for his labour, and the farmer when he sells his crop can employ more men to husband it.

3451. Does the farmer, as a matter of fact, pay higher wages in consequence?—Wages are always in demand where a farmer can sell his produce with a railway alongside it, which he cannot do without a railway, and of course he can employ more people to help him in his business.

3452. May I ask if any advance of wages has taken place in favour of the labourer in consequence of the higher prices of wheat through the

Mr. *Slagg*—continued.

railway facilities?—I do not belong to the wheat districts of India, and I cannot say of my own knowledge.

Mr. *William Fowler.*

3453. Something has been said about America; is it not the fact that in America the people send the railway into the desert with the hope of developing the country, and what we are asked to do is to send the railway into this district, which is full of people; is not that a contrast?—Yes.

3454. That is a contrast rather than a comparison?—Quite so.

3455. And is it not the fact that, as a rule, speaking generally, the results of railways in India have surpassed official expectations?—I believe so.

Mr. *Slagg.*

3456. In Major Gordon's pamphlet, at page 15, you speak of the Government action in relation to the too abundant surplus produce, do you know any districts where there is a great surplus of produce?—I would refer you to the Chamber of Commerce memorial upon this pamphlet, when they presented it to the Viceroy; I think it is there pretty clearly brought out.

3457. It is stated in that letter to the Viceroy, but of your own personal knowledge do you know any district where there is large surplus produce available for exportation by railway?—I can only judge from the reports which are published from year to year.

Chairman.

3458. You have already stated that you are not familiar with wheat?—No, I have never been in the wheat districts for any length of time. I have merely passed through them.

Mr. *Slagg.*

3459. Your opinion is gathered from the literature of the country?—Yes, and from gentlemen who have been there.

Mr. *Carbutt.*

3460. You complain of the rates on the Great Indian Peninsula Railway; have you had any experience in obtaining lower rates from private companies as against Government-worked railways, that is to say, have you endeavoured to get lower rates from the Government railways as well as from private companies?—All the lines upon which I travel, and which are near to me, belong to guaranteed companies, and I have had no experience in dealing with State railways.

3461. You have not heard any complaints that the Government is more difficult to deal with than private companies, or the private companies are more difficult to deal with than the Government?—No; on the other hand I have heard it universally admitted that the Government are much more accessible in the matter of rates than private companies. I would remind this Committee that during the scarcity in Bengal in

Mr. *Carbutt*—continued.

1873–74 the Government went to the East Indian Railway Company and said, Reduce your rates, and we will make good the loss to you if there is any loss; and they reduced the rates with this effect: that the railway company, from their own inclination, continued to work at the reduced rates.

3462. Have you had any experience as to the management of railways. Of course it is not always a question of rates; it is a question as to the way in which the traffic is conducted; do you know whether private companies are better managed than Government companies; is the traffic conducted in a better manner by the Government than it is by private companies, or by private companies than it is by the Government. Supposing that there was an option between the two, would the people of India take the Government-worked railways, or would they take the private-worked railways?—I think they would take the private-worked railways, because there is no doubt the Government is a little late in replying to communications. It takes several days to go through the usual routine; and I think the people would prefer the private companies as being more accessible in that respect.

3463. You think that the private companies are more business-like in conducting their business?—I think so, generally.

3464. With regard to the feeling of the commercial classes in India, does that object to the management of railways by military men?—I have never heard such a complaint.

Mr. *Kynaston Cross.*

3465. You gave 11*s.* 8*d.* as the cost of production of a quarter of wheat; have you any data for that?—It is from a communication of the Commissioner of the Central Provinces to the Chamber of Commerce; he gave an estimate to the Chamber of Commerce.

3466. Could you furnish us with the official report in which it is contained?—I had it in a form from what may be considered official; from the Commissioner of the Central Provinces to the secretary of the Chamber of Commerce.

3467. Did it go into any detail at all?—Yes.

3468. You spoke of the Government having the power to impose a reduction of rates necessary to maintain the proper condition of the export trade of the country; what did you mean by that?—If I said so, I think I must be allowed to correct it. What I meant to say was, that the reduction of rates is beneficial, as giving additional area of country the advantage of railway service. High rates mean a contraction of that area, and low rates mean that a greater amount of land upon each side of the railway receives railway service.

3469. Then you do not mean that it is one function of the Government to impose such rates that the export trade would be stimulated?—Clearly not.

3470. You spoke of the landowners being greatly benefited, and the Government, as landowners, being benefited along with the rest?—That has been the rule in all countries.

3471. Do you mean by a direct increase of revenue?—The tendency would be in that direction,

Mr. *Kynaston Cross*—continued.

tion, certainly. I cannot go into the question of limiting the increase of railways.

3472. I think you want just to say something as to the effect of reducing the rate of exchange, whether a low rate of exchange is good for the cultivator or not?—Supposing the exchange to-day falls one penny, that means that the farmer upon the line of railway receives 7 *d.* more per quarter for his wheat, on the supposition that the cost of production is about 11 *s.* 8 *d.* per quarter.

3473. That is supposing the sterling price of wheat does not alter?—Yes, assuming that.

3474. Given that the sterling price of wheat remains where it is, a fall of one penny in the exchange would give 7 *d.* per quarter more to the farmer?—Yes.

3475. Are you not afraid that a large extension of railways would add to the taxation of India?—Not if judiciously selected and commercial lines are made; but of course unproduction, famine, and military lines might add to the taxation of India.

Sir *George Campbell.*

3476. You said that you had ascertained from reliable sources the rate of wages in Bilaspur, what are the reliable sources from which you get them?—As I explained to the Committee a few minutes ago, when I heard of that as being the rate of wages, I was incredulous; but I made special inquiry of a friend, and I found it to be so.

3477. Did I understand you to say that you were not prepared to point to any district which requires to be opened up now?—I think that the greater part of India requires to be opened up.

3478. What is your experience about the jute trade in East Bengal; do you think that there is at present sufficient means of getting the jute and other produce from Bengal?—I think additional facilities should be opened up.

3479. In what shape?—More railways.

3480. In what direction?—From Purnea and all round by Dacca and any districts of India that are in a manner unserved by railways at present generally.

3481. Are you not away that certain lines in the jute district have already been undertaken by the Government?—I believe they are under survey, and some are making.

Mr. *Jackson.*

3482. I do not know whether the question has been put to you before, but you gave us the other day one line of railway which you said had taken 10 years to make, and which ought to have been made in three; in your opinion would it have added to the cost if it had been made in the shorter time?—No, I think it would have been cheaper; making a railway or any public work in driblets is a costly method of doing it.

Mr. *Jackson*—continued.

3483. In fact, you think that if this railway had been constructed in much less time, it would not only not have entailed additional expense, but would have been a saving?—Certainly.

3484. And it would have benefited India by an increased revenue?—Yes.

3485. You mentioned a number of railways, with the rates of interest which they are now earning. I want to ask you with reference to the possible increase of the construction of other lines, are you of opinion that there is anything special in the lines which you mentioned, and in the districts served by these lines, which could not be found in other districts?—I think not; I think there is sufficient scope to develop railways still further with the same results.

3486. You gave us, for instance, a list of lines, the Rangoon and Irrawaddy and Patna, showing that those lines earned shortly after construction a good paying rate of interest; in your opinion, are there other districts in India which afford facilities which may be looked forward to with equal confidence as to the result?—I think so.

3487. There is nothing special in those particular districts which have given those good results from the opening up of railways?—No.

Mr. *Bolton.*

3488. How do you prove that a reduction of rates caused an increase of net revenue?—The mileage was the same in both years, and there was a great increase of revenue.

3489. Were all the circumstances the same?—Much the same; there was no great difference.

3490. All that you know is that there was a large amount of traffic carried, and a higher rate of dividend?—Yes.

3491. And the same year there had been a reduction of rates?—Yes.

3492. But you do not know whether the circumstances were identical in both years?—Personally, I do not.

3493. There may have been, for instance, a better harvest?—The rate was progressive.

3494. There may have been a greater demand for wheat?—I gave you two extreme points in 10 years, and the rate has been progressive both in dividend and in traffic; it was not one exceptional year.

Major CONWAY-GORDON, R.E., called in; and Examined.

Chairman.

3495. WILL you state to the Committee what is your position in connection with railways in India?—Before proceeding to India, in the early part of the year 1860, I was employed on the Cardigan and Carmarthen Railway under a civil engineer. On arrival in India I was engaged at first on the construction of the large bridges on the Grand Trunk-road; and then for a short time

Chairman—continued.

on the Great Trigonometrical Survey of India. After about a year's employment as Professor of Mathematics and Surveying at the Engineering College at Roorkee, I was appointed Assistant Consulting Engineer and Assistant Secretary to the Government of the Punjab for Railways at Lahore. From there I went as Examiner of Railway Accounts at Calcutta for the East Indian

Chairman—continued.

and the Eastern Bengal Railways. I have since been employed in various ways: as Superintending Engineer on the Indus Valley Railway; and latterly as Manager of that line; I left that line to take up the appointment of Deputy Accountant General and Under Secretary to the Government of India in the Public Works Department, and though that has been my substantive appointment since, I have lately been a great part of my time on special duty, either as delegate for State Railways at the general conference held for the revision of the rules for the interchange of rolling stock, or engaged in drafting a Railway Legislature Bill, or otherwise. The Committee will observe that I have been engaged during the greater part of my service either directly on railway work, or on finance connected with railways. I have been, however, engaged on the ordinary finance work of the department. I have no practical knowledge of irrigation works, except as regards the departmental accounts kept in connection with such works.

3496. Will you briefly state to the Committee what are the proposals of the Government of India with regard to railway extension?—I wish, in the first place, to clear away some misapprehensions which appear to have arisen regarding the proposals of the Government of India; but in doing so I have no intention of leading you through the mass of detail given in the five Despatches that have been laid before you. Briefly, the proposals of the Government of India with regard to railways are, either directly or through the agency of companies, to spend during the next five years 33,462,000 *l.* on the financial responsibility of the State; and to leave 24,288,000 *l.* to be spent on the financial responsibility of any other persons who may like to undertake this responsibility.

3497. Will you explain the proposals a little more in detail?—I will further on. You will find Schedule B. at page 86 of the Papers which have been placed before you (App. No. 1, p. 572).

3498. Will you tell the Committee what you have to say with regard to Schedule B.?—I think it would perhaps save the time of the Committee if I were to confine myself to what the Government of India does propose to do, and to omit any consideration of what the Government does not propose to do; my contention being that the Government of India does not propose to undertake the railways named in Schedule B.

3499. The railways in Schedule B. are railways to be constructed by unassisted public enterprise?—The railways in Schedule B. are those left to unassisted public enterprise, the Government merely granting the land free of cost.

3500. Do you think that the Government of India expect those railways to be taken up by private enterprise?—No; I do not think they do; the correspondence, in fact, shows that they do not. They only hope that these railways will be taken up.

3501. That being so, can you explain why the Government of India include these Schedule B. railways in their proposals?—The Government of India and the Secretary of State have both approved of the policy of constructing railways by unassisted private enterprise. You will see that from para. 3 at page 24 of Despatch No. 29 of the 23rd January 1883 (App. No. 1, p. 510),

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where the Government of India say, "We shall assume that your Lordship approves of the policy of constructing railways through unaided private agency." It was therefore necessary for the Government of India, in putting forward their proposals, to show to the Secretary of State that their proposals for constructing railways on the direct responsibility of the State did not cover the whole field, but that there was still left in India a sufficiency of good railways open to unassisted private enterprise.

3502. And for the purposes of this investigation you propose that the Committee shall drop all further reference to the lines mentioned in Schedule B.?—Yes, I think so, except in the possible contingency referred to by the Government of India in para. 19 on page 79 (App. No. 1, p. 565). If the Committee were to come to the conclusion that the proposals of the Government of India for Railway extension, as shown in Schedule A., are open to a charge of insufficiency, the Committee would, I conclude, consider what railways in Schedule B. might be taken up in addition to those in Schedule A. If, on the other hand, the Committee consider that the railways in Schedule A. are sufficient for the present, then there would obviously be no advantage in further considering the railways in Schedule B.

3503. Then dropping Schedule B. in the meantime, what may we consider are the definite proposals of the Government of India?—The definite proposals of the Government of India are to expend, or to induce companies to expend, on the financial responsibility of the State, a sum of 33,462,000 *l.* during the next five years, or, on an average, 6,692,400 *l.* per annum.

3504. How much of that total expenditure is proposed on new railways, and how much for improvements and additions to existing lines?—Of the total expenditure proposed of 33,462,000 *l.*, 28,262,000 *l.* are for new railways (you will find that figure at page 77—App. No. 1, p. 563), and 5,200,000 *l.* are for additions and improvements to existing lines and for working and surplus stores on projected railways. The average expenditure proposed is thus: 5,652,400 *l.* for new lines, and 1,040,000 *l.* for improvements and additions; in all, as I have said before, 6,692,400 *l.* per annum.

3505. How much of this aggregate sum of 33,462,000 *l.* is to be expended directly by the Government, and how much through the agency of companies?—Of the total sum of 33,462,000 *l.* proposed to be expended, 17,822,000 *l.* are proposed to be expended by the State directly, and 15,640,000 *l.* through the agency of companies. The State expenditure includes the proposed expenditure of 1,500,000 *l.* for additions and improvements on the East Indian Railway.

3506. How does this proposed expenditure compare with the annual expenditure in previous years?—From the statement showing the annual rate of outlay which is given in the Report of the last Select Committee, at page v, you will see that this proposed expenditure of 6,692,400 *l.* a year has often been exceeded in previous years. In the year 1859-60 the total expenditure on railways was 7,171,464 *l.*; in 1860-61 it was 7,578,715 *l.*; in 1866-67 it was 7,297,703 *l.*, and in 1867-68 there was an expenditure of 7,120,675 *l.* In the five years ending 1862-63 the total expenditure

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penditure on railways was 32,707,843 *l.* You may also the better judge for yourselves how this proposed expenditure compares with the total expenditure in previous years, by running your eye along the last line of figures in Statement 3 B. which I have put before the Committee.

3507. Have you got any statement which will show to the Committee the whole of the expenditure on railways, year by year?—Yes; I have supplied each Member with a copy.

3508. Will you kindly explain it?—I have handed in statements showing the whole transactions of the Public Works Department from the year 1867-68 to date, that is Statements No. 1, No. 2, and No. 3, all together. The figures in these Statements agree with the Accounts of the Government of India, revised in accordance with the existing classification. I think I should warn the honourable Members that the classification has, from time to time, been altered; the accounts have lately been brought up to agree with the present classification, so that the figures in my statements may not possibly agree with the figures printed in the previous Blue Books. Both the receipts and disbursements in the statements are shown in what we call conventional sterling; that is, the rupees are converted at an exchange of 2 *s.* to the rupee, or 10 rupees to the 1 *l.* These accounts show the whole receipts and disbursements of the Department from the year 1867-68, the first year in which the expenditure on productive works was excluded from the ordinary Budget of India. The statements exclude loss by exchange. I wish particularly to observe that the loss by exchange on the Public Works transactions is not included in these statements, as under the system in force the loss by exchange on the Railway transactions is included under the general head of "Loss by Exchange," which shows the loss by exchange on the whole remittances to England on every account Statement No. 1 A. is an abstract statement of the whole Public Works Expenditure, and Statement No. 1 B. is a similar abstract of the Public Works Receipts. You will understand that Statement No. 1 A. shows the whole of the Public Works Expenditure of India, including railways, irrigation, and every other head, and No. 1 B. is a similar Abstract of the Public Works Receipts. Schedules are attached giving further details under any heads regarding which I thought the Committee might specially desire information.

3509. What is Statement No. 2?—I would first say that at the bottom of Statement No. 1 A., that is the very first statement of all, I have shown the yearly net normal outlay of the Department, that is the net outlay after the deduction of certain sums which appear in the Government accounts as expenditure, but which really represent nothing more than the transfer to the Government books of the capital expenditure of certain guaranteed companies on the works of those companies being taken over by the Government. This line of figures may be usefully read with reference to the late Vote in the House of Commons to the effect that the Public Works Expenditure in India should be reduced. It shows that, with the exception of certain years, in which the expenditure of the Department was unavoidably raised by the opening of the Famine Relief Works, the net annual expenditure of the

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Department has remained very nearly uniform throughout. You will see that in the year 1868-69, the second year in the statement, the expenditure is 9,525,128 *l.*, and the proposed expenditure in 1884-85 is 9,521,060 *l.* The bottom line of figures on that page shows the net outlay of the Department. I wish particularly to call your attention to the last line of all in No. 1 A. Statement, viz., the actual normal outlay. The Statements No. 1 A. and No. 1 B. are prepared under the same heads as the published accounts of the Government of India, and may, in fact, be considered as extracts from these accounts. The financial system of India being somewhat complicated, these statements, like all other financial statements, require to be carefully looked over and thoroughly understood before it is quite safe to make any deductions from them. They present special difficulties to those accustomed to mercantile accounts, because they are drawn out on a different principle, and because they do not clearly distinguish between expenditure on what may be termed capital or block account, and that on revenue or working account.

3510. What are the set of statements numbered 2?—To assist the Members of the Committee who are accustomed to ordinary mercantile accounts, I thought it would be of advantage to draw up three other statements, Nos. 2 A., 2 B., 2 C. Statements Nos. 2 B. and 2 C. show the receipts and expenditure on revenue or working account, and 2 A. gives the expenditure on capital or block account. The Committee will consequently understand that were the Government to cease all further outlay on developing India; were it to discontinue the construction of all further new buildings and military works; were it to stop making any further roads and railways, and to attempt to bring no further area of land under the influence of irrigation; were the State to confine itself to the ordinary administrative business of Government, and to merely work and maintain the *existing* Public Works, the whole expenditure and receipts of the Department would be confined to what is shown in Statements 2 B and 2 C. But, as the Committee are well aware, the Government of India has for years past pursued the policy of expending large sums annually on the material development of the country. Every year new roads are opened, and the railway system is extended, new schools, hospitals, barracks, and dispensaries are built, and year by year the country is more and more protected against famine by increased irrigation. The expenditure on new works for the improvement of the country, or on what I have termed the capital or block account, is shown in detail in Statement No. 2 A.

3511. What general conclusions do you wish the Committee to draw from Statement No. 2?—I would ask the particular attention of the Committee to the last line of figures on Statement 2 C., which I have called the "net charge," showing the present net charge to the country on account of the whole of the *existing* Public Works. This statement shows that the Public Works Department defrays the interest on all its debt for productive Public Works; it discharges all claims on account of guaranteed railway interest; it repairs and maintains all the *existing* roads, bridges, hospitals, dispensaries, schools, courthouses, and

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public offices; it keeps up all the costly barracks, fortifications, and military buildings: it works nearly 11,000 miles of railway; and it keeps in order all the innumerable irrigation works scattered over a country double the size of Great Britain and Ireland, France, Germany, and Italy all put together, at an average net annual charge, exclusive of exchange, of 2,791,100 *l.* In other words, the Public Works Department has given the benefits of vastly improved means of communication, and all the requirements of civilised life and modern progress, to a population of about 198,000,000 of people at an average net annual charge, exclusive of exchange, of 3½ *d.* (3·38 *d.*) per head.

3512. Is this net charge to the taxpayer on account of the maintenance and working of the existing Public Works increasing or decreasing?—This net charge, the Committee will observe, is on an average gradually decreasing. It culminates about the year 1872-73, and on an average it gets less and less subsequently. You will observe that in the year 1881-82 the charge was reduced to 1,223,349 *l.*, or less than one penny halfpenny (1·48 *d.*) per head. It is hardly too much to say that we hope in India (and everything now points in that direction) that we shall ultimately be able to do the whole work for nothing, exclusive of the loss by exchange. Very soon we expect that the revenue produced by our investments on capital or block account (that is, the receipts from our railways and irrigation works) will enable us to run the whole Public Works business at an insignificant charge to the taxpayer.

3513. With regard to the latter part of your evidence, it is to show that the net charge to the taxpayer on account of existing Public Works is decreasing, and not increasing?—Yes, that is so.

3514. As you say, these accounts exclude the cost of exchange on the Public Works transactions; we have had it in evidence that that is about a million sterling; is that so?—General Strachey said that it was about a million sterling. The Public Works Accounts, as I told you at first, exclude all loss by exchange; and if you were to add one million to the net cost to the taxpayer in 1881-82, you will find that he pays on account of all the benefits he receives about 2½ *d.* per head instead of 1½ *d.* But then, on the other hand, I wish to point out that this working expenditure, that is, the net working expenditure which is shewn in No. 2 C., at the bottom, includes the interest on all the capital expended on railways and canals which are not yet open, an amount of capital which cannot be less than about 12,000,000 *l.* to 14,000,000 *l.*; and it also includes the interest on at least 5,000,000 *l.*, which have been debited against the Public Works Department as a matter of account; it also includes heavy payments practically to a sinking fund for clearing off the capital account of the East Indian Railway. Putting the two things together, the two disturbing factors on either side roughly balance each other, and leave the general result pretty much as I have described it; that is, you may say there is, perhaps, a little more than a million to be added, or there is, perhaps, 500,000 *l.* to 600,000 *l.* to be taken off.

3515. Is the net charge on capital account

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increasing or decreasing?—By referring to Statement No. 2 A. you will see that the expenditure on block or capital account is slightly increasing. I have just told you that the net charge for working the Department, as shown in Statement No. 2 C. at the bottom, is on the average decreasing; I have also told you that the total net expenditure of the whole Department, as shown in Statement No. 1 A., remains fairly the same. The general conclusion that I wish you to draw is, that while there is pretty much the same total net expenditure year by year, there is a less proportion of that net expenditure year by year expended on maintenance and repairs, and a larger proportion on capital account, that is to say, devoted to the construction of new works for the material improvement of the country.

3516. Have you anything else to say regarding Statement No. 2?—Nothing further; I will pass on to Statements No. 3, if I may be allowed to do so. Statements No. 3 require hardly any explanation; they are simply extracts from the other two Statements, No. 1 and No. 2, exhibiting for greater convenience the railway transactions alone by themselves. I have drawn them out because I thought that they might be found useful when comparing the present rate of railway expenditure with the rate now proposed by the Government of India. So that you will understand that Statements No. 3 are simply nothing more than extracts of the Railway transactions from Statements No. 1 and No. 2.

3517. What are the Statements X. and Y., which you have also handed in?—I have handed in Statements X. and Y. simply in order to illustrate the whole financial position of the Public Works Department of India. I shall have to refer to them constantly during my evidence, and I had better, therefore, explain at once what they are intended to show. Statement X. is an abstract statement of the accounts of the Government of India for the year 1882-83. I have selected the accounts of the year 1882-83 for the illustration of my remarks, simply because they are the last accounts published, and you will understand again that the whole account is in conventional sterling, that is to say, the rupees have been taken at two shillings. From this account it will be observed that the total ordinary receipts for the year 1882-83 were 70,125,231 *l.*, and the total ordinary expenditure, that is, the expenditure which is met from current taxation, was 69,403,384 *l.*, leaving a surplus under ordinary taxation of 721,847 *l.*, a figure obtained merely by deducting one side from the other. In addition to the ordinary expenditure there was expended on Productive Public Works for the general improvement of the country, a sum of 4,665,112 *l.* which I have called Item R., and this expenditure turned the surplus of 721,847 *l.* into a deficit of 3,943,265 *l.*, which I have shown as Item H. This may be considered as a tolerably fair illustration of the normal position of Indian finance. There is, as a general rule, a surplus under ordinary, that is to say, a surplus from the current taxation, which surplus, under ordinary, is not sufficient to cover the further expenditure required for Works for the general improvement of the country charged to the Productive Works account. The consequence is that the balance has to be made up by borrowing; that

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that is to say, Item H., as a general rule, has to be borrowed. Were the Indian Accounts drawn up more on commercial principles, were the revenue or working expenditure shown separately from the expenditure on new works, that is, on capital or block account, I think a clearer light would be thrown upon the whole transactions. I have drawn up Statement Y. on that principle, showing the expenditure on new works separate from the expenditure on Working or Maintenance Account. This account shows that if the Government had altogether stopped laying out any further money in developing India, if it had ceased making any further new roads or railways, and had confined itself merely to carrying on the ordinary business of governing, and to working and maintaining the *existing* roads, railways, and other public works, there would have been a surplus under ordinary of no less than 4,715,959 *l.*, that is, the current taxation would have produced a surplus to the extent of that sum of 4,715,959 *l.* That figure represents the difference between 65,409,272 *l.* on the one side, and the total receipts of 70,125,231 *l.* on the other side. The deficit of 3,943,265 *l.*, Item H., is caused by an expenditure on new works for the general improvement of the country of 8,659,224 *l.* on capital or block account, which is represented by Item S., of which large sum 3,994,112 *l.* were expended on works supposed not to be productive, but which, all the same, might have been expended on semi-productive works of all sorts, such as protective railways, irrigation works, and so on; and there is charged on productive account a sum of 4,665,112 *l.*, which is supposed to be expended on works which are calculated to earn more than 4 per cent. on the expenditure. Before we pass on from these accounts, I shall be very glad to make a few general remarks. I have drawn out the accounts X. and Y. simply with a view of illustrating my case; the figures are correct for the year, but I do not wish to call your attention to the actual figures. You will understand that I have drawn up the accounts to be considered simply in the abstract in order to illustrate my remarks further on.

3518. Returning to the proposals of the Government of India, you said, to begin with, that 17,822,000 *l.* were proposed to be expended directly by the State during the next five years; will you tell the Committee how you arrive at that figure?—If you will turn to page 77 (App. No. 1, p. 563), of the Despatch before you (it is in para. 11 of the Despatch of the 29th January 1884), you will see that there are 1,647 miles to be constructed, at a cost of 11,175,000 *l.* (Item *a.*). Then there are 499¼ miles at a cost of 2,899,000 *l.* (which constitutes Item *b.*), and one mile at 48,000 *l.* (Item *d.*). In all there are 2,147¼ miles, at a total cost of 14,122,000 *l.* To this must be added 700,000 *l.* for working and surplus stores on the projected railways, which is also shown on the same page, and 1,500,000 *l.* for additional capital outlay on open State railways. If you will now turn to page 35 of the Despatches, to Item 4 on that page (App. No. 1, p. 521), you will find that there is another 1,500,000 *l.* for additions and improvements on the East Indian Railway, which is a State Line, and those all make up together the 17,8220,00 *l.* of direct expenditure by the State. This gives an average expenditure directly by the State of 3,564,400 *l.* per annum.

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3519. How does that compare with the average annual expenditure at present?—The Committee will be able to observe how it compares with previous expenditure by turning to Statement No. 3 B., shewing the capital expenditure on account of railways in India. If you will look along the line "Total Outlay by the State," you will see that the expenditure is perhaps not quite so much as is going on at present. The average expenditure proposed, as I said before, is 3,564,000 *l.*, and the Committee will observe that in 1877–78 there were 4,656,362 *l.* spent; that in 1878-79 there were 3,548,738 *l.* spent; in 1879–80, if you will deduct the bottom figures, 9,568,614 *l.* from the figure given above, 14,217,115 *l.*, you will get an expenditure in 1879–80 of 4,648,501 *l.* In 1880–81 there were 5,342,673 *l.* spent; in 1881-82, deducting the figures at the bottom, you will find that the expenditure was 3,177,319 *l.*; in 1882–83 there were 2,393,624 *l.*; in the present year, 1883–84, there will be 3,536,604 *l.*, and the proposed expenditure in 1884-85 in the Budget is 4,024,200 *l.*; so that you see, on an average, the proposed State expenditure of the Government of India of 3,564,400 *l.* compares very favourably with the past expenditure.

3520. You have stated that the proposed expenditure of the Government of India through the Guaranteed Companies is 15,640,000 *l.* during the next five years; will you state to the Committee how this figure is made up?—I must ask the Committee to turn again to page 77 of the Despatches, and in para. 11 on that page (App. No. 1, p. 563), Item (*c.*), they will observe that there is to be made, by what are termed "construction and working" companies, 292½ miles, at a cost of 2,100,000 *l.*, and under Item (*e.*) 1,456 miles are entered (that is the total of 92 miles and 1,364 miles), to be carried out by limited guaranteed railways, for 12,040,000 *l.* There are, lastly, additions and improvements to guaranteed lines, for which I must refer the Committee to Item 6, at page 35 (App. No. 1, p. 521). Looking at Item 6, on page 35, they will see that there is to be borrowed by guaranteed companies for open lines, 1,500,000 *l.* The whole of these sums together amount to 15,640,000 during the next five years, in other words, about 3,128,000 *l.* per annum are to be expended by the companies.

3521. How does that compare with the present rate of expenditure by the companies?—It is higher than the present rate of expenditure. I do not say that it is very much higher, but it is higher, no doubt. The present rate is somewhat as follows, and I refer the Committee again to Statement No. 3 B.: the Committee will observe that in the year 1881–82, adding the figures under the Guaranteed Railways, Capital Withdrawals, Subsidised Railways, and Limited Guaranteed Railways, they will get a total of 842,435 *l.*; in 1882–83 they will get a total of 1,460,111 *l.*; in the year 1883–84, the present year, the guaranteed railways propose to expend 1,064,600 *l.*; the subsidised railways, 373,000 *l.*; and the limited guaranteed railways, 610,000 *l.*, making up a total of 2,048,500 *l.* In the year 1884–85 the proposed expenditure is, on the part of

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of the guaranteed railways, 1,382,600 *l.*; on the part of the subsidised companies, 270,000 *l.*; and on the part of the limited guaranteed railways, 785,400 *l.*, making up a total in the year 1884–85 of 2,437,000 *l.* But as the Government does not provide the capital expended by these companies, it is evident that the expenditure, through the agency of companies, only affects the Government in respect to the interest that Government has to pay on account of that capital; in other words, the financial effect to the Government must be looked for in the railway revenue or maintenance accounts, Statements 3 D. and 3 E. You may, practically, look alone at Statement 3 E., because it contains both expenditure and receipts. The last line of Statement 3 E., represents the net loss or gain to the Government on account of the whole of the railway transactions. You will observe that the net loss on account of railways continued steadily to the year 1876–77. In the year 1877–78 there was a gain; that was succeeded by three years of loss up to the year 1880–81, and from that year we have gained steadily. You will remember that these figures exclude loss by exchange. In 1878–79, 1879–80, and 1880–81, you will see that there are three years' loss recorded, but from the year 1881–82 we have gained steadily; and this is purely on working account.

3522. Will the proposed increased rate of expenditure by companies bring any heavier charge for repairs and general working on the revenue account?—As I spoke of direct expenditure by the State in the first place, I will consider first the effect of the direct expenditure by the State.

3523. To what extent do you consider the proposed rate of direct State expenditure, namely, an average rate of 3,564,000 *l.* will affect the balance of the general railway revenue or maintenance account?—I do not think it will affect it at all: As the Government do not propose a higher rate by the State than what goes on at present, it is evident that the balance of Statement 3 E. will not be affected; that is, it will not be affected by the direct outlay by the State. The working expenses shown in Statement 3 D., that is the working expenses which are shown deducted at the bottom of Statement 3 E., now include the interest on all the capital expended on lines as yet unopened; that is to say, these working expenses now include the interest on a sum which I may calculate as from 10,000,000 *l.* to 12,000,000 *l.* expended on lines as yet unopened. Further expenditure at the same rate cannot affect the net balance shown in Statement 3 E., for just as fast as further expenditure takes place on new lines, the capital now unproductively sunk in unopened lines will begin to yield revenue as the lines are opened. Just as much capital, and no more, will remain on the average unproductive as there is at present.

3524. That is with regard to State expenses?—Yes.

3525. The case is different, is it not, with regard to the sum proposed to be expended through guaranteed companies?—It is, because the proposed rate of expenditure by the limited guaranteed companies, or by the construction and working companies, is at a higher rate than what is going on at present. The increased rate of expenditure by the limited guaranteed companies will of course bring a slightly heavier charge on the working account, but only to the extent of the difference between the present rate of expenditure and that proposed. The proposed rate of expenditure by companies is about 3,128,000 *l.* a year; and, as I said before, the present average rate for the last three years of the subsidised companies, which you can take out yourselves from the railway block account, is about 1,981,000 *l.* per annum. The difference is about 1,147,000 *l.*, that is to say, there is a difference in the proposed rate of expenditure, and the present rate which is now going on by the companies of 1,147,000 *l.*, on which the increased interest would be about 45,800 *l.*, or say 46,000 *l.*; this would bring an increased cost on the working account of 46,000 *l.* a year; a sum which might be expected to accumulate up to three years. That is, supposing, as before, you were to take three years as the average time required for constructing a line, it would accumulate up to three years, and then it would appear at its maximum as about 140,000 *l.* a year. You will remember that the Government of India, in para. 16, on page 79 of their last Despatch, No. 27 of the 29th of January 1884 (App. No 1, p. 565), estimate that the greatest possible extra liability to be borne on account of the increased expenditure by the companies cannot exceed 200,000 *l.* per annum.

3526. Will that extra charge of 200,000 *l.* per annum cause an increase to the burden of taxation in India?—No, it will not. If there is one point of my evidence upon which I want to be definite, if there is one point I wish to emphasize above every other, it is, that the total proposed expenditure by the Government of India will not increase the taxation on the people of India. The Government of India have specially guarded themselves on this point. I would refer you to para. 4, on page 24 of the Government of India Despatches, No. 29, of the 23rd of January 1883 (App. No. 1, p. 510). The Government of India express themselves there in the following words: "Great as is the importance we attach to the speedy development of the railway system, we are not prepared to recommend, for the attainment of this object, the adoption of any measures which are likely to lead to an increase of taxation. We should regard increased taxation as a greater evil than relatively slow progress in railway construction, more especially in the case of those railways which are not urgently required, as a protection against famine." I consider that the Government of India are distinctly pledged to carry out their railway policy without increased taxation. If you will turn once more to Statement X., to which, as I say, I shall have constantly to refer you, you will see that the Government of India admit a possible maximum increase, under Item N., of 200,000 *l.*, that item being the expenditure on working and maintaining existing telegraphs and public works. They maintain that the greatest possible increase of working expenditure, owing to the increased rate of capital expenditure by companies, will be 200,000 *l.*, under Item N.; but what they hold is, that Item G., on the per contrâ side, that is, the receipts from telegraphs and public works, will increase to a far

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far greater extent than 200,000 *l.* This is what they say on this point. I will first refer you to para. 54, on page 33 (App. No. 1, p. 519), where the Government of India distinctly say that "taking all these circumstances together, we think that if we borrow 18,309,000 *l.* for the construction of railways during the next five years, we may feel confident that the increased charge on account of interest will be more than covered by the increased receipts on account of the railways we already possess. If this were not the case, the policy would, we think, be very questionable, for we should not be prepared to recommend any course which would involve increased taxation." If you will again turn to para 16, on page 79 (App. No. 1, p. 565), you will see that they repeat themselves very much to the same point; they say, "The rapid growth of all railway receipts is explained in paragraphs 47 to 54 of the Despatch, which we may now revise, by stating that the net profit in 1882-83 was actually 531,786 *l.*, instead of 261,000 *l.*, as therein estimated, and that the six months' estimate for 1883-84 is 1,077,000 *l.*, which itself will probably be exceeded. In view of this increase, we do not see any ground for doubt that the net interest from year to year, above detailed, cannot be met out of the growing receipts of the railways we already possess." You see the Government contention is, that although there may be a possible maximum increase under Item N. to the extent of 200,000 *l.*, there will be an increase of receipts under Item G. to a far greater extent. There is yet one other consideration which I wish to bring before you. In addition to this probable, and I may say more than probable, for it is almost a certain increase in the receipts from Telegraphs and Public Works, under Item G., I understand that my financial colleague, Mr. Westland, the Comptroller General of India, is prepared to prove to you that there has been lately such an increase in the general revenues, that is to say, such an addition under Item F., "Receipts for Land Revenue, Opium, Salt, Army, and all heads other than Telegraphs and Public Works," as would in itself more than justify the proposed increase to Item N., without further taxation. If you wish additional insurance, I would call your attention to Item O., representing the "Expenditure on new works for the general improvement of the country," which comes out of the ordinary current taxation, as representing expenditure which could be immediately reduced at will by the Government of India, not by stopping works already in progress, but by simply ceasing to begin any more new ones, such as schools, roads, bridges, military works, and everything of that sort. The Committee can themselves see from Statement Y., the ample margin there is to work in, it amounted in the year I have taken for my illustration to no less than 4,715,959 *l.* That is the difference between 65,409,272 *l.* expenditure on the one side, and the total receipts of 70,125,231 *l.* on the other. I wish to be specific on this point, that the proposals of the Government of India in regard to railway extension will not involve increased taxation. So far as I am personally able to judge, the proposed increase of 200,000 *l.*, under Item N., will be over and over again

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covered by the increased receipts from Telegraphs and Public Works under Item G. In proof of that I will call the Committee's attention to the line of figures at the bottom of Statement 3 E. You see that in the 18 years from 1867-68, we have actually turned a net loss of 1,445,480 *l.*, into a gain at the end of that period of 920,740 *l.* I may also bring forward one further fact, which will tend to show generally that the Government of India do not intend any sudden increase in their railway expenditure. If you will turn to Schedule A., at page 84 of the Despatch from the Government of India (App. No. 1, p. 570), you will see that the Government of India's proposals amount to a length of 3,896 miles in five years, which would be at an average rate of 779 miles a year. The present average rate of progress for the two years 1883-84 and 1884-85 is about 762½ miles. If you will kindly turn to Mr. Juland Danver's Report to the Secretary of State on Railways in India for the year 1881-82, in paragraph 2, you will see that during the year 1881-82, 726 miles of new railways were completed and open for traffic. If you will turn to the similar report for the year 1880-81, you will see it is stated that a length of 838 miles were opened during that year. Therefore for the four years, we have in the first year a length of 838 miles, in the second year we have a length of 726 miles, in the two next years we have an average rate of 762 miles, so that I may say that the average rate proposed by the Government of India of 779 miles, cannot be considered as a sudden increase of operations.

3527. Is that all you have got to say with regard to your first issue, namely, the rate of expenditure proposed by the Government of India?—Yes, I think I had better stop here; I think it is safer in complicated inquiries of this sort to adhere to general considerations; and not to lose sight of the broad facts of the case by going too much into detail. With regard to the rate of expenditure, generally summing up, you will see that the average rate of State expenditure is not higher than at present; in fact, it is rather lower. The average rate of proposed expenditure to guaranteed companies and subsidised companies is somewhat higher, but, speaking broadly, the increase in the working expenditure borne by taxation, that is on account of the working of the lines, will be more than covered by the estimated increase in the receipts.

3528. The Committee understand that the next head on which you desire to give evidence is the class of work proposed by the Government of India?—The next head, regarding which I wish to make a few remarks, is the class of works proposed by the Government of India. I would first say that in para. 12 of their Despatch of the 23rd of January 1883, which you will find at the bottom of page 25 (App. No. 1, p. 511), the Government of India talk of the necessity of inverting the regulations hitherto in force, and in para. 8 of the Secretary of State's reply of the 16th of August 1883, at page 62 (App. No. 1, p. 548), the Secretary of State says: "Your Excellency's proposal, as is recognised in your letter, involves a complete reversal in many of the most important points of the rules which have been in force for some years regarding the construction of productive public

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works." It is this point that I wish to explain. Briefly, the rules at the time the proposals of the Government of India were put forward, were that no railways could be carried out from borrowed funds, and kept outside the ordinary accounts of the Empire, except such as would in five years after being opened pay an average rate of 4 per cent. upon the outlay. In the first Despatch by the Government of India, that is the Despatch which is to be found on page 23, the Government of India proposed to construct protective works from borrowed funds, or in other words to apply borrowed funds to works which are not calculated to pay as much as 4 per cent. on the capital expended, and it is on that point that I must make a few remarks. I regret to say that in doing so I shall have to ask the Committee to follow me through a brief examination of the principles underlying the whole system of public works finance. I am very sorry to have to carry them into such dreary ground, but I cannot help it.

3529. What are the principles which you refer to as bearing on the proposals of the Government of India?—In a former reply, when remarking on Statements X. and Y., I said that the Government deliberately borrowed a certain sum every year in order to invest this sum on productive public works. If you look at Statement X. you will see that the Government deliberately borrow Item H., in order that they may invest in Item R., representing the "Expenditure on new works for the general improvement of the country charged to productive." The justification for thus deliberately expending sums in excess of the annual revenues is, as the Committee are well aware, that the money is borrowed for laying out on productive works, and that the additional debt is covered by good investments, which produce as much as, or more than the interest on the debt incurred. In theory, the position of the Government differs from that of an ordinary bank which borrows money at a low rate of interest in order to reinvest at a higher rate only in the respect that the Government of India throughout the transactions does not look to profit, and is satisfied if the earnings on the investments just cover the interest on the borrowed capital; that is the only difference between the two cases. The Government of India deliberately borrow Item H. in order that they may lay out the money that they borrow on reproductive works for the general improvement of the country. Before this money can be spent; that is, before the Government of India is allowed to spend this money on reproductive works, they have to prove to the satisfaction of the Secretary of State that those works on which they intend to expend the money will on an average pay 4 per cent.

3530. There are rules, are there not, in force to secure these investments producing at least as much as the interest paid on the amount borrowed?—There are. The rules on the subject of the productive public works expenditure are very stringent, to the effect that nothing is to be charged to productive account, or, in other words, that no expenditure is to be charged under Item R. but what will produce at least 4 per cent. on the capital expended, that being the rate at which

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it is assumed that the Indian Government can borrow Item H. The proceedings of the last Select Committee on East India Public Works, the Despatches of the Secretary of State, and generally, it may be said, the whole of the voluminous correspondence on the subject of the productive public works expenditure in India, deal with the portion of the expenditure incurred on the development of India which is shown outside the ordinary accounts, and with that alone. The whole of the correspondence, and everything connected with the subject of productive works, deals with Item R.; but in addition to this there is a considerable sum spent annually on the development of India, which is raised by ordinary taxation, and which is included in the ordinary account. If you will look at Statement Y. you will see that in the year I have taken for my illustration, the sums spent on new works for the general improvement of the country, and which were charged to Ordinary, that is, under Item "O," amounted to 3,994,112*l.*; in other words, the amount which was spent from ordinary taxation for the general improvement of the country was a little more than the whole deficit of 3,943,265*l.*, Item H. The object of the Government of India is now, as far as I understand it, to call attention to the actual effect that this Item O. exercises on the general financial position of India. The Government of India's proposal, as contained in clause 2 of para. 10 of their last Despatch of the 29th of January 1884, and which you will find at page 76 (App. No. 1, p. 562), in the second clause, to use indiscriminately for railways, in Schedule A., the resources of ordinary revenue and loan funds, is briefly in effect a request for a consideration of the whole financial position, not as it appears in Statement X., but as it appears in Statement Y. The whole contention of the Government of India is, that the expenditure from ordinary funds, and from borrowed funds, must be considered together, and not separately; in other words, that you must consider the whole expenditure on the improvement of the country, Item S., and not alone Item R., which is entered simply for account purposes, outside the ordinary account. At this point I wish to guard myself carefully. It will be understood that the proposals of the Government of India do not refer to the whole of Items S. and R., but only to that portion of the expenditure shown under Items S. and R. which is expended on railways. Major Baring brings out the point that I am wishing to raise in his note, which is printed at page 11 in para. 3 (App. No. 1, p. 497). He says there: "When private enterprise is substituted for State agency, the words 'productive' and 'protective' lose, to a great extent, their special technical meanings. No question arises as to whether the works in question are to be made out of money borrowed by the State, or are to be paid for out of new revenue. It is no longer necessary to draw a hard and-fast line between 'productive' and 'protective' railways."

3531. Will you state a little more clearly the effect of viewing the financial position, not from the point of view of Statement X., but from the point of view of Statement Y.?—I will now ask the Committee to follow me through a few abstract

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stract principles connected with these accounts, and I will be as brief as I possibly can. Several considerations at once present themselves if you look at Statement X. I want to call your particular attention to Item R. and Item H. As the matter stands, Item H. is the amount to be borrowed by the Government, and Item R. is the amount which is invested by the Government; and the first position which I should like to establish is that the financial position of the Government is sound, if the investment of Item R., that is to say if the investment of 4,665,112 *l.*, on the one side, produces earnings equivalent to the interest at 4 per cent. on the 3,943,265 *l.*, shown on the other side; that is, if the 4,665,112 *l.* in this case produce only 3·38 per cent. In the case that I have taken as an illustration it is obvious that an investment of 4,665,112 *l.*, at only 3·38 per cent., would produce as much as the interest on Item H., or the interest on 3,943,265 *l*, at 4 per cent., which is the per-centage taken right through. That, I think, is obvious to everybody. The next principle that I would ask the Committee to consider, is that any rate of interest earned by the investment of the 4,665,112 *l.* in excess of 3·38 per cent. constitutes a sinking fund, which sooner or later must extinguish the capital debt. Then my third contention is that the existing rules, under which interest at 4 per cent. has to be earned on the whole productive public works expenditure, and not on that portion only which is actually borrowed, do necessarily constitute a sinking fund, and a sinking fund of a very material extent. Now if you will look at Statement Y., you will see there that the Government borrow 3,943,265 *l.*, that is Item H., and they actually invest in new works for the general improvement of the country a sum of 8,659,224 *l.*, part of which is invested in productive works, and part of which is invested in non-productive works. I wish to point out that, viewing the matter as shown in Statement Y., the financial position of India is sound if the 8,659,000 *l.* invested on capital account produce earnings equivalent to the interest at 4 per cent. on the 3,943,265 *l.* of borrowed money; that is, if the investments as a whole clear only 1·74 per cent. Anything in excess of this constitutes practically a sinking fund. The next point is that the Government of India, when deciding on the particular works that are to be constructed from the 8,659,224 *l.*, available for investment on block account, that is from Item S., has, in order to maintain a sound financial position, only to take care that the investments on the average produce at least 1·74 per cent; if some works produce more, others may produce less, or even nothing, and yet the financial position may be thoroughly sound as a whole. Generally it may be held, that the more valuable the asset, the stronger the financial position; and in this sense railways that produce only 1 per cent. are evidently more valuable as revenue-producing works than roads which produce nothing. There is therefore no *primâ facie* evidence of unsound financing in Government investing on railways which produce only 1 or 2 per cent. In the instance I am considering, it is evident that an investment of the whole amount of 8,659,224 *l.* in railways earning only a net revenue of 2 per cent. would clear off the whole borrowed

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capital of 3,943,265 *l.* in about 61 years. The next principle which I wish to call your attention to is this: that it is evident that every addition to the total expenditure on block or capital account, that is every addition to Item S., increases the deficit that has to be made good by borrowing, that is, every addition to Item S. increases the amount of Item H., which is to be borrowed, and, *vice versâ*, every reduction in the expenditure on block account or capital account decreases the amount that has to be borrowed; and it is also evident that this conclusion is equally correct, whether the expenditure is incurred or the reduction is effected on unproductive works or on productive works, that is, it makes no difference whatever whether the reduction is effected on Item O., or whether the reduction is effected on Item R. A reduction on either item reduces the balance that has to be made good by borrowing. It consequently follows that all expenditure on unproductive works, that is all expenditure on Item O. is, from a financial point of view, exactly equivalent to a reduction of the balance of ordinary revenue, or a reduction of the balance from ordinary taxation which is available for reproductive expenditure, and hence is exactly equivalent to the unproductive expenditure being incurred from borrowed money. The Secretary of State's instructions to the effect that Famine Protective, and other unproductive works should not be carried out from loan funds are apparently based on a misapprehension. Unproductive works as a matter of fact, as you will yourselves see by looking at the account, are, under the present system, carried out from borrowed funds just as much as productive works are. Possibly they might be considered even more so, for, as the duty of Government would obviously lie in devoting their available resources in the first instance to the most useful works, it would follow that the reproductive works, as being the most useful, should properly be considered to have the first lien on the balance of the ordinary revenues. That is what I wish to point out here, that if you build a large and expensive Public Office, which brings you in nothing, you are really practically building that Public Office from borrowed money.

Mr. *Kynaston Cross.*

3532. That is if you borrow at all?—Yes; if you borrow at all, for if there is any balance to be made good by borrowing it is a balance which has to be made good on the whole account. These are all the principles which I wish to bring to the notice of the Committee, because they seem to me to affect the whole of the proposals of the Government of India.

Chairman.

3533. Do you consider that the principles which you have pointed out are of practical importance?—They have got to be of practical importance during the past few years simply owing to the Government having lately commenced to invest largely on railways and other *de facto* reproductive works which are carried out from Famine Protective and other ordinary

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funds, that is, which are carried out from Item O., raised from current taxation. Every such reproductive investment under Item O., saved from ordinary taxation and invested, obviously tends to lessen the general rate of interest that must be earned on Item R., in order that we may cover the interest at 4 per cent. required on Item H.

3534. Then I gather that the whole tenor of your evidence is to show that the Government of India's proposal to expend their resources, as a whole, on the railways which are entered in Schedule A., is not *prima facie* an unsound financial position?—I think it is not. What I wish to point out is that the principle really underlying the matter is, that the Government should take care that the amount borrowed under Item H. is amply covered by good and sufficient assets arising from the investment of the whole sum under Item S. and not alone from the amount entered for accounts purposes under Item R. My contention is, that if you have under Item S. a number of railways which altogether only earn say 3 per cent, then the expenditure of 4 per cent. in Item H. is more than covered.

3535. Would you say that the financial position would be a sound one if Government invested 1,000,000*l.* of borrowed money in railways, earning only two per cent., provided they invested another million of ordinary income in the same way?—As an accountant, of course, I should say so, but as a practical man I should work with great caution, and allow a fair margin. Practically I would say that your supposed investments would be sound, if both railways earned something more than 2 per cent., say 2½ to 2¾ per cent.; you get then practically a sinking fund.

3536. Then you are prepared to maintain that the proposals made by the Government of India are financially sound?—I think they are, and I would call your attention here to this Paper which I put in to-day, showing the railways entered in Schedule "A." If you will turn to the statement of railways entered in Schedule A. headed No. 3, you will see that the purely protective railways amount on the whole to only 10,173,790*l.* You must not imagine from that that they will not pay at all, because some of them will probably pay fairly well; out of this item of 10,173,790*l.*, 3,983,000*l.* is already under construction. You will observe that the Jhansi Manickpur is under construction. The Bellary-Kistna and Cuddapah-Nellore Railways are also under construction, so that all really that we have to consider is a sum of 6,190,000*l.* of new line to be undertaken, regarding which it cannot be positively stated that the investment will produce 4 per cent. It is obvious that the whole probable deficit is more than covered by the excess profits of the Rajputana Railway; that is to say, by the large line we have now opened, which is earning, so far as our accounts show, over 5 per cent.

3537. Are you now arguing in favour of a relaxation and removal of restriction?—The Government of India propose, as I have said, to take advantage of the whole of their available resources, both for protective lines and productive lines. The productive lines it is estimated will produce 4 per cent., and the protective lines, something less than 4 per cent. The present orders of the Secretary of State are to the effect, that no borrowed money is to be laid out on lines, unless they, within five years, will produce 4 per cent., so that as the orders now stand it is impossible for the Government of India to invest borrowed money on the protective lines, which I have entered at the top of the page. The Government of India consider it requisite that the restrictions which have been laid down by the Secretary of State, with regard to works to be undertaken by borrowed capital, should be slightly relaxed. The rules now in force regarding these works, are contained in the Secretary of State's Despatch, No. 1, 6th January 1881, which you will find at page 4 of the Papers, in para. 8 (App. No. 1, p. 490). According to these instructions which are now in force, railways are "to pay within a maximum limit of five years from the date of the line being opened for traffic, 4 per cent. on the capital invested; including therein, all arrears of simple interest incurred up to that date, and also the capitalized value of the land revenue, and of leave allowances and pensions." It is these restrictions which the Government of India desire to have relaxed.

3538. We shall be glad to know to what extent you wish them relaxed?—I will first make a few observations with regard to the restrictions as they now stand. I think it may be held that the conditions laid down by the Secretary of State as to productive railways, would, if they had been in force all the time, have excluded the construction of the East Indian Railway, which is now, I think, our most successful financial work. I think it would not only have excluded the East Indian Railway, but also, as far as I can calculate, the construction of every railway in India. I went into the matter before I left India, and I could not find one railway which answers strictly to the Secretary of State's restrictions. The restrictions practically prohibit altogether the construction from productive funds of short extensions of, or of branches from existing railways in all cases where such short extensions or branches have to be considered as independent revenue-producing works. Because, as every railway man knows, when a branch is made, the actual receipts from that branch practically appear in the accounts of the main line and not in the branch. It brings traffic on to the main line and not very much on the branch itself; if you were to consider the branch as a revenue producing work on its own basis, I think that the result of the restrictions imposed by the Secretary of State would simply prevent us making any branch lines at all. I would also point out that it is absolutely inconsistent with the previous and express policy which the Secretary of State laid down himself. I will go further. In addition to this it may easily be shown that existing lines were not nearly developed in their fifth mean year. I have taken the Secretary of State's instructions to indicate the mean year, because I cannot put any other meaning to them. If the line was opened in three sections, and the first section had been opened six years, and the second section had been opened five years, and the third section had been opened four years, then I should take five

Chairman—continued.

five years as the mean age of the line, provided that the sections were all the same length. I find that in the fifth mean year of the East Indian Line, the earnings per mile per week were 374 rupees. At this present moment they are 630 rupees. In the fifth year of the Eastern Bengal Railway the earnings were 279 rupees per mile per week, and now they are 644 rupees. In the fifth year of the Oude and Rohilkund the earnings were 153 rupees per mile per week, and now they are 191 rupees. The similar figures on the Scinde, Punjaub, and Delhi Railway compare as 122 rupees to 302 rupees; on the Southern India Railway, as 84 rupees to 113 rupees; on the Great Indian Peninsula Railway they are as 357 rupees to 515 rupees; on the Bombay, Baroda, and Central India Railway they compare as 291 rupees to 496 rupees; on the Calcutta and South Eastern Railway they are as 64 rupees to 102 rupees; on the Omraoti Railway, which is the only State railway we have opened sufficiently long to enable us to make a fair comparison, the figures compare as 212 rupees to 308 rupees. The above figures show that if a line earns 4 per cent. in its fifth mean year, it may be fairly expected to earn from 7 to 10 per cent. subsequently; and this percentage on the amount expended, that is to say, a percentage of from 7 to 10 per cent. on Item S., or if you like to take it, Item R., would produce about 10 or 12 per cent. on the amount actually borrowed under Item H. In other words, the contention of the Government of India is that the restrictions laid down by the Secretary of State, ordering that all our lines must earn 4 per cent. within five years, are rather too stringent. If you remember, General Strachey, one of the members of the Council of India, came before you and told you in his evidence that this particular despatch, laying down these restrictions, was the outcome of a policy which strove really to arrest the expenditure on public works; and that it was hardly denied that this was the object of it. I think after this frank avowal, the Government of India, if they are to carry on their public works policy further at all, may well expect these restrictions to be slightly relaxed, and on the grounds which I have put forward.

3539. Is that all you have to say regarding the class of works?—I want to point out that from the despatches of the Government of India, although I may say it is a point that I have no definite instructions upon, I think it is plain that the Government of India would wish all such restrictions to be removed, and that they may be permitted to carry out their works on the intelligible principle that the total amount borrowed, Item H., must always be more than covered by good assets; that is, by good revenue-producing works. Whether the assets are good or whether they are bad should be judged on purely mercantile principles; simply by the actual revenue they produce. This would simply mean that the works should be carried on so as to bring no further burden on the taxpayer. Personally, I think the works should be carried on so that in the long run the taxpayer should be relieved. This is in accord with what, if you remember, I stated in one of my previous answers; I pointed out to you that the burden on the taxpayer was being lessened year by year, and that we hope it will soon be nearly entirely removed.

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3540. We come now to your third issue, the alterations proposed by the Government of India in the limit now fixed for direct borrowing on productive public works; what are the proposals of the Government of India?—You will find the proposals of the Government of India at page 76 of the Despatches, in para. 10 (App. No. 1, p. 562). They are very brief proposals. The Government merely propose that the annual loan of 1,800,000 *l.* borrowed for railways alone should be increased to 2,150,000 *l.*, *i.e.*, by 350,000 *l.* The limit fixed for the total sum to be borrowed is now 2,500,000 *l.*; the amount to be borrowed in future, under the Government of India's proposals, would be 2,850,000 *l.*, which you will find on the foot-note on page 76. These constitute the Government of India's proposals; they wish the limit of 2,500,000 *l.* raised to 2,850,000 *l.*, as you will see in the foot-note. They wish no alteration in the amount borrowed for irrigation works. The whole addition of 350,000 *l.* is intended to be expended on railways.

3541. Will you explain to the Committee how the aggregate sum to be expended on protective public works has been fixed since the Report of the last Select Committee of the House of Commons?—You will remember that the Report of the Select Committee of 1879 recommended that a sum of 2½ millions should be laid down as the annual limit of the borrowing powers of the Government of India. The actual words were, "that the amount to be annually expended on productive public works should mainly depend upon the financial condition of India, and should therefore, for the present, be limited to an amount of 2,500,000 *l.*, as recently fixed by the Secretary of State for India. That, in furtherance of the above recommendations, 2,500,000 *l.* should be the maximum amount to be raised in any one year by the Indian Government (in addition to existing liabilities) for the prosecution of productive public works." The Committee, however, omitted to define what works were to be included in those 2½ millions, and from the first it has been held that there were a great number of charges that were really met from borrowed capital which were to be excluded from the 2½ millions. I will now mention all the different heads under which we have practically borrowed, without the borrowings having been included under the 2½ millions. First of all: (*a.*) All expenditure by private companies, although the capital might have been wholly or partially guaranteed by the State. (*b*) All sums spent on works from ordinary funds, which on the works being subsequently classed as productive, were transferred to the Productive Public Works Accounts, and brought on the accounts as part of the Productive Public Works Debt. (*c.*) All capital expended by the guaranteed railways on additions and improvements of existing lines, and on extensions of lines. (*d.*) All capital expended on the East Indian Railway on additions and improvements since the line was taken over by Government. (*e.*) The capital to be expended on the Eastern Bengal Railway on additions and improvements. (*f.*) Debt created

Chairman—continued.

er incurred in the purchase of the Madras Irrigation Company's Undertaking, the East Indian, and the Eastern Bengal Railways. All these sums have been considered outside the margin of the 2½ millions. In practice, the limit laid down by the Select Committee has been worked to by taking care that the Annual Budget Grants for (*a.*) Direct State Expenditure on Productive Railways; and (*b.*) State Expenditure on Productive Irrigation, did not, in the aggregate, exceed 2,500,000 *l.* on the average, *i.e.*, all expenditure of previous years short of the limit of 2,500,000 *l.* was added to the grant of the year. Of the total amount of 2,500,000 *l.* a sum of 1,800,000 *l.* was ordinarily devoted to railways, and 700,000 *l.* to irrigation works. That will account, I think, for some statements which apparently look curious in the Despatch. There is one sentence in the Despatches, page 65 (App. No. 1, p. 551), in which it is said that Lord Hartington stated that instead of 2,500,000 *l.* there had been 8,000,000 *l.* spent upon public works. Judging from the Government of India's Despatch, I read it as referring to "productive public works." It says, "the fact that capital expenditure on public works is not confined to 2,500,000 *l.*" and so on. The inference from that would be, that it meant "productive works," I think. The Despatch is No. 269, dated the 24th of September; it is the third Despatch in Paper 2, page 65: "The fact that capital expenditure on public works is not confined to 2½ millions, was effectively brought out by Lord Hartington in his reply to the Manchester Chamber of Commerce in December 1881; but our annual resources are unfortunately far below the eight millions which his Lordship was then able to show." I do not think I make a mistake by saying that it apparently refers to "productive public works."

Mr. *Kynaston Cross.*

3542. Clearly it does not, because it is there stated that "our annual resources are unfortunately far below the 8,000,000 *l.*"?—But the total expenditure of 1881–82 on block account was 8,000,000 *l.*, and Lord Hartington says 8,000,000 *l.* as near as possible.

3543. Then the letter of the Government of India on the 24th of September is entirely wrong?—The inference that might be placed on the sentence is apparently so. I put in these remarks simply because it seemed to me that some explanation was required to show how very much more we have annually spent on productive public works than 2,500,000 *l.* Any Member of the Committee who compares the expenditure on block account with the 2,500,000 *l.*, can see that for himself. The grand total of productive works expenditure in Statement 2 A, you will see is a great deal above 2,500,000 *l.*; in the year 1878–79 it amounted to 4,381,898 *l.*; in 1877–78 it amounted to 4,791,052 *l.*; and if you look at the year 1882–83 you will see that the expenditure on productive public works is in excess of 4,764,000 *l.*

3544. May I ask you whether the restriction which the Select Committee fixed was upon the borrowing power and not upon productive public works?—I understood that it was on

Mr. *Kynaston Cross*—continued.

borrowing power, that is to say, I understood that the limit of 2,500,000 *l.* referred to our Item H. and not to our Item R.

3545. So that if you had any surplus revenue you might spend it in Item R.?—Yes.

Chairman.

3546. Have the Government of India any other suggestions to make with reference to this limit to the power of borrowing?—They have made one further minor proposal, which you will find at para. 18 on page 79 (App. No. 1, p. 565). They suggest that the sum required for additions and improvements to the State railways open for traffic should be considered as outside the normal limit of 2,500,000 *l.*, in the same way as all further capital expended on additions and improvements on the East Indian Railway is now considered as outside the limit. The sum required for additions and improvements on the State railways is estimated to amount to 300,000 *l.* a year, which would bring the specific amount of 2,850,000 *l.*, mentioned by the Government of India, to 3,150,000 *l.*, or to say in round numbers 3,000,000 *l.* a year. Thus the Government of India propose an absolute increase of 350,000 *l.* in paragraph 10, and they also propose that you should allow the whole capital required for additions and improvements to the open State railways to be considered as outside the fixed limit.

Mr. *Carbutt.*

3547. Would that include branches?—No, the works referred would be additional stations, additional goods sheds, rolling stock, and works of that sort.

3548. And would you include doubling the line?—No.

Chairman.

3549. You have been giving evidence upon these three heads up to this point, as I understand, on behalf of the Government of India; have you any views of your own upon these three issues which you would like to place before the Committee before we pass on to the other heads?—I will put my own views before the Committee, if they say they would like to have them; but still they are only the views of an individual.

3550. But they are the views of an individual who has paid great attention to the subject, and I think the Committee would be very glad indeed to get them?—In the first place, I think, that as the Government intend to carry out a policy for improving the communications of India and for generally developing the country on so large a scale as to involve the necessity of borrowing, as is now being done, every effort should be made to reduce the expenditure in other directions; that, I think, is one great point to be attended to. I think considerable care ought to be taken to cut down unnecessary establishments in all departments, and to restrict the expenditure under the head of Military Works and Public Buildings and Offices, &c., to the lowest possible amount.

3551. Do you think it is practicable to do so?—Yes; looking at the statements, I think that the amount charged under Item O. should be reduced to the lowest possible figure. Secondly, my opinion is, that the limit of borrowing placed

Chairman—continued.

placed on the Government of India should be a limit sufficiently elastic to allow of the business being carried on intelligently; that is to say, it should be a limit that should come into practical operation only in extreme cases. When money was cheap, it would obviously be to the advantage of the Government to push on their works at a more rapid rate.

3552. Do I understand you to be in favour of the Committee of the House of Commons laying down a limit; or would you leave the limit to be fixed by the Secretary of State?—I think that one important point to be attended to is, that the borrowing should never be pushed at such a rate as to injure the credit of the Government or disturb the money market.

3553. Who should, in your opinion, fix this limit?—There should either be a limit fixed by the Select Committee, just as the 1879 Select Committee fixed a certain limit, or else definite principles should be laid down upon which the expenditure is to be carried on. I think the two important points to be attended to are, first, that the borrowing should never be pushed at such a rate as to injure the credit of the Government; and secondly, that the money should be laid out on really good assets, that is on the best paying lines; that is my personal opinion. And lastly, I think that in the accounts of the State, the administrative business of the Government should be kept quite distinct from that part of the operations of the Government, which I may term fiscal enterprise. In other words, I would keep the whole of the railway accounts outside the general accounts of the Empire. The general accounts of the Empire would thus contain but two entries regarding railways, one entry showing the actual contribution from ordinary revenues, *i.e.*, from current taxation towards the capital cost of constructing railways; and the second entry, showing the net cost to the taxpayer of working the whole railway system. Coming back to our statements, I think, that the only figure shown in the general accounts of the Empire, with regard to the working of railways, should be the figure which you will find at the bottom of No. 3 E. the net loss or gain on working. If the entry were on the receipt side it would show that the railways were more than paying their way, and it would point to the advisability of cautiously reducing the rates and fares. If the entry were on the expenditure side it would be evidence at once to show that the Government, as regards the commercial side of their business, were not so successful as they ought to be; that is, it would show that they had sunk money which was not a paying investment. The taxpayer, at any rate, would be able to see at once how the matter stood. When I speak of the railway accounts being kept outside the general assets of the Empire, I mean, of course, that the railway accounts should be kept on the ordinary principles accepted by the commercial world; that they should include loss by exchange, furlough and pension allowance, and every other charge that actually is incurred in the course of construction and of working; and that they should be such accounts as the commercial world would accept, and which the Government could defend against all comers. With these accounts I think it would

Chairman—continued.

be perfectly easy at any time to see whether the railway capital account, which should include guaranteed railway capital and all other railway capital for which the State is financially responsible, were amply covered by good assets. We should, in fact, know, which we do not know at the present time, whether our railway system, as a whole, was commercially a success. We should be able to recognise our mistakes and to congratulate ourselves on our successes. Personally I believe the whole business, if exhibited properly in accurately kept commercial accounts, could be shown to be, at the present time, a financial success. With regard to our State lines, I shall put in some accounts showing the loss by exchange, and other indirect charges. Speaking broadly, I should say that the Indian railways were not, on the whole, a complete success to the last generation, that is to say, to the first shareholders; but the last generation cheerfully bore their burden, and they have passed away, carrying their burden with them, leaving us, at the present day, a vastly improved, and now a very valuable property. I think that, on the whole, Indian railways at the present time do very nearly pay their way.

3554. And you look forward in the future to their paying still better?—I look forward, certainly, to their paying still better.

3555. You do not think there are any causes at work which might lead you to fear that there would be a falling off?—No, I do not. I think that in all these things there would be what I might call a tidal movement. There would not be one regular increase; I think there would be increases and there might be decreases; but on the whole on the average, as shown by the bottom line of figures in No. 3 E., there would be, I think, a material improvement.

3556. You take a cheerful view of railway finance?—I do, certainly.

3557. You think there is nothing in the proposals of the Governor General in Council which should alarm us?—I think there is nothing. I am perfectly convinced that the whole of the proposals of the Government of India can be carried out without any further taxation whatever.

3558. Although you personally, I understand, do not approve of their proposal to spend largely on works which are called non-productive?—That is if you assume that the protective Indian Railways entered in Schedule A. will not be productive; but my opinion is that the railways entered in Schedule A. will, on the whole, pay; I do not see any reason why they should not. There is no evidence whatever to show that they will not. I do not think that some of the so-called protective lines will be anything like as paying as the others; but, I think, when even these are allowed to develope, say in 10 years, you will find that they will pay the whole 4 per cent. if they are managed economically.

3559. You would be inclined, first, to construct works that were absolutely certain to pay?—I should certainly do so, and that opinion is not opposed to the general proposals of the Government of India, because the proposals of the Government of India put forward no particular order in which they intend to take up the works.

Chairman—continued.

3560. Have you anything to say about this action of the Chambers of Commerce in India, with regard to railways; do you think that their schemes are rather extreme?—I think that the proposals of the Bengal Chamber of Commerce are moderate; but I think that the proposals of the Bombay Chamber of Commerce go quite beyond reason.

3561. Are you aware of any feeling amongst the natives of India that a large expenditure in extending Indian Railways would necessitate increased taxation?—I have never heard of any such feeling.

3562. You think that the Committee may disregard any statements that have been made of a very strong feeling in India, which exists upon this subject?—I think that the Committee may safely disregard such statements. So far as I know the natives, the notion that they always give me is that they dislike our law, and they dislike our system of land revenue; but if there is one thing in this world about us that they do like, it is our roads and our railways.

3563. Then I understand that the purport of your evidence is that the railway system is rather popular amongst the natives?—I think it is decidedly popular amongst the natives. The only thing against the railway system generally I should complain of is, that we have not sufficiently reduced the third-class fares, so as to touch the natives of India of the poorest classes.

3564. You think that the native third-class fare, the class by which the natives usually travel, might advantageously be reduced?—I think so. When I was manager of the Indus Valley Railway, I had under me a very able assistant manager, who was a native, and he always assured me, and I am bound to say, judging from what I have seen, I agree with him, that our third-class fares never touched the lowest classes of India; that is, the bulk of the poorer classes; and I think it would be easy to prove that they do not touch these classes. I was very much struck, when I was manager of the Indus Railway Line, by finding that some men who came from a village near Agra to see my assistant manager, walked the whole way.

3565. How many miles?—I cannot say; but anyhow, when I was down in Moultan they walked the whole way from Agra to see my assistant manager. I had the curiosity to make inquiries and to find out where they slept, and I found (I am only speaking from memory at the present time) that they had walked about 30 miles a day, the whole way. If you take into account that a native can walk 25 miles a day, it is perfectly easy to find out what he saves or loses by going on the railway; and taking into account his average rate of earning, I think you will find that it pays the poorest classes to walk rather than to use the railway.

3566. Then you say that the natives take an interest in the railway system, and would be glad to see it extended, provided the fares were lowered?—I think they would be glad to see it extended whether they have lower fares or not, because, although the third-class fares do not, as I say, touch the whole of the natives now, the fare of two pies per mile, which is a very low fare, certainly does touch an immense number of people, and it is a great convenience to a very great number of them. Whether a man travels by railway, or whether he walks, entirely depends upon the amount of his average earnings.

Chairman——continued.

3567. What are two pies equal to?—Two pies are less than a farthing at the present rate of exchange; at a 2*s.* rate it would be exactly a farthing.

3568. The natives all over the country use the railway to a very great extent, do they not?—To an extraordinary extent. There is traffic where you literally cannot see anything. My own experience on the Indus Valley Line was this: I have got over 200 rupees a week at desert stations where you could not see how you were to get one shilling of revenue. Look as far as you could around you, and you could not see a blade of grass growing. Where the traffic came from, or where the people came from or went to, I could not say; I can only say simply that the traffic did come. It was not only passenger traffic, but there was actually a certain amount—a very small amount, to be sure—of goods traffic; but still, no matter where it came from, there was the traffic; and, remember, I was manager of a line which above all other lines everybody said would not pay.

3569. You constantly find the stations in India, do you not, packed and crammed with natives, waiting for hours for a train?—Yes, on the East Indian Line the passenger traffic has developed to an extraordinary extent. I have very often seen natives left behind. On the Scinde, Punjaub, and Delhi Railway I have on occasions seen people left behind at the stations; but, of course, as a general rule we run our trains like you do in England, with such a number of carriages that we are able to take advantage of the whole of the traffic that offers.

3570. So that you think the Committee may dismiss altogether from their minds any fear lest there should be dissatisfaction in India on the ground of probably increased taxation with any proposal to considerably extend the railway system?—I think they may safely dismiss any such fear.

Mr. *Carbutt.*

3571. Could you explain to the Committee the reason why, in the year 1877, you made a surplus profit of 629,000*l.*, and in the following year, that is in 1878-9, the railway made a loss of 1,076,000*l.*; and in the next year, that is in 1879-80, they made a loss of 605,000*l.*; and in the year 1880-81 they made a loss of 50,000*l.*?—The disturbing element, I think, of the year 1877-78 in the railway receipts was the enormous amount of grain that was carried for the Madras famine.

3572. Would you expect that there would be a loss in the following year?—I should have expected that there would be a loss, seeing that there had been a loss for so many years previously, and that there would have been a loss in 1877-78 had it not been for the increased receipts due to the famine, which more than balanced the expenditure of that year. If you turn to the Revenue Statement I B., you will see that the famine took place in Madras and Bombay during that year.

3573. You have explained to the Committee what the proposals of the Government of India are

Mr. *Carbutt*—continued.

are since that time; and you have also explained your own views. I rather gather from your views that you would be inclined to go beyond even what the Government of India talk of in capital expenditure; is that so?—No; I think the Government of India's proposals with regard to capital expenditure are very reasonable indeed.

3574. Because, as I understood you, that would include a large amount of extra money for what might be called unproductive works, if the line was a protective work?—That is one of the proposals of the Government of India, not mine; my opinion was just the opposite way. But I must point out that the proposals of the Government of India, with regard to protective works, do not involve works which would absolutely be a loss, because the only protective railway that is open at this present time is, I believe, paying fairly well.

3575. I understand you to say that the protective works will pay in time?—Yes, I think they will pay in time.

3576. And you would recommend an advance of money by the Indian Government, to be spent on protective works, because they will pay in time?—Personally I should take up the lines that paid best first.

3577. With regard to the Quettah line, about which there has been a great deal of discussion, As I am informed, that line is likely to pay very well indeed; can you tell the Committee any thing about that line?—I can only say that I have been manager of the Kandahar line, which will form one of the sections of the Quetta line; but this point will come in under the second head of evidence.

3578. You said that you had a native assistant manager; do you think that the Committee could in any way make any recommendation that natives should be employed more than they have been hitherto?—I will come to that afterwards, in the second part of my examination; at present we are dealing with the proposals of the Government of India.

3579. I presume you will put information before us as to the management of those railways?—Yes, I propose to do so. I wish my present evidence to be confined to the proposals of the Government of India, for the reason that when I appear next before you in examination, I shall appear simply in support of my own individual opinions, without instructions from the Government of India.

3580. You stated, with reference to the total cost of public works, as I understand you, that the sum we had to borrow would only amount to 3·38 *d.* per head of the population?—No; that sum is the net cost of the working of the *existing* public works, that is, if we stopped making any further new works for the improvement of the country, and merely confined ourselves to working and maintaining the works we have at present, the probable charge to the taxpayer would be only about 3·38 *d.* That does not include loss by exchange.

3581. What would that amount to?—I am not in a position to say what the loss by exchange would be. I would ask you to let Mr. Westland give you evidence on that question, because he deals with that item of the account, and I think it would be better to get the information at first hand from him.

Mr. *Carbutt*—continued.

3582. You gave us the amount that the Government of India propose to expend; what proportion of that would be paid in this country for anything sent out from this country, including the freight delivered at Calcutta?—I should say that about 40 per cent. would be paid in this country; I will give you the exact figures next time.

3583. Of course, by so much that would not interfere with the loss of exchange, that is to say, there would be a net deduction of 40 per cent. from the amount proposed to be spent by the Government of India, and which would not have to be borrowed in India?—That would very largely depend upon where you borrowed the money; I understood that you wanted the general average proportion of the whole capital of the Indian railways, which is spent in England.

3584. Do you think that the amount of borrowings that are proposed by the Government of India would in any way affect the exchange at the present time?—That would depend upon whether you borrowed in England or whether you borrowed in India.

3585. Do you think you could persuade the Indian population to subscribe anything, on any terms whatever, to railways in India?—Practically, nothing at present; but at the same time just before I left Calcutta they started a line there, which I consider as one of the most hopeful symptoms of a rising tendency on the part of the native public to invest in railways that I have seen since I have been in India. It was a small line from Serafuli, on the East Indian Railway to Tarakessur, in the Hughli district. It now has, I understand, a very long share list, mostly consisting of native clerks, and perhaps a few engine-drivers, but it is all taken up by that small class of people.

3586. Do you think that if the Government proposed issuing shares, say of 50 rupees, or 100 rupees, and making the payment of interest due at any post office, or at any Government office all up the country, by that means they could induce the natives to take any share at present in the Indian Railways?—No, I do not.

3587. On the ground that they can invest their money better?—Yes, much better elsewhere. The only possibility of getting railway shares taken up in India, is to get the whole affair taken up by a syndicate in India, when it would be a matter of personal interest to issue them and place the shares on the market.

3588. Would that be a syndicate of Indians or of Europeans?—In the case I allude to it was a syndicate of Europeans.

3589. By what means do they induce the natives to invest their money?—That I cannot say, I only know the fact that natives did invest their money in it; it is a small branch line from the East Indian Railway to Tarakeshwar, where there is a Hindoo shrine, and, to begin with, the priest of the shrine took, I think, some 50 shares, which shows that he wanted custom, and thought the railway would give facilities to pilgrims.

3590. You also mentioned that engine-drivers invested their money in that line?—Yes, some of the engine-drivers on the East Indian line.

Mr. *Carbutt*—continued.

3591. Were they natives or English?—I think they were East Indians, or, as you may say, Eurasians; I may say that my information is derived from Mr. Robert Miller, who is one of the members of the Council of India; he was, I believe, one of the syndicate.

3592. Have you any idea what was the amount of the capital that was raised in India?—About 16 lacs.

Mr. *William Fowler.*

3593. I do not quite understand why you thought that a Committee of the House of Commons should put a limit on the expenditure of the Government of India, seeing that you have a Secretary of State, and a Council here, to watch the proceedings of the Government of India?—I will only refer to the answer that General Strachey gave. General Strachey proposed that the Government of India and the Secretary of State should be allowed to fight it out between themselves; I, as representing the weaker body, would say that it would be advisable for the Select Committee to lay down some limit, or some definite principles, and not let the matter be fought out between us, as probably we should get the worst of it.

3594. What limit would you place on the operations of the Government of India; they would not be bound to let you have the whole of the money that you think you require?—I have already said that, in my opinion, I think that the limit should depend far more on the credit of the Government than anything else.

3595. You say that the Government of India here would get the best of it; what did you mean by that?—I said that the Secretary of State would probably get the best of it.

3596. But it is an open question now, is it not, except to this extent, that you must not borrow more than the limit?—The Government of India may not borrow more than the limit.

3597. The limit binds both parties, both the Secretary of State and the Government of India, and if you had no limit it would be a question merely of what was prudent in the opinion of the Government here, and the Government in India?—My own opinion is that it would be far better not to fix a limit, but to indicate the principles upon which the Government should proceed, that is to say, to indicate principles and not to have a fixed limit. With a fixed limit, such as 2½ millions, the Government of India would be allowed to borrow 2,500,000 *l.*, no matter what was the state of the money market, and of course that would be bad financing; but anybody who meant to carry on the business as a commercial transaction would borrow more when money was cheap, and would contract his borrowings when money was dear, and therefore to lay down a fixed rule of borrowing 2,500,000 *l.* every year seems to me to be bad financing upon the face of it.

3598. On the other hand, when money was excessively cheap and materials excessively cheap, it might be prudent to borrow a very much larger sum?—Provided that you could push on the works with your present staff, and provided that there was no waste, because waste always

Mr. *William Fowler*—continued.

occurs whenever there is any sudden variation in the rate of public works expenditure.

3599. Therefore, you say there is no reason for any limit, as a matter of finance, at all?—With regard to the 2½ million limit, I may say in fact there was no reason whatever for it; it was a limit fixed not with regard to the requirements of India with regard to public works, but to the rate at which it was at that time supposed that the money market of India could absorb rupee loans. If you read between the lines, at the time of the last Committee the matter practically stood in this way: the officials on the part of the India Office said, we have no power to borrow in this country; if we go to the House of Commons for power to borrow in this country, the House of Commons is most reluctant to give us power to borrow any money; you will find that evidence in the year 1879, at Question 499, where the then Assistant Under Secretary of State said that the whole expenditure should be kept within the limit at which money could be borrowed in India. That was the principle adhered to right through; it was laid down in 1874, when the Secretary of State said that the necessary funds for productive public works extraordinary were to be obtained in India; and, as I say, this principle of borrowing in India was adhered to right through. You will see at Question 1167, in the evidence of the Select Committee of 1878, the witness answers, "I should have liked to have borrowed about 2½ millions a year for carrying on the public works, because I think that is about the amount you could get easily in the Indian money market." The Government of India, in its Despatch No. 368, dated the 13th October 1876, wrote to the Secretary of State as follows: "We have also, in accordance with your Lordship's repeated injunctions, resolved to reduce expenditure on public works classified as extraordinary within the limit of the amount which we may find ourselves able to borrow in India on adequately advantageous terms; what this amount may be experience can only decide, but we cannot prudently estimate it even at the outset at more than 2 or 2½ crores of rupees a year, and for a permanency it may prove to be even less than this sum." That was the first suggestion, as far as I can see in the correspondence, limiting the expenditure to a sum of 2,500,000 *l.*, a limit which was based, I say, not on the requirements of the country in respect of public works, but on the amount which could advantageously be borrowed in India, it being then supposed that the loans which were placed in India were absorbed in the country.

3600. As a matter of fact, is it not so, that a great deal of the rupee loan is held in this country?—I believe it is, but I understand you have had much better evidence on that point from other witnesses.

3601. Therefore, I find no principle in their laying down the rule as regards the requirements of the country?—I can see none whatever.

3602. It was simply a question of the convenience of the Government in borrowing?—Yes, the convenience of the Home Government. You will find in another Despatch, dated the 27th March 1879, the Secretary of State pointed out to the Government of India that the outlay on productive

Mr. *William Fowler*—continued.

productive works had hitherto exceeded an average of 4,000,000 *l.* per annum, which was more than could be borrowed in India. He consequently limited the productive works expenditure in future to 2,500,000 *l.* a year. You may take it as proved that the limit of 2,500,000 *l.* a year was fixed on the supposition that 2,500,000 *l.* could be borrowed advantageously in India.

3603. You are aware that you can borrow now at one per cent. cheaper in London than you can get money in India. The present rupee loan produces 4½ per cent., and at the present rate of exchange you can borrow in London at 3½ per cent., if not less?—I am aware of this, but you will notice that the principle laid down by the last Select Committee of the House of Commons with regard to borrowing, which was altogether a sound one, is somewhat altered in the passage of the recommendations between England and India. I will read you the two proposals. The Report of the Select Committee says, "Your Committee, while making allowance for these difficulties, are clearly of opinion that loans for public works in India should always be raised in India, unless the Secretary of State in Council should be satisfied that the difference between the rates of interest in England and India is so considerable as to afford full compensation for the disadvantages which inevitably attend borrowing in this country." I understand from that, that the Committee recommended not that loans should *always* be made in India, but that you should see from the rates of interest between England and India which was the more advantageous of the two. But that was not the way in which the recommendations were sent out to India. The Secretary of State in sending out these recommendations to India made the following remarks in Despatch No. 420, dated the 23rd October 1879: "In regard to the advantage of raising in India, as a general rule, the whole of the money to be borrowed for public works, the Committee are in accord with the instructions of Her Majesty's Government, and with the undertakings of various times given by the Government to Parliament; and I desire that this may continue to be looked upon as part of the accepted policy in relation to such works." You see in that sentence there is no exception hinted at as to the possible difference of interest altering the whole system of borrowing in India. Then, if you will turn to page 3 of the Papers before you (App. No. 1, p. 489), you will find that afterwards, at para. 4 of a Despatch dated the 6th January 1881, it is stated, "The reasons for fixing the present limit of expenditure were explained by the late Under Secretary of State for India (Mr. Stanhope), in the House of Commons on 22nd May 1879, to be, that as it had been decided that money required for public works should be borrowed in India and not in England, the amount should be limited to that which the Government of India could fairly be expected to borrow in ordinary years without undue disturbance of the money market in India." So that now you have another expression of the policy in which is omitted altogether the exception which was laid down by the Select Committee of the House of Commons. In this last expression of policy there is no apparent hint that a difference in the rate of interest would alter the condition of borrowing in England or in India.

Mr. *William Fowler*—continued.

Mr. *Kynaston Cross.*

3604. Mr. Stanhope's statement in the House of Commons did not, I think, refer to the recommendations of the Select Committee?—No, it did not.

3605. But it did refer to the decision of the Secretary of State in Council?—Yes.

3606. Therefore that has no reference whatever to the recommendations of the Select Committee?—No, I agree with you in this point.

3607. Then the observation of Mr. Stanhope with regard to the recommendations of the Select Committee has no weight?—It has so far weight that I find that, in the Despatch of 1881, the exception which is definitely laid down by the Select Committee finds no place. As a practical matter of fact, we know that the Public Works Loan is supposed to be borrowed in India.

Mr. *William Fowler.*

3608. Although there is at the present moment an immense difference in the rate of interest?—Yes.

3609. There is one other question which I should like to ask you. You have given us a great deal of evidence as to those two items, O. and R., the one being the expenditure on new works for the general improvement of the country, charged to ordinary, and the other the expenditure on new works charged to productive works. I want to know whether your attention has been called at all to this question, how far a large amount of new works and permanent works are made in India out of revenue which would in England be charged to capital account, and made out of borrowed money; have you analysed this amount of 3,994,112 *l.* at all?—Looking at it in a general way, I suppose there is no country which bears such burdens in improving itself as India; that is to say, looking at it in a broad point of view, I should say that the whole of India now is heavily taxed for the sake of generations to come, say some centuries hence.

3610. Instead of doing as we should do in this country by charging it perhaps 30 or 50 years, a very large amount of this 3,994,000 *l.* is really in respect of works of that class?—You will be able to see at once by turning your attention to Block Account, No. 2 A., where you will see we have got a very large figure under "Telegraphs." I think the English people have also invested in telegraphs. You will see there that in the 16 years under review we have invested under Telegraphs more than 2,000,000 *l.* In the 16 years from 1867-68 to 1882-83 we have invested from ordinary funds in telegraphs to the extent of about 2,136,000 *l.*

3611. But it is not confined to telegraphs, is it?—Yes, wholly. You see it is under the word "telegraphs."

3612. I mean, are there any other new works besides telegraphs?—No, not in that figure.

3613. What amount have you borrowed on works of that character?—There is the figure there. I think you will see it is 55,000,000 *l.* in 16 years.

3614. I understand from the accounts that a good deal of that charge is for what we should

Mr. *William Fowler*—continued.

call repairs and establishment charges?—No, I have divided the expenditure between new works and repairs, each bearing its fair share of establishment charges.

3615. The grand total being 55,000,000 *l.*?—Yes; less 6,000,000 *l.* which have been transferred to productive works in the 16 years; it is about 49,000,000 *l.* in 16 years, or, you may say, about 3,000,000 *l.* a year. You might have judged that from my Statement X., because there it appears as Item O. In Statement Y. you will see it entered under the Block Account.

3616. The same item of which you speak here, which includes the whole of the expenditure on O., but O. is not all the block expenditure, is it?—Yes, Item O. is all capital expenditure; the rest of the expenditure is on working account; Item O. is for new works.

3617. The whole item of the ordinary works, and the ordinary account is a great deal more than 3,900,000 *l.*?—The whole expenditure, both on new works and on repairs expenditure is far more. The whole expenditure you will get of course from Statement 1 A.

3618. However, it comes to this: that really India is laying out enormous sums every year out of revenue on capital account?—Of course it is.

3619. And, therefore, it may fairly be said that, even supposing there should be a fall in railways, you have a considerable margin in that item if you compare the expenditure in England and in India?—Yes; that was one of the considerations that I pointed out to you to-day, showing that you need not be frightened about adding 200,000 *l.* to Item N., because you have such a very large margin to draw upon under Item O.

Mr. *Slagg.*

3620. You say, I think, that in future no works should be undertaken which would impose any burden upon the taxpayer?—I think that the principle should be that the State expenditure on new works should not be carried out so as to impose any further burden than is at present borne.

3621. Under the system of account which you propose, would you charge every item of expenditure; that is to say, the cost and interest during construction, and the loss by exchange, to capital account; it is not done so now?—It is not done so now. In cases where railways are constructed directly by the State, charging interest to capital practically makes no difference, except as regards the individual account of the work itself; that is, the only difference in the accounts would be that, instead of putting the interest as it is now, under Item N., it would appear under Item R.; but it would make no difference whatever to the total amount which would have to be paid. You should understand that charging interest to capital in the case of a guaranteed railway is distinctly an advantage to the Government, because you get more money out of the guaranteed company; but, as regards the Government itself, on its own State railways it makes not the slightest difference whatever; it is merely a difference of account; the interest that must be actually paid, instead of being carried, as it would be now, to revenue or working account, would be carried to capital or block account; instead of being carried to Item N., it would appear under Item R.; but there would be no difference whatever as regards the total expenditure.

Mr. *Slagg*—continued.

3622. You estimate the railway as paying their own way, or nearly so, which they do at the present time. You exclude from this item loss by exchange; do you exclude loss of interest?—I would propose, certainly, to bring the loss by exchange into the railway account.

3623. I think you also told the Committee that, from sources of information available to you, you consider that the natives are now quite favourable to further extensions upon a large scale of railway construction?—I could not say on a large scale. It is very difficult to get at the opinion of the natives of India at all; but all I can say is that, from personally speaking to them, they are extremely favourable to public works.

3624. We have seen it stated for instance, in some newspapers, that the natives are clamouring for improvement works of this sort. I suppose you have not heard that?—I have not; but I do know this, that as the practical manager of a railway they are so keen about railways, that on no less than two occasions when I offered to stop trains at a place if they would build me a platform, that is if they would throw up the earthwork of the platform and do the whole of the work themselves, they did so; and in one place they did so at very considerable expense, because I ordered them to make a platform at a place where we had dug out our earthwork for the railway embankment. They had first to fill up the hole which originally existed there, and then to build the platform, and they did it all cheerfully.

3625. By what process would you ensure yourselves with sufficient accuracy that though a work would pay, it would impose no burden upon the taxpayer?—If you ask me that question directly I would say, that there is no statistical machinery at present that I know of by which you could definitely say whether a railway would pay or whether it would not. When you compare the previously recorded official opinion with regard to the probable receipts of a railway with the subsequent actual facts, you will find considerable diversity, and I should say that at present nobody could possibly say whether a railway would pay on any but general grounds; when I speak of general grounds I mean from the population per square mile. From there being a large certain trade, and putting one consideration with another, we might say generally that a railway will pay; but I must say that I do not altogether trust in the detailed statistics that are put forward.

3626. Even in exercising your very best discretion there would be a great element of risk about it?—I think there would be an element of uncertainty, judging from the experience of the past.

3627. I think you said that it was in your opinion desirable that this Committee should recommend a fixed limit of expenditure?—No, I did not say that I should recommend a fixed limit, but I should recommend some principles be laid down under which the whole of the productive

Mr. *Slagg*—continued.

ductive public works expenditure should be conducted. I should consider it quite a safe principle to lay down that all the productive public works should be carried on, so as not to further increase the burden of the taxpayer.

3628. Is the feeling that such limitation of public works should rest mainly in the hands of the Secretary of State in Council?—Yes.

3629. Do you think that that would be undesirable?—I think it undesirable in this way, that an authority so far away as England is from India cannot possibly know what is going on in the country itself. I will take the recent wheat trade as an illustration. I do not think that anybody in England foresaw the enormous development of the wheat trade. We saw it clearly out in India. I think in all these things it is utterly impossible for an authority so far away as the Secretary of State is from India to be perfectly certain of what is going on in the country.

3630. It would be possible for two departments of the Government to come to two distinct and conflicting conclusions on this fundamental question?—I understand that you are now here because there is that absolute conflict of opinion.

3631. And you are of opinion that in such a case as that the Indian Government in India would go to the wall?—I think they would, decidedly.

Mr. *Bolton.*

3632. I understand that you approve of the extent to which the Government of India recommend the progress of railway construction?—Yes, I think it is fair and reasonable.

3633. An expenditure of 33,000,000 *l.* on an average of six or seven millions a year for five years?—Yes. I think that is a safe expenditure, and such as might be carried out with the existing staff.

3634. The estimated cost per mile of the broad gauge railway would be from 6,000 *l.* to 7,000 *l.* per mile; would you take that as a fair average?—I shall be prepared to give you evidence on that when I come to the evidence on the gauge question

3635. I would ask you, should not the present rate of progress be accelerated to the extent of a third; if that is so, you are at present opening about 750 miles per annum?—Yes.

3636. Seven hundred and fifty miles at 6,000 *l.* per mile would only be about four-and-a-half millions per annum?—Yes

3637. Consequently, you would require four-and-a-half millions per annum?—I think you slightly under-estimate the cost of the broad gauge.

3638. However, to that extent you would increase the mileage to be opened per annum?—Yes, to this extent, that I would practice the utmost economy in constructing a line, in order to get a greater length opened.

3639. I think I may take it generally that your opinion is, that no railway which is likely to be made in India is unlikely to pay?—That is my opinion, if it is economically managed.

3640. That is to say, every railway which is likely to be recommended, is likely to pay?—That is my opinion certainly, because if the Government of India does err on one point (I am not prepared to say it does err at all), but if it has a virtue carried to excess, it is over caution.

Mr. *Bolton*—continued.

3641. Referring to your Statement Y., with respect to receipts and expenditure of railways, you will see that the expenditure on working and maintaining existing telegraphs and public works show a considerable excess over receipts?—Yes, because the total expenditure includes the maintenance of all civil buildings, offices, roads, military buildings, schools, dispensaries, and everything of that sort, which produce no receipts at all.

3642. There is no statement put in by you, I think, exclusively referring to railways?—Yes, No. 3 Statements refer exclusively to railways.

3643. Will you take No. 3 Statement, which gives an abstract account of the railways and telegraphs, from the revenue and maintenance receipts; you have got also the annual working expenses, and those we must bear in mind do not include loss by exchange?—Precisely so.

3644. During all those years, from 1867 to 1883, the loss, with the exception of three years, has exceeded the gain?—Yes, but you must remember one very important point with regard to this, and that is that it is a loss only after considering that the guaranteed lines have earned more than 5 per cent., because it includes the guaranteed interest at 5 per cent. on the guaranteed capital, as well as a debit to the State railways of 4 per cent.. You must remember that the loss shown is after paying the whole of the guaranteed interest, and after debiting the State railways with interest at 4 per cent. Although the railways under these circumstances do at the moment show a loss, it does not show that the railways, as a whole, do not earn 4 per cent.

3645. Nor does it show the loss by exchange?—No, it does not show the loss by exchange.

3646. That would be equivalent, would it not, to nearly 1 per cent. of the guaranteed interest?—Of course the loss by exchange varies year by year, according to the fall in the rupee; the value of the rupee is very low now.

3647. It would be about 1 per cent. on the guaranteed interest?—No, about 20 per cent. on the amount of guaranteed interest shown in the public works accounts.

3648. After all these things are taken into account, there is nothing here to show that the railways, so far as they are opened, have paid more than their working and maintenance expenses, if so much?—This account includes the dividends as well as the working and maintenance. It includes the whole of the guaranteed interest and includes the 4 per cent. debited as interest to the State railway debt. If you look at Statement 3 D. you will see this, you will see the State railway working expenses first, then you see underneath interest on debt on productive public works; then you will see under the guaranteed railways not only the interest, but the excess profits. So that you see that the deficit you refer to is a deficit after paying over 5 per cent. on all our guaranteed railways, and after paying 4 per cent. on our State railways.

3649. Against 5 per cent. on the guaranteed railways, and against 4 per cent. on the State railways, with which the State is debited, you have to set the loss of exchange?—Yes, but it

Mr. *Bolton*—continued.

is exactly as I say, that we pay 5 per cent. when we might be paying 3½ or 4 per cent., and this we may set against the loss by exchange. Supposing the money had been borrowed at 4 per cent., the loss by exchange about balances the difference between the guaranteed interest which you are now paying at 5 per cent., and the interest which you would have paid at 4 per cent. What I have gathered from looking at the accounts is, that we have paid our way as nearly as possible, looking at the railways as started from the first, on a debt raised at 4 per cent.

3650. Have you any reason to suppose that money can be raised now at 4 per cent., inclusive of loss by exchange?—I put the excess interest on the one side, and the loss by exchange on the other, and I say that the loss by exchange does not amount to the difference between paying 4 per cent. and paying 5 per cent. upon our guaranteed railways. The loss by exchange only affects the guaranteed railways, because the other debt is supposed to be borrowed in India.

3651. But you know that practically it is not?—It is impossible to say whether it was raised in England or in India.

3652. That does not affect the argument, but it does affect the argument to say that the railways as a whole may be said to have paid 4 per cent. since they have been started?—Of course the loss by exchange on such portion of the State Railway debt as might have been raised in England, would affect the question, especially during the last 10 years, when I admit that the loss by exchange has been exceedingly heavy.

Mr. *Bolton*—continued.

3653. You made a suggestion as to railway accounts being kept separately; would you keep the railway accounts in India as they are kept in this country, placing that portion of the expenditure to capital which we consider belongs to capital?—Yes. When we speak of accounts, you must remember that there are three or four sets of railway accounts in India. There are the financial accounts for the official year; there are the administrative accounts, and there are the half-yearly railway revenue accounts. The half-yearly revenue accounts of individual State railways are kept in exactly the same way as the guaranteed railway accounts are kept; just the same as the English system.

3654. These accounts would show us better whether they have been paying as a whole or not?—Yes. Remember that the statements I have already handed in are not, strictly speaking, commercial accounts, because they show only the sums paid in and the sums paid out of the Treasury, and are based upon Treasury transactions alone.

3655. With regard to the third-class fare, I see that at present the fare is two pies per mile?—It varies; for instance, on the East Indian Line it is 2½ pies.

3656. What would you recommend?—If I did anything with my own line, I should try 1½ first, or, say, begin with one pie and three quarters, working down if the reduction was successful, to perhaps one pie in the end; I should be exceedingly cautious.

Friday, 9th May 1884.

MEMBERS PRESENT:

Mr. Baxter.	Mr. Kynaston Cross.
Mr. Bolton.	Mr. Dalrymple.
Mr. Brodrick.	Mr. William Fowler.
Sir George Campbell.	Mr. Jackson.
Mr. Carbutt.	Mr. Bernhard Samuelson.

THE RIGHT HON. W. E. BAXTER, IN THE CHAIR.

Mr. ROBERT WIGRAM CRAWFORD, called in; and Examined.

Chairman.

3657. YOU resided a long time in India, and were a member of one of the largest mercantile establishments connected with that country?—I went to India in 1833, and I resided in Bombay about 14 years as a member of one of the largest mercantile establishments there.

3658. On your return to England in 1847, I understand that you took part very shortly afterwards in the formation of the East Indian Railway Company, and have been chairman of that company for a great many years?—Yes. Before I left India I had taken part in the early formation of the Great Indian Peninsula Railway, and when I came to this country I took the same part practically in the formation of the East Indian Railway. In 1849 the Board was formally organised, and in 1854 I became its chairman, and I have remained so ever since, and I have never been absent but once from any meeting.

3659. You represented the City of London from 1857 to 1874, and during that time I believe you took an active part in all discussions relating to Indian railways?—If it would not be vain in me to say so, I should say, yes, I did so.

3660. Will you tell the Committee your opinion regarding the demand for an enlarged outlay for the construction of railways in India, on the part of the mercantile communities, both in this country and in India; do you think it is justified?—No, I think that the demand on the part of the commercial public in this country, and especially in India, has no substantial foundation and is very much exaggerated, and I think that proceeds from a mistaken view of the circumstances which led to the large export of grain and seeds and other commodities during the last year or two. Instead of that state of circumstances being normal, I am of opinion that it was entirely abnormal, there was an exuberant production of grain and seeds, and that the rates of freight to this country were very much in favour of the shipper; the exchange also, and the circumstances of the markets in this country were favourable at the time; I believe that the state of things was, as I have expressed, most abnormal, and is not to be taken at all as an index of what is to be expected in the ordinary course of years upon the average.

Chairman—continued.

3661. Then, in your view, considerable misapprehension exists both amongst the merchants in India and the merchants in this country as to the real requirement of further extension of railways in India?—I do not mean to say that there is no demand at all for new railways being made, but I say that the demand which has been put forward by the mercantile classes of India, that demand extending to an expenditure of 20,000,000 *l.* per annum, and also on the part of the merchants and others in this country is altogether exaggerated, and I should be ready to explain why I take that view.

3662. Will you favour the Committee with your reasons for forming that opinion?—I think that the public mind is very inadequately informed in this country as to Indian affairs generally; and I think probably there is not one person in a hundred who has taken part in the agitation for an increase in the railway system of India, and has taken into account at all the natural conditions which ought to be considered in determining where railways ought to be made, and how they can be made. I will put it in this way. I say that in order to understand it fully you must know the natural configuration and the geographical features of the country. The provinces and districts of India from which the bulky produce, consisting of grain and oil seeds and so on, which forms nearly the whole of the commodities for which easy and cheap access to the sea is required, and to which public attention has been so much directed, are principally the Central Provinces, Oude, Tirhoot, the North-West Provinces, and the Punjaub.

3663. In your opinion, are those provinces well served at present with regard to their access to the sea?—I would say "yes" in answer to that question; but, going back to my point, I say that, putting aside Karachi to the extreme west, and Chittagong to the extreme east, as the natural outlets of the Punjaub and Assam, there are only two ports in India through which the products of the districts which I have mentioned can find their way to foreign countries. I mean in the class of vessels which are now used in carrying on the commerce of the country. Those ports are Bombay and Calcutta, and I say with regard to Bombay the Great Indian Peninsula Railway

Chairman—continued.

amply satisfies (I will not interfere with former witnesses in point of mileage) all the requirements of the country. Also that the Bombay and Baroda, in connection with the Rajputana line, satisfies all the requirements of the country in the districts which it serves. With regard to Calcutta, you have the East Indian Railway serving the whole of the Gangetic Valley from Delhi to the sea; and you have the minor railways through Bengal, the Eastern Bengal and the Bengal Central affording all the facilities to commerce in the eastern part of Bengal proper. I say that that being the case, there is absolutely no necessity for any enlargement of the present system of trunk lines, and that all that is required is to develop and to extend those lines already made as trunk lines. Perhaps I may be permitted to say further, that physically you could not get another trunk line into Bombay. There are already two trunk railways that go into the narrow island of Bombay, and although there is nothing impossible from an engineering point of view, practically I do not think that there is room for another system.

3664. We have had a good deal of evidence laid before the Committee in favour of new lines, especially of two in particular, a proposed line from Jhansi by Bhopal to Cawnpur, and a direct line, so called, from Calcutta to Bombay *viâ* Nagpur; will you tell the Committee what is your opinion with reference to the necessity for the construction of those two lines?—I have considered the question as regards those two proposed lines of railway with some care, and one of them with the more care perhaps, because it would interfere to some extent with the railway with which I am myself connected. I do not mean to say that I would allow any consideration of that kind to affect the conclusions to which I have come, because I hold that in giving evidence before a Committee upon a subject of this kind, I am bound to consider primarily the public interests of the country. In the first place, to compare Cawnpur in its different relations with the sea, if the Bhopal Line should be made, the distance from Cawnpur to Calcutta is 684 miles; from Cawnpur to Bombay it would be, over the new proposed line by Bhopal, 858 miles, and the sum of the two is 1,542 miles. But the terminus of the one being 858 miles from Cawnpur, and the other 684, it is evident that the mean point between the two must be very much in favour of that which has the shortest distance as regards the cost of carriage, all things being equal. Now the middle point on such a through line would be 87 miles to the westward of Cawnpur, and, if any attention should be given to the suggestion which I shall venture later on to make to the Committee, that the distance between Bombay and Calcutta by the East Indian Railway shall be shortened by nearly 70 miles, then that medium point upon the line from Bombay to Calcutta *viâ* Cawnpur will be thrown almost upon the town of Jhansi; that is to say, Jhansi (83 miles) will then be, so far as mileage is concerned, the central point between Bombay and Calcutta. The argument that I draw from that is this: That so far as the traffic of the country is concerned which the new line would meet proceeding westward from Cawnpur to Calpi, perhaps by Jalone, or at all events in its vicinity to Jhansi; all other things, as I have said, being equal, the traffic must continue to flow to Calcutta, the disparity of distance being so greatly in favour of the East Indian Line. But that is not the whole question; because we carry our goods, owing to the facilities and advantages with which nature has furnished us on terms with which it is impossible for the Great Indian Peninsula to compete.

Chairman—continued.

3665. Before going to the rates, allow me to ask you this question in order to make it perfectly clear: Are you of opinion that those people who believe that the construction of that new line would divert a large portion of the traffic which now goes to Calcutta, to Bombay, will find themselves mistaken?—I have spoken up to this moment so far as distance is concerned. I was speaking at the time of the difference in respect of carrying cost. Whilst we can reduce our rate from Cawnpur to Calcutta below its present very moderate rate of 1 *l.* 7 *s.* 3 *d.* per ton for the whole distance, the other company, to put themselves on equal terms with us, must reduce their rates by 28 per cent.

3666. Will you state, if you please, a good deal more in detail to the Committee the rates charged respectively by the East Indian and by the Great Indian Peninsula?—The East Indian railway rate for grain from Cawnpur to Calcutta is 4·584 pies per ton per mile, that is 16½ rupees, which, at an exchange of 1 *s.* 8 *d.*, is 1 *l.* 7 *s.* 3 *d.* for the whole distance Now, the Great Indian Peninsula Railway rate from Jubbulpur to Bombay, which is the only standard which I can take, is 5·035 pies per ton per mile, or 22½ rupees, or, at the same exchange, 1 *l.* 17 *s.* 6 *d.* per ton for the whole distance from Cawnpur to Bombay, that is 1 *l.* 7 *s.* 3 *d.* in the one case as against 1 *l.* 17 *s.* 6 *d.* in the other.

3667. Now will you inform the Committee to what figure the Great Indian Peninsula would require to reduce their rate in order to compete on equal terms with the East Indian Railway?—I put it in this way, that to compete with our East Indian rate the Great Indian Peninsula rate from Cawnpur to Bombay must be reduced from 5·035 pies to 3·654 pies, or as much as 28 per cent.

3668. Will you kindly give us the same respective figures with reference to the traffic of the North-Western Provinces?—The next place above Cawnpur, going on the line afterwards, is a large junction called Tundla, which may be taken practically as the representative of Agra in a statement of this kind, the distance between the two not being very considerable. To go over the same ground as I took in the former case, the distance between Agra and Calcutta by the East Indian Railway is 841 miles, and between Agra and Bombay by the proposed line by Gwalior and Jhansi it would be 840 miles. The grain rate by the East Indian Railway being 60 rupees per 100 maunds, the charge from Agra to Calcutta is 3·733 pies per ton per mile, or 16½ rupees, which, at 1 *s.* 8 *d.* a rupee, is 1 *l.* 7 *s.* 3 *d.* per ton for the whole distance; that is to say it is the same as the Cawnpur rate. The Great Indian Peninsula

Chairman—continued.

Peninsula Railway rate being, as before stated, 5·035 pies, the charge from Agra to Bombay would be 22 rupees, or 1 *l.* 16 *s.* 8 *d.* for the whole distance; so that to compete on equal terms with the East Indian Railway the Great Indian Peninsula rate must be reduced from 5·035 pies to 3·733 pies per ton per mile, or as much as 26 per cent.

3669. But would not it be a great advantage to the people of India if the Great Indian Peninsula rates were reduced as you mention now?—What the Great Indian Peninsula can do in their circumstances, we can do in our circumstances; and if we reduce our rate in the interests of the people in India, and we must be controlled by that, I am not sure that we shall not benefit too.

3670. You admit that it would benefit the public; have you any doubt that it would benefit the shareholders also by a large reduction in the rates of the Great Indian Peninsula, and a reduction of your rates also?—I have thought over it in the interests of the East Indian Railway, but not in the interests of the other company with which I have nothing to do.

3671. You admit that there is some reason for a reduction on the part of your company, and you would be prepared to reduce your rates?—I can hardly say that we shall be prepared to reduce our rates below 16 rupees for the whole distance from Agra to Calcutta, because we reduced them last year to the extent of 14 per cent., and I do not think it would be reasonable to call upon us, or rather to subject us to such competition as would compel us to reduce them to an unreasonable rate. Still, I mean to say that we have the power of doing it.

3672. Are you afraid of the competition of this new line?—I am not afraid at all of the competition of the new line, and it is not on account of any apprehension on my mind that I am directing my evidence against, if it may be so called, the new line in opposition to the East Indian line. I am not afraid in any way of the competition that may arise. My reason for taking up this ground really is this: that if I were asked to come here and give my opinion upon a distinct proposal before this Committee, I am bound to put the whole case according to the best of my lights before the Committee.

3673. You think that the new line would cost a great deal of money, and is not absolutely required for the development of the resources of India?—That is my view, that it is not necessary. I think that between the East Indian Railway on the one side, and the Rajputana line on the other side, there is hardly room for the Great Indian Peninsula to come in with any prospect of success, because the country, as I shall be able to state by-and-bye, between Gwalior and Bhopal is of an indifferent character.

3674. But you have no doubt that if this line were sanctioned by the Government it would inevitably lead to a very large reduction of rates over the Great Indian Peninsula system?—It ought to.

Chairman—continued.

3675. Mr. Glover, in the very able evidence which he gave to this Committee, said a good deal about the country lying between Jhansi and Bhopal, its fertility, the number of its inhabitants, and the conviction that he felt that there would be a very large local traffic; would you kindly tell us your opinion upon that point?—I have no opinion founded on any personal experience, but I have had occasion to make myself acquainted as far as I could by a reference to standard works with the character of the country which lay between Gwalior and Bhopal, and I took up that which I always understood to be the principal standard authority on the subject, which is the "Universal Gazetteer of India," by Dr. Hunter. I had read it long before I heard what Mr. Glover had said to this Committee, and therefore, when I was made acquainted with what Mr. Glover had said, it appeared to me that there was so much difference between the views that he took of the country and his proposal to construct lines of railway, and the views stated in the "Gazetteer," that I thought it would be proper for me, having examined into the question, to mention those differences to the Committee, and leave the Committee to pursue the matter further, if they pleased. All that I wish to do, and am ready to do, is to show the Committee what the "Gazetteer" says, and contrast it with what Mr. Glover said of it. Pray let me be understood as not desiring in any way to impeach the credibility or authority of Mr. Glover, who is entitled, from all I have heard of him, to be absolutely relied upon.

3676. Will you read Dr. Hunter's account of that district to the Committee?—First of all may I say what I understood Mr. Glover to have stated before this Committee. He stated that he had gone personally over the ground. The country from Jhansi to Bhopal was a rich country very well cultivated; with the exception of a few parts, it was one field of wheat and grain, and he spoke of it as affording a local traffic sufficient to pay in two years to come. Having heard that, I went back to the 'Gazetteer," and there I found the "Gazetteer" so much at variance with Mr. Glover, that I can only suppose that the seasons of India must in the course of half-a-dozen years past have undergone an entire change in that district; however, speaking of Jhansi, the "Gazetteer" says, "Jhansi is specially exposed to blights, droughts, floods, hailstorms, epidemics and their natural consequences, famine; even in favourable years the consumption of the district exceeds its production by one-fifth, and it is considered that scarcity may be feared every five years on an average, as the district is not able to supply its own wants in the matter of food stuffs, it imports instead of exporting grain." "The district in the plains of the North-West Provinces, with the exception of Lalitpur, is so sparsely inhabited as Jhansi, and the population though considerably increased since the introduction of British rule, has declined slightly under the pressure of famine in late years." "Jhansi in the nature of its soil, the character of its people, the poor means of irrigation, and the want of good communication is,

Chairman—continued.

perhaps, worse of than any other district in the North-West Provinces, except its still more unfortunate neighbour Lalitpur. In the best seasons its produce is only just sufficient to feed its scanty and scattered population, and droughts expose it to the greatest hardships." I will now proceed to mention what the "Gazetteer" said about Lalitpur. "Several artificial lakes and tanks have been constructed in past times, the largest being Talbahat, among the northern hills, which covers an area of 453 acres." "Unfortunately these are of little service in irrigating the said table land of Lalitpur, as the porous nature of the embankments causes them to absorb great quantities of the water which they were designed to retain. There is little cultivation in the district, and that of a poor class. A very large proportion of the area is covered with forest jungle. The villages are scattered thinly over the plain, and many of them have been deserted. The general aspect is one of poverty and indolence, while the people seem little inclined to make any effort for the development of their resources. No district of the North West Provinces has so sterile a soil as Lalitpur, and in none is the future condition of the land and its inhabitants a matter for graver consideration. On the red soil of the hilly tract no cold weather crops can be grown at all without artificial water supply, yet the people are very slow to avail themselves even of existing advantages. Rotation of crops is almost unknown, but land lies fallow for long periods except where the rich black 'moti' soil prevails. Manuring is generally practised in the case of all the more important products. Lalitpur has not escaped the common plague of kans-gras, which throughout all Bundelkhund has thrown many villages out of cultivation. The unsatisfactory condition of the peasantry is evinced by the squalid appearance of their homsteads and the carelessness of their personal attire Ten acres form the average farms held with rights of occupancy, and seven acres the ordinary holding of a tenant-at-will. The latter, who form the most numerous class, are almost without exception heavily in debt to the village banker." "Lalitpur is subject to loss of crops from blight, hail storms, and the ravages of locusts, but its principal enemy is drought, to which the great famine of 1868–9 was mainly due." "As the food stuffs raised in Lalitpur are only sufficient, even in favourable seasons, to satisfy the home consumption, there is but little export trade, while in times of scarcity it becomes necessary to import considerable quantities of grain." I admit that there is a necessity for a line being made there, but as a famine line.

3677. So that, in your judgment, Mr. Glover is mistaken in supposing that there would be any considerable amount of local traffic in that district?—I have now two authorities; the one authority is the "Gazetteer," and the other is Mr. Glover. We all know, to begin with, the article of Sir George Cornewall Lewis on "The influence of Authority in Matters of Opinion." If I were a member of the Committee I should certainly consider in my own mind to which witness I would attach the greater authority.

Chairman—continued.

3678. Apart from the competition of the East Indian Line the proposed new railway would compete with the present line from Bombay to Delhi *vid* Ahmedabad, would it not?—It would.

3679. Probably you could lay before the Committee similar figures regarding that competition?—I have endeavoured to set before the Committee what would be the nature of the competition which would arise between the proposed new line and the East Indian Line. I now propose to show that the Great Indian Peninsula will be exposed to a further competition with the Rajputana, Bombay, and Baroda Line. The distance between Agra and Bombay by the Rajputana Railway is 847 miles, and by the Bhopal Line it will be 840 miles. The grain rate by the Rajputana Line is 4·242 pies per ton per mile, or, for the whole distance, 18·71 rupees, equal to 1 *l.* 11 *s.* 2 *d.*, at 1 *s.* 8 *d.* the rupee. At the same rate by the Great Indian Peninsula Company, which I have taken in the case of comparison with the East Indian Line, the charge from Agra to Bombay by the Bhopal route would be 22 rupees, or equal to 1 *l.* 16 *s.* 8 *d.* Therefore, to compete on equal terms with the Rajputana Line the Great Indian Peninsula rate must be reduced from 5·035 pies to 4·242 pies, or 15¾ per cent.

3680. Then the break of gauge at Ahmedabad would be a considerable advantage in favour of the new railroad, would it not?—It would be to its advantage, however, that advantage may be appraised. High authorities say that it is equal to 10 miles; other authorities take a different way of viewing it; but, undoubtedly, it is a very lamentable fact that the break of gauge should be there.

3681. You, yourself, think that it is very unfortunate that the metre gauge should be interposed on the Great Trunk Lines in India?—I should, as a matter of opinion, looking to the general interests of India, have desired that particular line should have been constructed on the broad gauge, but I am perfectly well aware that at the time when that line was proposed to be made, it was understood that it could not be made as a broad guage line; that, in fact, the State had not money to lay out upon it as a broad guage line, and that we must either have had a narrow gauge line, or none at all.

3682. To go to another point, I think you have something to tell the Committee with reference to the respective advantages of the ports of Bombay and Calcutta, as to the natural advantages of Bombay, and what is being done to improve the communications at Calcutta?—In setting out what appears to me to be proper to put before the Committee in reference to the relative advantages of the two systems of railway, I must not overlook the great advantages which Bombay possesses over Calcutta, however difficult it is to appraise them, but those advantages are great. With regard to Bombay the voyage to all European ports is generally reckoned now as ten days less than the voyage to those places from Calcutta, and they have much greater facilities at the present moment for the management and manipulation of their goods at Bombay. The mercantile intelligence and go-a-headness

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a-headness of the people in Bombay which is far superior to anything of the kind at Calcutta, has enabled them to build docks and provide other conveniences by which the commerce of the country is very greatly facilitated. There is another reason and that is, that a great deal of the traffic between Western India in the commodities to which I have before referred, is directed from Bombay to the continent, and we have lines of steamers running now between Trieste and Bombay, Genoa and Bombay, Marseilles and Bombay, and Antwerp and Bombay, of which I believe not one exists to Calcutta. Therefore, they have larger facilities for conducting trade of the interior through Bombay with Europe as compared with Calcutta. But we have not been slow in Calcutta to do the best we can to keep up to Bombay. In the East Indian Railway Company we have acquired a length of about half a-mile on the Howrah on the right bank of the Hooghly opposite to the town of Calcutta, and along that we have constructed an embankment. I will not compare it with the one we see out of these windows, but it is a very fine work. I am told that it is 2,000 feet long, and this will be provided with all appliances for dealing with goods by which the great obstacles which were encountered last year in dealing with the enormous amount of produce that came down from the interior, will be in a great degree obviated. All this has cost a great deal of money.

3683. You refer to the block of traffic at the Howrah Station?—Yes, there was a block there, but not all the way, and we are now busily engaged in building an important bridge over the Hooghly, 20 miles above Calcutta, and when that bridge is finished a great deal of the traffic will find its way on to the east or left bank of the River Hooghly in Calcutta; and the facility for shipment will be proportionately enlarged, because furthermore the Government have recently sanctioned the construction by the Port Commissioners of Calcutta of large docks into which vessels will go, where they will meet with a large accommodation for dealing with their inward and outward cargoes. With respect to the facilities of the two ports I do not think they can be increased at Bombay, because they are very perfect, but at Calcutta they will be very largely increased. There is generally supposed to be a difference of about 10 *s.* a ton in the freights from Bombay to Europe as compared with Calcutta. But it is not always so. I have known freights higher in Bombay than in Calcutta, It depends upon various circumstances. For instance, such a circumstance as this: it depends upon the number of ships that have gone out from this country. If there is a great demand for the shipment of machinery and heavy weight of one kind, and another to Calcutta, then there will be a greater preponderance of shipping in Calcutta than in Bombay, and the freights may be lower in one place than in the other from that cause. There are also other causes which need not be gone into now.

3684. Therefore, for all those reasons which you have so clearly stated to the Committee, you are of opinion that the Government would not be justified in giving a guarantee to a line which

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virtually would become a competing line both to the western Rajputana Line and to the East Indian Line?—I think there is no need for that line, and that it will disappoint those who propose to make it. I think there would not be sufficient justification for imposing a liability of guaranteed interest on four millions sterling on the finances of India. May I ask before parting with that subject to say this: Amongst other objections to that line there is an objec tion (it will take the bull by the horns) to what I may call the intrusion of the Bombay system into the East Indian system. I know that formerly when the lines were, so to say, allocated, the principle was laid down that one Presidency should not meddle with another Presidency with regard to railways. In the case of Madras the Bombay people have arrived at the frontier, or what they call in Scotland the march. There the Madras line comes up on one side, and the Bombay line on the other. That principle would be wholly departed from if the line from Cawnpur, at all events, as far as Kalpee, which is in the North-Western Provinces government, were handed over to the Bombay Company to make.

3685. Can you give us in detail the figures with regard to the other important line which have been recommended so strongly by various witnesses, the line from Nagpur and Raipur?—In the first place I would like to say that I think there is a misapprehension which exists as to the value of a through line between the two capitals of India, Bombay and Calcutta. I believe the traffic between the two in goods to be next to nothing unless there is an exhibition or something of that sort going on. There is no indication of there being any goods traffic If 1,000 tons of heavy goods had to go they would be put into a steamer and sent round the coast quite as cheaply. Therefore there is nothing in the argument that by making this line you will establish a through or trunk line between those two important cities. But upon the merits of the question itself I think a good deal is to be said. We know, practically, not very much of the Chattisgurh district and the country around Bilaspur and between them and Calcutta, but what we hear from all quarters is much in its favour as to its great productiveness. I believe there is a good deal that is mythical about the prices at which grain has been sold in that district; for there was no market there, and but a very inadequate production probably. There was really no market there, for the people were very sparse; but I believe that when the railway is made it will open up a very valuable and a very fertile country. It may be worth while to observe that the mean point, that is to say, in the distance been Calcutta and Bombay, would be 642 miles, or about 125 miles, to the eastward of Nagpur. Therefore, all things being equal, goods produced up to a distanee of 125 miles from Nagpur would go to Bombay, and other goods would go to Calcutta. And, practically, that will be the result, the destination of the goods being determined by the superior advantage of a cheaper service, and so on, upon the grounds which I have stated in examining the other lines. Of the political advantages of it I know nothing. I have

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not examined this question of the railways in India from that point of view at all, nor have I, I may say, from the famine point of view. I have had enough to do in looking at it in its commercial aspects at present. The distance from Bombay to Nagpur, all on the broad gauge, is 520 miles; from Nagpur to a place called Rajnandgaon on the narrow gauge, 149 miles; from that place to Bilaspur is 112 miles on a gauge which remains to be determined, and from Bilaspur to Seetarampur on the East Indian Railways Company's Line, 366 miles, and from Seetarampur to Calcutta, 137 miles, making a total of 1,284 miles.

3686. Then you are of opinion that as a through line, excepting for passengers, that line would not be of much importance?—Except for the advantage of five or six passengers who go once a week; I am within bounds when I say that.

3687. But that line would open up certain very important districts to commerce, would it not; would you tell us your opinion with regard to the probability of local traffic being developed?—I do not think that the local traffic of the country, that is to say, the traffic between one place and another within those districts will be very large, because you will not be able to make an impression upon those people as to what their wants ought to be by sending out from this country very cheap and unserviceable goods as is sometimes done; you will not have a demand for them just yet; nor will there be any large traffic, I think, in the way of consumable commodities which practically could be brought into those districts from either of the two ports. But I think if we may trust the accounts which we see before us, that there is a large ground, to use the language of a prospectus, for developing the resources of the country by the making of this line; I think there is a large field for doing that in time, but it must be a matter of time. There will be a large traffic from it, especially from the district of Chattisgurh, and in the district from Bilaspur to Calcutta. But there is another point, which is of great importance to be considered in connection with this, and that is the recent authentication by professional experts of the value of the coal deposits which have been found in the Rewah country. I have had the advantage of reading all the papers connected with that question, and I have very thoroughly examined them. The Secretary of State has written to the East Indian Company here to ask them upon what terms they will make a line of railway from the station at Kutni upon the Jubbulpur line to those deposits. There are two deposits which have been looked at by those experts; the one is at a place called Umariah, that is 38 miles from Kutni, 38 miles from our line, and there are deposits in the neighbourhood of Sohajpur; but after having got to Sohajpur you will find that place to be within a distance of 120 miles from Bilaspur, and being upon the proposed new line from Nagpur to Calcutta that it will afford another, what I would call, although I dislike the term, trunk line. There may be made a line from Kutni to Calcutta by that route, saving a good many miles, as compared with the existing route by way of Allahabad. You will have an alternative

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line, in point of fact, which on the occasion of any calamity would enable you to communicate with Jubbulpur and Calcutta, instead of going up into the North Western Districts.

3688. What is the total length of that line?—The distance from Kutni to Umariah is as I stated 38 miles; the next distance to Sohajpur is 38 miles; and from there to Bilsapur is 120 miles, making a total of 196 miles.

3689. Have all those 196 miles been surveyed for railway purposes?—We have the survey in full detail, and we have the reports made on them, and I have written them down on this map before me (*producing a map and explaining the same to the Committee*). In reply to the application from the Secretary of State, our Company has intimated their readiness to construct the line and to work it on what we call, "State line terms," which I can explain by-and-bye if the Committee wish me to do so. What I want to prove now is, what will be the effect of this. The quality of the coal is reputed to be, and has been found upon trial to be, good enough for locomotive purposes. One of the difficulties which the Great Indian Peninsula has had to contend with, is the great expense of their fuel. Now, as I have said some things which they may consider hard upon them, I will say that one of my objects in wishing to see this coal line made, is that the Western India Line, the Great Indian Peninsula, may have access to and command of a coal somewhat similar to that which we have on the other side. In fact, I am at the present moment making out very carefully the quantity of fuel consumed per train mile, and I find that whilst the East Indian Company's consumption of fuel per train mile during the half-year ended 30th June 1883 was exactly 1·11 *d.*, having been as low in 1881 as ⅞ *d.*; the Great Indian Peninsula had to pay 5⅞ *d.*, having paid as much as 6¼ *d.*, whilst in the case of the East Indian Line it has cost us one penny. In one official report which was made on this coal deposit these words are to be found: "When this line has been constructed Umariah coal will probably be delivered at Kutni at a cost of about six rupees eight annas and eight pies per ton or less. The coal is said to be nearly equal to the best Bengal coal." They include in that six rupees six annas and eight pies, five rupees for cutting and raising, but they say that "the training of local labour may be expected to reduce the cost to that in Bengal, namely, between two rupees and 2·8 rupees." The cost at Jubbulpur will therefore be to the Great Indian Peninsula Company, it having been taken there and delivered over by us to them, eight rupees seven annas a ton, and at the junction with the Bhopal-Jhansi railway it may be delivered at 12 rupees per ton. That is very much less than the rates that they now pay, and as such I am happy to present the prospect of it to the Great Indian Peninsula as some set-off against my unwillingness to forward their views in another matter.

3690. Have you anything else to tell the Committee about this particular line?—About its serving as an alternative line to Calcutta, it will give a mode of access from one side of India to the other by the Great Indian Peninsula up to Jubbulpur, and then over this system through the

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the Sohajpur country to Calcutta, up to the east, which might possibly under some circumstances, such as pestilence, or famine, or war, or outbreak, be of great advantage.

3691. You have something to say to the Committee, have you not, about the question of reviving a former scheme of the East Indian Company from Mogul Serai?—When the scheme of the East Indian Line was first designed, which was a matter of nearly 40 years ago, it was intended to carry it by a strait line from Raneegunge, or rather from what is now Seetarampur to Benares across the country by way of Shergotty and Sasseram. In one part there is a little natural difficulty, but levels were taken, and we happen fortunately to have them in our possession at this time. I have discussed them with the consulting engineer, and he tells me that there is nothing whatever in the way of difficulty at present. In the descent from the summit of the range which we have to traverse, down to the Valley of the Sone, there may be something like a gradient of 1 in 100 for 13 miles, but 1 in 100 is a difficulty which many engineers sneer at. Whether they are justified in doing so or not, is not for me to say; but, however, he tells me that there is no difficulty here. What I want to show is this; that the making of that straight line will shorten the distance between Calcutta and Benares and the North Western Provinces of India, and all the communications beyond it by between 60 and 70 miles. The facts are these; from Calcutta to Seetarampur we have already a line which is 137 miles; from Seetarampur to Moghal Serai, the distance would be as measured on the map, about 270 miles, making a distance of 407 miles. By the present route the distance is 470, so that that shows an amount of saving of 63 miles in the whole distance between Calcutta and the north-west provinces of India. It is supposed that that line would cost, including a bridge over the Sone, which would probably be rather formidable, about a couple of millions. If that money were advanced by the Government, not upon the terms which we see in the "Times" of to-day, no doubt the Government will be so elated with their great success in obtaining money, that they will hand it to us liberally; but I will take 4½ per cent.; I will go so far as to say that in order to pay 4½ per cent. interest upon 2,000,000*l.*, that is 90,000*l.*, you must take 150,000*l.* of gross earnings, if you carry at 40 per cent. Now the question is, what number of tons additional must we carry in order to obtain that rate of interest at a given rate of freight. I take the very low rate of 4-10ths of a penny per ton per mile for the goods that we might carry if that line were made, and find that we should require to carry an additional quantity of about 340,000 tons in the year in order to pay this interest.

3692. Where is that traffic to come from?—I say that as prudent and wise persons it would become those who are interested in this scheme, as the Government of course will be, to look to the future; to look forward, and not to found our conclusions upon the state of things at the present day. I will take four years, and when four years are over, if that line were to be begun now, it could be finished by that time, and the great bridge of the Oude and Rohilcund Company over the Ganges at Benares will also have been furnished, and the whole of the great traffic of the Oude and Rohilcund destined to the sea, will then pass upon our line 403 miles from Calcutta at once. All of it will go there; we shall lose the longer lead that we have now, from its being taken down from Lucknow to Cawnpore, but we should make it up in other ways by the shortness of the distance. Then, by that time the Tirhoot system will have become developed, the Calcutta and the North Western system also will have become developed, and probably a line that you can see marked upon the map, from Goruckpur to the river at Benares, will have been made, so that there will be an enormous out-pouring of goods by these lines, which all come from the north and north-east to the Ganges. The traffic destined for exportation will come upon our line, part over the bridge which is being built, part by the ferry at Patna, and part elsewhere; and I conceive that the development of the natural traffic of the country in addition to these things will provide such additional returns as will amply compensate the Government for going in and making this line. And here I am glad to say that we are altogether freed from the competition of the railways on the north-western side of the Ganges, because, excepting the Oude and Rohilcund, there stands the impenetrable barrier of the River Ganges between those narrow gauge lines and us; it would never be worth while to make another bridge below Benares, as far down as our bridge over the Hooghly.

3693. Do you think that the funds for these various undertakings could be raised without adding to the indebtedness of India to England?—Yes; it is admittedly one of the most difficult questions of the present hour, and what we have read in the papers this morning has, I think, had considerable effect. I am not quite sure whether my mind is not a little shaken, provided always that the Secretary of State is successful in getting his money at 93¼, which I suppose he will be; but apart from the question of terms, I object entirely upon the principle to doing evil that good may come of it. I think that the principle of borrowing money in this country and in imposing a heavy addition to India's liabilities to this country is altogether wrong. I think it is forestalling the future; I think it is shutting your eyes to difficulties that must come on by-and-bye, of which an illustration may be given in figures in half-a-dozen words. I believe it has been already brought before the Committee, but, taking the sum which, I understand, has been proposed to be laid out, 6,000,000*l.* a year, I have heard what witnesses have said in this room, that one-half of that capital has to be disbursed in this country and one-half has to find its way to India. For some time the wants of the Secretary of State here are supplied to the extent to which the money remains in this country, which, as I said, will be about one-half. But the evil day will come; you will not have to send out any particular sum as regards any particular year, you will not have to be the customer of the

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Government, but you will have to send home to this country, and it will be a perpetual charge upon this country; you will have to sent home, say 5 per cent., that is 300,000 *l.* a year for every 3,000,000 *l.* that you lay out. You are going to do that for 10 years, and you will find yourselves at the end of that time; I say "you," for I shall not be here; but you will find yourselves saddled with a permanent addition of something like 3,000,000 *l.* to the debt which India owes to this country. I say that whatever advantages you may get through the outlay of that money in India, in some senses you must relieve the burdens upon the people of India before you adopt that policy. That is the view which I take of the subject upon broad general grounds. I am not quite prepared to enter into a minute calculation as to the effect of a grant of money in particular districts in increasing agricultural produce and improving the land revenue and those sort of things, but I think that it is a principle as applicable as in private life. No man would borrow money now in order to increase the debt upon his descendants, and in that way it is an equally important principle in dealing with the finances of the State.

3694. As an alternative, could not it borrow the money in India?—I have heard what the witnesses said with regard to borrowing money in India. I have been connected with India and its affairs for nearly 50 years, and I remember that in the early times there never was any difficulty in raising money in India, but you cannot get the people of money at the present time, the great wealthy shroffs and native princes and chief people to lend. I imagine that in many cases when money was much wanted it was done by way of a private arrangement with a good many of these people. India has *not* been growing poorer since that time, but the natives do not put their money into sterling loans here, and they have not done it so much in India, but the money is there, and there ought to be some method of getting it out of the pockets of the moneyed interests. One reason why I think that the last loan was not taken at all by the people of India was this, that you gave the subscribers to it the facility of receiving the interest upon it, that is to say, upon the rupee loan in bills drawn by the Secretary of State in London upon India. The outcome of that was that if you had a rupee claim on receiving those bills, the first thing you did was to send those bills into the market, which was much the same thing as having a sterling debt here, because it added to the great weight of remittances which has to go on from week to week throughout the whole year. If I may throw out a suggestion just for what it may be worth, I should like to see a loan issued without the privilege of receiving interest in this country in the form of bills of exchange; that would throw the loan upon the lenders in India in rupees. It may come to nothing, but as I said before, I do not believe that the financial wealth of India has in any way decreased; I believe that there are many wealthy natives and native chiefs that are hoarding up lacs upon lacs and crores upon crores of rupees, and I believe that by proper arrangement amongst them it would

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be possible to obtain the money in India upon the terms I have mentioned.

3695. Have you any other suggestion to offer to the Committee as to feasible plans for getting this money from the people of India?—No, I have no other plan.

3696. You said a few minutes ago that if the Committee wished it you would explain what "State line terms" were. I think it would be very important if you would kindly state now to the Committee what "State line terms" are?—I wish to mention those "State line terms" rather in connection with questions which I understand have been put to former witnesses as to how you would work small subsidiary lines in connection with the larger lines, what in common railway parlance are termed feeders. It stands to reason that you cannot work a feeder of 50 miles independently with anything like the economy that you can work a longer line. The Government have made a grant in money, and have made the line from Agra to Gwalior, and have made the line from Patna to Gya, and they have made a line from a place called Dildarnagar to the ghaut opposite Ghazipur. The Government said to us in the course of a little previous negotiation, Will you, the East Indian Company, take over the working of these lines from us after having made the lines? The complaint was made by the people in India that the lines were made upon what had been what I will call the turnpike roads, and by the Government of the day I was called in, and was actively engaged in the negotiations.

3697. Were they made in such a way as in a manner to require to be re-made?—Yes, they were avowedly so. They asked us upon what terms we would work those lines, and our answer to the Government was this, that we were authorised by our Act, and by a provision which looked forward to this, to enter into contracts with the Government for the working and maintaining of the lines in connection with our line at the same gauge, and the principle eventually arrived at was this: We said to the Government, We will know nothing whatever of the cost of these lines, that is your business; only if we take them over from you they must be made up to certain previously agreed standards of fitness, at which we will maintain them. We will take them over from you, that is to say, we will take over the line in this way, its stations and permanent way, and everything except what you call capital expense. We will know nothing of capital. We will then put our stock upon them and our people, and we will work them for you, and we will keep an account of the money that we receive upon these lines, but we will not be burdened by keeping a separate account of the money which we expend upon them. We will give you the benefit of the average rate at which we work our own line. I have always been charged with having been exceedingly liberal, in fact, with giving too much in that sense, and my answer has been that we could afford to do so. The Government made a great advantage out of it, because if they had been at Patna Station, for instance, they must have had an establishment of their own there, they must have had shops, and they must have had the means of repairing,

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pairing, or they must have been at the expense of conducting their disabled stock over our line to wherever we might have been ready to do the repairs for them. So we agreed to do the work, and to include the whole within the average expenditure of the whole line. That was agreeable to the Government, because, of course, our expenditure was so small; at the time when we talked of it we were carrying at about 33 per cent., and we had been as low as 30 per cent. The working expenses are greater now because our line is getting old, and the maintenance of our line and stock begins to tell very heavily upon us; but still it is a capital arrangement for the Government, as they are relieved of the whole liability of working. Then when we come to the end of the year, there remains a certain net sum; it has only been at work for a year. For the half-year ending the 30th June I have the official figures, but the half-year to the 31st of December I have not yet got officially, because of the cantankerousness of some of the Government people in Calcutta; but the result was this: we worked three State lines, and they gave us, on the whole, 457,855 rupees. We then allocated for that the average rate of working the whole line, which comes out to 36 per cent, and there was a net sum left of 2 lacs 92,935 rupees. Under our contract with the Government they took four-fifths and we took one-fifth, and even that one-fifth is objected to by the people in India, that is to say, by the Government authorities there; but the Secretary of State, being a consistent man, followed up the principles upon which he concluded our first negotiation, because at the end of his letter he said to us: "The Secretary of State desires to acknowledge the liberal and practical spirit with which the proposed terms of working have been conceived." Those terms are not concurred in by the Government of India.

3698. Do you think that the arrangement is a fit and proper one for all the parties concerned?—I think it was a fit and proper arrangement for all the parties concerned, although the remuneration that we get for doing it is very small. Now I say that upon these sort of principles we are prepared, if the Government wish it, to work any feeder lines that they like to make in connection with the same gauge as our line. We can do it, but I do not know that other railway companies can, because our working expenses are so small.

3699. Have you any limit to that offer; are you prepared to endorse this arrangement with regard to any lines which the Government of India may propose to you?—I would hardly say to any lines, because the Government may have a concealed view, that is to say, they may wish to do it entirely for political purposes unconnected with the development of the commerce of the country, and then I should not be in a hurry to go to their assistance.

3700. You confine your offer to commercial lines?—We made a contract as to the three lines which have been finished and are in working; and if the Government come to us again, for instance, if the Government were to say to us, if we make a line from Cawnpur to Kalpi, will you work it upon State line terms, that would be my answer if I were speaking individually and personally, without reference to my colleagues.

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Mr. *Bernhard Samuelson.*

3701. With respect to what you told us just now about the Government terms, do you believe that the 36½ per cent., in the case you have named, pays you?—Yes; that is to say, I believe that our working of the State lines has not led us to any additional expenditure.

3702. Then that would leave 63½ per cent. to be divided?—Yes.

3703. One-fifth of that is 12¼ per cent., or a little more?—Yes.

3704. Therefore, upon 36½ per cent. you would make a profit of 12¼?—I suppose that is the arithmetical deduction.

3705. Which is rather more than 33 per cent. upon your outlay?—I suppose it is so, but I do not quite follow the figures.

3706. Therefore, so far the bargain would certainly not be a bad one for you?—It is not a bad bargain for us; that is to say, upon the working of these 140 miles of railway we got in the half year to which I have referred 4,775 *l.*

3707. Then, in addition to that, those three minor lines bring traffic on to your main line?—A certain amount of traffic does come upon our line.

3708. And you would gain in that respect?—Yes, we should have that whether we worked the lines or not; the traffic could not go anywhere else.

3709. Still, if it encouraged the Government to make the line, it would be an advantage to your line so far?—I do not mean to say that we were quite disinterested.

3710. As regards the quay which you have made at Howrah, which is 2,000 feet long, can you compare that length of 2,000 feet with the length of the quays at Bombay?—No.

3711. I suppose the length of the quays at Bombay is very much greater, is it not?—Bombay is a large tidal harbour, with docks and a variety of things; you cannot compare the two things, you can only contrast them.

3712. Can you state what is the average difference in the freight to Europe between Bombay and Calcutta for grain?—No, I cannot; I have been looking into it, but I find that there is a variableness about it which renders it difficult to obtain anything like an average.

3713. Generally the freight from Calcutta is higher than the freight from Bombay, is it not?—Certainly.

3714. And the insurance also, the cargoes being the same?—Yes, the insurance is higher because it is a tidal river which you have to navigate, instead of an open harbour.

3715. Hence it follows that it might be possible to ship from Bombay in preference to Calcutta, when the produce was brought from a point in the interior, the rates from which to the two ports were not identical?—Yes, that might be possible.

Mr. *Bernhard Samuelson*—continued.

3716. And therefore it would not be correct to say that those rates must be identical, in order that Bombay may have the preference over Calcutta?—I do not think that it necessarily follows.

3717. You have stated that a traffic of 340,000 tons per annum would pay the interest upon the proposed new East Indian lines which you named to the Committee?—Yes, I said so.

3718. Are you able to state what relation that amount of tons bears to the entire traffic over the East Indian line?—The whole quantity of goods and minerals carried on the East Indian Railway in the half-year ended the 30th of June last was 2,615,000 tons.

3719. And therefore 340,000 tons would be an increase of about one-sixth?—I suppose it would be so for a half year.

3720. With regard to the want of success of the late 4 per cent. Rupee Loan, I mean as to its not having been taken up in India, you said that if certain facilities had not been granted in the way of accommodation to holders in England, it might have been taken up to a greater extent in India?—That can only be a matter of opinion. I know the fact that whereas no such facilities existed in former days when I had practically to deal in India with these things, money was always forthcoming to feed the loans, but I know now that the people of this country have since had their eyes opened to the advantage of holding this kind of security, and the facilities given to them of receiving their interest in the form of bills here. I say that the inducement which was offered to people, caused the last loan to be taken principally by Paris houses.

3721. Is it not the case that in the former days of which you speak the rate was higher than that of the loans which have been recently issued?—No doubt that was so, but it depends upon what the market rate is; you must look at all the circumstances.

3722. Can you mention the date when loans were very readily taken up in India?—I cannot carry those dates in my memory, but perhaps the Government may have been under some very extraordinarily hard pressure. I recollect when they borrowed at 5½ per cent. in this country, but ordinary loans in India do not go above 5, and not even 5 per cent., and for many years past they have not exceeded 4 per cent.

3723. Have the 4 and 4½ per cent. loans been readily taken up by the natives?—Formerly they were.

3724. I do not see why the natives should have been discouraged from taking up the late loans by the possibility of disposing of them to Europeans, who would be able to get interest with greater facility than was formerly the case?—If I understand the question, or the observation, correctly, it is this, that facilities were given on the last occasion which enabled the monied men here to offer a low price to the Government, and consequently they offered a better price for the Government loan; but the native had then merely to put his hands into his pocket and say, I cannot afford to deal with you on those terms, you offer better terms than I do, because of that privilege.

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3725. In fact, that loan was taken chiefly in England, because the capitalists in England were willing to give better terms than it suited the people of India to give?—The loan was principally taken by people here and in Paris, and I believe they would not have taken it if it had not been for the privilege of receiving the interest here.

3726. Owing to the fact of that privilege having been accorded to them, they were willing to give better terms than the people of India were willing to concede?—Just so.

3727. You spoke of the disadvantages to the people of India of a sterling loan; would you consider that it would be a disadvantage to the Argentine Republic to borrow at 3 per cent. in London, rather than at 6 per cent. at Buenos Ayres?—I should hesitate to say anything to any South American authority whatever; he would misrepresent the first thing. I really cannot conceive myself in a position to be asked anything about the Argentine Republic, because the circumstances are wholly different.

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3728. Just one word about the difference of freight between Calcutta and Bombay; can you tell us, in a very rough way, about what you suppose to be the average difference for the last 10 years in the rate of shipments, not to Europe, but to England?—I do not think it has exceeded 10*s.*, and it has been sometimes upon better terms, in reference to the comparison with respect to Calcutta.

3729. About what is the ordinary rate of freight from Calcutta to England?—I have had to pay up to 4*l.* in former times.

3730. What kind of rate prevails?—I am out of business now entirely, and I have been out of business for some years, and therefore I have not followed the details of these affairs. I should say that 25*s.* per ton would be about the rate from Calcutta.

7331. You think that the difference of railway rate then would be about an average of 10*s.*?—I should think about that.

7332. I understood you to say, that the existing rates and distances being equal from Cawnpur, the difference of railway rate is about 10*s.* in favour of Calcutta, as compared with Bombay?—Yes.

3733. So that, taking 10*s.* in favour of Bombay in regard to rate, and 10*s.* in favour of Calcutta with regard to railway, it would come to about equal, would it not?—Except that we have the power of augmenting the difference in the case of the railway rate from Cawnpur to Calcutta. We carry now, I think, at the rate of 1*l.* 7*s.* 3*d.* per ton for the whole distance; but I think, if any body came up to me in a threatening attitude, I should say, very good, I will take 2*s.* 6*d.* off, and I could afford to do that.

3734. At the present moment, as regards Delhi, Agra, Cawnpur, and Allahabad, does the greater portion of the wheat go to Bombay or Calcutta of late years?—The greater portion from these districts below Agra goes to Calcutta; it is from competition that a large portion goes by

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by the Rajpootana line down by Ahmedabad, but the great proportion of the large quantities sent forward from Bombay are sent to Bombay, because I believe that the products of the country about Khandeish are all within competition distance of Jubbulpur.

3735. Confining yourself to the Gangetic Valley, has Calcutta or Bombay got most of the wheat trade of late years?—I should say that Calcutta has.

3736. Taking Tundla and the railway junction there, do you think that more wheat would go from Tundla to Calcutta, or to Bombay?—That is just the matter that we have all been talking about. I think that we should have to fight the battle of competition.

3737. Then as regards the advantages of the two ports, what you told us with reference to the wharves at Calcutta was with reference to the wharf at Howrah, was it not?—Yes.

3738. You are aware, are you not, that there are very great facilities for shipment at Calcutta, on the Hooghly River?—Yes, there will be plenty when the whole thing is completed, that is when the bridge has been built. I think you will find that the trade of Calcutta conducted on its own side of the river will be more in the lighter descriptions of commodities, and that the heavier things, such as oil seeds, wheat, and grain, will still go to Howrah. It will be remembered that ships now lie partly in the stream at Calcutta, and are partly tied up, as they say, on the Calcutta side. I do not think that you will ever see your ships tied up to the new wharf that we are building, but we shall have larger facilities for putting the goods off the wharf on to lighters and then sending them off to the ships.

3739. I do not question that, but it is as easy, is it not, to make wet docks at Calcutta as it is at Bombay?—It is all the difference between working in clay and working in stone.

3740. Which is best?—I cannot tell that; you must ask gentlemen with practical experience.

3741. As regards the terms of freight, are there any articles of traffic with the Mediterranean in which Calcutta and Bombay come into competition with one another?—No, I do not think so; at least not the natural productions of the country; but they do very largely come into competition with each other in conducting the import traffic. For instance, there is a very large quantity of iron, copper, and metals of various kinds; there are very large quantities of manufactured goods and cotton twist, and things of that sort, though not so much of late, since the mills in Bombay have been built, and they have to find their way up the country, and there comes in rather a sharp competition between Bombay and Calcutta.

3742. You attributed a very greatly superior mercantile intelligence to the people of Bombay as compared with the people of Calcutta; has your own experience been in Calcutta?—My own experience has not been in Calcutta, but I left Bombay as long ago as 37 years, so that I cannot possibly be supposed to claim even the remotest part of the intelligence that is ascribed to them in these modern days; there really is in truth a different class. The Honourable Member

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knows as well as I do the idiosyncracies of the classes in India.

3743. Are you speaking of Europeans or of natives?—Of natives.

3744. Has there ever been a question of making an efficient port up at Surat?—Not since the days of 200 years ago; you are dealing now with vessels of 2,000 tons burthen.

3745. As respects the relative merits of different lines, I think you alluded to the superior natural advantages which are possessed by the East Indian Railway, as compared with the Great Indian Peninsula, but you did not give us any details in that respect; as I understand it, the cost of haulage is very much cheaper upon the East Indian Railway than it is upon the Great Indian Peninsula?—Yes, and especially in reference to imported goods. The Honourable Member will know perfectly well that from Calcutta to Delhi it is almost level throughout, excepting where the line crosses the Chord Line summit; with that exception it is almost perfectly level throughout. And then we have in the neighbourhood of the Chord Line, at the present moment at all events, sufficient, and in one sense an illimitable supply of most excellent coal. Coal does not cost us, for consumption delivered at all the stations on the line, a larger sum for the half-year that this report before us refers to than 9*s.* 2¾*d.* a ton at all the stations from Calcutta up to Delhi, which is the extreme point; and out of that 9*s.* 2¾*d.*, 4*s.* 11½*d.* was the charge for carriage; that is to say, the amount which we charged ourselves for carrying, not to make a profit out of it, but to defray the expense of carrying it.

3746. I understood you to say that, as compared with the Great Indian Peninsula Railway, you have an immense advantage in point of level, your line being almost level, whilst the Great Indian Peninsula is very much up and down, in fact it has to climb a very heavy mountainous country; and also you have a great advantage in point of coal?—Yes.

3747. Could you at all estimate, taking Agra as the point of comparison, what would be the difference in regard to the rate at which you could afford to convey goods to Calcutta, as compared with the rates at which the Great Indian Peninsula could afford to take goods from the same point to Bombay?—I think I stated that, taking as the standard in the one case what we charge on the line, and in the other case what the Great Indian Peninsula charge upon the line from Jubbulpur to Bombay, in order to put the two lines upon a par, the Great Indian Peninsula would have to reduce its charge 28 per cent.

3748. That is as regards their existing rates, but supposing you were to reduce your rates to the very lowest rate which would pay you at all, what would be the difference in your favour on account of your superior natural advantages?—The average sum received during the half-year ended the 30th of June 1883, for carrying one mile a ton of goods was ·68*d.*; the cost of doing that was, ·20*d.*; and that left a net of ·44*d.*

3749. Then that would be the profit?—No, it is not all profit, because we have got to pay the interest that the Government charge us, and we

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have got many things to do before we get the sum that passes into our pockets.

3750. Are you able to tell us the comparative cost on the Great Indian Peninsula?—I have not got the figures with regard to the Great Indian Peninsula.

3751. Taking it roughly, you have told us that the extra rate is sometimes about 10 *s.* for freight?—I think so.

3752. Taking into account all the superior natural advantages of your line, do you think that you make the most profit out of those rates which now exist?—We, the East Indian, make more profit out of the existing rates.

3753. So that the natural difference is not only the 10 *s.* which now exists, but even more?—Yes, we do make a fair profit out of it, and that means that we can afford to do the business for less money.

3754. With regard to the case of the line from Cawnpur to Bhopal, when you told us that Jhansi and Lalitpur are very poor districts, you also said that there is a great necessity there for railway communication, for a famine line; you are aware, are you not, that the line from Jhansi to Mannickpur is already in course of construction?—I am aware of that.

3755. Which will serve the purposes of a famine line through that district?—I suppose it would partially do so, but that would depend upon what particular quarter you would draw your supplies from to remedy the famine.

3756. Would it not almost naturally do so; is it not the case that the great supply of grain generally comes either from the east of the Gangetic Valley, or from the west of the Gangetic Valley, and that the supply of grain from the West of India is comparatively small?—No doubt it is so.

3757. So that if there was an abundant supply in the western part of the Gangetic Valley or in the eastern part, they would equally get supplies to that Jhansi district by this new line; have you paid any attention to the question of the Mannickpur and Jhansi line?—No, the Government have never said anything to us or to our company whatever on the subject, and I find that it is much better not to ask the Government impertinent questions; if they want our services they will ask for them.

3758. Are you aware that some witnesses have told us that it might be used as an alternative through line to the East Indian line for the traffic from the west towards Calcutta?—I have not considered the question of the Manickpur line at all, it does not come before me in any shape, and I know no more about it than you find in Colonel Stanton's Reports.

3759. As regards the Nagpur and Bombay line, you are aware that a narrow gauge line has already been made to Raipur?—Yes.

3760. And it may probably be made as far as Bilaspur?—Yes.

3761. I suppose as regards any traffic in grain from east to west that line would sufficiently serve that district?—No, it is at a point where the traffic depends upon what port you are to send it to.

3762. But as regards the traffic from east to west it would be sufficiently served in that way by that line?—I do not think it would be sufficiently served by that line, because from the other part, from Bilaspur to Calcutta, it would be better served.

3763. It is the case, is it not, that, taking it generally, the traffic in grain in India is rather from east to west than from west to east, inasmuch as western India does not produce grain enough for its own consumption, and habitually draws from the east?—I could hardly answer that question. I do not know that it is so as a fact, but I cannot reason at all upon the probabilities of the grain traffic from these districts that are to be opened out until I see more into the future. We do not know what the lines may be. If the Government is going to make narrow-gauge lines, or if the Government say we will not take up narrow-gauge lines, from Nagpur to Raipur, you do not affect the question very much.

3764. Is it not the fact that at the present moment so much land in the Bombay Presidency is devoted to cotton that the Bombay Presidency habitually imports grain from the more eastern parts of India, and that now the Great Indian Peninsula Railway really carry a constant stream of grain downwards from the Central Provinces towards Bombay?—I suppose, without speaking with any precise knowledge upon the point, that the greater part of the grain trade carried on the Great Indian Peninsula must be wheat. They may carry a certain amount of other edible grains from Khandeish or Jubbulpur to Bombay for local consumption.

3765. Are you aware that there is a considerable traffic in rice from Calcutta to Bombay?—That depends entirely upon circumstances. I have known when the supply of rice was partly from Calcutta, and when rice came in large quantities from Siam and from Bankock, in Java, and all manner of places.

3766. Bombay habitually imports rice?—Bombay habitually imports rice; it has hardly 10 days' consumption in the whole of its Presidency.

3767. Do you think that if the line were made from Bilaspur to Calcutta there is any probability that there would be a more profitable trade in grain from that district towards the East?—I should say not, if I am to believe the statements that are made as to the productiveness and the general fitness of the soil to produce grain.

3768. On the assumption that there is already railway communication from that country to Bombay, do you think that the Government would be justified in paying money with a view of opening up another communication from that country to Calcutta?—I think that the Government might be justified in opening up a communication because of the other indirect advantages connected with it. I have referred to the connecting of that part of India with our line at Jubbulpur, at Katni; but, really, the country is so little known that the matter requires to be further investigated. If you take up the map of India some 25 or 30 years ago, you will see across that part of the country, "unexplored." I saw one the other day.

3769. Are you aware that the country between Bilaspur

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Bilaspur and Calcutta is a country almost unexplored and very little cultivated, with a very small number of inhabitants, and one which certainly would not justify a railway at present in point of local traffic?—I should say not, so far as local traffic is concerned.

3770. With regard to the Rewah coal that you have mentioned, do you think that a line such as you have alluded to would pay to bring the Rewah coal within the purview of the Great Indian Peninsula traffic?—I should suppose that there would be a sufficient traffic to pay, provided the coal ultimately showed itself to be such as it has been seen up to the present time to be. But we should work it as a State line; that is to say, we should get our share of the net profits, and if there were no net profits we should not be paid for our labour.

3771. Do you think in general that that line would pay itself?—I should think it would.

3772. Do you gather that the supply of coal from the Rewah field would be very superior in quality and quantity to that from the Chanda coalfields?—I do not know much about the Chanda coal fields, but the statement in the report that I have is, I think, that it is about 15 per cent. worse than the Kuraballi coal. But then they say that they have not gone so far down into the bowels of the earth for their coal as we do, and they say that as a general rule coal improves as you go down; whether that is so or not I cannot tell.

3773. I did not quite understand about the line that you suggested; you are aware that the Government of India proposed a line which I find on the list from Bilaspur to Etawah connecting the Jhansi district with Bilaspur, that import the same as the line from Umariah to Bilaspur?—The line which the Government have proposed to us to make, is 38 miles only for the present, out of a total distance of 196 miles between Katni and Bilaspur. When you get on our line at Katni, you go up the Jubbulpur line to a station called Mannickpur, then at Mannickpur you will get upon this new line, which the honourable Member has referred to, going towards Jhansi, and so by that means you would be able to get the coal from this district into the Jhansi district.

3774. Do I understand you to advocate making immediately a direct line from Calcutta to Benares?—No, I do not advocate it, as you say, immediately. In that sense I should like the question to be further considered; I should like the reports to be verified; I should like to have time to make preparation, because I should not desire to have the line made one moment before the opening of the bridge over the Ganges at Benares.

3775. It would be a very up and down line, would it not?—No. I could have brought the levels here from the River Barrackur up Domrah summit, which is about 120 miles; the ascent is very gradual the whole way, in fact, hardly worth mentioning; when you get there and have to fall down to the Sone, there is, I think, an average descent of something like 1 in 100 for 13 miles.

3776. Are you not aware, at the present

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moment, that it is an up and down line almost the whole way?—That may be the fault of the road makers. I am only speaking as to the facts that are stated in those reports. Those reports were made as long ago as 45 years. I do not mean to say that those reports under the altered aspects of the people of India are not open to change, still I should like very much to see them verified.

3777. Are there any other lines amongst those you have mentioned in connection with the East Indian line which you would be very much inclined to advocate at present?—No, I would rather leave that to the Government; if the Government like to make any small lines, 40 or 50 miles in length, impinging upon our line, and of the same gauge as ours, we shall be able to undertake the management of them on State line terms, by which we encounter no risk, because we are not connected in any way with the capital.

3778. For instance, a line from Kalpi to Cawnpore would be exceedingly cheap?—I should say that it would be exceedingly cheap, and it would be a most desirable line to be made; I believe the country is quite flat.

3779. And there is no waterway at all?—No; you will have a bridge to build at Kalpi; another company may have a prior interest in that line the other side of the Jumna, and there would be communication between the two; so that we should build a bridge.

3780. Is it your experience that at the present moment railways can be built very much more cheaply than it was possible to build them when the East Indian Railway was made?—Undoubtedly so, because in those days we had to buy our experience; everything was new. It has been charged against the East Indian Railway Company that it cost a vast sum of money per mile, 22,000 *l.* per mile, or something like that. I have a statement in the room at the present moment which I made to the House of Commons a great many years ago, in which I explained why the cost was so large; it was after the Mutiny, and the Mutiny put upon that Company a loss of about 3,000,000 *l.*; absolutely 17,000 tons of rails disappeared and were never found. All these things made the cost of the line very large. It is, therefore, not permissible to make a comparison between the probable present cost of making a line and the cost at that time, without making a very large deduction from the cost of making the main line, on account of circumstances which are no longer existing.

3781. Putting aside the Mutiny on the one hand, and your better experience on the other hand, the gaining of which, perhaps, enhanced the cost, could you give us roughly some kind of comparison of what would be the relative cost?—I could not do that without communicating with the engineering authorities, who will better speak for themselves. I do hear about a broad-gauge line being made in a tolerably level district for 6,000 *l.* a mile.

3782. Perhaps you can explain to the Committee a question which was raised by a witness the other day, as to what were the original terms of your contract with the Government as regards the

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the maximum rates which you were entitled to charge?—I am told that the actual rates of the year 1866 were fixed upon as the maxima.

3783. Did the original contract contain any power to the Government to lower the rates?—If we go to the original contract we find that the rates and fares had to be fixed in communication with the Government.

3784. What the witness told us was that, according to the original contract, the Government had a general power of fixing maximum rates?—I cannot answer that question without preparation; but I should think that all the other companies in India following in the wake of ours must have been subject to similar conditions.

3785. What we were told was, that the Government could only exercise that power once, and that they had rashly exercised it, and fixed rates which were far too high, and far higher than any company would now think of working up to. Is that the case with regard to the East Indian Railway Company?—I know that the power has been sought to be exercised, and that that argument has been used.

3786. As regards passengers, the East Indian Railway Company have a new contract with the Government to work the line. Is there any obligation to maintain any particular rate, as between the Company and the Government at the present time?—Under the present contract for working the line, "The Company shall charge such rates and fares for the carriage of goods and passengers as may from time to time be fixed by the Company, with the approval of the Secretary of State. Provided the Secretary of State may require the charges for the conveyance of any minerals or mineral substance, or any article of agricultural produce, over distances not less than 300 miles, to be reduced to any rate not below one-sixth of a pie per maund per mile for full waggon loads, and may also require the fare of passengers conveyed in closed carriages with seats to be reduced to any rate not below two pies per mile." That was all the Government had the power of calling upon us to reduce our rates in those two cases; otherwise the Company has the power of charging such rates as shall meet with the approval of the Secretary of State. That is the existing contract.

3787. So that the Government have no power of reducing the rates beyond the limits of these contracts?—No.

3788. What is your present charge for third-class passengers per mile?—Two and a-half pies.

3789. So that the Government have the power to reduce the third class fares to a certain extent?—Yes, to two pies; I may say that the Government called upon us about a couple of years ago to reduce the rate from three pies to two and a-half pies, and I for one was not at all opposed to it, because I thought that it was in our own interest, and the result has been that whilst our receipts remain pretty much the same after the deduction of one-sixth of a pie, the number of passengers has increased so as to compensate for the amount of the money reduced.

3790. And you are yourself favourable to the reduction, I believe?—Certainly.

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3791. And do you think that a further reduction to two pies might be attended with a favourable result?—You must not think that these are matters to be determined by mere rates; in order to accommodate the increased traffic of passengers, which amounted to above a million, we had to add largely to our stocks; we had to increase the locomotive stock; we had to increase our third class carriages, and if we were to reduce the rate from two-and-a-half to two pies, we should have to add a great deal more to our capital in order to meet it; but I may mention, in order to show the Committee that we as a Board of Directors have no objection to a reduction of rates, it is not long since we ourselves proposed to the Secretary of State to reduce our first class rates, which are 18 pies per mile, to 12 pies, and we proposed to reduce our second class rate from nine pies to eight pies, and we proposed to reduce the intermediate class from four and a-half pies to three and a-half pies rate; we have already dealt with the third class rates, and we have shown no unwillingness to treat upon the idea that reduced prices will lead to enlarged custom; but it is the Government of India who have hesitated to follow us; our own people, I am bound to say, hesitated to follow us, but as we, the managers of the Company, stand at present, we are willing to make those reductions.

3792. Are you aware that a witness has told us that the first class traffic pays so badly, that it would be more profitable for you to pay every first class passenger a large sum not to go?—I think in that sense you may go back nearly to the old coaching days in England, when I remember the competition upon the Dover-road; at last came to this, that you were carried for nothing, and you stopped at Sittingbourne for lunch at the expense of the coach. I think you might almost do that in the case of the first class traffic upon Indian railways; literally it is nothing, it is not half per cent. in the whole of what we carry.

3793. With regard to the third class rates, are you aware that a gentleman who was deputed to give evidence by the Government of India, at the last meeting, told the Committee that two pies per mile is a great deal too high, and that it does not tap the real people of India?—Yes, I happened to see that; and I also saw that in answer to the very last question put to him by the Committee, in which he talked about going down to one pie, he closed with the words "you should be cautious," one pie being the third part of a farthing.

3794. Is the present rate one calculated to tap the people of India?—I believe we really tap them as far as we can. If reasonable cause could be shown to me why we should go below two and a half pies, I would not be deterred by any apprehension of the consequences if I had a fair ground for supposing that a good result would come from it, always bearing in mind that if it is to go down to less than two-and-a-half pies, we have simply to spend a heap of money in this country in buying additional locomotive power, and additional carriage stock for the railway, and for that money I should have to go to the Secretary of State.

3795. The

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3795. The last witness told us that he had known in his personal experience recently, people who had walked from Agra to Moultan rather than go by rail; do you think that is often the case now?—No, I think not. A man's personal interest will govern his proceedings in the matter of going half a dozen miles by railway in preference to walking, as it will govern him in any other thing.

3796. Are you of opinion, to put an extreme case, that the labouring classes of India at this present moment would generally, rather than go a thousand miles by railway, walk a thousand miles alongside that line at the present charge?—I am not acquainted with such a person to whom I could ever suppose such a choice would be presented, but I know that the natives of India will do anything to save the fractional part of the very smallest coin.

3797. In your opinion is the present arrangement between the Government and the East Indian Railway Company, as a sort of intermediate between a pure and simple government line and a private line, a good arrangement?—I think it is an excellent arrangement; and I think so the more, because I remember five years ago we had to encounter certain difficulties with certain gentlemen. I remember in the discussion in the House of Commons that I did not feel comfortable when the honourable Member himself was speaking upon this point. However, we carried it, and I believe that the arrangement then entered into, considering that it dealt with the transfer of a property represented by thirty-three millions of money, has proved to be a most successful one in every respect.

3798. You will understand that I am not asking you as to the prudence of making it, but merely as to the working of the line?—As to the principle of working through a body such as we are, I hold that it is one of the best principles that could be adopted; because I wish to take this opportunity of saying that I am not one of those who think that the control of the Government is at all adverse to the interests of the proprietors. The control has always been most happily exercised from the day when Sir James Melville was the first person who came to us; indeed I may say that the control has been exercised more in the sense of co-operation than of rigid control and overlooking. I am speaking of England and of this country only. In India, no doubt, the inspection or control of the Government officers there is very useful, and I am not at all sorry to be under it; but as to the manner in which that control is exercised I hope I shall not be asked to give an opinion.

3799. This arrangement, under which the Government owning the line delegates to a company the working of the line, you think is a good arrangement?—I think it is a very good arrangement.

3800. Is the interest of the shareholders and of yourself as chairman of the railway company representing the shareholders so great that you think that your principal incentive to the good working of the railway is the interest of the shareholders, or are you more in the nature of trustees holding under a kind of trust for the benefit of the public?—No; I think the Committee would be surprised if they were aware of the extent to which the Board of this Company exercises its authority as the administrators of the railway. Perhaps there is no occasion for my going into the details, but the manner in which that authority is exercised gives us an accurate knowledge of everything that takes place in India. They cannot expend a halfpenny without its being made to come under our supervision here; without the slightest clogging of the wheels all goes on smoothly, as if it were so much machinery. If that principle could be applied, and there is no reason why it should not be, I think it would be a good thing. I do not pretend to be a bit cleverer in this matter than anybody else, but I do not see why every time that a railway contract falls in it should not be applied.

3801. What I want to know is whether you consider yourselves principally people who are bound to make a profit to your shareholders, or as a kind of public trustees, who, having but a very moderate and very partial pecuniary interest in the matter, are bound to do the best that they can for the public?—I would endeavour to give the answer which I would give to my shareholders at a meeting, if necessary. I consider myself unquestionably as a trustee for the public interest in the matter. We are employed by the Government under a special arrangement for working this great line for them, and on on every occasion, and occasions are not few, when the private interests of the company appear to come in conflict with this trust, I am always ready to assert the principle that we are acting as contractors on the part of the Government, and that we are bound to defer to them as the owners of the line; at all events to have the interests of the country before us in preference to any distinctive interest of our own, unless the Government takes to what I call an undue and improper interference with us, and then I am ready to contest the matter with the Government.

3802. How are your directors appointed under the present contract?—We rest upon the confidence of the shareholders.

3803. How is a new director appointed?—If such an unfortunate thing were to happen as that a director were to cease to be one, the Board have the power, under their old constitution, of putting anybody into the deceased director's place who is duly qualified, and to report it at the next general meeting. It is then said that Mr. So-and-so has left the direction, and the Board have elected to put Mr. So-and-so into his place, and he now presents himself to you for election. That has gone on for a great many years, and I never knew a case yet in which the power of the directors collectively to elect a colleague for themselves has been questioned.

3804. Under the present contract, are the directors selected by the shareholders without any control of the Government, or has the Government anything to say to it?—The Government has nothing whatever to do with it.

3805. Have you ever considered the question whether it might be possible to put the State Railways under the management of a trust similar to the Port Trust of Calcutta and Bombay?

Sir *George Campbell*—continued.

bay?—No, I never have considered it; but I say off-hand on the instant, that I think it would be a very difficult job to accomplish to work it successfully.

3806. With regard to your management of such a great concern as the East Indian Railway, have you any such system as the employment of young engineers; have your established anything like a regular engineering service, similar to the Government service?—Yes, we have had for nearly the whole time regular grades of service, and regulated salaries, and so on in every branch of our service.

3807. At present are almost all your engineers young men who have begun at the bottom?—That has been our practice of late years. Last year we sent out five young men.

3808. Have you any regular system of pensions?—No, we have no pensions whatever. I have always held that it is quite impossible for a company like a railway company to have a pension fund; but we have what we call a provident fund, and every person in the service is obliged to contribute out of his monthly salary 5 per cent. to this fund, and if he pleases he may contribute 5 per cent. more, making altogether 10 per cent. Then at the end of the half-year the Government and the Company between them contribute towards the provident fund 1 per cent. out of the surplus profits above 5 per cent., and in that way we have contributed for some years past 27,000 *l.* per annum.

3809. Is that provident fund for families?—No; it is for the individual.

3810. Have you ever tried any system of competition for your young engineers?—Let me say at once that I am a decided opponent to competition. I think you get flashy, showy men very frequently, when you want really sound working men.

3811. As regards the raising of money, you are aware that in former days the Government of India used to raise very large sums at 4 per cent.?—Yes.

3812. And that was done a good deal through the system of open loans, under which a native who chose to go to the nearest collector could put money into the treasury?—That was subject to so many abuses that the Government, in a fit of wisdom, abolished the system.

3813. Do you think that it was wisdom?—I am not ready to say that it was wisdom. You must deal with things in this world as you find them, and I do not admit, further, that rules founded on what appear to be principles here apply equally in India as they would apply in this country.

3814. The present system of sealed tenders is so large that small people have not the same facilities for lending to the Government that they had in former days?—Not the same opportunity. The great man overwhelms the small one.

3815. It is the fact, is it not, that in India, whereas formerly the Government raised a great deal of money at 4 per cent., they cannot now get money at less than 4½ per cent.?—Something like that.

Mr. *Jackson.*

3816. Did I understand you to say that you stood in this position, that you were willing to reduce the rates, but the Government stood in the way of it?—It was the passenger rates. We had made a proposition, but the Government said you had better postpone the consideration of it.

3817. You have no power to reduce rates without the sanction of the Government?—No.

3818. Neither for goods nor passengers?—No.

3819. You stated that if you reduced the rate you would have to increase your capital to provide additional stock; may we take it then, that, in your opinion, there is a large traffic which would follow the reduction of the rates which at present you do not get?—No; we reduced our rate, at the instance of the Government, from 3 pies to 2½ pies for third-class passengers, and the only way that we could recover the one-sixth of the money that we lost would be by obtaining, at least, one-fifth more passengers. To carry this one-fifth more passengers, when you come to deal with millions, you require more stock, and therefore, when you consider the question of reduction, it is not a question that is to be determined by the receipts and the number of passengers only, because you have a large sum of money to lay out, and you have to get a return for it.

3820. Do you think that the expense which you had to incur with the previous reduction you would have again to incur with a further reduction?—It might be so to a certain extent, but it would not follow in the proportion of three to two and a half.

3821. But if it did not follow you would not have to increase your stock?—No, we should not have to increase to so great an extent in proportion.

3822. I understood you rather in your previous answer to indicate that the bar to a reduction was that you would have to raise additional capital and to provide additional stock to carry the additional traffic?—No, I merely meant to mention that as incidental to the operation.

3823. The result of this arrangement for working those lines which you have described to the Committee appears to have been satisfactory to your Company; does this arrangement also work satisfactorily to the Government in giving them a reasonable return of interest on the outlay which has been made?—That I do not know, because they have never made any statement to us upon the subject, and because we have no means of calculating it, inasmuch as we do not know what was the cost of those railways. I have no doubt that some one of the India Office officials will give the Committee the cost of the lines.

3824. With regard to the proposed line from Kutni to part of the way to Bilaspur, is that proposed to be broad gauge?—Yes.

3825. The line from Nagpur to Raipur, I think, is narrow gauge?—Yes.

3826. Would it be difficult to make that into broad gauge?—I cannot tell you that; that is an engineering question which depends upon the application of general principles to the particular circumstances of the line.

3827. Have you known any cases where narrow guage lines have been made into broad gauge?—I do not recollect any.

3828. Your

Mr. *Jackson*—continued.

3828. Your suggestion is to work this proposed line from Kutni to the point you mentioned; would that hold good as far as Bilaspur?—I presume so.

3829. I think we may take it that in your opinion it is desirable to make that line, and also from there to Calcutta?—It is my opinion.

3830. And so far as we are able to judge, you would be willing to work it if the terms were the same?—No, I do not concede that point. It might be better for us to adopt it and incorporate the line with our own undertaking, and that would require to be carefully considered, but if we were limited only to what I call the coal line to Umaria, or to Sohajpur, then I should say we could only work it upon State line terms.

3831. You gave us some very interesting evidence about Bombay, which seemed to show that the trade of Bombay was increasing, and probably would increase in the future at a greater rate than that of Calcutta, I mean the trade from Bombay to Europe; and you gave us one of the reasons that lines of steamers ran from the Continent to Bombay?—From four or five ports on the Continent.

3832. I suppose that traffic used to come from India through this country?—Yes, that traffic used to come here. In other words, London has ceased to be the *entrepôt* for the distribution of tropical goods. That is one of the causes of the decline in the whole of this trade done which all old people are so apt to speak of.

3833. Then we may take it that the development of Bombay rather means the development of the direct trade with the country, and therefore less trade going through this country?—I think so.

3834. With regard to the raising of funds, do you think that at the present rate at which the Government can borrow money in this country, it is possible to get the money in India?—It is a question of terms.

3835. Your idea of it, I think, is that it was rather a question of the way in which it was borrowed; but in your opinion is it not rather not a question of the rate at which it is borrowed?—Yes; and I prefaced my answer to the question put to me by saying that I might hold rather a different opinion to-day when I see an advertisement that the Indian Government are about to beg and supplicate the public to give their money at 3 per cent. for 93, which I apprehend means 3¼.

3836. Then you are not sanguine that the money could be raised in India, or to use your own words, that the wealth of India could be got at on such terms?—Not on such terms as 3¼ per cent.

3837. Would you not recommend money to be borrowed in the cheapest market?—No, because consequent upon borrowing, what I object to is India being made a perpetually increasing debtor to this country.

3838. You think it would be better to borrow money in India even if you paid a higher rate than to borrow it in London at a lower rate for India?—It is a question of terms. Of course there is a limit either one way or the other, but I am not prepared to discuss it upon what I call arithmetical reasons, because so much more is involved in it; but I think that within moderate terms India had much better borrow in India of her own subjects, and for her own purposes than to go to London and make London a bigger creditor for all time than she is at this moment.

3839. Is there any means of knowing whether much money has been raised in India, and how much of this stock is held there?—I suppose if you were to get access to some of the old financial authorities from India with whom the Honourable Member for Kirkcaldy is more acquainted than I am, up in London they would probably be able to give you that information. We used in former days to think nothing of a subscription of half a crore of rupees, that is 500,000 *l.* as a loan, and I believe the money still to be there in some form or other.

Mr. *Bolton.*

3840. With respect to State line terms, those lines, I presume, are practically feeders of your main line?—Two of them.

3841. And the terms upon which you are working them, are supposed to be applicable to feeders, and not to main lines?—Entirely to feeders; up to this time they have been considered so.

3842. Practically, I presume, that the working of a feeder is less expensive than the working of a main line?—It is because you do not proceed on such an expensive scale. Your working expenses are less, and you do not require to go so fast; you can without any detriment to anybody use an inferior kind of stock on the trade.

3843. But the remuneration which the East India Company have for working those lines is on an average of the whole?—Yes.

3844. And consequently you have the profit to a small extent?—I do not really think it amounts to anything.

3845. But it should do so; whatever it is it should be a profit, seeing that a feeder, which comes into the average of the whole is a less costly thing than the main line?—It may or may not be; I do not think it matters much one way or the other.

3846. You have in addition to that profit, if it is a profit, a fifth of the surplus receipts over the cost?—One-fifth comes to the Company apart from the undertaking. If there were a profit upon the working of the State line, it would not come to the Company, but it would go into the general receipts of the undertaking in which the Government shares.

3847. And you get one-fifth of that?—Yes.

3848. The Honourable Members' estimate of your profit at about 33 per cent. was rather under the mark than over it?—It did not catch my attention at the time; I suppose it is so.

3849. I think you said you stood alone in recommending the acceptance of such a proposal as that, and you were rather severely criticised for adopting this bargain?—No; it was not with regard to that point that my remarks tended.

3850. As to the reduction of the rate for third class passengers, are your trains now completely filled?—Yes, I should say so, because we hear of so many passengers being left behind at the stations.

3851. Consequently you are short of rolling stock

Mr. *Bolton*—continued.

stock now for the actual traffic that exists?—That may or may not be; it may be that a train is made up to go some distance, and without the traffic manager being aware of it, some fair or some great "poojah," as they call it in India, is going on, and when you arrive at a station you find 500 or 600 people where you did not expect to find 100, and then some are left behind.

3852. But you think, generally speaking, that your rolling stock is sufficient?—I think it is sufficient.

3853. Not more than enough; what I want to get at is this; you feel certain that if you reduced your third-class fare by another half-pie, which would be 25 per cent., you must at once, before you adopt it, increase your rolling stock?—We should have to inquire into the probabilities, because it would never do for us to reduce the rate at a time in the future, and then to find that the consequence was that a larger number of passengers were being carried from day to day and we had no stock to put them into.

3854. But evidently your opinion is that you could not reduce the rate without increasing the stock?—I think not.

3855. Your opinion must be, I should imagine, formed from your knowledge of your requirements, that your present stock is barely sufficient for the existing traffic; is not that so?—No, I do not think so; we have not had occasion recently to consider the thing.

3856. I cannot understand why you so readily jumped to the conclusion that a reduction of the third-class fare cannot be made unless at an increase of cost and an increase of rolling stock, unless it is from a knowledge that your present rolling stock is only sufficient to carry the present traffic?—I do not suppose that our present rolling stock is more than sufficient to carry from one month to another month the traffic that comes to the line.

3857. You disagree altogether with Mr. Glover as to the desirability of the extension of railways in India, which he advocates?—No; I do not wish to be misunderstood. I have heard what Mr. Glover said here; and, having previously read the accounts of the district over which his line is proposed to go, I was struck with the different account that he gave of it. What I say is this: I do not distrust Mr. Glover; Mr. Glover may be perfectly right; and I do not distrust the book; the book may be perfectly right; but I mention the facts to the Committee as presenting a serious case of inconsistency, and I leave the Committee to further prosecute the inquiry if they please.

3858. Then the extent to which you would go would be that you could not confirm Mr. Glover's evidence?—Certainly not; I have no personal knowledge excepting through the book.

3859. Mr. Glover said, in reply to a question by the Chairman, that he had been very much struck by the change in the country in consequence of a railway being made through it; and he says that in India it is a well-known fact that when a railway is made the country at once gets rapidly cultivated all round about for miles and miles, which, before the line was made, was a barren country. You can neither confirm, or deny, nor qualify what he said?—That depends upon the character of the country. If the country is rock and stone you will find great difficulty in improving it by the mere passing of a railway through it. If, on the other hand, it is like Belgium, you may undoubtedly do a great deal towards developing its resources.

3860. He was then speaking in connection with the proposed line from Bhopal to Gwalior; do you know anything of that country?—Not at all; I never was there. I merely present two differing views for the consideration of the Committee.

3861. Mr. Glover also approved of the recommendation of the Government of India that from 50 to 60 millions should be spent in making new railways during the next five years; do you think that is excessive?—Enormous, unnecessary, and uncalled for. Of course, I do not speak as to anything connected with Burmah, or those parts with which I have no acquaintance.

3862. If State-aided lines were to receive 32 millions in five years, would you think that excessive?—I think the whole thing is excessive.

3863. With respect to the inclination of the traffic; assuming that the Bhopal and Gwalior line was made, continuing on to Calcutta in place of Bombay, you have, I think, indicated your opinion plainly, that all the traffic below Agra would still be inclined to Calcutta?—Yes; I think so.

3864. At Agra there would be a junction, in fact, with the main line?—It would be so as regards the through route from Bombay to Calcutta, *vid* Agra; but I was going to say that the mean point upon the other line, that is, from Bombay to Calcutta, by way of Cawnpur, would be very near to Jhansi.

3865. But nevertheless you think that the inclination of the traffic would still be to Calcutta?—Yes, I do.

3866. Has the East Indian Company any power to direct the course of traffic over its own line?—Simply by exercising wisdom in its own interest in fixing its rates.

3867. Only that?—Only that; they have no moral power and no physical power.

3868. For example, could the Great Indian Peninsula put down traffic agents and booking clerks, and so on, at your stations?—They have no power to do anything of the kind now.

3869. How would they obtain traffic, for example, below Agra on your line; if they wanted to obtain traffic at that portion of India, for the purpose of conveying it to Bombay, could not they compete with you at all?—I do not think they could.

3870. So that there would not be facilities for competing at Bombay, but there would be facilities for competing in the control of the traffic?—I think that the result, if the line were made, would depend upon the facts connected with the line, and not upon their not having any access to anybody in our station. It is a point really that has never presented itself to my mind.

3871. Are you under obligation to make through rates, for example, from your district

to

Mr. *Bolton*—continued.

to Bombay, to traders or others?—None whatever; we are not bound to go beyond our own line.

3872. How would the Great Indian Peninsula create traffic on your system, for the purpose of directing it to Bombay over theirs; you are not competitors now, or not so much so as you would become, and you could prevent them under those circumstances, could you not, obtaining traffic from your district?—No, they are not by any artificial means; we should deal with them as competitors merely upon the point of rates.

3873. But you could do that at present, could you not?—No, the Government could interfere to prevent us.

3874. Could they compel you to accept Great Indian Peninsula officials along your line, giving them all the facilities which are customary in this country, where running powers and competing facilities are given to opposing railways?—The word "running powers" has hardly yet been used in India.

3875. In this country you are no doubt aware that one company getting running powers over another, gets also what are called "facilities," for which they are entitled to put a booking clerk, to have the use of the stations and to have carting agents, and so on, as if they were the owning company; with such facilities it must be quite clear to you that it would be possible for the Great Indian Peninsula to get traffic from your system, for the purpose of directing it over their line to Bombay, and withdrawing it from your system to Calcutta?—The question has never arisen; it is the first time I have heard it in connection with Indian railways.

3876. Do not you think that it might alter the indication of the traffic?—No, I do not think it would have any effect upon it. I think the only thing that will affect the current of the traffic one way or the other, is where the company has its advertisements stuck up everywhere.

3877. We have had evidence that the rates on the Great Indian Peninsula are very light, and it was put by some witnesses here, I think, as absurdly high; I think your evidence goes in the same direction?—No, I have not said that the rates are high. I have merely quoted a rate.

3878. You have told us that the difference between the rate from Jubblepur to Bombay, and I asked you the rate from Cawnpur to Calcutta, which you gave, I think, as about the same distance, was a difference of 10*s.* per ton, and you gave that as a reason why, if the line from Bhopal to Gwalior was made, they could not compete with you; could not they direct the traffic from your district to Bombay?—I stated that as a fact with which we would have to contend.

3879. Do you say that they could not reduce it; is that your point?—No, I do not say that they could not reduce it. I merely said that they would have to reduce their rate by 28 per cent., to compete with us mileage for mileage.

3880. But that reduction might be made if their present rates are extravagantly high?—Yes. I cannot tell exactly; their working expenses are very heavy.

Mr. *Bolton*—continued.

3881. However, the making of that line would be an inducement to them to reduce their rates?—They would get no traffic if they did not.

3882. And that would be very much to the benefit of the growing produce of the district, served by both your line and theirs?—It might be.

3883. Could it be otherwise?—I should like to consider that point.

3884. In your opinion, the Bhopal line is not necessary?—I do not think it is, excepting that it may be necessary for famine purposes, but for commercial purposes, I say it is not necessary.

3885. I think you expressed a favourable opinion to the line from Kistni to Bilaspur, or somewhere in that direction?—Yes.

3886. And I think you shewed that that line would be a competing line to Calcutta?—An alternative line I termed it.

3887. But that alternative route would not be so short a route as the route *viâ* Nagpur, would it?—There would be three routes, in point of fact; but if you are to get to Nagpur broad gauge, and get into narrow gauge, and then go in a carriage to Raipur, and then get out of it again and get into a broad gauge and go on to Calcutta, I think you would not go that way.

3888. What gauge do you contemplate using for the line from Kistni to Calcutta?—That remains in the superior wisdom of the India House authorities.

3889. But if it was narrow gauge there would be a break of gauge?—Yes, there would be a break of gauge, and there would be a break of gauge at Bilaspur, which I should deprecate.

3890. Therefore, so far as regards the gauge, the direct route by way of Nagpur would be on all fours with the route *viâ* Kistni?—Possibly.

3891. There would be a break of gauge in either case?—Yes.

3892. Why do you think that the Bhopal and Gwalior line is not necessary if the other is desirable?—I do not think there is any analogy or comparison between the two; the Bhopal and Gwalior line is a wholly different thing from the line from Kutni to Bilaspur.

3893. Excepting in this respect, that both lines would open up a country at present without any railway accommodation. There is no railway accommodation at present between Kistni and Bilaspur, and there is no railway accommodation as between Bhopul and Gwalior?—I think, if I may say so, the honourable Member has missed the point, which is that the making of a line from Kutni to Bilaspur is the opening out of a productive coal country.

3894. And the other line opens out a productive piece of country?—Then you must decide between Mr. Glover and the Gazetteer.

3895. You evidently do not like a break of gauge?—I certainly do not like it.

3896. Do you think it is any saving in any shape?—I have not considered that question so far as to be able to form an opinion which would be of the slightest use.

3897. You have no experience of the practical working of the narrow gauge?—None whatever.

3898. With respect to the relative merits of the two ports, Bombay and Calcutta, do you think

Mr. *Bolton*—continued.

think it is possible ever to make Calcutta as cheap a port as Bombay?—No, I should doubt it. The one has a magnificent harbour open at all times of the tide, and I may say at all seasons; the other is 100 miles up a somewhat difficult tidal river; in that consists, in my opinion, the only difference between the two. When we get to Calcutta, and the docks are made there, she will be made in the same position as Bombay is, and she will also have facilities for taking in cargoes in the stream.

3899. And there will always continue to be greatly increased assistance at Bombay from Europe?—Yes.

3900. Magnified by the opening up of the Suez Canal?—Undoubtedly.

3901. Therefore, Bombay must remain always the best port of India, having regard to Europe?—Undoubtedly.

3902. Therefore if money is to be spent in improving railway communication throughout India, should not Bombay be made the basis from which to start, rather than Calcutta?—Not unless Bombay can show equal railway facilities, and I think I have shown that the kind arrangements of nature have put the East India Railway in a position with regard to its level and its supplies of coal, and one thing and another to compete against Bombay on terms which Bombay cannot expect to come up to.

3903. But we are considering rather the railways to be made, than the railways which exist?—I should like to know what railways are to be made.

3904. Would not you say, looking to the fact of the position of Bombay, that if possible, railways should be concentrated upon Bombay rather than upon Calcutta, looking exclusively to the interests of India?—No, I do not think so, because it must be remembered that Calcutta does a deal of business with the eastern world; Calcutta has a large and growing business with the Australian Colonies, and a large growing business with China, and China has to be considered as well as Europe.

3905. I will come to that afterwards; I am now speaking of Calcutta relatively with England and Europe, and I ask you whether you do not think that looking to the position of Bombay and her connections towards Europe, the railways which are to be made should be directed towards Bombay rather than towards Calcutta?—No, I do not say so, because the country is so different, that they have found it a matter of great expense to make those railways economically; and further, as I said before, you would not be able to get another railway into Bombay, the neck of the bottle is nearly closed.

3906. Do you mean, for example, over the existing lines of railway into Bombay; they are double lines, are they not?—I believe the Bombay and Baroda is double.

3907. Do you mean that there is not room for another line of rails?—I mean that if you are to establish a trunk line of railway, you will require something more than merely putting down two pairs of rails; you will require station accommodation and workshops, and everything else.

Mr. *Bolton*—continued.

3908. But it is a very common thing in this country where two or more railways are working on the same lines of rails to work into the same station?—But the mode of working in this country is no indication of what they can do in India.

3909. I think you have told us that there are people of great intelligence and enterprise in Bombay?—That I never would dispute for a moment.

3910. Your opinion is, that there is an exaggerated importance attached to a through route between Calcutta and Bombay?—Yes, it is.

3911. That is as respects traffic between Bombay and Calcutta alone?—Yes, I mean that.

3912. That there is a large and important undeveloped local traffic?—The local traffic is a totally distinct thing from the through traffic, and it is the through traffic which I do not see my way to.

3913. You have told us that there cannot be a very great traffic between the two places, but there must be a good deal of local traffic?—I hear that there is a very large local traffic on the narrow gauge line from Nagpur to Raipur, but what it consists of I really do not know.

3914. In advocating the making of a direct line to Benares, or rather in suggesting that you might advocate it at some future time, you showed that it would require 340,000 tons per annum to pay 4½ per cent., and you thought also, that that additional traffic might be found?—My opinion is, that if the line is made, it will be found.

3915. What becomes of that traffic now?—It does not exist yet.

3916. Then is that a case in which the making of a line of railway would create additional traffic?—No, it is this; it will shorten the distance by between 60 and 70 miles to Calcutta from Benares, and at Benares, the Oude and Rohilcund Company are building a great bridge.

3917. You told us that really before you come to that you will require 340,000 tons of extra traffic, and I want to know where that extra traffic is to come from; I asked you whether it exists at present, and you said No, therefore I presume it must be traffic which would arise upon the line itself?—No, it is from the further development of the lines to the north of the Ganges.

3918. Then it does develop traffic in some directions?—Yes, it does develop traffic, undoubtedly.

3919. You seem, I think, to look upon India as divided between the two great systems of railway, that the east should be apportioned to the East Indian Railway, and the west to the Great Indian Peninsula Railway?—And the Bombay and Baroda and the Rajputana lines.

3920. On the other side you would keep it all to the East Indian Company?—No, I did not say so. I was following the provisions of nature. Nature has supplied India with the River Ganges, and our railway has taken the course of that river, and I say that it is a line perfectly capable, with augmentations and developments, of carrying the whole of the traffic of that part of the country.

3921. You spoke of the intrusion of Bombay into the Calcutta territory; what do you mean by

Mr. *Bolton*—continued.

by intrusion," unless it means a division of the district into two parts?—I mean this: I take the exact words which were used by a witness before this Committee, Mr. Chapman, that one object was to shorten the distance. What he meant was, I presume, between Bombay and Cawnpur; but he went on to say, "and to take traffic from the East Indian Railway," or words to that effect, and that I call "intrusion," because I consider it to be unnecessary.

3922. Is it necessary to believe that it is to the disadvantage of the people of India to send their traffic to Bombay, and that it is to their advantage to send it to Calcutta?—I deny that it can be to their advantage to send their traffic to Bombay if they are governed by the question of the cost of carriage.

3923. But if it is a fact that it is to their advantage, of which we must presume they are the best judges, your denial, perhaps, would not affect that question?—Certainly not under such circumstances as those; but if I am to consider a hypothetical case I must be satisfied in my own mind that the bases of the hypothesis are correct.

3924. But you would not be called upon to contribute to the expense of making the line from Gwalior to Bhopal, which Mr. Glover was advocating, and we have had no opinion upon that point at all, except that it might bar traffic from the East Indian Railway?—Except that I have been honoured with an invitation to attend this Committee. I have been asked to come here because it was supposed that I knew something of India from an experience of nearly 50 years, and as I feel myself bound to answer questions upon those points. I am asked to consider questions which are put to me with reference to the extension of railways in India, and with reference to the finances of India, and I hold that it would be improper to commit the finances of India to guarantees for particular lines. But that is altogether apart from the point which the honourable Member has put to me.

3925. Excuse me. I took it for granted that you desired to be questioned on the subject on which I am now asking you questions, because you, yourself, introduced the words "intrusion of Bombay into Bengal territory," and, therefore, I am now asking what harm would arise from the intrusion of Bombay into Calcutta?—I do not think it would do us any harm.

3926. Nor do the people of India any harm?—No, I think not.

Mr. *William Fowler.*

3927. Referring to some remark that you made just now with regard to these new lines, have you read the letter dated the 29th of January 1884, from the Government of India to the Government here?—No. I think that is a document which has not been made public, and probably you have access to it only in this Committee as one of the records of the Committee.

3928. You have not seen the paragraph which says that some recent lines are paying better than anything else in India?—I have not seen that.

3929. Amongst others, you have not seen this

Mr. *William Fowler*—continued.

remark with regard to the Nagpur and the Chaatisgarh line, that the percentage of net earnings to capital outlay in the calendar year 1833, was 7·15 per cent.?—I have not seen that. I labour as a witness under a great disadvantage, because I am not in possession of the views of the Government, as shown in the Reports which the Members of the Committee have themselves, and I have not.

3930. With regard to this vexed question of the Bhopal and Gwalior, have you read Mr. Chapman's evidence?—Yes, I have.

3931. Do you recollect that in Question 870 he refers to the opinion of Sir Lepel Griffin as to this district; have you read that?—Yes.

3932. Are you aware that Sir Lepel Griffin is an authority of great weight in matters of that kind?—He is an authority. I am not in a competent position to say whether he is an authority of weight or not.

3933. You spoke about there being two witnesses, namely, Mr. Glover, and "The Gazetteer;" you are aware, are you not, that Mr. Glover did not refer to Sir Lepel Griffin at all?—No, I am not aware of that. When I say that I have read his evidence, you know that we have not got copies of the evidence to read that, I remember the fact, his evidence was there when it was presented to me to read, but I have not attached the proper weight to it which, it appears, I ought to have done, and, therefore the Committee have a third authority between Mr. Glover and myself.

3934. With regard to this new line from Nagpur, it has been proposed that it should go to Seeterampur on your system; would not it be more satisfactory that it should go direct to Calcutta?—I must not be accepted as a witness of authority upon that point; I merely know this fact from the opportunity that I have had of examining the papers, and a general knowledge of the subject, that it would have to cross five immense rivers in getting into Calcutta from the south-west.

3935. You think that it would be too expensive?—Yes, and it would pass through the country at right angles to the course of the rivers which drain an immense surface.

3936. With regard to the mode of borrowing, you spoke of increasing the burdens of India, and you seem to have a great dread of the future results of borrowing in sterling; have you at all looked into the effect of paying one per cent. more through a long series of years, as you would do now if you borrowed in India?—I have not looked into that, because I have not considered it as merely an actuarial matter.

3937. I suppose as a man of business you would be aware that it tells up at a very rapid rate at interest and compound interest?—I am a man of business, but I may not know that.

3938. But with your large business experience, you would agree that the difference by one per cent. is a very enormous difference in the rate of borrowing?—I confess I may be prejudiced, but I cannot get over the idea that the present generation is not justified in getting advantages at the expense of the future, or rather by the accumulation of a debt year by year against the natives of India.

3939. I am

Mr. *William Fowler*—continued.

3939. I am supposing that to borrow the money at this very cheap rate would be ultimately to the benefit of the people of India?—That is from the honourable Member's point of view.

3940. Not at all, but merely as a matter of figures; but you have not gone into that matter?—I have not gone into it.

3941. You are so afraid of the ultimate effect of borrowing in sterling that you would even be willing to pay one per cent. more?—I said that in a general way.

3942. It was not upon dry minute examination of the results?—No.

Mr. *Carbutt.*

3943. How many years is it since you left India?—It is between 37 and 38 years ago.

3944. Is your objection to a great extension of railways in India at all tinged by your not having been in India lately and seen the development which the railways have produced in that country?—No, I do not think so, because I have been familiar with the whole of the circumstances of India during the whole time; it has been the principal staple of my thoughts and proceedings for 40 years.

3945. I cannot quite understand why you should take such a fatherly interest in the prosperity of the Great Indian Peninsula Railway, that if they wished to make this line from Bhopal to Gwalior, you think that they can work it at a profit, and therefore you think it ought not to be sanctioned?—I do not think that it ought not to be sanctioned, but I think that it ought not to be guaranteed. I would let them make it if they please without a guarantee, and I should hail that with pleasure, but I do not think that the Government ought to be called upon to guarantee that line at the expense of the people of India.

3946. From what I gather from your evidence it went to prove that it could not possibly compete with the East Indian Railway in taking grain from the Punjaub district through Calcutta as against the Bombay district?—It is not the Punjaub grain that I refer to; it is the grain that is grown in the immediate neighbourhood of Cawnpur.

3947. What I understood you to say was that the Great Indian Peninsula Railway could not compete with you, because they have a greater length of mileage as against yours?—Yes, that is what I said.

3948. I think you admitted that it was much cheaper to ship from Bombay than it was from Calcutta?—Yes, it is now.

3949. And in addition to that the merchant would save 10 days, as I understand you, in his grain coming to Europe, which would facilitate the traffic in that way?—Yes.

3950. And you made a statement which I could not quite understand, that the Great Indian Peninsula could not compete with the East Indian Railway, on account of the cost of coal, and you made a statement that the cost of coal to the East Indian Railway Company was 1 *d.* per ton per mile?—Yes, per train mile.

3951. And to the Great Indian Peninsula Company, you said it was from 5 *d.* up to 6 *d.*?—Yes.

Mr. *Carbutt*—continued.

3952. I find by the last published reports that it is only 4 19 *d.* a mile on the Great Indian Peninsula, which is a great deal of difference?—The way in which we have arrived at it is this; all the railway companies report half-yearly to their shareholders upon one form of account, and I have taken the half-yearly consumption of coal as reported by each company to its shareholders, and the number of train miles run, and the result comes to the figure which I have read. When I say that I have done so, I mean that it has been done for me by others.

3953. This is from Colonel Stanton's Report, so that there is a great deal of difference between 4 *d.* and 6 *d.*?—Undoubtedly, but I stated the principle; I have done it upon the returns of the railway companies themselves.

3954. You recommend the making of a line from Kalpi to Bilaspur, on account of the coal, and you think that that will benefit the Great Indian Peninsula Railway?—Yes.

3955. Are you aware that now that they have made this Nagpur line, they get coal up from Warora?—I quoted to you the words from the official report, but I showed what would be the consequence as regards the supply to the stations of the Great Indian Peninsula Railway, by the construction of that line. I do not know anything about Warora.

3956. That coal has only lately come into the market, I believe?—I am speaking only from impression, but I think it is an inferior coal, and rather an inadequate supply.

3957. I see, according to the report, that the selling price of coal is 9 rupees per ton, so that it would give them all the better advantage in competing with you?—But I think that the report from which I quoted, showed that this Rewah coal could be delivered at Jubbulpur to the Great Indian Peninsula Company at 8 rupees per ton.

3958. Then you stated in another answer that if competition were forced upon you it would be for the benefit of the people of India?—Unquestionably it would.

3959. You would not blame the Government for running some little risk of forcing competition upon you?—Yes. I blame the Government for doing anything to jeopardise the East Indian Company's interests, because they have a large stake in our line. I think the Government should only be expected to do reasonable things.

3960. If it benefits the country in general, do not you think that it would be worth their while to run that risk, especially now that they can get money so cheaply?—So long as they are within the lines of their contract with us, but not if they go beyond that.

3961. With regard to your State line terms of working, you have proved that in addition to your working expenses you get about 33 per cent., so that in case the Government settled to work the line themselves they would have that margin above what you charge them?—A certain profit is made, out of which the Government give us one-fifth for our pains and labour.

3962. That is in addition to your average working expenses?—Yes; but we make no gain out of the working expenses; we are money out of pocket.

Mr. *Curbutt*—continued.

3963. In the first place, you have it handed over to you with new rails, new sleepers, and new chains, and everything in working order, and consequently you will not have to replace those rails for 22 or 25 years, so that you would have very little working expenses on your rails?—We should have a considerable amount of maintenance, because I think the less that is said about the condition in which the Government handed over those lines to us the better.

3964. Is it not a rule that in these short lines that you take over, you work them with your own locomotives, which you could not possibly run upon your main line?—So far as it is local traffic, because high speed is not required on a local line.

3965. You have not high speed, you have not the same consumption of fuel?—No.

3966. So that your working expenses on those branch lines are nothing compared with those on the main line?—I daresay they are not; but taking the 36 per cent. that I stated, four-fifths of the profit goes to the Government and we get nothing, but just an infinitesimal benefit profit out of such arrangement as that.

3967. You said that you objected to this new line being made from Nagpur, and Bilaspur, and Calcutta, because there was a break of gauge?—No, I did not object to that line being made. I said expressly that if the line be made, I leave it to the wisdom of the Government to determine what the gauge shall be, in reference to the fact that they have already got 149 miles between the Raipur terminus and Gwalior on the narrow gauge.

3968. That is the only portion of the narrow gauge, is it?—Yes, that is all.

3968. The total distance from Bombay to Calcutta is 1,284 miles, and if you had to make any alteration whatever, you would only have to alter 149 miles of narrow gauge into broad gauge, so that it is not worth while, considering the cost, of altering the narrow gauge into broad gauge on purpose to get one main through line on the broad gauge?—That is a fact to be arrived at after very close examination.

Mr. *Kynaston Cross.*

3970. Your main objection to borrowing in England is that you will thereby increase the remittances that will have to be made from India to England?—Yes, it is.

3971. Why are you so much afraid of increased remittances from India to England?—Because I think that any increase of indebtedness of India to England is to be deprecated. I do not think that it can do the country good in the long run that an increase of that indebtedness should take place from year to year almost as a matter of course, as it comes to now.

3972. If that were not done by the Government at all, but it was done by private parties sending their money over to India in the same way as they send it to every other part of the world, would the remittances come less to England than they would if the advances were made by the Government?—I do not know that I quite understand the honourable Member's question, but I cannot get away from the apprehension that all

Mr. *Kynaston Cross*—continued.

the money that India borrows, or that is borrowed for her in this country, and that increases the amount of her indebtedness to this country, cannot be to her advantage if she can get it in her own country.

3973. Putting India on the same footing as any other country in the world, as America for instance, would you say that it was a great evil that America should borrow money in England, the interest of which would have to be remitted here, if the undertakings in which that money was invested were good paying undertakings?—That would depend upon what good came out of the application of the money that was borrowed; I think that too much money is being borrowed, and I do not see the use that it has been put to.

3974. Do you mean everywhere?—No, between India and this country.

3975. Supposing we take the amount of English capital that goes to India every year, and compare it with the amount that goes to any other country in the world from which there is anything like the same amount of exports, do you think that the English capital invested in India would bear comparison with the English capital invested in any other country from which there is the same amount of export?—I do not think it is a question of degree. It appears to me that there is a matter of principle involved in it, and as I said once before to-day, I think that the obligations and duties of common life apply as much between one country and another as between individuals.

3976. Precisely so, that is what I want to get at; I want you to say whether you think it is more detrimental to India to borrow largely in England than it is to America to borrow largely in England?—I cannot tell what detriment America would derive from borrowing in this country, but I think the circumstances are so different, that it is difficult to institute any comparison in dealing with the transactions of this country with America, and this country and India. India is to a certain extent a dependency of this country, and America on the other hand is a foreign nation. The peculiar relations of America with this country, although she is foreign, are almost those of brothers. It is one nation in blood, and almost one body for some purposes, whereas between us and India it is a totally different thing. We hold her as a conquered county, and of course we must regard the people of a conquered country as holding a different position with regard to us than the kindred people of America.

3977. Then it is because it is a conquered country, and not because it is a poor one, and not because it is a dependency?—No, not entirely because of that.

3978. Put it as compared with Australia. Australia borrows very largely from us, and Australia has to send her produce to pay interest; in what does the relation between us and Australia differ from the relation between us and India as to the interest on loans being paid in the produce of the country, and not in coin?—There is this difference, that America is a free country, and can do it as well as we all

Mr. *Kynaston Cross*—continued.

know. Australia is practically free, but India is a conquered country, and I think you must have special regard to the interests of the people of India when you have conquered her, in the manner in which you administer your control over her in the way of increasing her debt.

3979. Then you put it in this way, that though all other countries in the world may borrow money in England and consider it to their advantage to do so, because India is a conquered country you would debar her from those privileges which are freely given to every other part of the world?—I am not prepared to say that it is a privilege to come here if you have to pay for it, by taking upon your shoulders the burden of a heavy debt for all time.

3980. As to the objection to the reduction of rates which you said had been made by the Government on the East Indian Line, did that objection originate with the Government or with the company's agents?—The objection to the reduction rates was made by the agent on the spot; the directors here took somewhat a neutral position. The Government had the power, and we did not feel ourselves justified in remonstrating against the exercise of that power. My own personal feeling at the time was in favour of the reduction.

3981. How was it that the reduction did not take place; has the Government, as a rule, objected to any reduction of rates?—The honourable Member is confounding two things there, or else I have been very imperfect in my explanation?—A reduction from 3 to 2¾ pies did take place, and we made a proposal from the country that the first and second-class fares should be reduced also, and the Government said, We would rather postpone the consideration of it. It was the Government of India that said that.

3982. Not the India Office?—No; not the India Office.

3983. The Government director has not objected to any reduction of rates at all, has he?—The Government director did not object very much to it; I think he was a party with us to the proposal to reduce the first and second-class fares.

3984. He has generally been in favour of a reduction of rates, has he not?—Yes; he generally takes a wise course in that matter.

3985. I think you have told us pretty fully why you object to an extension of the line from Bhopal to Gwalior, and I think you said, at the same time, that it might be a considerable advantage to the country if it could be made?—It might be from a famine point of view, and I do not say it would not be an advantage if it were made at private expense, and at the risk of a company; but my point is, if I may presume to say so much, that I could not advise the Committee to recommend the Government to guarantee it.

3986. Are you aware that the Government of India put it under the head of companies that are to be established under a limited guarantee system; that is to say, that a guarantee of interest would only be given during the time that the railway was in course of construction, and perhaps for two years afterwards?—I have not been made acquainted with the details of the

Mr. *Kynaston Cross*—continued.

negotiations that have passed. My impression was that it had all fallen to the ground pending the decision to which the Committee might come. I was not aware that that was proposed.

3987. You spoke about the supply of coal to the Great Indian Peninsula Railway from Bengal, and said that if the new line were made from Kutni in the direction of Bilaspur, it would be enabled to supply coal to the Great Indian Peninsula Company at very moderate rates?—Yes, I said so.

3988. And that the East Indian Company were very glad to supply coal to Jubbulpur?—The East Indian Company carry some coal all the way from their coal fields in Bengal to Jubbulpur for the use of the Great Indian Peninsula.

3989. What rates do they charge them?—They charge them only the carriage; they have nothing to do with the sale of coals; they are not coal merchants; they pay for it on terms. We did at one time; before the property went over to the Government we possessed the coal fields under lease, and then we did sell coal, but the Government interfered, and I think they interfered very properly, and said, "Your business is that of carriers." We then found other parties who take coal from us, and they take it from the Bengal coal owners. We do no more than carry it for them. I have got an account here of the coal carried in that particular half year, and the carriage in that half-year was 562,000 tons; and in the next year 624,000 tons for general purposes.

3990. Do you charge the Great Indian Peninsula the same rate for carriage as you charge any other lines?—Yes, we charge no different rate; we charge one uniform rate.

3991. The Scinde, Punjaub, and Delhi, and the State lines would be charged the same rate, would they, as the Great Indian Peninsula?—We charge the same rate.

3992. Can you give us the rate per ton per mile?—One-sixth of a pie per maund per mile; equal to 4-10ths of a penny per ton per mile.

3993. Then the charge which you would impose on the new line which will be made from Kutni would be about the same?—I suppose it would, because really one-fourth of a penny is below what the railway companies commonly charge, which is a half-penny, and this will be a very short line.

3994. I think you spoke of the Government control which is exercised over the East Indian Line in somewhat favourable terms?—I did do so.

3995. And you would say that it would be a great advantage that the Government should take hold of the guaranteed lines on similar terms at the earliest possible moment?—I think that when an opportunity offers for bringing the contracts to a conclusion, and the Government elect to use the power they have, then the method of working the line that they have adopted with the East Indian Company is a very good way of doing it.

3996. Do you know the method which the Government have adopted in working the Southern Mahratta line at all?—I only know a general outline of the arrangements which were made.

3997. Something

Mr. *Kynaston Cross*—continued.

3997. Something on the same basis, was it not?—Yes, something on the same basis, therefore it was not what we approved at the time for this reason, that in the case of the Southern Mahratta Company, the Company were never the owners of the line. They borrowed money from the Government, and then made the line the property of the Government, but the line was not from the beginning the property of the Government.

3998. Which is greatly more in favour of the Government than the terms which they will have to make with the guaranteed lines when they take them over?—Yes, I should think it a very good arrangement.

3999. You think that railways established on terms such as those on which the Southern Mahratta Line is worked, would in all probability pay the Government better than the terms on which they will be able to take over the guaranteed lines?—I do not quite see the point of the question.

4000. If they have to take over the guaranteed lines on the East Indian terms, it seems very much worse for the Government than if they had established the lines on Southern Mahratta terms?—Yes, I think putting it in that way it would be very much worse for the Government and very much better for the companies.

4001. So that in future you would advise the Government not to have anything to do with guaranteed lines on the old terms, but if they could, to establish lines on terms something like the South Mahratta terms?—Quite so. So far as I can give an opinion, having any acquaintance with the subject, I think the arrangement made with the South Mahratta line a very good one.

4002. The objection to the old guarantee system was, I take it, that the Government were uncertain as to the amount at which they should have to buy the railway back, and, besides that, they made certain arrangements, raising money at a fixed rate of exchange, did they not?—Yes; no doubt the Government was under a great disadvantage in agreeing to terms of that nature at the commencement of their arrangement with the railway companies; but they had no experience whatever to guide them, and, in fact, neither party had any experience. There were two lines before the Government at the same time, the Great Indian Peninsula and the East Indian, and the Government made practically identical terms with both of them, and they made them according to their lights in those days, and as the other companies were formed, their contracts generally followed the lines of the earlier ones.

4003. You would say that the charge on the Indian State-made railways is very much less than it was in 1872, and the amount that the Indian railways lose is very much less than it was in 1872?—Yes.

4004. It was then about two and a-quarter millions a year, was it not?—Yes.

4005. The loss now cannot be reckoned under any circumstances, including loss by exchange, at more than half a million a year?—Yes.

4006. Should not that give you some considerable encouragement to go on with, at any rate, a fair increase of railway accommodation?—Yes, I think so; and perhaps I may recite something which will give further encouragement, and that is, that since the 1st of January 1880, when the new system of the East Indian Railway commenced, seven half-years have passed by, and the Government have derived during that time an absolute profit of 2,323,922*l.* out of the working of the East Indian Railway. I refer to that because it formed a very large proportion of the whole profit amongst those who are entitled to it, and the whole profit upon this line has amounted to such a sum as 2,904,000*l.* in seven half-years. It must be borne in mind that that profit is arrived at after charging the net receipts of the undertaking, with every possible charge that could be raked up and scraped up and set against it in the form of interest upon the whole of the capital, annuities and everything. We have paid the Government a high rate of interest, that is to say, 4½ per cent. for all the money they have advanced since then for capital purposes, and, in one way or another, we make up a very large reduction from the total net profits, but still at the end it just comes out what I have said, that in seven half-years the whole profit amounted to 2,904,000*l.* Therefore, when the whole of the results are quoted, I suggest that the East Indian Railway Company's undertaking should receive credit for a considerable part of them.

4007. With regard to the establishment of feeders and the working of feeders, would you object to take over and work feeders which were not upon the same gauge as your own line?—We could not work them, because we have no stock; we have no shops and no patterns, and nothing at all.

4008. If any feeders were established in the neighbourhood of main lines, you would advise that they should be made on the broad gauge?—Certainly.

4009. One question, as to the line that is to be made from Jhansi to Manickpur; it will start from your terminus at Manickpur, will it not?—Yes, from our station at Manickpur.

4010. A different kind of rolling stock would have to be provided upon that line if it were made narrow gauge?—Yes; we should have to turn out the coal, for instance, that we had brought up from Rewah in broad gauge waggons into the narrow gauge waggons of the Government State line.

4011. So that the coal traffic, I suppose, would be a very considerable item of cost?—Yes, a very heavy burden.

4012. When it got to Jhansi, assuming that the Government main line was made broad gauge line, it would have to be transferred again, would it not?—Yes.

4013. It is proposed to make the Kutni and Bilaspur broad gauge, is it not?—Yes. We would not touch it if it were not for that narrow gauge line which opens into it.

4014. Taking the coal south from Kutni to Bilaspur, on coming to Bilaspur you would have another break of gauge, supposing that the Nagpur and Bilaspur line were narrow gauge?—Yes, there would be two breaks of gauge.

4015. And I believe those breaks of gauge would

Mr. *Kynaston Cross*—continued.

would be particularly objectionable, inasmuch as you want to tap the Rewah coal, and to deliver it at Jhansi on the north-west, and at the Bilaspur on the south-east?—Yes.

4016. It would be specially disadvantageous for the proper working of the line that there should be these breaks of gauge on those particular lines?—Yes, decidedly so.

4017. Therefore you say that the Jhansi and Mannickpur line especially should be made on the same gauge as that of the East Indian Railway?—I think so.

4018. You do not know, I presume, what the difference of cost would be?—No, I cannot answer that question, but having heard or read what the other witnesses have said, I should think it might be in the proportion of about one-third or one-fourth.

4019. I think you said that there were only two ports north of 18 degrees of north latitude which would serve India well, namely, Bombay and Calcutta?—Yes.

Mr. *Kynaston Cross*—continued.

4020. Do you know anything about a port which might be made at Vizagapatam?—I think I know on the western coast of India ports southward of Bombay, which might be made to a certain extent useful in carrying on the export trade of Western India, but they would be minor ports and ports into which none of the large steamers of the modern day could go, and the economy of using large steamers would be lost. It is the same sort of thing as one of the minor ports on the American coast competing with New York.

4021. But produce might come from the Chatisgarh district to Vizagapatam?—I believe that there is no capacity whatever for making a port there. I believe that from the Sandheads to Ceylon it is nothing but a beach all the way.

Tuesday, 13th May 1884.

MEMBERS PRESENT:

Mr. Baxter.
Mr. Bolton.
Mr. Brodrick.
Sir George Campbell.
Mr. Carbutt.
Mr. Kynaston Cross.
Mr. Dalrymple.
Mr. William Fowler.
Mr. Gorst.
Mr. Jackson.
Mr. Bernard Samuelson.
Mr. Slagg.
Mr. William Henry Smith.
Mr. Edward Stanhope.
Mr. Wodehouse.

THE RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

Major L. CONWAY-GORDON, R.E., re-called; and further Examined.

Mr. *Wodehouse*.

4022. You told us the last time you were here that the proposals of the Government of India with regard to railway extension were, in your opinion, moderate proposals?—Yes, that is my opinion.

4023. And those proposals contemplate the making of 3,896 miles of railway in the course of five years?—Yes.

4024. That gives, on an average, 779 miles a year?—Yes.

4025. And I think you said that in the last few years you had been making nearly that same amount of new lines in a year?—I should say that the miles of lines opened in each year had of late been much the same.

4026. Therefore under the new proposals of the Government of India the number of miles opened would little exceed, if at all, the number of miles that have been opened during the last few years?—Yes, that was my contention.

4027. If it be, that under the existing restrictions you can make that given number of miles, and you do not propose to make any larger number when the restrictions are removed, how do those restrictions fetter you now?—Those restrictions fetter us, as I showed in my second issue, by restricting us to the construction of lines which are contemplated to pay at least 4 per cent.

4028. Then it is not so much a restriction on the number of miles made in the year, as a restriction on the particular character of the lines made, which you object to?—Yes; as you know, the proposals of the Government of India, in regard to increasing the average amount of expenditure, were very moderate indeed; the proposals to increase the amount were only 350,000 *l.* a year.

4029. Those proposals contemplate spending about 6,692,000 *l.* a year, do they not, taking together the money spent directly by the State and through the agency of the companies?—Yes, 6,692,400 *l.*

4030. I think you said that in previous years that sum had been exceeded?—Yes, I did say so.

Mr. *Wodehouse*—continued.

4031. To find a year in which it has been exceeded; you have to go back some 16 years with regard to that, have you not?—Yes. The last year I quoted was 1867-68.

4032. Has there been no expenditure, in any year, above the sum proposed, since 1868?—In the year 1884-85 the Budget Estimate exceeds the amount.

4033. That is an estimate only?—Yes.

4034. But in no past year since 1868 has there been so large a sum spent as that?—No. In the revised Estimate of 1883-84 the figure is 6,089,100 *l.*

4035. You gave us the total amount spent in the five years ending 1862-63, which amounted to 32,707,843 *l.*?—Yes, that was the amount.

4036. Could you give us the corresponding amount spent in the last quinquennial period?—I could, with a little calculation.

4037. Would it be anything like so large a sum as 32,707,843 *l.*?—No, I do not think it was as large as that.

4038. Was it very materially less?—I cannot tell without running the figures up. Roughly speaking, there was about 23,200,000 *l.* in the five years ending 1882-83 spent on railways.

4039. Then you propose an increase in the next five years of 10,000,000 *l.* more than you spent in the last five years?—Yes, there would be more spent on railways.

4040. I think you said that the average annual expenditure contemplated by the State directly would be 3,564,400 *l.*?—Yes.

4041. And that, you say, compares favourably with previous years?—Yes.

4042. For instance, in 1880-81 more than 5,000,000 *l.* was spent, was there not?—Yes, 5,342,000 *l.*

4043. Then in the following year, 1881-82, there was only about 3,177,000 *l.* spent?—Yes.

4044. Therefore there is a sharp descent between those years of more than 2,000,000 *l.*?—Yes.

4045. Is that difference of 2,000,000 *l.* accounted for by the operation of the restrictions imposed

Mr. *Wodehouse*—continued.

imposed by the Secretary of State?—I wish to avoid all controversial matters; but I must say that there appears to have been a misunderstanding in India with regard to the orders of the Secretary of State.

4046. You desire to avoid any points of controversy between the Government of India and the Secretary of State?—I should like to do so.

4047. You would rather not enter into any explanation of the differences of opinion with regard to the magnitude of the proposals of the Government of India, as entertained by the Government of India themselves on the one hand, and by the Secretary of State on the other?—I have no objection to explain anything that may appear to be a difference between the Government of India's opinions and those of the Secretary of State at the present time; but I wish to avoid any criticism on past correspondence, because I am prepared to admit that there was considerable misunderstanding between the Government of India and the Secretary of State with regard to the restrictions imposed upon the Government of India.

4048. Will you answer the question and give us some explanation of the difference of expenditure of 2,000,000 *l.* in the year that you mentioned?—*Yes.* I will answer that. Up to a very short time ago the Government of India considered that they were limited in the expenditure on productive public works to a fixed amount of 2,500,000 *l.*, and that they were not allowed to spend their surplus ordinary revenues in excess of this sum of 2,500,000 *l.*

4049. In the succeeding year, for instance, of 1883-84, when 3,536,604 *l.* were spent by the State apparently, were some misconceptions removed from the mind of the Government of India, and did they find themselves to possess a larger discretion than they thought they had in 1881-82?—I think I had better fully explain the matter. The Secretary of State in his Despatch, No. 420, dated the 23rd of October 1879, in forwarding to the Government of India the Report of the last Select Committee in his paragraph 5, used these words: "I desire that the annual expenditure on productive public works from all services, be for the present restricted to the fixed sum of 2,500,000 *l.*" Those orders were apparently cancelled by a despatch which came out a month later, dated the 13th of November 1879, but owing to some misunderstanding in India, that later despatch, dated the 13th of November 1879, was never considered to have cancelled the previous one. It was considered that the total annual expenditure on productive public works, that is on those works which were classed as productive public works, could not exceed the fixed limit of 2,500,000 *l.*; the later orders I refer to are in paragraph 13 of Despatch No. 444. I will read the whole of paragraph 5 of the Despatch, No. 420, dated the 23rd October 1879:—"It would obviously be impossible to carry this into effect if the amount of the annual expenditure was likely to be soon enhanced; and bearing in mind the extent to which the balances have in recent years been increased by borrowing, and the consequent importance of some reduction of the debt at the earliest opportunity, I desire

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that the annual expenditure on productive public works from all sources be for the present restricted to the fixed sum of 2,500,000 *l.*" That was in October 1879, and it was followed by a Despatch, No. 444, dated the 13th of November 1879, only a month later. Paragraph 13 of that Despatch says, "I am as deeply sensible as your Excellency's Government can be of the importance of the development of the material resources of India by well-considered public works; but, so far as these are undertaken by the State, the amount of the annual expenditure upon them must be governed by other considerations of equal or greater weight, and under present circumstances, I have been reluctantly led to the conclusion that, until the financial prospects of your Government are such as to enable you to calculate with greater confidence the amount of the charges which may devolve upon your revenues, it is not desirable to appropriate annually a larger sum than 2,500,000 *l.* to public works for which it is not found possible to provide in your ordinary estimates."

4050. Were the restrictions relaxed to some extent when your expenditure rose again to 3½ millions?—You must understand that we have in India always considered that we were limited by paragraph 5 of the Despatch of 23rd of October 1879, to an expenditure of 2,500,000 *l.* on works classed as productive, and we considered that we were limited in that way until we received Despatch No. 31 R, dated 22nd February 1883, of which paragraph 10 runs as follows: "In Lord Hartington's Despatch of the 6th January 1881, No. 1 (Financial), it was laid down that the annual allotment of 2,500,000 *l.* might with propriety be increased when an actual surplus of reserve was available for the purpose. Assuming, then, that the Government of the North Western Provinces had earned as surplus revenue the sums devoted to the construction of the Hathras-Farukhabad and Jumna Bridge sections, the amount would be available for expenditure on a productive public work. The amount spent would be transferred from the provincial balances to those of the supreme Government, and would thenceforth be treated in the same manner as the sections already classed as productive. In the revenue transactions with the Provincial Government, the latter would be debited or credited with any deficit or surplus of receipt on the whole line, after paying four per cent., so that the general finances would be affected by the transaction, exactly as if the line were defraying its full interest of four per cent. per annum and no more." It was on the receipt of that Despatch that the Government of India in the Public Works Department found that they were enabled to spend the surplus provincial balances in excess of the limit of two-and-a-half millions. I say distinctly here, the Government of India in the Public Works Department.

Chairman.

4051. It was on the responsibility of the Government of India?—*Yes*; the Public Works Department found that they were able to spend the surplus provincial revenues on productive public works only on the receipt of that Despatch of February 1883.

4052. In

Mr. *Wodehouse.*

4052. In short, you abide by your opinion that the proposed expenditure in the coming five years by the State will not be much in excess, if at all, of the expenditure in the immediate preceding years?—Yes, considering the whole expenditure on public works.

4053. But not on railways?—Yes, taking the State expenditure on railways too; but I have admitted that the expenditure by the companies will be slightly in excess.

4054. You say that it will be an excess of about 1,147,000*l.*?—I think that is about it; I cannot say exactly, because I must tell you that the Government accounts do not show the expenditure by private companies.

4055. Is there not an open controversy between the Government of India and the Secretary of State about a sum of 2,084,000*l.*, being the difference between 2,284,000*l.*, which is the annual share of the capital cost of certain protective railways proposed, and 200,000*l.* per annum, which was estimated in paragraphs 35 and 44 of their Despatch of 23rd January 1883, as the maximum annual interest charge to fall on the Famine Grant, by raising 11,420,000*l.* on the security of it?—If I may make the remark, it appears to me that the Secretary of State in that Despatch, has not taken into consideration the existing expenditure by the companies, that is to say, he has omitted altogether from his comparisons the present expenditure by companies.

4056. Is not that the main point of controversy at the present time, between the Secretary of State and the Government of India?—Yes, perhaps the only point.

4057. The calculations of the Government of India in their proposals for the extension of railways are made in the hope of a continuation of profits on the railways, are they not?—Yes.

4058. But do you exclude from view the possibility of a relapse in the amount of railway receipts, such as you had in 1878–79, after there had been a rise?—I do not admit that after 1878–79, there was a falling off in what I should call the ordinary railway receipts, that is, the normal railway receipts. The railway receipts were exceptionally stimulated at that period by the famine, but I think, that if you make allowance for the receipts due to the famine, you will find that there has been a steady increase in what I should call the ordinary traffic receipts of the railways.

4059. It was a wholly transient and artificial increase?—Yes, quite an artificial increase; but taking the railways as a whole, and making allowance for exceptional circumstances, you will find that on the average there has been a steady increase.

4060. And, therefore, your plan makes no allowance for a falling off in the receipts of the railway?—Not for any great falling off.

4061. But lately you have had some very favourable seasons, have you not?—Yes, we have had favourable seasons.

4062. Supposing that there came two or three bad seasons, would there be any falling off then?—I do not think there would. If you look at the trunk lines, the gross earnings since 1867–68 have increased so regularly, taking them on the whole, that I do not think there is much fear of

Mr. *Wodehouse*—continued.

any great falling off, because if you have a bad season in one part of India, you are sure to have a good season in another.

4063. You practically exclude from consideration any possibility of loss?—Yes. If you will allow me I will read out to you the gross earnings of the whole Indian railway system. In the year 1866–67 they were 4,875,000*l.*; in the year 1868–69 they were 4,831,000*l.*; in the year 1869–70 they were 5,709,000*l.*; in the year 1870–71 they were 6,214,000*l.*; in the year 1871–72 they were 6,146,000*l.*; in the year 1872–73 they were 6,352,000*l.*; in the year 1873–74 they were 6,742,000*l.*; in the year 1874–75 they were 7,758,000*l.*; in the year 1875–76 they were 7,412,000*l.*; in the year 1876–77 they were 8,794,000*l.*; in the year 1877–78, the year that you alluded to, they were 11,236,000*l.*; in the year 1878–79 they were 10,365,000*l.*; in the year 1879–80 they were 11,231,000*l.*; in the year 1880–81 they were 12,100,000*l.*; in the year 1881–82 they were 13,726,000*l.*; in the year 1882–83 they were 15,352,000*l.*

4064. Then you do not apprehend any serious disburbance of your scheme, even from a succession of two or three bad years?—No; because I think that in such a succession of bad years as supposed the drought would be confined merely to certain tracts in India. I do not think that there could be a succession of bad seasons all over the country.

4065. How would an outbreak of war, in which India was involved, affect your scheme?—It would affect the scheme by contracting the expenditure at once.

4066. There would be a suspension of the works?—Yes, to a certain extent.

4067. Is there not a great waste, generally, in an extensive suspension of works?—Yes, very great in an extensive suspension of works.

4068. And that is a contingency for which you have not estimated?—No, for you can always contract expenditure on works by ceasing to begin any more, and that is the usual way it is done. You do not stop what is going on, but you cease to begin any more.

4069. But a war would materially affect your whole scheme, would it not?—That would entirely depend upon the financial department; it would be a question of ways and means; whether the financial department could supply us with money.

4070. But you would not have any increased taxation for that purpose?—Certainly not, though it might involve a temporary loan.

4071. That, I believe, is one of your cardinal principles?—Yes, it is one of the cardinal principles insisted upon by the Government of India; not to have increased taxation.

4072. I think you suggested that it would be a proper principle for the Committee to lay down, that there should be no increase of taxation for railway extension?—Yes.

4073. Were there any other principles which you had in mind?—I think another principle which I stated was, that the borrowing should never be pushed so as to injure the credit of the Government.

4074. And that would be within the discretion

Mr. *Wodehouse*—continued.

of the Government of India and the Secretary of State combined?—Yes.

4075. I presume that the restriction which you most desire to have removed is the definition of productive works?—I think that is the restriction which the Government of India chiefly desire to have removed.

4076. You mean that definition which defines a productive work as one which will pay interest at 4 per cent. in five years?—Yes; so as practically to allow the Government to borrow money for the construction of works which might not earn 4 per cent.

4077. You do not object to the recommendation, do you, of the Select Committee of 1879 about borrowing in India or in England, as the case may be?—I think the principle laid down by the Select Committee of 1879 about borrowing was a thoroughly sound one.

Sir *George Campbell.*

4078. I think you said that you had been a civil engineer on a railway before you went to India; are you a Royal Engineer?—Yes, I am a Royal Engineer; but was employed under a civil engineer before I went to India, although I was a Royal Engineer at the time.

4079. And you went out as an ordinary Royal Engineer?—I got my commission in the time of the East India Company, and that Company gave me leave, instead of passing through the ordinary engineering course at Chatham, to pass the time in Wales under a civil engineer.

4080. Then you entered the service in the time of the old East India Company?—Yes.

4081. Consequently I suppose your service has been entirely in India, and you are practically a local officer?—Yes, I am a local officer.

4082. I do not quite understand from your evidence what are the principles which have guided the Government of India in the classification of railways under Schedule A. and under Schedule B.; is it entirely on the ground that whoever may construct those railways, Schedule A. railways are most desirable to make, and Schedule B. railways are of secondary importance only; or is it in any degree upon the principle that has been put forward in some of the dispatches of the Government of India, namely, that it is for the Government of India to make railways which no one else will make, and to leave the most profitable railways to private companies?—I think in the opinion of the Government of India, Schedule A. contains all the railways that are absolutely necessary at the present time to open up the country.

4083. Then the railways that are classed as being Schedule A. contain railways which are most required for the country, and Schedule B. those which are only required in a secondary degree in the districts?—Yes, that is the distinction.

4084. Then I think you told us that the Government of India propose to construct a certain number of Schedule A. railways by direct borrowing, and a certain number by aided companies: will you tell us upon what principle the division is made between those which are to be constructed by direct borrowing and those which are to be constructed by aided companies?

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—I do not think that I can tell you of any further principle which guided the Government of India beyond this, that before Schedule A. was drawn up proposals had been made to make those particular railways by companies.

4085. Which are the principal railways for which proposals have been made to be constructed by companies?—You will find them in para. 26, on page 27 of the Despatches (App. No. 1, p. 513).

4086. I think the Nagpur and Calcutta Railway is one of them, is it not?—One is the Nagpur-Seetarampur, and the other is the Bhopal-Jhansi-Gwalior and the Jhansi-Cawnpur.

4087. Who are the parties who proposed to make those railways?—With regard to the Bhopal-Jhansi-Gwailor, you have already evidence before you showing that the Great Indian Peninsula Railway proposed to make it.

4088. We have had evidence that the directors proposed to recommend it to their shareholders, but we have not had any evidence that the shareholders have consented to construct that railway without a guarantee?—The Government of India, when they first drew up Schedule A., knew there were those negotiations going on in England.

4089. Were there any private parties who offered to construct the Nagpur-Seetarampur Railway, either with or without aid, and to carry them on when completed, either by themselves or by the Government?—Proposals had been before the Government for some time from Messrs. Hoare, Miller & Co., to construct and work the line.

4090. Have you any reason to suppose that they are prepared to make the railway, or have they only proposed to accept a concession to go into the market with?—I believe they were backed by a very strong syndicate at home, but I have no very definite information upon that point.

4091. Can you tell us what were the exact terms upon which the old guaranteed companies worked as regards their rates?—I am coming to that in my evidence-in-chief under the third issue in the second portion.

4092. Take the case of the Eastern Bengal Railway, which is not a trunk line, and which is not a political line nor a military line, but is eminently a commercial line; why is it that the Government, who are trying to get private companies to construct new railways, seem so anxious to buy up the Eastern Bengal Railway?—Economy, decidedly.

4093. In what sense economy?—We now guarantee 5 per cent. on the whole capital, whereas we can raise money at, say 4 or 3½ per cent. in England.

4094. But under the terms of the contract the Government will have to buy up the railway for something over 50 per cent. premium?—Yes; but if you work it out you will find that the Government saves materially, in spite of that.

4095. In spite of that, do you think that this is really a good financial operation for the Government to conduct?—Yes; because the Government will then get the whole of the surplus profits.

4096. Is it not in any degree with a view to protect the public from exorbitant rates and

charges

Sir *George Campbell*—continued.

charges by the Eastern Bengal?—That has been introduced as a secondary reason, but undoubtedly the primary reason is the financial advantage of buying up the line.

4097. But is not that practically a very important reason to protect the public against exorbitant rates?—Undoubtedly; and you will find from my examination-in-chief on the second issue, how very important I consider this question.

4098. When you suggest to us that if certain lines were made the profits would not be direct upon those lines, but the profits would go to the Great Indian Peninsula, is there not a great difficulty with regard to the present guaranteed lines, that if you make new lines the profit which goes, for instance, to the Great Indian Peninsula, that 16 years hence, if the Government had to buy up those lines, the value of those lines would be enormously increased?—Yes; I dwell upon that point in my next issue.

4099. As regards some particular lines which the Government of India have recommended in Schedule A., and some which are under construction, will you tell us with what particular object the Jhansi-Manikpur Railway was made; is it the case that the Jhansi-Manikpur Railway is not begun?—The earthwork has been begun, but it is now, I believe, stopped, owing to a difference of opinion between the Home authorities and the Government of India about the gauge.

4100. What was the object for which that railway was made; was it supposed that it would be a paying line, or was it made as a famine line?—It was made as a famine line.

4101. In what sense was it the object of the railway to enable the Government to import grain into those districts in case of famine?—You will see the whole argument used by the Government in Despatch No. 130, dated 18th August 1883, which I will put in (*delivering in the same*).

4102. With regard to the opinion which you have expressed, that the experience is such that we may reasonably expect that existing lines will continue to pay better and better, and that other railways, if they were judiciously made, would also pay, I think you told us that you do not think that estimates for the future are very reliable?—I think they are only reliable on the very broadest grounds.

4103. Do you think that the results of past experience would lead you to suggest that?—Yes, we can only roughly judge of what class of lines are likely to pay and what are not.

4104. For instance, can you give us any reason why the East Indian Railway should pay so very much better than the Oude and Rohilkund, both running through fertile countries connecting great cities?—I should say that one great reason why the Oude and Rohilkund Railway has not paid as well as the East Indian Railway is, that it has never had a fair chance.

4105. In what respects?—The Benares bridge is not opened yet. Besides, the higher a line gets away from the sea-board, the less will be the probability of its paying. The East Indian line receives the whole volume of traffic from the Oude and Rohilkund at Benares, and every maund of goods that is booked from Lucknow goes

Sir *George Campbell*—continued.

on the Oude and Rohilkund Railway only from Lucknow to Benares, while it goes from Benares to Calcutta on the East Indian.

4106. At present the East Indian Railway Company from Benares to Delhi pays very well, does it not?—It is impossible to say exactly, because the accounts of the different sectional districts are not kept separately. I should say that the line from Allahabad to Delhi pays nothing like as well as the line from Allahabad to Calcutta. The mere fact of the line having to be doubled near the sea will show how much smaller the traffic is the further you get away from the sea.

4107. With reference to the question of the excess of the expenditure in recent years over the amount which the Committee of 1879 recommended, am I right in supposing your explanation to be this: first, that outside and beyond the limit established by that Committee, and by the Government acting in concert with that Committee, a very large amount has been expended on guaranteed lines and otherwise, which was not contemplated at the time that the Committee reported; and, secondly, that you have had provincial balances which have been expended once for all, and which will not be again available?—I think I have told you in detail the different heads under which productive works expenditure has been incurred outside the two-and-a-half millions.

4108. It amounts to this, does it not, that a large expenditure has been incurred for guaranteed railways, which you yourself consider do not come within the prohibition; and, secondly, that we have had large accumulated provincial balances which have been spent once for all, and which will not exist to spend again?—No; I should not altogether agree to the last proposition. There have been accumulations of provincial balances, but doubtless in future years there will still be considerable portions of the provincial revenues which will be spent on railways.

4109. But it is not the case that whereas we have had accumulated balances which have been spent in the last five or six years on railways, they are now reduced almost to a minimum in most cases?—Yes, that is the case.

4110. So that what you practically propose is that with the direct sanction of the Government you should be able to spend all that you spent in the last few years, and a little more?—I do not quite follow you.

4111. What I understand is that a limit having been laid down by the Government acting in concert with the opinion of the Committee of 1879, means have been found of extending the expenditure by other modes and means, and what you now propose is to legitimatize, as it were, that expenditure which may to some extent be considered an evasion of the limit of 1879, and to go a little beyond, and a little beyond only?—I should say rather that the desire was to legitimatize the present system, rather than to go beyond.

Mr. *Bernhard Samuelson.*

4112. I understood you to say that the lines in Schedule A. were lines which were considered by the Government of India to be necessary or

Mr. *Samuelson*—continued.

desirable as lines for opening up the country?—Yes, they are considered by the Government of India to be lines which I may describe as of primary importance.

4113. Would that be in the sense of their being trunk lines?—In some cases certainly; you see on the map that the lines proposed by the Government of India in Schedule A. are entered in red; the ones entered in blue are the railways shown in Schedule B.

4114. But it might also be the case that lines might be considered of primary importance although they were not trunk lines?—Yes.

4115. That, however, would be exceptional?—Yes, that would be exceptional.

4116. Nothing, I believe, has been said about the lines in Schedule B., lines to be made by private enterprise; why is it that you do not propose to say anything about the lines in Schedule B.?—Simply because they do not fall within the immediate scope of the Government of India's proposals.

4117. In fact you think that the lines in Schedule B. can wait until the lines in Schedule A. are made, unless persons come forward to make them without any guarantee whatever?—Yes, that is the view of the Government of India, as is actually stated in their Despatch.

4118. That is what you mean in suggesting that they should be made by private enterprise?—Yes.

4119. Do you consider it likely that they will be made by private enterprise?—No; I stated before that it might be inferred from the Despatch that the Government of India did not consider it very likely.

4120. I wish to ask you under what authority you consider the Government of India granted a guarantee to the Southern Mahratta Line and lines in the same category, if there be any other?—The Government of India had nothing whatever to do with the negotiations with the Southern Mahratta Company.

4121. Then it was in this country?—The negotiations were conducted entirely in this country.

4122. Is there any difference as to the charge on the revenues of India between such a guarantee as that given to the Southern Mahratta Company, as to the interest involved in the guarantee and the interest involved in borrowing for public works?—I should prefer, if you do not mind, taking that on the next issue.

Mr. *Kynaston Cross.*

4123. You have just now said that Schedule A. contains all the railways that are required to open up the country?—Those of primary importance, or which the Government of India consider primary. May I read the wording of the Government of India's Despatch referring to Schedule B.? "All the above would be profitable undertakings to whoever embarked in them; at the same time none of them, except the lower section of the Benares Puri project, possess protective importance, and none can claim precedence in State aid over the railways, which, for one reason or another have been inserted in Schedule A."

4124. When those railways shall have been completed, which will take five years, what

Mr. *Cross*—continued.

would you propose to do with the railway engineers who are at present engaged in the railways department of the Public Works Department?—I think I should let the future take care of itself. When we come to the end of the five years it will then be for the Government of India to consider whether a further extension of railways would be desirable or not.

4125. But when you threw it out as a fact for this Committee to contemplate that those railways are all which are required to open up the country, seeing that the railway department of the Public Works Department have a number of engineers who are engaged for the next 30 years, and who will then become entitled to a pension, is it not very necessary to consider whether you should not spread your Public Works railways over a longer period than one-fifth of the period for which they have been engaged?—So far as I understand the proposals of the Government of India, they are that the railways proposed in Schedule A. can be carried out by the present staff of engineers.

4126. When they are completed, what is to become of the present staff of engineers who are engaged in constructing them?—I should say, practically, that by the time these railways are completed, possibly the trade of the country will have increased to such a great degree that other railways will be sure to be required; precisely in the same way as has been found in every other country.

4128. Are those the anticipations upon which you base your conclusion?—I should say so, certainly. No growing country can thrive without continuously improving its lines of communication. No country can be developed to a certain point, and no further. The railway system should be extended as long as money can be spent with a fair prospect of a return.

4128. Of the 33,462,000 *l.* which the Government of India propose to spend upon their financial responsibility, you propose that 12,230,000 *l.* should be spent by companies showing a limited guarantee in Schedule A.?—Some with a limited guarantee, and some by "construction and working companies."

4129. I am speaking of the exact sum which you propose to spend under the limited guarantee, which you will find in Schedule A.?—Those railways are proposed to be constructed on the Bengal central terms.

4130. That is a guarantee during construction or for a limited period after construction?—Yes.

4131. In the case of those railways I take it that the proposal of the Government of India is, that the money so advanced should be repaid out of profits?—Yes.

4132. If such companies should not be forthcoming, would you, on behalf of the Government of India, suggest that those lines should be made by any other means?—I have no authority to make any such statement.

4133. Then in case the undertakings are not popular, and the companies cannot be found who will take them on the Bengal Central terms, would those railways not be made?—In that case the Government of India would have to consider whether they would not make the railways themselves.

4134. But

Mr. *Cross*—continued.

4134. But you are not empowered by the Government of India to make such a proposal?—No, further than what may be inferred from paragraph 11, on page 77 (App. No. 1, p. 563).

4135. So that in that case, if the Government would not take them, the 33,462,000 *l.* proposed to be spent by the Government of India in the next five years, would have to be reduced to about 21 millions?—Yes; I think you will find that the Government of India refer to that contingency in one of their Despatches.

4136. I think you have expressed an opinion that the decision of a Committee of the House of Commons should govern the action of the Public Works Department; you did not express that in so many words, but I think you owned that there is sometimes a difference of opinion between the Public Works Department and the Finance Department in India, and there have been some considerable misapprehension as to the amount of money that you could spend?—I think there has.

4137. And you would suggest that the decision of a Committee of the House of Commons should govern the action of the Public Works Department directly?—What I rather hoped was that the decision of the Select Committee would be so definite as to prevent any misapprehension of their meaning.

4138. Do not you think that this Committee may do what the last Select Committee did?—No, I think their report should be more definite.

4139. Do you wish us to understand that the Government of India wish that the expenditure of the Public Works Department should be taken from under the control of the Secretary of State altogether?—Not in the slightest.

4140. Nor from under the control of the Financial Department of the Government of India?—Certainly not.

4141. I think that part of the proposal of the Government of India is based on the wish that the part of the famine fund which is now used for the establishment of railways should be used as interest to pay for the capital borrowed to make other railways?—Yes.

4142. Would not that practically, and to that extent, abolish the famine fund; would not it absorb the famine fund and take it out of the category of money which might be used for the relief of famine after a year or two, if necessary?—You will find that issue dealt with in the first Despatch of the Government of India, in paragraph 43, on page 30 (App. No. 1, p. 516).

4143. But would not that be the effect?—That would be the effect to a certain extent undoubtedly, and the Government of India admit that.

4144. And it would no longer be a famine fund?—The money expended as interest would be no longer available for famine relief.

4145. If you have hypothecated that famine fund for the next 25 years, the famine fund is not available; if you have not hypothecated it, it is available for the relief of famine, is it not?—Yes, that is so.

4146. Then you would propose to hypothecate a portion of the famine fund?—It is proposed to hypothecate a portion of it.

4147. Would that be equally sound finance with that which is now practised by the Government of India?—You will find that whole issue dealt with in paragraph 43 of the Despatch of the 23rd of January 1883.

Mr. *Cross*—continued.

4148. But I should like to have your expression of opinion as from the Government of India, if you do not like to offer it for yourself, because we shall not have those Despatches entirely incorporated in the Minutes of the Committee?—The Government of India say: "If now a portion of that money be, as we propose, devoted to the payment of interest on certain lines of railway, it is clear that the whole amount of 1,500,000 *l.* cannot, so long as these payments continue, be available for the relief of famine."

4149. It is equivalent to taking 200,000 *l.* of the hypothecated famine fund for the whole of the time during which you guarantee the money, charging it upon the revenues of India: it is neither available for paying debt, nor is it available for famine relief?—You know that 750,000 *l.* are now spent on the construction of famine relief works, and the sum hypothecated for interest would be part of that 750,000 *l.*; that is to say, instead of spending the whole 750,000 *l.* on the construction of new works, a certain portion would be spent on the construction of new works, and a certain portion would be devoted to the payment of interest.

4150. What I want to get an expression of opinion from you on is, as to whether spending it on interest is equally good finance as if you devoted it to public works?—Yes, I should say it was, provided that the construction of these works reduced the cost of future famines, as rightly or wrongly, it is supposed they will.

4151. Did you see General Strachey's evidence, in which he stated that he did not think that an increase of public works would really reduce the cost of famine?—Yes; but I did not say so.

4152. Your opinion appears to me contrary to the opinion of the Government of India; failing the interest coming in from the ordinary revenues with which to pay for the charge incurred by the increase of those works, the Government of India would propose to devote that further proportion of the famine fund to the same charges, to interest?—You see from paragraph 16, on page 79 of their Despatches (App. No. 1, p. 565), that they actually contemplate a possible heavier charge.

4153. Then the famine fund, little by little, would disappear?—Yes, it would be utilised as interest on famine or protective works, which works are supposed to reduce the cost of future famine.

4154. But it would be a considerable charge on the revenues of India, and instead of being an asset it would become a charge?—No, we deny that; it would not be a constant charge, because directly the lines began to pay, so far from the famine lines being a charge, we might possibly get some surplus profits.

4155. Would not it be very much in the same way as if a private individual having an income of 5,000 *l.* a year spent 4,000 *l.*, and was spending 1,000 *l.* on the improvement of his estate; he could easily go on spending his 1,000 *l.* a year in the improvement of his estate if he had not any great

Mr. *Cross*—continued.

great liability, but supposing he were to borrow 25,000 *l.* on the security of that 1,000 *l.* a year, and anything happened to him, would he be in as sound a position as if he were only confining his expenditure of 1,000 *l.* a year out of his surplus income?—Supposing he spent 1,000 *l.* a year upon the annual repairs of the road on his estate, and he capitalised a portion of the 1,000 *l.* a year, say 800 *l.*, in order to pave the road, and thus greatly decrease the annual charge for repairs, then his financial position would be as sound as before; because, instead of spending the whole 1,000 *l.* on annual repairs, he would spend 800 *l.* as interest on the amount spent on paving, and only, say 200 *l.* for annual repairs.

4156. But if he had a liability of 25 times his annual expenditure, supposing his income were to decrease by 1,000 *l.* a year, under those circumstances, where would he be?—If the construction of these famine lines does cheapen the cost of famines in future years, then undoubtedly the proposals of the Government of India are sound financially.

4157. It depends entirely upon that?—Yes, entirely.

4158. I think you said that the proposals of the Government of India would abolish the existing distinction between protective and productive works so far as the railways are concerned?—That appears to be the object; to remove the existing technical distinctions that General Strachey referred to.

4159. At least they are distinctions on which the Secretaries of State for the last 10 years have laid very great stress?—Yes.

4160. The figures by which you illustrated this proposal referred to public works of all kinds?—Yes.

4161. But your argument is, that, referring to Statement Y., the portion of the invested money of all kinds (S.) which is spent on railways produces enough revenue under (G.) to defray the interest on the borrowed money (H.) devoted to railways?—Yes.

4162. If this is the case the financial position is sound?—Yes.

4163. Item S. is divided into two classes; R. which is spent on works recognised as productive, and O, which is spent on works not so recognised?—Yes.

4164. When a railway built from ordinary funds appearing under (O.), is ascertained to be productive, it may under existing rules be transferred, and it is often so transferred, is it not?—Yes, frequently; but then that would not appear in the account of the year; it would be transferred outside the accounts of the year altogether.

4165. But it affects the accounts of the future, does it not?—No, it does not affect the accounts of the future, because it only affects the amount of the interest on the debt shown simply for accounts purposes against the Public Works Department.

4166. It affects the amount of expenditure brought against the Public Works Department, and the amount of interest that has to be charged upon the debt to the Public Works Department?—Yes, it affects that.

4167. Therefore, speaking generally, the financial position as regards railways will be made worse rather than better if you include all railways in these accounts instead of looking only at the productive list?—No, I beg your pardon for correcting you, but no transfer from Item O. to Item R. can possibly affect Item H.

4168. But you increase your debt?—No; you do not increase your real debt in the slightest degree; it is merely a question of account; it is merely transferring a charge from one head of account to another; you show for purposes of account a larger proportion of the general debt as incurred on account of productive works, but you do not increase Item H. in the slightest degree, which is the item that you really pay interest on.

4169. If you did not spend this money by investing it in railways; if you used it to pay off debt, would not that relieve the finances of India to the extent of the debt that is paid out?—Certainly it would, as I have pointed out.

4170. Is it not quite fair to say that you could have used the revenue in this way. You have used it in railways, and have relieved the charge on the revenues of India to that extent?—Your argument fairly pushed home would tend to prove that you should never build a road or a building. Undoubtedly expenditure under Item O. does increase the debt.

4171. Do you know what has been the real financial result of the productive railways within the last five years, the interest of which is charged to the Public Works account?—You can see that from the revenue account.

4172. The Government of India, in the financial statement, give the following figures: Net gain of income 3,270,843 *l.* in the last five years?—Yes. If you look at the line of figures at the bottom of Statement 3 B. you will see the Public Works net revenue.

4173. I think you said that that was exclusive of exchange?—Yes.

4174. I think you said in answer to Question 3553, that, including exchange, "the railways do now very nearly pay their way"?—Yes, I think they do as near as possible.

4175. If the exchange was included, do you know what the figure was?—No, I cannot say that I do exactly. I have not worked it out.

4176. Do you know who is prepared at the India Office with that figure?—No, I do not.

4177. It shows a net loss in five years, if the exchange is included of 293½ lakhs of rupees, nominally 2,900,000 *l.* I want to know if that would make a considerable difference in the force of your argument?—That would only show that the ever increasing net receipts of the railways have not yet quite produced equilibrium.

4178. And then this takes no account of the amount of pensions and furlough allowances of the engineers engaged in the construction and maintenance of railways?—It does not; but that is not a very large amount. I have put before you to-day statements showing exactly what the amount for pensions and furlough allowances comes to on each line.

4179. In answer to Question 3531, in urging that the financial position is sound, if the total receipts from public works pay interest on the amount borrowed, are you giving your own views

or

Mr. *Cross*—continued.

or those of the Government of India?—These are the views which I gathered from the despatches.

4180. You stated that in your examination-in-chief; are we to take it that those are the views of the Government of India?—Those undoubtedly are the views of the Government of India, if you will carefully read the despatches.

4181. Why do you say you are stating your own views, if they are what you get from the despatches?—Because coming home on such a very general inquiry as this, one's instructions cannot be complete upon every possible point, and therefore on points on which I have no definite instructions I gather the views of the Government from reading their despatches.

4182. Has the Government of India consented to such a separation of the finances of the Public Works Department from the rest of the administration as that which you propose to this Committee?—Certainly not; I put that in decidedly as my own personal opinion, and not as the opinion of Government. The Government of India have never to my knowledge proposed such a separation.

4183. At Question 3531 you argue that the expenditure on unproductive works, being exactly equivalent to a reduction of the balance of ordinary revenue which is available for reproductive expenditure, is also exactly equivalent to incurring unproductive expenditure from borrowed money?—Yes, so I regard it.

4184. Does not such an argument apply equally to expenditure on the Army or Civil Justice?—Undoubtedly it does.

4185. Or any other item, so long as the money is borrowed at all within the year?—Yes; and that appears to me an argument for insisting upon economy in every department.

4186. Are not the unproductive or protective railways constructed to a very great extent from the grant for famine insurance?—At present they are. The object of the Government of India in proposing to use borrowed funds on famine protective works is to try and push them on more quickly, because there are only 750,000 *l.*, or rather, you may say, 500,000 *l.* a year now available for protective railways.

4187. Would the effect, if you hypothecate the famine insurance, be as I put it before, to lose control over it?—The Government of India distinctly say that they lose their control only for a limited time until the railways begin to pay; and they further state that if you will allow the companies to charge interest to capital during construction, they would lose hardly any control at all.

4188. That would be only piling up so much more debt?—Yes, except this, that a railway, immediately it pays at all, might pay net earnings to the extent of the interest on capital and on the advances for interest during construction.

4189. But those unproductive railways which are constructed from famine insurance are constructed from that famine insurance to guard against famine on the understanding that they are not lines which are expected to pay?—But I would point out to the Committee that the railways which the Government of India recommended to be carried out by companies, and it is this you are now alluding to, are distinctly productive lines.

Mr. *Cross*—continued.

4190. Then if you take away the famine insurance fund, which is now used for protective purposes, you would not go on with the protective lines?—Yes, if you look at Schedule A., they are both productive and protective.

4191. You are taking away the famine insurance fund and using it for another purpose, and you still go on with the plan which has hitherto been pursued of making certain protective lines in a given time?—The argument of the Government of India is that the sum of 500,000 *l.* which they have available is not sufficient to push the lines on at the speed that they are required, and that therefore they are prepared to capitalise a portion of it in order to push on some lines which are both productive and protective, and which will, as soon as they are open, repay the interest of the expenditure upon them.

4192. But which are not famine lines?—Excuse me, they are famine lines. If you look at Issue I., Statement Number 3, you will see that they are both productive and protective.

4193. Would you include the Southern Mahratta Line?—The Western Deccan is productive and protective.

4194. Are not those grants annual appropriations of revenue, and not of borrowed money?—Yes, of ordinary revenue.

4195. And they are handed over either to the Commission which temporarily employs them in the reduction of debt, until it becomes necessary to borrow the money again for famine relief, or they are handed over to the Public Works Department, which uses them in constructing works likely to reduce the pressure on the finances when famine occurs?—Yes, at present half the fund is handed over to the Commissioners to reduce the general debt of India, and one-half is given to the Public Works Department for the construction of famine relief works.

4196. And this you would entirely alter, under the proposals which the Government of India make?—No, I do not admit that it would be an entire alteration.

4197. Would it not alter the principle of the appropriation of the grant?—No, I think not. Instead of using a portion of it to construct a new line, it would be used temporarily to pay the interest on a line which is constructed for the same purpose.

4198. Then the Government of India do not really see any difference between the two things?—Not from a financial point of view, except that it would be a great advantage having the lines at an earlier date.

4199. But as it is at the present time, in either case, whether the money is paid over to reduce the debt or used as surplus revenue to make famine lines, the expenditure is not at the present time supposed to be from borrowed money?—It is not; it is supposed to be from the famine fund.

4200. Nor is it from borrowed money?—No.

4201. But in the way which you propose, it would be from borrowed money, would it not?—If you regard the capital of guaranteed companies as money borrowed by the State, certainly.

Mr. *Cross*—continued.

4202. You mentioned, did you not, in answer to Question 3541, the different heads under which the Government of India have practically borrowed beyond the 2,500,000 *l.*; and you included sums spent from the ordinary funds on works subsequently classed as productive works?—Yes.

4203. Is not this the only sense in which that money was borrowed, that if not so spent, the money might, like any other unspent revenue, have been used to pay off debt?—Yes; the course is in accordance with the Report of the last Select Committee.

4204. You have also enumerated the debt incurred for the purchase of the East Indian and Eastern Bengal Railways, and the Madras Irrigation Company's works?—These items have all been considered outside the 2,500,000 *l.*

4205. In all those cases was not the liability which was extinguished greater than the debt which was incurred?—Yes, in all cases.

4206. And the debt that was created was less than the liability?—Yes.

4207. Therefore in that sense it is a reduction in those cases of the liabilities of India?—Yes, except in this wise: that the debt now created appears in the State accounts as a debt; the liabilities which previously existed were outside the State accounts altogether, and were never shown as part of the debt of the Government of India.

4208. Still they were liabilities of the Government of India?—Yes, they were liabilities of the Government of India, but they were never shown in the accounts as such; still they were liabilities, undoubtedly. If you remember, in one of my proposals I suggested that if an account of the railways was kept separately, you should show exactly the whole of your liabilities; that is one of my personal proposals.

4209. In laying down the limit of 2,500,000 *l.* as a desirable one, did not the Select Committee speak of it as being "in addition to existing liabilities"; that is, beyond the operations of the existing guaranteed companies?—Yes, in addition to existing liabilities.

4210. You mean beyond the operations of the existing guaranteed companies?—I do not know whether the proposals of the Select Committee did or did not include additional capital raised by guaranteed companies.

4211. The operations of the existing guaranteed companies were, as you know, that a certain capital might be raised by them under those existing guarantees?—I cannot say what the Select Committee would have thought, for instance, of the extension of the Oude and Rohilcund Railway.

4212. Still, that phrase exists, and is a very definite one?—But it would only cover the existing liabilities; an improvement or an addition to the guaranteed lines would certainly be an addition to the "existing liabilities."

4213. Then that would require the sanction of the Secretary of State?—Yes, everything would require the sanction of the Secretary of State.

4214. Is that the only instance which you knew where it would not come within the definition of "in addition to existing liabilities?"—I should say that all the subsequent additions and improvements of guaranteed lines were not "existing liabilities."

Mr. *Cross*—continued.

4215. Would not that entirely depend upon the contract?—It would entirely depend upon whether there was money lodged with the Government at that time which would have been sufficient to meet the new improvements.

4216. Would not it depend upon the contract with the guaranteed railway companies as to the provision of means by the Government?—I do not quite understand the question.

4217. You lay it down as a principle that the Select Committee limited the borrowing of the Government of India to 2¼ crores of rupees annually?—Yes.

4218. And you do not understand that beyond those 2¼ crores the existing guaranteed companies might spend anything?—We have always considered the expenditure on the guaranteed railways as outside the limit, and I have said so to the Committee. We have from the very first considered all those items to be outside the 2,500,000 *l.*

4219. According to the recommendation of the Select Committee?—Yes, under the reading that has been put on the recommendations.

4220. When the East Indian Railway was purchased, did not the Secretary of State agree that further capital outlay on that line must be similarly treated as "in addition to" the 2,500,000 *l.*?—I do not know whether you are aware of it or not, but this course has always been followed; and you will see from the Despatches that the Secretary of State approves of it; see para. 7, on page 73 (App. No. 1, p. 559).

4221. All that would be outside the 2,500,000 *l.*, which you thought a reasonable limit?—Yes.

4222. Did you say in Question 3538 that the Secretary of State's instructions would have prohibited the construction of any of the existing railways?—Yes, I said I thought so.

4223. They are contained in the closing sentence of para. 8, in the Despatch of January 1881, are they not, at the top of page 4 of the Papers (App. No. 4, p. 490); was anything said by the Secretary of State about the mean age of a railway?—No. You see what he does say; the date of the line being opened for traffic is the expression used.

4224. Is it probable that when dealing with a system of irrigation which will take from 20 to 30 years to complete he would have required them to pay 4 per cent. on their capital outlay within 10 years of their mean year of construction?—I can put no other meaning but that; it seems to me the most reasonable meaning of the passage, because it could not possibly mean five years after the whole of the line was open for traffic.

4225. The limit applies both to irrigation works and to railways?—Yes.

4226. We will suppose that an irrigation work takes 20 years to construct, do you think that the Secretary of State had it in his mind, and would it be a fair construction to say that they must pay 4 per cent. upon the outlay within 10 years of the mean age of construction?—Yes; I should say certainly it was so; I can put no other meaning to it, because if it meant from the date of the completion of the entire work it would

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would really mean nothing, because railway work never is completed.

4227. Supposing it took 20 years to construct, would not it then come into interest bearing form?—That would entirely depend upon when it reached this tenth mean year; if you will give me the data, I will work out the mean age for you in a moment.

4228. Say that an irrigation work was begun in 1871 and finished in 1891, when ought it to come into interest-bearing?—Supposing it was gradually constructed, it would be obviously at the date of completion; if it took 20 years to construct, the mean-time would be exactly half; it would be 10 years.

4229. Do you think that that would be a possible construction to put upon the Secretary of State's Despatch?—Yes, I think it would; I think it is the only reasonable one that can be put.

4230. In the case of a line opened in sections, is not the following the manner in which the instruction has been applied: first of all, to ascertain the probability of the line first sanctioned repaying the cost on the money to be borrowed for it, and then, when an extension was proposed, to ascertain the expectation of the line as extended meeting those conditions, and so on; the limit of five years being in each case taken at five years after the whole line as proposed should be opened, and not the mean year of construction; with regard to the definition which you have put upon the Secretary of State's Despatch, is it a reasonable one to put upon it?—I think it is a reasonable one; I do not see any other meaning to be attached to it, for the simple reason that if you take it to be the date of the completion of the whole line, I can attach no practical meaning whatever to the instructions.

4231. I do not say the date of the completion of the whole line, but in case the line is opened in sections, would it not be reasonable to say that the Secretary of State's Despatch in that case applied to the completion of the whole line?—No, because the Secretary of State says distinctly "the date of the line being opened for traffic."

4232. When you said, in answer to a question, 3533, that the money should be laid out on the very best paying lines, were you giving your own opinion or that of the Government of India?—I distinctly said that I was giving my own personal opinion.

4233. Is not that directly opposed to the view of the Government of India?—I said in one of my replies that it was not strictly opposed to the views of the Government of India, because the Government of India have indicated no particular order in which they wanted to take up the lines.

4234. Do not they wish to spend their borrowed money on protective lines?—Yes, that is what they have proposed; but the advisability of taking up the best paying lines first, was put forward as my private opinion.

4235. And likewise the opinion of the Government of India?—The Government of India have indicated no order in which they wish the lines taken up.

Mr. *Cross*—continued.

4236. Do not they say that they would leave those paying better to the companies to take up or not, as they liked?—Yes, they do; but they also say this, that the railways in Schedule A. include good-paying lines as well as lines that will pay only moderately.

4237. I am rather in a confusion as to what the Government of India wish?—The Government of India wish to carry out the lines entered in Schedule A., but they have indicated no order in which the lines entered in Schedule A. are to be carried out. Those lines in Schedule A. include both productive lines and protective lines. My own private opinion was that the productive lines in Schedule A. should be carried out first.

4238. The productive lines in Schedule A. are principally the Jhansi-Bhopal and the Nagpur-Barakur lines?—Yes.

4239. Those lines the Government of India do not wish to carry out by borrowed money on their own responsibility, except through limited guarantee companies?—They propose that they should be carried out by limited guarantee companies.

4240. Do they propose to carry them out in any other way?—I do not think that there is anything very definite said on that point.

4241. Do they propose carrying them out in any other way?—If you will allow me to turn to their Despatches, I will refer you to para. 11 of the Despatch of 29th June 1884, at page 77 (App. No. 1, p. 563), which says, "It is of course understood that there would be no objection to handing over to 'construction and working' companies any of the lines entered as to be carried out by State agency. If such companies should come forward they would relieve the State, to the extent of their undertaking, from borrowing direct. If they should not, the completion of the schedule will take a few months more or less than six years, according to whether the suggestion in paragraph 18 of this Despatch regarding open lines, is adopted or not."

4242. Then I may understand that the Government of India in the event of the companies not coming forward are prepared to go on with the lines, the capital coming from the Government of India; you are not prepared to say anything more about that Despatch?—No, not on that point, beyond what is contained in the Despatch itself.

4243. You consider, do you not, at Question 3603, that the Secretary of State unduly restricted the recommendation of the Committee of 1879, as to requiring the money to be borrowed in India?—Yes, I think he did.

4244. You mentioned also something about Mr. Stanhope's statement in the House of Commons. Mr. Stanhope's statement to which you refer was made in May, and the Committee reported in July?—Yes.

4245. So that the Committee's recommendation was a modification of Mr. Stanhope's words rather than his statement being an omission of a part of the Committee's recommendation?—Mr. Stanhope made that statement at the time when the Draft Report was under consideration by the Committee. The Draft Report was put before the Committee on the 15th of May 1879, and that Draft Report, if you remember, had a

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paragraph in which these words occur: "Your Committee, whilst making allowance for these difficulties, desire to express their emphatic opinion that loans for public works in India should not be raised in England." This clause was altered by the Committee, the final recommendations being in the following words: "Your Committee, whilst making allowance for these difficulties, are clearly of opinion that loans for public works in India should always be raised in India, unless the Secretary of State in Council should be satisfied that the difference between the rates of interest in England and India is so considerable as to afford full compensation for the disadvantages which inevitably attend borrowing in this country." If you will look to what I stated the other day: I said that the Secretary of State in the Despatch of the 6th of January 1881, para. 4, page 3 (App. No. 1, p. 489), had quoted the statement of Mr. Stanhope to the effect that it had been decided that money required for public works should be borrowed in India, and not in England, and had not called attention to the clause in the subsequent Report of the Select Committee, to the effect that when the rate of interest was better in England than in India the borrowing should not be carried out in India.

4246. But then, must not the "disadvantages which attend borrowing in this country" be interpreted by the Secretary of State in Council, and not by the Government of India?—Certainly. The whole of the responsibility of the late borrowings in India and not in England rests with the Secretary of State.

4247. And it is the opinion of the Secretary of State in Council which is to decide as to what difference in the rate of interest will compensate for the inevitable difficulties which must come upon the Government of India by borrowing in England?—Undoubtedly. I should be the last to put upon the Government of India the responsibility of the late borrowings in India.

4248. You say that the Secretary of State's Despatch, No. 420, dated October 1879, referred to the policy of borrowing in India as a general rule?—Yes; paragraph 8 of the Secretary of State's Despatch, No. 420, of the 23rd of October 1879.

4249. That speaks of it as a general rule?—Yes.

4250. Was not it always open to him to modify that rule, if he should think fit?—Yes.

4251. And he should be prepared to justify it in Parliament?—Undoubtedly.

4252. Then it could not be taken as a rule which could not be altered?—The authority who makes a law can alter the law, of course.

4253. Although you think that you have been tied up for three and a-half years under this law, was not it really altered by the Despatch of the 13th of November of the same year, on the issue of the limit?—Yes, personally, I read it so.

4254. So that it was entirely a mistake of the Government of India to think that the limit of 2,500,000 *l.* was imposed upon them by the Secretary of State without the surplus revenues?—I can only say that it was not a mistake in the Public Works Department of India.

4255. It was a misapprehension, was it not?—I think it was a misapprehension on the part of the Government of India.

Mr. *Cross*—continued.

4256. Do you think that it would now be wise to borrow in the London market the amount that is required for public works?—Yes, I do, at this present moment.

4257. Do you, speaking for the Government of India, think that it makes any considerable difference in the economic conditions of India, whether the money is borrowed in England or India?—I have no instructions upon that point, and, therefore, I have put it in the second part of my evidence on purpose; Mr. Westland, I believe, will be prepared to put evidence before you as regards the views of the Government of India on this point; you must understand that the provision of ways and means does not in any way rest with the Public Works Department, and I would rather not say anything about it.

Chairman.

4258. Before going further it would be convenient if you would again state to the Committee what your first and second issues were, because certain questions have been put to you which you said you wished to answer on the second issue?—I understood that the first part of my evidence was to be confined to the proposals of the Government of India, and that the second part of my examination was to include my personal opinions upon any points upon which you desired to have evidence.

4259. You stated to the Committee when you entered the room on the first day, that there were three points upon which you wished to be examined; will you kindly read them to the Committee?—The second part of my evidence is to deal with the question of the comparative advantages of the two agencies; State or private companies, the question of gauge, the question of the advantages to India of railways generally, together with the advantages of the particular railways which the Government of India now propose to construct.

4260. Will you kindly just refresh our memories and repeat the issues upon which you have already been examined in chief?—First, the proposals of the Government of India with regard to expenditure; secondly, the class of works which they propose to take up; and, thirdly, the alteration which they propose in the limit laid down on the powers of the Government for borrowing money for productive public works.

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4261. I understood you to say that you desire to abolish altogether the distinction between protective and productive railways?—I should say that the Government of India desire to do away with the technical distinction which now exists between the two.

4262. But that after all you propose that there should be no additional taxation for the construction of new railways?—Yes, that is the cardinal point involved.

4263. So that it would involve the necessity of very careful consideration before the Government of India committed itself to any considerable number

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number of railway works?—Undoubtedly; very careful consideration.

4264. Then that would involve the necessity of a most strict financial examination, on the part of the Financial Department, of the proposals of the Public Works Department?—That course is always followed at present.

4265. So that the estimates of revenue must be most carefully examined?—Yes; the estimates of revenue are always most carefully examined by the Financial Department.

4266. Then it comes really to a question of judgment, discretion, and good faith?—Entirely; and my argument is, that the estimates of the Government of India throughout have been so cautious that there is every reasonable anticipation that all future estimates will be as cautious as the past ones have been shown to be.

4267. And you appeal to the results of the last five years as affording evidence of the care and caution which have been exercised by the Government of India in committing the country to the making of railways?—Yes, I can do so without mistrust.

4268. And you say that a loss amounting to 600,000 *l.* a year for five years, which Mr. Cross brought out in cross-examination, is not too large for the results which have been achieved; are you satisfied with that?—Yes, admitting Mr. Cross' figures at present, I am satisfied with the results brought out.

4269. Are you able to say that a railway line pays indirectly; that is to say, does it increase the revenue from other sources than the profits of the railway itself?—I think it increases the land revenue. I have some evidence which I intend to put before you upon this subject, but at the same time I wish to say at once, that it is a most difficult point to establish.

4270. You were asked as to the period at which a railway might be expected to pay; do you know of any hard and fast rule which shall be applicable to all railways, or to any public work, as to the stage at which it should be brought into a productive condition?—I do not think any definite rule could be laid down, which would be applicable generally to all railways; one line will develop very quickly, and another will take more time to develop.

4271. Then again you must rely upon the judgment, discretion, and financial ability of the officers who are on the spot?—Yes, certainly.

4272. Because it is quite conceivable that an irrigation work might pay as it went along, whilst in course of construction, and yet it is quite conceivable that another irrigation work should altogether fail to pay until it was completed; is that so or not?—Yes, it is so. It would entirely depend upon the willingness or otherwise of the natives to take the water, in that case.

4273. So that it really comes to this, that the Secretary of State must have an officer in India, with the Government of India, on whose judgment, discretion, and financial and business capacity he can place entire reliance?—Undoubtedly.

4274. And no rule that could be laid down will protect the revenues of India if the country

Mr. *W. H. Smith*—continued.

is not so served by officers whose capacity would protect the State from loss?—No such rule could be laid down, it would entirely depend upon the judgment and professional skill of the officers on the spot.

4275. I understand you then to insist that the investment of money in productive works, or in works which are carried out with discretion and judgment, is as good a protection from famine as the retention of money for purposes of paying off debt; that is to say, you contend that the application of some portion of the 750,000 *l.* a year, which is the charge upon the revenues of India in the nature of a famine protection fund, to pay interest on public works, would be as profitable and as secure an investment as actually paying off the debt by the application of the 750,000 *l.*?—Yes, if those works are calculated to reduce the expenditure on famines in subsequent years.

4276. There again you come back upon judgment and capacity?—Yes, upon the judgment and discretion of the officers of the Government of India.

Sir *George Campbell.*

4277. You say that the Government of India wish to abolish the technical distinction between protective and productive works; I want to know whether you propose to substitute any other principle. You propose to execute certain railways which you acknowledge will not pay; upon what principle, do you justify the construction of those railways which are now classed as protective and not as productive?—I think the principle should be that the Government should carry on all further railway extensions so as to lay no further burden upon the taxpayer.

4278. But upon what principle would you propose that the Government should select certain works which are not paying works?—I think that must be entirely left to the discretion of the Government of India under the control of the Secretary of State.

4279. Although you propose to abolish protective works, you still propose on principle to retain the system of constructing certain railways, not because they are likely to pay, but because they are likely to protect the country in case of famine?—That is the proposal of the Government of India.

4280. There again, although you propose to abolish the technical distinction, you still propose to maintain the principle?—Yes, I propose to maintain the principle of leaving the works to the discretion of the Government of India.

4281. Then, maintaining the principle, as I understand it, you admit that the million-and-a-half, which is proposed to be taken from the famine fund, should be treated as a special fund in order to guard the Government against future expenditure upon a famine?—Yes.

4282. Take the case of an unproductive railway made as a protective work, to protect the country against famine, the result will be, will it not, that grain will be brought in, in time of famine, by that railway in order to feed the people?—Yes, that would be one of the uses to which it would be put.

 4283. But

Sir *George Campbell*—continued.

4283. But would it not be the case that someone must pay *for* that grain; because if you spend your money in making a railway no money will be left to pay for the grain that is brought in?—The proposals of the Government of India are, if you remember, to devote only 200,000 *l.* a year of that money temporarily to the payment of interest.

4284. Do you mean to capitalise that 200,000 *l.*?—Yes.

4285. If you have spent your money on protective railways, where *is* the money to come from for which you are to pay for the grain which is brought in by those protective railways, in order to feed the people?—The other 750,000 *l.* which are now devoted to the repayment of debt, together with the balance of 350,000 *l.* now devoted to protective works, would be available for starting relief works.

4286. So far as you have spent that money on railways it will not be there to feed the people?—Certainly not.

4287. Do you think there would be any pecuniary saving to the Government of India from making those railways in time of famine?—Yes, I think there would; but I think it would be utterly impossible to calculate exactly what the saving might amount to.

Mr. Carbutt.

4288. So far as I understand the proposals of the Government of India, they are not to expend more money than has hitherto been spent, or to build more railways than have hitherto been built. Supposing that this Committee came to the conclusion, from the evidence put before them, that it is advisable, if it can be done without detriment to the Government of India, that is without an increase of taxation to the people of India, to build more railways; what recommendation would you advise the Committee to make to untie the hands of the Government of India?—I should recommend that the Government of India be allowed to borrow money for the construction of railways on the principle that no further taxation is brought upon the country.

Mr. *Jackson.*

4289. On the point of abolishing what you call the technical distinction between productive and protective works, supposing your views were adopted, would it enable you to carry on the making of railways at any more rapid rate?—Yes, it would, because as the rules now stand we can, from borrowed funds, construct a railway which is calculated to pay 4 per cent.; but if it be calculated to pay only 3·99 per cent., we cannot use any borrowed money to construct it.

4290. Would it alter the relative proportions, for instance, of Item O. and Item R. in this Statement Y.?—The effect would be to throw Items O. and R. into one.

4291. And that would enable you to get on more rapidly with the works which might be thought to be highly necessary, although not coming strictly within the category of those works which would be expected to pay 4 per cent.?—Yes.

Chairman.

4292. Now, we will pass on to Part No. 2, Issue No. 4; would you be so good as to repeat again your objects in Part No. 2?—I first intended to dwell on the comparative advantages of the two agencies, State and private enterprise; secondly, on the question of gauge, the standard and the metre gauge; and, thirdly, the advantage of the particular lines proposed by the Government of India.

4293. Will you kindly state to the Committee what are the comparative advantages of railway construction by companies?—Guarding myself again, by stating that what follows is simply my own personal opinion: there appear to me to be two advantages from constructing railways by companies; First, directly the contract with the company is signed, the Government is pledged to the expenditure; there can be therefore no alteration in the policy thereafter; the railway is made, no matter what may be the state of the Government finances at the time or subsequently. Secondly, that the capital sunk by companies in the construction of railways does not appear in the accounts of the Empire as part of the State debt. Those are the only two advantages that I can see in the construction of railways by private companies.

4294. What are the corresponding disadvantages, if any?—First, that the control exercised over their servants by a board of directors in London is not sufficiently close and immediate to secure good results; Secondly, that in the case of a guaranteed company, as the shareholders are secure in any event of their interest at the normal rate, there is no sufficient inducement to economical construction; Thirdly, that companies will be ready to take up only such lines as will yield for certain a direct profit, and that this will prevent Government from making additional feeder lines for the further development of the country, because the indirect returns of the feeders will go, not to the Government, but to the company; Fourthly, that the dual control, absolutely essential where Government has to supervise the expenditure of what is practically its own money, leads to unnecessary friction and delay; Fifthly, that as far as our experience goes, almost the whole of the capital furnished by companies comes from England, while on the other hand part, at least, of the State Railway capital is raised in India; the construction by companies must therefore, by increasing remittances to the extent of the difference, tend to lower exchange; and Sixthly, a disadvantage which has been brought forward by the Government of India at different times is, that the Government possesses too little control over the actions of the officers of private companies, and that this want of control might lead to political complications where railways have to be made through the territories of native states. These are all the disadvantages that I have to mention in regard to the construction of railways by private companies.

4295. Will you tell the Committee, in addition, what have been the principal disadvantages to the Government in the terms concluded with the present guaranteed companies, that is, what are the points on which Government should be specially

Chairman—continued.

specially careful to guard itself in future contracts?—The old contracts with the guaranteed companies have turned out to the disadvantage of Government in three respects. First, in the rate of guarantee having been fixed as high as 5 per cent. It must be remembered that when these contracts were concluded, 5 per cent. was not a high rate of interest, considering how the credit of the Indian Government stood at the time. No one could have foreseen how much higher the credit of Government would stand in 1884 than it did in the year 1849. The unfortunate result of this high rate of guarantee has been aggravated, owing to the action taken by the Secretary of State in the year 1870, when he gave up the right of purchasing at the first contract period of 25 years the Great Indian Peninsula Railway, the Bombay and Baroda, and the Madras Railway. You will find that noticed in General Strachey's "Finances of India," at page 128. In the second place, the terms agreed upon, under which Government can purchase the guaranteed railways, have turned out to be disastrous, owing to the great rise since in the credit of the Indian Government. The Government when taking over the guaranteed lines must pay the mean market value in London of the shares during the last three years preceding the notice of purchase. Had the credit of Government not risen, the only premium that Government would have had to pay on the shares would have been that due to their value as shares in an ordinary commercial undertaking, for the only shares that would have stood at a premium would have been those which were earning more than 5 per cent. In the case of lines earning less than 5 per cent. the shares would have stood only at par; but as it has turned out, owing to the credit of the Government having risen, the shares of companies, which are practically commercial failures, stand at a premium, owing to the 5 per cent. Government guarantee, and Government has thus to pay a higher sum for the railway, simply owing to the rise in the credit of Government. The third mistake in the old guaranteed contracts was laying down a fixed rate of exchange for all transactions between Government and the country; this was the most fatal blunder of all, for events have turned out singularly unfortunately for the Government, and in a way that no one could possibly have foreseen. The exchange has so unfortunately fluctuated that when the companies were remitting the bulk of their capital out to India the fixed rate of exchange was in their favour. Directly the companies began to remit their revenue earnings home to England, exchange fell so that the fixed rate of exchange became in their favour again in the other direction. The rate of exchange fixed in the first guaranteed contracts was 1 *s.* 10 *d.* per rupee, and while the old companies were remitting the bulk of their capital to India the rate of exchange of Council bills varied from 2 *s.* 0⅛ *d.* to 1 *s.* 11⅛ *d.* The Indian Government for every rupee the companies spent in India lost from 1 *d.* to 2 *d.* This loss was so great that when the contract was concluded with the Oude and Rohilcund Railway in 1867 the contract rate was raised to 2 *s.* per rupee. Against this loss in

Chairman—continued.

remitting the companies' capital to India, Government always fondly hoped to gain when the companies revenue had to be remitted home at the contract rate of 1 *s.* 10 *d.* If you will turn to paragraph 2 of Mr. Danvers' Report for 1871–72 you will see that as late as that year Government was dwelling with satisfaction on this hope. Mr. Danvers then writes, "Assuming that 2 *s.* the rupee has been the average prevailing rate for bills of exchange drawn upon India the net loss incurred by Government hitherto would be about 2,942,400 *l.*, the gross loss having been 3,180,963 *l.*, and the total gain 238,557 *l.* The time has now arrived when the Government will recover much of this loss from the net revenue receipts, all of which are credited to the Government at 1 *s.* 10 *d.* the rupee. This year, if the prevailing rate of exchange had been 2 *s.*, the gain would have been about 250,000 *l.* by this means." Unfortunately, however, in the year 1875–76 exchange dropped below 1 *s.* 10 *d.*, and from that time Government has steadily lost on the remittances the other way. Government now loses on every 2 *s.* of guaranteed interest paid in England, the difference between 2 *s.* and the current rate of exchange, or say from 20 to 26 per cent., besides losing further from the companies' rupee being taken at 1 *s.* 10 *d.* in the calculations of the amount of surplus profits. Those are the three points regarding which, I think, the Government should be careful when concluding any further contracts with private companies.

4296. Will you next tell the Committee what are the advantages of the Government making the railroads themselves?—First, that the Government can raise the money required at a cheaper rate than any guaranteed company, however influential; Secondly, that Government, by having a larger selection, and by its more immediate and effectual control over its servants, should be able to construct railways more economically than guaranteed companies; Thirdly, that in the case of railways carried through the territories of Native States, there is less danger of political complication when the whole arrangements are in the hands of the Government. Those are all the advantages I can find on that head.

4297. I observe that you use the words "should be able to construct railways cheaper;" is it your opinion that the Government do construct railways cheaper than guaranteed companies?—I think that they do a little, but I will come to that afterwards.

4298. Will you state whether there are any disadvantages in direct State construction?—First, that there is no continuity of policy on the part of Government, that what one Government introduces, the next too often upsets; Secondly, that there is no certainty when a railway is once begun, that funds will be made available for pushing on the work as fast as possible to completion; and, Thirdly, that there are political disadvantages in increasing the aggregate amount of the State debt. That although there is no real distinction between the two, the money market looks quite differently on a State loan, and on capital raised by a company

Chairman—continued.

for railway construction, although that capital may have been guaranteed by the State.

4299. Will you now give the Committee your opinions regarding the disadvantages of having the Indian railways worked by commercial companies?—First, that the object of a private company will naturally be to develop a dividend; that as long as the maximum dividend be secured the company will be indifferent as to whether that dividend is derived from a small traffic at high rates, or a large traffic at low rates; Secondly, that it may often be the true interest of a company, as a dividend-seeking concern, to charge such high rates as may be sufficient to contract the export trade in some particular article of produce, or such rates for the carriage of coal as may tend to strangle the industries in other provinces; Thirdly, that the desire to secure a good dividend, on all occasions, naturally tends to make the servants of private companies very cautious in trying experiments towards reducing rates and fares; Fourthly, that every rupee taken out of the country by an English company, in excess of the normal rate of interest on the State debt, constitutes practically a direct tax on transit which must, of course, have its effect on checking the export and import trade, and on the general development of the country; Fifthly, that where a company is given a fixed guarantee of interest, as long as the net profits of the line are not in excess of the guaranteed rate of interest, there is no incentive toward economical working. These are all disadvantages.

4300. In your opinion has India practically suffered from those disadvantages?—I think it has, on the second and last counts, certainly.

4301. What are the advantages gained to the public by the State working the railways?—I think that the advantages of State working are;—First, that it may often be to the advantage of the country, as a whole, for Government to lower a rate, and to work at the lowest possible margin of profit, thus accepting a slight fall in the railway receipts, in order to secure an advantage in some other respect, either to encourage the export trade in some particular staple, or to foster some new industry; Secondly, that it is to the advantage of every country, and particularly of India, that the railways should be worked so that they may pay no more than their working expenses, including interest at the normal rate on their capital, all additional profit being nothing more than a direct tax on transit; Thirdly, that Government has a larger selection of officers to choose from, all of whom are more or less acquainted with the customs, the habits, and the language of the country, and that when the supply of these officers fails, Government can avail itself of the services of precisely the same staff as is available to private companies, and at lower rates of salaries; Fourthly, that, generally speaking, the State has in the working of railways all the advantages over private companies that may be claimed for working on a large instead of on a small scale. These appear to be the advantages gained to the public by the State working the railways.

4302. Now will you tell us the disadvantages in the State working of the railways?—There

Chairman—continued.

are very few disadvantages in the State working; I think there are some slight disadvantages in the railway staff being bound by the hard-and-fast rules of the Financial Codes, intended primarily for a service on an entirely different footing. Secondly, there are disadvantages in the railway servants being directly under the Government, and this, rightly or wrongly, produces in the mind of the public a feeling that the Government will support their officers under all circumstances, as far as the facts will admit.

4303. Then, on the whole, which agency do you consider the more advisable?—As regards construction, I do not think there is much difference, provided the rate of guarantee is somewhat below the normal rate of interest. It depends more on the men employed than on the system. But as regards working, I think the advantages to the public are slightly in favour of the State, owing to the companies working to develop a dividend, and not to develop the country. I think, if *you could get any popular or representative system of railway administration devised*, it would be better for the country to have Stat, rather than private enterprise railways; even were there a doubt upon the point, I think that it would be advisable for Government to retain in its own hands, to a considerable extent, a monopoly of such importance to the development of India as a carrying trade of the country. The rivalry and competition between the two agencies, State and private enterprise, stimulates the efforts of both.

4304. Is there any important point involved in this question, in your opinion?—Yes, I think there is. I think it is important that Government should not give up its present power of operating on the rates throughout India, by means of reductions in the rates on the State railways, which force to some extent corresponding reductions on the competing guaranteed railways. On this point it is important to remember that the reduction in the early part of last year in the rate for wheat, which has had such a great effect in stimulating the export trade of India, would have been impossible had the Rajputana line been in the hands of a private company.

4305. Are you in favour of a policy under which all the lines that are likely to pay would be given over to private enterprise, leaving those that are not likely to pay to be constructed directly by Government?—Personally, I am not in favour of the complete acceptance of a policy under which all the lines that are likely to pay would be given over to private companies, leaving those that are not likely to pay to the direct construction and working of Government, as I think such a course would tend to discredit Government management. At present, as I have said before, the fact that Government can make their railways at least as cheaply, and can work their lines at least as successfully, places the State in a more favourable position towards private enterprise than Government would otherwise be. I would, however, point out that the acceptance by the Government of India of this policy extends only to a certain definite number of lines, the early construction of which is considered absolutely necessary to secure the country

Chairman—continued.

country against famine, and of which the commercial prospects are not sufficiently favourable to attract private enterprise.

4306. Will you tell us what you think should be the general principle to be acted upon as to the order in which the different lines should be taken up?—My opinion is that the construction of no important line should be delayed simply because there is a likelihood of its paying, and hence of its being taken up at some future time by a private company. I think that the lines should be taken up in the order of their urgency and importance; if there be a private company willing to take the line upon favourable terms, the company should be permitted to make the line; but if not, the construction should be carried out directly by Government as soon as there are funds and staff available.

4307. To what do you attribute the disinclination on the part of the English money market to invest moneys in Indian Railways without Government guarantee?—I think there are a great many causes which prevent railways in India attracting English capital. First, the instability of the exchange value of the rupee in which the profits are earned, and hence the natural fear of the depreciation of the capital invested. Secondly, the manner in which the State accounts are kept, and the fact that we practically have no accounts which we could put before a commercial man to show him, after taking into account loss by exchange, advances of interest during construction, &c., how any of the guaranteed lines has actually turned out as a purely commercial venture. These accounts might certainly be prepared from existing data more or less approximately, but it never has yet been done, and one cannot expect commercial men to believe in a business which cannot produce books which will bear being looked into. For the State lines, accounts which include loss by exchange, pension allowances, and other indirect charges, are prepared, but they are not, I believe, published. Thirdly, the want of information on the part of the public as to the terms on which Government are prepared to make concessions for constructing railways in India. No promoter seems to know exactly where to go or to whom to apply in order to find out what these terms are. Fourthly, there are political reasons. In a business carried on far away from the presidency towns, and possibly through wild unsettled districts, there are obvious advantages in having the Government interested in the success of the undertaking. Fifthly, apart from the financial security given by the guarantee, the shareholders in England naturally desire in working a business so far away, to have the additional security against bad management and possible fraud, which is given to some extent by the Government control and audit, under a system of State guarantee. I think that all these causes taken altogether are sufficient to explain why the money market looks shy at Indian railways.

4308. Are you of opinion that there is a probability of the Government of India securing the capital they require on a limited guarantee?—I think it greatly depends upon the success or otherwise of the Central Bengal Railway. There are certainly no signs of it at the present time.

Chairman—continued.

The whole history of Indian railways is one long and unsuccessful attempt to get railways constructed without a State guarantee.

4309. Is the limited guarantee much more favourable to the Government than the continuous guarantee?—If you can imagine modern science producing some altogether new or improved system of transport which would do away with railways altogether, then, in that case, there would be a distinct advantage. In that case the loss of the whole business would fall on the shareholders, and not on the Government. And there would be obviously an advantage to the Government in all cases where the railway did not earn the normal rate of interest after the limited guarantee had expired. But, practically, I see few advantages in the limited guarantee system. It is not likely companies would embark in ventures not calculated to earn a fair interest on their money, and in this case Government, with a continuous guarantee, would secure half-profits over a certain rate of earnings.

4310. Supposing you had to arrange the matter yourself, with full power, what proposals would you make to the guaranteed companies?—I would offer a company a fixed minimum guaranteed rate of interest in sterling, which should not exceed the rate of interest of the Indian sterling loans that at the time the company is formed are standing about par; that is, if the 3½ per cents., when the company is formed, are standing at 102, the guaranteed rate of interest to be given to the company should not exceed 3½ per cent., and probably might be about one-eighth to one-quarter per cent. below this. The object of fixing the rate of guaranteed interest slightly below the normal rate is to give the company some inducement to cheap construction. Another proposal frequently put forward with the same object is, to limit the guarantee to a certain fixed amount, estimated to be the fair cost of the line. In addition to this guaranteed interest, the company to receive one-half surplus profit over and above the guaranteed interest, the surplus profits being calculated on the year's, not the half-year's, transactions. I should make the companies transmit home their own net earnings. When the net earnings remitted home were less than the guaranteed interest, the balance would have to be made good by the Secretary of State. When the net earnings were in excess of the guaranteed interest, the Secretary of State and the company to share the sterling surplus between them. I would have, further, a purchase clause, which should give the Government the power of taking over the line, at certain stated times according to the contract, on repaying the capital expenditure.

Mr. *Bolton.*

4311. And at par?—Yes, simply the capital expenditure, exactly the same as in repaying a loan.

Chairman.

4312. In what manner do you propose to raise the further money required for the State construction of railways?—I think the principle adopted by the last Select Committee was a perfectly

Chairman—continued.

fectly sound one; but I do not think on the whole it has been acted up to. The principle adopted was, that loans should be raised in India, unless the difference between the rates of interest in England and in India were so considerable as to afford full compensation for the disadvantages which inevitably attend borrowing in England; and I think the difference in the rates of interest between England and India has since been considerable enough to turn the balance in favour of borrowing in England. I do not think that any fixed rule can be laid down with regard to the most advisable market for the Indian Government to borrow in; the best course would be to watch events, and always to proceed on the economic principle of borrowing in the cheapest market. The surest guide throughout is the ruling price of Government paper; and when the price of 4 per cent. paper is about par, a rupee loan for a moderate amount could probably be floated in India with advantage, without injury to commercial undertakings. I think it is wrong to force Government loans on the Indian market, or to conduct the financial operations of Government, so that the rate of discount in India runs up to 8 or 9 per cent., showing that too large a proportion of the whole available resources of the country is absorbed by Government. As matters at present stand, I think the floating of a 3 per cent. loan in England would be the most advisable course. This is much to the same effect as my recommendations to the Government in the Report which I lately had to draw out on the Home Accounts of the Indian Government. It should be remembered, that there is an essential difference between raising sterling loans for the general purposes of the Empire and for productive railways. A fall in exchange, which increases the rupee remittances home to provide for the interest on a sterling loan, causes equally an increase of exports. These increased exports not only lead to increased railway activity, resulting in increased earnings from the Indian railway system as a whole, but also tend to again strengthen exchange. These two effects taken conjointly, may be held to roughly balance any loss in remittances by a fall in exchange, so that the objections to sterling loans for the construction of railway loans are to a great extent removed. By the increase in the railway earnings due to increased exports, Government, in fact, must always receive ample compensation from any loss that may accrue from a fall in exchange when remitting to England the interest on a sterling loan for productive railways.

4313. What control does the Government now exercise over railway rates and fares in India?—The powers reserved to the Government as regards the rates and fares of the old guaranteed companies are contained in clause 8 of the contracts. The powers of the Government under these contracts have been held to be as follows: Government possesses no power to reduce fares and rates already established until the net profits on the railway come to 10 per cent. Government can therefore only deal with attempts to raise fares and rates, or with cases in which fresh fares and rates have to be fixed for a line about to open.

4314. How were the maximum rates and fares on the guaranteed railways originally fixed, on what data?—The subject of the control to be exercised by Government over railway rates and fares was practically raised about the year 1867. Up to this point, rates and fares had been left to the agents and to the consulting engineers to settle between them from time to time. There had been no formal settlement by Government of the rates and fares under the terms of the contract. In February 1867, the Government of India, commenting on the Secretary of State's Despatch of the 24th November 1866, to the Government of Madras, remarked that the Secretary of State assumed, that the Government should not interfere with the fares, except on the ground of their being more or less profitable to the companies, and that on this point the railway agent should be allowed to be the judge in the first instance. The Government of India altogether dissented from that view, and pointed out that it was a distinct duty of Government to protect the interests of the people against what was practically a monopoly. The Secretary of State replied that he thought the companies should be allowed to make such alterations in their scale of rates and fares as they might at any time think desirable. On receipt of these orders the Government of India published a circular which, while giving up to the local governments the control over rates generally, retained in the hands of the Government of India the fares for third class passengers and the rates for food grains, and coal.

Chairman—continued.

Sir *George Campbell.*

4315. Can you give the date of that?—The 16th of October 1867. To this action the Secretary of State dissented, holding that the companies were not advocates for high rates, and that they should have a discretionary power to vary the rates in actual use. The Government of India, on receipt of this Despatch, made a further attempt to defend the people of India against the natural tendency of the guaranteed companies to develop a dividend. The wishes of the Government of India were, however, over-ruled by the Secretary of State in Despatch No. 48 of 25th of June 1868. On receipt of this the Public Works Secretary, together with the member of Council in charge of the Public Works Department, advised a yet further protest against the orders of the Secretary of State. They were, however, over-ruled by the Viceroy, who considered the Secretary of State's orders final, and consequently in accordance with the orders of the Secretary of State, a list of the maxima rates and fares fixed upon by Government for all opened lines, under Clause 8 of the Contract, was formally published. In communicating their action to the Secretary of State, the Government placed on record another protest.

Chairman.

4316. Can you put in the actual maxima rates?—I will put in a statement showing the actual maxima rates and fares sanctioned for all the guaranteed railways, which were sanctioned by a resolution of the Public Works Department, dated the 6th of October 1868 (*delivering in the same*).

4317. Were

Chairman—continued.

4317. Were all or some of them subsequently altered?—I would first say that the maxima rates which were actually fixed at that time, rates which as regards the particular articles which the Government of India desired to treat exceptionally, namely, food-grains and coal, appear exorbitant when viewed from our present standpoint. There were subsequently some alterations made. No sooner were the maxima rates and fares for all the guaranteed railways published, than the Secretary of State requested the maximum scale for passengers sanctioned for the railways in the Madras Presidency, might be reconsidered, with a view to the introduction of a scale that would allow the railway companies larger scope for making such changes in the working rates, as circumstances might require. In accordance with these orders, the maxima fares for railways in Madras were raised to the following:—First-class, 20 pies per mile; second-class, six pies per mile; third-class, four pies per mile. It was on this occasion Lord Mayo recorded the following opinion:—"I regret extremely the maximum fare for third class passengers has been revived, and would have gladly supported the Madras Government in maintaining the three pie rate. It is blind policy to deal with our Native millions in this way; it is to the third class we must look to make our railways pay, and it is not by raising fares but by cheapening the cost of carriage and locomotion, &c., that we must hope to develop the enormous revenue that we are now only touching from this source. The tendency of the railway management in this direction should be checked on every possible occasion. Great political and social considerations are involved in this question, and I hope that the policy of reduction of third-class fares to the lowest possible point, together with the humane and considerate treatment of native passengers of the humbler class, will, on every occasion, be pressed on the railway authorities."

4318. Will you tell the Committee what were the maximum rates which were sanctioned for the Oude and Rohilkund Railway in the year 1875?—In January 1875 the Government of India fixed the following maxima rates for goods traffic on the Oude and Rohilkund Railway one pie per maund per mile for high class, one-fourth per maund per mile for low class, seven-twelfths pie per maund per mile for middle class, as an experimental arrangement, subject to reconsideration at the end of two years. As regards the higher class those rates were very much lower than the fifth class rates sanctioned in the year 1868.

4319. Was there an alteration made in the third class fares for that railway in 1878?—In September 1869 the Secretary of State again called attention to the low maximum fares sanctioned for third class on the Oude and Rohilkund Railway, remarking that the fare was "one which would leave the company no discretion in fixing the rate for actual use." In reply, the Government of India pointed out the advisability of allowing their orders prescribing the continuance of this low rate till June 1870, to stand, remarking that "It is in our opinion a matter of the last importance that the third-class passengers' fare on Indian railways should be fixed at the

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lowest possible amount, both in the interests of the companies and of the vast masses of the Native public, who set so little value on time and personal inconvenience that they will travel on foot or in carts for long distances unless they can actually make a money saving by going by rail. It is to this class that we must look for any returns from passenger traffic in India, and our fares should therefore be pitched so as to secure the greatest possible number." In 1878 the maximum fare for third-class passengers on the Oude and Rohilkund Railway was raised from two to two-and-a-half pies, the Government of India apparently admitting that they had no power to do otherwise in the face of the orders of the Secretary of State.

4320. Has any alteration been made in the maximum third-class fare on the East Indian Railway?—On the transfer of the East Indian Railway to the Government of India, the Government of India, against the wishes of the company, decided to lower the third-class fares to two-and-a-half pies, a measure of which the company has apparently since recognised the wisdom.

4321. What have been the maximum rates and fares fixed in the recent contracts entered into with the railway companies?—The rates and fares indicated in the various railway contracts have been as follows:—In the contract of December 1879, with the East Indian Railway Company for the lowest class of passengers, two pies per mile; for minerals or mineral substance, or any article of agricultural produce over distances not less than 300 miles, one-sixth of a pie per maund per mile. In the contract dated the 26th of July 1881 with the Bengal Central Railway, the passenger fares were: First class, 12 pies per mile; second class, six pies per mile; third class, four-and-a-half pies per mile; fourth class, three pies per mile. The goods rates fixed upon were: First class, one-third of a pie per maund per mile; second class, two-thirds of a pie per maund per mile; third class, one pie per maund per mile. "The classification of goods shall be arranged by the company, subject to the approval of the Secretary of State." In the contract dated 1st June 1882, with the South Mahratta Company, the lowest class passenger fare was fixed at two pies per mile, and for salt, coal, and food grains one-fifth of a pie per maund per mile. In the contract dated 12th December 1882, with the Bengal and North Western Railway Company, the lowest class passenger fare was fixed at two pies per mile, and for salt, coal and food-grains for full wagon loads carried not less than 100 miles, one-fifth of a pie per maund per mile. You will observe that in each case the extent of the Government control, and the maxima rates and fares fixed vary considerably.

4322. Can you tell the Committee what was the effect of lowering the third-class fares on the East Indian Railway?—You must remember that on the 1st of January 1882 the third-class passenger fare on the East Indian Railway was reduced from three pies to two-and-a-half pies per mile for all stations above Nyni station. From July 1882 the reduction became general throughout the whole length of the line. The following figures

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figures give the increased traffic that has resulted from this reduction of fares. I will compare, first, the half years ending 31st of December; in the half year ending the 31st of December 1880 the number of passengers was 3,744,061; on the 31st of December 1881 the number was 3,969,308; on the 31st of December 1882 it was 4,688,429; and on the 31st December 1883 it was 5,255,688. Comparing the half years ending the 30th of June, I find that on the 30th of June 1881 there were 4,193,465 passengers; on the 30th of June 1882 there were 4,939,168; and on the 30th of June 1883 there were 5,943,736.

4323. Can you give the Committee any example in your own experience as manager of a railway, of the increase of traffic solely due to a reduction of rates?—In the half-year ending 30th June 1881 the tonnage of food-grains over the Indus Valley State Railway was 28,633 tons. About that time the Indus Valley State Railway was hardly paying its working expenses, as the military traffic had fallen off on which the line had chiefly depended. In August 1881, the manager of the Indus Valley State Railway proposed to the agent of the Scinde, Punjab, and Delhi Railway a uniform rate of one-eighth pie per maund per mile for wheat and other food-grains booked through to Karachi from stations east of Mooltan; and about the same time he himself reduced the through rates between Sukkur and Karachi to 4½ annas per maund, which was equivalent to a rate of one-fifth pie per maund per mile on the Scinde, Punjab, and Delhi Railway, and one-eighth pie on the Indus Valley Railway. In October 1881, to further stimulate the Punjab wheat trade, very low rates were quoted by the Indus Valley State Railway from Ferozpur to Karachi, *viâ* Adamwahan. The Indus Valley line runs from Mooltan to Kotri. The general rate of one-eighth pie proposed by the Indus Valley State Railway was refused by the Indian agency of the Scinde, Punjab, and Delhi Railway, but after considerable correspondence some material reductions in the rates were introduced on the 6th of March 1882. The rate of one-eighth pie per maund per mile was however eventually accepted by the home board of the Scinde, Punjab, and Delhi Railway in June 1882. By that time there had been a change of managers on the Indus Valley State Railway, and the new manager hesitated to accept the very large reduction in the rates which had been proposed by his predecessor and approved by the home board of the Scinde, Punjab, and Delhi Railway. After some correspondence with the Government of India, the following rates were eventually accepted in October 1882 by both lines: for distances over 1,000 miles, one-seventh pie per maund per mile; for distances from 500 to 1,000 miles, one-sixth pie per maund per mile; for distances from 200 to 500 miles, one-fifth pie per maund per mile; and for distances under 200 miles, one-fourth pie per maund per mile. The following has been the effect of these reductions on the amount of wheat carried on the Indus Valley State Railway line; in the half year ending the 30th of June 1881 there were 28,633 tons carried; in the half year ending

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the 31st December 1881 there were 90,494 tons carried; in the half year ending June 1882 there were 59,123 tons carried; in the half year ending the 31st December 1882 there were 115,508 tons carried; and in the half year ending the 30th June 1883 there were 172,331 tons carried. The following shows the effect on the trade of Karachi: of wheat exported from Scinde in the 12 months ending the 31st of March 1879 there were 22,3?7 cwt.; in the 12 months ending the 31st of March 1880 there were 274,764 cwt.; in the 12 months ending the 31st of March 1881 there were 169,465 cwt.; in the 12 months ending the 31st of March 1882 there were 1,852,334 cwt.; and in the 12 months ending the 31st of March 1883 there were 2,732,275 cwt.

4324. Now will you tell us what the effect of lowering rates was upon the revenue of the Indus Valley State Railway?—The net earnings of the line on the 30th of June 1881 were 4,89,739 rupees; on the 31st of December 1881 they were 6,87,549 rupees; on the 30th of June 1882 they were 6,79,661 rupees; on the 31st of December 1882 they were 8,96,452 rupees; on the 30th of June 1883 they were 18,92,264 rupees; and on the 31st December 1883 they were 13,26,369 rupees. The yearly rate of per-centage earned during the half year ending the 30th June 1881 was 1·34 per cent., and the rate varied until the 30th June 1883, when it was 5·64 per cent.; and it fell the next half year to 3·84 per cent. Altogether during that year there was over 4 per cent. gained on the line. Then if you wish to know the cost of carrying a ton of goods per mile, in the half year ending the 31st December 1880 it was 0·723 annas; in the half year ending the 30th June 1881 it fell to 0·664 annas; in the half year ending the 31st December 1881 it fell to 0·367 annas; in the half year ending the 30th June 1882 it fell to 0·362 annas; in the half year ending the 31st December 1882 it fell to 0·286 annas; and in the half year ending the 30th June 1883 it fell to 0·213 annas; so you see that in six half years the cost of carrying a ton of goods per mile fell from 0·723 annas to 0·213 annas. I wish to point out also that, in spite of the increased traffic, the working expenses were reduced considerably. On the 31st December 1880 the working expenses were 26,73,916 rupees; on the 30th June 1881 they were 23,72,311 rupees; on the 31st December 1881 they were 19,85,562 rupees; on the 30th June 1882 they were 17,28,079 rupees; on the 31st December 1882 they were 18,80,369 rupees; on the 30th June 1883 they were 20,95,887 rupees; and on the 31st December 1883 they were 19,26,655 rupees. What I wish to point out to you is that in the half year ending the 30th June 1883 we carried 106,537,704 ton-miles of general merchandise, with working expenses of 20,95,887 rupees, as against carrying in the half year ending the 30th of June 1881, 27,945,968 ton-miles, with working expenses of 23,72,311 rupees.

4325. Will you tell the Committee how the recent reduction in the grain rates has affected the receipts of the Indian Railways in general?—I have a statement which I will put in showing the

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the gross earnings, the expenses, and the net earnings of the East Indian Railway, the Oude and Rohilkund Railway, the Great Indian Peninsula Railway, the Scinde, Punjab, and Delhi Railway, the Indus Valley and Kandahr Railway, and the Rajputana Railway, those being the lines which these decreased rates affected. The net earnings of those companies for the half year ending the 31st December 1881 amounted in the whole to 2,50,62,561 rupees; in the half year ending 31st December 1882 they amounted to 2,36,01,635 rupees; and in the half year ending 31st December 1883 they amounted to 2,58,56,688 rupees. Comparing the half years ending the 20th June, I find that on the 20th June 1882 these railways had net earnings to the amount of 3,61,78,327 rupees, and on the 30th of June 1883 the net earnings were 3,91,81,038 rupees, so that there is no indication whatever that the reduction of the rates has reduced the net earnings of those lines in the aggregate.

4326. Now we will pass to the question of gauge; will you tell the Committee what has been the principle which in your opinion underlies the whole question of gauge in India?—I think the principle underlying all questions of gauge is, that a machine is comparatively speaking economical only when working at its full power. The best gauge for any particular railway is therefore merely a question of the amount and description of traffic that will probably come on the line. And it is consequently a question that ultimately hinges not on the cost of construction of the line, but on the total cost of working including the interest on the capital expended. This consideration, the ultimate cost of working, appears to me to have been most insufficiently considered throughout all the discussions that took place regarding the gauge question in India in the years 1867-73. To give a very homely illustration: For the purpose of conveying a cargo of 4,000 tons of wheat from India to England there would be a tolerable unanimity of opinion that a 4,000-ton steamer would be a cheaper machine than four 1,000-ton steamers. But if the cargo to be exported amounted to only 1,000 tons, nearly every one would agree as to the superior economy of the single 1,000-ton steamer. For amounts of cargo varying between 1,000 and 4,000 tons doubts would arise as to the comparative economic merits of the two machines, and very few people probably would agree as to the exact point at which the larger or the smaller machine became the more economical.

4327. At the commencement of railways in India, what was the decision that was come to by the Government with regard to the question of gauge?—To avoid all the evils of a break of gauge, which had been universally recognized in railway practice long before railways were started in India, Lord Dalhousie recorded the following opinion in his Minute of the 4th of July 1850, paragraph 33: "The British Legislature fell unconsciously and perhaps unavoidably into the mischievous error of permitting the introduction of two gauges into the United Kingdom. The numerous and grievous evils which arose from that permission are well known and will long be felt throughout all England. The Government of India has it in its power, and no doubt will carefully provide, that however widely the railway system may be extended in this Empire in the time to come, these great evils shall be averted, and that uniformity of gauge shall be rigidly enforced from the first." That was the principle that was recognised when the railways were first started in India.

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4328. Under what circumstances was a break of gauge first permitted in India?—About the year 1860, doubts arose regarding the advisability of continuing the guaranteed system of constructing railways in India; it was alleged that the system had led to great extravagance and waste, and that in order to extend the railways it was necessary to carry out the branch lines on some cheaper system. The Government therefore tried a system of subsidising lines carried chiefly along the existing roads, indifferent apparently as to what the gauge of these railways or tramways might be, the intention being that these lines were to be merely temporary expedients, and were not to be allowed to grow into a system which might compete with the lines on the standard gauge. Looking back at the history of the narrow gauge lines in India, it will thus be found that at first they were permitted only on sufferance. "I will read an extract from a letter from the Government of India to Mr. Wilson, the agent for the Indian Branch Railway Company, dated the 29th of December 1862: "'The first point that calls for remark is the gauge to which you make no special allusion * * * His Excellency in Council is of opinion that it will be essential to insist on the adoption of the Standard Indian gauge of five feet six inches in the case of all railways that are intended to form portions of main lines. But when the lines proposed are designed as *bonâ fide* tramways, that is feeders to the main system but not essential parts of it, and when the exported traffic may not warrant the outlay necessary for the formation of a full gauge line, the Government of India will sanction, as it has already done in the case of the Nulhattee line, narrow gauge light lines as a temporary expedient on the conviction that such lines will be replaced by full gauge lines of a more substantial character whenever the development of the traffic renders such a change advisable. Where such narrow gauge lines are sanctioned it will therefore be an advantage that they should be of the lightest and most economical description compatible with safety and the necessary degree of permanence, in order that there may be the least possible difficulty in the way of the change when it has become expedient and that there may be no doubt as to their temporary and provisional character, and no risk of them being permitted to grow into a system which would compete with the system constructed on the standard or national gauge." So that up to 1862 you see the opinions of the Government of India were against allowing any system of narrow gauge lines to become permanent. Much the same opinions were held in the year 1864. In May of that year the Government of India expressed themselves as follows regarding narrow gauge lines

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lines in paragraph 9 of a letter from their Secretary, Colonel R. Strachey, R.E., No. 2028, dated 16th May 1864: "The object of Government should be to get the best possible railway, and in aiding the cheapest and most temporary kind of line the subsidy should be limited so as to give relatively better terms to the more substantial lines. The construction of light and cheap lines is undoubtedly desirable where none others can be got, but they should be so cheap that when the time comes to replace them by more solid lines, it may be done without a serious sacrifice of capital. The Governor General in Council is of opinion that narrow gauge lines of a really substantial character ought not to be *encouraged*, and that any aid given to such lines should be quite exceptional." It was only in the year 1867 that it was proposed to admit permanent narrow gauge lines under certain conditions, although such lines were still allowed to be inferior to those on the broad gauge. I will quote from a Resolution by the Government of India in the Public Works Department, dated the 3rd of December 1867: "The Governor General in Council would not exclude from consideration under special circumstances the expediency of constructing railways of a narrower gauge than the standard five feet six inches. Where a railway would be forbidden by reason of its expense, if made of the full gauge, if by adopting a narrower gauge it could be shown to be feasible, it might become a question whether the latter, with all its advantages, should not be accepted." After this, opinions veered round rapidly. By the year 1869, permanent narrow gauge railways may be said to have been recognised even for main lines under certain financial conditions. On the 22nd of March 1869, the Government of India wrote to the Secretary of State as follows, paragraph 22: "It would always be our wish to conform to the 5 ft. 6 in. gauge, if the financial objections to it are not insuperable, but we shall hope to receive your approval to our considering it an open question when the prospect of the returns from any contemplated system of lines are not satisfactory, whether such lines might not be constructed on a narrow guage, say 3 ft. 6 in., instead of the ordinary broad Indian gauge."

4329. When the narrow gauge was sanctioned, I suppose no one had any idea of the great development of traffic in India which would take place?—I think no one had an idea of the great expansion of traffic that was subsequently to take place.

4330. What were the reasons that led the Government to adopt a gauge smaller than the standard one of 5 feet 6 inches?—The cause that led the Government of that date to adopt a different opinion on the subject of gauge was, undoubtedly the belief that the broad gauge line was too large and, hence, too wasteful a machine for the traffic likely to be secured on the railways in India, coupled with the belief that the narrow metre gauge line was a sufficiently large and, hence, a more economical machine to carry this traffic. Perhaps the clearest exposition of the motives that actuated the Government of India at the time in introducing the narrow

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gauge system, is to be found in the statement read before the Institution of Civil Engineers by Mr. W. T. Thornton, C.B., in February 1873: "It will scarcely be argued that the transport of the utmost amount of traffic to be expected on any of the contemplated lines would be beyond the capacity of the metre gauge. On the contrary, there are, probably, few who will not admit that if railway construction in India were now being for the first time introduced, it might be wiser to have all, even of the existing lines, that is to say, all those of the guaranteed companies, either on the metre gauge or, at any rate, on some gauge a good deal narrower than the present Indian standard, say, for example, on one of 3 feet 6 inches. If the traffic on existing guaranteed lines were anything like what it was originally expected to be, were it anything like the amount for which the lines were designed and on which the original shareholders fondly reckoned, they would surely be yielding much more nearly 10 per cent. than 5 per cent. on their cost. What they are on an average really yielding is, however, less than 3 per cent., whence, it may be safely inferred, that their present traffic is certainly not three-fifths, and is most probably not three-tenths of what with their actual standard gauge they could carry, nor therefore more, if indeed nearly so much, as they could carry if their gauge were less by two-fifths than the standard gauge. But if this narrower gauge would suffice for the traffic of the existing guaranteed lines, of course it would be more than sufficient for that of the projected State lines, which, in a commercial sense, are so much less promising." The Committee will, therefore, observe that it was on this single issue of the amount of traffic that might be ultimately expected on the Indian railways that the whole point turned, and hence it becomes especially valuable to see how far the official beliefs regarding the amount of the traffic to be expected upon the railways in India, then so firmly held by the advocates of the metre gauge, have since been justified by the facts of the case. It can be shown at once that no one at the time the metre gauge railways were decided upon had the slightest idea of the enormous traffic that would result as soon as the railways were worked more in harmony with the requirements of the country. No one at that date foresaw the extraordinary development of the export trade that has since taken place under the stimulus of low rates coupled with a fall in exchange. The official views were strongly to the effect that the Indus Valley and the Rajputana lines would not pay.

4331. What were the opinions of the mercantile community on the prospects of traffic?—The opinions of the mercantile community were strongly the other way. The opinions of the mercantile community, as represented by the Chambers of Commerce, were to the effect that there would be a considerable amount of traffic on the proposed lines; that is on the Indus Valley Line, the Rajputana line, and so on.

4332. How does the tonnage of general merchandise carried on the guaranteed railways during the year 1868 compare with that of the year 1882?—Taking the guaranteed railways in

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the aggregate, in the year 1868, when all these discussions took place, they carried 2,175,762 tons of goods; in the year 1882 they carried 7,220,817 tons. In the year 1869 there were only 159½ miles of double broad gauge line. At the beginning of this year there are no less than 839½ miles. On the whole, I think it is very doubtful whether the confident opinions regarding the broad gauge line being too large for its work, would have been uttered in the Institution of Civil Engineers, had it then been known that only 10 years later the East Indian line would have been doubled as far as Moghal Sarai; that the Great Indian Peninsula Railway would have been doubled as far as Bhusával; that proposals would have been submitted by the Great Indian Peninsula Railway for doubling both lines beyond Bhasáwal, in order to work the traffic; and that proposals would have been submitted for the doubling of the metre gauge line between Ajmere and Bandikziz. In the year 1868-69 the total imports of India were 35,990,142 *l.*, and the total exports 53,062,165 *l.* In the year 1882-83 the imports had risen to 30,003,041 *l.*, and the exports to 83,400,865 *l.* In the year 1871-72 the exports of wheat were 637,000 cwt.; during only nine months of the year 1883-84 the exports of wheat were no less than 18,921,000 cwt. It is, however, needless to multiply further instances of the vast increase in the trade of the country since the year 1869. I think, on the whole, it may fairly be said that if the adherents of the narrow gauge in the year 1869 were right in selecting a gauge of 3 feet 3 inches on the data of the then existing traffic, the amount of traffic at the present time would more than justify, for all through lines, a gauge of 5 feet 6 inches.

4333. Was it the original intention to work these metre gauge lines with light engines and light rolling stock?—Yes; originally it was intended that the metre gauge lines were to be light lines worked with light engines and light rolling stock; and, in fact, this was one of the reasons put forward for their justification. I will read another extract from the paper read before the Institution of Civil Engineers by Mr. Thornton, in which he says: "Practically, however, the broad gauge is never adopted except when broad heavy vehicles, nor the narrow gauge except when comparatively narrow and light vehicles are intended to be used; and in any comparison of the two gauges this intention may always fairly be assumed. But on this assumption certain economies, more or less important, will be facilitated by the adoption of a narrow gauge line."

4334. Has that anticipation been realised?—I will take the case of the Rajputana line, which is the only through metre gauge line. It was soon found out that on the Rajputana railway the engines were too light and the wagon stock too small for the traffic. From the time the line was opened the engines have been getting heavier and heavier, and the wagons larger and larger. The following have been the weights of the engines that have been successively supplied to the Rajputana line. Of the A. class, June 1872, the total weight was 17·8 tons; of the B. class, February 1874, 21·2 tons; of the C. class, August 1874, 26 tons; of the D. class, March 1874, 22·9 tons; of the E. class, November 1874, 28·4 tons; of the F. class (old), December 1875, 33·7 tons; of the F. class (new), December 1875, 32·6 tons; of the M. class, February 1881, 35·3 tons; of the N. class, October 1881, 36·5 tons; of the O. class, May 1883, 39·5 tons. So that you see the weights of the engines have risen from the A. class, 17·8 tons, to an engine and tender, together weighing 39·5 tons in May 1883. The wagon stock has also got heavier and heavier, till the Rajputana line now possesses 12½-ton wagons. To the Committee it will perhaps be hardly a matter of surprise if I tell them that it is now under contemplation to increase the weight of the rails on this line, and thus deliberately give up a considerable part of the savings claimed for the light metre gauge lines.

4335. Now will you tell the Committee first the comparative cost of construction, and then of the working of the two gauges?—I will put in a detailed statement both of the cost of construction of the narrow gauge railways, and also the cost of their working. It cannot be denied that the metre gauge as regards capital cost, is considerably cheaper than the broad gauge line. To what extent it would be difficult to say, from the fact that there is hardly a fair-sized standard gauge State Railway that has been made under similar conditions to the metre gauge State lines. It would be manifestly unfair to compare the cost of the present narrow gauge lines with the cost of the old broad gauge lines constructed by the guaranteed companies, as the cost of the old lines was considerably increased by causes special to the time at which they were constructed, such as for instance, defective communications; disturbances and delays arising from the mutiny; the excessive cost of the carriage of the materials, &c, and also to the fact that on many of the old lines the embankments and part of the bridgework were constructed at first for a double line. The only fair sized standard gauge lines constructed by the State have been the Indus Valley, and the Punjab Northern Railways, and both of these were first constructed as metre gauge lines, and afterwards turned into standard gauge at a large additional cost. The only other standard gauge lines which could be made to serve for purposes of comparison, are the Sindia and the Dhond Manmad; the cost of the former appears high owing to the large expenditure on the Chambal bridge thrown over a short length of line; while the cost of the Dhond Manmad line appears low owing to the absence of rolling stock. Making allowance for all this, it appears to me that the standard gauge line may be estimated to cost at present from 7,000 *l.* to 9,000 *l.* a mile, against a cost of 5,000 *l.* to 7,000 *l.* a mile for the metre gauge. I do not think judging from the actual figures that the difference in cost between the two gauges can be reckoned as less than from 1,500 *l.* to 2,000 *l.* a mile, inclusive of rolling stock in both cases.

4336. What has been the comparative cost of working?—When one turns from the cost of construction to the cost of working, the published statistics are much in favour of the standard gauge lines; and I must repeat that it

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is the cost of working (including interest on capital) and not the cost of construction, that affects the trade of India. If India is to compete with the other nations of the world for the trade in cheap agricultural staples, it is the cost of land carriage to the seaboard which will be one of the most important factors involved. What the country will require is not railways that have cost little, but those which can be worked most economically. The statistics published by the Railway Department of India, show that while the cost of carrying a passenger is nearly the same on the two gauges, the cost of carrying a ton of goods is considerably less on the standard gauge lines than it is on the metre gauge. From these statistics it appears that the average cost of carrying a passenger on all the standard gauge lines taken together was 1·19 pies per mile; excluding the East Indian Railway, the average cost of carrying a passenger on all the other standard gauge lines taken together was 1·36 pies, while the average cost on all the metre gauge lines was 1·25 pies. On the other hand, the average cost of hauling parcels, luggage, and other coaching traffic per ton was on all the standard gauge lines taken together 18·08 pies per mile; on all the standard gauge lines exclusive of the East Indian Railway 22·86 pies per mile; while on the metre guage lines, the cost per ton per mile was 29·37 pies. I have shown the East Indian Railway as excluded from the calculations in regard to the broad gauge lines, because owing to the very favourable gradients on this line, to the low price of coal, &c., the cost of working the East Indian Railway is so exceptionally low, that I have considered it fairer to the metre gauge lines to show how the comparison would lie after excluding this, the most favourable standard gauge line. From these figures it would appear that, while the cost of carrying passengers is much the same on the two gauges, the cost of carrying dead weight is much higher on the metre gauge. These conclusions are borne out by the figures showing the cost of working units of goods traffic. The average cost of hauling one ton of freight per mile on all the standard gauge lines taken together is 3·60 copies; on all the standard gauge lines, excluding the East Indian Railway, it is 4·68 pies, while on the metre gauge lines the average cost of working a ton of goods is 5·62 pies. Taking the cost of working, inclusive of the interest on capital, the result is still much in favour of the standard gauge lines. The cost of working a unit of traffic inclusive of interest on capital is, on all the broad gauge lines 7·98 pies; on all the broad gauge lines, exclusive of the East Indian Railway is 8·90 pies; while on the metre gauge lines the cost is 11·45 pies.

4337. How have these statistics been prepared?—In the year 1880, the Government of India appointed a Committee to report on the statistics that were considered advisable to keep up regarding the working of the Indian Railways. This Committee was composed of delegates from the principal Indian Railways together with a few Government officials; they submitted a report, and in accordance with their recommendations the statistics of the working of the Indian Railways have since been compiled and regularly published by the Railway Department of

Chairman—continued.

Government. Those statistics have ever since furnished the basis for the cost of working of the different railways in India, and have been used for this purpose by all the officers concerned, both Guaranteed and State. It is well known that the cost of carriage on different lines varies according to a multitude of factors; the gradients; the cost of fuel, and other stores; the skill and economy of the management; the amount of traffic; the cost of labour; &c., all of which factors have more or less effect in increasing or decreasing the cost of the carriage of units of traffic. The effect of these varying conditions may easily be seen by comparing the average cost of the working on the different broad and on the different narrow gauge lines, *inter se*. All that can be hoped from for the preparation of such statistics is that by taking the whole of the lines together, the bad with the good, these varying factors on both sides will to some extent neutralize one another, and leave a residuum in the average result that will point in the direction of the truth; more, I do not think can be expected from any statistics. I wish to say that *the statistics have not been prepared for the purposes of this inquiry*, and hence may fairly be credited with as much value as statistics of railways working under such totally different conditions as the various railways in India do work, can possibly possess. As I have before said, all that can be hoped for is that by taking a number of railways of both gauges, and considering their working over a term of years, the disturbing factors will on the whole be sufficiently balanced to allow some considerable value being placed on the general conclusions arrived at.

4338. Can you tell the Committee what are the comparative capacities of the two gauges?—The same statistics show that the average freight carried in a goods train on all the standard gauge lines is 120·39 tons; on all the standard gauge lines exclusive of the East Indian Railway 98·44 tons; on the metre gauge railways 57·37 tons. The average load of a goods vehicle on all the broad-gauge lines is 4·77 tons; on the standard gauge lines exclusive of the East Indian Railway 4·21 tons; on the metre-gauge lines 2·71 tons. Judging from actual working on the Great Indian Peninsula and the Nagpur and Chattisgarh Railways, the broad gauge waggons carry from 2·4 to 4·9 times as much as the metre-gauge.

4339. A break of gauge is a very serious disadvantage in all cases, is it not?—I think it is in all cases. There are a great number of disadvantages which may be generally summarised as follows: There is first the actual cost of transshipment; secondly, the delay and uncertainty that result from goods not being run through; thirdly, the wastage and dryage of goods during transhipment; fourthly, the loss of power to each line that results from the rolling stock of the two lines being locked up at the changing station; fifthly, the loss to the lines in the aggregate arising from the surplus stock on one line not being able to assist in the gluts of traffic on the other. On the first head the actual cost of transshipment of goods on the Nagpur line is about 11·27 pies per ton. At Sabarmati on the Rajputana line, the coast is 3 annas 0·6 pie per ton. As regards the loss on the second and third of these heads

Chairman—continued.

heads the mercantile community can alone give any adequate estimate. On this point the remarkable unanimity of the mercantile community against a break of gauge should be allowed the fullest weight. We have a number of educated men, who petition Government for more railways, coupled with the request that these railways, on all through lines, should be on the standard gauge. They know as well as Government that the broad gauge railways cost more than the metre gauge, and that with the limited resources of Government their request for broad gauge lines to a certain extent contracts the area of new country to be opened out to railway communication. Knowing this, and knowing that the commerce of the country increases, and hence that their own interests are promoted by every new district flung into railway communication with the seaboard, yet they steadily petition for a comparatively lesser length of standard gauge railways. It is impossible to see in all this a sentimental objection. One may be sure that the disadvantages of the break of gauge in its practical effect on the ordinary operations of trade are greater than those not actually engaged in commercial undertakings are inclined to believe. I might notice as bearing on this point, the fact that the sweepings of grain from the transhipment station at Nagpur sold during 1883 for 2,700 rupees. On the fourth head, I can, if required, hand in statements received from the managers of the Nagpur and Rajputana lines, showing the number of waggons locked up each day at the changing stations. The delay caused by the transhipment of goods appears to average from 10 to 24 hours. As regards the fifth head, it is impossible to say to what extent Government loses or will lose from the fact of the surplus stock on one railway not being able to assist in cases of exceptional traffic on the other railways. The amount however must be very considerable, as is to some extent shown by the correspondence from the commercial community on the subject, and there can be no doubt that in the event of the two lines being much pressed under the exceptional traffic produced by a famine, the loss from this cause in the aggregate capacity of the two lines for carrying traffic, would be very great, if indeed the break of gauge did not lead to an absolute block.

4340. How do the marked variations in the amount of traffic effect the question of gauge?—Throughout the whole correspondence regarding the disadvantages of a break of gauge, it seems tacitly assumed that the traffic on a railway is uniform or nearly so throughout the year. This, however, is far from the case. The traffic, depending in a great measure on advices telegraphed from England, varies in the most irregular way, and these variations as the competition of trade between the different nations increases, tend every day to get more marked. In the nineteenth century people cannot afford to wait; those railways will therefore get the most traffic which can send down the greatest amount of stuff during the short periods when prices may be in favour of India; and this consideration in much in favour of the broad gauge lines.

4341. What is your general opinion with regad to the matter?—There is not a doubt in my own mind of the advantages of the standard gauge line for all through lines and for all short connections between existing broad gauge lines; I think that the metre gauge lines are most suitable for isolated portions of the country where the probable traffic is not sufficient to justify the greater cost of the standard gauge line.

Chairman—continued.

4342. In such isolated portions of the country you would have a general system of metre gauge?—Yes, I would have a general system of metre gauge.

4343. Not connecting those lines with the broad gauge lines?—Probably the best method would be to connect them with the broad gauge lines by cross communications, but not in the direction of the sea-board.

4244. With whom should the decision rest as to the question of gauge?—On this point, I think that the Committee might usefully read paragraph 10 of the Government of India Despatch, No. 28, of the 22nd of March 1869, in which the Government of India said that they thought that all questions regarding construction should be settled in India itself. I consider, on general principles, that within a certain limited scope of action being definitely approved by the Secretary of State, the Government of India should be given full power to settle all details regarding gauge, &c. The question of gauge is dependent upon the amount of probable traffic, and this the Government of India on the spot are in a better position to estimate. These were the proposals of the Government of India in March 1869: "We therefore desire very earnestly to submit, for your Grace's consideration, that the Government of India should, as far as is practicable, be henceforth let to be the final authority, acting through the several local governments, in respect to all the details of transactions between the Guaranteed Railway Companies and the Government arising in India; and that the Secretary of State should abstain from dealing with that class of question which relate to construction, maintenance, traffic rates, or general management, reserving to himself the management in detail of business arising in England, and continuing, of course, to exercise such a general control over the policy and measures of the Indian Governments as is customary in all other branches of the administration."

4345. Will you put in a statement which will inform the Committee regarding the effects of the present railways in India upon the trade of the country?—I have handed in statements showing the exports of wheat and seeds from India, and the imports of piece goods, and iron and steel into India.

4346. Will you now tell us which are the most important of all the lines proposed by the Government of India?—I think that the two most important are the Barakur-Nagpur line, and the Bhopal-Jhansi-Gwalior and Jhansi-Cawnpur; I think those two are the most important of all.

4347. Are they the railways which you would recommend to be made in the first instance?—Yes, I should recommend those to be made in the first instance.

4348. Those two railways you think should be made by guaranteed companies?—That is the proposal of the Government of India.

Chairman—continued.

4349. Does that accord with your own personal opinion upon the matter?—Yes.

4350. Are there no other lines which you have in your mind at the moment which you would put in competition with those two?—No, because I think these open up the greatest area of country.

4351. If the Committee saw their way to recommend those two, you think that we should be wise to leave the others to the judgment of the Government of India?—Yes; I think so.

Sir *George Campbell.*

4352. As regards the construction of these two railways by a company, do you propose that they should be left to private companies unassisted by the Government, or that the Government should give them a guarantee?—The Government of India have proposed to give them a limited guarantee under the Bengal Central terms.

4353. Under the Bengal Central terms, have the Bengal Central Railway Company the right to demand back their money at any moment, or on a short notice?—I think it would be better to turn to the contract itself, you will find the terms of the contract in Clause 48.

4354. But can you tell me whether they have a right to demand back the money in case they find that the railway does not pay?—No, I do not see they have; the Government can only buy the line up at certain dates.

4355. Do I understand that the railway company, if they find the railway an unpaying concern, have no right to come to the Government and get their money back?—No.

4356. Then do not the Bengal Central Company run very considerable risk in return for the advantages which they get?—Yes; because directly the limit of the guarantee is over, they are just in the position of an ordinary commercial company.

4357. But how far will they come into the position of a simple commercial company; has the Government any control, and if so, what control over the rates?—The maxima fares and rates are entered in Clause 12 of the contract; the rates and fares to be charged by the company for the carriage of first-class passengers are 12 pies per mile; for second-class 6 pies per mile; for third-class, 4½ pies per mile; and for fourth-class, 3 pies per mile; those being maxima rates.

4358. Certain maxima are established, but in case of any future change in the value of money, or the rate of haulage, or for any other reason, the Government retain no further control over the rates?—I think not. The company have power to work within the maxima.

4359. So that if hereafter a question should be raised with regard to the monopoly of these companies, and their power of charging rates which may then be in excess of what may be considered just and fair, the Government so far retain no control?—Not to reduce beyond the rate fixed in the contract.

4360. What is the maximum as regards third-class passengers?—The third-class passengers' maximum is 4½ pies per mile. Then there is a fourth class at 3 pies, which is the lowest class of passengers.

Sir *George Campbell*—continued.

4361. The Government has no power of reducing the rates for fourth-class passengers under 2½ pies?—No; there is no power of reducing the fares for any passengers below three pies per mile.

4362. Looking at it from that point of view, is that a very prudent contract on the part of the Government?—I think that these maxima rates and fares are perhaps higher than they ought to be.

4363. Do not you think that it would be a very great mistake if the Government, having been bound to contribute a very large proportion to make this railway and bound to give the land free and to pay interest for seven years, should find that they are totally without the power of protecting the public, and that this railway company are entitled to charge rates which you consider are a great deal too high?—I certainly agree with all that the memorial of the Bengal Chamber of Commerce has said upon that point. I think that the Government should retain in their hands more control over the rates and fares than they have hitherto done.

4364. Do not you think that in that respect it was a very imprudent contract with the Bengal Central Railway running upon the very rocks upon which they had been wrecked as regards the old railways?—Yes; but I do not quite think that the Government of India, if they give a limited guarantee to another company, would necessarily accept these particular maxima rates and fares. There is no reason why the maxima rates and fares that are entered in this particular contract with the Bengal Central Company should be adhered to in a contract concluded with any other company.

4365. But did I correctly understand you to say that the proposal is to give those two great lines the Bengal Central terms?—Yes; those are the proposals of the Government of India, undoubtedly, but I think that the Government of India put it in a general way, that is to say, they are not tied down word for word to every clause in that contract.

4366. Are you of opinion that those terms ought to be modified for the protection of the public?—I should say that the maxima rates and fares should be low, not only for the protection of the public, but also for the protection of the company. I am of opinion, that low rates are for the advantage of the companies as well as for the public.

4367. You think that in establishing companies which will hereafter be private commercial companies, it is desirable that some such power of governing the rates through some tribunal similar to the Railway Commission in this country should be reserved?—I think there should; but, on the other hand, it is very difficult to deal with a commercial company on these terms, because I can hardly see how a commercial company could be expected to undertake the construction of a line unless they were given the power of charging what might be called "fair" rates.

4368. Are you not aware that in this country, and in America and in other countries, there has been

Sir *George Campbell*—continued.

been a general tendency of opinion and practice in this direction, that railways being great monopolies it is necessary, in the interests of the public, that some control should be exercised over their charges?—Yes, I am certainly of opinion that the Government should keep in their own hands some control over the fares for the lowest class of passengers, and over the rates for agricultural and mineral produce.

4369. It seems to me that, with regard to the relative advantages and disadvantages of the direct construction of works by the State on the one hand and by guaranteed companies on the other, the statements which you have made show an immense advantage in favour of the direct construction of the works by the State?—I said that the advantages were, I thought, in favour of the State working, simply on this particular issue, that the Government does retain in its own hand a control over the rates and fares. I think that is really the most important point of the whole.

4370. Do not you think that the general balance of your evidence has been decidedly in favour of State management as distinguished from trusting the railways to private companies?—If you ask me this point directly, I may say that all monopolies like railways are better in the hands of the public; that is to say, in the hands of the Government, than in the hands of commercial companies.

4371. Still, not only as representing the Government of India, but as giving us your private opinion, is it your personal opinion that it is desirable that the construction of those two great railways, which you have put first, should be restricted to companies, and not to be done by the Government?—I think that there would be too great a tendency, if we had nothing but Government management, to run too much in one groove. I think that having the companies alongside the Government management certainly does good to both; and if you start companies with what I should call fair maxima rates, fair to them and fair to the public, and retain in your hands a power of control after a given period, say, of from eight to 10 years, I think some mean course of this sort could be adopted which would be fair both to the public and to the companies concerned.

4372. You wish to reserve the general question, but I want to ask why you wish to give those two particular lines first to be made by companies?—I think, as I said before, that the only reason that the Government proposed these two lines to be constructed by companies, was simply owing to the fact that negotiations were going on at the time with regard to those two lines on the part of private individuals; the Government knew at the time they drew out Schedule A. that there were private individuals who had proposed to make these lines.

4373. Do you think that those were serious proposals. I think you told us that you are not aware of the existence of a syndicate in England which are supposed to be backing a Calcutta firm; do you think there was anything really *bonâ fide* in the proposal to make the lines, or was it a proposal to get a concession to go into the market with?—I cannot personally give any

Sir *George Campbell*—continued.

opinion upon that point. The only thing that we can judge by, is the fact of the Government of India having deliberately recommended to the Secretary of State the concession of the Barakur-Nagpur and Jhansi-Gwalior lines to private companies, and I imagine that they must have had before them sufficient evidence as to the respectability of the firms, or they would not have recommended such concessions; but, personally speaking, I know nothing of the matter.

4374. Have you yourself gone into the subject sufficiently to enable you to say that your personal opinion is, that those are the two lines which should be first constructed?—I only say so on the ground that they open up so much larger an area of country than any other.

4375. I see that those lines are classed as productive lines; is it your deliberate opinion that the Calcutta and Nagpur line will be a productive line?—That is my deliberate opinion, looking at the enormous receipts from the small section that has been already made.

4376. Are you not aware that the section already made is the productive part of the line, and that the remainder of the line will be made through a country which is at present almost barbarous, and very sparsely inhabited by the original savage tribes, who do not even wear clothing?—I think, certainly, the section of the line from Sumbulpur to Chijobassa would be a grain-producing country.

4377. Assuming that the line from Nagpur to Bilaspur is already in great part made, or, at all events, to be completed, do you think that that line from Bilaspur to Seetarampur will pay?—Yes, I do.

4378. What is the kind of traffic which comes upon that line; is it local or through?—Through, chiefly.

4379. Will you tell us what is the character of the through traffic which you expect to come upon that line?—The traffic will be chiefly in wheat, oil seeds, and rice.

4380. Where do you expect the wheat, oil seeds, and rice to come from, and where will they go to?—The export trade in wheat and seeds will come from Raipur and Bilaspur, with some rice, oil-seeds, raw sugar, lac, and cotton, from Sambulpur: and, in addition to this, there will be imports of salt, and refined sugar, and piece-goods.

4381. Do you expect that rice is to go from the Central Provinces to Bengal; is not that like sending coals to Newcastle?—Not if it goes for export; there is some trade in rice from Singbhoom and that part of the country which will be served by the proposed railway from Seetarampur to the Central Provinces. In the correspondence with the Bengal Government in May 1883, which is amongst the papers, the trade in rice is spoken of.

4382. Not a trade in rice from the Central Provinces to Bengal?—It is a trade that will come on that line to Bengal; the trade from Singbhoom.

4383. That is in the immediate district of Bengal?—Yes; it is in Bengal, near Chyebana.

4384. You are aware that Singbhoom is a very sparsely inhabited district?—Yes.

Sir *George Campbell*—continued.

4385. And the produce of Singhhoon is not large?—Not very, but it will increase.

4386. So that there would not be any large amount of local traffic?—No, not at first.

4387. With regard to the through traffic, do you think under the present conditions of trade, looking at the great production of grain in the east of India, and the small production in the west, and at the great advantages which the Port of Bombay has in preference to any other port, and that it has already through-communication between the Chattisgarh Division and Bombay is at all likely that a through traffic in grain for export will spring up between the Chattisgarh Division and Calcutta?—Yes, I think it will, because directly you make the line it will attract all the traffic that there may be, and will cause increased cultivation.

4388. You think that it will attract some away from Bombay to Calcutta?—Yes, a part of it will go to Calcutta.

4389. Do you think that the part that will go to Calcutta will be sufficient to justify a large expenditure?—Yes, I think it will be.

Sir *George Campbell*—continued.

4390. Is there any other through traffic that you think that line will serve?—It has been stated by the Government of India that there is a considerable traffic between Bombay and Calcutta direct, which goes round by sea, and which we hope will be attracted by the shorter route between Bombay and Calcutta.

4391. Do you think it is likely that it will be attracted?—It will all depend upon the rates offered.

4392. Supposing you find that no large capitalists are really willing to make this line upon the Bengal Central terms, would you make it on the part of the Government, or would you not? I should make it on the part of the Government in the cheapest possible way.

4393. You have that confidence in it that it would be a paying line?—Yes.

4394. When you say the cheapest possible way, do you mean on the narrow gauge or the broad gauge?—I should build it on the broad gauge in the cheapest possible way.

Friday, 16th May 1884.

MEMBERS PRESENT:

Mr. Baxter.	Mr. Gorst.
Mr. Bolton.	Mr. Jackson.
Sir George Campbell.	Mr. Bernhard Samuelson.
Mr. Carbutt.	Mr. Slagg.
Mr. Kynaston Cross.	Mr. W. H. Smith.
Mr. Dalrymple.	Mr. Wodehouse.
Mr. William Fowler.	

THE RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

Major L. CONWAY-GORDON, R.E., called in; and further Examined.

Chairman.

4395. SINCE we last met I understand that you have been furnished by the Government with a copy of a Return prepared by the India Office, showing the direct financial results of the transactions connected with Indian railways, including the loss by exchange?—Yes, I have been furnished with that Return.

4396. And you are desirous, are you not, of making some reference to this statement before proceeding to your cross-examination?—Yes, I wish to make a few remarks with regard to the Return prepared at the India Office, a copy of which has been furnished to me, showing the direct financial results of the transactions connected with the Indian railways, including loss by exchange. It is the Return to which I think Mr. Cross alluded, when noticing my evidence to the effect that I thought the Indian railways as a whole, even after the loss by exchange had been taken into account, would be found at the present time to be nearly paying their way. With regard to this Return, I wish merely to say at this point, that I have looked carefully over it, and using the expression "railways" in the sense of "opened railways," I wish to adhere to my previous statement, that the railways are now nearly paying their way, even after allowing for the loss by exchange. I have taken out all the figures in that statement that relate to the revenue transactions of the guaranteed railways, the East Indian Railway, and the State Railways. I have omitted the loss by exchange on capital account, as that is part of the capital charges and not part of the revenue charges. I would also have omitted the cost of land, but I had not the data for separating these charges. Both the loss by exchange and the cost of land appear to me to be part of the capital charges borne directly by Government, which should carry 4 per cent. interest against the working account. Separating off the revenue charges, I find the average net loss these last four years, as shown in the statement I have laid before you, is about 25,20,551 rupees. In the year 1884-85 Budget Estimate you will see a total loss of 3,83,686 rupees; in the year 1883-84 Revised Estimate, it is 31,04,420 rupees;

Chairman—continued.

in 1882-83 the actual loss was 69,59,260 rupees, in the year 1881-82 there is a gain of 3,65,160 rupees, and taking the average of those four years, I find it to be about 25,20,551 rupees, or say, 252,055 *l.* conventional sterling. These figures include the interest at 4 per cent. on the capital spent on unopened lines. But this loss of 25,20,551 rupees, as I was careful to tell you before, is a loss, only after debiting the working account with the interest on all the capital now sunk unproductively on lines not yet open for traffic; a charge, I submit, not fairly debitable to the lines now working. No one expects an unopened line to pay the interest on its capital. The figures entered in the return, show that the loss on working account, including all loss by exchange, and including the interest on the capital sunk unproductively on unopened lines, during the last four years, has been, on the average, about 25,20,551 rupees. This represents interest at four per cent. on about 6,30,00,000 rupees, or say 6,300,000 *l.* of conventional sterling. I will ask the Committee to turn to Statement 3B, and, looking at the line of figures showing the total expenditure on Productive State Railways, to form their own opinion from those figures as to the probable amount of capital on the State Railways lying unproductive from year to year. Taking three years as the average length of time required for constructing a line, the Committee will see that the probable amount of capital at any time lying unproductive cannot be less than about 10,000,000 *l.* It is probably more than this sum. The interest on 10,000,000 *l.* would be 40 lakhs of rupees, as compared with the average loss of 25 lakhs during this last four years. In other words, the loss shown does not amount to the probable interest on the capital now lying unproductive on the unopened lines. This would show that the opened lines might be said to be paying their way, with a slight margin. I wish to make one or two further remarks, for I am afraid lest this return, showing the financial results of our railways in the past, should be taken in any way as a basis for estimating the probable financial results of Indian

Chairman—continued.

railways in the future. On this subject I may point out that the financial results of Indian railways in the future will probably be better than they were in the past in no less than three respects. In the first place, we are now paying 3½ or 4 per cent. for money instead of 5 per cent.; in the second place, we can construct our lines for, say, *from* 9,000 *l.* to 10,000 *l.* a mile, instead of 18,000 *l.*; and in the third place, a point which is quite as important as the other two, we now know how to attract traffic by offering low rates. To show to what extent these factors affect the question, and to place the Committee in a position to judge of the future prospects of the Indian railways on the basis of the past transactions, I would most respectfully submit: 1st, that the present statement be drawn up, omitting all the capital transactions so as to show the working or revenue transactions alone. If the cost of land, which I infer has been included in the statement, was on account of capital, this item should be removed from the statement of the working charges. Both the loss by exchange on the capital transactions and the cost of land are portions of the capital account contributed by Government, on which the working account should fairly be debited only with interest. Having thus cleared the present statement of all capital charges, I would most respectfully point out the advantage of drawing out another return on the supposition that the guaranteed interest had been 3½ per cent. or 4 per cent., whichever may be considered the fairer rate of interest to take for our future transactions. The return thus modified would then show how the railways would have paid had they been started on conditions similar to the conditions under which we shall start the railways in Schedule A. To show how greatly this factor of interest influences the result, it is only necessary to compare the financial result of the State railways and the guaranteed railways. The State railways in their 17th year are as nearly as possible paying their way, a result not yet attained by the guaranteed railways, exclusive of the East Indian Railway. I would then ask that a third statement be prepared on the basis not only that the guaranteed interest had been 3½ to 4 per cent., but also that the capital cost of the lines had been only 9,000 *l* to 10,000 *l.* a mile. Any accountant could easily draw out such a statement. It is this statement, and this statement alone, that would give the Committee a correct idea of the probable future of Indian railways, based on past experience. Even in this last statement there would be no allowance made for the advantages of our present experience in working a traffic composed chiefly of low-priced agricultural produce; but, I think, that without this allowance being made, the facts of the case, modified only to the extent of the difference which we know has actually taken place in the rate of interest and in the cost of construction, will show that the probable future of Indian railways is brighter than is ordinarily imagined. In conclusion, I may be permitted to say how much this statement, even in its present form, supports the views I have been instructed to place before you. I must have made myself imperfectly understood, if you have not seen that my argument, as regard the charge on

Chairman—continued.

the taxpayer, has been more relative than absolute. I have dwelt more particularly on the desire of the Government of India to carry on their railway policy, without any further burden to the taxpayer than is borne at present. The last column of figures in this statement showing the total net charge to the taxpayer on account of railways, inclusive of exchange, is in complete accordance with the views I have laid before you. It shows you that in spite of a fall in exchange, the burden on the taxpayer is on an average decreasing;—it supports the view that the loss on railway transactions owing to a fall in exchange is more than balanced by increased railway receipts owing to the increased activity in the export trade;—and it points, I think, distinctly to the fact that it is the gradual improvement in the public works finances, as much as any other cause, that has placed the Government of India during the past few years in so sound a financial position that they have been enabled to remove nearly the whole of the customs duties, and to reduce the tax upon salt. That is all I wish to say with regard to the India Office Return.

4397. Some questions were asked you on the last meeting of the Committee, with regard to particular railroads proposed by the Government of India. I understand that you are drawing up a Paper, going very minutely into statistics with regard to them, and that you would rather the Committee saw that Paper before being asked questions about particular lines?—I should. The fact is that the statistical information that we have got together in India is contained in a very voluminous mass of papers, and it is almost impossible for any human being to retain in his memory all the statistics that have been collected regarding these 29 railways. I am thus placed between the two alternatives of answering questions regarding the probable advantages of particular lines in a general way from mere memory, or else of having to refer to papers, which takes up the time of the Committee unnecessarily. At the same time I feel that the Committee desire to have the actual facts rather than mere general remarks. I, therefore, thought it would be more convenient to the Committee if I drew up a Paper showing the advantage of the proposed lines, the probable traffic, &c., &c., as far as we now have information available with regard to the proposed lines, which Paper I propose to put in.

4398. It is your desire not to be asked questions with regard to those railways, at present?—I think it would be more convenient if I were not.

Sir *George Campbell.*

4399. As regards the principles on which the Government of India propose to make those lines which are classed as protective, are those lines purely protective in the sense that you do not expect them to pay at all; that they are merely for protection against famine, or are they lines which will pay something less than 4 per cent., and the balance of advantages will be made up indirectly by protection from famine and in other ways?—They are of the second description; they are supposed to be lines which will pay from

2 to

Sir *George Campbell*—continued.

2 to 3 per cent., besides being useful for protection against famine.

4400. You think that they are lines which will pay from 2 to 3 per cent. above their working expenses?—Yes, I think they will.

4401. Then as regards the terms which are made with private companies, you have alluded to the Bengal Central terms, and I wish to ask you a question with reference to those terms, and it also applies to that completed private company's line, the Bengal and North Western; for I think there is a provision in that contract that in case of default the Government may take over the working of the line, paying the full value of the capital expended; and what I want to know is, is not there some danger that if a line turns out to be an unpaying line, the company might wilfully default, and might block the way of traffic, and might force the Government to take over their line at the full cost, as they were compelled, as I daresay you know, to take over and work the Orissa Canal?—In the case of the Bengal and North Western Company, the Government, if they take over the line, do not pay the whole of the capital cost, they pay the capital cost less the value at the same time of the capital cost treated as a reversionary sum absolutely payable on the 31st of December 1981. I will read the terms of the contract: Clause 59. "In case the Secretary of State shall determine this contract by notice of determination, he shall within four calendar months from the time when this contract shall terminate, pay to the company in London out of the revenues of India the fair value of all such rolling stock, moveable machinery, and plant, boats, and stores belonging to the Company, as shall, pursuant to the previous provisions of this contract, be delivered by the Company to the Secretary of State on the termination of this contract, and also the sum which shall at the time of the termination of this contract be the fair value of the said railway so far as constructed, and of the fixed machinery and plant belonging thereto, or to any ferries or ferry established, or then in course of establishment by the company under this contract (exclusive, however, of all telegraphs and telegraphic machinery and plant), less the value at the same time of the sum last hereinbefore mentioned treated as a reversionary sum absolutely payable on the 31st day of December 1981, the rate of interest employed in calculating the reversionary value to be 3½ per cent. per annum."

4402. As regards the Bengal Central Company there is, as I understand, in their contract an absolute right to the company to get from the Government the full amount of the capital expended, if the Government take over the line?—Yes.

4403. What I want to know is, under a contract of that kind is there not a fear that the same thing may happen as happened with regard to the Orissa Canal Company, that is to say, the Company may fail to perform their contract, and make themselves so disagreeable; I do not mean to say that with the Bengal Central, it would be likely to be the case, but in the case of new companies, when it is found to be an unpaying line, I say they may make themselves to be so disagreeable and be so much in the way that

Sir *George Campbell*—continued.

Government will practically be obliged to buy up the unpaying concern as they had to do in the case of the Orissa Canal?—I think there may be that danger.

4404. Then also, is there not this additional danger, that if the Bengal Central Company prove barely to pay, and not to be a concern that would be at a premium in the market, they may, by making themselves particularly disagreeable to the Government, practically force the Government to buy them up at 5 per cent. premium under that clause in the contract, not making a default, but merely making themselves disagreeable?—They could make the Government pay the extra bonus of 25 per cent. on the capital expenditure, only in case the Government themselves wished to take over the line.

4405. Supposing that the Bengal Central Company, who, you say, have completed their contract, still find that their line is not a paying line, is there not a danger that they might make themselves disagreeable to the Government in order to force the hand of the Government to buy them up, and, in buying them up, the Government might be obliged to pay 5 per cent?—I think there may be this danger, but whether the danger amounts to anything really practical, I cannot say.

4406. You are probably aware that the Secretary to the Orissa Canal Company, being the secretary to an utterly unpaying concern, made a very good thing of it?—Yes, I am aware of that.

4407. So that there may be a danger that future secretaries may be inclined to follow such an example?—There is such a danger.

4408. With regard to the question of maximum rates, I have been looking over the contracts of the old companies, and I find that the contracts of the old guaranteed companies all contain a provision, which seems to give absolute power to the Government over the East Indian Railway Company, for example, to make them charge such fares and tolls as shall have been approved by the East India Company?—Yes.

4409. And it is the same with the Great Indian Peninsula Company, and also the same, I think, with the Oude and Rohilkund?—Yes.

4410. I find that these words from time to time were introduced, "such fares and tolls as they shall think fit, not exceeding a maximum to be from time to time fixed by the Secretary of State." Is it the case that that has been construed that the Secretary of State having exercised that power once for all, his power is exhausted?—That is what has been held, but I think the honourable Member has not read the last portion of this clause of the contract.

4411. I know that there is a last portion which says that there is to be a reduction when the profits exceed 10 per cent.?—It is held that the first sentence of that clause is modified by the second one, and that has been the view held right through, I find, in the correspondence. I do not think the point has actually been referred to any legal officer, but I could produce correspondence to show that the Government has held that view from the first.

4412. In almost every case the rates under that provision were rashly fixed, which rates are now enormously high. I think you told us far

Sir *George Campbell*—continued.

beyond what the companies in their own interest would ever dare to work up to?—Yes, they are very much higher than what the companies actually charge.

4413. I think you quite agree that the rates and fares prescribed by the Bengal Central Company, without any power of reduction by the Government, are most injudiciously high?—I think they are.

4414. Far higher than ought to be charged?—Yes. On the particular point you asked me just now as to the view held by Government, regarding their powers of control over rates and fares given in the Guaranteed Railway Contracts, you will find the views distinctly stated in paragraph 3 of Circular No. 10, dated the 16th October 1867. They were also stated in a letter from the Government of India to the Government of Bengal, No. 818, R., dated the 12th May 1871.

4415. Then we may assume that in giving contracts to future companies on lines corresponding to those of the Bengal Central Railway, the Government of India, or those who are responsible for the Government of India, will take care not to fall into this difficulty again?—These contracts are dealt with by the Secretary of State for India, and not by the Government of India; the Government of India has nothing to do in settling these contracts.

4416. I understand that it is your individual opinion that in the case of those first and most expensive railways, such as you propose, the Nagpur and Surampur, and one or two other lines, they should be made by companies, but should not be made by the Government?—Yes, in event of the failure of companies to take them up.

4417. Do you understand that as distinctly the view of the Government of India, or is their view somewhat to this effect: We are willing to encourage those great railways provided that the private companies or individuals think them so nearly profitably, that with the aid of a moderate contribution from us, they will be willing to make them; and if they are not so satisfied, we think that the practical test of the whole character of these railways has failed, and we do not bind ourselves to make them on the part of the Government?—I think the Despatches show that that is not the view of the Government of India, for the Government of India in one part of their Despatch say distinctly that they consider all those lines as urgent and indispensable for the country; and in another part of their Despatch, they state that if the companies do not come forward it will delay the construction of the lines. By that, I understand that it will only delay them until the Government can supply the funds itself.

4418. I should like to come back again to the question which I asked somewhat hurriedly at the end of your last examination; it seemed to me that the answer which you gave with regard to the relative advantages of construction by the Government and construction by companies, showed an enormous preponderance of argument in favour of Government; do you still deliberately say that it is your opinion that these great lines should be made over to the companies apart from the question whether you can get companies to make them on very favourable terms; as a mere matter of machinery would you make them over to companies?—What I did say was that so far as construction was concerned, I could see very little difference between the two agencies. It appears to me more a question of the men employed than of the system; but as regards the working of the lines, I said that I thought there were some advantages in the Government working the lines. I think, for instance, that companies would try to develope a dividend, whereas the Government would probably try to develope the country by low rates.

4419. Would your recommendation that those great lines should be made over to companies be confined to cases in which you can get the companies to make them on favourable terms, with only a very moderate contribution from the Government, or failing that, if those lines must be made, and you cannot get companies to make them on such favourable terms, would you still, as a mere matter of machinery, prefer to make them over to companies rather than to make directly by the Government?—I do not think it would be advisable to give them over to companies unless the companies will accept favourable terms, and as included in those favourable terms, I certainly think that the fixing of what I should call fair maximum rates is one of the most important points to be looked to.

4420. You would not give them more favourable terms than the Bengal Central; but you would make a better provision with regard to the rates?—Yes.

4421. I understood you to say that, in case of such a line as the Rajputana-Malwa Line, which has turned out to be a great through line with a great deal of traffic, practically the result came to this, that they were obliged to use almost as heavy rails, and as large and heavy carriages, and as heavy engines, as upon a broad gauge line?—I said that because the wagons are very nearly as heavy as the broad gauge wagons, and the engines were getting heavier and heavier, I thought it would end in the rails being made heavier.

4422. Supposing that you had rails, and engines, and waggons of a heavy character for heavy traffic, is there then any considerable advantage in point of economy in the narrow gauge?—There is very little economy. I think the question of expense is more a function of the weight of traffic moved over the line, than of the gauge.

4423. You told us that you thought that the making of that great through-line, the Rajputana line through the North Western Provinces to Bombay, on the narrow gauge, was a great mistake?—I believe it is universally recognised as a great mistake.

4424. Now that they have come to have large waggons, and large engines, and probably heavier rails, would it be a very expensive thing to alter the gauge?—I am afraid it would.

4425. As a matter of opinion, would you rather expend a moderate amount of money upon making that gauge broad, or a larger sum of money upon making what I may call a rival railway from Cawnpur to Bhopal; supposing that the funds were limited, which would you do first, widen the Rajputana

Sir *George Campbell*—continued.

Rajputana line, or make the rival line to Cawnpur?—I should make the line from Bhopal to Cawnpur at once, certainly, because it opens up a new area of country.

4426. What new area will it open up?—All the area on either side of the proposed line.

4427. But not as regards through-traffic?—No.

4428. As regards the narrow gauge, I understand you still to say that you think that on lines where there is likely to be a light traffic, not justifying a heavy plant, you would maintain the narrow gauge?—I said that I thought that metre-gauge lines would be most suitable for isolated parts of the country where you could get a complete metre-gauge system.

4429. In the case of branch-feeder lines, I suppose those branches would not be suitable for heavy traffic?—No, I would have broad gauge lines with light rails; the cheapest possible rails; I do not think there is any economy whatever in making short metre-gauge branches. I would make the line broad gauge in the most economical way, for the simple reason that directly you bring in the metre-gauge you require separate metre-gauge workshops, as well as transfer platforms.

4430. I suppose there is no doubt that in very hilly countries there is a great advantage in narrow gauge, is there not?—The more hilly the country the less the proportionate advantage of narrow gauge.

4431. Will you explain that view a little?—Mr. Molesworth, the consulting engineer to the Government of India, in his minute dated the 19th of June 1882, sums up his conclusions generally, as follows: "Heavy ghaut country, excess cost of 5 ft. 6 in. over metre gauge, 5 per cent.; surface line, excess cost of 5 ft. 6 in. over metre gauge, 33 per cent."

4432. Are you not aware that that is entirely contrary to what has been the experience of other engineers?—I think it is borne out by all the engineering opinion, and you can see at once that it is so, because with a surface line the great difference in the weight of the rails and in the size of the sleepers constitutes a considerable portion of the whole expenditure, but in a heavy ghaut country with deep cuttings and high embankments the difference becomes less proportionately, because the only difference in the earthwork in that case is a very small slice representing the difference between 3 ft. 3 in. and 5 ft. 6 in., which is in the middle of your embankment.

4433. Do not the curves that come into the narrow lines cheapen the cost enormously?—The sharper curves do undoubtedly tend to cheapen the metre gauge lines.

4434. At the present moment, is not the Darjeeling Line made upon a gauge of a foot and a-half?—No, it is on a two-feet gauge.

4435. Do you think that it was a mistake to make it so?—Perhaps it was; but you must remember that it was made on an existing road.

4436. The existing road is broad gauge, and you could have made the broad gauge line on the existing road?—I do not think you could; you could not have got the broad gauge carriages round the curves of the existing road; in fact, you cannot, even with a two-feet gauge, get round the curves of the existing road.

Sir *George Campbell*—continued.

4437. Are you not aware that there are some very narrow gauge lines in the Festiniog district?—Yes, I am aware of that. The conclusion, however, which was put before the Government of India by their highest professional adviser, was that the excess of the standard over the metre gauge was 5 per cent. in heavy ghaut country, and 33 per cent. in a surface line.

4438. I think that they have in America narrow gauge lines, generally in hilly countries, have they not?—I believe that is so.

Mr. *Gorst.*

4439. In the broad gauge in the hilly countries you would have to make somewhat broader cuttings, would you not?—Of course you must; but as I say, the difference is only a parallel slice in the middle. The greater part of the earthwork is contained in the side slopes, which are the same exactly in the narrow as in the broad gauge. The higher the embankment the less the difference in the earthwork between the two gauges becomes proportionately.

Mr. *Jackson.*

4440. Will you allow me to ask you just one or two questions to get it quite clear, as to the cost of working on the broad gauge and the narrow gauge?—I have put in to-day a large volume showing the whole of the statistics with regard to our Indian railways, Issue No. 6; and that will give you all the details as regards cost of working.

4441. I think you told us that the Punjab and the Indus Valley Railways have been converted from narrow into broad gauge?—Yes, the Punjab Northern and the Indus Valley Railway have.

4442. Do you happen to know the actual cost of converting them?—I do not know the actual cost of converting them, the cost of conversion is not shown separately in the accounts.

4443. Would the making of a narrow gauge line *plus* the cost of converting it, be considerably in excess of the cost of making a broad gauge line in the first instance?—Yes.

4444. Therefore it would not be an economical transaction?—No, it was exceedingly wasteful, because on the Indus Valley line, which is now broad gauge, we had not only to alter the gauge, but also in places to alter the alignment.

4445. You flattened out some of the curves, but what became of the rolling stock on the line?—It was transferred to other metre-gauge lines.

4446. I think you told us that the cost of working goods on the standard gauge might be taken as being 25 to 30 per cent. less per ton than on the metre gauge?—I gave the exact figure, which you will find in the statistics which I have put before you to-day. You will see the exact figures as to capital cost given first in Statement No. 1, which is a "Comparative statement showing the cost of construction of broad and narrow gauge railways, based on the capital outlay on 31st December 1882." Then the next set of statements, which I have numbered 2 A., are, "Abstract statements of working Indian railways; cost of working units of traffic; coaching traffic;" and you will see at the end in Statement No. 2 F., that an abstract is got out for the

Mr. *Jackson*—continued.

broad gauge as well as for the narrow gauge lines. The next set of statements, No. 3, shows the "Cost of working units of traffic, goods traffic," also with an abstract at the end, in Statement No. 3 F. Then Statement No. 4 show the carrying capacity of the two gauges in respect to the coaching traffic. No. 5 statements show the carrying capacity of the two gauges in respect to goods traffic. Then after that I have given you the cost of working the different lines under each head, namely, Statements No. 7, Maintenance; No. 8, Traffic; No. 9, Locomotion expenses; No. 10, Carriage and wagon expenses; No. 11, General charges.

4447. You told us something about the shops; do they make any engines in India?—No, I do not think they make any engines there as yet.

4448. Or any rolling stock?—They repair the engines, but I do not think engines have ever been made in India. We make rolling stock; the ironwork comes out from England, and we make up the rolling stock ourselves; but sometimes the carriages and wagons are made in England and sent out and merely erected out there, particularly in the case of iron wagons; these are sent out from England and merely erected in India. The ironwork for the wooden wagons generally comes from England, and we build the wooden wagons out there ourselves.

4449. Is this ironwork obtained from other countries besides England, America for instance?—I do not think American ironwork has ever been used, but some rails have come out from Belgium, and very bad rails they were.

4450. Were they steel rails?—No, as far as I remember, they were iron rails; but I know that they were so bad that some of them broke as they were being unloaded out of the wagon.

Mr. *Kynaston Cross.*

4451. Do you know how long it is since they were procured?—It must have been about the year 1875.

4452. Do you know of any since then?—I do not know of any since; I think this single experience was enough.

Mr. *Jackson.*

4453. You told us that in your opinion the Government ought to retain a control over the fares to be charged on Indian railways; do you mean by that that they ought to retain the power to alter the maximum, or to call upon the companies to reduce the rate below the maximum that has been fixed?—I said, if you remember, that I thought that one of the great difficulties between the Government and a private company, was to contrive some system by which the Government could, fairly to the company, maintain a control over the rates and fares; that, I think, is perhaps the greatest difficulty with companies working in India. There is a difficulty in protecting the interests of the public when companies work railways in India. It is very evident that the control which was intended under the old contracts to be exercised over the rates and fares in the case of guaranteed railways has utterly broken down; we have really no practical control at all.

4454. I suppose the maximum rates are fixed when the contracts are made?—No. In the later contracts they are, but in the case of the guaranteed contracts they were not fixed.

4455. But under the present system they would be fixed, would they not, in all cases?—Yes.

4456. Do you think it desirable that the Government should retain the power to alter those rates and fares?—I think it is desirable that the Government should have that power, but at the same time I practically do not see how the Government could retain that power with a private unguaranteed or unassisted company.

4457. Would not it interfere with the power of inducing companies to take up more lines?—It would; and that is the reason why I am in favour of the Government giving a permanent guarantee; for the simple reason that if the Government did give a permanent guarantee, they could fairly claim a permanent control over the rates.

4458. You gave us the instance of the Rajputana line I think, and you said, did you not, that the low rates on that line would have been impossible if the line had been in private hands?—I said the reduction carried out generally in the rates for wheat in the early part of last year would have been impossible.

4459. Are the rates charged on that line lower than in any other part of the country?—No. At the time those rates for wheat were reduced, the Government of India wanted to get a general reduction of rates over India. They had no power to reduce the rates on the guaranteed lines, but by operating through the Rajputana line, which was a State line, they were able to reduce them in this way: The Rajputana line goes from Delhi to Ahmedabad. We offered to make a certain material reduction on the Rajputana line if the Bombay and Baroda Company would make a corresponding reduction on their line from Bombay to Ahmedabad, so that in this way we procured a reduction in the through rate from Delhi to Bombay. The effect of that reduction was that if the East Indian Company had not made a corresponding reduction in their rates from Delhi to Calcutta, they would have lost part of their traffic. Also the Scinde, Punjab, and Delhi line was also obliged to reduce their rates in order to get a fair share of the traffic of Delhi and the neighbourhood.

4460. Is that to Karachi?—*Yes*; the result of our lowering the rate on the State line between Delhi and Ahmedabad, was that we practically reduced the rates to the three ports of Bombay, Calcutta, and Karachi. If the line from Delhi to Ahmedabad had been in the hands of a private company the Government could not have operated on them. Government would consequently have had no power whatever to affect the rates, and they would not have been reduced.

Mr. *Wodehouse.*

4461. In determining the choice of gauge, you attach more importance to the consideration of the comparative cost of working than of the construction of the lines, do you not?—Yes, I do.

4462. And, in your opinion, the narrow gauge is suitable for isolated districts of India?—*Yes*, where there would be no break of gauge.

4463. Are

Mr. *Wodehouse*—continued.

4463. Are there many such districts?—There are some which might be indicated at once, such, for instance, as the district to the north and east of the Ganges, and the Gogra. The lowest bridge over the Ganges that we shall probably have within our time is at Beharas; and the result is that the whole of the traffic from Assam, and from the districts lying to the north of the Ganges, must break bulk in crossing the river; therefore, these geographically isolated districts would seem to me to be suitable for the metre gauge. A break of gauge must take place somewhere; and therefore there is no inconvenience whatever when you have to take the goods out of the wagon and put them on to a ferry boat, whether you load them back into a metre gauge wagon or into a broad gauge wagon. Then there is the whole of the district lying south of the Madras Railway. There is a complete system of metre gauge lines in this district, and they have their own line leading into Madras, so that the whole of the traffic of that district could come to the port, and be shipped at Madras without a break of gauge.

4464. Is not Kattywar a suitable district for the narrow gauge?—The Kattywar lines are narrow, and there is a break of gauge at Wadhwan.

4465. You attribute the reluctance of private companies to undertake Indian railways, without State aid, partly to the mode in which your accounts are kept, and partly to a want of information in England as to the terms which can be obtained by the companies, do you not?—I do.

4466. Both of those are removable obstacles; have you ever considered any way by which they could be removed?—The first is easily remedied, and I think that the second evil might be removed by the Government publishing the terms upon which they are prepared to encourage the construction of railways by private enterprise. In September 1881, the Government of India forwarded home for approval draft rules showing how far the Government of India was prepared to assist private enterprise towards developing railway communication throughout India, but the Secretary of State did not approve of those terms being published for the information of the public, and the result of that has been, so far as I can see, that the public do not exactly know what terms the Government are prepared to give to encourage the construction of railways.

4467. You submitted to the Secretary of State a proposal for that purpose, which was rejected by him?—We did.

4468. With regard to the mode of keeping your accounts, have you any scheme in view?—I stated my own private opinion, that I thought it would be better to keep the railway accounts on purely commercial principles outside the general accounts of the Empire.

4469. You deprecate the surrender of all the most profitable lines to private companies, on the ground that it would convey an unjust impression of State management?—Yes.

4470. Do you look upon those two important lines, the Bhopal-Jhansi and the Nagpur lines, as likely to be among the most profitable?—I think they certainly will be as profitable as any others.

4471. Might it not be desirable that one of

Mr. *Wodehouse*—continued.

them should be constructed by the State?—No, I would give to private enterprise the benefit of them both. I feel perfectly convinced that our State management will compare favourably with companies' management, even if these two comparatively good lines are made over to private enterprise.

4472. But upon the ground of maintaining the reputation of State management, you would not reserve one of those to the State?—No, I would not, if companies come forward and offer favourable terms.

4473. You referred to complications which might arise from the construction of railways by private companies in Native states?—I said that political reasons against private enterprise in the territories of Native princes were brought forward by Lord Lawrence.

4474. In the selection of the lines which are to be handed over to companies, is that consideration borne in mind by the Government of India?—I think so to a certain extent.

4475. You stated, did you not, that the capital required for the State railways was partially raised in India, whilst all the capital required for the companies' railways came from England?—Yes.

4476. Is the capital raised in India on State railways any large proportion of the whole capital?—The best estimate that I could make before I left Calcutta (but I confess that such inquiries are entirely out of the scope of my profession) was that about a crore or a crore and-a-half of rupees of Government paper is absorbed in India yearly. Out of two and-a-half crores of rupees borrowed every year, I made out that one-and-a-half crores or one crore was absorbed in India.

4477. But the major part of it comes from Anglo-Indians, does it not?—The major part of it is held by Europeans.

4478. I think that your chief objection to the construction of railways by the State was the constant liability to a fluctuation of policy?—Yes.

4479. That is an evil, is it not, which it is apparently impossible to remove?—I think it is difficult, though not perhaps impossible to remove it. You have some remarks upon that subject, and very strong remarks, in the Minute which is recorded by the Honourable Rivers Thompson at page 11 of the Papers which have been put before the Committee. (App. No. 1, p. 497.)

4480. Does he suggest any way of removing the evil?—Yes, he does suggest a very practical means of removing the evil. He suggests the Home Government leaving the Government of India alone for about 10 years. You will find that in the last paragraph of the Minute recorded by Mr. Rivers Thompson, on page 11.

Mr. *Bolton.*

4481. Of the capital raised in India, I think you said that a small proportion was held in India, and chiefly you thought by Europeans?—Yes, I think it is chiefly held by Europeans in India.

4482. What real difference is there between a loan so held raised in India, and a loan raised in England?—If the amount of interest is remitted

Mr. *Bolton*—continued.

home of course it makes no difference whatever; the remittances would be the same.

4483. Is it not natural to suppose that a European does remit his interest home?—No, I do not think that is neccessarily to be assumed, because a great number of us hold Government paper. I may say that I hold some Government paper myself, but I do not remit the interest home; I invest it in India.

4484. Sooner or later probably you will remit it home?—Sooner or later it will be remitted home; but there is a very considerable portion of the Government paper, you will remember, held by natives. In the year 1868 the amount held by natives was about 14,700,000 *l.*; and in the year 1878 it was 20,100,000 *l.* That appears from the Evidence taken before the last Select Committee in the year 1879, in answer to Question 683.

4485. Is there any reason to suppose that those natives who desire to invest their money in rupee loans would not, failing those rupee loans, invest in sterling loans for Indian works?—I do not think they would, because a great deal of the rupee paper is held by contractors and others who find it useful to lodge as a security.

4486. The comparative advantages and disadvantages of contracts being carried out by companies you have given us in detail, and the advantages you think are first, that a contract once signed the work must be completed?—Yes, I mean to say that a company having lodged its money, the construction goes on; the work is not liable to be stopped in the event of a war; it must be completed.

4487. You say that the other advantages are that the cost is not included in the Indian debt; is not that a sentimental advantage?—That has appeared to me sometimes only a sentimental advantage; but, when I see the objection stated by several of the Finance Ministers of India, I begin to doubt my own opinion, and to think that the Finance Ministers' opinion may perhaps be right.

4488. Does not that involve this disadvantage, that inasmuch as the companies, if they raise money in India, must be the remitters of dividends, they thereby multiply the opponents of the Government by the large remittances very much reducing the price of rupees in the exchange?—It increases the number of remitters.

4489. Is not that a disadvantage?—I do not see that necessarily it is so. Colonel Strachey on the contrary told you that it was a distinct advantage.

4490. If you wanted to buy a new hat in Calcutta and there was only one seller from London, do not you think it is possible that you would have to pay more for it than if there was a seller in every street?—That appears to me to be obvious.

4491. I want to make the best bargain that I can in Calcutta, and I ask your opinion upon the subject, whether there would be any real difference, amount of remittances being the same, whether it was remitted by the Government or whether it was remitted by two or more senders?—The opinion that I formed from discussing the subject with bankers and others in Calcutta, and I give it to you for what it is worth, was that it made very little difference in exchange whether the total sum remitted was remitted by one or by two or more holders, but that if the one holder was exceedingly clever and sharp it would rather be slightly to his advantage than otherwise; that is to say, if an exchange bank was in the position of Government it would get an advantage by having the whole of the remittances in its own hands.

Mr. *Bolton*—continued.

4492. We see constantly combinations of traders in certain articles or in certain industries to fix a price upon the whole of them in consequence of the reductions which follow competition amongst them all. You think under those circumstances that an Indian banker would conceive of it as being altogether unnecessary for the maintenance of a certain price?—I think the rate of exchange would entirely depend upon the relative amount of Council bills and other remittances on the one side and the total amount of exports on the other.

4493. In your answer to Question 4295 you mentioned the fact, speaking of the disadvantage of the old contract, that some companies had turned out commercial failures; which companies are those?—I can mention two instances; the Madras Railway certainly, which does not pay more than 2 per cent., and the Oude and Rohilkund, which also might as yet be considered a commercial failure.

4494. To what do you think that that is due?—On the Madras Railway, first of all, to there being very little traffic in the country; secondly, to the line being so cleverly laid out that it avoided every town.

4495. Was that promoted as a productive railway or as a protective railway?—It was built before any distinction between productive and protective lines was heard of.

4496. When it was promoted it was supposed to be a paying line, was it not?—It was a part of Lord Dalhousie's original scheme and supposed to be about as paying as the other lines then proposed.

4497. Is that the measure of confidence to be placed upon the estimates of the Government now with regard to paying schemes or protective schemes?—If you will read the abstract of correspondence regarding the means of rapid construction of railways which has been drawn up by the India Office, you will see that in the very first instance the Government had thought these particular railways might not pay, and that the public would probably therefore have to come forward to assist them.

4498. With regard to the construction of railways, I think on the whole your opinion is in favour of the Government constructing the lines entirely?—I did not say so; I said that I thought, so far as construction was concerned, it was more a question of the *personnel* than of the system.

4499. But you summarise the advantages under three heads; you say that the Government can obtain money at a much cheaper rate, that there is more economy in construction and less danger of political complications?—Yes; I said that they should, I think, be able to construct railways more economically.

4500. And the only disadvantage that you saw

Mr. *Bolton*—continued.

saw was the increase of the public debt?—And the want of continuity of policy, which I consider is a very great evil.

4501. You would not express a decided opinion in favour of the Government constructing all the lines?—No, I would not; I think, as I said, that the rivalry between the two agencies is a distinct advantage.

4502. That is as to construction?—Yes; and I think the rivalry in working also is productive of good.

4503. You gave us three or four instances of the disadvantages of working by companies, and the first was that the company will only seek its dividends?—You were told so I see by one of the Directors of the Great Indian Peninsula Railway who appeared before you; he distinctly said that the object of the company was to secure the best dividends.

4504. Is not that generally understood to be the best test of good working?—I think it is, if it is intelligently done; but, as I stated it distinctly, a company would be indifferent as to whether the dividend was derived from a small traffic at high rates or from a large traffic at low rates.

4505. But we do not see that carried out fully?—Very often companies kill traffic by high rates.

4506. If the traffic is small and the rate moderate it increases the traffic?—I admit that; but you may get quite as large a profit from a small traffic at a high rate as from a large traffic at a low rate.

4507. But the maxima rates are fixed already by the Government in the original contracts?—No, not in the original guaranteed railway contracts, but they have been fixed in all the later contracts.

4508. So that the rates must be moderate, one would suppose, to begin with?—The maxima rates of the old guaranteed companies were fixed too high, because the rates were fixed at a time when nobody knew how to work the Indian traffic properly.

4509. But we are speaking of the future?—Yes; matters will be better managed for the future.

4510. So that the danger is removed, is it not?—That danger is very much lessened compared with what it was.

4511. Might it not be obviated altogether?—Yes; by fixing the maxima rates sufficiently low, it could be.

4512. Would there be any difficulty in fixing the maxima rates sufficiently low?—I think it would be better to fix the maxima rates not at any absolute amount, but as a certain proportion of those in force on a large line like the East Indian; say that the maxima rates should not exceed 10 per cent. in excess of the rates in force on the East Indian Railway.

4513. Whatever rates might be fixed they should be fair rates according to the views of people at this day?—Yes.

4514. So that that danger would be obviated altogether?—If you fixed them as I suggest, it would be so; that is to say, if you fixed the maxima rates as a given per-centage of the rates of a large company like the East Indian Company.

Mr. *Bolton*—continued.

4515. Then that disadvantage would be altogether removed?—Yes.

4516. You say that there is great caution on the part of individuals or private companies as to the reduction of rates and fares; do you find that to be so in your experience?—I think if you look back to the past history of the subject you must acknowledge that, considering how long the guaranteed railways were working before they reduced their fares. If you remember they never did reduce their fares until the famine occurred, and the Government reduced the actual fares to the public from one-fourth of a pie to one-eighth of a pie, they themselves making up the difference to the companies. The increased traffic that resulted from these reduced rates taught the guaranteed companies the advantages of low rates.

4517. But those companies I think were blessed with a very high guarantee?—Yes, with a guarantee of five per cent.

4518. And consequently their inducement to reduce the rates was not so great?—Their inducement was very small I should say.

4519. Your idea is that they should only be blessed with a very limited guarantee?—With a very small guarantee.

4520. Would not that obviate that danger?—It would tend to obviate the danger undoubtedly.

4521. Then you say that where a company has a certain fixed guaranteed interest there is no incentive towards economical working?—There is none, so long as the net profits are not in excess of the guaranteed rate of interest.

4522. But they would be always seeking to obtain that, would they not?—In a case like the Madras line, where, after a great number of years working, they have come to the conclusion that it is hopeless to expect to earn more than the guaranteed interest, I do not think there is that inducement to economy that there ought to be.

4523. Then as respects economy, when we are speaking of the stimulus to economical working, would that include low rates?—The more economical the working the lower the rates the company could offer to the public.

4524. It includes lower rates of carriage too?—Yes.

4525. Is not a company possessed of a high guarantee in a better position to make trial of low rates than a company without a guarantee at all?—Provided they do not wish to get surplus profits.

4526. Have you any reason for supposing that they would not wish to get surplus profits?—They would be sure to wish to get them.

4527. If a company blessed with a guarantee, we will say, of five per cent, and is earning only one per cent. on its own merits, is not that company in a more favourable position to try the effect of low rates as it runs no risk whatever, than a company with a very low guarantee earning probably nearly its guarantee or a fraction more?—It is in a better financial position to reduce its rates certainly, but I do not think that the inducement to economical working is so strong in the case of a five per cent. line as in the case of one with a lower rate of guarantee, because in the latter case the company would have every induce-

Mr. *Bolton*—continued.

ment to work economically, whereas in the case of the five per cent. guaranteed company, they would feel that no matter how they worked they would still get their five per cent.

4528. And if they worked it well they might get a higher per centage?—They might.

4529. And they would be running no risk of loss?—Your views are correct in one sense, because directly the East Indian Company began to earn above five per cent. the Board began to be more careful about the expenditure.

4530. Because they share the profit?—Yes.

4531. *Is it not* the fact that a high guarantee is more likely to be a stimulous to try those experiments of low rates than a low guarantee?—No, just the opposite, because it is only when the company begins to earn above the guaranteed interest that it begins to be careful about the expenses, and a low rate of working means low rates and fares to the public.

4532. In the one case with a high guarantee a company runs no risk whatever, but with a low guarantee it runs a considerable risk; therefore, you have got a person trying experiments at the expense of the State in one case, and a person trying experiments at his own expense in the other; which is the most likely to be a stimulus to experiment?—As far as experience has shown, I do not think that a 5 per cent. guarantee has tended towards low rates.

4533. Is it not possible that there has been some difficulty with the Government where the results have been very low?—No, on the contrary the Government has steadily done all in its power to induce the companies to reduce their rates.

4534. You know that for a fact?—I could produce a great deal of correspondence on this point.

4535. I think we had evidence the other day to the contrary effect if I remember rightly where a company, the East Indian, was desirous of reducing their rates, and the Government objected to it?—There can be no doubt of the reduction of the third-class fare from three pie, to two and a half pie on the East Indian line, was carried out by the Government against the wish of the East Indian Company. I will state another case. In about the year 1871 we tried our utmost to get the East Indian Company to reduce their rates for coal, and in fact their refusal to reduce the rates has induced the Scinde, Punjab, and Delhi Railway, and the Indus Valley State Railway to try the experiment of importing English coal at Karachi and carrying it up to the Punjaub at the very lowest rate. One-tenth of a pie has been proposed per mile in order to induce the East India Company to reduce their rates for coal.

4536. You have expressed an opinion, I think, that it is desirable that the Government should retain possession of a portion of the line, if not of all of it, and that their reason for retaining and working a portion of the line is, that they may just do what you have explained to us, that they may create a healthy rivalry?—Yes.

4537. A company makes a line under a certain contract, by which it is enabled to charge certain rates and fares; would you not consider it rather unfair on the part of the Government, to reduce the rates on it to the figure you have named, one-tenth of a pie per mile for coal, in order to

Mr. *Bolton*—continued.

compel a company in these circumstances to reduce the rate below what is its maximum?—I think that the Government as an owner of railways, has a perfect right to work those railways in any way they choose, especially when I may say that the reduction proposed has been accepted by a guaranteed line as well as by the State line. You must remember that the line from Kurrachi to Kotri, and the line from Mooltan to Lahore, is a guaranteed line, and the guaranteed line, so far as I understand, is prepared to accept the same rates as the States line.

4538. Under the circumstances of compulsion that you have named?—No; because in this way the guaranteed company would get coal at Lahore cheaper by getting a very low rate quoted on the State line from Mooltan and Kotri, and they are prepared to quote themselves an equally low rate over their system for the Indus Valley and the Punjab North State Railways, in order that they themselves may get their coal at Lahore cheaper than the East Indian Company will deliver Bengal coal at Delhi.

4539. It is the principle rather than the particular instance that you refer to; I am supposing a company's line made upon the conditions of a contract, such as has been suggested, and the Government making the line which can operate with the company having the line; if there is no line then all the disadvantage of rivalry disappears; there is none then if the Government forces down the rates on the States lines, in order to compel the company worked line to take lower rates than its maximum; do you think that is fair?—Yes, I think it perfectly fair, because the Government would never force down a rate so as to work at a loss.

4540. Do you think that one-tenth of a pie per mile would pay?—When you are running all your wagons one way empty, of course it would; we are running the greater part of our wagons empty the whole of the way up from Kurrachi, and it is better they should carry coal at very low rates than carry nothing.

4541. Still it was done for the purpose of reducing the rate on other lines?—It is done for the purpose of supplying the railways in the Punjaub with coal at cheaper rates.

4542. What effect do you think such a policy as that would have upon the companies who were asked to make new lines; what would be the value of their rights to charge maximum rates?—First of all you must understand that there is very little railway competition in India at all; there is no competition so far as local traffic is concerned; really the only competition is from one or two places in India; there is a little competition for the traffic from the North West Provinces and from about Delhi, because it may come down to the sea either at Karachi, or at Calcutta, or at Bombay, but when you regard the traffic on the through lines from stations somewhat nearer the sea-board, there is no competition whatever; for instance, the traffic from Jubbelpur must come on the Great Indian Peninsula.

4543. For the purpose of my question we must assume competition?—Yes, but you must understand

Mr. *Bolton*—continued.

understand it as competition to the very smallest extent.

4544. Therefore, there is not a healthy rivalry?—No; in a great many cases we have no railway communication at all; it will be a long time before we can afford the luxury of competing lines.

4545. But you must assume competition; what would be the effect of such competition as that upon future contracts; would not you find the public very careless in taking an interest in contracts under such conditions?—No, I do not think so; they know there is little or no competition; and if there were, the company need not reduce beyond their maximum; they would only reduce their rates when it was to their advantage.

4546. If they did not reduce below their maximum, would not that impose a loss of traffic?—Precisely, and the public would gain by the reduction of rates in order to attract the traffic back.

4547. You have expressed your opinion as to a limited guarantee, that you see, I think, few advantages in a limited guarantee; by a limited guarantee system you mean, I presume, a guarantee limited to a certain number of years?—Yes.

4548. But you do see advantages in a perpetual small guarantee?—In a continuous guarantee at a low rate I see many advantages, perhaps the greatest advantage I can see in it is that it will attract capital; I do not think you will get money unless you do offer a continuous guarantee.

4549. Do you mean more than about three or three and a-half per cent.?—It all depends upon the price at which the Government loans are standing at the time.

4550. Then in effect you would have the Government borrow the money at the lowest possible rate, and authorise the companies to make small lines under a minimum guarantee of 3 per cent. in perpetuity, or until such time as the Government themselves absorb the lines?—I may say at once that I see no great difference between a three and a-half per cent. guarantee, and the Government raising the money at three and a-half per cent.

4551. We are now on the best mode of carrying into effect the making of the additional railways that are required in India; you think that, on the whole, you would prefer a small amount of guarantee, say three and a-half per cent. in perpetutity, or until Government absorbs the line?—Yes, I think that is the best plan.

4552. And whatever is made afterwards you would give the company a share in the surplus profits?—Yes.

4553. Giving them also the full right to work the lines as they think best for the interests of the shareholders within certain limits?—Yes, subject to a certain control over the rates.

4554. I think you have suggested that the State should not earn more than the actual cost of the line; that the profits of the railway should be only sufficient to pay the interest and expenses?—Yes, taking the whole State system together.

4555. Would you carry that out to its legitimate length according to your view in respect of

Mr. *Bolton*—continued.

companies so situated?—No; I stated that it was improbable that any company would take up a line that was not likely to pay; I have also stated that I thought the advantage of a continuous guarantee was that it allowed the Government to claim a share of the surplus profits. In this way the paying lines can be made to recoup the Government for the unpaying lines, and thus permit the rapid construction of railways without their becoming a burden on the Indian taxpayer.

4556. On the other hand you tell us that there should be no surplus profits?—If the companies get the good lines, they must gain surplus profits, and in these surplus profits the Government would share. These surplus profits would go to make up for the losses on the non-paying lines, so that on the whole Indian Railway system, the earnings would be only sufficient to cover working expenses and interest.

4557. But if the rates are reduced, so will the earnings be reduced?—Yes, but not reduced so much that the company should not earn surplus profits; the interest can be covered on the whole only by the paying lines. The Government would have to allow the company to earn more than its guaranteed rate of interest in order that they might have something to recoup the Government for the non-paying lines.

4558. Your plan is this; that the companies should receive a minimum rate fixed, and half the surplus profit?—Yes.

4559. But you accompany that with this condition that the State should work the railways so as to produce only the cost of maintenance and a fair interest?—Yes; on the whole, taking all the railways together, the paying with the non-paying.

4560. Therefore the companies would not receive any profit at all?—Yes, they would, because the companies would have the railways which were most calculated to pay, and it is part of the scheme that some railways must earn more money than the guaranteed interest, in order that the Government share of their surplus profits may make up the deficit on the lines that do not pay.

4561. The result would be that you would make one district of country pay for another?—Yes.

4562. And do you think that that would be desirable?—I think so certainly, because it would be the only practical plan on which to proceed.

4563. Would it not be practically taxing the community?—It certainly would be practically taxing the community, say, in Bengal, for the sake of the community in the Punjab; but that is what is done at present in regard to all taxation; it is what is done in all countries with regard to general taxation.

4564. With regard to the gauge, is there no means of overcoming the curves on the broad gauge, so as to make the broad gauge as easily worked as the narrow gauge; could it not be done by the rolling stock, by the engines particularly and shorter carriages; you have expressed no preference for the narrow gauge, but you admit that the narrow gauge lines can be made with sharper curves than broad gauge lines?—Yes, but scientific construction is

Mr. *Bolton*—continued.

gradually overcoming the difficulties in regard to curves.

4565. Is there no means of overcoming that by the use of bogie carriages?—Yes; the tendency every day is to work with sharper curves.

4566. You say that now there are railways in existence that trend as sharply round as the corner of a street?—Yes, the tendency every day is to get the curves sharper and sharper.

4567. Do not you think that the present advantage of the narrow gauge is only an imaginary advantage with respect to curves?—Yes, it is but a small advantage.

4568. It is not an advantage which you would consider for a moment if you were laying out a line?—No.

4569. You have spoken of the weight of the engines and the capacity of the stock; what do you find the effect of an engine of 4·39 tons or 4·4 on the Bombay and Baroda railway?—I cannot say practically, because I have not had anything to do with the working of either the Bombay, Baroda, or the Rajputana lines.

4570. I suppose that the speed is not very great?—The speed is not so great on the narrow as on the broad gauge.

4571. Those waggons of 12½ tons that you spoke of must be very large waggons?—They are bogie wagons.

4572. That does away at once with all the advantages of the narrow gauge as to curves; you have had great experience of changing narrow gauge lines into broad gauge lines, have you not?—No, not practically; when the old Indus Valley line was constructed it was a narrow gauge line. I laid down some 70 miles of it before I left as a narrow gauge line, and when I came back I found it was a broad gauge line; but I was not employed on the conversion of the line.

4573. Just a word about those detached isolated districts; you spoke of that district on the north-west being so isolated that there must be a break of gauge?—Yes, there must be a break of gauge to the north and east of the Gogra and the Ganges.

4574. Those waggons, I suppose, could not be transferred by means of ferry boats?—It would be exceedingly difficult because the river shifts so much, and the alterations of level in the surface of the water in these rivers are so great, that I think a ferry would be difficult to manage. I have had a good deal of experience with river ferries, because the whole of the time I worked the Indus Valley line we had a ferry on the Indus worked, you may say, between two permanent banks. The river at Sukkur passes through two rocks, so that we had permanent banks there; but even in that case the alterations of level in the water were so great that we had the greatest difficulty in working the slips.

4575. How is the operation performed now?—We have in the river a pontoon with a bridge from the bank to this floating pontoon. The pontoon of course rose and fell as the level of the water in the river altered, and the steamer that went across the river came alongside the pontoon, and we let the carriages down the slip over the pontoon on to the steamer.

Mr. *Bolton*—continued.

4576. Then the carriages themselves were transferred?—The goods waggons were transferred, not the passenger carriages.

4577. You can hardly say that that is an isolated district?—In the case of the Indus Valley State Railway at Sukkur we did pass the traffic across, but as regards the Ganges I think a ferry would be practically impossible, because the river will sometimes alter its course a couple of miles.

4578. How would you perform the operation of transhipping the cargo?—The cargo is transhipped by coolies to flats that go across the river.

4579. But those flats could not take the carriages themselves?—No; for the reason that I have given, namely, the alterations in the level of the water and the want of permanent banks. To tranship wagons requires steam winches and other elaborate machinery, which cannot be shifted quickly on each alteration of the river's bank.

Mr. *Slagg.*

4580. I think you stated that the investing public in England are deterred from putting their money into non-guaranteed lines, on account of the difficulty of understanding the accounts, and you would recommend that the public accounts, with regard to railways, should be made more intelligible, so that there would be less apprehension on the part of the public?—I think that the investing public would know better the ground upon which they stood, if we could produce proper commercial accounts including the loss by exchange and all other charges involved.

4581. But you personally have examined those accounts, and presented them to the Committee, and, as I understand in the last three years, there has been a loss of over 100,000*l.*, including all charges?—No, I do not admit that there has been a loss during the last three or four years, because the total loss shown in this statement includes the interest on the whole of the capital now lying unproductive on unopened lines.

4582. I think you say it is proposed by the Indian Government, in future, to apply the famine fund for the purpose of guaranteeing the interest upon the railways?—It was the proposal of the Government of India that a part, but only a very small part, 200,000*l.* out of 1,500,000*l.*, should be so applied.

4583. Do you think that is a desirable way for providing monies out of the revenues?—I do not see that there is much difference, whether the amount is paid out of the famine fund, or whether it is paid out of the ordinary revenues. They both appear as expenditure, only they are shown under two different items of account. The charge to the taxpayer is exactly the same.

4584. Then you do not object to the application of the famine fund for that purpose in any degree?—The famine fund, as I look upon it myself, is simply an expedient for strengthening of the financial position of India. The Government decided on raising more taxes in order to strengthen their financial position, but there is really no difference between a rupee which is raised by a license tax imposed to meet famine expenditure, and a rupee which is raised from any other source of revenue.

4585. Is

Mr. *Slagg*—continued.

4585. Is there not this difference with regard to the famine fund, that it is raised out of a special tax?—It is supposed to be, but the proceeds of this special tax are not kept separately after the money reaches the treasury.

4586. But the taxation falls distinctly upon a special taxpayer, and, therefore, cannot be classed as ordinary taxation?—It falls only on people who would otherwise escape all State taxation; I am not prepared to say if you wished to reduce taxation, that those people should be the first persons whose taxes should be reduced.

4587. Do not you think that there would be a greater amount of discontent amongst those who paid that special tax?—I think that Europeans constitute practically the only people in India who can complain effectually, and that they naturally will always complain when they are taxed; but, speaking for myself, I am distinctly one of those who think that Europeans and especially European officials ought to be taxed like everybody else.

4588. In the case of famine, how is the fund to be supplied if you apply the famine taxation to guaranteed railways?—I think the famine fund really constitutes nothing more than additional taxation for strengthening the financial position of the Government of India. Where the famine fund is expended in that way there is all the less debt incurred on the general account.

4589. That would make it into a fresh taxation?—I do not think any additional would be required; the position of the Government is sufficiently strong without additional taxation.

4590. You also stated that promoters cannot at present time exactly understand on what terms they stand with regard to railway enterprise? — I do not think they know exactly what terms the Government is prepared to give them.

4591. How would you remedy that obscurity in order to place promoters in the best possible position to obtain information?—The Government should publish the exact terms which they are prepared to offer to private enterprise.

4592. I think you calculated that the difference of cost between broad and narrow gauge is about 2,000 *l.* a mile?—From 1,500 *l.* to 2,000 *l.*, I think I said.

4593. And you say that that includes rolling stock?—I think, taking the two lines thoroughly stocked, that might be considered as the fair difference between the two gauges, judging from past data; but, at the same time, there seems every day to be a tendency for the difference between broad and narrow gauge to become less and less, owing, I think, to the reduction in the price for rails.

Mr. *William Fowler.*

4594. You gave us some very interesting evidence with regard to the Indus Valley and the Rajpootana lines; and I think you gave us pretty full particulars of official estimates and results, have you anything further which you wish to add to your evidence in any way?—Nothing more, except that if you look at the official opinions which were recorded at that time with regard to the probable traffic on the Indus Valley and on the Rajputana lines, and at

Mr. *William Fowler*—continued.

the opinions which were held on the same subject by the Chambers of Commerce, it will probably appear to you that the opinions of the Chambers of Commerce were more correct than those of the officials.

4595. Have you anything to tell us about the Jhansi-Manickpur Railway?—I think the Jhansi-Manickpur Railway might be taken as a very good case of the difficulties that we now labour under in India owing to the want of any principle as to the application of the two gauges. In fact, as I told you before, in reply to a question which was put to me, the construction of this line is at a dead-lock owing to a difference of opinion between the Home Government and the Government of India with regard to the gauge. This case points to the desirability of this Committee laying down general principles which would avoid a similar dead-lock in the future.

4596. Have you anything further to say with regard to that line?—Perhaps the Committee would like me to hand in the Despatches with regard to this line, showing the present difference of opinion between the Government of India and the Secretary of State, with regard to the gauge.

Chairman.

4597. I think it would be desirable that you should give the Committee some information on that point?—In June 1882, the Government of India submitted an estimate for the line between Jhansi and Manikpur, on the metre gauge, and, in reply, the Secretary of State said that he wished the matter reconsidered, on the ground that the line from Bhopal to Jhansi and Cawnpur would probably be a broad gauge line, and that this circumstance would probably affect the question of gauge.

Mr. *Kynaston Cross.*

4598. The Government of India first proposed, did they not, to make it metre gauge?—Yes.

4599. Then if it had been left to the Government of India, in that case it would have been a metre gauge line?—Yes, I think it would; I must admit that, in this as in other cases the Government of India has altered its mind, probably owing to a change in the Government. To continue: after some correspondence, the Lieutenant Governor of the North-West Provinces offered to pay 50 lakhs of rupees towards the line provided it was made on the broad gauge, and on this the Government of India submitted home a proposal to make the line on the broad gauge line. That Despatch went home on the 18th August 1883.

4600. Was not that recommendation of the Government of India, one in which they alluded to the Lieutenant Governor of the North-West Provinces having offered 50 lakhs of rupees?—The Government of the North-West Provinces assented to contribute 50 lakhs on the 14th August 1883, and on the 15th of August the Government of India sent home a Despatch, proposing that the line should be broad gauge.

4601. After having recommended that it should be narrow?—After having sent home at first an estimate for the line on the narrow gauge.

 4602. The

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4602. The 23rd of August is the next one?—Yes, when the Secretary of State telegraphed to the Viceroy that he had considered the Jhansi-Manickpur line, and decided to sanction it.

4603. In what form?—He did not specify the gauge. On the 25th of August the Viceroy telegraphed to the Secretary of State, "Despatch issued on 18th instant, giving final results of location survey; Jhansi-Manickpur line, with engineer's reports, traffic particulars, protective urgency proof. Local Government concurs with us in recommending broad gauge, and will give 50 lakhs in aid from provincial balances." That telegram went home on the 25th of August, and orders were given by the Government of India to the Director General of railways to construct the line on the broad gauge, and to the North-West Provinces to take up the land for that gauge. On the 8th November 1883, the Secretary of State telegraphed to the Viceroy, that he had decided that the Jhansi-Manickpur line should be metre gauge, and on the same day, the 8th November 1883, he followed up the telegram with a Despatch, giving his reasons. These reasons are contained in his paragraph 6, "With reference to the question of gauge on which the line should be made, you state the reasons which have led to your conclusion that the 5 feet 6 inches gauge should be adopted. This it appears will involve a very large outlay in excess of the amount originally estimated as sufficient, and on the revised estimates an additional outlay of 270,000 *l.* over the sum needed for a metre gauge line would be requisite. Having in view the restricted means which must necessarily continue to be at the disposal of your Government for the prosecution of railways, and particularly for those not likely to be remunerative, and looking to the probable limited traffic that may be anticipated to pass over the line, I have not been satisfied that this additional expenditure would be justified. The urgent representations made by your Excellency's Government as to the necessity of an early extension of railways to districts which are not yet provided with them, renders it imperative that every possible economy in first outlay should be secured; and in the present case the balance of argument appears to me to lead to the conclusion that the least costly description of line must be preferred. The well-known precarious rainfall in the districts to be traversed, the relatively small population, only about 220 to the square mile, and the depressed condition of the agricultural classes give almost certain indications that the traffic will be small in comparison with that of more favoured districts of the North-Western Provinces; while the traffic even in Oudh, from the agricultural wealth and population of which Bundelcund is very far removed, is so moderate as to fall altogether below the capacity of a metre gauge line." That Despatch is dated 8th November 1883. On the 21st December 1883 the Government of Bombay addressed a letter to the Secretary of State forwarding a memorial from the Bombay Chamber of Commerce on the subject of the gauge of the Jhansi-Manikpur Railway. The Bombay Chamber of Commerce throughout strongly advised that the line should be on the broad gauge. On the 8th of January 1884 the

Mr. *William Fowler*—continued.

Government of the North-West Provinces wrote to the Government of India, saying that they were much surprised at the decision arrived at by the Secretary of State regarding the gauge of the line, and that this decision altered entirely the conditions under which the North Western Provinces were prepared to give the contribution of 50 lacs. The wording of that letter was as follows: "The Lieutenant Governor has now learnt, somewhat unexpectedly, that Her Majesty's Secretary of State for India has sanctioned a line on the metre gauge. The terms therefore upon which the financial arrangements with this Government were settled are no longer the same." "His honor trusts that the Government of India will not oppose his holding the special arrangement entered into with the Government of India as regards the supply of funds to be partially annulled." On the 29th January 1884 the Government of India again addressed the Secretary of State, pointing out "that the saving, by substituting the narrow for the broad gauge, will not amount to more than 200,000 *l.*, or 12½ per cent. on the estimate for the latter"; and stating that the Government of Bombay, the Government of the North-West Provinces, the Agent of the Governor General in the Central India, and the Bombay Chamber of Commerce were all of opinion that the line should be made broad gauge. They therefore asked the Secretary of State to reconsider his decision. They accompanied that Despatch with a memorandum, showing the estimated difference of cost of construction on the standard and the metre gauge; and one of the particular arguments brought forward by the Government of India as regards the question of the gauge was, that as the Secretary of State had decided that the line from Bhopul to Cawnpur and Jhansi was to be made on the broad gauge, and as the East Indian and the Great Indian Peninsula Railways were broad gauge it would be extremely unadvisable to put in a small link of narrow gauge line between two broad gauge lines. On receipt of that Despatch, the Secretary of State telegraphed, "Your Railway Despatch, No. 16, 29th January 1884, Jhansi Manikpur line. Adhere to decision for metre gauge." The Government of India on receipt of that telegram, again addressed the Secretary of State, protesting against the decision, and they expressed themselves in the following terms, "Against this decision we beg very respectfully, but emphatically, to protest; and we solicit a further consideration of the matter. In our Despatch above referred to we showed: First, that a broad gauge line would only cost 12½ per cent. more than a metre gauge line, and only 180,000 *l.* more than your Lordships was willing to sanction for the latter; Second, that the saving in first construction, by adopting metre gauge, would be to a great extent neutralised by the permanent additional cost of working a short isolated line interpolated in a broad gauge system; Third, that the traffic would flow in and out at both ends, thus interposing the inconvenience, delay, and expense of a break of gauge after a maximum run of only 90 miles; Fourth, that this break of gauge would be a serious obstacle to relief in time of famine, which may be termed the *raison d'etre* of this 'protective railway,' as also a burden on the export

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export trade in ordinary years; Fifth, that the large contribution from the Government of the North Western Provinces had been promised on the distinct understanding that the line should be on the broad gauge; Sixth, that the three Local Governments concerned, and the Bombay Chamber of Commerce, were in accord with us in considering the broad guage essential." They then went on to say, that as the North Western Government had practically withdrawn from their agreement to provide funds for the metre-gauge line, the effect of the Secretary of State's decision was that they had no funds to go on with. In their last paragraph they say, "For the above reasons funds are not available for the construction of the Jhansi-Manikpur line on the metre gauge; and if your Lordship should not, as we hope, be pleased now to consider favourably the present representation, the work must unavoidably stand over until after the Select Committee of the House of Commons has reported. Some new provision is made for funds for protective railways." That is the last Despatch on the subject, and that is the position in which the railway now stands.

4604. In that case you say that the disadvantages of the narrow gauge would be intensified?—Every disadvantage that could be brought against a break of gauge would be intensified in this particular case. The Jhansi-Manikpur Railway is not only surrounded by broad gauge railways, but the *raison d'etre* of this line is to supply food to the Bundlekund districts. The corn could come only from the Punjaub, Bengal, and the North Western Provinces or the Central Provinces, and in every case by a broad-gauge line; whichever direction the grain comes from there must be a break of gauge.

Mr. *W. H. Smith.*

4605. Is there any narrow gauge line with which it would communicate?—None at all; the line would stand entirely by itself.

Mr. *William Fowler.*

4606. If I understand you rightly, the only argument of the Secretary of State for India was the money argument?—Yes.

4607. They objected to the expense?—They objected to the expense. The argument of the Government of India was, that the contribution by the North Western Government, which was given only on the condition that the line was to be broad gauge, would be withdrawn; therefore they had more money actually available if the line was made broad gauge than if the line was made narrow.

4608 But you said something about the question of principle; you omitted to say what principle there is, except that the judgment should be left to the Government of India?—Yes; it would be quite sufficient to leave such details of construction to be settled by the local authorities.

4609. It is a question of discretion in each case?—Yes.

4610. You have referred to the large isolated district north of the Ganges, in which it was probable that the traffic would be small; but is not that one of those cases where it is very difficult to say whether the traffic will be so small as you think, because, in the other cases which you have narrated to us, where your prophecies of small traffic were most positive, the traffic has, nevertheless, turned out to be very heavy?—I do not think the traffic of those districts, at least in our time, will be beyond the power of a metre gauge line.

4611. It is not merely a question of power, but of economy; it is a question whether you would not work more economically looking a good way ahead, and therefore it would be better to have one kind of line everywhere, excepting on a very small scale?—In that particular case, the whole system at present existing is metre gauge.

4612. What lines are there up there now?—There is the Patna-Baraitch line, and the Tirhoot and the Bengal Northern system of lines, all metre gauge.

4613. You said something about the expense of changing the narrow to the broad gauge; do you include in that the changing of the engines and rolling stock, and all the rest of it?—When lines are changed from narrow gauge to broad gauge lines, the engines and rolling stock are transferred to other metre gauge lines, and the capital account of the line gets the credit of the value of the stock transferred.

4614. You disposed of them in other directions?—Yes.

4615. They were not converted at all?—No; that would be impossible.

4616. I think the question of the maximum rates was pretty much disposed of by the examination of Mr. Bolton; is there anything further that you have to add upon that matter with regard to any further illustration which you wish to give?—No; I do not think there is anything further to say on that point.

4617. If I understood you rightly, you felt that that difficulty was being gradually got rid of?—Yes.

4618. And is not likely to be so serious as it has been?—No, I think now that all parties concerned are alive to the importance of fixing the maximum rates at a low point.

4619. And that would remove what you laid much stress upon in your examination?—Yes.

Chairman.

4620. If your remedy for those controversies with regard to gauge between the Government at home and the Government in India had been in operation, would not a great mistake have been committed, the Government of India having first proposed this railway from Jhansi to Manikpur to be metre gauge?—At the time the Government of India proposed to construct the Jhansi-Manikpur Railway as a metre gauge line, I do not think that any definite decision had been come to with regard to the gauge between Bhopal and Cawnpore.

4621. But was it not during the operation of consulting the home authorities that fresh light was thrown upon the matter, so that what would have been a great blunder was prevented. It strikes me that the particular instance which you have chosen to illustrate the necessity of letting the decision be in the hands of the Government of India has rather tended the other way, because the suggestion of the broad gauge came from this side,

Chairman—continued.

side, did it not?—The suggestion to construct the line on the broad gauge first came from the Secretary of State. I brought forward the case, not of course with the object of imputing blame on either side, but with the object of showing the necessity of this Committee laying down some principles which would obviate the delay and the waste that is going on at present.

4622. If the principle that you advocate, namely, allowing the Government of India to settle matters of that kind had been in operation, a great error would have been committed?—Yes, in this case there would, and this shows the necessity of recognizing some principles in the matter. I should be quite content if this Committee would lay down the principle that in certain parts of India the narrow gauge was to be adopted, and in certain parts of India the broad gauge was to be adopted. You might lay down the principle that the narrow gauge should be limited to self-contained areas.

4623. Then I understand that you wish us to say something more than merely leave the decision to the Government of India?—Yes, I think so, most certainly. The question of gauge must and should be faced.

Mr. *Kynaston Cross.*

4624. In fact you would not leave the question of gauge to the chances of the opinion of the Government of India at the time?—No, I do not think the principles should be left either to the Government of India or the Secretary of State, because, although the opinions of the Government of India on the subject of gauge at this present time are perfectly sound, we have only to look back a little while, to the time when the opinions of the Government of India on the subject of gauge were very unsound. In any case I should like the gauge question to be faced by this Committee.

Mr. *Bolton.*

4625. You would like to be at perfect liberty to adopt the broad gauge only, except in some isolated districts?—Yes.

Mr. *William Fowler.*

4626. Did you give us Lord Dalhousie's proposal in the course of your evidence?—I referred to one paragraph of Lord Dalhousie's Despatch which refers to the gauge question.

Mr. *Kynaston Cross.*

4627. I think you said that the Government would object to your proposal to publish the terms?—I did; the Secretary of State objected to the terms being published on which Government was prepared to encourage private enterprise.

4628. Would not the basis of the terms necessarily vary with the different conditions of the country and the districts through which the railways would have to be placed?—I do not think that the general terms would vary.

4629. You know the Southern Mahratta line, I presume?—Yes.

4630. And you know the Bengal and North Western line?—Yes.

4631. Could those lines by any possibility

Mr. *Kynaston Cross*—continued.

have been taken up on the same schedule of terms?—I think the general terms might be the same certainly; for instance, I think the purchase terms might have been the same.

4632. Would you look upon the terms which the Government of India propose as final?—I think the terms which the Government of India proposed were intended to be rigidly adhered to; they were sufficiently elastic.

4633. Could they have been put under the schedule which the Government of India propose?—I have not the schedule with me, and therefore I should not like to give a definite answer without seeing before me the terms which the Government of India actually did propose.

4634. Would not the district through which the lines went through, and the climatic conditions of the country, and the condition of the people, make a very great deal of difference in the terms which the Government might get from the Railway Company in making a railway through those districts?—I do not think it would make much difference probably in the rate of interest guaranteed; it might make a difference in the maxima fares and rates fixed.

4635. It would make a difference, you say, in the amount of the guarantee; is not that a fundamental difference in terms?—The rate of interest guaranteed, of course, is a fundamental point.

4636. Is it not the main difference in making bargains with companies?—It is the main difference undoubtedly.

4637. Does not that really knock your argument on the head?—No, I do not think it does, because what is really important is that the public should know, and have the opportunity of knowing at once, the conditions which the Government are prepared to offer. For instance, a bank alters its rate of discount, but that causes no inconvenience to the public, in so far that the public still know where to go to get their bills discounted.

4638. To use your own comparison of the bank altering the rate of discount, would you propose that the Government should alter the rate of guarantee in the same way as a bank alters its rate of discount?—Not often, certainly; but if money got cheap and the rate of interest fell to 2½ per cent., then I conclude the Government would not continue to offer 3½ per cent. It was one of my proposals that the rate of guaranteed interest to be offered to a company should depend upon the price at which the Indian stocks were standing at the time the offer was made to the company.

4639. That would not be one of the conditions which you would enter in your schedule, would it?—I do not see why not; you might offer terms to the public to the effect that Government would be prepared to guarantee lines at something, say ¼ per cent., less than the current rate of interest on certain stocks.

4640. Then in that case you would propose that the Government of India should make a survey, and then issue proposals for the making of the line under those conditions?—Coming down to practical matters, perhaps the best way would be to let the Government of India make the surveys, and to send the surveys home to the

India

Mr. *Kynaston Cross*—continued.

India Office, and to have a room in the India Office, where the public might examine those surveys, and then to have a small Standing Committee of the India Office to discuss all points of detail with the promoters, certain general rules being laid down for the guidance of that committee.

4641. So that the public might come to the India Office if they felt inclined to enter upon railway work in India, and might have an opportunity of taking it up on the terms which would be laid down?—Yes.

4642. And then would come in the question of guarantee, would it not?—Yes, it would; and this question would be decided by that Committee for the time being on the general principles prescribed.

4643. Then the guarantee would have to be decided by the Committee for the time being in precisely the same way as a guarantee now given is decided by the India Office?—No; I should say not, because at present there is no particular person or persons, as far as I know, appointed at the India Office to whom promoters can go and get what would practically be a definite answer on definite points. I asked a particular promoter to give me his experience, and I will read to you what he says. To begin with, there was some doubt as to whom the first advances were to be made, and he says: "My first letter was addressed to Sir Louis Malet, by whom I was referred to Major Baring. My second advance was to Major Baring, by whom I was referred to Sir Louis Malet. This is literally true, and it is characteristic and typical of my experience from the first beginning of my promoting struggles up to the present time."

4644. I think you said that what you particularly want is continuity of policy with regard to railway matters in India?—I did say so, and I would strongly urge it again as the most important point this Committee has to deal with.

4645. And especially no change with regard to the system of gauges from time to time?—Yes.

4646. I do not know whether you think that would be secured by leaving it to the Government of India?—I do not think it would.

4647. In case you had had Sir John Strachey in India?—We should have had all our lines upon the narrow gauge, I think, had General Strachey remained in India.

4648. Then might you not, after some pressure upon the Government which now wishes to make the broad gauge, have some one in India who would wish to establish the narrow gauge?—The constant changes of policy with each change in the *personnel* of the Government, are much to be dreaded; it is one of the points the Committee has to deal with.

4649. And the way in which you would guard against that is, I think, that you would prefer having some stringent rules laid down by this Committee and a Committee of the Indian Council, who would carry them out?—I should not call what I desire stringent rules; what I would rather have are general principles.

4650. Perhaps you would call them definite recommendations?—Yes, definite recommendations.

Mr. *Kynaston Cross*—continued.

4651. But which would be carried out by the India Office?—Yes, which I trust would be applied by the India Office when considering the different cases brought before them.

4652. We have had some evidence about the possible traffic upon the line, which is to be made through the Central Provinces; could you give us some information about it?—I propose to put the whole of the information about it in the Paper which I am preparing for the Committee. The information is so scattered, that I shall take a little time in preparing the Paper.

4653. With regard to the cost of working the traffic on the standard and the metre guage lines, you answered that pretty fully in Questions Nos. 4333 to 4335 and so on, and what I wanted to ask you about was your method of comparison; you said that the traffic on a broad gauge line cost 22·86 pies per mile, and on a metre gauge line 29·37 pies per mile?—That was for parcels traffic only; only for coaching traffic.

4654. And not goods traffic?—No, only coaching traffic.

4655. In this calculation you take, do you not, the broad gauge, which are old lines, and the metre gauge, which are comparatively new lines?—Yes, I have taken the whole of them.

4656. The broad gauge is a good deal more developed than the narrow gauge, is it not?—Yes, the broad gauge lines as a whole are much more developed; that I have distinctly stated.

4657. Do you think that the comparison would hold good when the metre gauge became anything like fully developed?—That is one of the factors which we should have to weigh in considering the comparative statistics.

4658. The average cost of working the traffic on the metre gauge lines would probably be considerably less as time goes on, and as the traffic increases?—One of the factors, undoubtedly, is the amount of traffic on the line, and the more the traffic the less is the cost.

4659. The traffic being comparatively less on the metre gauge than it is on the broad gauge you would, when fully developed, expect that it would be very much increased?—Yes; that would be the tendency.

4660. You spoke of the cost of transhipment at Nagpur, which amounts to 11·27 pies per ton, and on the Rajputana line to 3 annas 0·6 pies per ton?—Yes.

4661. Will you tell me how many miles of haulage would be equal to that cost?—On the Rajputana line it would represent about seven miles haulage on the average.

4662. It would be equal to seven miles for haulage only?—Yes, about that. It would entirely depend upon the class of goods that were taken, of course; but I am taking them all together. I think that on the Rajputana line it would at one-fifth of a pie per mile be about equal to seven miles haulage.

4663. And on the Nagpur line what would it be?—On the Nagpur line it would be, I should say, about two miles.

4664. Do not you think that there is a very remarkable difference between those two figures?—Yes. I tried before I left India to come to the bottom of the difference; but each auditor sent me the full details of the two figures, and

Mr. *Kynaston Cross*—continued.

each auditor declared that the charge I have given you was the correct cost of transhipment. In fact, I came home in the same ship with the auditor of the Nagpur-Chhatisgurh line, and I could get nothing out of him but that he stuck to his figures. I cannot help thinking that there must be some error.

4665. You would call 3 annas 6 pies a very small cost, would you not?—Upon the face of it the cost of transhipment must be very small. The two wagons are brought up side by side, and the coolies pitch the goods from one wagon to the other.

4666. The traffic varies very much on those lines, does it not?—Yes, very much.

4667. Can you give the Committee any idea of the extent of the variation from week to week?—I am sorry to say I have not the monthly accounts to show the exact variations; but I can tell you, from my own experience of one half-year, that during the months of July and August we were doing absolutely nothing on the Indus Valley line; and we were working at an absolute loss; but the traffic began in September and by December we had to borrow rolling stock.

4668. How long did this considerable amount traffic last?—It went on fairly; there was a drop, as I showed you, in one half year, but as a whole the traffic has kept up pretty constantly.

4669. I do mean from year to year, but the week by week spurt of traffic?—It kept fairly up; it was not a weekly spurt in that case; but there was a great variation between those months before and after September.

4670. On the Indus Valley line, for how many weeks in the year would you have a pretty full traffic?—I could not give you any general idea; the traffic there varies from month to month; it varies according to the advices from home of the ruling prices in England.

4671. On a little line like the Nagpur line, do you know how many weeks of full working traffic you would have in the course of the year?—I could not tell you without a reference, but I should say that they have about four or five months at least of what I should call slack traffic.

4672. Are you ever so full on the Nagpur line that you cannot carry what is offered?—Yes.

4673. How long has that block lasted?—The block has lasted during what I should call the wheat season on the line.

4674. How long is that?—Generally speaking, the wheat season begins in March, you may say, and ends in June or July.

4675. Then it would be from March to June or July that there would be a considerable pressure on the line there?—Yes.

4676. What happens if the wheat cannot be carried within a reasonable time; is there any loss through their not being able to take it away?—Messrs. Ralli & Co. say that there is a loss; I have got the correspondence here which I could read to you if necessary; they say that there is a loss owing to the dryage of the grain.

4677. Has it to be left outside?—Yes; reading these papers which I have got here, I see they calculate the loss from the grain having to be kept in the open at about 1 to 1½ per cent.

Mr *Kynaston Cross*—continued.

"The weight of each bag prior to dispatch from Dongurgurh was 202 lbs.; upon weighing them at Nagpur we found the weight had fallen to fully 2½ per cent." Here is another case. "This we can say with confidence, as we have made some experiments at our various sub-agencies; for example, linseed bags, which we filled up to 204 lbs., we found, after exposing them to the sun for about a week, showed a loss in weight of half per cent. in some bags, and 3½ per cent. in others."

4678. If this wheat were put out of the sun after that, would it recover its weight?—I cannot say, not being in the trade; this is what they say, regarding the effect of the blocks on the line:—"Thus, when the railway cannot carry away what goods we have ready, the stocks in our go downs accumulate very fast; this necessitates our storing goods in the open."

4679. That only lasts, at the most, for three months in the year, you say?—Granted; but it is those few months in the year when the railway really makes its profit; you may say that the Nagpur and Chattisgur line is in much the same position as the Burmah lines, that is to say, they make the greater part of their profit during the busy season, and this enables them to be carried on through the slack season.

4680. Does not that make it very necessary under those circumstances to go into the smallest cost of construction?—No, it points to having the greatest possible carrying capacity during the time when the goods are offering.

4681. Supposing that the goods so accumulated were to come down in four months instead of in three months, would that make any very great difference?—That I would rather you took evidence on this point from some of the merchants; it affects what they call "forward contracts."

4682. It would simply spread the delivery over a longer time?—It would; but they would possibly miss the market and lose their freight.

4683. Does the railway company undertake to deliver the goods within any particular time?—No.

4684. They simply take them in and send them off as fast as they can?—Yes.

4685. Do you know, between one week and another, what the variation is in the receipts?—No, I have not got the figures before me, but on my own line, the Indus Valley line, they varied from 70,000 rupees to about 200,000 rupees a week.

4686. Was the figure of 200,000 rupees continuous for some considerable time?—Yes, after we lowered our rates it went on for a time, but it would rise and fall; in one week it would run up to 200,000 rupees, and in another week it would fall down to 180,000 rupees, or 160,000 rupees, or 130,000 rupees.

4687. Could you put in tables to show the variations?—We could easily get them from India.

4688. You have put in a table; may I ask if you exclude from those figures the loss by exchange on the supply of stores?—I exclude the whole loss by exchange on capital account.

4689. Are you aware that stores are always put in the capital account in the Home Accounts?—Yes.

4690. Then

Mr *Kynaston Cross*—continued.

4690. Then you would exclude the loss by exchange on the supply of stores?—No, not on the stores used for revenue.

4691. Are not stores always raised for revenue?—Not all; some of the stores now invoiced are for extensions and additions. I see that the additions on the East Indian line come to about a million a year. Certainly to my statement must be added the loss by exchange, whatever it may amount to, on the revenue stores.

4692. Are your stores supplied at cost?—I was obliged to take the figures as they stood in the return drawn up in the India Office, because I had not the data for altering them; this slight addition may be put against the cost of land if the cost of land is entered against revenue, which I fancy it is. I put in some statements the last time I was here, and one of those statements, No. 9 C., shows the revenue transactions of the State railways. After taking into account all indirect charges, such as loss by exchange, capitalization of the abatement of land revenue, leave and pension allowances, &c., the statements show what the State lines have actually earned after making allowance for all those things.

4693. They show a much better condition than the guaranteed lines on the old terms?—They do.

Chairman.

4694. You have more than once expressed a desire that this Committee should lay down something like a principle to guide the Government of India upon the question of gauge; would it be sufficient, in your view, if the Committee were to express an opinion that all the leading trunk lines in India, and all the lines on the great plains of Central India and in the North Western Provinces should be upon the broad gauge, the metre gauge being confined to comparatively isolated districts; for instance, Assam, Madras, and Kattiwar; would that be sufficient?—Yes, I think that would be sufficient.

Mr. *W. H. Smith.*

4695. With regard to these definite principles which you have attempted to lay down, would you include in these principles a limitation of expenditure so as to preclude additional taxation?—Yes; so as to exclude additional taxation.

4696. You would lay that down as a most important principle to be insisted upon by this Committee?—Yes.

4697. You have recommended that there should be a schedule of terms to be offered by the Secretary of State in Council to companies desiring to make lines in India?—Yes, I do not think it would be impossible to draw up such a schedule.

4698. You would, of course, include the amount to be guaranteed under any such arrangement within a sum which was to preclude additional taxation?—Certainly.

4699. So that it would come to this: that you must limit your annual expenditure, whether by the companies or by the State, to an amount which would not involve additional taxation?—Certainly, because I do not see the slightest difference so far as the taxpayer is concerned, whether the amount spent on railways is spent through the direct agency of the State, or through the indirect agency of companies guaranteed by the State.

Mr. *W. H. Smith*—continued.

4700. Therefore that would involve the limitation of the amount to be raised by loan, or to be raised by guaranteed companies?—I said distinctly that I did not think it would be advisable to lay down any definite limit of expenditure at all beyond the principle that the taxpayer should not be more burdened than he is at present.

4701. Who should be responsible for the application of that principle, the Government of India or the Secretary of State?—The Government of India under the control of the Secretary of State. The Government of India draws out a Budget, and the Budget would show at once whether there was any further taxation required to meet the outlay, and I conclude that if the Secretary did not agree to the Budget as drawn out he would address the Government of India to that effect.

4702. This, of course, would be prospective to a very considerable extent. We have had witnesses who proposed that the railway expenditure in India should be made prospective for a period of five years, and revised every year. It is clear that a railway when it is undertaken must be carried out, and it might take three or four years to complete; and therefore your scheme must be a prospective scheme; you would require to frame from year to year a proposal or scheme which would extend over the four or five coming years?—I think the system of forecasts, which was introduced by Lord Northbrook, regarding which there was a good deal of evidence before the last Committee, was a very excellent system.

4703. You propose that that system should be adhered to?—I think it should be adhered to. Practically speaking, every Budget is in itself a forecast, but it extends over only two years instead of having the whole programme of the next five years drawn out.

4704. Then it would be essential in order to insure successful or prudent application of those principles that your Railway Budget should take in a longer period of time than the ordinary Financial Budget?—I think that the system of forecasts instituted by Lord Northbrook was calculated to produce a good result.

4705. How was it that it broke down?—I do not think it broke down at all; it was discontinued.

4706. Why was it discontinued?—The only reason that I can imagine for its being discontinued is that the next Viceroy did not ask for any further forecasts. I find no orders actually discontinuing the system.

4707. It was simply dropped?—Yes.

Mr. *Kynaston Cross.*

4708. Do you know why it was dropped?—No, I cannot say.

Mr. *W. H. Smith.*

4709. Are you able to say, off-hand, what amount you think might be raised properly by loan and by guarantee, in the course of every year, as an additional charge upon the revenues

Mr. *W. H. Smith*—continued.

of India, without imposing additional taxation?—*No*; I could not say, off-hand.

4710. You would not say that in the next five years we might raise 5,000,000 *l.*, 6,000,000 *l.*, or 7,000,000 *l.*?—*No*; I should not like to name any definite sum.

4711. It must be a matter of very careful consideration?—Yes.

4712. You have been asked a good deal about the meter gauge and the broad gauge; have you considered the question of the gauge for the Nagpur Line; have you any view upon that subject?—Yes; I think that the Nagpur Line should be on the broad gauge; it is a link between two broad gauge lines. The traffic would go out at both ends, and on to broad gauge lines; it must go over broad gauge lines to get to the sea-board.

4713. Would you convert the narrow gauge lines which already exist into broad gauge, in order to carry out your scheme?—Yes; it would not be so great an additional expense as it looks at first sight, because the whole of the rails, permanent way, rolling stock, and engines, can be easily utilised on other narrow gauge lines.

4714. Then you would take them up and lay down broad gauge rails, and have broad gauge rolling stock?—Yes.

4715. We have had some very strong evidence as to the economy of carrying on traffic on the broad gauge as compared with the meter gauge; are you aware that there is a very strong opinion in favour of the meter gauge as against the broad gauge, as regards economy?—I have never heard any opinion in favour of the narrow guage on the grounds of economy of working, but I have heard such opinions on the grounds of economy in construction; everbody recognises the superior economy in construction.

4716. I think it will be found that there is an authority of some weight who is prepared to maintain that traffic can be carried over the metre gauge on the Rajputana Line, at a cost not exceeding, if it is not less than that for a similar amount of traffic on the broad gauge?—I think it would be unfair to judge of the point from data desived from one line. The Rajputana Line has been wonderfully well managed, and economically worked. It has been a line to which I think I may say the Government of India has paid the greatest attention in the way of designing its rolling stock so as to carry a maximum load with a minimum dead-weight. The older lines, the broad gauge guaranteed lines, have this great disadvantage, that their rolling stock was designed for the most part at a time when those considerations were not thought of so much weight as they are at present.

4717. I see by the figures furnished to the Committee on Issue No. 10*a*., there is a statement that on the Rajputana Line the cost of waggon expenses per train per mile is 1·43 pies, and it is lower actually than any other charge whatever, excepting on the Cawnpore line. That is only one element of the cost?—It is merely the cost of repairing the wagon and carriage stock.

4718. On the other item, that of "Gross ton mileage of goods trains" at page 11 (App. No. 23, p. 808), the East Indian is the lowest of all.

Mr. *W. H. Smith*—continued.

One can well understand why that should be, for it has the heaviest traffic. Then you come to the Great Indian Peninsula, 3·71?—That is only for one-half year. If you look at page 12 (App. No. 23, p. 809) you will get the whole five half years compared.

4719. The hauling of one ton of freight per mile, is on an average 3·60?—Yes, the working expenses for the whole of the broad gauge.

4720. And the whole of the narrow gauge is 5·62?—Yes.

4721. Are not the narrow gauge rails adapted to a thinner traffic?—They are undoubtedly. That is one of the points which I specially brought forward as affecting the statistics; but on the other hand, the broad gauge lines have the disadvantage of an enormously heavy capital cost, and also the fact that their stock was not designed with the same skill as the narrow gauge stock is at present; you must put all those different factors which I have mentioned the one against the other.

4722. Then you would be prepared to concur in the evidence which we had from Mr. Glover at Question 1850, on the 4th April, to this effect: "My own experience of haulage is in connection with my own contracts for carrying ballast for my own lines; the average cost of the haulage of my own ballast by train on the broad gauge is 1*s.* 6*p.* per 100 cubic feet; on the narrow gauge the haulage of 100 cubic feet, the same distance, is on the average 2*s.* 4*p.*"?—Mr. Glover's evidence is in accord with my own, that the working expenses on the narrow gauge lines are the heavier.

4723. On precisely the same conditions?—Yes, under precisely the same conditions. I wish on this point to put in a letter from the Government of Madras to the Government of India, in which, after going into the matter of the cost of working, the Government of Madras writes as follows: "On the general question of the working of the broad and metre gauges, I am to state that in his Excellency's opinion the results attained in this Presidency point to the conclusion that, whatever economy in working there may be on the metre gauge with inconsiderable traffic disappears when the work to be done by a train approaches the capacity of the broad gauge; and that the saving in first cost is not sufficient to justify the evils of break of gauge and limited carrying capacity in times of pressure, except in localities where the probability of pressure is remote, and the break of gauge local in its effect." If you were to take the most favourable narrow gauge line, undoubtedly it would be worked cheaper than a bad broad gauge line; but if you wish to take the most favourable narrow gauge line, you ought to take for comparison on the other side the figures of the most favourable broad gauge line, the East Indian Railway.

4724. I think that the Committee would wish to have evidence as to the cost under conditions which are precisely the same, favourable or unfavourable, in both cases?—I am afraid there are no means of getting such figures. The question entirely depends upon the principles which I indicated at the beginning of my evidence on this

Mr. *W. H. Smith*—continued.

this subject; the gauge depends upon the amount of traffic.

4725. Would you like to make any further statement with regard to the cost of working?—No, I think not, until I have heard what Mr. Rendel has to say on the other side.

Mr. *Bolton.*

4726. Do these statistics which you have given to the Committee include the cost of maintenance?—Yes, everything; you will find the cost of maintenance by itself.

Mr. *W. H. Smith.*

4727. I think you stated that construction by the Government was cheaper than by companies?—I do not think I quite said that; I said that it was at least as economical; I think those were my words.

4728. This is what you say in answer to Question 4296: "Secondly, the Government, by having a larger selection, and by its more immediate and effective control over its servants, should be able to construct railways more economically than guaranteed companies." Upon that we have already had some evidence from Mr. Glover, who says that when he is contracting with the Government he should ask and would get from 10 to 12 per cent. more than when working for companies; and I asked him whether he expected to get any new work from the Government on those terms, and he said yes, he did, most distinctly?—If you will turn to Issue 4, No. 1, you will see the actual price of the State lines as compared with the guaranteed lines.

4729. There, again, you compare things that are different. I am asking now, taking the Jhansi and Gwalior line, if that line was made by the Government, and let to a contractor, whether Mr. Glover's evidence would turn out to be correct, or whether your view of the case would turn out to be correct?—As I said before, I think it is entirely a question of your staff. If your chief engineer is a capable man the line will be cheap; but, if he is an incapable man, it does not matter whether he is a company's man or whether he is a Government man, your line will be dear.

4730. I understood Mr. Glover's evidence was to the effect that he quarrelled once with one civil engineer; I do not see that he got much beyond that?——

Mr. *Jackson.*

4731. I wish to ask you with regard to the limit upon which the Right honourable Gentleman asked you some questions. If I understand your view correctly, you do not wish this Committee to place any limit as to the number of millions per annum which shall be spent, but only that the principle should be laid down; that however large or however small the sum is which is spent annually it shall not be such a sum as will produce additional taxation?—Yes, that is my view exactly.

Mr. *Jackson*—continued.

4732. And, therefore, if the prosperity of Indian railways continues, and allows of larger expenditure without actual additional taxation, you would desire the discretion to be left with the Government of India?—Yes.

Mr. *Bolton.*

4733. You spoke of the advantage to the existing guaranteed lines of feeders constructed at the Government cost; how would you provide for the Government to share in those advantages in your new contracts?—I can see no way except by making the company carry out the feeders.

4734. How could you do that?—By drawing up the contract as has been done in the case of some companies; *i. e.* to make the contract include all feeder lines that could possibly be wanted for the main line.

4735. How are you to judge of the want?—That is a difficult matter. You know that the South Mahratta and the Patna-Baraitch contracts both included certain branches as well as the main line.

4736. And there may be others that were not contemplated at the time?—Precisely so. I do not see any system of securing the desired end except by putting in a general clause to the effect that the companies should make whatever branches were required.

4737. Who is to determine the requirement?—I should let that be a question of agreement between the company and the Government.

Mr. *W. H. Smith.*

4738. I see you state that the Government salaries are lower than those paid by the private companies?—Yes, they are.

4739. Is that really the fact?—I think it is, without doubt.

4740. Do you include pension and furlough?—The companies' servants get furlough allowances as well as the Government servants, and they get a bonus, which we do not, at the end of their service; but they do not get pensions.

4741. Are you generally of opinion that for a given amount of work the pay is less under the Government?—I judge of the matter in this way; that when companies have finished construction, or in any other case where the servants of companies are unemployed, they are always willing to come to the Government service at a lower rate of salary.

Mr. *Bolton.*

4742. How do you account for that?—I account for it principally upon the ground of the greater certainty of the employment.

Mr. JAMES WESTLAND, called in; and Examined.

Chairman.

4743. WHAT is your position?—Comptroller and Auditor General to the Government of India.

4744. You wish to give evidence to this Committee upon a variety of particulars, and first I understand that you wish to state what is the famine policy of the Government so far as finances are concerned?—The famine policy of the Government was first of all laid down by Sir John Strachey in the financial statement for March 1878, in which he laid down the necessity for the Government having each year a surplus of 1½ million for famine insurance, in addition to the surplus of half a million which the Secretary of State had ordered should be ordinarily shown in the accounts.

4745. In what position was Sir John Strachey?—Sir John Strachey was Finance Minister at the time; he was the Member of the Council of the Government of India who had special charge of the financial affairs. In paragraph 28 of his Financial Statement, the policy as it was then conceived was thus laid down. Having described the necessity of imposing new taxes in order to preserve this surplus of a million and a-half for famine, he says: "The proceeds of these taxes, together with the sum of 400,000 *l.* which will be gained by the extension of provincial responsibility, make up a little more than the 1,500,000 *l.* which is annually required for the insurance of the country against famine. The manner in which the Government proposes actually to apply this sum was fully explained by the honourable Sir John Strachey in his speech in the Legislative Council on the 9th February 1878. By following the course which is proposed, the Government of India will virtually reduce the public debt by 1,500,000 *l.* a year, and resources will be stored up in years of prosperity by means of which, when famine actually occurs, it will be possible to discharge the heavy obligations which then fall upon the State. By investing in productive public works from the resources thus specially created, a sum of 1½ millions yearly, instead of from borrowed money, the charge for interest which would otherwise arise will be saved, while an additional income will be created from the works which will supply in the future a source from which to meet, without increased strain on the finances, a corresponding interest payment on any debt which may then be incurred to meet famine charges." A calculation was made that famine in every 10 years would cost 15,000,000 *l.* The Government, by reserving a surplus of a million and a half every year, would obtain on the whole of the 10 years this average surplus of 15,000,000 *l.* But that surplus of course could not be stored away in a box, and as the Government of India had independently of any question of famine established the policy of borrowing every year for productive public works, that is to say, for works which would return in receipts the interest which was charged upon the loans, it was considered that this million and a-half might every year be invested in productive public works, so as to save the necessity of

Chairman—continued.

additional borrowing. By that means at the end of a cycle of 10 years the Government would have only borrowed the same amount which it would have borrowed if there had been no such thing as the possibility of a famine in India, and no necessity to lay by a surplus for it. In 1878–79 this surplus was actually realised, but in 1879–80 war and exchange had run away with the whole amount. In the Financial Statement for March 1880, Sir John Strachey repeated the same statement of famine policy, showing that the average surplus of a million and a-half reserved for famine, and half a million for other purposes, had really been realised, although special expenditure in connection with war had run away with the money, that is to say, the taxes which had been imposed and the general policy of the Government had been successful so far; but this war had absorbed the whole amount. Before this time there had been a correspondence with the Secretary of State upon the subject of expending part of this famine surplus of a million and a-half upon protective works. The Secretary of State had authorised its being partly expended upon protective works, but unfortunately, as the war had absorbed the money, no protective public works had been really undertaken. In paragraph 69 of the Financial Statement for March 1880, this statement is made: "The limit of 2,500,000 *l.* which has been placed on our annual expenditure on productive public works has avowedly no sort of finality. 'The amount to be annually expended' (I am quoting from the Report of the Committee of the House of Commons) 'should mainly depend upon the financial condition of India, and should therefore, for the present, be limited to an amount of 2,500,000 *l.*, as recently fixed by the Secretary of State for India in Council.' Considering what our financial condition already is, and what we hope it will be in the future, I predict, with confidence, that the check which has been placed upon our expenditure on useful works essential to the progress of the country and to its protection against famine, will be only temporary, and that the execution of the plans described by your Excellency two years ago, has been only temporarily deferred." I am reading from the Financial Statement of March 1880, in which Sir John Strachey refers to the proposals which have been made by the Government of India to expend part of this surplus of a million and a-half on protective and productive works. "But at the same time I wish to make it clear that if the Government of India has failed for the present fully to carry out its programme for the construction of material works for protecting the country against famine, no responsibility for that failure rests upon us." Next year, in March 1881, new orders were given with reference to this particular surplus of a million and a half of money; it was brought actually within the accounts as expenditure. At that time it had been laid down by the Secretary of State that half the amount was to be actually expended upon protective works, and

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and half the amount was to be reserved and placed in the hands of the Commission for the Reduction of Debt, and applied to the actual reduction of debt, and the whole amount of a million and a half has ever since then appeared in the accounts as actually expended, whether it has been used for the construction of protective works, or whether it has been handed over to the Commission for the Reduction of Debt. The question of using part of this famine surplus of a million and a half for the payment of interest upon money borrowed for the construction of protective works was first of all raised by the Government of India in 1879. It was recommended by Lord Lytton's Government on a proposal to construct railways out of borrowed funds, and hypothecate part of the famine surplus for the payment of interest. The proposal, which was made in 1879, was at that time negatived by the Secretary of State. The proposal was made by the Government of India in a Despatch dated the16th September 1878, and it was answered by the Secretary of State in a Despatch dated the 20th of February 1879. It is from that beginning that the present proposals started, and for that reason I am going back to those years to show how the present proposal has developed itself from the minor proposal which was made in 1879. Paragraph 12 of the Secretary of State's Despatch in re-stating the proposals made by the Government of India says, "You explain that in sanctioning the execution of a work from borrowed money, the cost of which was to fall on the general revenues of the country, you have hitherto, subject to the sanction of the Secretary of State, decided on the merits of each case, whether or not the risk of constructing it should be incurred with reference to the period within which it might be reasonably expected to become remunerative; and you are of opinion that this principle may be extended to the action of the provincial governments. At the same time you observe that if unremunerative works are carried out from the money provided for the cost of counteracting famines, under conditions which reduce the surplus so provided beyond a certain limit, additional taxation will be eventually required to make good the loss. But owing to the difficulty of discriminating between works strictly productive and those only admissible as providing against the effect of famine, you propose" (and it is part of the present proposals also) "to accept a yearly maximum dead weight charge, to be fixed as experience may suggest for works constructed as productive, whether under the existing strict conditions, or as now proposed, in order so prevent famine, or give protection from famine, or diminish the expenditure for the counteraction of famine if it occurs. In other words, you 'would limit to a specific maximum amount the net expenditure for the interest on the capital cost of all such works, and their maintenance after setting off all the net income yielded by the works.'" At this time, 1878, nothing whatever was being spent on protective works of any kind. This was the first proposal to construct public works with the deliberate object of protecting the country against famine. "This amount" (that is the amount to be set aside out of the famine

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surplus for the payment of interest on capital so required) "you would for the next five years fix at 25 lakhs of rupees in any one year, in addition to your 'existing net liabilities,' and you think that the famine insurance fund of one million and a half sterling may be safely reduced by that sum, on the consideration that the construction of any works not fully productive according to the existing definition which may be thus facilitated, will cause an equivalent reduction of your ultimate liability on account of famines when they occur." The ground on which the Home Government refused its sanction to this proposal is stated thus in paragraph 18 of the Despatch: "The first claim on these receipts being that of the Home Government for the repayment of debt already incurred on account of famine, I am of opinion that not less than one-half, or say 750,000 *l.*, should be held available for remittance to England in the next and ensuing years on that account. The remainder may be appropriated at your discretion to the extinction of debt, to the relief of famine, or to the construction of protective works, not necessarily directly remunerative, but obviously productive in the sense of guarding against a probable future outlay in the relief of the population; I cannot, however, under present circumstances, sanction the raising of capital by loan for the construction of works which do not distinctly fall under the regulation laid down for productive public works." That is, that within a certain limited period they should be able to return their interest. This gave a sanction to the appropriation of half of the million and a half for the construction of protective works. I wish to point out with regard to this, that this appropriation involved the authorisation of the construction of that amount of 750 000 *l.* a year out of borrowed money. It is obvious that when you come to the end of 10 years, and you have during that period borrowed 15 millions on account of famine, you will have in hand only 7½ millions of surplus to meet it, because the remaining 7½ millions will have been spent upon protective works, so that whatever the amount is, a million and a half, or whatever it is, every year that you spend upon protective works, it is practically to all intents and purposes taken out of borrowed capital. There is not much doubt now that the million and a half which was estimated as the cost of famine was an excessive estimate. Sir John Strachey himself made the estimate, and I see in his book, he says that it was too high an estimate; and at present it is part of the basis of the proposals of the Government of India, that in the opinion of the Government of India they may entrench upon the total million and a half without practical risk of causing an excess in respect of charge against the revenues for famine. Of course it is very difficult to fix the cost of a famine, but this estimate of a million and a half was made immediately after the Madras famine, which was the biggest famine on record, and probably such a famine as only occurs once in a century, and bearing in mind the very heavy expenditure upon the Indian famine of 1873-74 Since then we have had a long succession of good seasons, and the good seasons naturally make us reduce

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the total estimated cost of famine; but it is utterly impossible to say whether the cost of a famine will on the average be a million and a half, or only a million and a quarter. The next proceeding in respect of the million and a half set aside for famine, was after Lord Ripon became Governor General. He took up the question in 1881, and the Despatch of 1881 is amongst the Papers which have been put in before the Committee. It is No. 2, beginning with page 6 (App. No. 1, p. 492); that Despatch is practically the germ of the present proposals. At that time the Government of India had in mind the refusal of the Secretary of State to authorise any money to be borrowed for the purpose of these protective works, and the consequence is that this Despatch recommends that those lines should be carried out by guaranteed companies.

4746. Will you explain what the proposals of the Government of India in 1881 were with regard to railways?—The proposals were to invite the companies under guarantees to construct the necessary lines, and the lines at that time were described very much as the lines which are now laid down in the Schedule of 1884. The Famine Commissioners in their report have pointed out that there were four or five parts of the country especially which required protection, and they also described certain railway lines which they thought it would be advisable to construct. They made a rough estimate that about 5,000 miles of lines would be required; but the Government of India on the consideration of their report went into the matter a little more in detail, and they came to the conclusion that 3,000 miles were all that were required. Then, in paragraph 7, they say: "We look upon it as quite out of the question to attempt to obtain by fresh taxation any such sum as would be required for the construction of the 3,000 miles of protective railway which we have in view in the course of the next four or five years; while the recognised policy of Her Majesty's Government and of Parliament, to which it is our duty to adhere, precludes us from raising the sum required by way of loan." "Under these circumstances, and in the present financial position of India, we have no hope of being able to effect what we urgently require without a delay which it is of the utmost importance to avoid, except by entrusting our railway works to private enterprise, under a safe and reasonable guarantee." Then there were two minutes attached to this Despatch; one by Mr. Rivers Thompson, now Lieutenant Governor of Bengal, in which he advocated raising money by loan, and one by Major Baring, who recommended private enterprise, or the carrying on of the works as far as they could be constructed out of the current revenues, but he did not advocate borrowing. He urged also that they should be constructed on the cheapest possible scale, and this is also one of the principal recommendations of the Famine Commissioners. The answer of the Secretary of State is in the Despatch of the 8th December in the same year, No. 3 of the Papers before the Committee, and it was practically this: That the burden imposed by the handing over of these lines to be constructed by guaranteed companies did not materially differ

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from that of additional indebtedness, and he was not prepared to sanction it, at all events, until the position of the Indian finances was more favourable: "Until it is possible to form a more certain estimate of the financial position of the country I feel compelled to withhold my sanction from a more rapid outlay than the existing rules permit. But those rules were confessedly of a temporary character, imposed in a financial condition of the country which inspired grave alarm, and which cannot be said to have, as yet, absolutely passed away." Then he says in paragraph 22: "It may, however, be reasonably hoped that the financial condition of the country may soon admit of a more free expenditure on public works. The cessation of the operations on the north-west frontier of India has afforded great relief to the finances; and, if the fiscal system of the country is placed on a really sound footing, and an adequate surplus of revenue secured, it may, I trust, be feasible to devote larger sums of money to the development of the more backward districts, without the fear that the burden thereby imposed upon the people of India is increasing more quickly than is justified by the results, or than the population can bear without undue pressure." So that it was practically an invitation to the Government of India to take up the subject again as soon as they found their financial position to be stronger than it was immediately after the Afghan War. It has been found to be so to such an extent that they have been able to remit a very large amount of taxation. Having attained this position, they took up the railway question again in 1883. But, in the meantime, they had, under the Despatch of 1881, been making surveys and completing inquiries all over the country with reference to the particular lines which had been recommended by the Famine Commissioners, and which they had proposed to the Secretary of State in 1881; so that in 1883 they were really very much further advanced in the consideration of the matter than they were in 1881. The state of matters was put more in detail before the Secretary of State, with the figures both as regards the cost of construction and as regards the character of the work, which was impossible for them to set forth in 1881.

4747. They had gone into every question, had they not, more fully and with much greater information?—Yes.

4748. Will you state the proposals of the Government of India of 1883?—The proposals of 1883 practically went over the whole ground of possible railway enterprise in India, that is to say, whether the railways were required for protective purposes, or whether they were merely required for productive commercial purposes.

4749. They include, do they not, Schedule B., which Major Gordon said we may dismiss?—That is what is put down as purely commercial; the Government of India set these commercial lines, at present on one side; they say that for the present their business is to protect the country against famine, and as that will absorb the whole of the advances that they can give to railway enterprise during the next five years, they have nothing for the present to do with lines which are wholly productive, and have

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have no reference to the protection of the country from famine; although a great many lines laid down for famine purposes are also productive. Schedule A. includes those lines which have in each case a distinct object with regard to famine; they either run through a country which is liable to famine, or as in the case of the Nagpur and Chattisgarh Line, they run into countries where there is a large reserve of grain, and enable that large reserve there, instead of being a loss as it now is, to be brought to the relief of famine in other parts of the country. The Chattisgarh tract is a tract which, the Famine Commissioners say, is absolutely free from any risk of famine. It is an extremely productive country. The line which has been run into the country from Nagpur it is intended to carry on to Raipur. At present it only goes 146 miles to a place called Dongargarh. It is a marvellously productive line, and I think it pays at present something like 6 per cent., although it has only been opened within the last five years. The country is comparatively sparsely inhabited, and before this railway ran into it, I believe a quantity of the grain that grew there was to a very large extent lost. It was sold at fabulously low prices at Raipur and Sumbulpur; when I was at Nagpur, where I was stationed for some time, the quantity of grain that used to come pouring in from the Eastern Districts towards the Nagpur Station, to be carried away towards Bombay, was enormous. Of course it was with reference to carrying that grain into the Nagpur District that the line was run into the Chattisgarh Districts.

4750. Are the railways that are mentioned in Schedule A. more or less required for protection against famine?—Yes, they are.

4751. And are they looked upon in that light by the Government of India?—They are looked upon in that light by the Government of India. If you refer to page 77 of the Papers before the Committee (App. No. 1, p. 563), it is stated that "the railways in Schedule A. may also be summarised from a different point of view, as under." Practically, the whole of it is under heads 4 and 5. Head 4 is "protective and productive 1,953 miles," and Head 5 "protective only 1,538 miles," which items include 3,500 miles out of a total of 3,900 miles; and the balance are lines that are under construction at present, of and course cannot be stopped, even if the Government of India changes its policy from the construction of purely productive lines to the construction of lines as a protection against famine. The Famine Commissioners describe the particular tracts that are liable to famine; one was the eastern coast running up from Madras to Orissa, practically the whole eastern coast, nearly all the way up to Calcutta. In the southern part of it there are protective lines proposed in several places; they are called "minor famine lines in Madras," which is one of the items in page 82 (App. No. 1, p. 568). Those lines are intended to connect with the existing railways, being feeder lines to enable the existing railways to connect with the famine tracts. On the western coast there is a large tract which is liable to famine, namely, north of Mysore and south of Bombay. The main lines which are proposed there are the Southern Mahratta Line, which is under construction at present, and will partly be opened during the current year, which runs to Bellary, Hubly, and Marmagoa, and is intended to connect with the western coast. That system of lines is also intended to connect with the existing Mysore State Railways, the whole of that country being liable to famine. Another line in that same part of the country is the Western Deccan Line, for which arrangements have already been made with the Southern Mahratta Company. It runs from Poonah to Sattara and Belgaum. Another tract which is particularly liable to famine is the Bundeleund tract, around Jhansi. There are several lines proposed here. One is the State Line from Manikpur, a station on the East Indian Railway across to Jhansi. Another is the Cawnpur Line, from Cawnpur to Jhansi, intended to feed the Jhansi tract and Bundelcund from the Doab districts near Cawnpur. Another line runs down from Jhansi and will meet the Bhopal Line, when the Bhopal Line is finished, which it is not yet. From this tract another line runs eastward to Bilaspur, the intention being that that line should enable the grain, which is very largely in excess in the Chattisgarh plain, to be carried into the famine tract of Bundelcund. Orissa is proposed to be protected by al ine running from the Chattisgarh lines across to Orissa, so that the grain may be conveyed into Orissa if necessary. Another tract which is liable to famine is the high tract on the west of Delhi between the Ganges water drainage and that of the Indus. There a line has already been constructed and is open from Rewari to Hissar, and is being carried on through Sirsa to Ferozpur, running quite through a tract which is particularly liable to famine. There was a beginning of a scarcity last year in that tract. The Rewari and Hissar line and the South Mahratta line were the first railways which the Government of India constructed, as purely protective lines.

4752. Have you anything more to state with regard to the Government's proposals of 1883?—A correspondence took place between the Government of India and the Secretary of State, as to whether or not the proposals of 1883 were a sudden expansion of railway construction. It is practically a mere controversy over words. The Secretary of State had replied to the proposals when they were first made in 1883, that the Government had resolved to appoint a Select Committee to consider the whole matter, and that he was not prepared, therefore, before the Committee reported, to give final orders. So that the whole of the correspondence that went on after that was of no particular moment.

4753. Now will you tell us the actual risk which the Government of India proposes to undertake in this 1883 scheme of theirs?—If you will permit me I would first mention that a summary of the proposals was again sent in 1884, and that summary in 1884 differed from the original proposals of 1883, chiefly in its adding some new famine lines to the original proposals of 1883. The risk involved in the proposals I will describe in this way. The question is in a large measure the balancing of two risks. On the one side if we could be assured of a period of five or ten years without a heavy burden on account of famine, then the argument would be,

Chairman—continued.

that as everyone admits that the railways must be made sooner or later, it is desirable to push on the construction with all possible speed so as to bring the country as soon as possible into a condition of protection against famine so far as railways can help. But if a famine were in the meantime to come, there is no doubt that if we undertake construction on an extensive scale, we find ourselves by reason of these obligations less able, so far as financial position goes, to meet the strain of famine. We are pledging the margin of our resources very largely for protective railways, and the practical wisdom of this depends upon the estimate we made of the demand upon them of any actual famine. The choice is between carrying out the railways from revenue, confining them to a rate of progress which will not be perceptible as a protection against famine, for some 15 years, or on the other hand, attaining the desired result by a concentrated effort which is admittedly beyond the capacity of current revenues and necessitates borrowing upon the security of them. The Government of India believe that the justification for this course lies in the fact that the railways proposed by them will be to a large extent productive, and that they can look forward to a very early time when their productiveness will so far diminish the financial burden they bring with them, that the Government will find their financial position, so far as current revenues are concerned, as secure as it is at present, and themselves the richer by the possession of over 3,000 miles of railway.

4754. So that the Government of India are of opinion that not only are the lines proposed in Schedule A. likely to be valuable in case of famine but will themselves in a very short time be productive paying lines?—Yes, the State classifies more than half of them as protective and productive. The word "productive" has the technical meaning, that within five years after the mean date of opening they will pay 4 per cent.

4755. The Government on their own responsibility consider that they are justified in making that proposal, having due regard to the state of Indian finances?—Yes, they believe that the burden between the present time and the time when these railways will absolutely pay, is not more than the present and future position of the State finances will be perfectly able to bear without having recourse to any new taxation.

4756. In future they believe that all railways will be of great advantage commercially to India as well as a protection against famine?—There is no doubt that every railway made in India is an advantage commercially. There is hardly a mile of railway that can be laid down in any part that will not pay ultimately.

4757. What do the Government propose to do with regard to the commercial lines?—With regard to the commercial lines, they leave them out of consideration altogether for the present. If private enterprise desires to take up any line they will give it all facilities as

Chairman—continued.

far as regards giving information; they are also prepared to give the land, but beyond that they are not prepared at present to go. They consider that they will be sufficiently burdened at present by undertaking the protective lines, and they are not prepared to give anything at present in the way of financial aid to lines that are only productive and not in any sense protective.

4758. On the part of the Financial Department of the Government of India are you prepared to agree with Major Gordon that we may dismiss from our minds all the railways in Schedule B.?—Yes, that is the case.

4759. Am I right in understanding that the Government of India merely put them in in order to show that they have not lost sight of them, and that as forming part of the great programme of the Government they might be advantageous?—Exactly so.

4760. You have received representations from the commercial bodies of India with reference to the rate of railway progress; of course we are aware of them; but will you give us a rough idea of their number and nature?—Representations have been received from the Madras Chamber of Commerce, and from the Bombay Chamber of Commerce; they are both printed on page 100 of the Papers. (App. No. 1, p. 586.)

4761. And from the Bengal Chamber of Commerce as well?—No, not that I am aware of; but proposals as regards the general policy have been received from Bengal. The Bengal merchants have gone further than either Madras or Bombay, because they have actually come forward with proposals to undertake railways.

4762. I understand that the Bengal Chamber of Commerce have expressed an opinion, very decidedly indeed, but their proposals do not go nearly so far as the Chamber of Commerce of Bombay?—I cannot say what the official opinion of the Bengal or Calcutta Chamber of Commerce is about it, but the Madras Chamber urge the application of the famine fund to raising money by loan so as to push on the famine railways with greater speed. Their proposal embraced the hypothecation of the whole of the 750,000 *l.* set apart for protective works. The Government of India do not go as far as the Madras Chamber, as their proposals neglect the fact that the actual money cost of a famine is the first charge upon the famine fund. They are not prepared to hypothecate the whole 750,000 *l.*, but their proposal is to hypothecate 200,000 *l.* or 250,000 *l.* The Bombay Chamber go farther, and propose that the two and a half million sterling annually raised by loan should be used for thus raising capital. I do not understand, and am not able exactly to follow what their proposal is; it seems to me as it stands a very extraordinary proposal to make, and I do not think they can actually attribute this meaning to it themselves.

4763. Those are the only two public bodies that have made representations on the subject?—Those are the only two public bodies who have done so.

Tuesday, 20th May 1884.

MEMBERS PRESENT:

Mr. Baxter.
Mr. Bolton.
Sir George Campbell.
Mr. Carbutt.
Mr. Kynaston Cross.
Mr. Dalrymple.
Mr. Gorst.
Mr. Jackson.
Mr. Onslow.
Mr. Bernhard Samuelson.
Mr. Slagg.
Mr. William Henry Smith.
Mr. Wodehouse.

THE RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

Mr. JAMES WESTLAND, re-called; and further Examined.

Chairman.

4764. YOU have some further remarks to make with reference to Schedule B.?—When I was last under examination, I was asked if I had on the part of the Financial Department, the same statement to make as Major Conway-Gordon had made, namely that the Committee might consider Schedule B. outside the present inquiries. I referred in my reply to certain instructions which had been received from the Government on the subject. As the inquiry indicated that there may be some doubt as to whether Major Gordon's view on the matter was correct, I have thought it well to state the matter at somewhat greater length. If you will allow me, I will refer to one or two paragraphs in the Despatches, and also to a telegram which has been received from the Government since the beginning of this inquiry. The reference in the first Despatch to Schedule B. is in para. 17, page 26 (App. No. 1, p. 512). "With a view to the solution of this question, we have caused two schedules to be drawn up, which we append to this Despatch. Appendix 1, Schedule A., contains a list of the 'Railways indispensable for protective or other urgent purposes, to be completed or made by the State or other agency on its behalf, and State railways under construction.' Schedule B. contains a list of railways to be left for private enterprise;" then it says, "It is with Schedule A. that we are for the moment more particularly concerned." Then after discussing Schedule A., the next statement made with reference to the Schedule B. is in para. 59, page 33 (App. No. 1, p. 519), "Having dealt with all the questions which arise in connection with Schedule A., we now turn to Schedule B., which comprises' the 'Railways to be left to private enterprise. 3,497 miles of line, estimated to cost 24,044,000*l.* are included in this Schedule. Before proceeding to deal with this branch of the subject, it is necessary that we should make some general observations on the subject of the construction of railways through the agency of private enterprise." On page 34, the next page, paragraph 64, it says, with reference to these railways, "The question therefore, really is, shall we revert to what has been termed the 'limited guarantee' system? We are decidedly of opinion that, as a general principle, we should not do so. Having made provision for such railways as are indispensable, but which owing to their unremunerative character, cannot be constructed by unaided private enterprise, we think that we should leave the field clear, and whilst we abandon all idea of taking any part of the profits, we should also refuse to give any pecuniary assistance to any companies which may be formed, beyond giving the land free." Since the inquiries of the Committee began, the evidence has been sent out privately for the information of the Government of India; and the Government of India recently sent a telegram to the Secretary of State with reference to this particular question. The telegram runs thus, "In evidence before Select Committee, we observe repeated assumption that Government of India have recommended 50 or 60 millions on railways in next five years, but we have only recommended 3,896 miles, to cost about 28 millions, including grants on present system, of which half to be raised by private companies. Please correct this complete misconception, and allow Conway-Gordon to see this telegram."

Chairman—continued.

4765. We will pass on now to the question of guarantee; can you lay down any terms upon which the Government might guarantee the capital employed in the construction of a protective line?—I would not lay down any hard-and-fast rule, as it depends largely upon the desirability of the line from a Government point of view. For example, I do not think the Bengal Central was a line which was so desirable. The contrary was the case with reference to the Southern Mahratta; there I think the Government were wise in giving considerable encouragement in respect of it. The lines in Schedule A. are described at the end of

Chairman—continued.

page 88 (App. No. 1, p. 574), as lines which must be made by the State in default of other agency; and it pays therefore to give any terms not worse than the risk accepted by Government if it makes the line itself. And other cases may occur in which the discretion of the Indian Government must be exercised.

4766. Do you think, in other words, that it would be unwise for this Committee to lay down rules as to the question of guarantee?—I do.

4767. You would leave the Government of India to deal with each particular case?—Leave the Government of India and Secretary of State to deal with each particular case.

4768. Would you insert a purchase clause?—In every case of a permanent guarantee I would have a provision for compulsory purchase at a price not above a certain maximum. I think such a provision corresponds exactly with the usual terms of an ordinary loan, namely, that the borrower by paying the principal, can reduce the charge when it exceeds the rate at which he can borrow the money. In paragraph 66 on page 34 (App. No. 1, p. 520), the Government state this opinion: "It remains to be considered whether power should be reserved to the State to purchase the railways, whether those made by unaided, or by aided private enterprise. We think that, on the whole, such a power had better be reserved. A railway will often constitute a natural monopoly and if the monopolists abuse their position, it may be in the interest of the community that the State should have the power to purchase their property, not necessarily with a view to keeping it in the hands of Government, but more probably with a view to selling it again under different conditions. The conditions of purchase, as well as the time after which the right can be exercised, might form the subject of negociation in each case. As regards the conditions, we think that they might form the subject of negotiation in each case, but we may say that we would not insist on too favourable terms."

4769. Then your answer with regard to that is to the same effect, that the case must be dealt with on its own merits, and no hard-and-fast rule laid down?—Yes, but I think it is advisable in the case of a compulsory purchase to lay down some definite price at which the line should be purchased; that is to say, a maximum price being fixed by which the Government might get the line at any time into its own possession.

4770. Do you mean that this Committee should lay down such a line?—No.

4770.* But, in your opinion, it would be desirable that the Government of India should lay down such a line?—Yes.

4771. In regard to the profits, have you any limitation to propose, or what arrangements do you submit to the Committee?—I consider it of great importance that the profits of the line should always be calculated upon a rupee basis as is done in the case of the Southern Mahratta Railway, that is, though the guarantee may be for 3½ per cent. interest in sterling, the charge for this interest should be taken upon the profit and loss account at its rupee equivalent. I consider that the only practical risk is that of the

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fall of silver, and that when a company has obtained a guarantee against this by having its minimum interest calculated in sterling, it should not claim any further protection in the way of having guaranteed interest charged, as in the case of the guaranteed companies, at less than its real cost, against the revenues. In the case of the guaranteed companies we have not only to pay the guaranteed interest, but we have to reckon the charge in such an artificial way that we have to make a further payment of surplus profits where none are made.

4771.* Have you any proposals to make to the Committee in reference to proprietary and debenture capital?—I think that as much as possible of the capital should be in the form of debentures; the object of the Government in having a company to promote the line is, that it shall have a body which is interested in working the line on an economical basis, and in causing it to produce a certain amount of profit; but this advantage is obtained whether the capital is altogether proprietary, or whether only a part of it is proprietary and the rest is debenture capital. The result of a large proportion of the capital being in debentures, is that the proprietary portion of it gains a larger proportion of the profits, and it might be possible under those circumstances, to fix a pretty high purchase price for the whole company, because the extra premium would be paid, when the purchase came to be made, on only a portion of the capital, the debentures, of course, being dischargeable at par. For example, if half of the capital were proprietory, and half of the capital were debenture; then if the Government reserves to itself a right to step in and purchase the line at any time at 150 per cent., it is obvious that the 150 per cent. applies only to half the capital; so that if the whole of the capital is four millions, the limit of 50 per cent. premium involves the Government in the expenditure of only five millions on the whole, whereas if it covered the whole of the capital it would involve an expenditure of as much as six millions.

4772. What do you say regarding the question of gauge?—I am quite incapable of giving an opinion on the engineering question, but I wish to take the opportunity of drawing the attention of the Committee to a recommendation made by the Famine Commission. At page 171 of their Report, they say, "In entering upon a comprehensive measure of such a character the Government should especially bear in mind two things: first, that what is now urgently required is, the supply in the shortest time possible of the cheapest form of railway which can be relied on as being capable of carrying such a quantity of food grain as has been spoken of; to secure these objects it is essential that the first cost of the works shall be reduced to a minimum, and that while the construction is thoroughly durable, nothing shall be attempted at the outset which may divert the available funds from what is strictly essential to what is only desirable as affording increased convenience." I simply wish to call the attention of the Committee to that statement of the Famine Commission.

4773. Now to go to the main point upon which

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which you have come to give evidence; do the Financial Department of the Government of India concur in the proposals contained in the Despatches of 1883-84?—The proposals are mainly the proposals of the Public Works Department, though they have been considered and adopted by the Government as a whole. The view taken in the Financial Department is that it concurs in the proposals as a whole and generally, but does not consider it advisable that the Government should bind itself by any hard-and-fast programme, either as to the particular lines to be made, or the order in which they are to be taken up; and above all does not like to bind itself to the completion of the programme within five years, or any other definite time. It concurs in the principle of making purely commercial lines, for the present, give way to lines which have a protective object, and in the necessity of pushing on the construction as rapidly as possible, by the plan of borrowing funds for the purpose; but would rather not bind itself to raise every year the amount necessary to ensure the completion of the programme within five years. I may be permitted to quote from the opinion of Sir Auckland Colvin, the present Finance Minister, on these matters. He says: "I think that to pledge ourselves to find or to guarantee so much money in so many years is likely to prove very inconvenient. The cost and inconvenience of such an engagement has been glanced at in paragraph 12 of the Secretary of State's Despatch of 16th August 1883. The rapid construction of railways upon a large scale in Europe and in America, has been accompanied by a rise in the price of labour and materials, which has seriously detracted from their financial success; and experience has shewn that India is no exception to this rule. Nor should the extent to which the value of Indian securities might be affected by the new loans which would be necessary to provide for this expenditure, be overlooked at a time when a serious depreciation in the price of rupee paper has taken place, owing partly to the want of confidence which is felt in the future of silver, and partly to the large sales of that security which have recently been made in the London market. I must say that, for my part, I do not believe that 30,000,000*l.* can be raised in five years in the London market, and expended in England in the purchase of material and here in construction, without the gravest risk of inconveniently disturbing the money market at home, if not the labour and wage market in India. This objection applies more or less to any proposals, which commit us to schemes enforcing considerable borrowing in a fixed and limited period. The money must mostly be borrowed in sterling, for we should certainly get but a fraction of so large a sum in India. Who can forecast the change in the relation of gold and silver during that period? and who can say what are the chances of prolonged peace in Europe, and of a favourable state of the money market. In any case we must risk a great deal, for in any case we must, at a greater or lesser rate of speed, go on constructing railways, and therefore continuing to borrow. But these considerations lead me to the opinion that we should, while preparing ourselves for our obligations, minimise as far as possible the risk; and the most obvious way of doing so, is to leave ourselves reasonable latitude. I agree in thinking that we must make our protective railways with borrowed money, for that, if not so made, famine will continue as at present to sweep away millions of lives; the progress of the work, if carried on as at present, being altogether out of proportion to its vital importance. I believe that our borrowed capital should, until their completion, be solely applied to this class of works; and I believe that we must largely borrow in sterling (which, when famine comes on us, we must in any case do, and in inverse ratio to the amount of works completed), because the silver market will not supply the large and recurring calls which we must make. On these points I agree generally with the declared policy of the Government." It will be remembered that Sir Auckland Colvin was not finance minister in 1883.

4774. Do you regard the Government of India as having given an absolute pledge and undertaking, or simply having expressed an opinion that it would be desirable to carry out this programme?—I rather think the latter, so as to leave a certain amount of latitude to the Government as to the order in which they shall take up, and the rate at which they shall prosecute the works.

4775. And with that reservation, you concur in the project which has been laid before the Secretary of State?—That is the view of the Financial Department.

4776. I understand you have prepared Papers in reference both to the financial position of the Government of India at the present moment, and with reference to the bearing of the railway proposals upon that financial position; you will be good enough to put them in; but probably it would be well now to give us a short *résumé*, or explanation of the two Papers; first, with regard to the present financial position of the Government of India?—To enable the Committee to follow exactly the financial bearings of the present proposals, I have prepared two Papers, headed respectively "Present Financial Position of the Government of India," and "Financial Results of the Proposals of the Government of India." Before going through these Papers, I would ask the permission of the Committee to make one or two general explanations with reference to the method I have followed in them. In the first place it must be remembered that the receipts and expenditure of the Government of India are liable to fluctuation to a much greater extent than is the case with those of other Governments. They cover a much larger area, and embrace a much larger number of subjects, as the Government is not merely an administrator, but is in some sense a great trader, and is largely engaged in the exploitation of the country. We have, for example, some 10 or 12 millions of railway receipts, and these are subject to the vicissitudes of trade, and the varieties of seasons. We spend some six millions upon ordinary public works, a class of expenditure which is largely within the control of the Government, so that when finances are not prosperous it is always

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possible to curtail for the time the demands on the Government Treasury; and when prosperity returns the expenditure is allowed on a scale which more nearly approaches the requirements of the country. The opium department is notoriously a source of very great fluctuation, as on the revenue side the result depends on the price opium is fetching in the China market, which is affected by many things entirely beyond the control of Government; and on the expenditure side, it depends upon the amount of the crop, which varies considerably from year to year. Other heads are similarly liable to great variations, so that it becomes impossible to take the figure of any one year as a standard of normal expectation of revenue or expenditure, the accounts of each year being liable under many heads to various qualifications. The plan which I have adopted is, therefore, to take each head of revenue or expenditure separately, and review the figures of the past four or five or seven years. Examining the fluctuations which have taken place during that time and deducing from a general view of the figures what may be stated to be the normal revenue or expenditure, to be expected under that head. It is of course of great advantage to have one actual year of account with which to compare these normal figures, and for this purpose I have selected the last published account, namely the revised estimates for 1883–84. These contain the actually realized results of ten or eleven months, and estimates for the remainder of the year; and it may be taken for granted that the results they show may be used as the approximate facts of 1883–84. So that in these Papers I set forth for comparison with each other, the realized results of 1883–84, and what I consider to be the normal standard of revenue or expenditure under each head. It is unnecessary to trouble the Committee with all the detail of these comparisons and calculations, as it will be sufficient to explain only the leading points on which the accounts of 1883–84 are affected by peculiar circumstances, which cause them to show specially favourable or unfavourable results under each head. Another point which it is necessary to explain is the manner in which I have dealt with the distinction between Imperial and Provincial. This distinction is of course altogether peculiar to Indian Finance, and I know that many persons in examining our accounts have been unable to justify to themselves the process by which we make, as the effect of the Provincial contracts, a lump deduction from, or addition to, our expenditure before setting it against the revenue for a declaration of surplus on the whole account. But for the purpose of the present proposals Imperial and Provincial revenue and expenditure are the same. Railway obligations are to be undertaken on the faith of the sufficiency of financial resources, without reference to their distinction into two categories, and I therefore deal throughout with the conjoint account of expenditure against revenue. It will be necessary for me to revert to the subject of Provincial finance, in discussing the public works expenditure of Provincial Governments. The high figure under this head during

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the last year or two is an abnormal feature, which is certain now to cease. But apart from that I deal, as just stated, with the total of the account of expenditure on one side against the total of revenue on the other. On still another matter I have to make an explanation, namely, the way in which I have dealt with the question of exchange. Our accounts are presented to Parliament in totals, which are made up by the addition of sums of 10 rupees in India, and pounds sterling in England. It is unfortunately a very long time since 10 rupees in India were equal to a pound sterling in England, and this method of making up the accounts, which was once nearly correct, has now become arbitrary and artificial, so that the figures cannot be used in their natural sense, but require a special and technical explanation. We must always bear in mind the effect of exchange, if we would avoid being misled by the way in which the figures are stated. I am not concerned to defend the form of our accounts, it is enough to say that we in India are only too sensible of its defects, and would be only too willing to alter it, if we were permitted. But for my present purposes, I have avoided all cause of error, by carefully distinguishing throughout between rupees in India, and sterling in England, and stating the conclusions separately for each of these two parts of the account, before combining them into a single statement. The present chapter of our financial history commences with the imposition in 1877, of the taxes to which I alluded when I was last under examination, the object of which was to secure the surplus of revenue over expenditure of two crores of rupees, of which 1½ constituted the Famine Insurance Fund. The desired result was actually obtained in 1878-79. But then came the heavy war expenditure, and the surplus was no longer shown upon our accounts. As Sir J. Strachey pointed out at the time, the revenue had fully answered to his expectations. The basis of our financial position was still sound, and the result was accordingly seen the moment the pressure of the war expenditure had passed away. While it had been necessary in March 1877, to add a little over a million in the form of new taxation, in order to ensure the possession of a famine insurance fund, and a moderate surplus; Sir E. Baring found five years later) that was in March 1882) that the revenue had meantime so much increased and developed that he was able not only to remit nearly three millions of taxes, but to introduce several administrative reforms, which added to the expenditure; and of course this was after still preserving the famine insurance of one and a half million. He explained in doing so that the improvement in the position was no sudden accretion, but had been accumulating for some time past. In March 1882, he stated with reference to these matters, "The country had at length recovered from the disastrous effects of the famine of 1877-78. The return of peace enabled the Government to turn its attention to those fiscal and domestic reforms, the consideration of which had necessarily been postponed during the continuance of the Afghan war. A large surplus was available. A favourable opportunity presented itself, therefore, for

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the execution of certain fiscal reforms, the desirability of which had long been recognised. With the exception of the duty on wine, spirits, malt liquor, arms, ammunition, opium, and salt, the whole of the import duties were abolished; a large reduction was effected in the duty on salt, and some substantial relief was afforded to the agricultural classes in the North Western Provinces and Oudh." These fiscal reforms of March 1882 necessarily involved a serious inroad on our financial strength, and it would not have been possible to make them if Sir E. Baring had not both parted with existing revenue and considered himself justified in relying for the future, not only upon the maintenance, but on the further progress and development of the remaining revenue. He says, "There must always be some uncertainty as to the ultimate effect of such important reforms as those which are now proposed. Those reforms are, however, so desirable in themselves that we consider that the estimates for the coming year may justifiably be based on a surplus of only 285,000 *l.* Further, it is to be borne in mind, and this is a consideration of great importance, that we already have in hand the surplus of the current year (1,577,000 *l.*), which amounts to more than three times the normal surplus (500,000 *l.*), for which it is, generally speaking, considered desirable to make provision." The year 1882-83 was, in a sense, a critical year; it has now closed with a surplus of 700,000 *l.* It must be admitted that part of the surplus of revenue arises from extraordinary items which were outside the normal financial position of the year, but on the other hand we had to meet over half a million of expenditure in Egypt. Reviewing the situation in March 1883, Sir E. Baring says, "It would have been no matter for surprise if the Government had been obliged to resort to an enhancement of the rate of duty on salt, in order to balance the revenue and expenditure of the year 1883-84. We are, fortunately, under no such necessity; not only are we able to balance our revenue and expenditure, but we are able, without any increase of taxation, and without in any way starving the public services, or checking the progress of public works of utility, to provide an adequate surplus in order to meet any of the numerous unforeseen contingencies which so frequently arise in India." The experience of 1883-84 has, however, shown a still expanding revenue, and has proved to us that we have now passed over the difficulties necessarily attendant upon a large remission of taxation, and are again in the position of having more revenue than is necessary to balance the account. It is the opinion of the Government of India that although there are one or two questions of fiscal reform which still claim their attention, the best use they can make of these growing revenues is to pledge them as they now propose to do, for the prosecution of a scheme of railway construction, which has for its object the development of the country and its protection from famine. It is at this point, with the accounts as they stand for 1883–84, that I have taken up the examination in the first Paper of the present financial position of the Government of India; and my plan has been to take up each head separately, to eliminate from these estimates any peculiar ex-

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cesses or deficiencies, so as to state what may be the normal expectation of revenue and expenditure. The Revised Estimates for the Government of India in 1883–84, I have stated in the beginning of this Paper, show an excess expenditure of 834,000 *l.*; that excess expenditure has to do entirely with the question of provincial finance. It really is not an element in the situation. Then I have divided the whole of those estimates into two parts, namely, that which is independent of any question of railways and famine, and that which bears more nearly upon the subject before the Committee. The two parts of the Estimate are set forth in Statement No. 1, on page 9 of the first Paper (App. No. 9, p. 638). Here the total receipts and expenditure of 1883–84 are divided into two categories, called respectively A. and B., and I have discussed in a separate Paper the details of the part called A. not immediately connected with railways and famine. In order to do so I have to separate from the head of Productive Public Works certain charges and receipts which we place under that head in order to show Parliament the result of the productive works policy. That is to say, on the revenue side we always credit productive works account with a certain part of the land revenue, and debit it with a certain part of the interest; but of course for statistical purposes that land revenue and that interest can only be considered along with the bulk of the land revenue and the interest. These are what I call the items transferred; and then I re-arrange the estimates for the purpose of consideration solely; but of course the re-arranged figures work up to precisely the same total. If the Committee will be good enough to look at the statement at the top of page 2 (App. No. 9, p. 631), they will find the net revenue and the net expenditure under each section of our accounts, stated, first of all, as they actually stand in the Revised Estimates of 1883–84, and then stated as they would stand if we were to eliminate from the figures of 1883–84 any special circumstances which have tended during that year to increase or diminish the revenue or expenditure of the year. The details of those differences are set forth in Statement No. 2, the last page of the first Paper (App. No. 9, p. 639). It would be far too long a business to go into the whole of these explanations. I can only say that I have them all, and am prepared to explain any of the figures, in which I have said that the normal revenue or expenditure is better or worse than that of 1883-84. It will be seen that I have taken as a standard of land revenue something less than the figures of 1883–84, chiefly because the figures of 1883–84 contain, especially in the North-West Provinces and in Burmah, some revenue which properly belongs to the previous year. Under the opium account I have made a very moderate estimate indeed; it is Revenue upon which we cannot depend to any great extent, and my estimate for the future, of the receipts which are to be got from opium is based on the assumption of a sale of 50,000 chests in Bengal, and of the necessary manufacture for it. That is very considerably below the amount expected to be manufactured in the current year. I have estimated

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the price at 1,250 rupees. It is not very difficult to build upon those assumptions an estimate of what the opium revenue in each year will produce, and it will be found I have estimated for 1,300,000 *l.* less than has been produced in 1883-4. I may say that since I drew up these figures, information received from India has shown that the opium prospects of the present year are very much better than they were at the time when these estimates were drawn up. The next principal difference occurs under the head of refunds; because the figures of 1883-4 contain some special refunds which are not likely to recur. I do not think it is necessary to go through all these things in detail; but I must refer to one very large difference which occurs under the head of "Public Works," and another which occurs under the head of "Army." It will be seen that under Imperial expenditure in public works, I have estimated the normal expenditure at 680,000 *l.* less than is the actual expenditure in this year, but the reason of that is that there is a very large write off of some old expenditure on the Madras Harbour, which enters the figures of 1883-4; it is 533,000 *l.* Under provincial expenditure, I have estimated the annual demand at 368,000 *l.* less than the present, and that involves the explanations which I have given in a separate Paper called "Explanation of provincial deficits and surpluses." I hope the Committee will bear with me in giving a certain explanation with regard to this, because it involves the question of the exclusion from the figures of 1883-4 of the provincial excess expenditure of 800,000 *l.* I wish to satisfy the Committee that that excess will not occur in future, and that it has been caused solely by certain temporary arrangements. The general effect of the provincial arrangement is that when an amount is, in accordance with the contracts with the Provincial Government placed at the disposal of the Provincial Government for expenditure, it is written off the general account whether it is really spent or not, in the same way as if it were expenditure. If it is not actually spent it passes out of the revenue account into a deposit account where it is held at the credit of the Provincial Government, the Provincial Government being at liberty to spend it when it likes. When the Provincial Government does choose to spend it, it has not again to be charged against the revenue account, but it is supplied from the deposit account, and thus it is spent without being charged against the revenue of the year in which it is spent, because, in fact, it has already been charged against that of some previous year; for example, if the Provincial Government has a revenue of 1,000,000 *l.* but spends only 800,000 *l.*, the balance of 200,000 *l.* is nevertheless charged off the General Revenue Account. We can put down only 800,000 *l.* against the particular heads of expenditure, but we charge off the 200,000 *l.* also, adding it, as a separate item, below the totals of expenditure. Next year it spends not only the million it receives, but the 200,000 *l.* also which it held over from the previous year and holds in its Deposit Account. This 200,000 *l.* it would be wrong to again charge off the General Revenue Account, and thus, although we have to put down 1,200,000 *l.* against the

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particular heads of expenditure we deduct the 200,000 *l.* from the total before stating the total expenditure to be taken against the revenue. Now the sums which are held in the Deposit Account of the Provincial Government are entirely sums which have been written off the General Expenditure Account, and the Imperial Government may under certain circumstances re-call them. It did so one year when the heavy expenditure of the Afghan War reduced its resources so much as to cause it to call on Provincial Governments to contribute towards them. But a sum which is thus transferred from provincial to imperial, and ceases to be at the disposal of the former, having been written off as expenditure when it was placed at the disposal of the Provincial Government, must necessarily come in in reduction of expenditure when it comes back again. The ground on which the amount was written off as expenditure has ceased to apply, and so to make the expenditure account correct, the former addition of it to the actual expenditure must now be written back; that is, it must be deducted from the expenditure. Now in this statement I have first of all stated under Heads 1, 2, and 3, certain transactions which caused the transfer of provincial funds to the Imperial Account. Any such transfer necessitates a deficit in the Provincial Account, and an improvement in the Imperial Account. The amount of the total deficit which is thus accounted for is stated in line 6; the total surplus or deficit in the actual accounts in line 7, and the difference is stated in line 8. Now that difference is entirely accounted for by the expenditure upon public works. At the time when our finances were very tight, the Provincial Government were told that we could not afford the money to spend within the limits even of the Provincial contracts. The consequence was they very largely reduced their public works expenditure. During the last few years they have been spending all that they saved up during that time; and you will see the effect of the restriction of public works expenditure if you will look at line 9 in this Statement of Provincial Deficits. In the six successive years it has been 2,900,000 *l.*, 2,700,000 *l.*, 3,200,000 *l.*, 4,000,000 *l.*, 4,500,000 *l.*, and then 4,100,000 *l.* You will see from those figures that if the expenditure of the Provincial Governments on public works, instead of being, as it actually was, and as it is stated in line 9, had been what is stated in line 10, then this Provincial deficit which appears in the Accounts in 1878-79, and 1879 80, and the surplus which came into the Accounts of 1882-83, and 1883-84 would have vanished; that is to say, the provincial expenditure would have used up the provincial resources exactly, nothing more and nothing less. You will see that the expenditure in line 10 runs very regularly indeed, and is quite different in this respect from the actual expenditure which is stated in line 9; that is to say, it is 3,600,000 *l.*, 3,600,000 *l.*, 3,900,000 *l.*, 4,200,000 *l.* Then came the revised provincial contracts, in which the Imperial Government withdrew provincial resources to the extent of 300,000 *l.* or 400,000 *l.* The consequence is that next year the provincial resources only averaged 3,800,000 *l.*, and this last year 3,700,000 *l.* So

that

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that my contention is that these figures prove that the provincial deficits, which have been deducted from the expenditure before declaring the surplus or deficit upon the whole account have been entirely due to irregularity in the public works expenditure. The nature of the contract between the Provincial Governments and the Imperial Government is such that they must return in future to the normal scale of expenditure, and, therefore, the provincial deficit will vanish. This provincial deficit, which has appeared in the Accounts of 1883-84, amounting to 800,000 *l.*, is an item altogether outside the ordinary accounts of the year, and may be left out of consideration in the statement of the actual financial position. It will be observed also that the year 1883-84, under the head of "Army," includes a million of extra expenditure. That is a repayment we have to make to the Imperial Government, and is also outside the account of the year. So that under the whole of the heads of revenue and expenditure in that part of the statement which I have called Part A. (that is to say, that which has nothing to do with railways and famine), the normal results are in India 465,000 *l.* worse, and in England 1,124,000 *l.* better than the total figures of 1883-84. Then after that we have to take up the part of the expenditure which is connected with railways and with famine. The non-productive part of the figures of 1883-84, is of no great importance. This expenditure is part of the inquiry which is before the Committee. If the Committee decide that the proposals of the Government of India are to be approved, then the expenditure will in the future be in accordance with those proposals, but the past capital expenditure has not to be provided for separately. The working account of the State railways will produce a little more than its ordinary expenditure, and the other items are set forth in page 3 of these Papers (App. No. 9, p. 632). Then I come to the productive railways. I have set forth the figures of these in detail, because it is part of the contention of the Government of India in the Despatches which have been laid before the Committee, that the increasing receipts which are to be expected from the existing railways of the country warrant their undertaking to bear the burden of considerable borrowing in the future. The first statement I present with respect to those productive works is that in paragraph 15, from which it will be seen that during the last five years there has been a very continuous increase in the return from State railways. The Imperial railways are of course the principal ones, and the figures of them in the successive five years are 237,800 *l.*; 466,400 *l.*; 639,000 *l.*; 826,400 *l.*; 826,000 *l.*, and 1,091,000 *l.*; showing a very steady increase from year to year. Part of the increase from year to year has arisen through opening of additional mileage; but the comparative figures in the last column show that during the last three years at least this cause of increase has not been the principal one. Under Imperial especially the net receipts have in three years risen from 466,400 *l.* to 1,091,000 *l.*, almost entirely by development of traffic arising very largely from the opening of the Rajputana through line. The figures show

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that we have in the existing open mileage of State railways an assurance of net revenue of about 1,400,000 *l.*, with an annual increase of say 150,000 *l.*;" I am speaking of conventional sterling; these are all rupees, 2*s.* a rupee. "The increase in the last three years has been 730,000 *l.*, or at the rate of over 240,000 *l.* a year, and as not only are these existing railways in their infancy, but over 400 miles are expected to be added to their length (apart from new railways) in 1884-85; 150,000 *l.* seems a moderate estimate of the annual increase during the next few years, but I shall take 100,000 *l.* only." That goes into the figures upon which I afterwards make a forecast of the future state of the revenue and expenditure for the next five or ten years. The figures of the East Indian Railway are set forth in para. 19, page 4 (App. No. 9, p. 633), and I have taken as the net return from the East Indian Railway 2,900,000 *l.*; that is to say, the excess of traffic receipts over the expenses of working. The figures of the Guaranteed Railways are set forth in paragraph 21 in the same way, and there I have taken as the net traffic receipts 3,613,000 *l.*, being the amount which the Government of India have estimated in their Budget Estimate for next year. Annuities and interest I have taken at their present figures. Then in paragraph 27 I state the whole of the account, the whole of the balance of expenditure against revenue in India, both those which actually appear in the Accounts of 1883-84, and the somewhat different figures which I call the normal revenue and expenditure, and which I justify by these particular explanations. In that statement the rupees in India are set forth apart from the sterling in England. According to the revised estimate the exchange is put down as 3,860,000 *l.*, so that the result of the whole year is an excess of the expenditure of 834,800 *l.* But this does not show the actual incidence of the charge for exchange, it merely shows the charge as regulated by the amount of remittances which may be more or less than the amount required for meeting the charges of the year. I have brought the figures together by taking 19½ *d.* as the actual charge at which the Government of India have to remit the sterling expenditure to England; and the result therefore on the whole account which states the present financial position of the Government is stated in paragraph 33: "The Government of India at present 1883-84 receive a net revenue in India of about 17,41,35,000 rupees. Out of this it has to meet net expenditure in England of about 13,717,800 *l.*, which at 1*s.* 7½ *d.* exchange will cost it about 16,88,38,000 rupees. It has also to make certain remittances to England at privileged rates which will cost it about 5,00,000 rupees. This leaves it a surplus of rupees in India of about 47,97,000 rupees. This surplus increases by about 41,40,000 rupees every year. Every farthing fall of exchange costs Government directly about 22,00,000 rupees, so that if the exchange were to fall a farthing every year, the annual gain on the present financial position would be reduced from 41,40,000 rupees to 19,40,000 rupees." That I state as the present financial position of the Government, that is to say, that upon the present balance of revenue and expenditure they can

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estimate for a surplus of 48 lacs of rupees. The above figures are taken as safe estimates of the revenue and expenditure, and at a low estimate of opium. They take no reckoning of arrangements with the civil funds, which may be expected to have the immediate effect of relieving the revenue account for many years to come of about 20,00,000 rupees to 25,00,000 rupees, and of arrangements for the payment of non-effective charges to the War Office, which will relieve the revenue account for a few years at least of 400,000 *l.* to 500,000 *l.* sterling. These figures, moreover, include the entire reservation of the 1,50,00,000 rupees famine insurance. I will not trouble the Committee with the next statement given in paragraph 36, the object of which is to compare generally the accounts of the past three years with the normal figures I have stated, and so to justify my figures by showing under the principal heads the cases in which I have taken the result somewhat better or somewhat worse than those of the past three years. But if you look at the last three columns of that statement you will see that for the most part the accounts have been better, and have not been worse than what I have taken as my normal figures, so that my normal figures are for the most part an unfavourable representation of the revenue and expenditure. Now, having established this as the existing position of the Government of India, I show the financial results of the present proposals in the second of the Papers put in by me this morning. The first page of this Paper merely states in an abstract form that which is called Schedule A. by the Government of India, and it will be seen that it works out to a total expenditure as stated in the Despatch of about 32 millions of pounds. But this figure, it must be remembered, is conventional sterling; that is, it means Indian expenditure, 1 *l.* for each 10 rupees, and the English 1 *l.* for the sterling 1 *l.* This makes a very considerable deduction from the whole expenditure which has been proposed by the Government. It has been stated in evidence before the Committee that the English expenditure would be about 40 per cent. of the whole amount. I have not taken such a high figure, because I find that in the actual past expenditure the proportion has been nothing like 40. I have taken 30 per cent., and the reason of it is that in the accounts published by Parliament there is one account called "The summary of capital outlay on productive public works." In this the whole outlay upon State railways from the beginning until now is set forth in two columns, one showing expenditure in India, and the other showing expenditure in England. The total amount is about 31,366,000 *l.*, and out of that the expenditure in England has been 8,091,000 *l.* So that it is just a little more than a quarter. I have considered therefore for the purpose of the present calculation that 30 per cent. of the whole amount which the Government estimate to be spent will be paid in sterling in England, and the balance, of course, will be actual expenditure in rupees in India.

4777. To make this clear, hitherto the expenditure in England has been only 25 per cent.?—On the whole about 25 per cent.

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4778. But to err on the safe side you have taken it at 30 per cent.?—Yes. It may be more in future; it all depends upon the prospective prices. The expenditure is divided between the companies and the Government, and in paragraph 4 the annual expenditure which results from this calculation is stated, namely, that the whole expenditure by Government on railways comes to 3,100,000 *l.* sterling, and by companies it comes to 2,460,000 *l.* sterling. That is converting the rupee part of the expenditure, into sterling, at the rate of 1s. 9d. Assuming this interpretation, the Government proposals are to meet the annual requirement of 3,100,000 *l.* for railway expenditure, as follows: they have first of all to borrow or find by means outside the revenue account, 2,370,000 *l.*, besides the annual borrowing for the East India Railway. The total amount of borrowing is 2,632,000 *l.* sterling, according to the estimates made by the Government of India. Part of the expenditure is to be met within the revenue account, that is to say, at present, we set aside out of the famine insurance fund, 50 lacs of rupees for expenditure in railways. The Government propose to spend on capital account 30 lacs of this, and to reserve the remaining 20 lacs as a fund upon the strength of which they can borrow money, so that the 30 lacs of rupees of annual capital expenditure they propose to meet from the existing famine insurance surplus. From provincial balances, which is another name for surplus revenues, they propose to find on the average about 110,000 *l.* The next item that is stated in the Despatch is a recovery by sale of the Nagpur lines of 630,000 *l.* I have left this out of the account for a certain reason, namely, that I have taken into account on the revenue side the receipts from that line, so that I do not reckon anything to come in by the sale of that line. So that the whole amount of the capital expenditure from borrowed funds of which the Government proposes to bear the burden is, on the part of the Government direct, 2,632,000 *l.*, and on the part of the companies, 2,460,000 *l.*; the total sterling borrowing being, therefore, 5,100,000 *l.* per annum. Now the first process is that I estimate the burden to be borne by the Government at 2 per cent. for the first year upon each borrowing, and 4 per cent. for every subsequent year; and in paragraph 14 it will be seen that the burden of the whole borrowing is there stated in thousands of rupees. On the other hand, the expenditure of this amount in railways will not be without return, and I have made a very moderate estimate of the return that will come in from this expenditure. The total return is stated in paragraph 16, also in thousands of rupees. I would ask the attention of the Committee to paragraph 21, where I set forth a forecast for 10 years of the effect upon the financial position of the whole of the proposals of the Government. The available funds are, first of all, the present surplus of revenue, 1883-84, which is 48 lacs of rupees; then the annual increase surplus, of which I have stated the details, and which I estimate will come to about 25 lacs of rupees, a sufficiently moderate estimate, which provides for a certain amount of fall of exchange, and

which

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which may be relied upon for the next five years. Then the other item which is available is the railway portion of the famine grant, namely, 50 lacs of rupees. The total available funds are then stated. Then the proposed disposal of these funds is set forth. First of all, "Expenditure on railways out of the famine grants;" next, the "Burden of proposed borrowing by Government and by companies;" next, "The net burden of Southern Mahratta Railway," and next, "The expenditure on railways out of surplus revenue." The total charge is stated, and the net charge is then stated; and deducting the net charge from the total available funds, the result is that the final surplus on the year's account, after the reservation of 75 lacs for reduction of debt, comes out for the year 1884–5 at 38 lacs; for the next period at 39 lacs; for the next at 41 lacs; for the next at 46 lacs, and for the next at 55 lacs. And then after that of course it very largely increases because no further provision is made in the present proposals for railway expenditure. In this statement of results I have headed the first year 1884–5, because such are the proposals of the Government of India; but it is evident that the proposals must now be set back by a certain time, half a year or a year, and the result of this will be to improve the financial position slightly by postponing the burden, while in other respects the position improves. But in any case the result is such as to show that a very considerable margin exists to give us assurance that we are well within our financial means, after we undertake the whole of the proposed railway construction. I have carried the figures beyond the first five years far enough to show that the operations of the five years are not likely to throw a burden upon future years, but results so remote must necessarily in many respects be taken with reservation. I have, however, as I think, made on every point which is open to question, assumptions which are considerably on the side of unfavourableness to Government. Famine is taken as sufficiently provided for by the famine insurance fund, notwithstanding the hypothecation of two-fifteenths of its amount; and war is a calamity which must be left outside the present discussion. I have only one further short explanation to make with reference to this, and it is that although I have stated that the annual borrowing by Government involved in the present proposals comes to 2,630,000 *l.* sterling, it must be remembered that the Government of India have very considerable transactions outside the revenue account, and that those transactions, on the whole, bring in money so that the actual amount which will require to be borrowed in the form of a separate loan each year will not be this whole amount of 2,630,000 *l.* sterling. In the first place we have the Famine Insurance Fund of 75 lacs of rupees, which is not locked up, but is actually invested in public works to that extent. It is available for these works and reduces the annual amount of borrowing. In the same way there is the surplus on revenue account which I estimate at about 40 lacs. These two sources furnish 115 lacs, or about 930,000 *l.* sterling. Then on the ordinary debt operations there are considerable net incomings, and we may

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expect something from savings bank deposits, say 25 lacs a year at a moderate estimate, from service funds about 5 lacs, and by repayment of loans 10 lacs. At present we have about 8,000,000 *l.* outstanding in the form of loans to various trusts and funds. This leaves on the whole about 1,400,000 *l.* sterling to be raised in the form of loans. Besides that there is the ordinary borrowing of 70 lacs for irrigation.

4779. So that the Committee may consider that this printed statement which you have placed before them represents the matter in the most unfavourable light conceivable?—I think so; I have on every point which is open to doubt made assumptions which are not better than the truth, and are often considerably worse.

4780. It has been drawn up, so to speak, with excess of caution?—That is my opinion, and it has been my object in doing it, not to set forth matters in too favourable a light.

4781. You feel satisfied that the result will be considerably more favourable than set forth in this statement?—Personally, I am satisfied to that extent. Of course I cannot bind the Government by all these details of figures; but I may say that it is the opinion of the Government that they are able to bear a burden of 40 lacs of rupees in addition to the present burdens on their revenue.

4782. These figures of course have been laid before the Government of India?—No, they have not been laid before the Government of India, but the conclusion to which they lead is the conclusion which the Government of India does generally adopt, namely, that they have to spare at the present moment 40 lacs of rupees, which they can set apart to meet any new burden that has to be borne by the revenue.

Mr. *Kynaston Cross.*

4783. Besides the prospective surplus upon which you have counted?—Exactly so. They are ready to set aside at present 40 lacs of rupees as a new burden upon the revenue; of course, subsequently they are assured of an increasing revenue; the next year they would be prepared to add something to that 40 lacs of rupees.

4784. There is one line which I do not think you have explained, paragraph 21, the line which you call "Increase of Surplus"?—It is explained generally in the Statement No. 3 at the end of the first Paper; I state the details of it there; that also is an extremely moderate estimate, because in each case I have only taken the increase of surplus at something like half its present amount.

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4785. Now we will pass on to the question of borrowing; and I ask you, in the first place, are not the borrowing operations of Government of grave import to the money market of India?—The borrowing operations of the Government of India always exhaust for the time the whole of the resources of the Indian market; we begin by intimating many months beforehand what we intend to do, because it is quite impossible for us to announce a loan of two and a-half crores of rupees without preparing the market for a long

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time to receive it. Then after that we announce the particulars of the loan, and we wait a month for the receipt of tenders, so as to enable several of the principal tenderers to communicate with Europe, and to make their arrangements for meeting the call. After that we take about three months to get in the two and a-half crores of rupees. If we attempted to lay hold of the actual money, and take it in to our reserve when it is paid into our credit, the result would be that we should force up the rate of interest to a very high amount. As a matter of fact, we have to leave it lying for a considerable time in the banks, so as to let the money market down easily. And from all these circumstances it is evident that a rupee loan of two and a-half crores which we put on the Indian market is a very serious operation for the time being for the Indian market.

4786. Who are the people in India who in the first instance take up these loans?—We have first of all the Europeans banks; then there are the native financial firms who have capital; and then there are native brokers and dealers in Government paper who have no capital, but who merely borrow on the chance of making something out of the operation by passing it on; then there are the European brokers who do the same, but they have for the most part some capital. I may mention that two years ago a very large and successful dealer in our paper was a doorkeeper in the Bonded Warehouse in Calcutta, a man whose income was about 12 rupees a month. He took up a large quantity of Government paper and speculated in it very largely indeed; but, of course, there was nothing behind him, and he had afterwards to run away. His whole capital was composed of what is called a "lota and a dotee," that is to say, a brass pot and a garment to wear round his loins. The consequence was that when misfortune overtook him, he had only to disappear and leave his burden behind him.

4787. Will you tell us where is the demand for the permanent investment?—A small quantity of it can be taken up in India; but for the most part it comes away to this country. In a Paper which has been put in before the Committee, I have traced the course of the permanent investment, and found that at least one-half of it is in this country; that is a Paper which has been put in some time ago. The conclusion there reached is that of the permanent demand only one or one-and-a-half crores is in India; for the rest we depended upon English demand, which was active enough till 1881-2, but began to fall off in 1882-3 owing to various causes. Although this was generally known, the consequences were only brought home to those who take up the loans when they had embarked in the loan of 1883-4, and found there was no investment demand to relieve them of it.

4788. Is that the rule; does the greater part of the funds find its way to this country?—They used to; but latterly they have not been finding their way to this country, and the consequence is that our loan of last year was rather unfavourable for those who invested in it; that is to say, there were no permanent investors to take it up.

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4789. Then has that loan not been absorbed?—That loan has not been absorbed yet; it had not been absorbed at the time I left India, and I imagine there is still a million of it to be absorbed.

4790. Who holds it at present?—A great part of that loan was really held by the bankers at that time; that is to say, bankers had made advances upon it, and the people in whose names the loan at that time stood and who held it, were paying interest to the bankers for the advance which the bankers had made to them to take up the loan.

4791. Is it your opinion that two-and-a-half crores is too much to attempt to throw upon the Indian market each year?—At present it is certainly too much.

4792. Then what is the reason of the falling off of the taking of the loans in the Indian market?—The reason of the falling off is partly this, that rupee paper for the last two or three years has not been very steady in price. Two years ago we floated a 4 per cent. loan at the price of 105. It was taken up at that time at that high price because it was believed that, looking at the former loan which had been issued by the Government, there would be a large demand for it in England; but, as a matter of fact, there was no such demand, there were no tenders came in from England; and when that loan fell upon the Indian market there was no money there to take it up, and it suddenly went down from 105 to 99. It recovered itself shortly afterwards, but what between the variableness of the price of the Government paper and the variableness of the exchange, which also was considerable at that time, the holders of the rupee paper began to be frightened about it, and several of the banks with large holdings thought they had better clear out of it. The consequence was a large amount of rupee paper which had come to this country flowed back to India, and depressed the market there; then on the top of that came our rupee loan of last year; it was taken up by people who, as usual, thought they could pass it on to permanent holders; but for these reasons they found that the permanent holders were rather trying to get rid of their paper than to increase their stock of it; and now we have exhausted the funds, even of those temporary tenderers. Then the paper at the beginning of this year, when a number of people who had tendered for it last year, and still held it, were very anxious to pass on their holdings, went down to 95 and 96, having been issued at 98·12, very nearly 99. The consequence was that the depreciation involved these tenderers and holders in very great loss. Then at the time the financial statement was made it was not determined whether another loan should be put upon the rupee market this year or not; so that there was no possibility of the recovery of price until a very short time since, when the Secretary of State issued a loan for three millions in this country, which practically rendered it unnecessary to raise further funds this year in India. The effect of this was to make the price of rupee paper recover itself at once in India; and within the last week or two the price has

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has risen from 97 to 99, and I imagine it is still rising; but the reason of its so rising is, that it is known now in India that there will not be a new rupee loan in India, and that therefore the holdings of the present holders will have an extra year to find permanent investors.

4793. Several witnesses before this Committee have referred to the importance of interesting the masses of the people, at all events, those of them who have any money at all, in India, so as to get them to invest small amounts in Government loans; can you tell us whether any attempts have been made in that direction?—I may, first of all, refer you to a correspondence which took place as long ago as 1870, when the Secretary of State called the attention of the Government of India to the fact that the proportion of Indian loans which was held by the natives was decreasing. The matter was investigated, as far as possible, by the Government of India, and the explanation which was then given of it I may quote from the Despatch, as follows: "Various circumstances (of which, doubtless, one is the provision for the payment of interest in London at the option of holders, as noticed in your Grace's eighth paragraph) have led to increasing competition for our loans by European capitalists, who are content with a lower return than will satisfy natives, and so outbid them. It is seldom that 4½ per cent. interest can be obtained now by an investment in our securities. Formerly the interest so obtainable was often more than 5 per cent. It is, obviously, not practicable or desirable to use any means which would affect this important cause of the distaste of natives for our securities. It is, in truth, a sign of political health, and a substantial financial advantage. Moreover, we consider it out of the question to attempt to encourage native investors by offering them, in any shape, better terms than we offer Europeans. It is obvious that any such policy must end in failure. It might enrich native speculators, but could not permanently increase native investors. In the long run our securities will fall into the hands of those natives or Europeans who will pay the highest price for them. It must, probably, be long before native capitalists generally learn to be satisfied with the moderate interest which, when accompanied by perfect security, suffices to attract European capitalists. Such measures as the development of savings banks (to which end we have lately ordered the formation of district savings banks), and the progress of education and intelligence, will alone, slowly but surely, bring about such results. Another wholesome cause for the diminution of native investments in our securities is the increasing craving to possess land (especially in Bengal), which has accompanied the peaceful prosperity of recent years, and which certainly indicates anything but a lack of confidence in our rule. Other causes may be traced in the decay of the native courts, whose courtiers were large holders of our securities, and of the inflated banking firms which prospered under native rule, and whose decadence has certainly deprived us of customers for our securities." One suggestion which was made in the course of that correspondence was, that when the loans were offered in India the minimum note to be issued should be put at 100 rupees, instead of 500 rupees.

Chairman—continued.

That was done for a certain time, but I doubt if there was a single case in which a tenderer actually got such a small amount as 100 rupees. We have since then reverted to the minimum of 500 rupees, but we have done so because another provision had been made for offering means of investment to those who had only very small sums to invest. This plan of offering very small investments was introduced about two years ago in the form of stock notes, which were issued at all the treasuries over the country, for sums varying from 12½ rupees to 100 rupees. It was done, deliberately as an experiment, to find if there was really any field for these small investments; that is to say, whether the ordinary native would actually come in and take 4 per cent. investments out of his small savings. Those stock notes have not been successful; about 20 lacs of rupees, or rather less, have been taken up during the two years, and the greater part of that has not been taken up well. The arrangements were made for the most part by giving a monopoly to bankers and firms who would take up these stock notes; the stock notes were offered to them at 99, and it was supposed they would make 1 per cent. profit by being able to pass them on to permanent holders. As a matter of fact, a great part of what they have taken up has remained in their hands; so that they have not been able to pass on their stock notes to permanent holders. Then there was another attempt which I may explain, which was made in connection with the prosecution of provincial public works; the Government thought that local commercial firms might be interested in those works, and offered them debentures, promising them not only 4 per cent, or in one case, 4½ per cent. interest, but a certain percentage of the profits of the undertaking. There were four railways altogether in connection with which these debentures were issued; three in the north-west and one in the Central Provinces; and the debentures were taken up very largely in sums of 100, 200 rupees, and sometimes 500 rupees, by native merchants; but when it came to the actual issue of the debentures it became evident that these native merchants had taken it up not as a speculation, but rather as a sort of subscription to a purpose in which the Government and the local officers had very largely interested themselves; they were in many cases wealthy firms, and it did not pay them to go to the Treasury to get some four rupees interest upon a holding of 100 rupees. Then, when they found that the debentures had to be managed under certain rules, they began to think that the Government was not dealing with them fairly. For example, one of the original holders died, and it was necessary that the person who claimed his estate should take out administration in the civil courts, and go through certain forms, and that sort of thing, in order that the debentures might pass to the new hands in legal form; and this they were not at all prepared for; and it was necessary, as a matter of fact, for the local government to make special provision for meeting such cases. The truth was, that the investment was not taken up as an investment, but, as I said before, as a sort of subscription in aid of a public object, in which the local

Chairman—continued.

authorities had very greatly interested themselves. From these two cases, it has been made evident that it is not possible to expect the ordinary petty savings of the people of India to come into our hands in the form of investment in 4 per cent. or 4½ per cent. paper.

Mr. *Jackson.*

4794. I should like to ask if that paper was payable to bearer or to order, or to both?—The stock notes were to bearer; the provincial debentures were to order.

Chairman.

4795. Then the Government of India have not been successful in interesting the mass of the people in these loans; the various attempts which you have described have not met with any such amount of success as to encourage them in future?—Exactly so; neither of those loans have been taken up as the Government intended them to be taken up; and they have been extremely cumbersome to manage in every respect.

4796. Do the natives of India put much of their money into the savings banks?—The Government savings banks give 3¾ per cent. on floating investments, and every facility for permanent investment. But Bombay is the only place where deposits are still growing. They grow there at the rate of 10 lacs a year.

4797. In the other places are they falling off?—No; they are not falling off, but they are pretty steady. Investors in our savings banks are mostly people connected with the courts, Government servants and pleaders, not the masses of the people. Latterly a savings bank department has been added to the post office, and that has been very successful as far as it has gone.

4798. Successful in attracting the savings of the ordinary agricultural class?—Yes. The reason of that, I imagine, is that there is less formality in dealing with the Postmaster than in dealing with such a big business as a Government treasury.

4799. Is there any difference in the interest?—There is no difference in the interest. The conditions are very much the same, except that the minimum transaction is one rupee in the ordinary savings bank, and four annas in the post office savings bank.

4800. What is the amount of Indian debt held in England?—The last return I have is 30th November 1883. This shows a total of Indian debt of about 93 crores of rupees. Of this amount nearly 21 is held by natives in India, 50 is held by Europeans in India, and 22 is enfaced to London; that is to say, the interest is paid at the Bank of England, and presumably the stock is held in this country.

4801. As to the rate of interest, what comparison is there between the rate of interest which English investors require upon a rupee investment as compared with a sterling investment?—At present we can get money in England at less than 3¾ per cent. A 3 per cent. loan was floated the other day at a little over 94; and our last loans in India have been at 4 per cent., and have been under par.

Chairman—continued.

4802. Yes, but that is rupees?—Yes.

4803. What is your estimate of the gain or loss to the Government in raising loans in sterling here as compared with raising them in rupees in India?—I have drawn up a Paper on the subject, which I have handed in. It is headed, "Loss and Gain on Sterling Borrowing."

4804. Tell us the general result of it?—The general result is stated in paragraphs 1 and 2, and I may be permitted to read those paragraphs. "Those who claim that an actual gain or saving accrues to the Government by the substitution of sterling borrowing for rupee borrowing for expenditure in India, reckon the gain under the following heads:—(1.) A saving of the charge for 'loss by exchange,' arising from the fact that a smaller amount has to be remitted to meet sterling demands in the year in which the borrowing takes place. (2.) A gain by reason of the rate of exchange on the amount so remitted being made more favourable to Government by the reduction of the total drawings. (3.) A saving by reason of the smaller rate of interest demanded upon the loan. I propose to investigate these in turn, and to show that No. 1 is quite unreal, and arises solely because our accounts are set forth on a plan which involves certain errors. These errors are systematically adjusted at present, but would cease to be so if money were borrowed in England for Indian Expenditure. No. 2 is a gain which however is completely and exactly set off by a corresponding loss. No. 3 is liable to considerable reduction, in consequence of the probability of future fall of exchange." The result I arrive at is, that the only saving is, that Government has to pay a smaller per centage in this country than it has to pay upon a rupee loan raised in India. Against that gain, there is a very considerable set off in the possibility of a future fall in exchange; because after a certain time it is perfectly possible that 3¾ per cent. measured by sterling, may be more than 4 per cent. measured by rupees. It is impossible to make any precise calculation as to whether there is a gain or a saving on the whole, because it depends so much on the assumption that is made as to the future of silver.

4805. Then do you think any precise hard-and-fast rule should be made as to whether we should borrow in India or in England?—I do not think any rule should be laid down; there are advantages in borrowing in India in that we have the burden of the loan measured by the same standard in which we receive our revenue; in that respect it is better to borrow in India. On the other hand, it is sometimes not possible to borrow there on any terms whatever, as at present, and then we may be forced to borrow in this country. But I do not think the Government of India should set before itself any hard-and-fast rule, either to borrow in this country or in India.

4806. So that in this, as in other particulars, your opinion distinctly is, that the Government of India should be left with free hands?—They should be left with free hands to do as the state of the money market at the time may show to be advisable.

4807. Does that opinion extend, not only to the

Chairman—continued.

the place of borrowing, but to the limit of the sum to be borrowed?—Certainly.

4808. Is there anything you have to say to the Committee in the event of the Government borrowing in England in sterling, in regard to the form of accounts. Are there any alterations which you would propose in consequence?—The adoption of a policy of borrowing in sterling, will necessitate a change in the form of accounts. They are at present, as made up for Parliament, computed by showing 10 rupees as equal to 1 *l.*; but this leads to a false result if money is borrowed in sterling. The position is, that a large amount of expenditure, costing 12 rupees or more per £., is put down against revenue amounting to 10 rupees per £., and compensation is made by entering the item "Loss by exchange." But unless we actually remit enough to pay the net sterling expenditure, the adjustment under "Loss by exchange," will not be sufficient to balance the error in understating the expenditure against the revenue, and the account will show a result, more favourable than the reality, by 200,000 *l.* for every million borrowed in sterling. That is a difficulty you cannot get out of as long as your accounts are kept in the present form, and it must therefore be always borne in mind that for every million you borrow in this country in aid of your sterling transactions, the surplus of account is overstated by 200,000 *l.*

4809. How do you propose to remedy that?—I do not think it is possible in any other way than by altering the form of accounts, and that is rather a big question, because there is a good deal to be said for it, and a good deal to be said against it. In my opinion there is a very great danger in stating our accounts too favourably, and to get rid of that danger I would go to the extent of even altering the form of our accounts in this respect.

4810. Do you think there would be much difficulty in altering the form of accounts?—Personally I do not think there would be much difficulty in doing it, but I know there are other people who hold a contrary opinion.

4811. Can you give the Committee, in a few words, the mode in which you would alter the form of accounts?—I may explain, first of all, in our financial accounts the Indian transactions are quite distinct, and are stated distinctly throughout from the sterling transactions. It is only in the single statement, the general account, that they are combined together: namely, there we state 10 rupee-pounds for India, and 12 rupee-pounds for England, and we combine the two to bring out a single total. I would allow everything to stand exactly as it is at present, save that when I come to combine the Indian figure with the English figure, I would show the Indian figures in pounds, not of 10 rupees, but of some other standard, say of 12 rupees or even of 12½ rupees whichever might be considered most convenient. I admit that there are objections to that course, and one of the principal objections is, that no standard that you can lay down at present, can be a permanent standard, and that it is impossible to adopt a system of perpetual alterations year after year.

4812. Do you think the preponderance of argument is in favour of certain alterations now?—I think that the inconvenience of stating our transactions on a basis so very far removed from the truth as the assumption that the rupee is equal to one-tenth of a pound sterling is so great, as in my own personal opinion, to warrant the inconveniences of a change.

4813. Do you agree with Major Gordon's opinion that the accounts of the public works, and of the railways particularly, should be kept quite separate from the general Revenue Accounts of India?—No, I cannot see any advantage in separating the accounts into two parts. The expenditure of the Government must be taken against the revenue of the Government, as a whole, and I do not see that any advantage is gained by stating them in two accounts rather than by combining them into one.

4814. Might the Committee take it that, in your opinion, as it is a matter of comparatively small importance?—I think it is a matter of comparatively small importance.

4815. You see no reason for the change?—I see no reason for the change. I see no advantage to be gained by it.

4816. Do you think that the results of administrative accounts of railways should be brought into the revenue and finance accounts;—No; I think they should be kept by the Public Works Department for its own purposes, but that for the Finance and Revenue Accounts it is important that we should adhere to the standard of the amount of money paid into and taken out of the Government Treasuries. It is possible to keep both systems; one for financial purposes and the other for administrative purposes; but I think there are very great dangers in departing in the finance and revenue accounts from any other standard than that of the amount of rupees paid into or taken out of the Treasury.

4817. Do the present proposals of the Government of India involve any changes of the present form in which accounts of works constructed out of borrowed funds are presented to Parliament?—I think it is possible they might; because the heading "Productive Public Works," is at present drawn up in such a form as to make it a test as to whether those works are, or are not returning enough to pay interest on the capital; that is to say, 4 per cent. I think if works are deliberately undertaken with the knowledge that they are not to pay 4 per cent., it requires a certain reconstruction in that part of the accounts; but it is a matter of detail which I think might very well be left to the Secretary of State. It is only that the alteration of the policy of Government which is involved in their undertaking works which will not pay 4 per cent., is not exactly consistent with the present form in which the accounts in this respect are drawn up.

Mr. *W. H. Smith.*

4818. You spoke of 1,000,000 *l.*, due to the Treasury for army charges, as an exceptional charge on the revenues of this year?—Yes.

4819. How has that charge accumulated?—There has always been a difference between the War Office and the India Office, in respect to the non-effective charges of the English army; that is to say, the amount used to be stated at a certain

Mr. *W. H. Smith*—continued.

definite sum to be paid every year by the India Office to the War Office. The War Office have on several occasions represented that the sum is too small, and it was agreed that it was too small, and that the calculation should be made on a different basis. The War Office have for a very long time delayed stating the precise amount of their claim. It has been known for a long time to be mounting up, and the claim really was only put forward in actual figures a short time ago, and then it amounted to about 2,200,000 *l.* sterling.

4820. And is that claim admitted by the Government of India?—It is practically admitted; objections were made to some part of it, but those objections I believe have been now settled by splitting the difference, and the India Office have agreed to make payment to the War Office. They have paid one million this year, and they have more to pay hereafter. It is proposed to make a new arrangement about payment in future, an arrangement which will have the effect of spreading the payment over a considerable number of years, instead of causing it to fall in a lump sum on any one year. This 1,000,000 *l.* has been actually paid in the years 1883-84.

4821. So as to go into our financial accounts for the 31st March 1884?—I do not know anything about the English financial accounts, so I cannot tell you.

4822. This sum of 2,000,000 *l.* is in addition to the annual contribution made by India towards the non-effective charges of the army quartered in India, is that so?—I will tell you exactly what it is. Where a pension is given by the War Office to a soldier, part of whose service has been passed in India, the War Office claim that Indian revenues should make good to English revenues a certain portion of that pension. The 2,000,000 *l.* is the capitalized value of the pensions which have been granted for some time back; that is to say, the Indian Government is to pay to the English Government not the amounts which the English Government pays in the form of pensions as they become payable, but a lump sum, when the pension is awarded, equal to a capitalized value of that pension.

4823. But was no portion of that pension included in the sum which India paid annually for the non-effective charge?—Yes, the Indian Government did make an annual payment, but that annual payment was not sufficient. The annual payment was made at a fixed sum, if I remember rightly, under an arrangement between the War Office and the India Office, but the War Office claimed that the fixed sum was too small, and desired that it should be calculated on a different basis. I think the India Office accepted the proposal that it should be calculated on a different basis. The War Office took some years to make the calculation, and present their claim. During that delay the amount was not actually discharged by the Government of India.

4824. You stated that, assuming the views of the Government of India were carried out as far as the railway scheme was concerned, the annual borrowing by them at the most would be 2,620,000 *l.* Am I right in assuming that you reduce that sum by repayments or other sources of contribution amounting to 1,200,000 *l.*?—I said that the amount required for railway purposes would be 2,600,000 *l.* sterling, but there is irrigation besides, about 70 lacs.

4825. That includes the State Railways?—Yes.

4826. And also the guaranteed railways?—Not the guaranteed, the guaranteed are not borrowed for by Government; that is a borrowing by the companies.

4827. But I thought that in one of your proposals here in this Paper, you have put down the limited guarantees, including them in the gross total of thirty-two millions of pounds, do not you?—Yes, but those are the future guarantees. I thought you were talking of the past guarantees.

4828. No, I am speaking of the future guarantees?—They are entirely outside the 2,600,000 *l.*

4829. So that we have not from you a statement of the possible charge upon the revenues of India?—Yes, I have calculated the charge upon the revenues of India upon the amount to be borrowed both by the Government, and by the limited guaranteed companies; I was talking quite separately of the total amount of borrowing, saying how the Government could provide its share of that borrowing, viz., the 2,600,000 *l.*, partly out of its existing ways and means.

4830. And the charge which would arise from the borrowing by companies?—The Government will have to bear that charge, and I have included that charge in the forecast of account we have made for the next few years.

4831. How far will your estimates of revenue be affected by famine. You have calculated an annual increase of revenue?—I have; of course if a famine comes, it very seriously affects our revenue, and it will swallow up that annual increase for a year or two certainly. Land revenue is the first thing that suffers when a famine comes, and it may suffer very seriously indeed. It may fall off by a million, or even more than that. It depends upon the extent and severity of the famine.

4832. Then we may take it you have not made any allowance for any casualty of that character?—I have stated distinctly at the end, that famine is provided for only by the Famine Insurance Fund.

4833. In speaking of the value of money in India, have you any personal acquaintance with the demand for capital for local purposes in India?—I have a certain acquaintance.

4834. You have told the Committee that there is an absolute falling off in the local demand for Government paper?—I did not say a falling off in the local demand; the falling off was in the English demand.

4835. That is an important question; I rather gathered, and I think the Committee gathered too, that there was not the same annual absorption by the natives of Government paper as prevailed some years ago?—I think what I said was, that the proportion of the total debt which was held by natives had fallen off; but the total debt has of course very much increased, so that the total held by natives has increased, although it has not increased so rapidly as the total held by Europeans,

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Europeans, either in India or enfaced to this country.

4836. Is there a growth of capital in India; of savings?—There has been a great saving of general agricultural capital during the last few years, which have been years of prosperity, but it is not a tangible saving; that is to say, it is not a saving upon which you can in any way lay your fingers: people have become better off generally.

4837. I think you gave evidence as to the high rate of interest upon which investments are made by the people themselves; in what do they invest their savings?—Well, the savings of natives are very often not invested at all; they are hoarded and converted into ornaments, and so forth; but when a ryot becomes wealthier than his neighbours, he usually sets up a business of lending money to his neighbours.

4838. And that rate of interest is considerably in excess?—His rate of interest is probably 12 per cent. at the very least; 37½ is often the rate of lending between ryots and the local traders, who supply them with seed and meet all their revenue payments.

4839. With regard to savings bank depositors, are you aware whether there is any preference for depositing and investment in a form which will bring back to the depositor and investor the precise amount which he has deposited?—Yes, I think there is, because in Bombay especially, the natives pay sums into the savings bank and very quickly reach the total permissible deposit in a savings bank; then of course they are able to get back that precise sum whenever they want it. The maximum is 3,000 rupees, and there are a great many savings bank accounts held by natives in the Bombay Presidency, on which this maximum has been paid up. They prefer holding it in a savings bank to investing it in Government paper, because the amount is absolutely fixed, and it can always be realised if they want it.

4840. Then, in your judgment, there is a decided preference for a form of investment which will give the investor the precise amount which he invested, subject neither to increase or decrease?—Certainly.

4841. Do you attribute to the fluctuations in the value of rupee paper, the apparent indisposition on the part of the natives to invest?—No, I think it arises from the fact that 4 per cent. is not a sufficient return for them. Those natives who have money, can always get more than 4 per cent. for it. The investments of natives in our rupee paper are, for the most part, connected with some ultimate object; for example, people who have to give security in their office, hold a certain amount of Government paper; contractors who have to give security, hold for that purpose a certain amount; there is also a considerable amount set aside by clerks and other people who are connected in some way or other with the mercantile offices, or with the Government, in the form of jointure to their widows, but those are very small sums.

4842. It comes to this, that the interest on rupee paper is not large enough to attract the native capitalist as a form of investment?—No, it is not.

4843. What is the total amount of the savings bank deposits in India?—I can give it you exactly.

4844. Perhaps if you can give it for two or three years, it will be interesting?—31st March 1882, the total was 3,273,000 *l.*; (that is rupee-pounds), a year later it was 3,616,000 *l.*; the difference is 343,000 *l.*, which was almost entirely due to the institution of the Post Office Savings Bank.

Mr. *Bernhard Samuelson.*

4845. You quoted a statement, that purely commercial lines should give way to protective lines. In quoting that statement, was the reference as to commercial lines, a reference to the lines in Schedule B.?—Yes.

4846. Then with regard to Schedule A. you make no distinction?—I make no distinction. Schedule A. is altogether described as lines which must be taken up, and part of them taken up by companies, if possible; but if the companies do not come forward, the statement is that the Government will take them up.

4847. Then with respect to those lines in Schedule B., if I understood rightly, it was stated by Major Gordon that they were introduced as it were *pro memoria*?—Yes.

4848. In order to show that they had not been forgotten?—In order to show that the Government had gone over, practically, the whole field of railway enterprise in India, before they had made the selection of lines which they themselves desired to have constructed.

4849. But with no hope of their being taken up by companies?—The later despatches show that the Government of India have not much hope that the companies at present will come forward.

4850. Why do they abandon that hope?—Because as a matter of fact, the companies have not come forward, and there have been certain difficulties latterly, in connection with the Bengal and North Western Railway, which seem to indicate that private enterprise is not prepared, without a guarantee from Government, to enter upon railway construction in India.

4851. Then they can hardly be spoken of as being commercial lines in the sense of offering temptation to commercial investment?—No; I talked of them as commercial lines, thereby meaning that they were lines which were to be constructed solely for commercial purposes, and had no reference to the protection of the country against famine.

4852. And therefore might be postponed until the other lines had been made?—Might be postponed if people did not come forward to take them up.

4853. You spoke of the Chattisgarh and Nagpur line; is that now in course of negotiation?—I believe it was connected with the offer of Hoare, Miller & Co. to construct a through line from Calcutta to Nagpur, but the negotiations were stopped, because the Secretary of State

Mr. *Bernhard Samuelson*—continued.

said he was not prepared to go further with them until the Report of this Committee had been received.

4854. What was the nature of the terms proposed for that line?—I am afraid I have no information upon that subject.

4855. You spoke of dividing the capital of the lines to be made under the guarantee into share and debenture capital?—Yes.

4856. How would you propose that the debenture holder should be secured?—By the same guarantee which is given to the proprietory capital, except that they would not have a share in the profits.

4857. That is to say, that the interest would be secured on the revenues of India, in addition to the security of the revenues of the line?—Yes; I believe there has been capital of that sort raised the other day in connection with the Southern Mahratta Railway; they have raised 1,700,000 *l.* by debentures.

4858. Under the direct guarantee of the Indian Government?—I believe they are guaranteed, but I cannot state the terms of the guarantee.

4859. In reference to the increase of surplus for which you take credit, have you taken into account the increase likely to arise from the development of railways themselves?—I have allowed 100,000 *l.* a year for the development of the existing State railways; I have allowed 50,000 *l.* a year as further increase from the East Indian line; I have made no allowance in respect of the guaranteed railways, although I think a very considerable revenue will come in from them.

4860. My question was, whether in reference to the increase in the general revenues of India you have made allowance for the increase likely to arise from the opening of the railways?—I cannot say I have; what I have done, is to take the actual increase of the several revenues, and assume that a moderate extent of increase will go on for the next five years. I cannot say how far, for example, the increase of land revenue is due to railway enterprise, and how far not; as a matter of fact, it has been increasing at the rate of 80,000 *l.* a year for the last 10 years, and there is every prospect that it will continue. And so with regard to the Excise revenue, which is due to the prosperity of the country, and is influenced by railway enterprise, wheat export, and a dozen other things of the same kind. I have taken a very moderate estimate as to the amount of the increase of the Excise revenue; but, of course, I cannot say how far that increase is due to railways, and how far to other causes.

4861. You have not separated the various causes which contribute to the increase, of which you have made an estimate?—I have not.

4862. You have spoken of an accumulation of arrears of somewhat over 2,000,000 *l.* sterling as having arisen on the Army accounts between the Indian Government and England?—Yes.

4863. During how many years did that accumulation arise?—I think the account goes back during five or six years, if not more. The annual amount which we had to pay is about 800,000 *l.*, that is to say, 800,000 *l.* is the capitilised value

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of the portion of the pensions which is ascribed to Indian service, and the amount which we should, therefore, according to that method of calculation, have paid during each year to the War Office; the actual amount we have paid is 500,000 *l.* or 600,000 *l.*, and the result is, on the account extending over six or seven years past, there is an arrear due to the War Office of 2,200,000 *l.*

4864. Then would it not be the case, that apart from the discharge of these arrears, you will now have a larger amount to pay upon the agreed account as now settled?—No; because a reduction comes in on the other side in this way. It is agreed that we shall not in future pay the capitalised pensions, when a pension is awarded, but pay the actual charges for the pension each year; so that, of course, we begin by paying only a very small amount. Afterwards when the amount of pensions, of which we have not paid the capitalised value increases, that amount will become bigger; but, meantime, we shall take advantage of the reduced amount which we have to pay, to pay off in the course of two or three years, the remaining amount of the total arrears which comes to about 1,200,000 *l.*

4865. And you have ascertained that, apart from the amount of arrears which you have to discharge, the present charge in respect to the same item will not be larger than it has been in former years?—No, it will be very much less; it will be 300,000 *l.* or 400,000 *l.* against 800,000 *l.* in the past.

4866. Then, as regards the total charge for interest on borrowings, and interest on guaranteed railways, I suppose it would be the case that if the interest on guaranteed railways were greater, the interest on borrowings, for the purpose of railways by the Government itself, would have to be diminished accordingly?—I am sorry to say I do not quite follow you.

4867. Suppose a larger amount were laid out on guaranteed railways, and that consequently the interest upon that were greater, you would lay out less on railways to be made by the Government, and therefore your borrowings on that account would be less?—Yes, if we could get guaranteed companies to take up a larger quantity of the lines, of course the share to be taken up by Government would be *pro tanto* less.

4868. Those two figures would always have to be read together?—They would; and that is the proposal of the Government, as far as regards the lines included in Schedule A.

4869. So that if there were a rush of undertakers for these lines to be constructed by companies, you would immediately diminish the construction by the Government *pro rata*?—I presume the Government would do so. I presume it is not prepared to increase the total amount for which it will be responsible.

4870. That is the view which you intend to put forward?—I cannot say I have special authority for it; but it seems to me that the Government, having laid down a certain programme of railways, whose construction is to occupy its attention for some years to come, will, if it can get the companies to take up a larger share

Mr. *Bernhard Samuelson*—continued.

share of those railways, abstain to that extent from carrying out its own share.

4871. I suppose, as a corollary to that, we may take it that the Government would not permit companies to take up more than the united sums now proposed for the Government and the companies?—It depends entirely upon whether the companies require a guarantee from the Government or not.

4872. I am assuming that?—The Government is perfectly willing to allow the companies to come and take up any railways they like, as long as they do not want a guarantee.

4873. To take an extreme case, supposing companies were willing, under the Government guarantee, to take up 10,000,000 a year; a proposal of that kind would not be accepted by the Government, according to your view?—It would depend upon whether the lines were those included in Schedule A. or Schedule B. If they were within Schedule A. the Government would permit them to be taken up; if within Schedule B. it would let the companies do it or not, as they liked.

4874. There is a misunderstanding; the Government of India would not be prepared to let companies spend say 10 millions a year under a guarantee?—It seems to me the question is not likely to arise. There are 30 millions of railway altogether to be taken up. If guaranteed companies came forward, and said they were prepared to take them up in three years, on a certain guarantee by the Government, the Government would review its financial position to see if it could bear the burden or not; and if it thought it could, it would tell the companies to go on. It would raise a difficult financial question.

4875. But as far as you see at present, it would not be entertained by the Government?—I do not think it would, because I do not think the Government is prepared, at present, to undertake the financial burden of such a heavy amount of railway construction.

Sir *George Campbell.*

4876. As I understand, you speak for the Financial Department of India, as distinguished from the Government as a whole, to some extent?—I do.

4877. Is the evidence which you give official evidence, on the part of the Financial Department of the Government of India, or is it your individual evidence?—It is, to a great extent, given under instructions. I have tried to distinguish, by reference to documents, between those matters upon which I may give a private opinion, and those matters upon which I give evidence under instructions.

4878. May we take it your own opinion, in the main, coincides with the instructions you have received?—It does.

4879. Then are you decidedly of opinion that it is a good policy to put protective lines before commercial lines?—At present, I think, protective lines require to be pushed in India, and as the Government is not prepared to take up both, the energies of Government ought to be given to the

Sir *George Campbell*—continued.

construction of protective instead of commercial lines.

4880. I want to draw the distinction. The financial member of the Government of India, although he is responsible for finance, is also bound by general considerations of administration, and all the rest of it. I want to know whether you think that from a purely financial point of view, it is a prudent thing to place protective railways before commercial railways, that is to say, whether the pecuniary gain in case of famine from these protective lines is such as to outweigh and overbalance the gain from more purely commercial lines?—I think that, taken in the abstract, they both claim considerable attention, but in time past we have gone in largely for the construction of lines with the intention of their being purely productive, and the time has come now to take up the other side of the question, and to construct lines which are intended to protect the country.

4881. Putting aside the question of humanity, do you as a matter of finance think that the protective lines or the productive lines are the most prudent?—Apart from any question of humanity, I should say the principle was that when the famine came, the people should be allowed to die. As a matter of fact, one cannot conduct the Government of a country upon that principle, therefore, one is obliged to construct protective lines, and go in for other remedies against famine.

4882. I must bring in the question of humanity so far as to assume that the Government of India is not prepared that the people should die. Then do you think, from a financial point of view, the protective lines are more paying than the commercial lines?—They are not so paying as commercial lines, but it is not immediately the business of the Government to construct productive lines. It does not do so in this country, and there is no reason why it should in India. Now that it has "shown the way," it can legitimately say to private enterprise that the country is open to them.

4883. But assume that the Government is practically bound to feed the people, you do not think that the pecuniary saving in times of famine with regard to these lines, ordinarily non-paying, would be sufficient to counterbalance the loss?—It depends upon the extent to which these protective lines are carried out; because there are certain parts of the country where, if a famine were to occur, the Government would be obliged to let the people die from the impossibility of conveying produce to them.

4884. Do you think there are very considerable provinces now in that position?—I think there are; I think Bundelkund is one of them.

4885. You have had some administrative experience?—I have.

4886. Does not your experience, with regard to famines, teach you that the most severe famines occur in the most populous countries; and that sparsely populated countries are very little exposed to famine?—That is distinctly the case; and I think that the populousness of a country is one of the causes that leads to famine.

 4887. Does

Sir *George Campbell*—continued.

4887. Does not that fact rather lead up to what has been suggested by certain witnesses, that it is rather a fallacy to distinguish between protective and commercial lines; that the lines are really the most wanted for famine purposes, where they are most wanted for other purposes; that is to say, where you have a dense population, and where you are most liable to famine, there it is that you have most need of railways for commercial purposes, for both purposes in fact?—I do not think there is any substantial difference between a protective line and a productive line in that respect, although there is a difference in the object which the Government sets before itself in the construction of the one and of the other.

4888. Have you had an opportunity of seeing Sir James Caird's evidence?—I have read it.

4889. Do you differ from the opinion he has expressed, that the distinction between protective and productive lines cannot be well maintained?—I think the two classes run into each other, but that it is possible to specify a line purely protective which is not productive, and *vice versâ*. For example, the Bengal Central Railway, which runs through parts of the districts of Nuddea and Jessore; these are tracts where there is very little chance of a famine, and if there were a famine, there is sufficient water carriage to enable food and grain to be conveyed to the people. I would say that that line had no protective object whatever, and that if it was to be constructed at all, it would be for purely productive purposes. It is only to that extent that I define any distinction between the two classes; but I admit that the two classes entirely run into each other.

4890. Do not you think it may be fairly said, that this Schedule A. of the Government of India, consists in the main of a net work of railways running through the least populous, the least fertile, and the least productive parts of India, and are the least likely to pay in the ordinary way?—I think a great number of the lines run through parts of the country where they are not likely to pay.

4891. But does not this Schedule A., in the main, consist of a network of such lines as I have described?—I do not think so, but I really cannot say; but, for example, that Chattisgar line is a line which will pay.

4892. That is already made?—Partly, but it will be carried to Raipur.

4893. Take the part of that line which joins Chattisgar to Calcutta. Do you think, in any sense, that can properly be called a protective line; who is there to protect?—No, I do not call that protective.

4894. Is there any part of that country which has ever been the scene of a severe famine?—No, I do not think there is.

4895. The population is sparse in the extreme?—It is very sparse.

4896. And the people are a good deal in the habit of living on jungle berries and rats and mice, and things of that sort?—They live in a very poor way.

4897. So that that is not a protective line?—There are several lines in Schedule A. which personally I am not prepared to defend, but I am bound to say I am not an authority on the subject.

Sir *George Campbell*—continued.

4898. You are not prepared to say that the line between Chattisgar and Calcutta is a protective line?—Personally, I do not think it would have very much influence.

4899. Now, I will take the first line in that Schedule, Vizagapatam-Raipur, which is to cost 2,900,000 *l.*; that also runs through one of the most wild and uncultivated countries in all India?—Yes, I think it does, until it reaches the sea coast.

4900. In what sense should you call that a protective line?—The intention of that line is to enable Orissa, in the case of famine, to be fed from the grain tracts of Chattisgar.

4901. Orissa?—Yes, to connect the Orissa coast.

4902. Is not Orissa nearer the grain countries of Bengal?—Yes, but it is not approachable from them.

4903. Would not a railway from Calcutta to Orissa be more paying and more effective for the protection of Orissa against famine?—I do not think so. There are some very great rivers to be crossed, and it is a line in which the engineering difficulties add very greatly to the cost of construction.

4904. Still, it would be a comparatively short line from the greatly populated countries of Bengal to the considerably populated countries of Orissa, between which there is very active communication; is not that so?—There is, by water.

4905. And the line from Vizagapatam-Raipur would not bring the grain to Orissa?—It would bring it rather far south.

4906. Is that what you understand to be the object of this Vizagapatam-Raipur line?—I understand that to be its object.

4907. Now we will take the most expensive line of all from Nagpur to Barakar; have you any reason to suppose there is any company whatever prepared to make that line without more assistance from the Government than has been given to the Bengal Central?—I do not know upon what terms it was proposed to make it, but I know there were negotiations between the proposed company and the Government for the making of that line

4908. Have you any reason to suppose, as an individual opinion, that any *bonâ fide* company would be found to spend five millions in making that line?—I cannot say I should like to take shares in such a company.

4909. But do you think that people will be found to do it?—I do not know. I presume Hoare, Miller, & Co. had some definite project in their view at the time they made the proposals to the Government.

4910. And if they failed to do it, would you leave the railway alone, or would you offer better terms, or have it made by Government?—I think it has been probably entered in Schedule A., because there were definite proposals for its construction made by a company.

4911. You are aware that since these proposals have been made, witnesses have told us that owing to what has happened in regard to other railways, the prospect of floating a new company of

Sir *George Campbell*—continued.

of this kind at a profit, has been very materially diminished?—Yes.

4912. And that it is much less likely for companies to take up this line on favourable terms?—Yes.

4913. With reference to these 12 millions proposed to be expended, is it your belief that, if the companies will not construct them on the favourable terms suggested, the Government will give them up?—The Government do not state so in their Despatch, but I have already said I do not think the Government ought to be bound down to every one of the details of the Despatch. I think they ought to be left a certain discretion. If it is at any time actually proposed that the Government should take up the construction of that line, they would have to lay very careful estimates before the Secretary of State, and it would rest with the Secretary of State whether the occasion for making the line was sufficiently proved or not.

4914. Is it your opinion that, if you cannot have the railway made upon such favourable terms, you ought to offer more favourable terms to the companies?—With regard to some of the lines, I think it ought to be done; I think some of those lines in Bundelkund are very important, and that it might be worth the while of Government to offer favourable terms for their construction; but I cannot say that, personally, I attach so much value to the line leading from Barakar to Chattisgar.

4915. These Bundelkund districts are not very populous?—No; the whole object of these railways is to protect the country against famine.

4916. The whole area of land under cultivation is not very large?—I do not know. There is already evidence on the subject before the Committee.

4917. You can, perhaps, tell us whether there are projects before the Government for protecting that country by irrigation?—Yes; there is a project at present, the Betwa Canal, on which a considerable amount of money has been spent.

4918. Is there an amount being spent in that direction?—Yes; I can tell you the particulars of it.

4919. In general terms you state there is a project in hand?—Yes.

4920. I see these Bundelkund lines are called the Jhansi Cross lines?—I gave them that name in my abstract.

4921. I want to know whether, considering the sparsity of the population and the small portion of cultivated land, with irrigation works already in hand, you think that poor country would justify the Government in making not one line through it but several cross lines through it?—I think they are made with slightly different objects. To protect the country against famine it is necessary to run a line along Bundelkund, from Manickpur to Jhansi. The other line, which comes across from Cawnpore, through Jhansi to Bhopal, is mainly a productive line, and was tendered for as such by the Great Indian Peninsula Company.

4922. Do not you think that there are a good many of these very important lines in Schedule B. which the country might very much require;

Sir *George Campbell*—continued.

for instance, the connection of the great and populous countries of Eastern Bengal with the port of Chittagong; do you think we are justified in putting this aside altogether?—I rather think expenditure is going on at present upon the Chittagong line up to Dacca. I think it is only put aside because it has not to do with famine. The Government will be very willing to take it up after they have completed their present programme, if necessary. It is put aside by reason of the principle that Government has set before itself that they do not wish to spend their resources on merely productive works.

4923. That is an inversion of the principle of previous Governments, which previous principle was to make the most profitable and paying lines first?—Yes, that is clearly stated in the despatches; the Government are inverting the principle upon which they have hitherto carried out these works.

4924. Something is doing with respect to the line between Dacca and Mymensing, but that leads to Calcutta; is not the effect of the present proposal of the Government of India absolutely to postpone *sine die*, I may say, all the projects for communication between the populous districts of Eastern Bengal and Assam and Chittagong?—I think it is; except that the connection of various lines in Northern Bengal, so as to form a stream of railway from Behar to Assam, is within Schedule A.

4925. Yes, but that will all connect with the port of Calcutta only, so that the other projects are altogether in abeyance under this Schedule?—Yes, at present.

4926. *Per se*, I suppose you would admit that is a very great misfortune?—I think it is; but then the companies, if they like, may come forward and take them up.

4927. Are not there some dangers and difficulties attaching to the fact that the whole commerce of the immense Gangetic Valley below a certain point is at present centred in this single port of Calcutta; might it not be a very great advantage to open up the other port of Chittagong, on the other side of Bengal?—There are advantages both ways; the more trade you bring to a large port like Calcutta, the more you can develope the appliances for harbour accommodation.

4928. You say if companies were found to take up a large number of the lines, the Government would abstain, and make them over to the companies; do you think that companies are a machinery preferable to Government for making lines?—I think they have many advantages over the Government in some respects; but there is room for both.

4929. Will you tell us what are the respects in which you think they have very great advantages over the Government?—Assuming that the Government could during the next five years borrow 15,000,000 *l.* for railway construction, it does not necessarily follow that they could borrow 30,000,000 *l.*, so that it is possible for the guaranteed companies to borrow the extra 15,000,000 *l.* where it is not possible for Government to do it. I think people who lend Government money are too apt to look to the total amount

Sir *George Campbell*—continued.

of debt without considering for what purpose it has been raised.

4930. The Government can raise it cheaper direct than through companies?—That depends on the amount of debt there is; if Government were to come into the market with 5,000,000*l.* a-year, I do not think they could raise it on as good terms as it could be raised if the Government came in for half, and the companies for the other half.

4931. As regards your general financial statement, you say we must exclude wars and famines?—It excludes wars, and assumes famines are sufficiently provided for by the present arrangements.

4932. Have you ever made any calculation in how many years out of the last 10 or 20 something extraordinary has happened to prevent the normal surplus the Government expected to have?—There have only been three events during the last 10 years; the Bengal Famine, the Madras Famine, and the Afghan War.

4933. Take the last 10 or 12 years, do not you find that the number of years adversely affected is a very large proportion of the whole?—I do not think so. I think we have in our years of surplus covered or very nearly covered all the deficit that has been caused by these various circumstances, and now we are very much stronger than we were at any time during the last 10 years, because during the last 10 years we had not that million and-a-half a-year provision for famine.

4934. Is that calculation calculated only prospectively, or have you made a calculation that a large portion of that million and a-half ought to be absorbed in paying for the famines for which you have already incurred a large debt?—The calculation was made in 1877, that famines in the future would cost on the average 1½ millions a year; this amount was set aside, so that future famines should be covered.

4935. Then you have not taken into consideration the debt incurred on past famines?—No, our revenue is sufficient to pay the burden of that debt.

4936. Then you do not propose to pay that off?—We cannot so long as we are raising money for the prosecution of works.

4937. Coming to the present year; about political accidents. At the present, there is a time of peace, and as far as we know, an absence of famine?—We cannot say about the absence of famine until the end of September.

4938. I am not aiming at famine, but political accidents. In the statements you have made, have you taken into account calculation of the cost of a line from Dadur to Quetta?—No; I ought to have mentioned that that was only sanctioned the other day. At the time I left India and drew up these Papers, the actual expenditure sanctioned was for the construction of a road, and I allowed nine lacs a year for that purpose. Since then the Secretary of State has, I believe, given instructions for the construction of a railway line, and that I admit is outside my calculations; but the reason of it is that it came in after they were made.

4939. That is a political accident which has already occurred, which will very materially disturb your calculations?—I think I must admit that.

4940. And on account of that political accident a good deal of money must be spent of which there is no prospect of a commercial return in our time?—I believe not. I believe it will cost about two millions of pounds, and that will have to be spent within a few years.

Mr. *Dalrymple.*

4941. Have you any opinion about the advantage of a coast railway from Calcutta to Madras?—The line would be a great advantage if it was constructed, except that Madras is not a very important place for trade; and I imagine there is very little through traffic between Calcutta and Madras, because of the competition by sea. On the other hand, there are a very large number of large rivers to be crossed, and although nothing is impossible for engineers now-a-days, they would present such serious obstacles that it would be practically impossible to construct a railway within any reasonable limits of expenditure. There is the Mahanadi, the Godavery, and the Kistna; they are all rivers which it would be impossible to cross anywhere near their mouth, or near the coast.

Mr. *Jackson.*

4942. You rather seemed to weaken some of the evidence which had been given before with reference to these Government proposals. You were asked as to whether they were to be considered as pledges of what was going to be done. Is there any doubt that the Government of India intend seriously to proceed with Schedule A.?—No, the Government do seriously intend it.

4943. Therefore your answers are not to be taken as in any sense indicating that there is any slackness with regard to Schedule A.?—No, except that the Government is continually changing, and it may see reasons to review and to make alterations of detail in Schedule A., but not to make any alteration of policy.

4944. I am asking more particularly with regard to the extent or rate of progress of making Indian railways. There seemed to be some doubt as to whether this proposal which we have before us is to be considered one which the Government of India propose to go on with straight away?—They do. What I said was, that the financial department did not like to be bound down to carry out this programme within five years, or any other definite time. There might be difficulties in raising the money, but they are quite ready to accept the programme as it stands, saving the obligation to complete it within five years.

4945. But you do not anticipate any difficulty that will arise to prevent their doing it?—It is impossible to say what may arise in five years.

4946. That is true; but you have no reason to anticipate?—I have no particular reason to anticipate.

4947. With regard to Schedule B., you said there was no intention on the part of the Government of India to go on with the lines in Schedule B.; I think I understood you to say the other day that Schedule B. might be considered in the productive class of railways; the productive class I understand

Mr. *Jackson*—continued.

I understand technically to mean railways which, in all probability, will pay 4 per cent. within five years?—Yes.

4948. And I notice in the Report, page 80, referring to Schedule B., it says: "A few of the most important are specified in the margin, and besides them there are various short feeders, which would be useful in opening up the country. All the above would be profitable undertakings to whoever embarked in them." Surely if that be so, then there ought to be some means of getting them built by somebody?—Yes, except that the capital is in this country, and the people who possess it are not very ready to expend it upon Indian projects.

4949. But they would spend it on Indian projects if the Government of India guaranteed the interest, I suppose?—I have no doubt they would.

4950. Do not you think it would be possible, from your anticipations of increased revenue, rather to have accelerated progress than to have delayed it?—I think all I can say upon the subject is that Schedule A. is quite as far as the Government see their way to going at present, and that when they reach the end of Schedule A. they may be prepared or may not be prepared to guarantee the lines included in Schedule B.; but it is all a question of time, and the amount of resources which Government feels confident in having at its disposal.

4951. You quoted Sir Auckland Colvin, that the borrowing of six millions could not be done without disturbing the money and the labour market?—I think that if the Government was to come into the London market for five millions a year, the opinion of their credit in the London market might be so far affected that they would not be able to raise money as they do now at 3 or 3½ per cent.

4952. Do you think with an expenditure of six millions a year on railroads (one-third of which might be put as being in England, and two thirds in India) would be likely seriously to disturb the labour market in India?—The effect of railway construction in India, wherever it has been undertaken, has been to send up the price of labour.

4953. Is not that all for the benefit of the district?—Yes, but it has added to the expenditure of the Government.

4954. But railways are made cheaper now than they were formerly?—They are made cheaper than they were at the time the guarantee railways were constructed, because so very much more is known about the conditions of railway construction in India.

4955. And therefore, although you might pay a little higher for the labour, the railways would not necessarily cost more than they did before?—They would not cost nearly as much as the guaranteed railways cost. Some lines latterly constructed have been constructed very cheaply indeed, and probably it is not to be expected that they can construct them more cheaply in future than the Rajputana, the Chattisgar, and the Northern Bengal Railways.

4956. I think I gather that it is your opinion that you cannot expect to borrow very much money in India?—We cannot expect to raise a rupee loan of 2½ millions a year in India; and even of the rupee loans which we do raise in India, we cannot expect more than half of them to be taken up in India itself; the other half would probably be taken up in this country.

4957. Major Gordon, I think, recommended that the accounts should be published separately, that is to say, the statement showing the income and expenditure of the Indian railways; do you think that would be beneficial?—We do publish them; they are included in the Parliamentary accounts, in which there are separate returns regarding the railways; there are several subsidiary statements of account.

4958. Are the accounts showing the revenue from Indian railways published so that the public can see at once the result of them?—They publish the main facts; I can show you the account. Here is the Parliamentary account of the railways, which shows the figures in abstract. It is included in the accounts presented to Parliament.

4959. My object was rather to elicit whether by the publication of these accounts showing the public the result of the working of Indian railways, probably the investment by the public in this country might proceed more rapidly?—There is no statement of account published with that distinct object; but there are accounts and papers published from which the information can very easily be gained.

Mr. *Wodehouse.*

4960. I think you told us that the proposals of the Government of India contemplate an expenditure of 32,000,000 *l.* in five years; Major Conway-Gordon said that they contemplated an expenditure of 33,462,000 *l.*?—The figures are the same; it depends, for the most part, upon what you include within the total. The abstract which you have before you reaches a total of 31,962,000 *l.* Then the figures which Major Gordon gave added to that one million and a half, which was the expenditure by the existing guaranteed railways. If you total these two it comes to 33,462,000 *l.*

4961. Therefore you were aware of the figures he put before us when you gave us yours?—Yes, there is no difference between the two.

4962. You contemplate borrowing about 2,600,000 *l.* as the utmost in any one year?—By Government. The Government only requires to spend from loan funds the equivalent of 2,600,000 *l.* sterling.

4963. Which would be an increase of how much on your annual borrowings in the past?—The increase comes to 800,000 *l.* It is 800,000 *l.* more than the present standard of borrowing, which is two crores and a half.

4964. The dominant consideration of the Government of India for desiring to extend railways is the apprehension of being overtaken by famine before they are prepared to meet it?—Yes.

4965. The making of the railways will, no doubt, save life, but do you think it will diminish the cost of famine relief?—The Government, as stated in their Despatches, are of opinion that it will. I see that General Strachey says the effect will be to carry the same amount of money farther, but not absolutely to save money.

Mr. *Wodehouse*—continued.

4966. Does your opinion agree with that?—I think the expenditure of Government upon famine depends upon the object the Government has in view. You can limit your expenditure in many ways, only at the risk of causing suffering; so that it is no doubt possible for Government to limit the expenditure to a smaller quantity when they have a protective line than when they have not a protective line.

4967. The Famine Commissioners reported that the most densely populated countries were the wealthiest and least liable to famine?—Yes; because a district ceases to be densely populated when it is liable to famine.

4968. Therefore your protective lines will have to pass through poor districts?—To a great extent they will have to.

4969. Which, of course, diminishes largely their likelihood of being remunerative?—Of being soon remunerative.

4970. You are satisfied that the proposals of the Government of India will not involve any increase of taxation?—Yes; I assume that the Government of India will be able to carry it out with their existing means.

4971. But you would deprecate an increase of taxation for this purpose?—Yes, I do. The Government have stated also that they would consider delay in the construction of these lines a less evil than the increase of taxation.

4972. And as far as the recommendations of this Committee are concerned, do you desire for the Government of India absolute freedom from all restrictions in the way of railway extension?—No, not absolute freedom. I rather indicated that it might be possible to approve the programme and the principle upon which it is founded, but at the same time to leave details as to time, and as to rate of progress, and many other things, to the discretion of the Government of India and the Secretary of State.

Mr. *Bolton.*

4973. When you speak of avoiding increase of taxation for the purpose of building railways, what is the present amount of taxation?—It is a very difficult question to answer, because there are so many different opinions as to what sources of revenue are taxation, and what are not; our principal revenue, for example, is land revenue; it is a question whether that is taxation or not.

4974. Supposing you had no railways to provide for, what reduction of taxation would there be, or what surplus taxation would there be?—If there were no future railways to be provided for?

4975. No, none at all now. You were speaking about increasing taxation to provide additional railways, and I should like to arrive at the figure of the present taxation?—It is extremely difficult to answer as to taxation in India, because although I can state what the revenue is under any particular head, and under any number of heads, it is very difficult to say whether those heads involve taxation or not.

4976. If you do not know the present amount of taxation, how will you be able to arrive at no increase of that amount?—I do not intend to increase the amount.

4977. But do you know whether you are doing so or not?—I do not intend to impose any new taxes.

Mr. *Bolton*—continued.

4978. Is that the meaning of it?—Yes, that is the meaning of what I said.

4979. When you spoke of borrowing two-and-a-half millions, or 2,600,000 *l.* per annum, you did not contemplate that you would be able to spend six millions per annum without borrowing the value of the amount; but the 2,600,000 *l.* in the proposed expenditure of the Government, is not it?—No; the Government will spend part of its ordinary revenues on railways, and partly meet the expenditure from borrowed funds; and the amount which it cannot produce from its revenues amounts to 2,600,000 *l.*

4980. You said you thought it desirable that the liability for the loans should be divided between the Government and the companies. That sum could be raised and raised more easily if a portion of the expenditure of the Government was raised by companies, and a portion of it by the Government itself?—Yes.

4981. Do you think that capitalists lending money to the Government would not look rather to the amount of their obligations in the shape of interest than to the nominal amount of the loans?—I think as a matter of fact they look to the total amount of the loans, and do not regard the burden in respect of interest.

4982. Then you think that the companies would raise the money at the same rate of interest?—It depends upon the nature of the guarantee which the Government gives; if the Government gave a permanent guarantee, I presume the companies could raise the money on very nearly the same terms.

4983. An absolute and perpetual guarantee?—Yes.

4984. Then there would be no difference between that and the Government loan direct?—There is no difference in reality, but there is when people come to look at it for the purpose of lending; because in the one case there is an addition made to the Government indebtedness, and in the other there is not.

4985. In those two cases do you think the rate of interest would be the same?—I think it would.

4986. Do you think the companies could raise the money at the same rate of interest as the Government?—I think there would be very little difference between the two if the Government would guarantee the interest.

4987. For a term of years?—No, permanently; when it is for a term of years people require a larger return.

4988. Then surely if it is an absolute and permanent guarantee by Government there can be little difference between the two; it could hardly deceive anyone?—It ought not to; but I think people do, as a matter of fact, look at the total amount of the debt.

4989. As to the amount of money to be raised, let it be what it may, you think that two crores of rupees is about as much as could be rised in India?—I think two crores is, as India at present stands, beyond its capacity; I do not say that it has always been so; I think three or four years ago there was no great difficulty in raising that amount.

4990. And

Mr. *Bolton*—continued.

4990. And your recommendation is that the Government of India shall be left free to raise their loans in India or in England as they think best?—Yes; that they should not be bound either to borrow in England or in India, but be allowed to judge what is the best, and to act for themselves.

4991. Now, as to this list of railways in Schedule B., you say, with regard to the commercial lines, if any private enterprise desires to take up any line, they will give it all facilities as far as regards giving information; they are always prepared to give the land, but beyond that they are not prepared at present to go?—Yes.

4992. Now, there would be a great many other things to provide besides the land and the information; for example, what rights or privileges would be given to companies who were willing to construct railways at their own cost under that guarantee; has the question ever been considered?—I do not know exactly to what rights and privileges you allude.

4993. For instance, what power would the company have under those circumstances as to rates?—I am afraid I cannot give any answer to that question; the question has been considered, and it is included within the existing guarantee; but I really have no more information upon the subject than any other person who has read the proceedings of the present Committee.

4994. You do not know whether greater powers would be given to a company which built a line without Government assistance than to a company that built a line under a Government guarantee?—I am afraid I must say that the question is beyond my department, and that I am unable to give any definite answer to it.

4995. And you do not know, I presume, whether powers would be given to a company so placed; that is, a company that builds the line without the guarantee, over existing railways on any terms at all?—No; I could not say anything whatever about that.

4996. Then, when you said they would give it all facilities as far as regards information, and so on, you had no special knowledge upon the subject?—No; what I meant by that was, that the Government had made actual surveys and an estimate of the cost; they had also ascertained as far as possible what the probable traffic is, and they are willing to give all that information.

4997. By "probable traffic," do you know whether that meant traffic arising and terminating on the line itself?—I cannot tell you.

Mr. *Slagg*.

4998. What is your opinion as to the proposal to take a portion of the Famine Fund for the purpose of guaranteeing railways. In case that Famine Fund is wanted at future times for famine purposes, do you consider it ought to be supplied out of the ordinary taxation of the country?—No; I can only quote Sir Evelyn Baring upon that, that we do not profess to estimate for a famine year. We take it for granted that when famine comes we shall have to borrow to carry us over the expenditure; and we provide for that by a large surplus of ordinary revenue.

Mr. *Slagg*—continued.

4999. The proposal now is to apportion only a limited amount of the Famine Fund for the guarantee of railway interest?—Yes.

5000. And as far as it appears to me that is the only fund which the Indian Government has at its disposal for that purpose; for it appears that there is no absolute ascertainable profit on railways at present which could be placed to such an account. If I am right in supposing that, that the Famine Fund is the only available fund for the purpose of paying interest, is not it very possible that the temptation may arise to invade that fund to a much larger extent than is at present proposed, and possibly to absorb the whole of it in railway guarantees?—I do not think that is the only fund from which the Government can carry out the railway progress, because we have also surplus on ordinary account which we estimate at half-a-million, and that will remain to us; and I estimate the surplus after all this expenditure to be still 400,000 *l.* surplus revenue over expenditure.

5001. On railways?—No; on the whole account.

5002. That is, of course, a comparatively small item of the charge proposed?—Yes; but then that is after providing for construction to the amount of 270,000 *l.* out of the revenue account. We still have a surplus of 400,000 *l.*

5003. And you feel confident that a further invasion of the Famine Fund will not be necessary?—That is the result of the estimates I have made.

5004. Would you feel disposed to object to any further invasion of the Famine Fund for that purpose?—I think that, if the charges turned out to be greater than the Government anticipate, so that it would be necessary to provide a larger sum of money, the Government would be obliged to add to the taxation; because they cannot give up this Famine Insurance Fund without confessing that they are unable to meet, on the whole, their expenditure out of the revenue. The result would certainly be that they would have to take measures for increasing the revenue. Of course the present estimate is that they will not have to take such measures. The estimates may fail, but, as it stands, the Government think they are within their means in undertaking the present burden.

5005. Then, beyond the present moment, you would object to any further invasion of that fund?—Yes, certainly. I think that the Government should continue to set aside 75 lacs of rupees, as they do at present, for what is called reduction of debt, which does not mean, necessarily, paying off existing debt, but preventing further borrowing.

5006. I am sorry to say, that with all the explanations made to the Committee, I have not been perfectly clear as to the actual result of railway working in relation to money spent, the interest lost, and the loss by exchange, and the setting against those sums of the receipts of the railways; I have not been perfectly clear as to what the actual result is on the whole of the railway undertakings of India, and I would ask you to be good enough just to glance at that table, and to tell me if you think it would be possible to fill up the figures in such a form as

Mr. *Slagg*—continued.

that for the information of the Committee (*handing a Table to the Witness*)?—I think a great deal of this information could be given, but I should have to ask some questions as to the precise meaning of some of your heads. For example, under the head of "capital," I could very easily state the existing capital of the guaranteed lines, or of the East Indian Lines; but then that would not mean the whole amount which has gone towards its construction; because the question of exchange comes in to alter the precise figures. For example, in the case of guaranteed railways, you raised the capital in the form of sterling in this country. The expenditure took place in India, in rupees. The Government were bound to bring to account every rupee of expenditure, only at 1 *s.* 10 *d.*; but, as a matter of fact, every rupee of expenditure at that time cost them 2 *s.*; so that the sterling capital is an under-statement of the actual expenditure. I should have to ask some question regarding the precise meaning which you attach to the terms in those respects; but I do not think it would be difficult to give a great deal of this information.

5006. I should desire to have it if possible in the form which most accurately represents the actual expenditure, estimated in the way which you think most real?—With reference to both, I presume?

5007. With reference to both?—Yes.

Mr. *Carbutt.*

5008. You have handed in to the Committee a very interesting forecast of the financial position of India for the next few years, and as far as I understand it you have under-estimated it in every respect?—I have tried to do so; I have tried to make my estimate safe.

5009. Then supposing that your forecast was under-estimated, and we have no wars and no famines, and that the revenue of India is very considerably more than you have estimated, do you think that the Government of India would be inclined to spend more than 32,000,000 *l.* in the next five years?—They certainly will not do so until they have had experience of two or three years more; I do not think they will undertake further risk.

5010. Supposing that the railways that are constructed, many of which are only just open, will earn more dividend than they are earning at present, and that there is a surplus from the railways, do you think that the Government of India would then be justified in spending more money?—No, because there is a definite limit to the power of the Government in the matter; they cannot undertake more than a certain amount of expenditure without considerable preparation. Their establishments are limited; they require engineers to carry out the works, and so on.

5011. The proposal of the Government of India is to spend 32,000,000 *l.* within the next five years?—Yes.

5012. But, as I understand it, they propose to spend parts of it by companies?—Yes.

5013. Then if your forecast is under stated, and the Government have a much larger revenue, and they obtain a much larger revenue from railways, would you then think they were justified

Mr. *Carbutt*—continued.

in spending more than this 5,000,000 *l.* or 6,000,000 *l.* a year?—No, because I think there are other claims; other fiscal reforms which they are very anxious to carry out.

5013.* Then it comes to this, that if this proposal is sanctioned by this Committee, all that the Government of India will spend per annum more than they are spending at the present time is about 800,000 *l.*?—*Yes*; that is the Government itself, not the guaranteed companies.

5014. Then even on the most favourable report of this Committee the total amount of money that the Government could spend per annum is only about three-quarters of a million over and above what they are doing at the present time?—Yes, besides the guaranteed companies.

5015. Then you are of opinion that, even supposing this Committee had come to the conclusion it would be better for the Government to spend more, they would not be justified in doing so?—It is not the proposal of Government that they should do so, and if they have funds at their disposal more than they require for this particular purpose, they have other purposes to which they can put them.

5016. I suppose you have heard of the proposals from gentlemen who have been out to India, and know about railway construction there, to spend from 7½ to 10 millions per annum?—Yes.

5017. And you think this Committee would not be wise in sanctioning that?—I do not see any ground upon which such a recommendation could be made. I think the Government is not prepared to spend 10 millions, and you cannot so suddenly swell the expenditure.

5018. But you might gradually increase the expenditure?—There are very great difficulties in that, because the question of the amount of trade, and the possibility of its meeting the necessary remittances, and other questions of that kind, will enter into the consideration of such a large expansion of expenditure.

5019. You were saying that you thought the Government ought to undertake protective works rather than commercial works?—Yes.

5020. Do not you think it would be advisable for the Government to go on making the commercial works with the view of inducing capitalists in this country to spend their money more freely in India; that is if you showed them that railways were paying better in India, you would induce capitalists to come forward in this country; whereas, if you made protective works, your guaranteed interest would increase without your net earnings increasing?—I think the Government will attain that object by their present programme, because what they require to satisfy the commercial community of is, that their estimates are correct; and if they estimate 2 per cent. as their net earnings on existing lines, and they prove in actual practice a net earning of 2 per cent., that will show the public that where they make an estimate of 4 per cent., that will also be realised.

5021. You think that the more information the European capitalists obtain of what you are doing actually in India, the more likely they are to find the money?—I seriously think so.

5022. You propose that half the money should be

Mr. *Carbutt*—continued.

be borrowed on debenture bonds?—As large a proportion as possible.

5023. And you also said that in the end the Government ought to buy the railways; now, do not you think it advisable that the Government in guaranteeing interest to a private company should say at once, "We will find you half the capital at 3 per cent. in debenture bonds; the other half you must find yourselves on a guarantee?—One object the Government has in causing the companies to carry out the construction is that they gain the advantage of having the expenditure carried out without the disadvantage of having the liability on their books.

5024. But surely if it is guaranteed in perpetuity, they are liable?—I perfectly admit the liability is precisely the same, but at the same time when we go into the market to borrow the money, people will look at the total of our liabilities.

5025. Do you think that they will if they know that your assets are fully equal or more than equal to them?—I think they will to a very large extent.

Mr. *Carbutt*—continued.

5026. You must remember a great number of these Indian railways have been made out of revenue and not out of capital, a thing no other country in the world has ever done?—Yes; from the debt as it stands in the books you have to make a very large reduction before you get really the debt of India, because a large portion of it has been expended on productive works; but at the same time people of whom we ask money will not look upon it in that light.

5027. And you think it would not do to face the subject boldly and say: It is only a question of account as to whether we guarantee the money or whether it is in our books, and therefore we appeal to you, and publish and show you we have a large amount of assets in the shape of railways, and we think it cheaper to construct railways half in debentures rather than guarantee the money to the railway companies?—Well, I am afraid all I can say is that people do not always take a reasonable view of things, and we must accommodate ourselves even to the prejudices of our creditors.

Friday, 23rd May 1884.

MEMBERS PRESENT:

Mr. Baxter.
Mr. Bolton.
Mr. Brodrick.
Sir George Campbell.
Mr. Carbutt.
Mr. Kynaston Cross.
Mr. Dalrymple.
Mr. William Fowler.
Mr. Gorst.
Mr. Jackson.
Mr. Slagg.
Mr. William Henry Smith.
Mr. Wodehouse.

THE RIGHT HONOURABLE WILLIAM EDWARD BAXTER, IN THE CHAIR.

Mr. JAMES WESTLAND, re-called; and further Examined.

Chairman.

5028. BEFORE going on with the cross-examination, I wish to call your attention to two sentences which, in the course of my multifarious reading with regard to the work of this Committee, I find in the newspaper called the "Indian Statesman" of the date of the 29th April 1884; I wish to ask you how much, if any, truth there is in the sentences I am about to read: "The accounts are so defectively prepared that no one knows to this hour the real cost of any railway line in the country. Masses of expenditure have been made every year upon the lines that should have gone to capital account, but that have been treated as part of the ordinary annual expenditure of the administration; the same remark applies to the State lines as well as to the guaranteed; in the statement received by us from Simla the other day, the cost of the Rajpootana-Malwa line is put down at 77,000 rupees per mile; Mr. Glover, the contractor, now tells the Select Committee that the cost was 66,500 rupees. From inquiries made by ourselves some years ago at Agra, we are satisfied that the actual cost fell little short of 100,000 rupees a mile. Instead of every item of the expenditure being posted in a great public works ledger to the distinct heading of the 'Rajpootana State Line,' so that everyone might see at a glance what the outlay had been, we have no means of ascertaining it whatever, and have to make a 'scratch' estimate of the amount whenever any inquiry is made into the facts. Masses of expenditure have passed in this way through the annual accounts every year for the last five-and-twenty years, without a record of any kind of the outlay, which has been treated just as though it were expense incurred in the maintenance of the police or the civil courts of the country; the effect has been to make the balance-sheet show an almost constant deficit throughout the period. On railways alone there has been smuggled in this way through the accounts not less than 50,000,000 *l.* sterling"?—I think I may first of all explain that the editor of this newspaper has peculiar ideas regarding the form in which we should keep our accounts in India, and he has once or twice ventilated them in the "Statesman" in India; and one of his ideas is that we should keep our

Chairman—continued.

accounts in much the same way as a commercial house or a commercial company would keep theirs, that is to say, that we should have a separate block account, in which we should enter a very vast number of things, and that this block account should be separate altogether from our revenue account. What he states here has reference to this particular theory; he says that a certain amount of money has been spent in the form of capital, only upon Indian railways, and that it has been entered in the revenue account. That is perfectly true, and if any person refers to the details in which our revenue account is stated, he will find one or two headings which are distinctly set apart for the exhibition of capital expenditure upon State railways. I cannot at the present moment state how much capital expenditure upon State railways has been entered in the revenue account, but to say that any figures have been "smuggled" into the railway account is thoroughly false; they are exhibited under their proper heading to any person who chooses to look into the accounts. But it is perfectly true that large sums have been spent against revenue upon capital in railways, and the only amount which is not strictly set forth under the head of railway expenditure is the amount which comes under the head of "loss by exchange," because we have really borne under the head of "loss by exchange" what, strictly speaking, is part of capital outlay upon State railways.

5029. So that, apart from improprieties of expression in that statement, there is a foundation of truth in the editor's remark?—It is perfectly true that we have spent out of revenue as against capital in Indian railways; it has been part of the policy of the Indian Empire.

5030. The accounts show that upon the face of them?—Yes.

Mr. *Bolton.*

5031. Do you hold that the loss by exchange subsequent to the completion of the line is a charge which should be made to capital?—I will state more accurately what I mean. Stores, rails, and ironwork of various kinds are purchased for State railway purposes in this country, and the

Mr. *Bolton*—continued.

the amount of it is put down in sterling at so many pounds. If you read the total as "sterling" it is perfectly correct, but our accounts of revenue are kept at 10 rupees, so that if you show sterling expense against 10 rupees revenue you have to show loss by exchange as the difference upon the expenditure.

5032. Then of course the loss by exchange on stores purchased for the maintenance of railways should not be a charge against capital?—It has not been charged against capital, it has been charged against revenue account.

5033. In your remark you referred to rails and stores for the making of a railway, and not to stores necessary for the maintenance of the railway?—The stores which are necessary for the making of a railway are charged to capital account.

Sir *George Campbell.*

5034. Every year there is presented to the public in India and Parliament a Finance and Revenue Account, showing the income on one side and the expenditure on the other, and the surplus or deficit, as the case may be. What I want to ask is whether, putting aside this vexed question of exchange, you mean that in the ordinary expenditure of the year of which the Budget contains the result, there is an expenditure upon the capital of Indian railways which is thrown into the ordinary expenditure and which in that sense vitiates the account?—Yes, there is; there are two headings in our accounts which are stated as ordinary expenditure; one under the head of "Public Works not classed as Productive," the heading of which is "State Railways Capital Account," and another is under the head of famine, called "Protective Railways"; that heading is also "Capital Expenditure." The same also is the case with the Frontier railways under the head of Public Works not classed as productive.

5035. Then I understand that as affecting the surplus or deficit your statement is confined to railways and works classed as non-productive or political railways, which are upon that account deliberately classed as railways whose capital expenditure must be charged against revenue?—That is the case, except that it is not only political railways, but there are other other kinds of railways charged; there is a strict limitation as to railways whose capital expenditure may be charged outside the account; and any railways which do not come within that restrictive clause must have their capital expenditure charged within the revenue account.

5036. I understand with regard to the railways which are charged as "productive," that no part of their capital expenditure is charged against revenue?—It is not intended that any should, but there is a limited amount that falls under the head of "loss by exchange."

5037. Take the Rajpootana Railway; how was that classed?—That railway was classed as "productive."

5038. Then no part of the expenditure upon the Rajpootana Railway has been charged against revenue?—Except this small amount of loss by exchange; and I may say in the administrative account they show the capital account of the Rajpootana Railway at a little more than we

Sir *George Campbell*—continued.

show it in the finance and revenue accounts; namely, they make a small addition in respect of loss by exchange.

5039. I suppose we may take it that except as regards loss by exchange there is no complication at all; that certain railways classed as "productive" railways are entirely charged to capital, and that certain railways classed as "non-productive" are put in the same category as roads and public works for the benefit of the country which are charged against revenue?—Yes.

Mr. *Kynaston Cross.*

5040. If after a few years it is found that a railway upon which a considerable amount of money has been spent, which has been charged to revenue account, is productive, the money so spent is charged in the account to capital, and the railway is taken out of the ordinary works and is put into the "productive works"?—That has been done, but it has not affected the revenue account, and we are specifically instructed that when any amount is thus added to the capital account of "productive railways," a *per contra* entry is not to be made so as to affect the revenue account of the year; and it appears as extraordinary receipts after the declaration of surplus or deficit.

Sir *George Campbell.*

5041. Would you tell us which are the principal railways which have been so far charged against revenue?—The Bhopal Railway is one, that is the first 12 miles of the railway from Etarsi to Bhopal, and the Kandahar from the Indus Valley to Sibi, the northern section of the Punjab northern.

5042. From where?—I think that is from Rawul-Pindi to Peshawur; the Kaunia and Dhurla line, a small line made by the Government of Bengal.

5043. You might say certain provincial railways?—Yes, certain provincial railways; those are all the open ones. Then a considerable amount of railway survey has also been charged to the revenue account.

5044. Putting aside certain provincial lines, may we take it that the Imperial lines charged to revenue are so far very limited indeed?—That is so, and even the provincial railways are now being transferred for the greater part from revenue to capital account, so that a very small amount altogether has been charged against ordinary expenditure.

Mr. *William Fowler.*

5045. The result is that when you transfer such a line, you have really made the whole line out of revenue?—Yes.

5046. That is to say, you charge to revenue the expenditure which in this country would certainly have been charged to capital?—Yes, which any commercial company would certainly charge to capital.

5047. That comes to a large aggregate in the whole, does it not?—It comes to about 6,000,000 *l.*

5048. Now I wish to ask you a question with regard to what was said by Major Gordon as to the public works ordinary expenditure; he gave

Mr. *William Fowler*—continued.

a memorandum in which he separated the capital expenditure from the other expenditure included in the public works ordinary?—Yes.

5049. You will find in Statement Y. that there is what he calls a block account of the public works ordinary, which for 1883 amounts to 3,994,000 *l*, that is to say, that year there was a capital expenditure out of revenue of 3,994,000 *l*.?—Yes.

5050. You have referred in your evidence, I see, several times to what is there called the risk which is run by the Government of India in guaranteeing interest in the future upon railways proposed to be made, or in making railways itself, as a very important consideration in reference to the speed with which railways have been made. Now I want to ask you, having regard to this very large sum which every year is paid out of revenue to capital account, whether there is not a very great reserve of expenditure less important than railways, out of which any accidental amount of payment might be made; for instance, you might suspend certain works which are much less important than railways, if you found your finances by any accident in an unsatisfactory state when you have 3,900,000 *l*. paid out of revenue?—I think so; there is a very large reserve in that sense.

5051. I do not understand why it is that it is said a very large risk is run in guaranteeing considerable amounts for productive works?—I would say that the Government recognises that there are so many claims upon it besides those of railways, that the risk is not the risk of not having the money to meet the burden, but the risk of having to stop other expenditure which is considered necessary for the purpose of administration.

5052. I quite understand that; these items analysed in page 40 of the last Revenue Statement contain the items of civil buildings, roads and services, as I read it, 3,965,000 *l*., which is very nearly the same amount as was mentioned by Major Gordon as having been the capital expenditure in 1882-83; you mean that some of those works would have to be suspended if it turned out that the expenditure upon railways was greater than was expected or than could be met in the ordinary way; but are not these expenditures upon railways far more important for the development of the country than most of these things?—I cannot say that they are, because one must remember that under the head of civil buildings we include the repair of roads and existing buildings; it is not altogether new expenditure; the new expenditure might to a great extent be suspended, but the ordinary maintenance expenditure must go on.

5053. What I do not quite understand is this, I put that especially to Major Gordon; I was quite aware that a very large amount of your total expenditure upon ordinary works was for maintenance; I asked him distinctly, "Do you mean this 3,994,000 *l*. is strictly capital expenditure for new works," and he said, "Yes"?—Then it is not correct.

5054. I am quite aware that a very large part of this was, as I read it, for maintenance and repairs, but he says this is what he calls "pure capital expenditure." Now I do not consider maintenance is a capital expenditure?—But the

Mr. *William Fowler*—continued.

capital expenditure extended over other heads; there are a great number of heads which involve capital expenditure, for example, telegraph and military works, but this head of civil buildings, roads and services, includes repair and maintenance as well as new works.

5055. The total amount of the expenditure upon public works not classed as productive for the current year (the difference would not be great between one year and another) is 6,089,000 *l*. I do not remember what it was in 1882-83, but it was a similar amount?—It was 7,100,000 *l*.

5056. And of that Major Gordon said 3,994,000 *l*. was strictly capital expenditure in the ordinary sense of the word?—I am not prepared to controvert his statement; I can only say that out of the whole 7,000,000 *l*. a large amount is repair and maintenance, and that it can be distinguished by making up a statement from the figures that are represented to Parliament.

5057. If you take his statement as correct it is quite evident that there is an enormous reserve in the shape of the possible reduction of works not so important as railways?—I quite agree.

5058. Does not that greatly diminish what is called the risk to the Indian Government?—I think it does.

5059. I do not think that has been fully brought out by any documents I have seen as yet?—I stated in my evidence upon the last occasion that the expenditure on public works was largely under the control of Government; that is to say, it was possible to diminish it if it were necessary, and that, as a matter of fact, the Government has diminished it by a million; for example, upon such occasions as while the Afghan War was going on.

5060. If any accident of that kind occurred, would it not be better to suspend some of these works than to suspend railways?—I think it is very possible that would be the course the Government would adopt if railways were actually under construction at the time.

5061. With regard to the second item in the ordinary expenditure; it is called No. 41 in the list, "State Railways Working and Maintenance," is that strictly what we should call revenue expenditure?—It is.

5062. It is not included in the capital?—It is not included in the capital, it is the working expenses of the three railways I mentioned just now.

5063. What in the English sense would be strictly working expenses?—Yes; it is very little more than covered by the working of the line.

5064. I see your nominal entry for capital account for railways is only 166,900 *l*.?—I may explain the reason for that is that a very large transfer has to be made in the account of 1883-84 for current expenditure on railways which has been met from "Ordinary" but has now to be transferred to "Productive."

5065. For the future these railways are to be treated as productive?—They are all to be treated as productive, therefore the expenditure of 1882-83 is deducted in 1883-84 from State Railways Ordinary Account and added to the 1883-84 State Railways Productive Account; so that the totals carried forward may be correct. And that is what we do in the case of railways under construction. The amount so transferred

is

Mr. *William Fowler*—continued.

is stated separately in the figures I gave to the Committee last Friday.

5066. You said the receipts were put under Extraordinary Receipts this year?—No; when the construction of a railway is finished and we make the transfer after that, it comes under Extraordinary Receipts, but in every transfer of expenditure going on at the time we make the correction in the revenue account.

5067. I did not quite understand a remark you made about exchange in answer to Question 4808; you say, "The position is that a large amount of expenditure costing 12 rupees or more per £., is put down against revenue amounting to 10 rupees per £., and compensation is made by entering the item, loss by exchange." I do not quite follow that?—In a year in which we have neither surplus nor deficit, we have in India a net revenue of 17 crores of rupees. In England we have a net expenditure of 14,000,000 *l.* sterling. As they are stated in the account the Indian net revenue is stated at 17,000,000 *l.*, and the English net expenditure is stated at 14,000,000 *l.*, but of course 17,000,000 *l.* of Indian revenue being only 17 crores of rupees is only just sufficient to meet the 14,000,000 *l.* sterling of expenditure; and in order to show things correctly we state the loss by exchange, amounting to 3,000,000 *l.*, as an adjusting item; which, being added to the 14,000,000 *l.* expenditure, make its total up to 17,000,000 *l.*, and equal to the revenue figure.

5068. It costs you so much to bring the money over to London?—Yes, it does; these 17,000,000 *l.* are precisely equal in value, and we require the whole 17,000,000 *l.* shown in our account as net revenue in India to meet the 14,000,000 *l.* shown in our account as net expenditure in England; the difference represents loss by exchange.

5069. You have to turn the silver into gold?—Yes.

5070. A good deal has been said about the loss by exchange and the increase of it by reason of the making of railways. I do not know whether it is a fair question to ask: is it not the fact that the improvement of the condition of India is infinitely greater than any such increased loss by the making of railways can possibly be; there can be no comparison between the value to India of the railways, and the increased loss by exchange arising out of the making of railways?—The question of the gain which India as a nation has obtained from railways is entirely different from the question of how many rupees it has cost to make them, or how many rupees it costs to maintain them in the Government accounts.

5071. It would be a great mistake to lay too much stress upon questions like that, when you have such large matters to deal with as the development of a very large undeveloped part of India?—I do not think too much stress should be laid upon it, but it is a question which has to be considered in dealing with the matter.

5072. It is a question to be considered, no doubt, because it is a considerable sum of money which it adds to the cost. Now I observe something was said of the saving which arises by borrowing large sums of money in England in preference to borrowing it in India, and thereby reducing the Government drafts; I think you went into that in one of your answers?—One of the Papers I gave in went into that in detail, and what I said was that the saving should not be considered a saving; it was a mere matter of account, and not an actual saving.

5073. That all depends upon what happens, does it not; you said that in the future silver might fall still more?—Yes, but that is a different part of the question.

5074. But it is all mixed up in this way, that if you have a very large saving by reducing your draft for several years, and by raising the value of the rupee in consequence of the reduction of the draft for several years, and it might happen that after that silver would rise instead of fall, and then you would have a great saving without any compensating loss; on the other hand you might have an increased loss by reason of the fall of the rupee after you had finished your railway?—I do not think the saving ought to be in any way brought into the account if it depends upon the future of silver, because the prospects of a fall are at least as great as the prospects of a rise.

5075. Of course if you increase your sterling loan you have to increase your drafts when the interest has to be paid, and to increase the amount you have to pay in sterling hereafter; you diminish it first, but you have to increase it hereafter?—That is so.

5076. The result all depends upon what the future of silver is?—Yes; but what I mean is that there is no saving in the mean time except the small difference in the cost of remittances.

5077. I could not follow your argument that there is no saving?—There is a small saving in this respect that you improve the remittance rate at the time that you borrow.

5078. Is that because you draw less?—Yes, because you draw less.

5079. By every million you borrow you draw a million less?—Yes.

5080. In the draft there is a saving of loss, and you may raise the amount you may get upon the rupee on the whole of the rest of the loss?—Yes, but I do not admit that we are entitled to show in any way as a saving the amount which we have saved by diminishing the amount of the remittances, because, as a matter of fact, we have made the sterling expenditure all the time whether we have provided for it by drafts, or whether we have provided by borrowing in sterling There is an actual loss by exchange upon the borrowed amount as well as upon the remitted amount, although it does not come into our accounts, and if you are to state the account at an exchange of 1 *s.* 8 *d.* instead of an exchange of 2 *s.* you will find that that saving of which you talk, the saving by reason of a smaller amount of drafts being placed upon the market, disappears entirely; it does not come out in the account at all.

5081. I do not know that I quite follow your answer, but I do not wish to dwell two much upon it. There is another point which I wish to ask your opinion about. You have referred in your answer to the saving at the present moment resulting from borrowing in sterling as against borrowing in rupee, having in regard in addition the condition of the money markets in India and in England, amounting at the present moment to very nearly 1½ per cent.; that is to say, you could raise money in London at 3½ per cent., and it would

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would cost you 4 *l.* 8 *s.* per cent. to raise it in India?—It would.

5082. Have you calculated what the saving would be after a long series of years, and when interest and compound interest is calculated upon it?—I have calculated that in my Paper, but I take my calculation at half per cent. difference between the two.

5083. But that is not the fact?—I think it is; the difference in the ordinary state of the market is the difference between 3½ per cent. in England and 4 per cent. in India; at the present moment exceptional circumstances have made the difference very much greater.

5084. I rather doubt the fact which you state?—If you look at the actual borrowings of the last two or three years you will find that we have borrowed in India 4 per cent. very slightly under par, and we have borrowed in England at 3½ per cent. very slightly above par.

5085. If I were to tell you, speaking as one having to do with the London money market, that the great probability is that you would borrow never worse than you do now in ordinary circumstances, and that your credit every day improves in the London money market, perhaps you might not agree with me, you are now paying 3¼ per cent. in London?—Yes.

5086. That is a question of calculation merely whether you take it at half or one per cent., but if the difference is anything like one per cent., would it not become of immense importance in regard to the finances of India?—Yes, my opinion upon the whole is, that at a difference of half per cent., the chances are that borrowing in England and borrowing in India will be of the same ultimate cost; if the difference is more than half per cent., then it would be preferable in respect of the cost of the borrowing to borrow in England.

5087. I understood from your evidence that there was another reason, which was that the difficulty of borrowing in India rather increases than otherwise?—Yes, it does increase.

5088. Whereas the ease of borrowing in England rather increases also?—Yes, it has lately.

5089. It has for a long time, has it not?—I think that in the English market the dread of silver has been increasing, and the consequence is that we can get capital for sterling loans much more easily than for rupee loans, and that this effect is increasing.

5090. You mean that the fear about silver is rather increasing?—Yes, the fear about silver is rather increasing, and the tendency of capital is to seek sterling rather than rupee investments.

5091. All that goes to show that whatever may be said about the danger of having the ultimate payment in sterling increase, there is a compensation so large that on the whole you are favourable to borrowing here?—The question of compensation is outside the question of loans; because, as far as my own opinion goes, we have a very large amount of compensation in India in a hundred ways for any loss by exchange, that our revenue improves under several heads, and that any future loss by exchange we are likely to be able to meet by the revenue having

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improved more than it would have improved had it not been for the loss by exchange.

5092. That confirms what I say; you say the loss by exchange is not so important as it seems?—It comes to that; that it is not so important when it is considered along with its collateral circumstances.

Mr. *Kynaston Cross.*

5093. Before I go to the evidence you gave upon the last occasion, I would like to ask you a question with reference to an answer you gave to Mr. Fowler, as to the half per cent. of difference being sufficient to compensate you for borrowing in England, as against borrowing in India; are there no economical conditions which come in in favour of borrowing in India?—No, I think the economical conditions run the other way rather, because, as a matter of fact, whether we borrow in India or in England the capital equally comes from England, and in either case we have to remit the interest to England for payment.

5094. But I am speaking of *bonâ fide* borrowing in India?—If you could *bonâ fide* borrow in India, you would have a greater economic advantage and political advantage also.

5095. A great deal more than would be represented by the half per cent.?—I do not think the two things are commensurable.

5096. Would it be an advantage that you could hardly measure?—I could not say; you could hardly measure it; I do not think you can reduce either the economical or political advantage to rupees, annas, and pice.

5097. You could not estimate it in any way?—You cannot estimate it in rupees, annas, and pice; the one you can and the other you cannot estimate in money.

5098. You spoke of suspending the expenditure upon civil buildings, roads, and services, if you wanted to continue your railway expenditure; which of the items which appear upon the detailed accounts under "Civil buildings, roads, and services," do you think you could materially reduce?—The new buildings.

5099. You consider that the railways are much more important than new buildings?—No; that is not the way in which I put it; what I said was that if you had actually incurred a financial liability in the form of interest in respect of railway construction; it is necessary to meet that liability before spending capital upon new buildings.

5100. Then, in order to meet that liability you might have to stop building bridges over rivers, or you might have to stop the construction of public buildings which have been ordered, and which are in course of construction?—My estimate is that you would not have to stop them, but as a matter of fact if it did come to a question of finding money for the payment of interest, you could stop them.

5101. You have stated, in answer to a question, that it would be quite possible to divert some portion of this 3,900,000 *l.* to railways, which would be productive, from ordinary public works which you consider unproductive?—It would not be easy to do so, because there are a great number

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ber of claims from all sides for the construction of new buildings.

5102. If it had been easy to do so, do not you think the Government of India would have done it in the last few years?—They have done it as far as they could do it. Three or four years ago the provincial governments complained very much that they were starved in respect of all these conveniences; but now that complaint has been entirely removed, because they have been allowed to spend the money they then saved. The question has not arisen as to the distribution of the available amount between railways and new buildings.

5103. But they have spent the accumulated surpluses upon these new works?—No, very largely upon railways; the North West Government alone has spent nearly a crore of rupees upon railways.

5104. Will you tell the Committee whether the Government of India is now able to retrench its ordinary Public Works expenditure and to divert some of that money to expenditure upon productive public works?—I do not think it is advisable for it to do so.

5105. You would not advise that this item of 3,900,000 *l.* should be reduced by diverting some of it to productive purposes?—I would not.

5106. I think you wished to make a remark upon a statement which is prepared by the India Office about the effect of the railways upon the finances of India. Major Conway Gordon spoke of the loss by exchange on capital transactions being excluded?—I have prepared an explanation to show exactly what the exchange amounts to, and how it has entered into the actual transactions of the Government. The effect of the exchange upon capital account was as follows. So far as sterling capital received by the Secretary of State in England has been withdrawn for sterling expenditure in England, there has been no loss or gain of exchange; the Government of India merely remains liable to pay interest at certain sterling rate upon that expenditure. But so far as this capital has been used for expenditure in India the operation is this: The Government have received in England an amount which is equal at the exchange of the day to 45 crores 75 lakhs, and which, if laid down in India, would have produced that amount. They have been obliged, however, through the operation of the exchange clause to disburse in India 50 crores 55 lakhs, and the railway as a dividend earning concern cost not only the 45 crores 75 lakhs provided by the company, but also 4 crores 80 lakhs provided out of the Government Treasury, But as the dividend goes to the company in respect of its contribution of 45 crores 75 lakhs, and the Government can make no claim whatever in respect of its contribution of 4 crores 80 lakhs; the amount, 4 crores 80 lakhs, is dead loss to the Government, in exactly the same way as if it had been written off at the time as a gift to the company. Of course the railway would not be there if the 4 crores 80 lakhs had not been laid out, and if the exchange clauses had been different they might have thrown this burden on the company, and would in that case have substituted for the original expenditure of 4 crores 80 lakhs by Government, this amount of additional capital of the company on which Government would have had to pay interest; Government, by paying the capital once for all, escaped the burden of interest; but it is not the less real expenditure by Government out of its revenues; against the 4 crores 80 lakhs Government recovered 69, as mentioned in column 17 of the Statement. It holds (as the accounts are made up) 28 crores at debit of the companies, to be paid up by them, the balance of 3 crores 83 lakhs is the difference between columns 18 and 19 (436–53) in the Statement.

5107. Then that statement, which is prepared by the India Office as showing the result of the financial transactions connected with railways, is correct?—It is correct; I think the outgoings of the Government as there shown are correct.

5108. Of course that did not take any consideration of the dead capital invested in railways which are not yet productive; there is no allowance made in that statement for that?—There is not.

5109. I would ask you whether your Paper on the present financial position of the Government of India does not show that the normal condition of the revenue and expenditure exhibits a surplus of 48 lakhs of rupees, with an annual increase of 41 lakhs?—Yes.

5110. That is, if no serious alteration should arise from famine, war, depreciation of silver, or any similar abnormal cause?—Yes.

5111. In applying this calculation to the proposals of the Government of India, have you, with the view of allowing for a possible depreciation of silver, reduced the estimated annual increase of surplus from 41 to 25 lakhs?—Yes; a reduction of the increase of surplus from 41 lakhs to 25 lakhs.

5112. Do you then, in your Paper on the financial results of the proposals, arrive at the conclusion that the surplus on the year, if they should be adopted, would be in the first year 384,900 *l.* (conventional); in the second year 396,600 *l.*; in the third year 414,300 *l.*; in the fourth year 466,300 *l.*; and in the fifth year 552,400 *l.*?—Yes.

5113. After which time there would be a cessation of expenditure from the famine fund?—I cannot say there would be a cessation of expenditure. I say the present proposals end there. What the Government may do after that is not at present settled.

5114. Granting that the railways were finished by then, you would consider that after that time you had a constantly increasing surplus, supposing that things went on comfortably?—Yes, if we ceased to make capital expenditure from ordinary revenue.

5115. In your reckoning of the surplus of last year, you did not consider the extra payment of 1,000,000 *l.* sterling to the War Office last year as abnormal, you considered it as part of your usual expenditure; was that so?—No; I reckoned it outside the account; in producing the normal figure, I reduced the figures of 1883–84 by that extraordinary expenditure.

5116. If you reduced the figures of 1883–84 by that extraordinary expenditure, ought you not to have taken from the normal surplus of past years a proportion of the accumulated deficit

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deficit which will be brought against the India accounts in the future?—I referred to that specifically in my Paper, pointing out that I should allow as part of the normal expenditure of the year, 800,000 *l.* in respect of the non-effective War Office charges. As a matter of fact the future expenditure, including the payment of arrears, will not amount to anything like 800,000 *l.*, therefore in the normal expenditure of the year, I have made full provision respecting all arrears and current payments, on account of the non-effective War Office charges.

5117. The current payments being reduced from what they have hitherto been by a change in the method of reckoning them?—Yes, exactly; and then extra payments are going to be made above this reduced amount to pay off the arrears.

5118. And you have included that?—Yes, I have included it.

5119. Will you tell the Committee how the sum of 13,644,000 *l.*, stated by the Government of India (App. No. 1, p. 563), as the net amount they propose to borrow direct, will be raised, and the extent to which their proposals involve borrowing as compared with previous years?—The amount stated in the Despatch is headed "Total net amount to be borrowed by the Government of India direct, 13,644,000 *l.*"; but that expression is a little inaccurate, because it leaves out of consideration everything whatever except the proposals which are laid before the Committee; it assumes that what is not paid from the Famine Insurance Fund and available from actual provincial balances will have to be borrowed. As a matter of fact we find in the rest of the account of the Government of India a very large contribution towards this 13,000,000 *l.* I stated some of the details of it at the end of my answer, No. 4778, and the reckoning I there made was that instead of the total net amount to be borrowed in the form of actual loans by the Government of India being 2,728,000 *l.* a year, it would actually come to only 1,400,000 *l.* sterling.

5120. Did you tell the Committee how you have arrived at that figure?—Yes, it is all stated in detail in my estimate; but what I want to point out is that the proposals of the Government of India do not involve any actual increase or any large increase to the amount which they may, under existing circumstances, borrow; it is more a change in the application of borrowed funds than an increase in the total amount which the Government of India will have to borrow.

5121. Will you give the Committee the comparative rates of expenditure which you propose, as compared with the rates of expenditure for the last two years?—I have prepared a statement showing the actual capital outlay on railway construction by the Government of India during the last four years. The details it is unnecessary to mention, but the totals for each of the four years are 5,300,000 *l.*; 3,200,000 *l.*; 2,400,000 *l.*; and 3,500,000 *l.*; the average expenditure of the four years being 3,600,000 *l.* The present proposals involve expenditure to the extent of 3,570,000 *l.* (conventional sterling) upon the part of the Government, so it is about the same as has been going on for the last four years.

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5122. It is rather less, is it not?—It is rather less; but a considerable amount of the frontier railways is included in the past account. Then as far as regards the operations of companies during the last two years, the expenditure by companies has been the Southern Mahratta Company, about 1,300,000; the Bengal Central, and the Bengal and North Western, each 600,000 *l.*, giving a total for the two years of 2,500,000 *l.*, or say, 1,250,000 *l.* a year.

5123. But one of these has no Government guarantee, has it?—That is correct.

5124. Would it not be well to omit it from your enumeration?—If the Bengal North Western Railway be omitted, it comes to 1,900,000 *l.* in the two years, or about 950,000 *l.* a year. Against that the present proposals involve expenditure by the companies of 2,460,000 *l.* sterling.

5125. For which the Government would be liable?—Yes, for which the Government would be liable. The proposals, as they stand, involve an addition of 1,000,000 *l.* altogether; and that 1,000,000 *l.* is entirely under the head of "Companies".

5126. That would mean that the proposals of the Government involve an additional expenditure, for which they would be financially responsible, of about 1,000,000 *l.* sterling for the next five years?—Yes, the increase is from 5,000,000 *l.* to 6,000,000 *l.*; that is not sterling, it is conventional.

5127. Still, with that explanation, would not the proposals of the Government of India result in the absorption for the next five years of all the improvement of revenue which might otherwise be appropriated to fiscal reforms?—That is the case.

5128. And you would propose to allot all your increase of revenue to the establishment of railways, to the exclusion of all other considerations?—It is the effect of the present proposals that they will render it extremely difficult, if not impossible, for the Government to take up any question involving the remission of any existing revenue.

5129. Have not certain taxes been generally considered rather onerous lately, and have not certain promises been made by the Finance Minister with regard to their remission or reduction?—There is a question which the Government has had before it for some time about export duties on rice in Burmah.

5130. And in Bengal?—And in Bengal. That, of course, if these proposals are approved of, it will not be possible to touch for some time at any rate.

5131. Would you mind stating to the Committee the amount of that tax?—The amount of it is 81 lakhs.

5132. May it not be fairly said that that tax falls especially upon a few provinces?—It falls especially upon those provinces which export rice, viz., Bengal and Burmah, and the benefit of the trade also comes to them.

5133. Does the Finance Minister of India think that it is very important to reduce the duty upon rice?—I think it has been stated that if the existing customs' policy is to be carried out, that export duty will ultimately have to be considered.

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sidered. I cannot say that the Government of India consider the matter especially pressing.

5134. But, speaking for the Government of India, you led the Committee to understand that they had agreed to postpone the consideration of the reduction of the export duty upon rice for the five years, during which this railway policy is to be carried out?—I think that must be taken to be the tenor of the Despatches.

5135. I want to ask you whether the plan proposed by the Government of India will not be an entire reversal of the policy laid down by the late Government, and also the policy laid down by the Select Committee of 1878–79?—If you will refer to page 25 of the Papers before the Committee, the last line (App. No. 1, p. 511), the Government of India say, "This position seems to indicate the necessity of inverting the regulations hitherto in force, of applying the loan funds in aid of the famine grant to unproductive but protective lines, and leaving to private enterprise all such as are sufficiently profitable to attract it. This, therefore, is the corner stone of the policy we now advocate. We consider that instead of continuing State agency for the construction of productive lines of railways, we should for the future, as far as possible, exclude the action of the State altogether from this field of enterprise; and that, as a general rule, the Government should only undertake the construction of railways which, from their unprofitable character in a commercial sense or other causes, cannot be made by private agencies." It is a reversal, therefore, of the productive works policy which was the matter for the consideration of the Committee of 1879.

5136. It is a complete reversal of the decision that was arrived at, in 1878-79, by the Committee, and which was then endorsed by the Secretary of State and the Cabinet?—Was the decision of the Committee that they should continue productive works? I think the question before the Committee was only the extent and the means.

5137. That no work should be constructed with borrowed money unless it should within a given number of years produce a 4 per cent. return. It was a complete reversal of that policy, and would give the Government of India power to construct from borrowed money works which you would not feel certain would, within any reasonable period, return that interest upon the capital?—Or rather, construct them without any reference to return, because many of them are expected to come within that condition.

5138. It would remove the restriction?—Yes.

5139. I think you said that the policy of the Government of India laid down by Sir John Strachey in 1878, was that there should be an annual average surplus of 1,500,000*l.* reserved for famine, and a further surplus of 500,000*l.* for other purposes?—Yes; which surplus of half a million had been laid down by the Secretary of State many years before.

5140. For how many years has this policy been carried into effect?—The first year of the policy was 1878–79, when an actual surplus of 2,000,000*l.* was secured; the next two years were war years. In 1881-82 a million and a-half was actually charged against the revenue,

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part of it being for reduction of debt, and part for protective works; and the surplus of that year, instead of being only half a million, was over two and a half millions. In the next year, 1882–83, a million and a half for famine was set aside, and the surplus was 706,000*l.* In 1883-84 a million and a-half has also been set aside, and the surplus on the Revised Estimate is 271,000*l.*; but then that is after meeting the arrear charge of 1,000,000*l.*

5141. So that, altogether, in the years that have passed since the famine fund was established, what amount has been set aside?—In the last three years 4,500,000*l.* was set aside, and in the first year of all an amount was practically set aside, but it was not so shown in the account; it appeared in the surplus; the amount set aside has only been in the last three years, and it amounts to four and a-half millions.

5142. When the famine insurance was instituted, was not a special taxation imposed which was expected to produce a revenue of 1,100,000*l.*, the remaining 400,000*l.* being provided by adjustments of the provincial accounts?—Yes.

5143. Then the primary object of the increased net revenue, thus obtained, was the relief of famine, estimated to cost about that sum annually on the average?—Yes.

5144. As the charge for famine relief would be very small in most years, and has been small lately, and very heavy occasionally, was it not arranged that so much of the 1,500,000*l.* as was not needed in any year for the actual relief of famine, should be devoted to the reduction of debt, either by actual discharge or by avoiding the raising for public works of so much as otherwise might have been incurred?—That was the policy at first laid down before 1878-79.

5145. Then was that policy changed afterwards; was half this amount allotted to the reduction of the debt, and the other half considered to be available for protective works and famine relief?—That was the policy laid down in the beginning of 1881.

5146. Will you be so good as to tell me whether this intention has been effected?—The intention has been effected.

5147. To what extent?—In the first year 1881–82, the grant of a million and a half was divided into two parts, one of which was exactly spent in protective works and the other half used for the reduction of debt, after a small charge for actual famine relief had been taken out of it. The next year the intention was the same, but the Southern Mahratta Company came in to purchase the railway which had actually been constructed out of the Famine Relief Fund. The Government were therefore unable to work up a total of protective works expenditure of 75 lakhs, and they only spent 14; the balance of a million and a half was then set aside for the reduction of debt.

5148. In that year you really paid off a considerable amount?—In that year we paid off 1 crore, 34 lakhs, and in the next year 1883–4, the grant for protective works was increased by the amount by which it had been short in 1882-83. The gross amount has not been completely worked up to.

5149. But still it is available?—It is available; that is to say, the amount, although it has not been

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been worked up to, will be worked up to in 1884 85.

5150. And in your Budget of 1884-85, you take an increased amount?—Yes, there is an increased amount in the Budget of 1884-85; they have set aside 250,000 *l.* more, so that the total will be not a million and a half but a million and three quarters.

5151. Was not the 750,000 *l.*, which under the orders of 1880-81 might be allotted to protective works, available under that arrangement for use in any part of India, or even, in extremity, for actual relief or transfer to other protective works in the afflicted famine districts?—Yes.

5152. Then under the proposals of your Government now I suppose you would only have 300,000 *l.* towards the 500,000 *l.* which was then set apart for railways available, would you?—£. 200,000 is appropriated for payment of interest, leaving only 550,000 *l.* available out of the 750,000 *l.*

5153. Then unless that estimate of 1,500,000 *l.* a year should prove to be rather greater than in reality was wanted for the famine, might it not result in your having to borrow the 200,000 *l.* a year?—It might; but I would only refer you, upon that matter, to what the Government of India say in paragraph 42 on page 30 (App. No. 1, p. 516), where they take up that question. I will read the last half of it: "It will be sufficient for us to say that in 1879 Lord Cranbrook directed that 750,000 *l.* should be applied to the reduction of debt and 750,000 *l.* to the construction of works which should protect the country against famine." That is not perfectly correct, because the second half Lord Cranbrook laid down should be applied to the extinction of the debt or to protective works. "This arrangement has often been criticised, and we are quite free to admit that, logically speaking, the original proposal, which was to apply 1,500,000 *l.* either to reduce debt or, which is much the same thing, to diminish the amount of the annual borrowings for productive public works, involved a more consistent financial policy, and one of which the soundness was more capable of arithmetical proof. The financial defence of Lord Cranbrook's policy rests upon the hypothesis that the money spent upon protective works will either prevent famine or will render its relief less costly when it occurs. The extent to which money will have been saved by the construction of a canal or railway when famine occurs is not capable of proof; but we may say that, although perhaps it is less logical, we think, on the whole, Lord Cranbrook's policy is more beneficial to the country, and is preferable to that which was originally proposed."

5154. Then if you use these 200,000 *l.* in another way, that is, for the guarantee of interest, do not you remove it from the purview, practically, of the finances of the year, and might it not be necessary to increase taxation by that amount?—I do not think it would be necessary to increase the taxation as a matter of fact. Certainly the amount available for the Government for meeting famine is reduced by that 200,000 *l.*

5155. Then the assumption would be that the 1,500,000 *l.* was more than was required?—That is the assumption.

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5156. Does not the difference which has arisen between the Government of India and the Secretary of State turn to some extent on the question whether it is proper thus to divert a portion of the allotment for famine insurance to the general provision for railways, so as to put it out of the power of the Government to use it, in case of distress, in the manner most needed?—I think the Secretary of State has pointed out that that would be the effect of the Government of India's policy, but I do not know that he has raised any particular objections to the policy upon that ground.

5157. Will you state what has been the actual outlay on famine relief between 1873-74 and 1882-83?—The actual outlay has been 14,710,000 *l.*, that is conventional sterling.

5158. That is slightly less than the 15,000,000 *l.* which would naturally be laid aside?—That is the case, but then a famine costs a great deal in the way of loss of revenue; so that the total cost of famine has been more than this 14,700,000 *l.*; it has probably been 3,000,000 *l.* more in the shape of loss of revenue.

5159. Then that period includes exceptional famines?—So we believe; it includes the Bengal Famine and the Madras Famine, both of them involving unusual expenditure.

5160. Do you know how many people died of famine between 1874 and 1878?—The Famine Commissioners in paragraph 81, page 28, say: "It has been estimated, and in our opinion on substantial grounds, that the mortality that occurred in the provinces under British administration during the period of famine and drought extending over the years 1877 and 1878, amounted on a population of 190,000,000 to 5½ millions in excess of the deaths that would have occurred had the seasons been ordinarily healthy, and the statistical returns have made certain what has long been suspected, that starvation and distress greatly check the fecundity of the population."

5161. Have you formed any idea of the amount of expenditure which would have been required to prevent loss of life in the great famine in Madras?—I do not think it is possible to form any idea of the amount that would have been required.

5162. Still it would have been enormously greater than the 15,000,000 *l.* that was spent?—It would have exhausted all the revenue of India for many years to come.

5163. Then if such exertions have been made that loss of life had been prevented, would not a very much larger outlay have been required?—Yes, if the Madras Famine had been dealt with upon the system adopted in the case of the Bengal Famine, a very much larger outlay would have been required.

5164. Can you therefore say that 1,500,000 *l.* a year is too high an estimate of the cost of famine?—It depends upon what the Government sets before itself; the Government has deliberately adopted the policy that it cannot absolutely prevent suffering or death in the case of famine.

5165. Would the Government of India be in the position to meet a famine expenditure, such as that which occurred in 1878, without immediately borrowing heavily?—In any case of famine they

Mr. *Kynaston Cross*—continued.

they have always been obliged practically to borrow.

5166. Notwithstanding the fact of the famine insurance amounting to 6,000,000 *l.*, in two years we shall have to absorb more than that by borrowing, in the event of a considerable famine?—The first effect of a famine is to divert all the available money in India to famine relief, and the result is that the Secretary of State would not get his money for his expenditure in this country, he has therefore to go into the sterling market.

5167. You stated on the last occasion that you would take it for granted that, when famine comes, it will have been provided for by the famine grants?—Provided for over the whole extent of the decade, according to the calculation laid down in the Government statement of famine policy.

5168. But as a matter of fact?—As a matter of fact you have spent half your famine grant upon protective works, and therefore when you come to the end of the 10 years, and have spent 15,000,000 *l.* in famine relief, you will practically have to borrow the amount you have spent upon protective works. That is the case with the present policy.

5169. To what extent do you consider the Government of India has provided itself by those grants against possible famine?—It has obtained a million and a half a year by special taxation, of which it has spent upon protective railways and upon irrigation about 3,000,000 *l.*

5170. Upon those, and upon the reduction of debt together?—Yes.

5171. Has there been any increase of debt, owing to the outlay on famine during the last 12 years?—The famine has caused operations upon the Debt Account; but taking the whole account of the last 12 years together, the revenue of India has been sufficient to provide every rupee that it has spent upon famine.

5172. The whole of this amount has been defrayed from revenue, has it not?—It has been defrayed from revenue, not directly, but upon the whole account.

5173. I wanted to ask you whether it was not one of the recommendations of the Select Committee of 1879 that when money had been spent from revenue as capital outlay on productive works, the amount should be transferred from the ordinary to the productive works portion of the debt?—I have already answered that question. May I put in a summary of 12 years' accounts, with regard to the statement you made. I have a short summary of it here, which shows that, excluding the outlay on public works which have been subsequently transferred to "productive" class, there is upon the Revenue Account of the 12 years a surplus of 7,840,000 *l.*; that 8,693,000 *l.* of debt on Ordinary Account have been discharged during that time; that on other obligations, Savings Bank Deposits, Loans to Municipalities, Guaranteed Railways, Withdrawals on Capital Account, Bill Remittance and Deposit Accounts, the net payments have been 1,021,000 *l.*; the result of these three items being that the cash balance has decreased by 1,873,000 *l.* That is a summary of the whole account of the Government of India, excluding debt raised for productive public works and

Mr. *Kynaston Cross*—continued.

expenditure upon productive public works. (*The Table was handed in.*)

5174. The conclusion you have come to is that the whole of the amount of famine debt has been really defrayed from revenue during the period?—Yes, and we have had a surplus of nearly 8,000,000 *l.* of revenue after meeting Famine Charges and War, and Railway Capital, to a certain extent.

5175. Was this on the principal previously adopted by the Government of India, that, had the money not been so spent, but accumulated in the balances as surplus revenue, it would have been available for the discharge of the ordinary debt?—Yes.

5176. So that the method of account was to some extent changed about the year 1879, was it not?—It was changed about that time.

5177. Will you state what, under that system, has been the increase or decrease since 1871-72 of the ordinary and productive works portions of the debt respectively; the two classes of the debt?—There is one small explanation I should like to make with regard to the statement of the debt, as it started on the 1st of April 1871, viz, that during the course of those 12 years, one amount which was actually debt did not appear upon the statement of debt, but was brought upon it by the Government of India about 1875 by raising the debt to the extent of 4,500,000 *l.*; this was the old East India Company's dividend; that must be included in the debt of 1871, just as it is necessarily included in the debt of 1883. Allowing for that, the total debt in 1871 was 108,915,000 *l.* Upon the 31st March 1883 the debt was 159,274,000 *l.*

5178. Not including the guaranteed railways?—Not including the guaranteed railways, the total increase of debt coming to 50,359,000 *l.*

5179. Can you give me in periods the ordinary and the public works of each period?—I am coming to that; the difference is an increase of the Productive Works Debt to the extent of 59,804,000 *l.*, and a decrease of the ordinary debt to the extent of 9,445,000 *l.* I stated a short time ago that the net discharge of ordinary debt was 8,693,000 *l.*; the difference between that figure and the other which I stated just now, is the amount of the debt which has been reduced by the operations of the Commissioners for the reduction of the debt, and has been separately charged against revenue.

5180. The difference represents the capital outlay on Productive Works during that period?—A good deal less; the capital outlay on Productive Works comes to 59,879,000 *l.*, and the total increase of debt comes to 50,359,000 *l.*, the difference being what is represented by the decrease in the ordinary debt.

5181. Can you tell the Committee what was the expenditure during these 12 years charged upon the revenues of India, without borrowing, for what you may consider extraordinary items, which are not in the ordinary course of expenditure?—The State Railways Capital is 1,801,000 *l.*; Frontier Railways, 4,112,000 *l.*; Famine Relief, 14,710,000 *l.*; War Expenditure, Afghanistan, 11,840,000 *l.*; War Expenditure, Egypt, 699,000 *l.*; Commission for Reduction of Debt, 2,059,000 *l.*; Protective Railways and

Mr. *Kynaston Cross*—continued.

Irrigation, 884,000 *l.*; the total of those items being 36,105,000 *l.*

5182. You say these extraordinary items which have been borne by the revenues of India without borrowing have amounted to this large sum in 12 years?—Yes, 36,105,000 *l.*

Chairman.

5183. Do not those figures, excluding the sum spent in famine relief, show that the Government might annually allot to public works a larger amount from revenue than it now does, without hypothecating its power to retrench in case a war or other matter of urgency should arise?—I think if we are as fortunate during the next 12 years as we have been during the last 12 years, there is no doubt we would be able to meet every one of these proposals and have a handsome series of surpluses over.

Mr. *Kynaston Cross.*

5184. Could not you do it without trenching upon the arrangements which have been made by hypothecating any considerable portion of the Famine Fund?—That is really a question of whether you choose to say you will reduce the Famine Fund by 200,000 *l.*; it is only a question of how you will enter the items in a particular account and has no other meaning, because you can charge the 200,000 *l.* either against the famine insurance or against the remaining part of the surplus.

5185. But when you have hypothecated it it is no longer a question of account?—And if you do not wish to hypothecate it, the only result is that you have to reduce the surpluses which I have shown in my forecast for the next five years by 200,000 *l.*; that is to say instead of there being 400,000 *l.* or 500,000 *l.*, there will be only 200,000 *l.* or 300,000 *l.*

5186. Now I will ask you a question about the increase of debt, what proportion of that increase of debt has arisen in India, and what proportion in England?—I stated the whole increase of debt at 50,360,000 *l.*, of that 26,379,000 *l.* is in England and 23,981,000 *l.* in India.

5187. The policy really has been for years to borrow as much as possible in India, has it not?—The whole of the increase of the debt in England is accounted for under three periods. The first is three years commencing with April 1873, the period of the Bengal Famine, the increase then was 6,200,000 *l.* The next three years, the period of the Madras Famine, the increase is 9,800,000 *l.* Then on account of the purchase of the East Indian Railway, the increase has been 10,600,000 *l.*; that was only a change from one form of sterling liability to another form of sterling liability. That accounts for, altogether, 26,600,000 *l.*, and, as I have said the total increase is 26,400,000 *l.*, this almost exactly accounts for it.

5188. Is not the interest on this sum an addition to the remittances which have to be annually made from India?—No, not the East India Railway part, because you had to make remittances there before; but the interest on the remaining part, which comes to 16,000,000 *l.*, is an increase to the remittances.

Mr. *Kynaston Cross*—continued.

5189. Has not the interest upon a considerable portion of the rupee debt also to be remitted to England?—It has.

5190. Do you know the increase in the amount of rupee paper which has been enfaced for payment of interest in London?—The amount on the 31st December 1869 was 16,087,000 *l.*, on the 31st December 1873 it was 13,265,000 *l.*, on the 31st December 1878 it was 16,644,000 *l.*, on the 31st December 1883 it was 22,118,000 *l.*; that is the paper actually enfaced for payment of interest at the Bank of England. Besides that, a great deal of paper is held by banks in India on account of constituents, to whom they remit interest in this country, and above that there is a special loan of about 3,130,000 *l.*, of which the interest is payable on coupons payable to bearer, and this loan is believed to be entirely held in Europe.

5191. Can you give me the approximate amount of the increase of the rupee debt held in Europe?—I should think from the 31st December 1869 to the 31st December 1883, the whole amount held by Europeans had probably increased by 24,000,000 *l.*

5192. But would you say that the total amount of the increase of the rupee debt was held in Europe?—Not the whole. There would be about 10,000,000 *l.* out of the 24,000,000 *l.*, as the increase of the rupee paper upon which interest is remitted to this country either by the Government or by the banks. The total increase of the rupee debt is about 24,000,000 *l.*, which would make about 14,000,000 *l.* increase of debt held in India itself by the natives and Europeans. We have no means of getting accurately what those figures are. Regarding some part of it, we have definite information; regarding the rest we can only make estimates.

5193. The interest for that comes into the Remittance Account between this country and India?—Yes, not the Indian Government Remittance Account, but the ordinary trade remittances.

5194. Taking quinquennial periods beginning in 1868-69, would you state shortly what have been the amounts of the Government remittances to England?—Dividing it into periods of five years, in the first period of five years, the remittances began with 3,700,000 *l.*, and ended with 13,900,000 *l.*

5195. What five years are those?—1868-69 to 1871-72; the first figure there stated, viz., 3,700,000 *l.* was altogether exceptional; it was due to the fact that the English Government reimbursed to the Secretary of State 4,000,000 *l.* odd, on account of the Abyssinian War. The real standard of remittances about the beginning of that period should rather be stated, I imagine, at 7,000,000 *l.* or 8,000,000 *l.* In the second quinquennial period the remittances are 13,300,000 *l.*; 10,800,000 *l.*, 12,400,000 *l.*, 12,700,000 *l.*, and 10,100,000 *l.*, being about 12,000,000 *l.* a year pretty steadily. The next quinquennial period they increase very largely; the figures are 13,900,000 *l.*, 15,300,000 *l.*, 15,200,000 *l.*, 18,400,000 *l.*, and 15,100,000 *l.*, giving an average over the whole of between 15,000,000 *l.* and 16,000,000 *l.*

5196. Could you give the Committee the total increase in the net disbursements since 1868-69?—Taking disbursements, not expenditure, they have

Mr. *Kynaston Cross*—continued.

have increased from 8,800,000 *l.* to 16,000,000 *l.* during the period from 1868-69 to 1883-84.

5197. Could you say that much of this has arisen from the Productive Public Works policy?—Nearly the whole of the increase has arisen from Public Works generally, productive or otherwise.

5198. Could you state shortly to the Committee the comparative amounts in number of rupees which had to be furnished to discharge the debt of 8,000,000 *l.* in 1868, and the debt of 16,000,000 *l.* in 1883; those amounts, I take it, are in true sterling?—The rate of remittance in 1868 was 23⅛ *d.* at which the equivalent of 7½ millions sterling would be 7,78,38,000 rupees; the rate in 1883 was 19½ *d.*, at which the equivalent of 15½ millions sterling would be 19,07,69,000 rupees

5199. Are the proposals of the Government of India calculated to add to the amount which will have to be remitted year by year from India?—If the Government are to borrow in this country they certainly will make an addition, and besides that you will have to make an addition in respect of the increased demand for English stores in respect to Revenue Account of railway works in India.

5200. Could you say to what extent this would take place?—For every 30,000,000 *l.* borrowed in this country you will have to remit 1,000,000 *l.* for additional interest. Besides that there will be a heavy expenditure upon stores for the maintenance of the railway.

5201. Besides the 30,000,000 *l.*?—Yes, every year you have to make a heavy expenditure upon stores for the maintenance of the railway apart from the construction.

5202. Then you look upon the increase of 8,000,000 *l.* in the last 12 years as likely to continue at rather an increasing ratio?—No, it will not continue at an increasing ratio, because you will not again have an increase of about 8,000,000 *l.* of remittance in 15 years, nor anything like it.

5203. If you spent 30,000,000 *l.* you will have to pay an increase of interest upon that?—You will have an increase of 1,000,000 *l.* in the way of interest.

5204. If any profits are available you will have to remit them as well?—Not unless we have to pay them to the companies, and our impression is that we will not make any profit in the first 10 years in addition to the interest we have to pay.

5205. How do the remittances come home?—The principal part of the remittances is made by means of sterling paid to the Secretary of State in respect of demands issued by him upon the Indian Treasuries.

5206. But really the foundation of the remittance is the produce exported from India?—It is the foundation of the remittance.

5207. Then for every 1,000,000 *l.* you borrow in this country you will want a considerable increased export from India?—You could meet the demand in two or three ways; you might reduce the imports, for example; it is perfectly possible because there is a large cotton industry

Mr. *Kynaston Cross*—continued.

springing up in India which may take to some extent the place of the present imports of piece goods.

Mr. *Bolton.*

5208. But that would decrease the export of cotton?—We should use our own cotton.

Mr. *Kynaston Cross.*

5209. If from any cause one of the staple crops of India should fail, for instance, or should cease to find a favourable market in Europe, would there not be considerable difficulty in effecting remittances, remittances generally being made against produce?—Yes; but that tells in two ways, because if the crop fails to find a market in this country, there is a difficulty in the remittance, and then down goes the exchange, and then the circumstances are altered and the produce does find a market in this country.

5210. But in case the crops should fail?—It is impossible that the crop should fail all over India; it may fail in part of the country, but it will not fail upon the whole.

5211. In 1878-79, did not the exports fall off considerably from what they had been a year or two before?—I believe they did, but it is a matter I have not studied.

5212. From your knowledge of the difficulties of the remittances from India to Europe in 1878-79, you are aware, are you not, that there was great difficulty in getting money home?—I believe there was, but to a great extent it was because we had not money in India to pay it.

5213. Was not there a very rapid fall in the exchange through the Secretary of State pressing his drafts on the market in 1878-79?—I am afraid I have no recollection of that. I recollect exactly the same circumstance occurring about 1881-82.

5214. Are there difficulties about getting home remittances from India from time to time which it is difficult to meet?—There have always been difficulties, but they have always been overcome; every year you have always been afraid that you would not be able to land the total of your demand for money, but every year you have been able not only to land your demand but to add to it.

5215. And every year you have suffered a great loss by exchange?—I do not think so; the rate of drawing in the last five years has been 19$\frac{29}{32}$ *d.*, 19$\frac{1}{2}$ *d.*; then came a fall to 19$\frac{23}{32}$ *d.*; and then again came a fall to 19$\frac{11}{32}$ *d.*

5216. But before the last five years, how was it?—Before the last five years the exchange was upset altogether.

5217. Was it upset by the Secretary of State's demand, or by the fall in silver?—Both causes came together, and they acted upon each other. The Secretary of State, I think, found that he had to increase his remittances, because the guaranteed companies were beginning to withdraw from capital account in this country, whereas before they had paid capital into this country, and that added very much to the amount which the Secretary of State had to draw for upon India. At the same time came the demonetisation of silver by the Latin Union and by the German Government, and then down went the exchange,

Mr. *Kynaston Cross*—continued.

and that confirmed the Latin Union in their policy; so the two things ran together.

5218. Would any repetition of that take place in case any considerable amount of extra remittances had to come from India in consequence of the increased expenditure of sterling money upon railways?—I may point out that during the last three years we have in each year remitted 1,000,000*l.* more than has been necessary in consequence of our current demands, so that the state of the remittance market is, so to speak, already 1,000,000*l.* in advance of the existing demands of the Secretary of State.

5219. Then you do not anticipate any great difficulty from the increase of sterling borrowing in England, the interest on which has to be remitted from India?—I think the exchange will adjust itself; it may do so at a lower rate, but I do not look upon the lower rate as a calamity for India.

5220. Whatever it might be for the people who had to make their remittances home?—Yes.

5221. I think you spoke of a fear that if a system of borrowing were instituted, the real position of the Government would be obscured through the form in which the accounts are presented?—I did.

5222. Will you further explain that?—I explained it in one of the printed papers I laid before the Committee. I was also asked on the last occasion whether I had any proposal to make with regard to the exhibition of this particular loss. I said then that I did not see my way to it, except by altering the rate in which the accounts were compiled; but what I wish to say now with regard to that is, that the question of the alteration of the rate of compilation is rather a big one, and involves very many considerations, and I do not think it should be taken up upon this single question arising out of it. But I think this particular difficulty could be got over in another way, viz., by charging the exchange upon the amount of sterling borrowed in the same way and to the same extent as if the amount had been remitted. The result would be to bring in an extraordinary receipt outside the revenue account. I think it is so very dangerous to exhibit a surplus in account bigger than we possess, that I think the exhibition of a charge by credit of an extraordinary receipt of that kind would be advisable.

5223. What I was asking about refers to money borrowed in England and credited to the Indian Government at given fixed rates?—The result of your borrowing 1,000,000*l.* would be that that 1,000,000*l.* would be used in this country for sterling expenditure. It has cost you exactly as much, or about as much, as if you had had to remit 1 crore and 20 lakhs of rupees, so that I think that that odd 20 lakhs should be charged off the account before declaring a surplus upon it, inasmuch as you would have had to make that payment if you had met your sterling payments by remittances from your revenue in India.

5224. You would alter the form of the account to that extent?—It would not be an alteration of form; it would be merely making an additional entry in order to exhibit the true result, or rather to prevent the exhibition of a false one; making a formal entry which would have the effect of bringing out the account more accurately.

Mr. *Kynaston Cross*—continued.

5225. You would recommend that it should be taken out of the gain or loss by exchange and made into a proper entry?—I recommend that the amount be added to the loss by exchange. You cannot enter it on the charge side without entering it upon the receipt. What I would do with the receipt is that I would bring it in as an extraordinary receipt; we have such receipts at present.

5226. Would you treat all capital connected with borrowing sterling in England in that way?—No, I would propose to do it only in respect of an amount borrowed in sterling for meeting expenditure.

5227. Only as far as regarded the expenditure in England?—Yes, that if you meet your expenditure in England by sterling borrowing instead of by remittances from India, you should, nevertheless, charge the loss by exchange to the same extent as if you had obtained it by remittances from India. You have to make an addition to the actual loss by exchange, because the amount you enter as loss by exchange is the amount you pay upon the remittances only.

5228. You do not propose to generally alter your form of Rupee Account in India at all?—We do not propose to make any alteration in the Indian form of account; my proposal was with regard to the whole form of the account; it is a big question. I say it does not arise out of the present matter, and I do not think it advisable to discuss it in connection with it.

Mr. *W. H. Smith.*

5229. You spoke of the large outlay for famine which would be requisite if the Government of India undertook to prevent or sought to prevent any loss of life from famine; to what extent does the outlay for famine induce the natives to rely upon Government rather than on themselves to make provision against the calamity?—I do not think that native society in India has reached that condition in which it would make provision for a famine, whether Government interposed or not. Even if the Government did not interpose, I do not think the natives would themselves make any provision against it.

5230. Then, in point of fact, are you prepared to say that the provision made by Government in the time of famine, does not tend to prevent the natives from making provision for themselves; that is to say, either to save or to go to another place?—I would rather say that it retarded their reaching that condition in which they would make such a provision.

5231. That the outlay or provision made by the Government retards the progress?—Of the mass of native population towards a condition in which they would make provision for such calamities out of their own resources.

5232. Then the greater the effort or the provision made by Government in time of famine, the greater the risk that you will impede the development of the native and his reliance upon his own resources as a protection against famine?—Yes, but you must bear in mind that the classes which the Government relieves are the very poorest classes of all; that the mass of the natives are really able to get over the strain of a famine without Government assistance. I

forget

Mr. *W. H. Smith*—continued.

forget the exact per-centage, but the per-centage which the Government has actually to relieve in the way of supplying food or work is, I think, only six or seven upon the population of the district, the rest being able to get over the calamity in some measure out of their own resources.

5233. If Nature had her way, would any portion of this 6 or 7 per cent. be compelled or induced to emigrate to other places where they would find more work?—No; I think emigration is utterly alien to the native manner of life.

5234. Then the alternative is death?—Death immediate or prospective; that is to say, they are so dreadfully reduced that they get into a state of bad health and die.

5235. To the extent then to which the Government impedes the progress of the native, the provision for famine increases the mortality from famine when it comes, is that so?—No, I do not think so; I think that proportion of 6 or 7 per cent., these being the lowest class of natives, native labourers and so forth, live continually from hand to mouth, and when a famine comes they have no resources of their own, and they must be fed either by the charity of their neighbours or by the Government when that charity is exhausted.

5236. And that proportion of 6 or 7 per cent. will be constant notwithstanding any efforts on the part of the Government?—I do not think you can hope to reduce it so long as native life is what it is; it requires a very great alteration and very great progress.

5237. I want to ask you a question upon this interesting Paper about the capital account of railways; you state that "the Government have received in England an amount which is equal at the exchange of the day, to 45 crores, 75 lakhs of rupees, and which, if laid down in India, would have produced this amount. They have been obliged, however, through the operation of the exchange clause, to disburse in India 50 crores, 55 lakhs of rupees, and the railway as a dividend-earning concern, cost not only the 45 crores, 75 lakhs provided by the company, but also 4 crores, 80 lakhs, provided out of the Government Treasury;" now to what extent is the Government of India damnified by that difference?—The money has gone straight out of their pockets, and the exchange clauses of the contract prevent their obtaining any return whatever upon it. If they had not met that amount themselves out of their own resources, it would have been charged in some way to the company, and to that extent the present payment of interest at 5 per cent. to the company would have been increased, so that the Government by paying that out of its capital has relieved itself from a present payment of 5 per cent. interest under the contract.

5238. That is to say, the Government have borrowed so much less money, and therefore they have relieved themselves of so much interest?—They have prevented themselves from coming under the liability of paying so much interest.

5239. The amount of the loss which the Government of India sustains is simply the amount of dividend in excess of interest which they may have to pay upon these 50 crores, is it not?—The amount has been paid out of revenue; there is no further loss to be borne upon it now; if it had not been paid it would have had to be paid by the company, and they would have had to pay interest.

Mr. *W. H. Smith*—continued.

5240. In other words, the Government have had to pay these four crores, without borrowing, to the company?—Exactly so.

5241. And therefore the Government of India sustained no loss?—They have sustained no loss to this extent, that they possess a railway under certain conditions, upon which this amount has been paid; but they have spent it.

5242. They have spent it just as much as they have spent any other money which they have invested in a railway of their own?—Yes.

5243. Unless they had spent it they could not have had the railway?—No.

5244. If they had borrowed the 50 crores in England they would have had to pay the interest upon the 50 crores?—They would.

5245. They have only had to pay the interest upon 45 crores?—They have to pay the sterling interest on the equivalent of 45 crores.

5246. What is the loss sustained by the Government of India upon that transaction?—If you look upon the railway as a possession worth what has been laid out upon it by the Government, then there is no loss, because the Government possesses a railway in respect of this money which it has laid out; but that may be said of any railway; it enters the account as expenditure because their accounts take notice of money only, they do not credit us with anything we get in return for the money.

5247. I assume the Government in making the contract for the carrying out of the railway decided absolutely upon the construction of the railway?—Yes, certainly it did.

5248. Whether it cost 50 or whether it cost 45 crores?—Yes, it did, without very much knowledge, I imagine, of what it would cost.

5249. Therefore, under any circumstances, they must pay interest upon the capital required for the construction of the railway?—Yes, they would have had to do so.

5250. And the difference between the two systems is simply a question then of account, is it not?—Yes, it is a question whether the amount is to be met out of the amount of revenues of the year at the time of construction, or out of the revenues of the year when the interest is being paid.

5251. So that there is no absolute loss, in the proper sense of the term, whatever, accruing to the Government of India under the system which has been pursued?—There is no loss if you consider the railway worth the capital which has been laid out upon it by the Government and by the companies.

5252. Then I go back to this; that the Government commit themselves absolutely to the construction of railways, and therefore, whether the country is involved in one form or another, it makes no difference to the absolute result?—I do not think it does, if you put it in that way; neither I nor anybody else regrets the amount that has been spent upon railways in India.

5253. I was anxious to get at the fact, because it would appear that the arrangement that was made had the effect of swelling the capital cost

Mr. *W. H. Smith*—continued.

of the line, and that this amount of 4 crores 80 lakhs went into somebody's pocket to the injury of the people of India; but that is not the case?—That is not the case; the payment arose from the circumstance that the Government undertook to charge the Company with 1 *s.* 10*d.* for every rupee that was handed out to it in India. The rupees that were handed out to it in India were at the time worth 1 *s.* 11*d.* or 2 *s.*

5254. You have already told us what the amount of the public works debt has been, and how much has been contributed by revenue, but we have not, I think, any balance sheet showing the value of the property which the Government of India possesses as against its debt, that is to say, taking it at 3½ or 4 per cent.?—I have had it prepared. I have not been able to give the whole of the information that Mr. Slagg asked for, but I think I have met his wishes practically. (*A Table was handed in.*)

Sir *George Campbell.*

5255. I think Mr. Fowler obtained from you the answer that some very large sum exceeding 3,000,000*l.* was expended from revenue upon capital account in one year, and I understand that but a small proportion of that is upon railways; that means upon public works of every sort or kind?—Yes, that was according to Major Gordon's block account.

5256. Is not that very much in the nature of the expenditure which a landlord incurs upon his estate from year to year?—I think it is, except that I imagine a landlord, for the most part, looks to the productive part, and not to what we do not class as productive.

5257. Is not a distinction now drawn in the accounts of India between certain productive works which are charged to capital, and certain ordinary works of improvement charged to revenue, very much like the account which is kept upon an entailed estate where the heir of entail is allowed to charge to capital certain permanent improvements, but is obliged to charge to revenue such expenditure as the modernising of his farm buildings, keeping up of his fences, and the improvement of his house, the rebuilding of his cottages, and expenditure of that kind?—As you explain it, I think the case is exactly the same, except that the Government of India are somewhat more liberal in their view of the amount of capital expenditure advisable in the circumstances of the country.

5258. You think they are more liberal?—I think they are very liberal; they do not starve the country.

5259. Does the money expended upon their works and modern improvements out of revenue exceed, say, 5 or 6 per cent. upon the gross revenue?—I think it does; I should think it comes to about 5,000,000*l.* out of the whole revenue of 70,000,000*l.*

5260. That would be about 7 per cent.?—Yes, about 7 per cent.

5261. Do you think there are many landlords who are able to manage an estate without being at least as liberal as that?—I am afraid I cannot pretend to any sufficient knowledge to enable me to answer a question of that kind.

5262. Then as regards the expenditure upon

Sir *George Campbell*—continued.

railways out of revenue, it is, as you have told us, that a certain limited expenditure takes place upon certain railways, classed unproductive, out of revenue?—Yes.

5263. Is it not also the case that there are many railways charged to capital which are not fully reproductive?—I think I must admit that many of the railways charged to capital are not productive, in the strict sense of their producing 4 per cent. within the five years, but they are productive all the same, otherwise than in that restricted sense.

5264. But inasmuch as they are not fully reproductive, do not you think we might fairly set against the railways constructed out of revenue the railways which are constructed out of capital which do not fully pay the requisite interest, and that in that way the account would be pretty fairly balanced?—I think that the whole of the railway account does produce very nearly, if not quite, 4 per cent. If you deduct from the State railway expenditure, that expenditure which has been made upon lines not yet opened, the return would be more than 4 per cent.

5265. I think you said that commercial people would charge to capital what the Government charge to revenue; do you think that any commercial people would ever have made these unproductive railways?—I do not think they ever would have occasion to, but at the same time it may be the duty of a Government without its being the duty of commercial people.

5266. You have repeated to-day your calculation of the surplus which in normal circumstances would accrue to the Government of India in the next five years; have you not also admitted that an expenditure of 2,000,000*l.* upon the Quetta railway has already been accepted, which will sweep away the whole of your surplus for the next five years?—I do not know how the Government propose to meet this expenditure of 2,000,000*l.*; they may possibly do it by contracting their other expenditure upon railways under this scheme. The question has been discussed, and the orders of the Secretary of State have been given, since I left India, and since these despatches by the Government of India were sent to the Secretary of State. I do not know what view the Government of India have as to the alteration which it is necessary to make in their proposals, in consequence of this sanction given to the construction of the railway towards Quetta.

5267. Still, taking your calculation if an additional two millions are charged to revenue, that would sweep away the whole of your expected surplus for five years?—The surplus in five years I make about 2,500,000*l.*

5268. At all events it would sweep away four-fifths of it?—It would take away a good deal of it.

5269. Now as regards the questions you have been asked about the famine, I think this 5,000,000 odd of deaths which you stated had been estimated by the Famine Commissioners to have occurred, were solely with regard to the Madras and Bombay famine?—Yes.

5270. It is not estimated that any considerable number of deaths occurred in the Bengal famine, is it?—I think it was stated that no deaths had been

Sir *George Campbell*—continued.

been caused by that famine; that no deaths were distinctly due to the famine.

5271. And without making any comparison with regard to the duration of the famine, it is the fact that the positive expenditure upon the Madras famine was a great deal larger than upon the Bengal famine?—I have the figures here; the expenditure during the three years of the Bengal famine came to 6,710,000 *l.* During the three years, which included the Madras famine, the expenditure came to 7,804,000 *l.*

5272. I think you alluded to the expenditure upon the Bengal famine as having been upon a very liberal scale; is it your experience that any demoralisation of the cultivating or the lower classes has resulted from that taking place, as it does, say once in a hundred years?—No; my impression is that it produces no effect upon them; that their circumstances of life, and their habits of life, are not such that they would provide against famine under any circumstances, whether the Government came forward to assist them in the famine or not.

5273. So the statement which I think you at one time accepted, in answer to a question, that the liberality of the Government in providing for starving people in time of famine must have the effect of retarding the process of saving, must have been rather a theory founded on the general principles of human nature than anything founded upon any facts which have come under your observation?—It is entirely theory; all I meant to say was, that if we could imagine these people at any time reaching a state of life in which they would save against a famine, the effect of the Government coming forward to relieve them from the consequences of famine would be to retard them in reaching that condition.

5274. Perhaps you would say that, while a normal expenditure in the relief of the poor from year to year might have the effect to which allusion has been made, it is probable that if a famine occurred in any particular part of India, involving an expense of this kind perhaps only once in a hundred years, the demoralising effect would be reduced almost to a minimum?—For any practical purposes it is nil.

5275. What were the years when the great expenditure was incurred on behalf of the Madras famine?—In 1876-77 the expenditure was 2,145,000 *l.*, and in 1877-78 it was 5,346,000 *l.*, and in 1878-79 it was 313,000 *l.*, only a small amount of famine expenditure; that was the total expenditure during those three years. There may be some amount due to famine elsewhere than in Madras, but that would be very small; it may be taken for granted that the whole of that expenditure was for famine in Madras and Bombay.

5276. I understand that in this year, 1878-79, there was a large surplus after paying the famine expenditure in that year?—Yes, but the year 1878-79 was hardly a famine year; there were only some small remainders, 313,000 *l.*, spent upon famine relief that year.

5277. Was not the year 1878-79 a kind of oasis of surplus in a desert of deficit; were there not several years of deficit immediately before and immediately following that year?—Yes; the Madras famine went before it, and the Afghan War came after it.

5278. And the two years before and after were all years of a large deficit?—The two years before and the two years after were, but the year before and the year after that period were both years of large surplus.

5279. Taking the last 12 years, you say there has been a surplus upon the whole, after paying all wars and all famines?—Yes.

5280. I think you alluded to crediting the cost of certain public works which were subsequently transferred to the head of productive?—Yes; they were first charged to ordinary, and they were afterwards classed as productive.

5281. Was that credit confined to the expenditure made upon those works in that period of 12 years; you do not take into account certain public works the expenditure upon which took place very long ago, but which were subsequently transferred to the head of productive works?—I have not been able to get the precise years in which that 6,296,000 *l.* was spent; I think it possible that 1,000,000 *l.* of it was spent before that 12 years began, but I cannot tell how much.

5282. Was not there a transfer to the head of productive of some very large and considerable public works which had been made out of revenue in former years, the Ganges Canal, the two Jumna Canals, and some other very large works?—I have not been able to get the years in which the expenditure occurred.

5283. What I want to know is, whether, in making out that favourable account for the last 12 years, you have taken credit in those years for the whole of that sum which had been expended out of revenue many years before, and which was then re-credited, being transferred to productive?—Yes, I have taken credit in those years for the whole of that sum; the surplus upon the 12 years' account, and apart from this transfer, is 1,544,000 *l.* In that I am taking the provincial and Imperial transactions together, as if there were no division between them.

5284. So that, so far, there is some substance in the suggestion that I have made to you, that the statement you have made is more favourable than the reality?—I have taken the full credit.

5285. So that it is more favourable than the reality?—It is more in respect of the amount of the surplus, but it is not more favourable in respect to the fact of the surplus.

5286. I take it that it is more favourable with regard to the amount of the surplus, and that probably the surplus for those 12 years would be a great deal reduced; now, I want to know if that period of 12 years is not one which is taken as showing a somewhat abnormally favourable result; if you were to take the last 10 or 15 would the result in either case be less favourable?—I did make up the account for 14 years, and it was more favourable; the surplus was a little bigger.

5287. How would it be if we took 10 years; have you considered that?—I can tell you what the surplus would be; the account would be considerably worse if you were to leave out the first two years of the 12; I see the surplus in those two years was 4,890,000 *l.*

5288. So that if you were to leave out those

Sir *George Campbell*—continued.

public works formerly made out of revenue, which were then re-credited to the revenue, and those two years, upon the 10 years there would be a deficit, and not a surplus?—Yes.

5289. Now, I want to ask you a question upon another subject, namely, as to why it is that there seems to be so much difficulty about borrowing in India in these days; is it not the case that in former days, when the country was much less opened out, when to all appearances it was much poorer, and when very much less money was received in return for produce sold and exported, the Government of India were able to borrow very considerable sums in India; have you come to any conclusion why it is that, in these apparently prosperous days, there is so much difficulty in getting any money in India?—I think one reason of it is that capital in this country seeks Indian investment to a greater extent, and the consequence is that our loans in India are raised now at a very much smaller rate of interest than we were able to get them at in those days. We now give 4 per cent. only in India, whereas we used to give 5 and 5½ per cent. in India 30 years ago.

5290. Is it not the case that, in the days before the mutiny, a great deal of money was borrowed by the Government of India at 4 per cent.?—I imagine it was borrowed at a discount. I have not particulars which will lead me so far back, but I know there was a 5½ per cent. loan in 1859–60, and I know there was a 5 per cent. loan in 1854–55.

5291. Have you carried your inquiries back at all to the time when the system of open loans prevailed?—I cannot give very much information as to the state of the borrowing then.

5292. Supposing that the Government were willing to pay something moderately in excess of the rate of money in this country, do you still think there would be a great difficulty in getting a considerable sum in India now?—It is almost impossible to answer a question of that kind except by making the actual experiment. There is a very fair demand for investment when the 4 per cents go down to 97 or so, and I presume we could get a very fair amount of money at 4½ or 5 per cent. in ordinary times; but whether it would come from native or from European savings is a different question.

5293. What I was rather attempting to bring out is that you, being a practical man, and so long connected with the Account Department, and having occasion to study the money market a good deal, do you think that there are any large accumulations going on among the natives, and seeking investment?—No; I think the accumulations are only in the hands of those natives who are addicted to mercantile pursuits, and that they will not look at our 4 per cent. loans.

5294. How is it with regard to the native princes, who used to contribute so largely to the East India Company's loans?—They are much more in debt than able to contribute money, I should think.

5295. To what do you attribute that change?—It is part of the native character.

5296. Was not it part of the native character in former days; native princes used to accumulate large sums in former days, part of which they hoarded, and part of which they contributed to the loans of the East India Company?—But things have become quieter; they have more opportunities of spending money, and they have not the same prospect of rainy days against which they had to provide.

Sir *George Campbell*—continued.

5297. Is it not the case that the Government guaranteed 5 per cent. upon a very large amount to the old guaranteed railway companies at the time when they could borrow in the market at 4 per cent., or a little over 4 per cent.?—I think that is the case; but then they could not have got the amount of capital which was requisite for the guaranteed railways, or anything like it. They may have been able to get a small amount of money, but they would not have been able to get the large sums they required for the guaranteed railways.

5298. Was not it the case for a very long period, whether from prejudice or fashion, one or the other reason, the money raised upon guarantee was raised upon far less favourable terms than money borrowed directly by Government? I think it was; I think it is to be accounted for by the magnitude of the transactions.

Mr. *Brodrick.*

5299. In connection with the exact sum that you propose to lay out in five years, have you any idea what proportion of the 34,000,000 would be raised in India?—The guaranteed companies will certainly raise the money in this country; the Government of India has to borrow, as I estimate, about 1,400,000 *l.* sterling yearly, if they have no famine or other extraordinary expenditure to meet; besides that they have to borrow 70 lakhs for irrigation, so that the whole amount of borrowing comes to 2,000,000 *l.* sterling; it is not absolutely beyond the capacity of the Indian money market to lend us that amount in the form of rupee loans, but we have certainly found by the experience of the last two or three years, that we cannot depend upon its being able to give us that amount. So it is proposed for that reason to have the option of going to the sterling market for it; but for how much it will be necessary to go to the sterling market, it is impossible to say.

5300. Could you give the Committee any indication from your own opinion?—I think we may easily raise next year as much as half of it in India, and that only half of it need be raised in this country; that is judging by the experience of the last few years.

5301. And even if the guaranteed companies were raising the whole of their proportion of it in England, you anticipate no difficulty in raising that amount in the present state of the money market here?—No, I think that is well within our means.

5302. You think it desirable, as I understand, to raise as much as possible in India; how does that depend upon the rate of interest?—Because at present if we were to borrow money in India, we would have to offer 4½ per cent. at least; in England we can get it at 3½ per cent.; I think the difference between those two figures is much too great, but if we were able to borrow at 4 per cent. in India, and only 3½ per cent. in England, I think the circumstances are nearly equal, and the Government of India would probably prefer under those circumstances to make its borrowing in rupees.

5303. Could

Mr. *Brodrick*—continued.

5303. Could you make a rupee loan at all of a limited guarantee?—No, I think one necessity in raising loans is that the terms of them be as simple as possible; capitalists will not come forward with money unless the terms are such as to give a distinct and permanent return in the form of interest, and also a condition that when any repayment is made it is made at par.

Mr. *Jackson.*

5304. I want to ask you a question about the accounts. I asked you a question on the last occasion, and we were not quite at one about it; I see that this is what was in my mind at the time. Major Gordon, at Question 4307, in answer to the Chairman, who asked him, "To what do you attribute the disinclination on the part of the English money market to invest monies in Indian railways without Government guarantee," made answer, "I think there are a great many causes which prevent railways in India attracting English capital; first, the instability of the exchange value of the rupee in which the profits are earned, and hence the natural fear of the depreciation of the capital invested; secondly, I attribute it partly to the manner in which the State accounts are kept, and to the fact that we practically have no accounts which we could put before a commercial man to show him, after taking into account loss by exchange, advances of interest during construction, &c., how any of the guaranteed lines had actually turned out as a purely commercial venture; these accounts might certainly be prepared from existing data more or less approximately, but it never has yet been done, and one cannot expect commercial men to believe in a business which cannot produce books which will bear being looked into." I understood you to say the other day, in answer to a question I put to you, that separate accounts are published for the railways which give the actual results, and in a separate form?—The accounts to which I referred are the subsidiary accounts in the Finance and Revenue Account volume presented to Parliament every year, but those accounts necessarily do not show directly the working of the railways. For example, in the case of the East Indian Railway, the East Indian Railway makes a return of something like 8 per cent., I believe, upon its capital cost; but the object of the Government account is to show its effect upon the Government; and the consequence is that first of all we show its capital at a great deal more than its original cost, because its capital was bought up by Government at 25 per cent. premium; then in the second place we have to charge off as cost to Government in respect of this railway the share of surplus profits which is paid over to the company; so that the return to the Government is very much less than 8 per cent., although the return of the railway itself may be 8 per cent; the object of the account is to show its effect upon the Government, and not its effect as a working railway. So it is with the guaranteed railways.

5305. Therefore the accounts, as published, do not show the actual result of the working of the railways?—They do not show it, except to some person who knows what the effect of the figures is, and can put them together with the object of showing their earnings.

Mr. *Jackson*—continued.

5306. Major Gordon appeared to be of opinion that it would be desirable to publish the accounts (I think he laid some stress upon it), in some such form that the public might be able to have the information as to what was really the result of the working of those railways; do you agree with that view?—The Government does publish that separately with its annual Administration Report of the railways. I think it might possibly be advisable, if we wished to direct attention to the fact that the railways in India are paying, to show such accounts in our Finance and Revenue Accounts, but the volume is a pretty big one as it is, and the objection is merely to adding to it what are practically only statistical returns.

5307. But which are not given to the public in any other form?—No, they are not available to the public except in this form of the Railway Administration Report.

5308. Which it would require an expert to explain?—I do not think that accounts of the kind you mention are directly available, but I think they might very easily be made available if it were considered worth while to publish them.

5309. You spoke about the export duty on rice; is the duty levied on the person who ships the rice, or is it levied on the person who grows the rice?—It is a Customs duty levied at the port of export.

5310. At the port of export upon the shipper?—The shipper has to pay it, certainly.

5311. Is there rice shipped at any other port than from Calcutta?—The larger quantity is from Rangoon and the Burmah ports, and from Calcutta.

5312. There is none in the west?—There is practically none; there may be some very small quantity, but it is very small.

5313. There is a duty levied if there is any exported?—Yes, a duty of three annas a maund.

5314. Are there any other export taxes except on rice?—No.

Mr. *Bolton.*

5315. I wish to ask you a question connected with the Financial Statement of the Government of India for 1884–85; paragraph 27 in the Paper before the Committee, shows the loss and gain to the state from its connection with railways, commencing from the year 1880?—Yes.

5316. The statement does not include the loss by exchange?—No.

5317. Nor does it include the loss through money sunk in railways not yet completed, and earning any revenue?—Yes, it does; the account is charged with four per cent. interest upon all outlay in the construction of State railways, whether returning a profit or not.

5318. Then this makes the outcome of the railways much worse in appearance than it is in reality?—It does.

5319. Will you be good enough to turn to paragraph 29, the last clause of the Financial Statement of India, where it is stated that the amount expended in 1883-84 on railways was no less than 5,357,600 *l*, the amount to be expended in 1884–85 is 6,591,000 *l*?—Yes.

Mr. *Bolton*—continued.

5320. And that a further sum of 680,000 *l.* might be spent, but that funds cannot be made available without borrowing more than two and a-half millions, and that in the present state of the money market, this is not considered expedient; what money market is referred to in that paragraph?—The Indian money market, I think.

5321. I presume it is that, but it is not so stated?—It is not so stated, because at that time the Secretary of State declined to sanction any declaration that we would borrow in this country.

5322. With regard to the export duty upon rice in the question put to you by the Under Secretary of State for India, he asked you, I think, whether the export duty upon rice was not a tax upon the natives of Bengal and Bombay for the general benefit of India, and you replied "Yes," but you added, "they get the benefit of the trade"?—Yes.

5323. How do they get the benefit of the trade through the tax; they have the trade?—What I meant was that the tax, whatever it was, was taken out of the profits upon the particular rice trade; that they were not in that respect worse off than the people in other provinces, because they were taxed only upon the trade, and when they had a trade when the other provinces had it not.

5324. They can only have the produce of the soil?—Yes, precisely.

5325. There is jute produced in some parts of India, is there not?—Yes.

5326. Is there an export duty on that?—I believe there used to be, there is not now.

5327. They get the benefit of the trade without the tax?—The jute is grown in Bengal, which pays the rice duty.

5328. There is no other export duty except the duty on rice, is there?—No, there is no other export duty.

5329. Therefore all the others get the benefit of the trade without the duty?—They do not get the benefit of the rice trade.

5330. They get the benefit of the product of their soil in their own trade?—Yes, that is so.

Mr. *Slagg.*

5331. I think you have calculated a surplus over revenue of more than 400,000 *l.* a year; this is applicable to the public works which we have been discussing. You were asked how much of that amount would be absorbed by the Quetta Railway, and your answer was that the greater portion would be absorbed. In that case you would have to rely upon the famine fund for interest on borrowed capital, would you not?—You would still have a small surplus unless the expenditure were to be carried on at a rate greater than 400,000 *l.* a year.

5332. But only a very small one?—Yes.

5333. Does your estimate of surplus take into consideration a falling off in the opium trade?—I have made what I consider a very low estimate for the opium revenue; an estimate which certainly is much lower than any past year, indeed, very much lower than any past year.

Mr. *Slagg*—continued.

5334. What is your estimate for the purpose of surplus calculation?—I take the revenue of Bengal at 6,000,000 *l.*, and of Bombay, 2,400,000 *l.*, excise and miscellaneous, 210,000 *l.*, total revenue, 8,610,000 *l.*, and I take the expenditure at 2,300,000 *l.*

5335. Do not you think it would be prudent for the Government of India to provide for gradual failure in the opium revenue?—There is no indication that the amount in the opium revenue is absolutely falling off; it has been very high during the last four or five years, but there is no indication that it will fall below the standard that it had attained before those four or five years.

5336. Has not the Indian Government to pay a higher price to the cultivators now as compared with what they formerly paid?—They pay 5 rupees now where they paid 4 rupees and 8 annas a short time ago.

5337. Are not other crops, such as sugar competing with opium?—No, opium cultivation is extending rather, I believe.

5338. You spoke of the Government not imposing further taxation for railway construction, is it not perfectly certain that in case these railways did not happen to pay, there must be a fresh imposition of taxation?—I have taken in my estimate a small return from the railways, but nothing approaching to the full return of 4 per cent.

5339. Upon the question of the imposition of fresh taxation, I suppose the land tax would have to be raised?—It is impossible practically to raise the land tax except by a very long operation; it cannot be done immediately.

5340. Are not some of the 30 years' settlements falling in now?—Yes, they are in the North-west, but the assessment of land revenue proceeds upon fixed principles, and it will not be altered by the consideration that the Government desires to raise 1,000,000 *l.* more.

5341. Do not you think that pressure would be put upon the settlement officers to raise the land tax?—I think that would not be so; I think the Government would look in other directions if it wished to increase the revenue.

5342. You do not think any danger of increase of the land tax is in question in your proposal?—I do not.

5343. I should like if it is possible to get one or two figures illustrating the economic effects of railway construction, and I have sketched a very simple form which you might be able to fill up, which if filled up would show the amounts for working expenses, wages and salaries paid in England, materials paid for in England, the same as to India; then the total capital in England and in India, the total remittances paid in England and the sums paid in India (*handing a blank form to the Witness*)?—I am afraid that as regards the guaranteed companies we have no information except from the guaranteed company's agents as to the statistics of their working expenses, but I may be able to get it.

Mr. *Fowler.*

5344. You said something about the non-expansibility of the land revenue?—Yes.

5345. I see in paragraphs 9 and 10 of the Financial

Mr. *Fowler*—continued.

Financial Statement just delivered, it says, "the land revenue would increase"; there is a tendency to increase, is there not?—That particular increase is merely a question of collection in one year rather than in another; but there is a general tendency to increase in the land revenue. The inexpansibility to which I referred was the impossibility of suddenly increasing the land revenue receipts.

5346. Does that increase arise from land being brought into cultivation?—It partly arises from that, and it partly arises from higher prices and new settlements.

5347. The Under Secretary of State said something with regard to that 12 years' estimate of extraordinary expenditure amounting to 36,000,000 *l.* in all; that is about 3,000,000 *l.* a year upon the average; he said it pointed to the increased power to make works out of revenue; does not that add to the reserve of which we were speaking in the first part of my examination this morning; you have there a very large amount of what we call extraordinary expenditure, some part of which may be repeated, but a great deal of which you hope will not be repeated; does not that show that the Government has a great reserve of power?—Yes; a great part of that was famine expenditure.

5348. £. 14,000,000?—Yes; our argument is that we have been enabled to spend in 10 years 14,710,000 *l.* upon famine, and 12,500,000 *l.* upon war, yet we have not been obliged to have recourse to borrowing in order to meet that expenditure.

5349. And you have paid a very considerable sum for works out of revenue; the frontier and State railways come to 5,900,000 *l.*?—Yes, that is the case.

5350. Then it does come to this, that there is besides what we have been referring to this morning a very considerable amount of expenditure out of revenue which is extraordinary?—Yes.

Mr. *Carbutt.*

5351. You stated that if there were an increase of expenditure upon railways eventually, no doubt there would be much larger remittances from India, and that to meet those increased remittances there would have to be a increased export?—Or a diminished import.

5352. Would it not increase the export trade if you could reduce the rate of export duty on rice from Rangoon?—I cannot say what the effect of that would be.

5353. Are you not aware that the rice comes to this country and is cleaned, and then is exported to the West Indies and to South America and to other countries, and that upon the least variation in the price, that is to say when the price is low, the trade of the country has tremendously increased in rice?—I am afraid I have no particular information upon the commercial part of the subject.

5354. I will put it in another way; you stated that if you increased the expenditure by 1,000,000 *l.* conventional sterling or 800,000 *l.*, you would not be able to reduce the duty upon rice?—That is the case, because it is about 80 lakhs of rupees that we get from it, and if we incur this amount of financial responsibility in

Mr. *Carbutt*—continued.

respect of railways, we will not be able to remit revenue at present to the extent of 80 lakhs of rupees.

5355. And you do not think that the increased revenue from the railways would allow you to do that in the end?—It might in the future, it would not at present, to which alone I have looked.

5356. Now I will ask you one other question; in my last series of questions I asked you a good deal as to whether the Government could not spend more money in the construction of railways, and you seemed very frightened that if the Government did anything of that kind they would not be able to raise the money in the English market, and that was your reason for thinking that the railways should be constructed partly by this country and partly by the Government?—We would not be able to raise the money upon good terms.

5357. Are you aware that since this inquiry has taken place it has opened the eyes of the investing public so much that some of the shares of the railways have gone up 5 per cent.?—Yes, but that refers to the guaranteed railways, because there are no shares in the Government railways.

5358. If the public were aware of the financial soundness of the guaranteed railways and the Government railways, they might be inclined to invest their money more freely; if you found the money were more easily raised in this country, would you not be prepared to spend more upon railways in India?—No, we cannot increase our establishment so rapidly; we have certain establishments and certain works; we are not absolutely unlimited.

5359. You mean as regards the State railways?—Yes.

5360. But I mean would you not increase your liabilities with regard to guarantees by allowing more guaranteed railways to be made?—I do not think the Government are prepared at present to go beyond the amount they have laid down in these despatches, that is to say in the way of guaranteeing assistance; they are quite willing that the people should construct railways to their hearts' content if they will not ask for a Government guarantee.

5361. Then it practically amounts to this, that this Committee of 17 gentlemen are sitting so that they shall allow the Government of India to expend three-quarters of a million more upon railways than they have hitherto been doing?—No, this Committee is sitting to remove from the Government of India the restriction which the Committee of 1879 imposed upon the Government, and unless that restriction be removed, the Government of India will not be able to do its duty to the public; that is to say, the restriction of the class of works in which the Government can expend borrowed money.

Chairman.

5362. Do you mean removing the restriction altogether, or raising the figure?—I do not think the question of raising the figure is of much importance, because the estimate is that the Government will be able to get on within their present total limit of borrowing, but I advocate the removal of the restriction as to the class of works to which the Government can apply borrowed funds.

Tuesday, 27th May 1884.

MEMBERS PRESENT:

Mr. Baxter.
Mr. Bolton.
Mr. Brodrick.
Sir George Campbell.
Mr. Carbutt.
Mr. Kynaston Cross.
Mr. William Fowler.
Mr. Bernhard Samuelson.
Mr. Slagg.
Mr. W. H. Smith.
Mr. Wodehouse.

THE RIGHT HONOURABLE WILLIAM EDWARD BAXTER, IN THE CHAIR.

Major L. CONWAY-GORDON, R.E., re called; and further Examined.

Chairman.

5363. YOU have prepared, and you now put in a document very fully describing the railways entered in Schedule A.?—Yes (*delivering in the same*).

5364. Do you wish to add anything to the statement, or to explain any part of it to the Committee?—I have drawn up a note showing the length, the gauge, the cost per mile, and the direction of each line, together with a précis of the correspondence connected with it, showing the advantages of the line, and the probable traffic, as far as can be gathered from the correspondence of the Government of India. The railways follow in the same order as Issue I., No. 3, in the Statement which I have put in before. I would call the attention of the Committee merely to the first page, showing the material extent of agreement between the Secretary of State and the Government of India regarding the different lines that have been entered in Schedule A. In order to show this, I have divided off the proposed expenditure for the 29 lines shown in Schedule A., into three Statements, marked A., B. and C., at the end. Appendix A. shows the lines already specifically sanctioned by the Secretary of State, amounting in all to 8,141,567 *l.* Appendix B. shows the lines which may be said either directly or indirectly to have been approved by the Secretary of State, amounting to about 7,460,883 *l.*; and Schedule C. shows the lines that have as yet received neither the sanction nor the approval by the Secretary of State, amounting at the present time to 12,660,000 *l.* Of this latter sum, 5,300,000 *l.*, or nearly one-half, represents the cost of the Nagpur-Barakur line, which, considering the negotiations which have been carried on at home with Messrs. Hoare, Miller, & Co., may be said not to have been disapproved of. A further sum of 7,090,000 *l.* represents four lines, Nos. 3, 8, 9, and 17, the projects of which are not sufficiently matured to submit to the Secretary of State for sanction, and regarding which the Secretary of State may consequently be said to have expressed no opinion at all. There is but one item alone regarding which there has been any definite difference of opinion, and that is the alleged difference in cost, namely, 270,000 *l.*, between the broad and narrow gauge construction on the Jhansi-Manikpur Railway. That is all that I wish to say upon that point.

Chairman—continued.

5365. The remainder of this long Statement is simply explanatory, is it not, of the various lines contained in Schedule A.?—Yes. You will find first a précis of the correspondence, showing how far the construction of the lines has proceeded, and then the population of the districts, and the population of the towns so far as known; and after that the advantages of the line and the probable traffic, &c. In some cases you will see that the information is given, very much more fully than in others. With regard to No. 15, the Nagpur-Barakur line, I have given that in full, the two principal Despatches from the Government of India showing the advantages of the line, the probable traffic, and the cost. I also put in a map which shows the principal railways concerned. The map gives the proposed route of the Bhopal, Gwalior, and Cawnpur Line; the Jhansi-Manikpur; the Bilaspur, Katni, and Etawa; the Nagpur and Seetarampur; the Raipur and Vizagapatam line; the line from Warora to Chanda; the line from Bezwada to meet the Nizam's Line, and also the lines in extension of the Tirhoot State Railway system. The map also shows in red the principal coal fields.

Mr. *Slagg.*

5366. What is the solid red?—The solid red is supposed to show the best coal measures.

Chairman.

5367. I need not ask you any questions with regard to particular lines; I would ask you however one or two questions of a general nature, and the first is: Are you of opinion, with other witnesses who have given evidence before the Committee, that at all events in numerous instances it is not possible to justify the distinction drawn between protective and productive lines?—Yes. I do not think that the distinction between protective and productive lines is a clear one; they run the one into the other.

Chairman—continued.

other. For instance, on this point I might refer you to page 8 of this Statement (App. No. 25, p. 858). The Rewari-Ferozpur line was constructed simply as a protective line; and, in fact, there was some difficulty in getting the sanction of the Secretary of State to that line even on these grounds. At page 4 (App. No. 25, p. 855), you will see that in September 1882, the Secretary of State refused his sanction to the Hissar-Ferozpur section, on the ground that the districts traversed by the line could be regarded as needing means of protection against famine, more than other parts of India subject to serious drought. However, in October 1882, the Secretary of State did sanction that section; the line has since been constructed; and if you will look at page 8 (App. No. 25, p. 859), you will see at the receipts on the opened section of this purely protective railway have been from 83 rupees to 100 rupees per mile per week at the dull season of the year, equivalent, with working expenses at 58 per cent. of the gross receipts, to about 4·7 per cent. on the capital expended. Here you have a case of a purely protective line which, when built, turns out to be a productive one. And that is only the returns from one section of it; it will pay much more when the line is opened through to Ferozpur.

5368. So that in your opinion that distinction has been proved by experience not to be tenable?—That is my opinion.

5369. The only other question that I have to ask you is, with reference to answers given by Mr. Westland to Questions 4890 and 4897. Mr. Westland first stated I think that a great number of lines in Schedule A. ran through parts of the country where they are not likely to pay, and then in answer to the other question, he said, "There are several lines in Schedule A. which personally I am not prepared to defend; but I am bound to say I am not an authority on the subject." You have paid great attention not only to railway matters, but to these particular lines; are you of opinion that many or any of the lines in Schedule A. are not likely to pay?—The only line in Schedule A. that I think there is a doubt about, is the line from Raipur to Vizagapatam; that line, I think, is not likely to pay, but this of course is a personal opinion, and for another and a contrary opinion, I refer you to page 22 (App. No. 25, p. 869), in which you will see that the Collector of the Godavery district in his letter to the Secretary of the Board of Revenue, dated the 17th of July 1883, states as follows: "In my opinion this is the most promising railway scheme which has been proposed for the South of India."

5370. So that there is a difference of opinion even with regard to that line?—Yes, there is a great difference of opinion, but on the whole I think that that is the weakest line that has been proposed; the real reason I fancy it will not pay is, that Vizagapatam is not a good port. for carrying on an export trade.

Sir *George Campbell.*

5371. Having only just at this moment received your Paper, I am not prepared to go into the question of particular lines, still I wish to ask you as regards classes of lines which the Government of India now recommend. Mr. Westland, I think, told us very broadly that the distinction between Class A. and Class B. in Issue No. 1, was founded upon the Despatch of the Government of India, which proposed to undertake the unpaying lines as a protection against famine, and to leave the more productive lines to private enterprise. In your previous examination, I did not quite understand you to admit that; but what I want you to tell us now clearly is, since you have admitted that the distinction between protective and productive lines could not be fully maintained, whether in your opinion the lines in Schedule A. are really those which ought to be first made, putting aside altogether for the present the question of agency, and whether there are not many of those in Schedule B. which are much more likely to pay as protective lines than many of those entered in Schedule A.?—To begin with, the whole of the lines which I have placed in Appendix A. to this Statement, at page 87 (App. No. 25, p. 919), are already under actual construction at the present time, and therefore I think we may exclude them from consideration.

5372. Do I understand you that the Jhansi-Manikpur line is now under construction?—The land has been taken up, and the earthwork commenced.

5373. The Billary-Kistna, is that actually commenced?—Yes; that is actually under construction.

5374. And a considerable amount of work done?—Yes.

5375. The Western Deccan; is there a considerable amount of that done?—I do not know how far matters have actually progressed with regard to the Western Deccan. An arrangement has been concluded with the Southern Mahratta Company for the construction of that line. With regard to the whole of the rest of the lines, with the exception of the one from Vizagapatam to Raipur, I find them to be fairly paying lines.

5376. Assuming generally that what is done cannot be undone, I should like to ask you not whether you find them good lines and proper to be made, positively, but whether, comparatively, you think they are lines which are likely to pay, and which you prefer to any of those which are entered in Schedule B.?—That is a very difficult question to answer, but I may say that there is certainly one line in Schedule B. which I should myself personally prefer to the Vizagapatam and Raipur line; that is the system of lines that would open up the Assam country.

5377. As representing the Government of India, is it not the fact that Schedule A. is compiled upon the principle of the State undertaking the now paying lines for the protection of the country against famine, leaving the more paying lines, which are more likely to be taken up by private enterprise, to private enterprise?—The object held in view by the Government of India in drawing up Schedule A. was to protect the whole of India against famine; that was the primary object undoubtedly.

5378. Were lines relegated to Schedule B. as being more likely to be taken up by private enterprise?—Not on that ground, but as not being so necessary for the protection of India as the lines entered in Schedule A.

5379. Are we to understand that they abandon

Sir *George Campbell*—continued.

the doctrine set forth in the despatch of the Government of India, and that they do not hold to the doctrine that the Government ought to make those lines which nobody else will make, and to leave the lines that private enterprise is most likely to undertake, to private enterprise?—As I stated in an answer to a former question, that doctrine only extended to a few lines which the Government of India considered were absolutely necessary for the protection of the people of India against famine.

5380. You have advocated the necessity of making lines for the transport of the wheat produce of that country; would you altogether dissent from an answer which I got from Mr. Westland, when I asked whether a very great part of Schedule A. does not consist of a network of lines through the most barbarous and the least populated, and the least productive parts in India?—To some slight extent I should agree with Mr. Westland's answer, but in addition to that, I should say that the most unopened parts of India are exactly those which most require railways.

5381. Have you studied the question whether those very barbarous and uninhabited parts of India which are now only filled with very savage native tribes, really have natural facilities, or whether India having been for thousands of years a very populous country, we may assume that the population not having taken possession of that country, proves that there are natural reasons against it?—*No*, I would rather take the view which you yourself took in a note which you recorded on the 28th March 1868. Referring to this Minute recorded by Sir George Campbell when Chief Commissioner of the Central Provinces, dated the 28th of March 1868, I see he was then advocating lines from the Central Provinces in different directions, and I think he advocated a line of communication from the Central Provinces down the Godaveri River. Regarding his proposed lines, he remarks, "It may be admitted that circumstance having long barred intercourse . . . we should look rather to the development of traffic by the railway than to providing for an existing traffic." This had special reference to a line running north and south through the Central Provinces, to connect it with Southern India.

5382. It seems to me that that is with respect to the grant to the proposed Godavery Canal, supposing the Godavery Canal to be completed, which for my part, I always opposed; but supposing the Godavery Canal to be completed, I thought we might make railways from the west up to Dongargarh and Nandgaon, the great mass of the Nagpur country; and again from Nagpur towards the east, and from my recollection going further to the Chattisgarh division; I do not think there is any suggestion of a railway to Cocanada?—I quoted the extract to show that it was your opinion that we should look rather to the development of traffic by the railways than to providing for an existing traffic.

5383. I understand that you cannot refer to any more distinct quotation in favour of any particular line beyond a line to Dongargarh-werda and the line from *Nagpur* to Chattisgarh?—Your proposed line went to near Chanda; thence

Sir *George Campbell*—continued.

the communication with Cocanada was by the River Godaveri.

5384. You alluded to the port of Vizagapatam as being a difficulty about the line from Raipur to Vizagapatam; is there any port at Vizagapatam now?—I should say it is an open roadstead more than a port.

5385. Is there any question of constructing a port there?—None that I know of.

5386. Then the whole line from the Raipur district to Vizagapatam lies through a very barbarous and little populated country, does it not?—Yes, I believe it does.

5387. May I ask you where you get the figures which I see in this statement, where you have put the population of the Chattisgarh division as 4½ millions. Looking at those figures, I find that in the two populous districts of Raipur and Bilaspur there are only about 1½ *millions*; where do you get all the rest from?—That is an extract, *verbatim*, from a minute by Mr. J. H. Morris, Chief Commissioner of the Central Provinces.

5388. At all events we may assume that the 4½ millions include the district which is much nearer Nagpur than Raipur, and must also include a good many Native states and other districts, with regard to which your figures of the respective distances to Raipur do not fully apply?—I have given you the population of the Raipur district at page 14 as 1,093,405 (App. No. 25, p. 863).

5389. Bilaspur is about three quarters of a million?—Yes.

5390 The Raipur district has a population of nearly 1,100,000. Then the district of Calahandi, which I think represents a sort of intermediate tract between Raipur and Vizagapatam, is put down at only 133,483 altogether?—Yes, that is so.

5391. So that there is not a population anything like 4,000,000 which would be directly tapped by these railways?—If you look at page 16 (App. No. 25, p. 865), you will see that the Chief Commissioner says that there would be a considerable traffic only in the event of Vizagapatam becoming a port through which trade could be transacted on a large scale with Europe.

5392. That was another Chief Commissioner of the Central Provinces?—Yes.

5393. You said that the collector of Godavery expressed the opinion that this will be one of the best lines in India; do you know who that collector was, or whether he had any knowledge of the Central Provinces of India?—The collector referred to was Mr. W. A. Happell; I do not know whether he had any knowledge of the Central Provinces.

5394. At all events, speaking generally, the Madras district is far removed and separated by a wide sandy tract from the Central Provinces, is it not?—Yes, by a mountainous and sparsely inhabited tract.

5395. As regards Schedule B., I think you have told us that those lines are to open up the country as far as Assam?—Yes, Schedule B. includes a railway system that would open out Assam and also the eastern districts of Bengal.

5396. With regard to the connection of those districts with the port of Chittagong, you said that it was one of a system of lines which you would

Sir *George Campbell*—continued.

would make in preference to some which are included in Schedule A.?—Yes, in preference particularly to the one from Raipur to Vizagapatam.

5397. I see in this Schedule B. there are Nos. 2 and 3 lines which pass through the most fertile districts of Oudh; you are aware that Oudh is the most populous district in India and one of the most productive; do not you think that lines of that kind tapping a certain district in Oudh would be more likely to pay than those running through the wild districts of Central India?—I think they would certainly be useful for local traffic, but at the same time the district of Oudh is now fairly served by railways.

5398. Are there not doabs, great tracts between the great rivers in Oudh, which are not served by the railways which you propose either by No. 1 or No. 2 in Schedule B.?—Those railways would undoubtedly be very useful lines.

5399. I see that there is a line from Umballa to Pattiala; is not that a very necessary line?—I do not think that it would have very much traffic on it. It has been proposed to the Punjaub Government several times, but they have, I believe, refused to accept the financial responsibility for it.

5400. From Jullundur to Amritsar and Pathancot, are there not three or four lines through a very productive country?—Yes, the Jullundhur-Hoshearpur would be a very useful line. It is a short line only 26 miles in length.

5401. You alluded to the negotiations with Messrs. Hoare & Miller, as having practically amounted to a sort of semi-sanction of that line, with the Government of India?—A semi-approval.

5402. But looking to the Abstract at page 36 (App. No. 25, p. 880), I am not able to find that approval in the correspondence; I only find that Messrs. Hoare & Miller had made a proposal, and that the Secretary of State had rather fenced with that proposal, and eventually put them off altogether until this Committee reported; can you point to any part of that correspondence which really amounted to an approval of that line, any further than a willingness to allow private parties to make it if they would make it?—No, except that I should gather that the Secretary of State, from his carrying on negotiations at all with Messrs. Hoare & Miller, must have semi-approved of the railway as a desirable line of communication, else he would not have carried on any negotiations at all. I allude to paragraph 4 of the Secretary of State's Despatch, 133 R., dated the 31st of October 1883.

5403. There the Secretary of State absolutely declined to proceed further, or to enter into negotiations with them, pending the decision of the Committee?—Yes, but when the Secretary of State says that he is only waiting for the conclusion of this inquiry to decide whether the line is to be made by the State or by private enterprise, it may fairly be inferred that the construction of the line has been approved of, on account of the agency.

5404. Did Messrs. Hoare & Miller ever pledge themselves to any serious and definite proposal?—Yes, they submitted definite proposals to the Secretary of State.

Sir *George Campbell*—continued.

5405. To which they pledged themselves?—Yes.

5406. What were their proposals?—The proposals of Messrs. Hoare & Miller were contained in their letter dated the 1st of May 1882.

5407. You have been a long time in the Public Works Department, have you not?—Yes, since 1860.

5408. The quotations which you have made from the Chief Commissioner of the Central Provinces, I think, were made at that time before the decentralising policy of finance commenced, and when it was the practice, was it not, for all the local administrations to ask for as much as possible from the Government of India, and for the Government of India to give as little as possible?—Yes, that roughly describes the practice at that time.

Mr. *Wodehouse.*

5409. I understand you to say that the large lines of railways in your Appendix A. are already commenced, and will be proceeded with?—They are all sanctioned, and most of them are under construction.

5410. Has any estimate been made of the sum that will be required to complete them?—No, I do not think any forecast has been made, beyond the Budget. Every year when the Budget is drawn up, a certain sum is allotted for each railway, as much is given as can be conveniently spent upon the line.

5411. The total mileage is not given; do you happen to know what it is?—About 1,779 miles.

5412. Have those lines been selected with special reference to famine exigencies?—Some of them have; the Rewári-Ferozpur, for example.

5413. Has that not been taken into consideration with most, if not all of them?—No, not with all of them; with some of them certainly not so; for instance, the Rangoon-Toungoò line in Burmah.

5414. Is that expected to be a remunerative line?—Yes; regarding the other railways proposed, the Warora-Chunda line cannot be said to be a protective line; the Bareilly-Pilibhit; the Farukhabad-Hattrass; the Dacca Mymensingh; the Ranaghat-Santipore-Bhagwangola, have no special reference to famine. The Wizirabad-Sialkot had no particular famine value.

5415. Are all those lines to be constructed by the State, with the exception of the Western Deccan?—Yes, with the exception of the Western Deccan. The Raneeghat-Santipur-Bhagwangola has been offered to the Central Bengal Company.

5416. That offer is not mentioned in your Appendix?—Yes, at page 85 (App. No. 25, p. 917).

5417. Has the offer been accepted?—No; the company has not yet accepted it; the fact being, I think, that they want to wait and see the traffic prospects on their main line to Jessore and Khoolna, before embarking on a fresh undertaking.

5418. The lines in Appendix B. require a further sanction before they are commenced?—Yes.

5419. With regard to the distinction between protective and productive lines, you object to the

Mr. *Wodehouse*—continued.

definition of a productive line, say a line paying 4 per cent. in five years?—Yes, I do, as a rigid distinction.

5420. Can you suggest any other definition which would as it were preserve the distinction between productive and protective, and which would allow the Government of India a sufficient right to choose the lines to be made?—I could not now suggest any principle.

5421. Then you simply propose the removal of that definition without the substitution of any other?—Yes, beyond the general principles I have before referred to.

Mr. *W. Fowler.*

5422. With regard to the question asked by Mr. Wodehouse just now, do I understand you to say that you would get rid of all the distinctions between protective and productive, and simply deal with each line upon its merits?—Yes, that is my contention.

5423. You are aware, I suppose, that Sir John Strachey said that if that distinction had been maintained the East Indian Railway would never have been made?—He has said so in his book, I think.

Mr. *Slagg.*

5424. Famine railways generally are protective railways, of course, but is it not possible that such railways built in a district where they do not pay, might encourage the population to rely too much on the State, that is to say, to sell their small surplus in good years and have nothing left for the bad ones?—I think not, because the tendency would be to encourage a greater extent of cultivation.

5425. But in districts where the population can only just support themselves in good and bad years alike, would it not be a temptation to them to sell their supply in a manner which might not be met with approval economically?—But in selling their produce they would of course get in exchange money, which would enable them to tide over a famine year.

5426. But if I understand the history of famines, it is not always a question of money?—It will be a question only of money directly the railway is built because railways, by facilitating the carriage of grain, tend to equalise prices.

5427. You are quite clear in your own mind that there is no apprehension as to a possible difficulty in getting supplies where the money exists?—Not if the protective railways are built.

Mr. *Bolton.*

5428. May I ask why the line from Bilaspur to Etawa is laid out so as to avoid the coal fields, as it appears to do?—There is a small branch to be laid into the coal fields. It is a very hilly country there, and directly the coal fields are in full working there will be branches into the coal fields. Where the coal will probably be worked first is higher up the line at Oomeria.

Mr. *Carbutt.*

5429. In continuation of the question asked by Mr. Slagg, is it not the case that there is enough food grown in some portions of India, even during a famine year, to supply the whole population?—The large export of wheat from India shows that there is always sufficient food, and more than sufficient food, for the population on the whole.

5430. Even if there is a famine in a certain district, it is made up by a superabundance in another district?—Yes.

5431. It only requires railways to be carried into the famine districts to be able to cope with famine?—Yes.

Mr. *Cross.*

5432. With regard to statement in Appendix C., at page 88, the additional cost of the Jhansi Manikpur is given as 270,000 *l.*; is that the difference between the cost of standard and metre gauge?—£. 270,000 was the amount deducted by the Secretary of State from the estimate of the broad gauge sent home by the Government of India. It is not the exact difference which the Government of India now estimates between the cost of the two gauges, which is only about 200,000 *l.*

5433. Will you tell me what the percentage of difference would be?—Twelve and a-half per cent. *See* paragraph 6 of the Government of India's Despatch, No. 16, Railway, dated the 29th of January 1884.

Mr. *Carbutt.*

5434. Who estimates the difference at 270,000*l.*?—The Secretary of State; if you read the correspondence you will see it was the difference between the previous estimates for the metre and the broad gauge.

Mr. *W. H. Smith.*

5435. In the event of your estimate not being sufficient for the completion of a line, you of course go on and complete the line?—Yes, but we apply, of course, for the sanction of the Secretary of State for the additional expenditure required.

5436. And that sanction must of necessity be granted, must it not?—Yes.

Mr. *Bolton.*

5437. Then we may supose that the estimates for the metre gauge are as likely to be trustworthy as those for the broad gauge?—There is no difference whatever in that respect; they are made by the same staff.

Sir *George Campbell.*

5438. Have you ever considered that in many of the richest, and most populous, and most productive parts of India, that is to say, the great alluvial plains, there is often an extreme deficiency of metal for roads, and that keeping up the metalled roads is extremely expensive; and on that ground there might be a great deal to be said in favour of making lines of railway, as being not only more effective, but also, in the long run, almost cheaper than regular roads?—There is a great deficiency of metal, especially in the lower provinces.

Sir *George Campbell*—continued.

provinces. The roads have to be metalled in a great many cases with burnt brick, at a very enormous expense. The maintenance of the roads is expensive for that reason.

5439. So that in those cases a great deal might be said in favour of having a large number of short lines of railway upon the embankments which are prepared for the roads?—Yes.

Mr. *Samuelson.*

5440. Has your special attention been drawn to the lines in Schedule B.?—Not with regard to this inquiry so very much, but of course I know a considerable deal about them from papers that have passed through my hands.

5441. Would you say that, setting apart the question of protection against famine, the lines in Schedule B. generally should be postponed for economical consideration to those in Schedule A.?—I think if you were to utterly disregard all question of the protective use of railways, you would undoubtedly have to draw out a new schedule, because some of the lines in Schedule A. are admittedly protective.

5442. Is it the case that, regarding simply the question of the return which the lines are likely to give, there are lines in Schedule B. which would probably be more remunerative than the average of the lines in Schedule A.?—There are railways in Schedule B. which I think would be more remunerative than some of the lines in Schedule A.

5443. I said than the average of lines in Schedule A.?—It would be very difficult to answer that question.

5444. I think you are acquainted with this Yellow Pamphlet?—Yes, I have seen it before.

5445. There is one statement on page 8 to which I wish to call your attention: "The poverty of the Indian ryot, it cannot be too often repeated, depends essentially on his having no market for the surplus produce of his land." Do you agree in that opinion?—Generally I do.

5446. You would say that, as railways are more developed, the produce of the country will decidedly increase?—The produce will increase, and the prices of the produce will rise.

5447. Would you say that, apart from the question of exports, the railways would contribute to the prosperity of the cultivators?—Undoubtedly.

5448. Would you draw a distinction between the class of cultivators and the class of labourers; there is a class of labourers in the agricultural districts, are there not, who require to be specially considered?—I think it would be impossible to increase the prosperity of the tenants without increasing, in the long run, the prosperity of the farm labourer.

5449. By the term tenant I suppose you include the class of farmers?—Yes.

5450. They are, in point of fact, themselves the labourers, broadly speaking?—Yes, broadly speaking, they are.

5451. Are there any statistical documents which would bear that out?—Yes, I think there are.

5452. On page 10 an allusion is made to the great increase in the export wheat trade of India; is it your opinion that by the extension of railways that increase would be likely to be still further developed?—Yes, that is my opinion.

Mr. *Samuelson*—continued.

5453. Then you do not hold with those who believe that most of the cultivated land in India is taken up, and that consequently any increase of exportable products would be to a great extent counterbalanced by the diminution of non-exportable products?—No, I do not agree with that; I think there is a large portion of waste land in India which could be cultivated, and I also think that the processes of cultivation would be improved so as to get a larger produce out of the same area of cultivated land.

5454. Would not that depend in some measure on the possibility of the cultivator being able to obtain capital for the purposes of cultivation?—It would depend upon that certainly; but I think that the increased prices of their products would enable the cultivator gradually to accumulate the capital he required.

5455. That is to say that it would not be necessary for them to borrow all the capital that they required for better cultivation?—It would not be necessary.

5456. You yourself, and I believe also Mr Westland, have stated a very strong opinion that the present returns from railways might be at least depended upon in the future; is it not the case that the traffic returns of the Eastern Bengal Railway have fallen off within the last few months?—They were falling off when I left India.

5457. Is there any special reason for that?—I understand that the last crop of jute was an exceedingly bad one.

5458. Is it the case that the traffic of any other important railways in India has fallen off within the last eight or ten months?—I do not think that there was any very great fall evident before I left India. Of course there are fluctuations of traffic from time to time; but there was nothing serious when I left.

5459. Nothing has arisen that would induce you to qualify the opinion that you have formed, that we may look for an increase and not a diminution of traffic on the Indian railways?—Nothing.

Sir *George Campbell.*

5460. Should you say that for the purposes of export the main lines to the coast are already made; do you think that there is any part of India where exportable produce is not exported on account of the want of a main line of communication with the coast?—I think that there must be a very considerable amount of produce which is not exportable, owing to the expense of cartage to the nearest station.

5461. That is not my question; what I want to know is whether produce is not exported for the want of sufficient main lines to the coast?—Yes; I should say that there is a considerable amount of wheat grown in the country that will be traversed by the Bhopal, Jhansi, and Gwalior line, which now never reaches a port.

5462. What districts do you refer to?—In the districts which will be traversed by that line, from Bhopal to Jhansi and Gwalior.

5463. Do you mean local produce?—Yes.

5464. Have you studied the question whether there is really much produce of wheat in those districts?—

Sir *George Campbell*—continued.

districts?—I have never been there myself personally; but I gather from the correspondence on the subject of this line, that there is a considerable amount of wheat grown there, and I think that you have had evidence to that point before you from Mr. Glover.

5465. At all events, are you aware that the great produce of wheat in the Central Provinces is in the Nerbudda Valley and the Chattisgarh division, and that the produce of the Saugur and Lallipur districts as compared with that of those districts is comparatively small?—Yes, I am aware of that.

5466. With that exception, are there any other large producing tracts in India which have not been tapped by main lines of railway?—I do not think that there are any very large producing tracts at present untapped; but there are certainly tracts unserved by railways which might produce.

5467. In the meantime, as regards the most populous and productive parts of India, do not you think that the present want is rather that of branch lines connected with the main lines than new main lines?—I think there is a great want of branches to the main trunk lines.

5468. Upon the whole, do not you think that branches are more wanted than new main lines?—I do not think they are; not more wanted certainly.

5469. With regard to the development of cultivation, I presume you would say that there is not in India anything like the prairies of America; great tracts of land which only await the plough?—In the district lying between Mooltan and Lahore, I should say that there was certainly a prairie.

5470. Is that a natural producing prairie, or is it a country where cultivation can only be extended by a large expenditure of capital, and a laborious use of irrigation?—It only wants a canal made through it.

5471. Then it requires irrigation?—Yes.

5472. It is not a country simply awaiting the plough?—No, that part of the country will require a canal made through it. That part of the district where a branch of the Bari Doab Canal has been laid through it is most fertile.

5473. Is it not the case that throughout India there is no such thing as a rich prairie merely awaiting the plough, and that cultivation can only be extended laboriously by the extension of irrigation and the expenditure of capital?—The honourable Baronet probably knows more about the Central Provinces than I do; but I understand that in the Central Provinces there is a large amount of land now which could be cultivated if there were the people to cultivate it.

5474. Have you been yourself over the Central Provinces?—No, I do not know the Central Provinces except simply by travelling on the line of railway.

5475. Do not the statistics show that in the Central Provinces the produce is much smaller than in the Gangetic Valley, and that the usual size of farms is three or four or five times as large, showing that the cultivation is less productive in character?—Yes, there is evidence as to that fact in the correspondence about the wheat trade.

Mr. *Bolton*.

5476. In paragraph 28 of the Financial Statement of the Government of India for 1884-85, it is stated, "There are indications that the mercantile public, whose interest in the matter is little less than that of the State, while actively pressing for a policy such as that above indicated, and confidence of prospective profits, is disposed to throw the burden and risk of such works as must be undertaken too entirely on the resources of the Government;" do you agree with that?—No, I do not. I should rather agree with the critique on that paragraph which was published by the "Saturday Review."

5477. Do you agree with the quotation from the "Economist," which is included in that despatch in the following words: "But if the new undertakings promise so well, where is the necessity for a Government guarantee"?—No, I do not agree with that, for the reasons which I have stated previously in my examination.

5478. You are of opinion that a Government guarantee is still imperatively necessary?—I think it is practically necessary.

5479. I think in some portions of your evidence already given you have stated that the guarantee which you would suggest was a perpetual guarantee?—Yes.

5480. Subject always to the acquisition of the railways by the State on terms to be arranged?—I said on repayment of the capital expenditure.

5481. And on certain terms?—Yes, with a control over the rates and fares.

5482. I presume that you do not anticipate that private companies will come forward and offer to make the lines on the terms which you have suggested?—I think they would with a continuous guarantee.

5483. Then the whole difference is the continuous guarantee?—As opposed to a limited guarantee or unassisted companies.

5484. This Committee was appointed to inquire into and report upon the necessity for the more rapid extension of railway communication in India. I understand that you having spent many years in India, and having been much occupied with the construction of public works, chiefly railways, are of opinion that it is most desirable that the extension of railways in India, should proceed as rapidly as the finances of the country will permit?—I am of that opinion.

5485. Will you tell the Committee what were the proposals of Messrs. Hoare, Miller, and Company; they had reference to a particular line, I think?—Their proposals were to construct the Nagpur-Barakur line on certain terms.

5486. What were the terms?—There were 12 clauses in their proposals. I will read only the most important. The Company "to have the right to acquire by purchase the Chattisgarh State Railway from Government at the cost price of that line." The Company "to have the right to convert the Chattisgarh State Railway from metre to standard gauge." "The Government to pay interest at 4 per cent. per annum on the total cost of the standard gauge line from Seetrampur to Nagpur up to a maximum cost of five crores of rupees. The interest to be payable in the same manner, and subject to the same conditions as are included in the contract between

Mr. *Bolton*—continued.

between the Government and the Bengal Central Railway. The capital sum on which the interest as above is to be payable is the estimated cost of the standard gauge line throughout. Interest is not to be payable by Government on any sum spent by the Company in excess of this estimate unless such excess is approved by the Government; and any guarantee on such additional expenditure shall be subject to the same conditions, and shall terminate at the same time as the guarantee on the original estimate. The period during which the Company is to be guaranteed 4 per cent. interest on capital as called up, to be payable in London, is to be limited to seven years, subject, however, to extension at the discretion of Government, in the event of delay occurring in construction which may be deemed by the Government to be unavoidable on the part of the Company. The first 5 per cent. net profit is to go to the Company. The Government and the Company to share equally in profit in excess of 5 per cent. on the amount of the capital called up under the guarantee. The Government to supply the land required for the original construction of the railway and works pertaining thereto on terms similar to those granted to the Bengal Central Railway Company. The Government to have the right to purchase the line on terms similar in all respects to those included in the contract between the Government and the Bengal Central Railway Company. The accounts of the Company to be subject to Government audit. Such accounts as shall require conversion from sterling money into rupees, and *vice versâ*, shall be converted at the rate fixed for adjustment of financial transactions between the Secretary of State and the Government of India, and in use on the day to which such account shall have been made up. On all other points the conditions of the contract between the Government and the Bengal Central Railway to be generally followed."

5487. Is there any control of the rates by the Government mentioned in the proposals?—Yes, there would be maxima rates fixed.

5488. Once those maxima rates are fixed, the control of the rates within those maxima remains with the Company?—Yes.

5489. And that I think you disapprove of?—That I personally disapprove of.

5490. Will you tell me why this proposal has not been accepted?—*I* cannot tell; the negotiations have been carried on at home.

Mr. *Kynaston Cross.*

5491. Was that proposal made to the Home Government by the Government of India, or was it made to the Government of India by Messrs. Hoare, Miller, and Company?—The letter is addressed from Mr. Robert Miller to the Secretary of the Government of India in the Public Works Department in India; and the proposal was *sent* home by the Government of India to the Secretary of State on the 8th of May 1882.

Mr. *Bolton.*

5492. Did Messrs. Hoare, Miller, and Company withdraw their offer?—No; it was open at the time I left Calcutta.

5493. Is the negotiation still going on?—It is still dragging on. The last Despatch of the Secretary of State said that he would not go on further with the negotiation pending the decision of this Select Committee.

Mr. *Kynaston Cross.*

5494. Do you think that Messrs. Hoare and Miller are at all prepared with solid financial men to carry out any such proposal as that which you have read?—So far as I understand Mr. Robert Miller, they are. My information is entirely derived from Messrs. Hoare, Miller, & Co. at Calcutta; I do not know the syndicate here at all. One of the principal complaints that I have heard on the part of the promoters has been the time it takes to get any negotiations completed, on the particular ground that men of capital who have money available, will not keep that money available at call from year to year.

Mr. *Bolton.*

5495. The Government of India seem to lay considerable stress on the fact that they afford facilities to private companies undertaking the construction of railways, inasmuch as they give them the surveys and various details connected with the district through which the line is to be run?—I am afraid I cannot say that they give them the surveys free of charge; they give them the land free of charge, but they make them pay the actual expenses incurred in the surveys.

5496. They give them detailed information?—Yes, they place the whole of the information before them; it is usually published for general information in the "Gazette of India."

5497. Is that information, in your opinion, trustworthy?—It is as trustworthy as the conditions of the case admit, that is to say, the public have the whole of the information given to them that is available to the Government.

5498. *I am induced to ask you that question* from reading the first two or three pages of the Paper which you have to put before us to-day. At page 2 (App. No. 25, p. 854), I see an extract from the Government of India's Despatch to the Secretary of State of the 18th of August 1883. There it is said that, "It must be remembered that by far the greater portion of the traffic carried by Indian railways is of their own creation." When I read that, and consider that the Indian Government have uniformly divided the railways into *two classes*, productive and protective, the latter of which are supposed to be non-productive, I cannot understand how they arrive at the conclusion that the greater portion of the traffic carried by the Indian railways is of their own creation; can you explain that; why is it necessary to make protective railways by the State if those railways themselves in all probability will create traffic which will make them profitable?—The only reason why railways are made by the State is that there are no private persons in the field who are ready to make them.

5499. That is abolishing altogether the distinction between productive and protective?—I have stated that very much difficulty is found in practically applying the definition.

5500. If you turn to page 4 (App. No. 25, p. 855), you will find that in September 1882, "The Secretary of State refuses sanction to

Mr. *Bolton*—continued.

Hissar-Ferozpur section on the ground that the districts traversed by the line cannot be regarded as needing means of protection against famine more than other parts of India subject to serious drought;" do you understand by that he condemns that line as a line which is not likely to pay?—That is my inference; but he does not actually say so.

5501. Then in October, the Government of India express an opinion that that line is of the first importance?—Yes, for protective purposes; that was their meaning.

5502. So important does he consider it that he does not wait for his letter to arrive, but he telegraphs his sanction for the construction of the line?—Yes.

5503. Then in November, "The Secretary of State explains that sanction to the line was given in deference to the Viceroy's urgent request, but that he does not consider that this railway passing through a tract only scantily populated and partially cultivated, will afford protection against famine on a scale commensurate with the outlay;" if these are the reports and comments of the Government of India, what guide will they afford to individual speculators?—Very little. I have before stated, if you remember, that I thought that the whole of the estimates of railway traffic, judged from the statistics of the traffic existing before the railway was made, were not to be depended on.

5504. You concur, I presume, with Mr. Westland, who said that scarcely a railway could be proposed in India which would not be remunerative?—That is my opinion, provided it is economically worked. Certainly not one that is likely to be proposed by the Government of India.

Mr. *Stagg.*

5505. The sum of four millions has been referred to, to be spent on frontier lines, and it appears from the accounts, that the State takes the earnings of these lines into account?—Yes, they are included in the accounts under non-productive State lines.

5506. Is any interest charged on that amount?—Yes; for the frontier lines, that is, generally speaking, the Punjaub Northern, and the Indus Valley Line, are both considered now to be productive lines.

5507. But their accounts bear no charge for interest?—The Indus Valley and the Punjaub Northern do.

5508. But not the rest?—Not the line from Rukh Junction up to Sibi, which will be part of the Candahar line.

5509. Then the general account of the railway earnings has the benefit of a considerable sum which might upon another adjustment of the accounts be charged with interest upon this four millions out of the income?—Regarding the line from Rukh up to Sibi, that is little or no benefit, because the line only just pays its working expenses.

5510. As to the wheat question, you are perfectly satisfied in your own mind with regard to the existence of a large surplus wheat production in the country generally?—Yes, I think that is shown by the statements of exports of wheat which I have placed before the Committee.

Mr. *Stagg*—continued.

5511. Do you consider that the state of the exports is sufficiently proved?—I think it is sufficiently proved.

5512. Do you know of your own special knowledge any particular district in which there is a surplus?—I know of my own special knowledge that there is a large surplus in the Punjaub.

5513. Have you ever seen what is stated in this yellow pamphlet, namely, wheat absolutely rotting in the field for want of being taken away?—No, I never have myself.

5514. Do you know of any case of that sort where no epidemic has existed, to account for the absence of labour?—The case cannot be exceptional, because I find it referred to in so many reports, official and otherwise; I could produce many official reports containing statements to that effect.

5515. Then you are perfectly satisfied that this wheat supply may be looked upon as a certain source of export?—Yes, I am perfectly certain that it may.

5516. And you have also stated that that production, whatever it may be, could be enormously increased through the proper employment of agricultural manures?—Yes, I think it could be increased in two ways; by taking up more waste land, and by a better system of cultivation.

5517. Do not the cultivators at the present time labour under very great difficulties with regard to obtaining manure?—I think that they rather labour under an ignorance of the most approved methods of farming; they burn their manure to a great extent.

5518. Their poverty causes them to do that?—Yes.

5519. Not ignorance of agriculture?—As an actual fact they do burn a considerable portion of their manure.

5520. With regard to that probably you think that the development of their production depends very much upon an increase of prosperity in their condition?—Yes, or the stimulus which no doubt would be given by higher prices.

5521. With regard to competition with America, which you have very often alluded to in your pamphlet, do you think there is any possible danger after this railway system has been developed to a great extent, of America, either through the adoption of free trade, or from some other cause, becoming a formidable rival of India in the wheat supply?—No, I do not think so, because I think wheat can be produced so much cheaper in India than in America.

5522. Under any circumstances?—Yes, under any circumstances; I think that in a war of rates America would go to the wall.

5523. You have said, in answer to Mr. Bolton, that you would encourage railway extension as rapidly as the finances of the country will permit; I want to ask you if you would go further than that, and sanction any further debt or taxation for the purpose of promoting railway extensions?—No, I would not go further; I would not increase the burden on the taxpayer under any condition.

5524. If you found that private companies were willing to make the lines proposed, without any guarantee, would you have any strong objection

Mr. *Slagg*—continued.

jection to placing the working of those lines in the hands of private companies?—None in the least.

5525. But under what conditions?—I think that the Government should have the power of purchasing the line on certain terms, and I think the Government should have some control over the rates and fares.

5526. The uncontrolled construction by private companies would not be approved of by you?—I think that all monopolies should be controlled by the public.

Mr. *William Fowler.*

5527. Mr. Glover, when he was here, used a very remarkable expression speaking of the effect of the railways that he had seen with his own eyes; he said he should rather say that the railway makes the country; would you go so far as that?—I should say that the construction of a railway does undoubtedly lead to a large increase of cultivation.

5528. But you have seen it yourself, have you not, as you explained to us with regard to the Indus Valley and the Punjaub?—Yes, I have seen cultivation increase.

5529. I was not quite sure, from what you said before, whether you judged merely from the increase of traffic, or whether you observed the change?—Of course one does not see very much of the country, but judging of it from what you do see from the line, it has struck me that the cultivation has largely increased.

5530. I observe in your pamphlet, at page 16, you quote a very strong article from the "Indian Agriculturist" with regard to the bad effects of a good harvest on the people; has that ever come under your own observation?—No, not under my own observation, because my experience has chiefly been confined to the Punjaub.

5531. Something was said by one gentleman with regard to the undeveloped parts of India, and he referred to the Jhansi district only; but the same argument would apply, would it not, to the Nagpur region, and all that part between the Central Provinces?—With regard to that question of the produce being a drug in the market, I must tell you that the author of this pamphlet relied nearly entirely upon what he found stated in the official documents which had been published previously. For instance, at page 17 is a statement from Selections from the Records of the Government of India in the Home, Revenue, and Agricultural Department on the wheat production and the trade of India, which were published in 1879, an offi cial document which is largely quoted in this yellow pamphlet.

5532. With regard to the want of development, if Mr. Glover was right in what he said, that a railway only served 80 miles of country, that is to say, 40 miles on each side of it, would not it follow that there will be a great many more railways required in India before the country is fully developed?—I think that a great many more railways will be required fully to develop the country.

5533. Far beyond anything that we have got before us?—Far beyond either Schedule A. or Schedule B., or both together.

5534. With regard to the money question and

Mr. *William Fowler*—continued.

the guarantee, I think I understood you to say that you had no actual experience with regard to finance in Calcutta; you have not to do with the financial department?—No, I deal only with the Public Works Finance.

5535. But you express a strong opinion with regard to the limited guarantees, that they would not answer?—It was only my personal opinion that a limited guarantee would not attract the capital that was required.

5536. You have no personal knowledge with regard to the peculiar character of the Indian money-market; I mean as regards its limitation; you only know that from hearsay?—I only judge of it from the bank rate of discount; I have been a director of a bank.

5537. A slight demand makes a very great change in the bank rate of discount?—Yes; I was director of the Bank of Madras for some time, and I know that that is so.

5538. I think that one of the witnesses said that one great objection to rupee loans was that the Government became competitors in the money market, and so drove up the commercial rate?—Yes.

5539. Do you think, from your experience, that that would be the fact?—I think it is so, judging from the rate of discount.

5540. In speaking about the estimate of traffic, I think you went fully into that with regard to two railways, about which you have told us a great deal, the Rajputana and the Indus Valley; has any other illustration come before you specially, that is to say, where there has been an official denial, almost of a possibility of traffic, followed by a very different result?—I think the two most extraordinary examples are those of the Indus Valley and the Rajputana lines.

5541. You expressed just now a strong opinion as regards to the power of India to compete with America as to the cost price of wheat, and as to the cost when delivered in England; have you any information with regard to the recent rates of freight from India to England, or anything of that kind; have you gone into that at all?—I have not gone lately into the rates of freight; I know the rates on the railways; I have no recent quotations of freight.

5542. You are aware, as regards Jubbulpur, that the wheat of Jubbulpur is one of the finest wheats in India?—Yes.

5543. When you expressed a very strong opinion just now as to the power of India to compete with America, I did not quite understand how you made out the calculation, because you say that you have not any specific information as regards freights; if you get the wheat to Bombay or Calcutta, you have got the longest part of the journey which the wheat has to go, so that the question of freight is of the very first importance?—Yes; my argument was that assuming any particular freight (I mean by that the total cost of carriage from the field to the London market) and taking the difference between that freight (either from America or from India), and the price in London freight, the balance must represent the price which is paid to the agriculturist. I think that the agriculturist in India would be able to sell his grain at a price which would not pay the American farmer to grow it; or,

Mr. *William Fowler*—continued.

or, in other words, that the difference in price which the two parties would be prepared to accept would be far greater than any difference in the cost of freight. You must recollect that it is absolutely impossible to find out the cost of production in India, because to attempt to do so involves reasoning in a circle. The cost of production depends on the cost of labour employed and that cannot be given a money value unless you assume some value to the produce. In an unopened district the cultivator does not care much about selling his wheat at all; he pays his way in kind, his rent is a share in the produce, and in a great number of cases his ploughmen are paid in grain, and he pays the village blacksmith and the village carpenter in grain, You cannot, therefore, put any value to his labour, or to the labour of the men employed by him, unless you assume a certain price for the produce; and, therefore, to attempt to get at the cost price of production in India is to reason in a circle.

5544. It is at the utmost only a rough estimate?—The roughest estimate. You first have to assume a value to the wheat before you can arrive at the value of the labour.

5545. May it not very easily happen that a man may have surplus wheat, which he would rather almost take any price for, than not sell it at all?—These are exactly the facts of the case. After having paid his own way, and paid his rent, and paid his ploughmen, and put by all the wheat that he requires for the consumption of his family during the year, for seed, &c., he is then prepared to sell the surplus at any price that he can get for it. It is my opinion, and I think it is a correct one, that in a war of prices between India and America, India could go below what America could possibly go.

5546. That is to say, the American cultivator has to pay money for everything that he gets in the way labour and machinery and all those things?—Exactly so.

5547. And that he has to pay out of his pocket?—Yes; in money.

5548. And therefore he cannot afford to do what a man can do who pays nothing out of pocket?—That is precisely my argument.

5549. Therefore it really comes to this, that the labour in a certain sense is worth hardly anything in India for the present purpose?—You can assign no value to it.

5550. For instance, in a time of good harvest a man has abundance of wheat to pay everybody, and a surplus which he must get the best price he can for?—Yes.

5551. You do not go into any calculation about freights or rates; you are aware, I suppose, that very often American wheat is carried from Chicago to Liverpool at about 7 *s.* a quarter?—Yes, I know that; and I know that the railway rates in India now are about twice or three times what they are in America.

Mr. *Carbutt.*

5552. You were saying that you could not get railways constructed in India on your terms without a guarantee?—I said that I did not think that the English money market would take

Mr. *Carbutt*—continued

up Indian railways on a large scale without a continuous guarantee.

5553. Do you think that you could get the money market to take up the railways on English terms, that is to say, if nothing were said about your buying them at any fixed price at any future time, and if you had no hold upon their rates, except their giving you a series of rates when they obtained their Act?—No, I do not think they would. I feel certain that there is no possibility of such a favourable state of things.

5554. Supposing it was possible that you could get railways constructed on which the Government should have no claim whatever at any future time, and should have no power over them, would you rather have railways constructed on that principle, or would you rather continue the guarantee, and thus burden the finances of India?—No; if promoters would come forward to build the railways without the slightest assistance from the State at all, then I should say that the State would be very foolish not to accept the offer.

5555. Even without any clause stipulating that the Government should be able to buy those railways?—Yes, it would then be really private enterprise; we have never seen such a thing in India yet.

5556. And you would not object to have such a thing?—Not in the slightest.

5557. Mr. Slagg seems to be afraid that in case you build railways, the cultivator would be induced to sell his grain, and that at some future time when a famine came, he would have no grain for his use; do you agree with paragraph 8, at page 17 (App. No. 25, p. 865), with regard to railways under Schedule A., in which it is said, "it may be indeed said that the surplus available for export is capable of almost indefinite expansion"?—That is my personal opinion, that it is capable of expansion to a degree of which few have an idea as yet.

5558. I think you do not agree with the question which was asked you previously, that railways are likely to increase famine rather than to reduce it?—No.

5559. With regard to the cost of production in the same paragraph which you have been reading, it is put that owing to there being no demand for grain, "the population are able to indulge in the religious caprice of refusing to plough after midday," so that in case there was more demand, it would further increase the chance of their being able to work all day, instead of only half-a-day?—That is so; the railway would be stronger than the priest.

Mr. *Kynaston Cross.*

5560. You spoke of the country between Bhopal, Jhansi, and Gwalior as being very productive; have you any account of the prices of grain there for the last four or five years?—No, I have not with me.

5561. If there were great variations in the price of grain, you would say that that was a proof that there was not always a surplus, would you not?—I should say that if there were very great variations in the price of grain, it would show the desirability of making a railway in order to equalise the prices.

5562. I ask

Mr. *Kynaston Cross*—continued.

5562. I ask you whether it would not show that there was not a great surplus in the district if there were great variations in the price of grain?—It would show that in some years there was a greater surplus than in others.

5563. If in one year in five on the average you had a very much higher price than usual, you would say that on the average there was not much surplus?—Under the present conditions of agriculture, yes.

5564. Do you know the proportion of the acreage of India which is required to grow the food grains which are exported?—Taking wheat alone, the 22¼ million cwts. exported in the year 1883 would probably represent the produce of about 3,700,000 acres; or say 1-320th of the whole country.

5565. Could you tell the Committee the proportion of the total produce of food grains in India which is exported?—Yes; that is to say I could tell you the proportion of wheat. The last estimate of the total production of wheat was 6¾ to 7¼ million tons, or say 135,000,000 cwt. That was the last estimate made by the Government of India of the wheat production.

5566. The amount of export has never exceeded one million tons?—In 1883, it was 22¼ million cwts.

5567. Not more than one seventh of the wheat produced is exported?—No, not more than one-seventh.

5568. Would the difference between a good crop and a bad crop not be much more than a seventh?—That I could not say, as I have never grown wheat; I should say that the difference between a bad and a good crop would be more than that.

5569. Therefore you would say that the great export of wheat of one million tons which occurred two years ago, might be entirely accounted for by a better crop than usual?—It might be; but I do not think it is.

5570. Were not the wheat crops of the last three years very much more than average crops?—I think in the Punjaub they have been. I do not know much as regards the rest of India.

5571. From what port would that be exported?—From Karachi.

5572. You put in a paper showing the exports of Indian wheat of the last few years, and Karachi would come under the Bombay district, would it not?—No, it comes under Scinde.

5573. The total export from Scinde was 2,700,000 cwt.; would that represent the large extra quantity that you spoke of?—Yes, it might, but at the same time I look upon the increased export as due more to the lowering of the rates on the Scinde railways which permitted the export to take place at all.

5574. But you only account in 1881-82 for 1,800,000 cwt., which is only one-tenth of the food exported in 1881-82, namely, 19,800,000 cwt.?—Yes, but you must recollect there was a drop in the rates between those two periods.

5575. What I am asking you to test is, whether it was the great increase in the crops of those years, or whether it was the greater development of railway communication which enabled you to make the great export?—I think it is due to both causes; to good crops combined with a lowering of the railway rates which permitted an export trade to be carried on which previously could not take place at all with the prices which were then current in England.

5576. You spoke of a considerable quantity of land in the Central Provinces as being available for cultivation; the gross area of the Central Provinces is 84,000 square miles, is it not?—Yes.

5577. Of which there would be say, 23,000 cultivated, 27,000 culturable waste, and 34,000 unculturable?—Yes.

5578. Is it not a fact, that there is in the Central Provinces a very large quantity of culturable waste which might be brought into cultivation?—I believe there is; it is noticeable that from the year 1866 to the year 1882 the area under wheat in the Central Provinces rose from 3,314,000 acres to 4,180,000 acres.

5579. That is an increase of about 30 per cent., is it not?—It is an increase of 26 per cent.

5580. From what port would that produce come?—It would come from Bombay.

5581. The increase in the export is about 100 per cent.?—There was little export in 1866 at all; you might say it was a anything per cent.

5582. Would that prove to you that the produce of that acreage in 1866 was consumed in the country?—Or wasted in the country.

5583. You say you have never known of its being wasted?—No, because I have been in the Punjaub, where we have always had the advantage of water-carriage, and where such a state of things would probably not occur; but there are constant official reports on that subject; I could produce a great number of them.

5584. With regard to the terms that you thought would be best to propose in order to procure the construction of railways; in the first place, you would prefer pure private enterprise, and after that the Bengal Central terms, would you not?—Yes, first purely private enterprise, after that the Bengal Central terms.

5585. Next to the Bengal Central terms, are the Southern Mahratta terms the best terms?—I see little difference between the Southern Mahratta terms and simply raising a loan; it seems to me the two are much the same.

5586. The Southern Mahratta terms, as you are aware, are that the money is found by a company and spent upon the line?—Yes.

5587. The Government guarantees a certain rate of interest upon it, and gives the parties who are working the line a certain portion of the profits?—Yes; it seems to me that that is precisely similar to the Government raising a State loan, and putting the railway in charge of a certain staff, with a share of the profits.

5588. Except that you get private enterprise to work in the management of the line?—Yes, you might get a different staff, but considering that the South Mahratta company's staff is largely recruited from the existing Public Works Establishment, I do not see that even in that respect you get very much change.

5589. Do not they have the advantage of self interest in working, and therefore would manage the line more economically?—No doubt; but I do

Mr. *Kynaston Cross*—continued.

do not see that there is any greater advantage than if you gave all your present railway employés an interest in the profits.

Chairman.

5590. I want to ask you whether, taking a broad view of the condition of India, you look forward to a period, not very remote, when all the new railways in India will be made by private unassisted enterprise without State guarantee of any kind?—I see very few symptoms of it at present, but I think we should look forward to that time.

5591. Do not you think that if judicious arrangements were made now, if the Report of this Committee, and the action teken upon it by the Secretary of State and by the Government of India, were such as you hope and expect, that it would give greater confidence than has hitherto existed on the part of the investing public, both here and in India, to railway enterprise in India?—Yes, I sincerely hope that this will be the effect.

5592. And that would be a considerable step in the direction of getting quit of Government subsidies and guarantees?—Yes.

5593. That being your decided opinion, do you think that in all the bargains that are about to be made by the Government of India with private companies, due consideration ought to be given to the fact that the time is approaching when those guarantees will in future no longer be required?—Yes, I think consideration should be paid to that contingency.

5594. You think that in any bargains which the Government of India are likely to make shortly on behalf of the public, they should keep in mind that this guarantee system is a mere temporary expedient, and not likely to be required in future?—I would say not possibly required in future.

5595. Are you of opinion that if the Government were to put a stop at once to the system of guarantees, it would be equivalent to stopping railway extension in India altogether?—To very nearly stopping it altogether.

5596. You say very nearly; do you mean that it would stop it except in respect of railways which the Government of India would find it necessary to make for themselves?—Yes.

5597. In the event of the Committee not taking the view of the Government of India, namely, that in the first instance railways should be made of a protective nature and not necessarily productive, in the event of this Committee not agreeing with the Government of India in that particular, is it your opinion that there ought to be a considerable alteration in Schedule A.?—That there should be some alteration, certainly.

5598. In that case would you import certain of the railways in Schedule B. into Schedule A.?—Yes, I should; that is to say, if you gave up all consideration regarding the protective nature of those railways.

5599. Supposing that the Committee were to take the view which was first propounded to them by Sir James Caird in his evidence, namely, that a broad distinction between protective and productive lines is not tenable, and that the Committee were to recommend that the Government of India

Chairman—continued.

should dismiss that distinction from their view, and make lines which would be productive, and at the same might be protective; you think there ought to be a change in that case in the schedule?—I think there would be a few changes.

5600. Could you give the Committee an idea of the changes which you would propose?—I think, as I said before, Vizagapatam and Raipur would come out of Schedule A., and probably railways 7, 8, and 9, that is the Kadiri extension of the Cuddapah-Nellore line, the Damarcherla-Vellore, Arni-Vellapuram line, and the minor famine lines of Madras, might be left out.

5601. Should you substitute other lines in their place out of Schedule B?—I should substitute some others from Schedule B.

5602. Could you give us an idea which you propose to substitute?—I think the first two lines in Schedule B., and also the Assam lines, Nos. 23 and 24, and Nos. 15 and 16. I think those are about all.

5603. Then am I right in saying that you propose to take out Nos. 1, 2, 23, 24, 15, and 16, namely, six railways out of B., putting them in A., and to take out of A. Nos. 3, 7, 8, and 9, four of them?—Yes.

5604. Financially, could you give us an idea of what would be the effect of that; what would the aggregate amount?—The financial effect would be very nearly the same. The lines taken out are 5,490,000 *l.* roughly; the lines put in would be 4,258,000 *l.*

5605. But in your opinion the financial effect with reference to the profit to the State would be favourable?—Yes, it would be more favourable.

5606. The Committee might look forward to a better result from Schedule A., as you now propose it, than from Schedule A., as proposed for various reasons by the Government of India?—Yes, provided that all considerations of famine are put out of court.

5607. You stated your opinion more than once that a line may be a very productive line, and also be a protective line against famine?—Yes, but the lines which I have mentioned in Schedule B., I do not think would be protective lines.

5608. Would you still leave in Schedule A. a certain number of lines which would be protective?—Yes.

5609. To sum up your evidence before this Committee, in the first place, I understand that under no circumstances do you contemplate an an addition to the taxation of the people of India?—Under no circumstances whatever.

5610. And in the second place, in your opinion, the making of these lines advocated before this Committee, would, at the outside, not add more than 200,000 *l.* a year to the debit side of the account?—Not more than that certainly.

5611. The Committee of 1879 expressed an opinion that the Government of India should not borrow annually a larger sum than 2½ millions for productive public works; am I right in recollecting that you thought that if that limit were raised to 2,850,000 *l.* it would answer all the requirements of the case?—Yes, that is the view of the Government of India.

5612. Would you prefer personally that the Committee

Chairman—continued.

Committee should take that view, or that they should simply express an opinion that a limit such as that laid down by the Committee of 1879 is no longer required?—I think the second alternative is the better one, that a limit is no longer required.

5613. Is there not a greater advantage in the Government having a limit, inasmuch as when pressed by speculators they can say that they have already borrowed as much as, in the opinion of Parliament, they ought to do?—No, there would be no advantage in retaining the limit on that account, because the present limit does not cover either assisted lines or guaranteed lines; it only refers to the direct expenditure by the State.

Sir *George Campbell.*

5614. Except what you have said that certain lines have been already sanctioned as protective lines, can you point to any part of the country where lines are required as famine lines?—The Vizagapatam-Raipur is urged by the Government as a famine line.

5615. Would you tell us which country that would protect from famine?—Personally I can only say that it passes through a very sparsely populated district, but the necessity of protection against famine for this part of India has been strongly urged by the Famine Commission, and by the Secretary of State.

Sir *George Campbell*—continued.

5616. Have you ever heard of a famine in that country?—No, personally, I know nothing about that part of the country.

5617. Can you point to any other line beyond those already sanctioned which would really be useful in famine?—The Hindupur extension of the Bellary-Kistna Railway, and I think the Kadiri extension of the Cuddapah-Nellore, would undoubtedly be useful as famine protective lines. They lead into the districts which were so decimated by famine in the last severe famine in Madras.

5618. Can you find that the Chief Commissioner of the Central Provinces in 1868 recommended any line of railway beyond those that had already been sanctioned, and for the most part profitably made, such as the Nagpur-Raipur, as far as it has been constructed?—No, the lines then proposed are covered by the lines now proposed, and those which are now open.

5619. And they are paying?—Yes. The Nagpur-Chhatisgurh Railway is paying well.

Mr. JAMES WESTLAND, re-called; and further Examined.

Chairman.

5620. YOU have been good enough to prepare some tables for the use of the Committee; will you state what those tables are?—There are three tables of "Statistics of Indian Railways, Nos. 1, 2, and 3." Then there is a Table of "Payments of Interest on Indian Debt in each year," from the years 1870-71 to the year 1883-84, and there is a further Table containing a "Statement of outstanding Debt of India," from the year 1870 to the year 1884. (*The same were delivered in.*) With regard to the railway statistics, the details of expenditure desired by the Committee are not immediately procurable, but they will be obtained, if necessary, by the India Office. A reference to India will however be required, both on the part of the India Office, and also in all probability by the guaranteed companies as regards their lines.

Chairman—continued.

Tuesday, 10*th June* 1884.

MEMBERS PRESENT:

Mr. Baxter.	Mr. Dalrymple.
Mr. Bolton.	Mr. W. Fowler.
Mr. Brodrick.	Mr. Jackson.
Sir George Campbell.	Mr. Samuelson.
Mr. Carbutt.	Mr. W. H. Smith.
Mr. Cross.	Mr. Wodehouse.

THE RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

MR. ALEXANDER MEADOWS RENDEL, called in; and Examined.

Chairman.

3621. WILL you state to the Committee your present and past position in regard to Indian railroads, the opportunities you have had of making yourself acquainted with the subject, and give us your opinion, in the first place, with regard to the working of railroads in India in contrast with those of the United Kingdom and elsewhere?—I have been Consulting Engineer of the East Indian Railway Company since the end of the year 1856. In 1870 I was a member of the Committee appointed by the Secretary of State for India, to consider what should be the gauge for the narrow gauge railways then contemplated. It had been determined that it should be a narrow gauge, and the point referred to us was not whether there should be a narrow gauge at all, but what the gauge should be. Since about 1872, I have been consulting engineer to the Secretary of State for Indian State Railways. I am also at the present time consulting engineer of the South Mahratta Guaranteed Company, the Nizam's Guaranteed Company, the Bengal Central Railway, the Bengal and North Western Railway, and the Rohilcund and Kumaon Railways. I have also had occasion to visit India four times since 1857, and in company with Mr. Danvers, on one occasion I travelled over nearly all the railways in India. As consulting engineer, I am responsible for all the work that goes out of this country for the railways with which I am connected, including the bridges and the permanent way, the locomotive and rolling stock, the machinery and the plant of the railways, measuring, I suppose, something like 6,000 miles in length. The expenditure, I suppose, is something approaching two millions a year. I am also consulted generally by the East Indian Railway Company on pretty well every point that arises in connection with the working of the line. I have made a special study of the subject of the cost of working railways in India. I have been instrumental in connection with General Strachey and Mr. Danvers, in introducing the peculiar system of statistics which is now in use all over India in relation to the cost of working, the quantity of work done, and so on.

Chairman—continued.

That is a system which is adopted in America, but it is not adopted in this country, and I am of opinion that the non-adoption of that system is the cause of a very great loss in the working of railways here. In England, the only way in which railways are judged is by the proportion which the expenses bear to the receipts. That of course is a perfectly fallacious test, because receipts depend upon the rates charged, and not upon the cost of the work done. General Strachey, Mr. Danvers and I, introduced that system with a view of letting it be known year by year, what was the cost of carrying a unit of traffic, that is, a ton a mile, or a passenger a mile, our great object being in the first place to excite a healthy competition amongst railways, to keep the cost down, and in the next place, by showing at what a very low cost the railway could be worked, to encourage low rates. I think we have been most successful in our object on the East Indian Railway. That line is, I think, at present worked at lower cost than any other railway in the world. A very curious paper has been published in America on the subject, in which it is admitted generally, so far as American experience goes, that there is no line which is worked at such a low cost as the East Indian Railway. With reference to that, I should say that we have a very curious paper sent home weekly giving the actual work done on the railway, especially giving the traffic in the form of so many tons of goods and so many passengers passing over every mile of line every day. These are collected at the end of the half-year, and then we are able to ascertain by the working expenses what is the actual cost on a certain basis of carrying a passenger or a ton of goods a mile. The general result is that you may say that upon the East Indian Railway we carry a passenger at a cost of about one pie, that is to say, one-eighth of a penny a mile, and we can carry a ton of goods at about two pie a ton a mile. I think we are a little in excess of that at the present moment, because we are doing a great deal of extraordinary work on the East Indian Railway at the expense of revenue. We are relaying the whole of the line with iron sleepers and

Chairman—continued.

and steel rails, and renewing the whole of the locomotive stock at the expense of revenue. I put in the American Paper to which I refer. (*The same was put in.*) I do not hesitate to say that five years hence I expect to see those rates very materially reduced. I think you will find that the traffic on the East Indian is fully as large as the traffic on the London and North Western; it is carried at about one-half the charge, taking passengers and goods together, and it is carried at about one-third of the cost. I think you will find that the cost of carrying a passenger per mile on the London and North Western would be something over a halfpenny, and the cost of carrying a ton of goods per mile something under a halfpenny; that is assuming that the average charge on the London and North Western is nine-tenths of a penny a passenger per mile, and for goods 1⅛ *d.* per ton per mile, that is on the average, taking minerals and goods together. Nobody knows exactly what it is, but I believe those are something like the rates. The result, of course, of the working at such a very low cost is, that we are able to charge very low rates, and that we have a very large power of still further reducing our rates if it should seem for the interest of all parties, including, of course, the shareholders and the Government that we should do so. We have of late made a very large reduction in our passenger rates. I do not suppose there is any country in the world where third-class passengers are carried comfortably for so little as two-and-a-half pie a mile; the average of our goods is about seven-tenths of a penny per ton per mile.

Mr. *Bolton.*

5622. What is two-and-a-half pie in English?—It is five-sixteenths of a penny per mile, that is taking the rupee at 2 *s.* It is not much more than a farthing, if you take the rupee at its present value. Goods are about six pie a ton a mile, that is at par, three farthings; of course it is really a good deal less than that.

Chairman.

5622.* I should say that in our contract with the Government, the Government has the power of reducing our third-class rates to two pie, and it is a power which I think it will exercise before very long. The result is, that notwithstanding these extraordinarily low rates, the line is paying between eight and nine per cent. over its whole cost, not merely over its share capital, but over its whole cost of something like 21,000 *l.* a mile. I should, perhaps, also observe, in comparing it with the London and North Western Railway, that with a traffic which is, I should think, practically as large as that of the London and North Western, two-thirds of the line is single, and only the other third double, and we have no treble or quadruple line. Our locomotive stock is under 600 engines, where the London and North Western use three times as many; and I suppose our waggon stock is not more than one-fith or one-sixth that of the London and North Western. The whole secret, of course, is that we run very few trains, and that those trains are very full. On the London and North Western, assuming those rates which I have given you as the rates of charge, the

Chairman—continued.

average number of persons in a passenger train will not be more than 50, and the average number of tons of goods in a train will not be more than 70. On the East Indian Railway, which is not particularly good in that respect, the number of passengers in a train will be about 260 or 270, and the number of tons of goods in a train will average, taking empty and full, and all kinds, about 164.

5623. Are any of the other railroads in India approaching that good standard of the East Indian?—In passenger loads many exceed us. It is very curious that one or two of the metre gauge lines get heavier passenger loads than the East Indian, but in respect of goods the East Indian is the best; the Bombay and Baroda following very hard upon its heels.

5624. You have, as we all know, very great experience of the metre gauge; the Committee would be glad to know what you have to say regarding its origin, its advantages, and its extensions?—In 1870, railway enterprise in India was in a very low condition; the lines had cost frightful sums of money; their working expenses were very high; their traffics were very small, and they were a very heavy burden, indeed, in the revenues of India, which were then particularly unable to bear the burden. It was quite clear that, unless we could start some cheaper form of railway, railway enterprise would come to an end. Under those circumstances, it was determined in India to adopt what had already been proposed, and to some extent carried out, namely, a smaller gauge. The original narrow gauge line in India was promoted by an engineer in the service of the East Indian Railway Company, a gentleman named Wilson. He proposed to the Government to lay down a line with a four foot gauge from the Nulhatti Station of the East Indian Railway, to the banks of the Bhagarutta at Azimgunge. He proposed to lay that line down upon an existing road. He said it could be done for about 4,000 *l.* a mile. The Government agreed, and the line was made at about that cost. That, I think, is the origin of the narrow gauge idea in India. It was then taken up by Government officers very seriously, and it was decided that the only way of restoring Indian Railway enterprise was to adopt a narrow gauge, on the ground that it could be constructed at a very much less cost than the broad gauge of 5′ 6″ then in use. I do not think we had very much idea that it could be worked at a less cost, though certainly we thought that small traffics could be worked at a less cost, but the real object was cheaper primary construction. The result was that having decided to adopt a narrow gauge, the question arose what should be the gauge adopted. A Committee was appointed in 1870 to consider that question. That Committee consisted of Mr. Fowler, the well-known engineer, General Strachey, General Dickens, and myself, and we reported on the subject. We did not agree. Mr. Fowler wanted a three feet six gauge, the rest of us wanted a two feet nine gauge, and it was ultimately settled at the metre, or 3′ 3⅜″. With respect to the gauge, I do not believe there is any line yet to be made in India which will have, in our time, at any rate, a traffic which cannot be carried upon the narrow gauge. There are only two lines, I think,

Chairman—continued.

on which the matter is worthy discussion, those are the extension of the Great Indian Peninsula, if it be extended to Cawnpore, and what is called the direct Calcutta and Bombay line. In respect to cost, the difference in the case of expensive lines, that is to say, lines costing something like 20,000 *l.* a mile, need not be considered, because the difference between the two gauges is pretty well constant, and if a line will cost 20,000 *l.* on the broad gauge, it will not cost much less than 18,000 *l.* on the metre gauge. It is with the low-priced lines that the difference is most marked, and it is the low-priced lines which have yet to be built in India. I should say that railway construction in India on the broad gauge ought to be conducted for the future at something like 6,000 *l.* a mile, and if it can be conducted at that rate on the broad gauge, it can be conducted at the rate of about 4,500 *l.* on the metre gauge, and that is, of course, a very serious difference. I may take, with reference to that, a particular system of railways which I have now to consider. I dare say you have heard of the Nizam's Railways; they have lately made a good deal of noise in the money market. There is a country which has an acreage almost as great as this country, in fact, I think the number of square miles in the state of Hyderabad is rather greater than the square miles in Great Britain, and it has a population at the present time of about 10,000,000. There is no reason why, if railways can be constructed cheaply, you should not have in the State of Hyderabad a mileage of railways something approaching the mileage in this country. The question is what is to be the gauge of these railways; so far as our present information on the subject goes we shall certainly be able to construct the railways on the broad gauge in Hyderabad at an average of something less than 6,000 *l.* a mile, and if they can be constructed on the broad gauge at 6,000 *l.* a mile, they can certainly be constructed on the narrow gauge for 4,500 *l.* a mile. The traffic will not be large, quite within the capacity of the metre gauge. Which gauge then is to be adopted? Looking to the fact that you have only a very limited sum of money to spend, say two millions of money, would it be better spent upon 450 miles of narrow gauge than upon 330 miles of broad gauge? The country plainly gets much more benefit out of the expenditure if the narrow gauge be adopted. The argument can only, as far as I see, be answered by your being able to show that the cost of working the metre gauge is considerably in excess of the cost of working the broad gauge, which I shall further show is not the fact. I say further with regard to the Nizam's Railway, supposing it wants, and it certainly does want 2,000 miles of railway, if you make that on the broad gauge you will probably want twelve millions of money, and if on the narrow gauge you will want nine millions. If the narrow gauge can be worked at the same expense as the broad gauge, the profits on the system will be spread over a much smaller capital, and there will be much more encouragement to extend the railway system, so that, take it whichever way you will, the narrow gauge seems to me, unless there be some political or military question involved, the proper gauge for the Nizam's Railway. I do not know whether the point has yet to be considered. But it is possible that it will be considered, and if it comes before me as the consulting engineer of the Company, I shall advise them in this sense. In regard to capacity it is clear from the experience already gained with both gauges, that given the broad gauge for certain main lines, the capacity of both gauges would be equal to the traffic likely to come upon them. I have drawn out here a Table, showing the traffic on broad and narrow gauge lines in the year 1882, which I think may be useful to the Committee. (*The same was put in.*) I have not got the returns for 1883. They would show a very large increase in many of the narrow gauge lines, and in many of the broad gauge lines too. Of course, if you look at that Table, you will see that the chief line of all is the East Indian; it has a traffic equal to about 1,600 persons, and 1,824 tons of goods passing over every mile of it every day, which is about twice as great as any other Indian railway. Two-thirds of that line is single, the other third is double. I believe we could carry far more traffic without doubling another mile of that line. You may, in fact, say that the capacity of the line with a proper amount of doubling, is unlimited. If you take the Madras Railway, you will find that there are only 657 persons and 264 tons passing over every mile of it; that is considerably less than several of the metre gauge lines; showing that the Madras Railway would answer all purposes, if constructed on the metre gauge. I do not rely upon that return as proving it, because we have not yet come to the limit of either gauge; but I do not believe that we shall ever see the limit of the capacity of a narrow gauge railway, certainly it is not tested in any respect as yet. The traffic on the Rajpootana Railway, at the present time, approximates to the traffic of the East Indian Railway in the year 1872; it is greatly in excess of the Great Indian Peninsula traffic in 1875, and it approximates to the traffic of the Bombay and Baroda in 1878; it is only a single line. The East Indian was doubled to the extent of one-third in 1872. The Great Indian Peninsula was doubled to the extent of one-fourth in 1875. The Bombay and Baroda has also had some double line. If the Rajpootana were doubled to the same extent as the East Indian, I suspect it might treble its traffic without the smallest difficulty. I come now to the question of cost of working the metre gauge, as compared with the cost of working the broad gauge. Here I should like to put in another Paper with reference to that subject. (*The same was put in.*) It is perfectly unfair to compare the metre gauge with the broad gauge, unless you compare like with like in other respects. Evidently, the cost of working a railway is very largely affected by the quantity of traffic. It is utterly absurd to compare a railway which is working at what I may call an irreducible minimum, with a railway like the East Indian Railway, with an enormous traffic. Of course if you are working a railway at all, you must incur certain expenses. In this Paper I compare the working of the Rajpootana Railway in the year 1883, first, with the East Indian Railway in 1872, when the traffics of the two were at all events comparable; next I compare it with the East Indian Railway in 1883,

Chairman—continued.

1883, when the traffic of the East Indian was something like four times the traffic of the Rajpootana. Then I compare it with the traffic of the Great Indian Peninsula in 1875, when the Great Indian Peninsula traffic was something less than the Rajpootana in 1883. Then I compare it with the Great Indian Peninsula in 1876, when its traffic was rather greater than that of the Rajpootana. Then I compare it with the Great Indian Peninsula in 1883, when it had a very much larger traffic than the Rajpootana. Similarly, I compare it with the Bombay and Baroda in 1875, 1878, and 1883. In the first of those years, the Bombay and Baroda had about the same traffic; and in the last year it had a greater traffic. Then I show that the cost of working the Rajpootana in 1883 was very little in excess of the cost of working the East Indian Railway in 1872. In fact, I might claim that it was working at less cost than the East Indian in 1872, because it must be remembered that coal costs the Rajpootana Railway between three and four times as much as it costs the East Indian. However, taking the Rajpootana and laying it alongside the East Indian in 1872, we have these facts. The cost of running a train a mile on the Rajpootana Railway in 1883 was 1·47 rupees. The cost on the East Indian was 1·795 rupees. I do not say that means anything, because I think the train mile test is a fallacy, and I only mention it for fear somebody should say I had forgotten it. But when you come to the cost of carrying a passenger one mile on the East Indian, the cost was 1·64 pies; on the Rajputana it was only 1·38 pies, that is to say, notwithstanding the enormous advantage the East Indian had in coal, and their enormous advantage in respect of gradient, because the Rajpootana is a line with heavy gradients, and the East Indian is a flat line, notwithstanding the fact that the East Indian traffic was considerably greater than that of the Rajpootana, the cost of carrying a passenger a mile was considerably greater on the broad gauge line than it was on the narrow gauge line. These are reliable figures. They were prepared years ago, with no reference to this matter. I published them in 1873, and I do not suppose anybody would challenge them. Then in respect of goods, the cost of carrying a ton a mile on the East Indian was 3·04 pies, while on the Rajpootana it was 3·61 pies. There I have to call to my aid the advantage which the East Indian has in respect of cost of coal, in respect of gradient, and also in respect of quantity, because the Rajpootana goods traffic was only 510 tons as against East Indian 728. Still, taking the passengers and goods together, I think it is quite clear that the Rajpootana was worked in 1883 at less cost than even the East Indian in 1872. Of course, if you take the East Indian in 1883 it is a very different thing. The East Indian cost per passenger per mile had fallen from 1·64 pies to 1·24 pies, but then its traffic had increased from 1,007 to 1,609. Again, the goods on the East Indian had cost 3·04 pies per ton per mile in 1872; and they had fallen to 1·97 pies in 1883, but then the goods traffic had increased on the East Indian Railway from 728 tons per mile per diem to 2,084; the cause of the decrease in the East Indian is simply the quantity; you will see the same thing on the Rajpootana, if you compare the Rajpootana in 1883 with the Rajpootana in 1882, the traffic on the Rajpootana in 1882 was 321 tons per mile per diem, and in 1883 it was 510; the result of increase in traffic was a fall in the cost of transport from 4·88 pies to 3·61 pies. So I believe you will find in each succeeding year, as the traffic of the Rajpootana increases so the cost of carrying it will decrease. Well then there is no explanation at all needed when you come to compare the Rajpootana with either the Great Indian Peninsula or the Bombay or Baroda. You will see that comparing the Great Indian Peninsula in 1875 with the Rajpootana in 1883 the cost on the Rajpootana was largely less; for instance the cost of carrying a passenger a mile in 1875 on the Great Indian Peninsula was 2·6 pies; on the Rajpootana it was only 1·38 pies, a little more than half. The cost of carrying a ton of goods on the Great Indian Peninsula in 1875 was 5·7 pies; on the Rajpootana it was one-third less, viz., 3·61. I may take the Great Indian Peninsula in 1876 in the same way. I will take it now in the year 1883. Notwithstanding that the traffic of the Great Indian Peninsula in 1883 was just double, in respect of goods, that of the Rajpootana in the same year, the cost of carrying a passenger a mile on the Great Indian Peninsula in 1883 was 2·34 pies, as against 1·38 pies on the Rajpootana, and the cost of carrying a ton of goods was 3·69 pies on the Great Indian Peninsula, as against 3·61 on the Rajpootana. Now the Great Indian Peninsula is not so favourably situated with respect to gradients as the Rajpootana, though that is more in appearance than in reality, because the principle load on the Great Indian Peninsula is with the gradient, and also the Great Indian Peninsula gets its coal at about 33 per cent. less cost than the Rajpootana. Taking everything into account, I think it is clear that the cost of working on the Great Indian Peninsula is considerably greater than on the Rajpootana at the present time, although the Great Indian Peninsula has twice the goods traffic of the Rajpootana. If you go to the Bombay and Baroda you will find pretty much the same thing. The cost of working that line in 1875, when it had a traffic comparable to the Rajpootana, was very largely in excess of the cost of working the Rajpootana. In respect both of passengers and goods it was 50 per cent. greater in 1875. Coming down so late as 1878, when the traffic on the Bombay and Baroda was considerably greater than on the Rajpootana, the cost of carrying a passenger a mile on the Bombay and Baroda was 1·73 pies as against 1·38. The cost of carrying a ton of goods was 4 pies as against 3·61 pies. In the year 1883, when the Bombay and Baroda traffic is considerably more than double that of the Rajpootana the cost of carrying a passenger a mile was 1·67 pies against 1·38 on the Rajpootana. But the cost of carrying a ton of goods a mile was 3·01 pies, against 3·61 pies on the Rajpootana. If you take into account the fact that the Bombay and Baroda had twice the traffic, and that its coal cost 30 per cent. less than the Rajpootana's. If you take into account also

Chairman—continued.

also that the Bombay and Baroda is a dead flat line from end to end, I think it must be conceded that the cost of working it at the present time is greater than the cost of working the Rajpootana. I have taken those two lines, the Great Indian Peninsula and the Bombay and Baroda, because I think you will find they are on the whole the cheapest worked of the broad gauge lines, except the East Indian. If I had taken any of the other lines I think you would have found the comparison still more unfavourable to the Rajpootana; I do not take the other narrow gauge lines. In the first place I am defending, not any particular metre gauge line; I am defending the metre gauge on the whole against the broad gauge, as a whole. What can be done on one metre gauge line can be done on any other metre gauge line. But if you take the returns for the present year in respect of the Nagpur and Chattisgurh you will see that is very rapidly coming up into quite as good a position as the Rajpootana. I have received this morning only, and therefore I cannot say I have looked at them very carefully, the returns for the Nagpur and Chattisgurh Railway for the first half of 1883. I find this to be the fact. In 1882 the passenger traffic on the Nagpur and Chattisgurh Railway was, taking the whole year, 208 persons per mile per day. It increased suddenly to 347 passengers per mile per day in the first half of 1883. The goods traffic on the Nagpur and Chattisgurh in 1882 was 120 tons per mile per day. It increased suddenly not less than five times; up to 597 tons. It tapped the grain traffic, and there was a great jump. The result was that the cost of carrying a passenger a mile, which had been in 1882 upon the Nagpur and Chattisgurh Railway 2·14 pies, fell to 1·3 pies; and the cost of carrying a ton of goods a mile, which had been in 1882, 8·5 pies, fell to 3·6 pies, showing the influence of quantity of traffic I do not doubt that as the traffic on these metre gauge lines increases so the cost of carrying will fall; and that this also will happen, that the cost of carrying on the metre gauge will be found to be absolutely less under similar circumstances than the cost of carrying on the broad gauge, because the proportion of dead weight to live weight is very much more favourable on the metre gauge. You carry much less dead weight on the metre gauge in proportion to the live. I will illustrate that with one or two figures. I received this morning, and this morning only, the Statistics of the Working of Indian Railways for the Half-year ending 30th June 1883. I turn to pages 10 and 11; I take passengers first; the freight of a passenger train on the East Indian Railway was 16·76 tons, the dead weight was 213 tons; that I think you will find works out one ton of freight to 12¾ tons of dead weight. Now I go to the South Indian Railway, which is a metre gauge railway; the South Indian Railway had just exactly the same live weight, 16·73 tons, but its dead weight was only 7¼ tons to one ton of live weight. The live weight on the South Indian was 16.73 tons, the live weight on the East Indian having been 16·76 tons. The dead weight on the South Indian was 120 tons,

Chairman—continued.

while on the East Indian it was 213 tons. The dead weight on the Rangoon and Irrawaddy was ten tons to one ton of live weight. The dead weight on the Tirhoot was eight tons to one of live weight. The dead weight on the Bownuggar Gondul was eight tons to one of live weight; the dead weight on the Rajpootana was 8½ tons to one of live. If I take the broad gauge lines the dead weight on the Great Indian Peninsula was 14 tons to one of live weight; on the Scinde, Punjaub, and Delhi, it was 12½ tons to one of live weight; on the Madras it is 9¼ tons to one of live; on the Bombay and Baroda it is 10 tons, on the Eastern Bengal 10 tons, on the Oude and Rohilcund 12½, and so on. It is clear therefore that the narrow gauge has a much more favourable proportion of live to dead weight in respect of passengers. I do not say that you see the same thing so markedly in respect of goods, but you do to some extent. In the narrow gauge lines they have not yet worked up the traffic load question in respect of goods as well as we have worked it up on the East Indian. You will see that in a very marked way from the enormous improvement that has been effected. I think some little time ago the average loads on the Rajputana line in goods trains were not more than 48 tons to the mile. They have now got up to 82. I am quite satisfied that in a very short time you will see the average loads on the Rajpootana over 100. If I take the Madras railway, which is a broad gauge line, the freight was 79½ tons; the freight on the Rajpootana for the year was 74 tons. The dead weight at the Madras was 211 tons; the dead weight on the Rajpootana was only 124 tons. Similarly if I were to to take the Scinde, Punjaub, and Delhi the live weight was 106 tons, the dead weight was 229 tons, or something like 2⅛ tons of dead weight to one of live weight, the Rajpootana being only about 1⅔, or as 74 to 124. Generally whether in passengers, or in goods, you will find I think that the metre gauge has much less dead weight to carry in proportion to the live weight. That, of course, is one reason for expecting that the metre gauge lines will be worked at something considerably less than the broad gauge lines, under fairly similar circumstances. I think Colonel Conway Gordon has not been very fair in his way of dealing with this matter; he has simply added all the broad gauge traffics together, and all the metre gauge traffics together, and he has never considered whether he was comparing like with like in any way. For that reason I have drawn out the table which is before the Committee, by which you will see that taking all the broad gauge lines together the traffic on the broad gauge lines averages 992 passengers and 870 tons of goods per mile per diem, while the traffic on the narrow gauge lines is only 680 passengers and 228 tons of goods; if he had compared like with like, and compared the Rajpootana, for instance, with any of the broad gauge lines taking anything like an equal traffic, he would have found that so far from the narrow gauge being more expensive to work than the broad gauge the broad gauge was considerably more expensive than the narrow. The fact is that, of all the circumstances affecting the cost of working a railway,

Chairman—continued.

railway, gauge is the least important. Quantity of traffic, gradients, the cost of coal and labour, and last, but not least, management, are far more important. I believe that the working cost of the East Indian, the Great Indian Peninsula, the Bombay and Baroda, and in fact all the broad gauge lines, will decrease as their traffic increases, but I believe that the cost of the Rajpootana and all the metre gauge lines will decrease more rapidly because there is more room for increase of traffic. Colonel Gordon has spoken in a very flattering way of the engine stock, and all the rest of it, on the Rajpootana Railway. He says that we pay far more attention on that line to carrying power than the broad gauge lines. I can only say I wish it was so. The simple fact of the matter is that when the Rajpootana line was designed we supposed that it would have an extremely small traffic. I remember drawing out a scheme for the rolling stock of this line on the supposition that it would cost 6,000 *l.* a mile, and might possibly be expected to pay 4 per cent. on that sum. Of course we designed a very limited rolling stock, each individual waggon was made a very small unit. Our engines were extremely light. The sooner we can draft off a hundred of our Rajpootana engines on to lines where the traffic is limited and replace them by heavier engines the better for the Rajpootana. The engines we are now sending out will draw from 40 to 45 of the present waggons, say 360 to 400 tons, at 14 to 16 miles an hour on the level on flat gradients, and about 30 carriages 30 miles an hour.

Mr. *Bolton.*

5625. What sized carriages?—Carriages which will very comfortably contain 32 third-class passengers; the ordinary third-class carriage on the Rajpootana Railway is 18 feet long and six feet wide inside, divided into four compartments, each compartment containing eight persons. I should say that on the whole they are better than the average English third-class carriage. You may see going out of London any day third-class carriages that are infinitely worse.

Chairman.

5625.* We are coming now to larger units. The grain trade has very much altered the face of affairs in respect of Indian railways, and we are now sending out bogey waggons on the American principle, which will weigh about 5½ tons, and will carry about 12½ tons. If our passenger traffic increases we shall do the same thing. We shall adopt very much the American system. It is just possible we shall have to double some portion of the Rajpootana as time goes on. With respect to that, I may point out that the East Indian is doubled to the extent of one-third its length; the Rajpootana is all single, there is not a mile of double line upon it, whereas in the East Indian out of 1,500 miles, 468 are double. In 1872 when its traffic barely exceeded that of the Rajpootana, it had 415 miles of double line; the Great Indian Peninsula even in 1875 had 327 miles double out of 1,266. I notice that the Great Indian Peninsula is demanding 150 miles more double line at the present moment. In their latest report they state that the time has come when the

Chairman—continued.

line should be doubled for a further distance of 150 miles. At the present time we are not asking for any double line on the Rajpootana, though I think it is possible that on a portion of the line, where the gradients are very heavy it may be desirable before very long to put in a little bit of double.

5626. Have you anything to say with regard to the rails?—Originally the line was laid with iron rails. The weight was fixed when iron rails were very dear. On the Rajpootana we paid as much as 14 *l.* a ton in England for some of the rails. It was laid just at the very worst time of the Iron Market in 1873 and 1874. Of course, whenever iron is dear it is also bad; I do not know when iron is worse, when it is dear or when it is cheap. When it is dear the makers do not care what they give you, and when it is cheap they cannot care. At any rate we got some extremely bad iron rails in India during the last days of the iron rail trade, and it is a great comfort to think that that trade is defunct. At that time, iron being very dear and we being very anxious indeed to construct our railways as cheaply as possible, we fixed the weight of our rail as low as possible. We, in fact, decided originally on 36 lbs. a yard. That was increased in India to 40 lbs. a yard, and that is the standard narrow gauge rail of India at the present moment, except that we are now sending out steel. The specific gravity of steel is a little greater than that of iron; the rail which was 40 lbs. a yard in iron is 41½ lbs. in steel.

Mr. *W. H. Smith.*

5627. The same section?—The same section.

Chairman.

5627.* I do not say the time has not come for increasing the weight of the rail, but I do say that it is not because we are increasing the traffic, or because we are increasing the weight of our engines; it is because we can get steel at 5 *l.* a ton, and because it will now pay to put a greater amount of wear, or wearing surface on the rails. Looking to that, seeing that we can relay the whole of the Rajpootana Railway at this moment for less than half the sum we spent originally, I should decidedly support any measure for increasing the weight of the rail from 40 lbs. to 48 lbs. or 50 lbs. a yard. It is not because the 40 lbs. rail is insufficient, but because we are able to afford for the heavier metre gauge railways a heavier rail.

5628. To sum up this part of your evidence you are clearly of opinion that the metre gauge has more than answered the expectations of its promoters?—Yes, much more; it has developed railway traffic to a degree we certainly had no idea of at the time we started it. You will of course come across lines where you will say, "it is a pity this line was not made broad gauge," but after all it is the narrow gauge that has made the pity. The lines would never have existed in the first place if they had not been made narrow gauge. You may look upon the Rajpootana as the parent of a great mileage of narrow gauge, all flowing into it, and the only question is where the break of guage should take place, whether it should take place upon the

Chairman—continued.

the Rajpootana itself, or upon the two extremities of the Rajpootana. I say it had better take place at the two extremities, and you had better treat the Rajpootana itself as the parent line.

5629. This naturally brings us to the subject of the break of gauge. You are aware that a great deal of evidence has been given to this Committee in regard to the evils of break of gauge. We should be glad to have your opinion upon the subject?—I have never been able to see that there is anything more in the break of gauge than the cost of transfer. In the first place the cost of transfer is extremely cheap in India, and it occurs after such an enormous mileage travelled that it is very unimportant. I do not think people have the least idea of the amount of break of gauge that goes on in this country; all traffic in this country that goes long distances, or at all events, a very large proportion of it, undergoes breach of gauge. Goods do not travel long distances by rail in this country, they do not travel anything like the distance they travel in India. Goods in India will travel 500 or 600 or 1,000 miles by railway. I do not believe the average distance travelled by goods on English railways is as much as 50 miles.

5630. What do you mean by break of gauge on English railways; do you mean transfer of goods from one truck to another?—No; transfer of goods from trucks to ships.

5631. That is hardly a break of gauge?—I call it a very distinct and a very bad form of break of gauge. For instance, I will take goods between Scotland and England. There is a great steamship company which plies between Leith and London; that company has been good enough to supply me with statistics of their traffic. All those goods might come by railway all the way if they liked, but they do not. Instead of being put into a truck somewhere in Scotland, and coming up by the same truck to London as they might do, and as they would do if break of gauge was all this tremedous difficulty that people make out; they go down to Leith, they are there taken out of the truck and put on board a ship, they come by the ship to London, there they go out of the ship into a barge, and a considerable proportion of them go out of the barge on to a railway again. Goods do not go out of a truck into a ship in India, because there are no ships to be found; they go from one truck into another truck, and it is the same thing.

Mr. *Brodrick.*

5632. What class of goods?—All classes of goods.

Chairman.

5632.* I will give you the case of rails, for nothing is more common than that. We have a contract at Darlington for rails to be delivered into a ship in London to go to India. Darlington has direct communication with the docks and Port of London, and it has not any connection with the sea, that is to say, it is not on the sea. You would suppose, therefore, if a break of gauge was such a great inconvenience that as soon as the trucks got on the rails at Darlington they would be taken to London direct, but not a bit of it. The goods are taken down to Middlesborough and there put into a ship, and the ship brings them to London. That ship does not go alongside the ship which is to take them to India, but it discharges them into a barge, and the barge takes them to the docks and they are there put into the ship, making two breaks of gauge.

Chairman—continued.

Sir *George Campbell.*

5633. They have to be carted through London?—No; the rail comes down to the ship's side. There is not a down stream dock in London that has not got the railway brought alongside the ship.

Chairman.

5634–5. In your opinion the break of gauge is much less important than witnesses before this Committee have stated it to be?—It is a mere question of money and a very small sum of money indeed. The actual cost of transhipment including interest on the sidings which would have to be put up for the purpose is under 5 *d.* a ton. You have it I think as a little over three annas. Here is the cost of transhipment on the Rajpootana Railway at three of the four places where transhipment occurs. Transhipment occurs on the Rajpootana Railway at Agra, where the goods brought by the broad gauge are put on the narrow gauge; at Delhi the same; and at Ahmedabad where the goods are put from the narrow on to the broad gauge. There is a fourth place, Kundwa, of which I have not the particulars, but taking into account capital, interest on capital, as well as cost of transfer, the cost at Agra is 3·18 annas per ton; the cost at Ahmedabad is 3·78 annas per ton. The cost is greater at Ahmedabad, because the cost of labour is higher there than further up. Then in respect of time, I think it is shown in this Paper that there is never any occasion for any greater delay than 12 hours; that is the experience at Ahmedabad, where the most of it goes on; this is a Paper prepared by a gentleman connected with the management of the Rajpootana Railway, giving statistics of the working of the Rajpootana Railway, and he deals specially with the break of guage. (*The same was put in.*) The quantities transhipped are very large, much larger than one would suppose; the quantities transhipped at Ahmedabad alone during the first half of 1883 are no less than 4,715,000 maunds, that is about 175,000 tons; there is no difficulty whatever connected with it; Ahmedabad is the junction of the Rajpootana Railway with the Bombay and Baroda. Finally, on the break of gauge question, I should like to say I have been over the figures relating to the cost of the break of the Rajputana Railway, and I find on that line, which is 1,200 miles in length, the cost of a break of gauge is equivalent to the cost of constructing about 10 miles of railway, and of working 10 miles of railway. I believe that is over the mark, but that at the present time is the cost of the break of gauge on the Rajputana Railway.

5636. The

Mr. W. H. Smith.

5636. The cost of working each break of gauge is 10 miles railway?—No, the cost of the four breaks; there is a break at Agra, Delhi, Ahmedabad, and Kundwa.

Chairman.

5637. We should like to have your opinion with regard to the agencies you think ought to be employed in the making of new railways in India?—I have acted for every form of agency that has hitherto been employed in the making of Indian railways. I have acted for the Old Guaranteed East Indian Company, for the New Guaranteed East Indian, for the partially guaranteed, for the totally unguaranteed, for the native guaranteed, and for the Government; and I do not think there has any other agency been employed. Therefore I have a considerable amount of experience, and I say it really does not matter what agency you adopt provided there is common sense and common honesty, which of course is obtained. One is as good as another. The real point is the executive. It is "a far cry to Loch Awe." You have very little control over your executive in India. The agency at home here is of minor importance. I believe that the Government can make and work railways as well as any outside agency, but I do not think it is desirable for the Government to undertake the work.

5638. Any part of it, or the whole of it?—Any part of it. I do not think it is desirable that the Government should either make or work the railways.

5639. Not at all?—No; I think the Government of India has more to do, and has less power to do it with than probably any civilised Government in the world, and I think it should delegate everything that can be delegated, and it certainly can delegate railways. And I say that the Government of India is in a more favourable position for delegating than any other Government, because it has a very large body of retired officers who form the very best materials for agencies; and I say that the right thing is that companies should be formed under directions made up of these retired officers with English commercial men in a given proportion, and that they should be entrusted with the construction of these railways, not as the property of the companies, but as the property of the Government. I think it essential for the future of Indian Railways that they should be the property of the Government. I mean that the freehold of the railways should be in the hands of the Government.

5640. Do you mean that the Government should own the railways from the beginning, or take them over afterwards?—No; I would have these companies construct the railways simply as contractors to the Government for their construction; and then I would let them take leases afterwards of the working of the railways for given periods; short periods, say of 20 years. Of course the leases might be continued upon such new terms as the circumstances of the time rendered reasonable. I say that because I think the class we want in India for the construction of the railways is the investing class, and not the speculating class. It would be a very serious matter indeed to let the concessionaire or the contractor into Indian railways; I say the Govern-

Chairman—continued.

ment should make them under an agency, as I have described, themselves. They can get the money on the best possible terms, much lower terms than any other agency.

5641. What do you think of the South Mahratta contract; do you think that is a favourable one?—That is the type I look for in future Indian Railway contracts.

5642. In your opinion that ought to be the type of the future?—Yes. We are simply the contractors of the Government for the construction of that line, and find the money for the Government under the Government guarantee; we are mere agencies for the obtaining of that money. I do not care in what form you put it, it comes back to that; we are simply an agency for raising the money and making the line for the Government.

5643. So that of all plans yet adopted, in your opinion that is the best?—In my opinion, that is the best plan. There is another difficulty about Indian railways, and that is the question of rates.

5644. Yes, I was going to ask you about that. There has been a good deal of difference of opinion on the part of the witnesses with regard to the rates and fares. We should be glad to know your opinion as to the control that ought to be exercised by Government?—The rates named in all the contracts are worthless. We were not to work above certain maxima; well we have never reached the maxima. I think there should be a commission appointed, something after the fashion of the English Railway Commission, and I would have all questions of rates referred to that commission. It should be a very small commission, say three persons; one representing the public, another representing the companies, the persons working the railways, and the third some one who should represent all; a judge.

5645. Should that commission have power to reduce the rates and fares at any time?—That commission should hear all persons complaining of rates, and seeking lower rates. Should hear all sides of the question and decide.

5646. Notwithstanding any arrangement originally made with the companies, you would give this commission power to reduce the rates and fares when they think proper on what they consider just and proper representations?—Yes, I would not leave it to the Government; the Government is irregular in its action; it is weak, inconsistent; it depends upon the men of the day too much.

5647. Would such a power rather have the effect of discouraging any railway extension in India?—No, it would not deter the right person; it would not deter the investor. There is nothing the investor likes so much as to be as close as possible to the Government; what an investor would like would be a low guarantee, and let the Government do as it likes.

5648. You rather agree in the evidence given before this Committee by various persons, that theory apart, practically the Government would act fairly both by the railway companies and the public?—Yes, I think it would, but I think if I was the Government, I should delegate that fare question, which is a constant thorn in its side, to some outsider, a commission such as I have suggested.

Chairman—continued.

5649. In the full belief that the railway companies would in the long run rather benefit than suffer from any reduction of rates, and that might be effected by the commission?—Yes, I believe that *nothing* can benefit Indian railways more than a reduction of rates.

5650. Probably it is your opinion that many of the Indian railroads have not acted sufficiently upon that principle?—No, I do not think any of them have.

5651. You believe that all Indian railways should make such a reduction of rates as would stimulate the traffic much more than it has been stimulated in the past?—Yes, nearly all; and the object of our introducing these statistics years ago was to help in that being done.

5652. From the nature of the evidence you have given I take it you would deprecate any very sudden and rapid extension of railroads in India. You would prefer that we should go on in a gradual manner, but spending a good deal more money than we have been doing the last few years?—I do not think you can spend money on Indian railways at a greater rate than you can find good executives to make the railways. The difference between a good engineer experienced in Indian railways, and one who is not so experienced is fully, I believe, a 1,000*l.* a mile on railways constructed at the rate of 6,000*l.* a mile. And if you hurry on the railways too much you will get inexperienced executives, and throw away 25 per cent. of your expenditure.

5653. Then do you think they should be constructed a little faster than in the past?—A little faster, but any sudden expansion of Indian railways will lead, in my judgment, to a very considerable waste of money.

5654. You have seen the proposals made by the Government of India?—Yes. I am not very well acquainted with them; I am not prepared to express an opinion as to whether they represent too great an expenditure or not, but I say that if they do not take very good care to keep the expenditure within the power of the existing executive they will run the risk of the same kind of extravagance as nearly ruined Indian railways 20 years ago.

5655. Have you formed any opinion yourself as to the sum that might be expended per annum upon extending railways in India?—No, I cannot say that I have; but I know this, that there is not a man acquainted with Indian railways, unless he is too old for India, who is not occupied at the present moment; that I am at the present moment wanting men, and I do not know where to get them; that is to say, I cannot get men who could be trusted with expenditure.

5656. In your opinion, even if it were thought proper to make railways at a more rapid rate in the future, it would be very difficult for some time to get competent men to carry out the work?—I think it would to any very large extent.

5657. And that is a consideration which you think this Committee should keep in view in forming a judgment upon this question?—I think so.

5658. Have you any other suggestion to make to the Committee of a general nature?—No, except that I should like to say it seems to me

Chairman—continued.

that there is probably no country in the world that wants railways more than India, and I do not think there is any country in the world in which, if you are prudent in the construction of them, and construct them at a low rate, as we certainly can, and work them at a low rate, which could make better use of railways, or which could have more railways than India.

5659. And, while recommending caution, you are of opinion that nothing would benefit India more than a very great extension of the railway system?—Nothing.

5660. Of your own knowledge, can you tell the Committee whether there is in India a considerable party, especially among natives, who look rather with dread upon obligations being incurred on making railways which might lead to additional taxation and embarrass the finances of the country?—No, I have no knowledge upon that subject at all. My own belief is that railways in future will not be a burden on the finances of the country. Constructing railways, as we certainly ought to do, at about 4,500*l.* a mile narrow gauge, I doubt if there is any railway which will be more than a few years a burden on the finances of the country. My own belief is that railways will be a very large revenue to the country.

5661. Eventually?—Eventually. They are, in fact, now a very considerable revenue.

5662. Do you agree that there are large districts of India which may be opened up to the export trade by railways?—In respect of grain?

5663. Yes?—No doubt grain can be produced; but whether it would be exported depends a good deal on the price in this country; and that is rather a large question. If wheat goes to 35*s.* I do not know how much Indian wheat will find its way home. It is a question of price a good deal.

5664. Still you think there are districts in India where the culture of grain would be very much stimulated and increased by the railroads?—No doubt of it.

5665. There are vast portions of that country not within a reasonable distance of any line at present?—Vast quantities of it. I should like to see 50,000 or 60,000 miles of railway constructed gradually and carefully.

Mr. Carbutt.

5666. I should like to ask you a few questions about the engineers; I understand you to say you object to the Government making these railways, but prefer them being made by private companies; if that was the case, what would you do with the staff of the Public Works Department, about a thousand men were there at the present time?—I do not mean to say I have taken that into account, but I suspect you would find they would be very glad to join the companies. At this moment we have a considerable number of the Government engineers loaned to us, and very glad they are to join us. I have eight or ten at the present moment loaned to clients of mine.

5667. Do you give them an increased pay?—We give them an increased pay and they like

Mr. *Carbutt*—continued.

the greater freedom; in fact, they are better off in every way.

5668. In case you had to make more railways, you say you would have great difficulty in getting engineers; I suppose you mean experienced engineers, able to take the lead out there?—Experienced engineers able to take the lead out there, who know how the Indian railway is to be constructed, who will be content with what you would call here a make-shift and study economy; it takes a training to do that.

5669. Would not it be possible out of these thousand engineers in the Public Works Department, to find men who would push up into the higher places, and fill up their places with young men, who have served their time in this country?—Every engineer in the Government employ at this moment is occupied. You are talking here of carrying on Public Works at greater rate than at present; every man in India is occupied. If you carry on at a greater rate, you must have more engineers.

5670. Then according to that, it is not the question of money at all; you think no more railways can be made than are being made at present?—I say if you go very suddenly into a very large expenditure you must employ inexperienced men, and the result of that will be that you will waste a great deal of money.

5671. And you do not think that by employing Indian engineers to man the minor posts, and push forward the English engineers who are out there to higher posts, you could manage?—I do not think you have many native engineers yet; I have met none, or very few at present; and it would be very experimental in trusting them largely with the expenditure of money.

5672. Do you consider if this Committee recommend an expenditure of 10 per cent. more on railways than at present, that that would be very large?—Oh no, 10 per cent. is neither here nor there.

5673. Would you say 20 per cent.?—I dare say you might go to 20 per cent. without affecting the question, but if you come to doubling or trebling the present expenditure on railways, you would get into very serious mischief.

5674. Supposing you settled to increase the number of miles of railway to be constructed per annum by 20 per cent., where would you obtain your engineers from?—I should have to consider; for I say even at the present moment, I do not know where to find the men I want.

5675. As to the cost of construction, you gave us the cost of the construction of a narrow gauge railway at, 4,500 *l.* per mile?—That is to say certain narrow gauge railways about to be constructed, or those which might be constructed in the state of the Nizam.

5676. Will you give the Committee some idea as to what portions of your expenditure the increased cost would apply to, and the difference between the narrow and the broad gauge; you have said 1,500 *l.*, but would it be on your bridges or permanent way?—Mainly on the permanent way; on the railways and sleepers, sleepers are a very important point indeed. Then the rolling stock is much cheaper. The works of course are extremely light where you are only spending 4,500 *l.* altogether.

Mr. *Carbutt*—continued.

5677. I suppose in making a bridge, the bridge has to carry itself, which is the main thing, therefore the cost would not interfere with bridge work?—There is not much bridge-work in 4,500 *l.* a mile.

5678. Whatever there is?—Whatever there is, there is a certain saving in a bridge.

5679. I thought the difference was very slight?—Oh, it is very considerable. If you are designing a bridge to carry broad gauge, you would have to calculate two tons to the foot run of weight. The engines we are using now there, would weigh 63 or 64 tons with a tender, whereas the heaviest engines on the narrow gauge would not be more than about 35.

5680. It is not a question of weight, it is a question of what weight per wheel you would get?—Yes, but it comes to the same thing.

5681. Therefore there is no difference between the narrow and the broad as to the weight per wheel?—Oh yes, very large.

5682. If you are going to draw the same amount of traffic, you must have the same weight on your rails?—For the metre gauge railways, the heaviest engine we are sending out weighs 24 tons the engine itself, that is a bogey engine, but the engine that will carry the heaviest loads only weighs 20 tons on six wheels, and that is 3⅓ tons to the wheel, whereas on the broad gauge railways, the engines I am now sending out will have seven tons on a wheel.

5683. What, 14 tons on a pair of wheels?—Yes, 14½; I have had 14½ for the last 20 years on the East Indian Railway, only I do not think anybody has known it except the locomotive superintendent and myself.

5684. Then you do think it would make a difference in the cost of the bridges?—Yes, a certain difference; but in 4,500 *l.* a mile, there is very little bridging to be encountered.

5685. In the ballasting and the permanent way is the principal difference?—The road is what makes the bulk of the difference.

5686. Why should you put heavier rails to carry the same class of traffic?—Because you will use heavier engines; take the Oude and Rohilcund, that was to be a light broad gauge line, and they have had to increase the weight of the rail and engines; the dead weight affects the question very materially.

5687. Why do you increase the weight of your engine if you are going to draw the same load?—As a fact, you do; the Oude and Rohilcund begun with a weight of four tons to the wheel, but they have had to increase the weight of both their rail and their engine, and they have no larger traffic than you have in the Rajputana; in fact, the Rajputana is rather a larger traffic than the Oude and Rohilcund; if it is said you can reduce the weight of the wheel on the broad gauge, the answer is that you can do that equally on the narrow gauge; I should like to push narrow gauge feeder lines with 25 or 30 pound rails with engines of half the present weight. Whatever you can do in reducing on the broad gauge, you can do on the narrow gauge, and you can go down with the narrow gauge to a much lower weight of engine than you can on the broad; you can push the light railway system, in fact, to a much greater extent on the narrow gauge than on the broad.

Mr. *Carbutt*—continued.

5688. You have given us the weight of your rail as 41 pounds steel per yard?—Yes, we are going through exactly the same process as you are in this country, but you must remember that although it is true that our standard rail is 40 lbs., we have at all events one line with a lighter rail. We originally laid the Muttra Hatras line with a 30 lbs. rail, that was to be a light metre gauge railway; that line has been worked for 10 years, and it is a very satisfactory little railway, and it is capable of extension with the same rail over a very large extent of India.

5689. Then you went into the question of the cost of working, and you quoted from Colonel Stanton's Report as to the cost of working?—Yes, I dare say I did; the figures I have given in this Paper relate to 1883, and that relates to 1882.

5690. There are two items on page 52; first of all, the working expenses and the average tons per mile for both broad and narrow gauge. I have taken out the number of tons per mile carried on the broad gauge, and I find an average of 93 tons; I have taken out the number carried on the narrow gauge, and I find an average of 53 tons, that is nearly one half; then I have taken out the working expenses, and I find the average on the broad gauge was 2·32, and the average on the narrow gauge was 1·93, so that the narrow gauge expenses very nearly approach the broad gauge expenses?—Averages are very dangerous, and it is not quite fair; I think you must take in each case the quantity of traffic; you are omitting from consideration the fact, that some of these lines you are taking carry 1,600 persons, and 2,000 tons of goods per diem, while others on the metre gauge for instance, have as little as 200 persons and 120 tons of goods per diem. Now, you cannot possibly compare two railways differing so essentially in their traffic.

5691. You have made a statement that your chief experience was your cost of management?—No; I said that break of gauge was perhaps the least important circumstance affecting the working of a railway; that gradients, the cost of labour, and above all management affected it much more. Good or bad management is infinitely more important to a railway than the gauge.

5692. Point out to the Committee why it costs more to manage a broad gauge than a narrow gauge?—I am not speaking of the cost of management, but of the character of the management; whether it is good or bad. Of course, the cost of management has nothing to do with gauge.

Mr. *Fowler*.

5693. I have a question or two to ask with regard to the way in which you propose to work under the Government; as I understand, you would like the Government to be the owner of the railway?—Yes.

5694. And the companies merely agents of the Government for the purpose of raising the money and constructing and working the line?—Yes, under a lease.

5695. Then how would that be as regards the

Mr. *Fowler*—continued.

surplus profits, would the Government share in them?—Yes.

5696. You have not gone into that?—Oh, yes; I take the South Mahratta contract; it is a question of detail what interest the Government should have in it. I say you should have the lowest guarantee that would raise the money, and that the company should be allowed a certain share of the surplus profits.

5697. Have you gone into the question what guarantee is requisite in order to induce people to invest?—That is a financial question and I have not gone into it. But I do not see why the Government should pay more for raising the money for the construction of the railway under a company than for any other purpose.

5698. Have you gone into the question of the possibility of raising money in India on a large scale?—No, I do not pretend to know anything on the financial question; I only know that every attempt to raise money in India has been a failure. In the South Mahratta, 500,000 *l.* was reserved for Indian subscription, but I think they got only 10,000 *l.*

5699. You made a remark with regard to the extension of the line going from Nagpur to Chattisgurh. I suppose you consider that will be extended to Calcutta?—It may be extended.

5700. Do you approve of that extension?—Yes. I do not think there is anything in a direct Calcutta and Bombay railway, because no goods will go.

5701. But to open out that district?—Yes, but no more than I should propose to open out any other district.

5702. But is not that a district which very much requires it?—It does, like every other district.

5703. Would not there be an immense increase in the wheat production?—I daresay there would.

5704. There are minerals also which would be developed?—A certain amount of mineral traffic would go across from Ranigunge to Central India.

5705. A great deal of that traffic would go to Calcutta if you got the line?—I expect a considerable traffic would flow from the centre of that line to each extremity, to Calcutta and Bombay, but there will be no through traffic except first-class passengers going by the English mail.

5706. Then you made some remark as regards the wonderful results of the Rajputana Railway beyond what you had expected?—Yes.

5707. Have you noticed that in the other lines?—I have not noticed any such sudden growth except in this Nagpur and Chattisgurh last year; that was the most remarkable instance of growth on record in Indian railways. That arose from the wheat trade; they suddenly tapped a wheat district.

5708. That is a strong illustration of what can come from opening out a district?—Yes; whether it will go on is another question. With regard to the break of gauge, some complaint was made by Messrs. Ralli in that district; they said their wheat dried. Well, probably that was rather a good thing, but I think it was very unfair to attribute that to the transit. If the goods

Mr. *Fowler*—continued.

goods were kept a week, that was due, probably, to the enormous expansion of the trade before the conveniences for so large a transfer had been arranged; it would not happen again.

5709. I dare say you have seen that great complaints have been made of mismanagement in that way by Chambers of Commerce and other bodies?—Yes, but there is no justification for them; if there were real causes of complaint, there would be a demand for compensation. The most remarkable thing on Indian railways is the few demands for compensation. The bill for compensation on an Indian railway is ludicrously small compared with that of an English railway.

5710. There is only one question I want to ask you with regard to the broad and narrow gauges: you said there were only two lines where you could say for certain that the broad gauge would probably be required?—I do not say even that for certain. I am not by any means clear that that direct Calcutta and Bombay line should be broad especially as the Nagpur and Chattisgurh is already built on the narrow gauge system, and it would take a million sterling to alter it.

5711. Would you propose to have a line half broad and half narrow from Calcutta to Bombay?—You have a line half broad and half narrow from Delhi to Bombay.

5712. But you do not think that is a good thing in itself?—Not in itself; but I think that the fact that the Nagpur and Chattisgurh already exists as a narrow gauge, is an important element in the case.

5713. Do you mean it would cost a million to put another rail down?—I understand the conversion would cost something like a million sterling.

5714. But I understood you to say that you would rather be inclined to think that the probable traffic would be so great on these two lines, that is the extension of the Indian to Cawnpore and direct to Calcutta and Bombay, that if there was any line where the broad gauge would be proper that was one?—Those were the two. I say it is arguable, but I am not sure I should be inclined to say that, looking at the present state of Indian enterprise, the extra expense of broad gauge is justifiable in these two cases.

5715. With regard to the relative dead weight carried by the broad and narrow gauge, is there no possibility of reducing it; does not the dead weight rapidly decrease in respect to the broad gauge as well as the narrow gauge, and will not that go on decreasing very rapidly with the expansion of the traffic?—Yes, I think it will.

5716. Then as that can be decreased in both cases by the extension of the traffic it is not a strong argument?—I am not sure that you can make any considerable reduction in the dead weight in the broad gauge, there is more room for it in the narrow. We have got up to the limit in our broad gauge of convenient stock. We have now a question on the East Indian Railway whether we shall not substitute the American bogey wagon for the ordinary wagon; but the result will be that we shall get to such a big unit, that it is unwieldy, and I think we shall settle not to use it largely.

5717. Apart from the mere extension of traffic, you think there is more room for a reduction of dead weight in the narrow?—Yes, that is the result of experience; I do not mean to say I expected that 10 years ago.

5718. You said a great deal about the contrast between the cost of carriage in India and in England; is not it impossible to compare them?—I only give the fact; I do not give any reason for the fact.

5719. Still you consider it to be an important illustration?—I think it is extremely important to bear in mind the very low rate at which Indian railways can be worked, because if Indian railways are to be extended, it is quite as necessary that you should feel they can be worked cheaply as that they can be made cheaply; and that is why I point out the vast difference between the English and Indian working.

5720. And that, as far as it goes, is a strong argument in favour of as rapid an extension as possible?—Exactly, and I only use it for that purpose. People are apt to form their judgments from what they see about them. Of course, circumstances are different.

5721. With regard to that extension; if I understand you rightly, you do not object to the extension so much from any financial reason as a mere matter of machinery, as from the difficulty of getting the right men to superintend it?—Yes. I say that the executive is an extremely important matter. A great deal of the waste of expenditure on Indian railways in their earlier history was due to want of experience on the part of everybody connected with them.

5722. Given all the requisite economy and efficiency of construction, you would like to see 50,000 or 60,000 miles of railway made in India? Yes, I should.

Mr. *Bolton.*

5723. Is not that efficiency of executive power likely to be provided if there was a demand, a demand generally to produce the supply?—Certainly, only it would take about five years to make any serious trustworthy expansion of it.

5724. There is, at the moment, a great oversupply of engineering power in this country?—Yes, but not an over-supply of engineers acquainted with India.

5725. They must learn by serving a sort of apprenticeship in India?—They must learn by experience.

5726. You say the compensation demanded and paid on Indian railways is ludicrously small compared with English?—Yes.

5727. To what do you attribute that?—In the first place freedom from accident; in the next place we carry everything very well.

5728. Freedom from accident due to what?—Well you very seldom hear of a bad Indian railway accident. I was thinking of goods, by the way, more than passengers.

5729. What do you attribute that to?—There is no doubt the amount of compensation depends to a certain extent upon the number of transactions. Now the East Indian railway traffic is extremely large, and the number of transactions is extremely small, because goods are carried to such a great distance. Damage to goods occurs most frequently at the stations, but the goods going

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going such great distances, the stations are not used to the same extent as they are here.

5730. Is the term "goods traffic" in India fairly the same things as goods traffic in this country?—Yes, I should think so.

5731. Is not the goods traffic carried in India mostly raw material?—The exports are, but the imports are not.

5732. But the great bulk of the tons must be raw material?—I cannot speak offhand upon that matter; I should think it was.

5733. In this country you do not find very large compensation, for example, for the loss of coal or iron?—No, I suppose not.

5734. The compensation payable by railways here applies to a different class of traffic?—That would account for it; but if you take an Indian Railway, and you look at the compensation bill you hardly find it at all. Take this Paper of Colonel Stanton's, for instance, and look at the railway expenses.

5735. The fact of there not being any very great demand for compensation does not prove much of the articles carried are different?—I have no doubt that the proportion of raw material to manufactured goods is greater in India than in this country; but still a very large quantity of such goods are carried.

5736. Take transhipment of wheat with a break of gauge from one train to another, there would be a loss of weight?—Why?

5737. Because I think you can hardly handle it without?—How many times. I wonder is that wheat handled between the time it leaves the producer, and the time it reaches the consumer.

5738. Every time it is handled there would be some loss?—Then what would be the total amount of loss. I once heard that question argued with respect to salt. It was said 1 *s.* a ton was lost every time it was handled so that by the time it got to the consumer's mouth two-thirds of it must have disappeared.

5739. No doubt in the transmission of salt there must be some loss?—I do not know that I would admit it.

5740. Do you think that every grain is transferred from one truck to another without any loss?—Well *de minimis*, &c.

5741. If that happened in this country, the owner of the goods would demand compensation for the loss?—And he would demand it in India equally.

5742. Does he ever get it?—Does it ever occur—is it worth considering?

5743. Does he get it?—He will get it if he has the right to it.

5744. You are not aware that he does get it?—I have often looked over the East India compensation bill, and it is full of claims for a rupee here and a rupee there.

5745. But do they get it?—They get it just as in this country. Upon that question of transhipment, take coal, if there is any loss anywhere it will be in coal. I have heard said there is 5 per cent. loss in transhipment of coal.

5746. Are you referring now to English railways?—To Indian railways. I have heard it said that the transhipment at Agra causes a loss of 5 per cent., that is one cwt. out of every ton. Why, if that were true, when you consider

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that coal is handled at least six times from the time it leaves the pit, and is shaken about in a thousand miles of railway transport, the whole coal would disappear. I do not believe that with respect to the coal it would be possible to prove the loss of a tenth per cent. It may be broken, but how is it damaged?

5747. Do you know what is the out-turn of a thousand tons of coal shipped in Cardiff and delivered in India?—No, I do not.

5748. Do you know whether there is any loss in that?—I could not tell you; Cardiff coal is a soft coal, by the way.

5749. You have referred to a system of statistics initiated by yourself?—No. General Strachey set them going; I worked them up, and Mr. Danvers believed in them and published them, and impressed them on others. The East Indian Railway Company subsequently took them up, and published them regularly, so far as that line was concerned, in their half-yearly reports; that is the division of labour in the matter.

5750. I think you said that the want of these statistics in England had been the cause of very great loss?—I believe so.

5751. Will you explain how?—Because nobody in England knows what it costs to carry a ton a mile or to carry a passenger a mile; and if they did, I think we should have a considerable improvement in railway matters.

5752. In what sense?—I think it would be found that the cost of transport is so enormously higher than it ought to be, that we should have an endeavour to reduce it.

5753. By what means?—By avoiding the utter waste of power that goes on in English railways, by running far more trains than the traffic requires.

5754. Are you referring to passengers or goods?—Both.

5755. Do you think this unnecessary number of trains which are run in this country, is owing to any other causes than competition?—Competition; competition which managers attempt to meet, by providing facilities rather than by lowering rates.

5756. Then how would that be obviated by the knowledge of the fact of the cost per mile?—It would be a matter of general discussion, and the public would see that it would not do; and pressure would be put on the railway companies if they required pressure.

5757. But now we know that railway passenger trains have doubled or quadrupled the spaces actually required for the passengers carried?—That fact is patent.

5758. Why do not railway managers and directors meet together and arrange to obviate that?—I am sure I do not know.

5759. You are assuming that they would do in the other case?—I think they would. I think the public would force them to.

5760. In India there is no competition?—Yes, there is.

5761. In what respect?—We have river competition on the East Indian, and that, no doubt, has quickened our wits a good deal.

5762. That is one instance; but can you really say that there is railway competition in India?—No, and I hope there never will be in the English sense.

5673. Do

Mr. *Bolton*—continued.

5763. Do you think that the extra cost of carrying goods in this country was due to competition, to the multiplication of railways and trains unnecessarily?—No, it is due to competition conducted on a wrong method. The difference is simply due to this: that we load our trains to a much greater extent than you do in England, and an Indian passenger train will average 250 to 260 persons, an English passenger train will not average as many as 60.

5764. But you run very few trains?—We run very few trains.

5765. And you pick them as you please?—No, I do not think I can say that. No doubt in England a carriage that will hold eight perhaps gets two. I dare say in India it gets six.

5766. If necessary you would put eight into the whole of them?—Just as you would in England, if you could get them.

5767. If the passengers on your line found themselves inconvenienced by over-crowding they must take your rail or not at all?—Yes; but our passengers only pay five-sixteenths of a penny a mile, where you exact a penny.

5768. Are you aware that five-sixteenths of a penny is in excess of some fares charged in England?—I dare say it is; but I take it that the average is close upon a penny of all classes.

5769. But your five-sixteenths of a penny is your third class?—Yes; but the average of all in India will only be a trifle over that.

5770. And you are aware that in this country some fares are less than that?—No doubt; but I have no doubt the average is hard upon a penny.

5771. Will you explain why it is that traffic can be conducted so much more cheaply in India than in England?—Because there is so much less waste of power.

5772. And that is due to what?—Our loading our trains.

5773. And that is due to the absence of competition?—No, it is due to our conducting our traffic in a more sensible manner than English railways do.

5774. But you have no one to compete with, so that you can take your own course?—Certainly, and you could do the same in England. When two railway managers compete in England, they set to work to run trains at each other; they do not lower the rates, if they did the public would get the benefit.

5775. But how low would you go; we are now down as low as your third class?—Oh, no; everybody knows that the English third class rate is nominally a penny.

5776. Yes, but that is very nominal, and in some cases it is lower than even your quotation of five-sixteenths of a penny?—You mean excursion traffic?

5777. No, regular traffic?—That may be; but you will not dispute that the average English rate must be close upon a penny. Of course, if your rate is less than a penny, your load is greater than I have given it.

5778. Are you aware that goods which would be called goods in India are carried, in some cases, here at considerably less than three-fourths of a penny per ton a mile?—I have no doubt of it.

5779. We have had evidence that some years ago coals were carried at a farthing a mile?—We are carrying coal on the East Indian at three-eighths of a penny. I gave you the average at three-fourths of a penny. You are carrying many things in this country at threepence a ton.

5780. You say that the traffic on the East Indian Railway is greater than the London and North Western?—That is assuming (you must make an assumption in these cases) that the average rate charged for carrying a passenger for a mile is nine-tenths of a penny, and the average sum charged for carrying a ton of goods or minerals is a penny and one-eighth.

5781. But I am speaking of the tonnage passing over the line?—Yes, but it is based upon that; you must turn the traffic into passenger miles and ton miles, and you must assume the rate.

5782. But you do not know the number of tons that actually pass over the line in a year of the East Indian?—Yes, I do.

5783. Then you can say whether it is more than the North Western?—I do not know the North Western; it is not published.

5784. But, at all events, the traffic on the East Indian Railway is very great?—It is very great, indeed; and assuming that I am right in the average rates I have taken, it is as great as the London and North Western.

5785. And the greater portion of it is single line?—Two-thirds of it.

5786. With rails of 40 lbs. weight?—Oh no; 82 lbs. and 75 lbs. weight.

5787. In advocating the narrow gauge, I think your advocacy goes this length; the narrow gauge, for a small traffic, would be preferable to the broad gauge for a small traffic?—Yes.

5788. You would not have advocated a break of gauge if our own gauge, or a 4 feet 8 inch gauge had been adopted?—I do not know. I think if we had been in the same position with the 4 feet 8½ inch gauge in 1870, that we were with the 5 feet 6 inch, I should have advocated it.

5789. If you began again in this country, would you advocate the metre gauge in preference to the 4½ feet?—No, certainly not.

5790. Why?—I do not think it would have carried the traffic of this country.

5791. But you are carrying over the East Indian Railway a traffic as large as a line in this country, which has over a great portion of it four lines of railway?—I think it is quite possible (I should not like to say it) that you might carry the East Indian traffic upon the metre gauge; but I suspect that you would carry it at a greater cost than you would upon the broad gauge. The machine would have to be larger for so large a traffic.

5792. Then you do think that there is a point at which the broad gauge, even the broad gauge of India, is preferable to the metre gauge, or to the narrow gauge?—Yes, I do; and I think also this, that you arrive at the point when you should have the broad gauge instead of a metre gauge long before you get to the other point; that the railways pay themselves so well that you may afford the larger machine.

5793. Yes, and upon that I may ask you this: you say that railways are paying remarkably well in India; what is your evidence of that?—I take the

Mr. *Bolton*—continued.

the East Indian, which is the most important of the whole.

5794. But must you not take the whole?—The East Indian is paying over its whole capital, not only the share capital, between eight and nine per cent. The other railways are doing fairly well. The Rajputana paid last half year 6¼ per cent. The Nagpur and Chattisgurh paid for the first half of last year 12 per cent. If you take them altogether, they are paying more than the interest of the money raised to carry them out.

5795. There is an apparent profit which is lost by the loss in exchange?—I do not think so. I am taking it in rupees.

5796. The break of gauge you think comparatively a trifling matter?—It is a matter of a few pence, and time.

5797. But time is an object?—The time lost is extremely small.

5798. If you extend the railway system by adding 50,000 or 60,000 miles, or even half that to the present mileage of India, there will then be competition in India; would not the line which could carry its freight to its destination, cut out one that had a break of gauge?—The difference between them would be so small, I do not think it would affect the question. Take for instance at the present moment the Rajputana, it is not affected by the gauge.

5799. What does it compete with?—Well, it competes at present with the East Indian.

5800. Where?—To Calcutta. The great question at the present moment is the competition between Calcutta and Bombay, and not between the railways.

5801. How does the Rajputana compete with the East Indian to Calcutta?—The great competition at the present is between Calcutta and Bombay.

5802. Will you show on the plan the two breaks of gauge?—At Agra and Delhi.

5803. If this line was continued through by Gwalior to Bombay without the break of gauge, do you think that would not cut out the other?—No, I am sure it would not.

5804. Would not senders find out there was some loss of weight?—I expect 2 *d.* or 3 *d.* would settle the question.

5805. You are a great advocate for the reduction of rates?—Yes.

5806. It adds to the traffic, and all that means of course a reduction of the cost to the sender?—Well, I will take the Great Indian Peninsula, last year, the Rajputana rate to Bombay; it had a break of gauge, and paid for the break of gauge, the Bombay and Baroda not having to pay any part of it, The Rajputana charge 7·7 pies, the Bombay and Baroda charge 8·7, the Great Indian Peninsula charge 8·92 pies.

5807. And there was no break of gauge?—None.

5808. And they came to the same point?—They went to the same point; I have given you the average charges.

5809. Well, what does it prove?—I mean to say the Rajputana having cost so much less than the Great Indian Peninsula, or the broad gauge continuation of it, will be able to charge lower rates, and that the rates will be so much lower as to pay for a great deal more than any damage consequent on break of gauge.

Mr. *Bolton*—continued.

5810. With regard to the sender?—The sender will be governed by the rates.

5811. Why does not he send by the Rajputana line, if that line charges less than the Great Indian Peninsula?—He does; at present the Great Indian Peninsula does not come into question; it does not go to the same points.

5812. I asked you what the Rajputana competed with?—It competes with the East Indian.

5813. I want to see how that competition arose?—You have to take into account the seagoing rates from Calcutta and Bombay. The East Indian has to be so much lower than the Rajputana, as to compensate for the greater cost of freight from Calcutta. If you take the East Indian, of course its rate is lower than the Rajputana. The East Indian is as low as any railway in India almost; last year it averaged six pies.

5814. Consequently, now having that little competition by sea, the East Indian is compelled to reduce its rates considerably below the Rajpootana line?—Yes, but the East Indian ought to do it without compulsion. No doubt compulsion quickens people's brains, but we were compelled long ago by the River Ganges.

5815. Then I come back to my point: supposing that line actually completed to Bombay and the Rajpootana line without a break of guage, would not the line be able to carry its traffic at somewhat lower rates than the Rajpootana?—No, because the broad gauge line would cost so much more money, that in order to pay interest it must charge a high rate, and that would be more than the difference consequent on the break of gauge.

5816. Until the traffic of that line arrives at the point when traffic can be carried on the broad gauge cheaper than it is now; which you have already referred to?—Possibly, but that is a long way off.

5817. But that day may arrive?—Yes.

5818. But you have shown us that with regard to one narrow gauge railway, the number of tons jumped up from 120 to 596 in one year?—Yes,

5819. And that was not anticipated?—No, but you must remember that as you increase railways you will withdraw traffic from one line and spread it over many. Now it is quite possible, taking that Rajpootana line, if you extend the Great Indian Peninsula line to Calpee and Cawnpore, you will take a portion at all events of the Rajpootana traffic on to that line. Then the question is, whether the increase of traffic will be such as to fully occupy both lines.

5820. And as you increase the number of railways you increase the chance of competition between the railways?—No doubt you do.

5821. And as you increase the competition you would bring out more strongly the evil effects of the break of gauge?—No, I do not think you do. I do not like talking of Indian railways in the English fashion. Our whole methods here are so utterly faulty that I hope we shall never see them introduced into India.

5822. But when you get your 50,000 or 60,000 additional miles of railway laid in India, there would be almost the same competition there

Mr. *Bolton*—continued.

there as here?—I do not think so; I think if you had a good commission to settle all these matters you might work them without competition.

5823. You have proposed a commission to which the Government should refer all questions arising between railways and between the public and railways?—Yes.

5824. What would be the principles that would guide the commission?—The principle of what was best for all parties.

5825. That which was best for the party interested in the cost of the line would be to have as much revenue as possible?—That would be the English mode of looking at it.

5826. That would be a most desirable thing for the shareholders?—I do not know that; I suspect the best for all parties is the adoption of extremely low rates; certainly it has been so on the East Indian.

5827. That might be best for the shareholders provided those low rates produced the greatest amount of revenue, but not otherwise?—Yes, and if you push that principle too far I should like to see that checked by the Commission.

5828. What principles are to guide the Commission?—What is best for all, reasonably; not considering what will give the highest dividend for the shareholders, but what will give them a fair return for their capital. That is why I would not allow the Indian railways to be the property of companies, and why I would only give them short leases in order that you might review from time to time the whole question of what the rates should be.

5829. Are you not trying to eat your cake and have it?—No.

5830. You are proposing that companies should undertake the risk and the responsibility of making the railways?—No, I am proposing that the Government should take the risk and responsibility under the guarantee.

5831. Which you have called "a limited guarantee"?—Enough guarantee to raise the money.

5832. Yes, but there is something beyond that; there is the management of the line?—I would give a small share in the surplus profits.

5833. And you do not propose a guarantee that would of itself induce the public to subscribe the capital for the railway?—Yes, I should offer just such a rate of interest as the Government can borrow at independent of any railway advantages.

5834. Then they might borrow the money without reference to railways?—They might.

5835. And then you propose that they should employ individuals to spend that money?—To spend the money and to work the railway after it was made.

5836. Paying them what?—Paying them this guaranteed interest and a share of any surplus profits.

5837. But there is no occasion to pay them a fixed interest?—Yes, there is.

5838. That rather complicates the matter; if the Government are to borrow the money, invest it themselves in railways, and then employ individuals to work their railways; that is your proposition?—Yes.

Mr. *Bolton*—continued.

5839. What should be the compensation to the individuals for working the railways?—A share in the surplus profits.

5840. And those profits are to be allowed to increase or diminish at the will of the commissioners?—Yes, if you choose to put it so.

5841. As to the rate of progress, you said that you could not fix upon a sum of money that it would be safe to expend; could you fix upon the number of miles that it would be safe to contemplate making annually?—No, I do not carry the figures in my head sufficiently; all I say is that the whole of the Indian staff is now fully occupied, and I am satisfied that unless you employ trained men to construct the works in India, a large proportion of the expenditure will be wasted.

5842. In speaking of the average rate charged for passengers and for goods particularly, could you tell me what that includes?—Everything.

5843. Does it include anything with regard to what we know here as "terminals"?—Yes; there are very few I am happy to say in India, but it includes all those charges.

5844. Have you no goods stations?—Yes.

5845. And it includes the cost of them?—Yes, everything; it is simply the whole of the goods receipts of the railway divided by the whole of the goods ton mileage.

5846. Does it include collection and delivery?—No, we have none; that is to say, it is done by the parties who own the goods. It includes loading and unloading, booking and everything of that kind, and it includes depositing the goods into the carts.

5847. And taking out I suppose?—No, it does not include that. They send their cart and we put the goods into the cart.

Mr. *Wodehouse.*

5848. While you desire to see 50,000 or 60,000 miles of railway made in India, you do not appear to have fixed in your mind any period of time in which they should be constructed?—No, I should go on as quickly as I reasonably could, looking always to see that the railways I had made were doing fairly well, so as to encourage me to go on; but I should like to see railways pushed into every part of India. No country wants them more.

5849. You express no opinion as to whether the present annual rate of construction is sufficient or not?—I say I do not think you can execute the work faster with your present staff than you are doing.

5850. Than with your present staff of experienced men?—Yes.

5851. You explained that the origin of the metre gauge was the extreme costliness of railway construction about the year 1870?—Yes. And the small traffic we were getting, and the high rate of working expenses. They were a very heavy burden on the finances of India, some millions a year.

5852. Notwithstanding the altered circumstances of the present time, you think that all the lines remaining to be made, with two possible exceptions, should be made on the metre gauge?—I think so, because although it is quite true that Indian railways have improved in traffic,

Mr. *Wodehouse*—continued.

that only encourages one to make so many miles more. If you might have said 20 years ago that India wanted 20,000 miles of railway constructed and could pay for that, you may now say the *same* with regard to 50,000 miles; but it is on the understanding that they shall be made at the lowest possible cost.

5853. Your opinion is founded on a general estimate of the rate at which traffic could be developed in these districts?—Yes, I think the traffic of certain railways will diminish as you increase the number of railways, because it will be drawn off *on* to those other railways.

5854. Are there no existing narrow gauge lines in India which, in your opinion, had better have been constructed on the broad gauge?—No, I know of none. It *is* the fashion to say now, "It is a pity that the Rajpootana was not made on the broad gauge." I deny it; I say it is the parent line to which you will make a number of affluents, and that as those affluents would have to be constructed on the narrow gauge so the parent line should be narrow gauge. Therefore, I maintain it was the right thing to do.

5855. I think you deprecate the direct construction or management of railways by the State?—I think the State has a great deal more to do than it can do already, and it is better to delegate anything that it can delegate.

5856. But have you seen any evils arising from the working of railways by the State?—No, I say every one of the agencies by which the Indian railways have been constructed seem to be good; they have all done well, Government as well as companies.

5857. Then your opinion is founded on the general administration of India?—Yes.

5858. And not with regard to the working of the railways themselves?—No.

5859. You would diminish, in short, the burden of Government resting upon the Indian authorities?—Simply.

5860. You have dwelt on the supreme importance of an experienced executive?—Yes.

5861. Looking at it in that point of view, do you see no advantage in a permanent government staff of trained railway servants?—No, I think you will find that the engineers will go from one line to another, and from one company to another, as they have finished off their works.

5862. Would they not be scattered to other parts of the world?—Not if you were continuously constructing railways in India.

5863. You think you would obtain the same amount of Indian experience, if you had no State railways?—I think you would.

5864. With regard to the small commission to regulate the affairs of railways which you propose to appoint; by whom do you suggest that they should be appointed?—I would let the railway companies meet together and choose one member; I would let the public choose another; that is to say the communities of Calcutta and Bombay (if they could be made to agree), and the Government should nominate the chairman.

5865. By whom would their salaries be paid?—I have not considered the point as far as that it would not be a very serious matter on the Indian Railway revenues.

5866. Would they not be a Government department if they were salaried by Government?—They need not be; they might be paid by the railway companies rateably.

Mr. *Wodehouse*—continued.

Mr. *Jackson.*

5867. There is one question I should like to ask you with reference to an answer you gave to Mr. Bolton about the system of competition between railway companies in this country; I rather take it that you said that that system was rather to compete by competing trains than to lower the rates, and that you think it would be better to lower the rates?—Yes.

5868. But there are some advantages in competing trains, are there not?—To those who have not to pay for them.

5869. But does not the public get the benefit; for instance, do not you consider it as a benefit to the public that there should be an increased number of trains per day, say a train every hour of the day, rather than three times a day?—I think the public would appreciate a reduction of rates more.

5870. But is it not a great convenience and saving of public time to be able to go at the particular time when they are at liberty, say from London to Manchester, instead of waiting some hours for one of the three trains per day?—Well, I think if you give the public the choice of more trains or lower rates, they would choose the lower rates.

5871. Even though the periods at which they could travel were less frequent?—Yes, certainly, with regard to the great bulk of the third-class passenger traffic; and that is the traffic you have to consider,

5872. You spoke of a "limited guarantee" in one of your answers. Now we have had limited guarantees spoken of by previous witnesses I think rather in a technical sense; that is to say limited during the period of construction. You do not mean it in that sense, but rather limited in amount?—I mean a guarantee limited to the rate that would raise the money.

5873. You have given us some valuable evidence with regard to the cost of carrying on the broad gauge and the metre gauge, and I gather that in your opinion the metre gauge can carry at a less cost per ton per mile than the broad gauge?—I think it is clear from the figures that it does so.

5874. That is to say if you exclude the East Indian Railway?—Comparing like with like or with anything like; comparing lines which have reasonably the same traffic. You will find that the Rajpootana is worked lower than the broad gauge lines.

5875. Is the Rajpootana at all approximately reaching its carrying capacity?—I think not.

5876. I see you confirm the evidence given by Major Gordon before, that you have largely increased the weight of engines on the Rajpootana line?—We began with engines that were a great deal too light.

5877. And you have gone up as far as 39 tons for the engine and tender?—I think not. The largest is 34, and that is a very heavy class of engine. The engine that carries the heaviest goods

Mr. *Jackson*—continued.

goods weighs about 20 tons; its tender may weigh 11. But the engine we began with was far below the capacity of the gauge. The tractive force of the engine was only about 3,500 lbs., and the cylinders were only 11 inches in diameter by 17 inches in stroke. We are now employing engines twice that power, and the gauge is quite capable of carrying them.

5878. What is the difference of cost made up of principally?—Permanent way and rolling stock; in a minor degree bridges and earthworks.

5879. And the cost of carrying per ton per mile; how is that made up?—I cannot say that I have the details of that in my mind.

5880. You have referred to the cost of coals, as being more expensive on the Rajpootana?—That is because the coal for the Rajpootana has to be carried about 800 miles by railway.

5881. Do you know what the percentage of cost of coal per ton per mile at those figures you have given us is?—On the Rajpootana Railway at the present time coal costs by the time it reaches the engine, 24 rupees a ton; on the East Indian its cost, including transport on the East Indian Railway itself, is about 6 rupees per ton.

5882. Taking the average cost as you have given it of carrying per ton per mile of goods on the Rajpootana at 3·61, do you know at all how much of that is represented by coal?—Yes. If you strike out coal altogether from both the East Indian and the Rajpootana, the cost of carrying a ton a mile on the East Indian Railway in 1872, was 2·74 pies; on the Rajpootana in 1883 it was 2·86 pies. So you see coal has to answer in the one case for three-fourths of a pie, and in the other for only one quarter of a pie.

5883. Would the same proportions hold good in the year 1883?—It would be rather worse for the Rajpootana in 1883. In 1883 the cost of carrying a ton a mile on the East Indian Railway, excluding coal, was 1·81 pies; that is to say, the coal cost ·16 of a pie, and the Rajpootana was the same as before. So that it cost on the East Indian Railway one-sixth of a pie per ton per mile, and on the Rajpootana three-fourths of a pie, but that does not take into account the effect of gradient. We burn a great deal more coal on the Rajpootana proportionately than they do on the East Indian, because the East Indian is a flat line and the Rajpootana is a hilly line.

5884. You spoke of the cost of break of gauge (and I just wanted to make that clear) as being equal to making and working 10 miles of railway?—Yes.

5885. And you spoke of having four breaks of gauge; do you mean to say that the 10 miles of railway cover the whole of the breaks of gauge on the same goods. Assuming that a ton of goods passed over the line, and suffered four breaks of gauge?—But it does not. No goods have more than two breaks of gauge. There are four places at which there is a break of gauge on the Rajpootana Railway, and at each of those four places a certain capital expenditure has been incurred; and the capital expenditure incurred at all four places is equal at the outside to the cost of 10 miles of Rajpootana Railway. Then certain expenses are incurred in the working of the breaks of gauge. On the traffic of 1883, that was equivalent to the cost of working 10 miles of railway, and that covers all four places, and those are outside estimates.

5886. Of course the figures you have given us do not guide us very clearly to the point of actual cost of a break of gauge; taking it at per ton per mile, for instance?—Not per ton per mile but it does per ton. The cost of a break of gauge at Ahmedabad, in the first half of 1883, was 3·78 annas per ton for every ton. That included interest on capital as well as the labour involved, and that is the most expensive place. The cost of it at Agra was only 3·18 annas and 2 02 at Delhi; the reason being that wages are about twice as high at Ahmedabad, as they are at Delhi and Agra.

5887. You said you rather deprecated any sudden expansion in the rate of progress of making Indian railways, but I take it that you are quite of opinion that the greater progress, if it can be accomplished, would be of great benefit to India?—Yes; the greatest possible progress, short of getting into a scandal by wasteful expenditure.

5888. And even at a little increased outlay, it would be to the advantage of India to have those railways constructed as early as possible?—Yes, but I am afraid if you begin too quickly you will make the lines in the wrong directions. I know that on the East Indian Railway, if we had deferred commencing our construction for a year or 18 months we should have saved two or three hundred miles of railway, and four or five millions of money. The East Indian Railway was taken the wrong route simply because we did not devote the necessary time to the survey of the railway, and so we went round by Rajmahal; we tapped the Ganges, as the expression then was, at Rajmahal instead of at Patna.

Mr. *Dalrymple.*

5889. I have one or two questions to ask you with regard to the question of gauge. I suppose whatever feeling there may be about gauges, it may be said that the narrow gauge is more suitable in some districts than in others?—In the vast majority of districts, in my opinion.

5890. But there are many people who, while disliking the metre gauge in general, would be content to see it in particular districts where it is suitable?—Yes, there are a great many people who like it in general: they say they only dislike it in particular. Whenever you ask them about any particular line they say that that particular line should be broad.

5891. If it be granted that all you say about the economy of the metre gauge is incontrovertible, is that any argument for a mixed gauge?—Yes, I think so.

5892. You do not think that the corresponding disadvantages of a mixed gauge outweigh the comparative cheapness of the metre gauge?—No, I think not. You must remember that after all the vast body of Indian railway transport is local. It does not seek the ports. It is for the convenience of the people of the neighbourhood.

5893. You said there was nothing more in a break of gauge than the cost of transfer; but is it

Mr. *Dalrymple*—continued.

it admitted that a break of gauge causes inconvenience and increased expense?—A very small amount. Of course, you must remember that all goods which suffer break of gauge are goods travelling over a long distance, and that the cost of the break bears a very small proportion to the total expense of the transport.

5894. Then would not the question of time be of importance to goods going a very great distance?—I think not. It is only a question at the outside of twelve hours, and the goods are probably on the road three or four days.

5895. But if there was, as you suggested just now, a break of gauge in two places, that would mean a loss of about twice twelve hours?—Yes, but that would be in a transit of about 1,000 miles.

5896. I observe that you said *de minimis, &c.*, in answer to a question just now; but suppose any loss of coal, or salt, or anything else were to occur in the handling, why should you incur it by having a mixed gauge?—You must take it for what it is worth; if there is a loss, no doubt it is against the break.

5897. But you would surely admit that on through routes where bulky traffic has to be handled a break is to be avoided if possible?—I do not know; it depends upon what it costs; it is a mere question of money. In this country the great bulk of the long distance traffic goes through two or three breaks, but you never hear of it; it is a mere question of figures.

5898. Would you not allow that in all future extensions a uniform gauge should be aimed at?—Yes, provided it be narrow. Enormous districts of India may be covered with narrow gauge railways which would never get railways at all if you were to insist upon the broad.

Mr. *Brodrick.*

5899. You have given us some figures about the carrying powers of the metre gauge. To what extent do you think it would be possible on the Rajpootana Railway to carry the traffic which is now carried on the East Indian Railway; could you carry the same amount per mile?—Yes, I think you could. I do not see the limit. We have not got to the limits of the East India powers, or anything like it.

5900. You carry 800 passengers in two trains a day each way; what is the utmost number of passengers you could carry?—It is perfectly clear that we could run eight trains.

5901. But could you carry double that number?—Certainly; I have put it at four times. We have at present 800 passengers per day per diem over the Rajpootana. The average number of passengers in a Rajpootana train at the present time is 210. That might be largely increased, because in the South Indian it is 280; but I will take it at 200. Then 800 passengers per mile per diem at 200 per train, means two trains per day each way. Now nobody would deny that you could carry eight trains per day each way, and therefore it amounts to four times the present traffic.

5902. You apply the same remark to the goods traffic?—There the great increase will be in the train loads, and I expect that, just as the Rajpootana has increased from 50 to 82 tons, so you will see it get much beyond that in a very short space of time.

Mr. *Brodrick*—continued.

5903. You stated that you can carry 500 tons a day of goods over the metre gauge alone; do you think you could carry 2,000 tons?—Well, that is a pull no doubt. I do not think we shall ever reach that. No doubt other lines will be constructed, which will have the effect of taking it away from us.

5904. How do you arrive at those figures; is it by dividing the total amount of passengers carried by the number of miles?—Yes, and the number of days.

5905. But that will only give one an average?—It will not give you the *maximum* or the minimum; you have to make use of your average in a sensible way.

5906. But a chain is not stronger than its weakest link; if you had to carry a large proportion of that traffic over some small piece of connecting line your average would not stand?—No, but I do not think you need suppose anything of that kind. What you will really consider is the variation of traffic which is much more important than anything. The variations of traffic are pretty much the same on all lines in India, that is to say, if an average applies to one it applies to all.

5907. You might run four trains a day each way, and that over parts of your line would not be sufficient?—That is so, no doubt; but when I say so many trains a day each way, that is only a method of putting it. There may be parts of the line which have only one train; other parts might have three trains.

5908. My point is that, if you have arrived at the traffic which you hope for, your metre gauge line will not carry it; is that your opinion?—This is purely a matter of judgment in which men may differ, but I do not believe that we shall ever meet the point when the metre gauge line is incapable of carrying its traffic.

5909. Have you formed any estimate, in your own mind, of what a metre line can earn per mile per week at present prices; what it ought to be able to earn at the outside?—I cannot say.

5910. You could not speak generally?—It will require some doubling just as the broad gauge is doubled, but I should see no difficulty in the Rajputana earning three times as much as it is earning at present.

5911. Did you allow in your estimate for the increase of repairs consequent upon doubling the traffic in proportion to the broad gauge?—That is the same on all railways; it pays for itself. Of course the repairs are in proportion to the traffic.

5912. That hardly meets my point; if the traffic on a metre gauge line is the same as the broad gauge line, you will have to run twice as many trains, or very nearly, and there will be twice as much wear and tear?—The wear and tear will be in proportion to the weight of the trains, and you will find that the dead weight to be carried on the metre gauge for a given traffic is less than on the broad.

5913. Quite so; but your rails are of a different quality?—A different weight; but that would not affect the question. You will renew your

Mr. *Brodrick*—continued.

your rails quicker, but in the one case you will renew a 40 pounds rail and in the other an 80 pounds rail.

5914. Is not the wear and tear greater in proportion to the traffic?—No, I should say less; because the wear and tear is in proportion to the dead weight; and the dead weight on the metre gauge is less in proportion than on the broad gauge.

5915. Other witnesses have said the contrary; they have said that the wear and tear is greater?—I think it is quite clear that the wear and tear of a railway must be in proportion to the dead weight passing over it; and therefore it will be be less on those railways in which the dead weight bears the smallest proportion to live weight.

5916. Provided that the rails over which you are running are the same?—You will get to the end of a 40-lb. rail sooner than you will get to the end of an 80-lb. rail; but then you have to renew, in the one case, a 40-lb. rail only, and in the other an 80 lb.-rail; so that it squares itself in the long run.

5917. I suppose you will admit that in a new railway like the Rajpootana you have not arrived at the full rate of repairs at present?—That will pay for itself. If you go back to the early days of the broad gauge railways you will find that the expenses were far greater than they are now. I have here the records of the cost of the Indian railways, given in the form in which I have given them to the Committee, since 1871; and you will see that the working expenses are governed by the management a good deal. But putting management on one side, they are governed by the quantity of traffic. In the early days of the broad gauge-railways they were costing a vast deal more than they are now.

5918. Do you attach importance to speed in Indian railways?—You mean that the speed is higher on the broad gauge lines. I do not know that the speed affects the wear and tear. I do not think the Indian maximum railway speed induces greater wear and tear than the slowest Indian metre-gauge speed. I think the speed at which the metre-gauge trains are run is below the maximum of economy.

5919. You cannot run metre gauge trains at much more than 22 or 23 miles an hour?—Oh, yes; I have run at 40 myself.

5920. With a broader system of rails you would consider it desirable to put on trains which you can run at a faster rate?—No, I think not; except, perhaps, with regard to the East Indian; you want a faster service between Calcutta and Bombay. At present the maximum speed on the East Indian averages 27 miles an hour. You might get up, on the metre gauge, to 23 or 24; perhaps 25 miles. The goods are really the thing you have to consider, and the third-class passengers.

5921. With third-class passengers you do not consider speed is an object?—No; 25 miles an hour is quite enough.

Sir *George Campbell.*

5922. In the early part of your evidence you showed us that the cost of working Indian railways is very much less than the cost of working English railways?—Yes.

Sir *George Campbell*—continued.

5923. And that that was to a considerable degree due to running fewer trains?—Yes.

5924. I want to know whether cheapness of cost, altogether, including the power of concentrating your trains, is not a good deal due to the difference of management; whether the system of regulating the management in India, controlled by Government, has not some advantage over the sometimes somewhat reckless management of private railways in Europe and America?—I do not think the Government have much to do with the system. The managers of the railways saw that they could load their trains well, and they took good could to load them. No doubt we have cultivated it very much by that train mileage system of ours.

5925. But have not you some advantage in being able to regulate your trains and your system more economically than in Europe or America?—No doubt the whole secret of the low working cost in India is due to our utilising our trains to a much greater degree than they do in England.

5926. And that is due to the difference in system as compared with the purely private companies' system in England and America?—Yes.

5927. And is the absence of accidents also to a certain extent due to that difference of system?—The number of accidents are determined by the number of trains. The fewer the trains the fewer the accidents; assuming there are fewer accidents, which I have not considered very carefully, but I think it is the fact, I mean serious accidents.

5928. You have told us that the rates at which the goods are carried by the East Indian are very low, compared with the English rates; have you compared them with the American rates?—They are fixed on very different principles. The American rates are lower than ours; but then they do not pay.

5929. As a matter of fact, they are lower?—No doubt.

5930. But still you are aware that the American railways have paid large dividends?—I should be very sorry to see American principles introduced into the management of Indian railways. The point was that the East Indian railway charges these low rates, and pays 8 or 9 per cent. on its whole capital.

5931. I think you said that the Government had power to reduce passenger rates lower than they are now; have they also power to reduce the goods rates lower than they are now?—In their new contract with us I think they were afraid to put the rates as low as they might have done. We have got below their maximum already.

5932. When you say "we," are not you an adviser of the Government?—I am an adviser of the East Indian also. I was speaking *qua* East Indian.

5933. Then the Government have not the power to insist on the reduction of rates to the American level?—No; and therefore I should like to see some control of rate-power in India.

5934. You say the Government were afraid; then you think they made an improvident bargain?—No; I think they did the very best they could

Mr. *Dalrymple*—continued.

it admitted that a break of gauge causes inconvenience and increased expense?—A very small amount. Of course, you must remember that all goods which suffer break of gauge are goods travelling over a long distance, and that the cost of the break bears a very small proportion to the total expense of the transport.

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5896. I observe that you said *de minimis, &c.*, in answer to a question just now; but suppose any loss of coal, or salt, or anything else were to occur in the handling, why should you incur it by having a mixed gauge?—You must take it for what it is worth; if there is a loss, no doubt it is against the break.

5897. But you would surely admit that on through routes where bulky traffic has to be handled a break is to be avoided if possible?—I do not know; it depends upon what it costs; it is a mere question of money. In this country the great bulk of the long distance traffic goes through two or three breaks, but you never hear of it; it is a mere question of figures.

5898. Would you not allow that in all future extensions a uniform gauge should be aimed at?—Yes, provided it be narrow. Enormous districts of India may be covered with narrow gauge railways which would never get railways at all if you were to insist upon the broad.

Mr. *Brodrick.*

5899. You have given us some figures about the carrying powers of the metre gauge. To what extent do you think it would be possible on the Rajpootana Railway to carry the traffic which is now carried on the East Indian Railway; could you carry the same amount per mile?—Yes, I think you could. I do not see the limit. We have not got to the limits of the East India powers, or anything like it.

5900. You carry 800 passengers in two trains a day each way; what is the utmost number of passengers you could carry?—It is perfectly clear that we could run eight trains.

5901. But could you carry double that number?—Certainly; I have put it at four times. We have at present 800 passengers per day per diem over the Rajpootana. The average number of passengers in a Rajpootana train at the present time is 210. That might be largely increased, because in the South Indian it is 280; but I will take it at 200. Then 800 passengers per mile per diem at 200 per train, means two trains per day each way. Now nobody would deny that you could carry eight trains per day each way, and therefere it amounts to four times the present traffic.

5902. You apply the same remark to the goods traffic?—There the great increase will be in the train loads, and I expect that, just as the Rajpootana has increased from 50 to 82 tons, so you will see it get much beyond that in a very short space of time.

Mr. *Brodrick*—continued.

5903. You stated that you can carry 500 tons a day of goods over the metre gauge alone; do you think you could carry 2,000 tons?—Well, that is a pull no doubt. I do not think we shall ever reach that. No doubt other lines will be constructed, which will have the effect of taking it away from us.

5904. How do you arrive at those figures; is it by dividing the total amount of passengers carried by the number of miles?—Yes, and the number of days.

5905. But that will only give one an average?—It will not give you the maximum or the minimum; you have to make use of your average in a sensible way.

5906. But a chain is not stronger than its weakest link; if you had to carry a large proportion of that traffic over some small piece of connecting line your average would not stand?—No, but I do not think you need suppose anything of that kind. What you will really consider is the variation of traffic which is much more important than anything. The variations of traffic are pretty much the same on all lines in India, that is to say, if an average applies to one it applies to all.

5907. You might run four trains a day each way, and that over parts of your line would not be sufficient?—That is so, no doubt; but when I say so many trains a day each way, that is only a method of putting it. There may be parts of the line which have only one train; other parts might have three trains.

5908. My point is that, if you have arrived at the traffic which you hope for, your metre gauge line will not carry it; is that your opinion?—This is purely a matter of judgment in which men may differ, but I do not believe that we shall ever meet the point when the metre gauge line is incapable of carrying its traffic.

5909. Have you formed any estimate, in your own mind, of what a metre line can earn per mile per week at present prices; what it ought to be able to earn at the outside?—I cannot say.

5910. You could not speak generally?—It will require some doubling just as the broad gauge is doubled, but I should see no difficulty in the Rajputana earning three times as much as it is earning at present.

5911. Did you allow in your estimate for the increase of repairs consequent upon doubling the traffic in proportion to the broad gauge?—That is the same on all railways; it pays for itself. Of course the repairs are in proportion to the traffic.

5912. That hardly meets my point; if the traffic on a metre gauge line is the same as the broad gauge line, you will have to run twice as many trains, or very nearly, and there will be twice as much wear and tear?—The wear and tear will be in proportion to the weight of the trains, and you will find that the dead weight to be carried on the metre gauge for a given traffic is less than on the broad.

5913. Quite so; but your rails are of a different quality?—A different weight; but that would not affect the question. You will renew your

Mr. *Brodrick*—continued.

your rails quicker, but in the one case you will renew a 40 pounds rail and in the other an 80 pounds rail.

5914. Is not the wear and tear greater in proportion to the traffic?—No, I should say less; because the wear and tear is in proportion to the dead weight; and the dead weight on the metre gauge is less in proportion than on the broad gauge.

5915. Other witnesses have said the contrary; they have said that the wear and tear is greater?—I think it is quite clear that the wear and tear of a railway must be in proportion to the dead weight passing over it; and therefore it will be be less on those railways in which the dead weight bears the smallest proportion to live weight.

5916. Provided that the rails over which you are running are the same?—You will get to the end of a 40-lb. rail sooner than you will get to the end of an 80-lb. rail; but then you have to renew, in the one case, a 40-lb. rail only, and in the other an 80 lb.-rail; so that it squares itself in the long run.

5917. I suppose you will admit that in a new railway like the Rajpootana you have not arrived at the full rate of repairs at present?—That will pay for itself. If you go back to the early days of the broad gauge railways you will find that the expenses were far greater than they are now. I have here the records of the cost of the Indian railways, given in the form in which I have given them to the Committee, since 1871; and you will see that the working expenses are governed by the management a good deal. But putting management on one side, they are governed by the quantity of traffic. In the early days of the broad gauge-railways they were costing a vast deal more than they are now.

5918. Do you attach importance to speed in Indian railways?—You mean that the speed is higher on the broad gauge lines. I do not know that the speed affects the wear and tear. I do not think the Indian maximum railway speed induces greater wear and tear than the slowest Indian metre-gauge speed. I think the speed at which the metre-gauge trains are run is below the maximum of economy.

5919. You cannot run metre gauge trains at much more than 22 or 23 miles an hour?—Oh, yes; I have run at 40 myself.

5920. With a broader system of rails you would consider it desirable to put on trains which you can run at a faster rate?—No, I think not; except, perhaps, with regard to the East Indian; you want a faster service between Calcutta and Bombay. At present the maximum speed on the East Indian averages 27 miles an hour. You might get up, on the metre gauge, to 23 or 24; perhaps 25 miles. The goods are really the thing you have to consider, and the third-class passengers.

5921. With third-class passengers you do not consider speed is an object?—No; 25 miles an hour is quite enough.

Sir *George Campbell.*

5922. In the early part of your evidence you showed us that the cost of working Indian railways is very much less than the cost of working English railways?—Yes.

Sir *George Campbell*—continued.

5923. And that that was to a considerable degree due to running fewer trains?—Yes.

5924. I want to know whether cheapness of cost, altogether, including the power of concentrating your trains, is not a good deal due to the difference of management; whether the system of regulating the management in India, controlled by Government, has not some advantage over the sometimes somewhat reckless management of private railways in Europe and America?—I do not think the Government have much to do with the system. The managers of the railways saw that they could load their trains well, and they took good could to load them. No doubt we have cultivated it very much by that train mileage system of ours.

5925. But have not you some advantage in being able to regulate your trains and your system more economically than in Europe or America?—No doubt the whole secret of the low working cost in India is due to our utilising our trains to a much greater degree than they do in England.

5926. And that is due to the difference in system as compared with the purely private companies' system in England and America?—Yes.

5927. And is the absence of accidents also to a certain extent due to that difference of system?—The number of accidents are determined by the number of trains. The fewer the trains the fewer the accidents; assuming there are fewer accidents, which I have not considered very carefully, but I think it is the fact, I mean serious accidents.

5928. You have told us that the rates at which the goods are carried by the East Indian are very low, compared with the English rates; have you compared them with the American rates?—They are fixed on very different principles. The American rates are lower than ours; but then they do not pay.

5929. As a matter of fact, they are lower?—No doubt.

5930. But still you are aware that the American railways have paid large dividends?—I should be very sorry to see American principles introduced into the management of Indian railways. The point was that the East Indian railway charges these low rates, and pays 8 or 9 per cent. on its whole capital.

5931. I think you said that the Government had power to reduce passenger rates lower than they are now; have they also power to reduce the goods rates lower than they are now?—In their new contract with us I think they were afraid to put the rates as low as they might have done. We have got below their maximum already.

5932. When you say "we," are not you an adviser of the Government?—I am an adviser of the East Indian also. I was speaking *qua* East Indian.

5933. Then the Government have not the power to insist on the reduction of rates to the American level?—No; and therefore I should like to see some control of rate-power in India.

5934. You say the Government were afraid; then you think they made an improvident bargain?—No; I think they did the very best they could

Sir *George Campbell*—continued.

could for themselves; but I do think they might have fixed a lower maximum goods-rate for us.

5935. Is not it a scandal that this railway having been bought up at a great price by the Government, we have been told that, in order to reduce their rates to the present level, the Government were obliged to compete with them, and so to force their hand upon their own railway?—That is a strong way of putting it. No doubt companies do not like lowering their rates, and I think a little gentle compulsion is an extremely good thing.

5936. But in this case the Rajpootana and the East Indian, both being owned by the Government, the Government have no control over the rates, and can only reduce them by running one of their own lines against another of their own lines?—There is some truth in that; and it is a reason for the appointment of a commission independent of the Government.

5937. I think you said the traffic on the East Indian is about equal to the London and North Western; do you mean the whole of the system?—The London and North Western *is* about the same length as the East Indian. I mean that the traffic running over every mile of the London and North Western every day, on the average, is about the same as upon the East Indian. Of course the quantity of goods going by the London and North Western is enormously greater than the quantity of goods on the East Indian. But then, on the East Indian, they are carried very long distances; whereas, on the North Western they are carried short distances. I do not suppose they carry them on the London and North Western as much as 50 miles on the average. We carry them perhaps 300 miles.

5938. As regards comparison between the cost of the broad gauge and the metre; you mentioned 1,500 *l.* a mile?—£. 1,500 on a cheap line; 2,000 *l.* on a dear line.

5939. Am I right in saying that the actual breadth of the gauge has very little to do with it; that it is almost entirely a question of a light railway, lightly equipped and lightly stationed, and all the rest of it, as compared with a heavy railway?—No. Sleepers have a great deal to do with it. The sleeper question is a very serious one in Indian railways. We are coming very rapidly to metal sleepers for Indian railways: steel or cast iron. Take the stamped steel sleeper; the narrow gauge sleepers, including the fastenings, will be about 57 lbs.; on the broad gauge it will be just upon a cwt.

5940. That is the difference of weight?—And that means a difference in cost; and a very considerable difference.

5941. Take such a line as the Rajputana; to carry the same weight of traffic would you have a very much lighter sleeper?—Yes; it is a question of length, also.

5942. As regards the whole of the expenditure, comparing light and heavy railways, you instance the Oudh and Rohilcund as a case showing that it was not necessary to run light carriages upon them?—The Oudh and Rohilcund was started as a light broad gauge railway. If you look at the figures you will see there is no saving in it.

5943. What I wanted to know was whether

Sir *George Campbell*—continued.

you believed that there was any physical difficulty in running light engines, light carriages, and light traffic on a light broad gauge line, supposing that the quantity of traffic is not such as to induce you to adopt heavier ones?—None whatever; and I say the same with regard to the metre gauge; there is no difficulty in running a light rail and light engines on the metre gauge. And you may carry the same principle much farther on the metre than on the broad. You could not lay down a 25-*lb.* rail on the broad gauge, but you could on the metre gauge. What I am looking at is the extension of railways in India everywhere, and you get these extremely light tramways into districts which would never see a railway if we insisted upon a broad gauge.

5944. What is the weight of rail on the Rajpootana line?—At present 41 lbs.

5945. Would there be any difficulty in laying and working a light broad gauge line upon a 40-lbs. or a 35-lbs. rail?—I think you are getting below the point there. On the Oudh and Rohilcund they have got up to a 56 lbs. rail. You are going below the point when you go to 40-lbs. rails; you had better change your gauge.

5946. But still may we say that by laying a light railway upon that broad gauge, the difference would be very much decreased?—You save a portion of it.

5947. Supposing that railways had been originally constructed in India upon the 4-ft. 8-inch English gauge, would you still propose to have a narrow gauge?—I think one would try to avoid it.

5948. No doubt there was a great blunder?—It was a great mercy we were preserved from having a six-foot gauge. Lord Dalhousie would have had it if he could.

5949. As regards the working of the two classes of line, comparing the Rajpootana of the present day with the East India working arrangement of 1872, allowance must be made for the improvements in the mode of working and in the methods which have been discovered during those years?—No; all I say of the Rajpootana is that as soon as we have handed over to other railways the light stock intended for light traffic, we shall be able to run very much heavier train loads, and we shall reduce our expenses down to something not very much above the East Indian, making allowance for greater cost of coal.

5950. Is not there something in the suggestion thrown out to us that the cheap working of the Rajpootana line is to a great degree due to modernised methods, good management, and improved experience?—That is a statement which has caused great amusement amongst the gentlemen connected with the management of the Rajpootana Railway. The real matter of fact is that the Rajpootana was the first narrow gauge railway in India. A good many experiments were tried upon it, not altogether successfully; and, in fact, we have gone through our experience there as every railway does.

5951. You altogether deny that it is due to superior management?—Altogether. We fitted up the Rajpootana Railway under the idea that we were going to have a very light traffic; and we got a very heavy one. The result is we must

hand

Sir *George Campbell*—continued.

hand over, as soon as we can, the light carriages to other lines, and start with heavier stock.

5952. You do not think it is due to superior Government management, as compared with company management?—Certainly not.

5953 As regards this Rajpootana line, I understand you to say that although you altogether deny the suggestion that if you had known what the traffic was to be, you would have made it on the broad gauge, I think you have admitted that in certain cases of very large traffic there is justification for the broad gauge; is not that Rajpootana line increasing so much in traffic, and becoming so large, that upon your own principles there might be good reason for making it upon the broad gauge?—The Rajpootana traffic is considerable, no doubt; but if you compare it with a broad gauge line it is not considerable. For instance, the Rajpootana traffic was, last year, 800 persons, and five tons of goods. In respect to passengers that is less than the average broad gauge lines; in respect to goods it is not much more than one-third.

5954. What I wanted to come to is this; is not it very rapidly increasing?—If you make other lines that traffic will diminish. If that extension of the Great Indian Peninsula to Cawnpore is made, for instance, no doubt it will draw a considerable proportion of the traffic which now goes by the Rajpootana. You must not consider the Rajpootana as anything like what it might be; no doubt it will grow in some particulars, but it will lose in others.

5955. Does not experience show that the Rajpootana line is quite as important a line, questions of gauge apart, as either the proposed line in the direction of Cawnpore, or the other line from Allahabad?—I would rather take existing lines. It is not so important as the Great Indian Peninsula; it has not half the goods traffic; it is not as important as the Bombay and Baroda; it has not half that traffic. It is not as important as the Eastern Bengal; it is just as important, and no more, as the Oudh and Rohilcund.

5956. But it is very much younger than the railways you have mentioned?—Yes; but it has had this wheat traffic suddenly spring up. But the question is how long is that going to last.

5957. The railways you have mentioned, at its age, had not a larger traffic?—No; I admit that. Take the Rajpootana. We will call it a trunk line; you will have a number of branches flowing into it. Would you make those branches with the broad gauge? We have heard it said that the right thing is to make the parent line broad gauge, and the branches narrow; but you would have a break if you did that.

5958. Look at the countries through which the Rajpootana runs. Is not it the through traffic that pays best there?—It helps, no doubt; but I say what you want to cultivate in India is local traffic. I think a great deal too much is made of this export traffic. The great thing to cultivate is local traffic.

5959. As a matter of fact, are not the only lines of railway which pay handsomely at the present moment in India, those which are fed by the through traffic of the ports, namely, the East Indian Railway, the Eastern Bengal, the Great Indian Peninsula and the Rajpootana?—The Eastern Bengal certainly; but I am not sure of the East Indian. The longest run by the East Indian is 1,000 miles. The average distance the traffic is carried is only about 300 miles. That points to local traffic as being the mainstay of the line.

5960. As regards agency, do I understand that you think either the Government or companies would be a good and cheap agency; that there is not much to choose between them?—Nothing.

5961. With regard to companies, how is the executive selected?—The administrative selects the executive.

5962. Is there no fear of nepotism and favour in those cases?—Well, I may say as regards myself, that I have never been asked by a director, except once, to appoint anybody in whom he was interested; if there is any nepotism the only person guilty of it must be myself.

5963. Does the appointment of the staff rest with you and not with the directors?—I am intrusted by the directors with the appointment of everybody connected with the mechanical branches of every line with which I am connected.

5964. As to the appointment of directors, how are the directors, as a matter of fact, appointed?—I do not know.

5965. Do you think that when you employ companies in the mode you have indicated the companies are really *bonâ fide* companies; have the shareholders anything whatever to do with the management?—Yes, when a surplus dividend is touched.

5966. Is that so with regard to the existing lines; is there any Indian railway in which the shareholders really take any active part whatever?—Yes, certainly; I have known very critical times in the East India Company between the Board and the shareholders.

5967. Not very frequently?—Not since we began to work the line well; but I remember in 1866 we were threatened with a committee.

5968. Are the directors of the Indian railways, as a matter of fact, elected by the shareholders, or almost invariably nominated by the other directors on the co-optative system?—Yes, nominated; but they are confirmed by the shareholders.

5969. Is not that confirmation almost invariable?—Because the Board always selects good men.

5970. Still, as a matter of fact, the boards of guaranteed companies are self-elected to a great extent?—As far as my experience goes, they are actuated by a very great sense of responsibility, and they do extremely well in all matters which come before them.

5971. What I wanted to know is this; whether, with regard to your observation that there was great facility and advantage in delegating the charge of railways by the Government to someone else, and the opportunities which the Government have with regard to retired servants and the like, that does not point to some sort of Trust, something in the nature of the Calcutta Trust; whether the Government might not make at least as good, if not a better governing body, from among the retired officials, than a small

Sir *George Campbell*—continued.

body who would elect each other?—I am by no means certain that the Government should not have a voice in the choice of directors; but I think you will find it is settled practically between the Government and the directors who shall be the new men; I suspect so: I do not know it.

5972. Have you ever thought of the question in connection with a Trust for these great railways?—I would rather see a company directly interested in the surplus profits. A Trust is supposed to work without profit. I think profits are a very great help to encourage good management.

5973. As regards the superintendence in India, would you have a board in India?—No, certainly not; I think all these divided boards are failures.

5974. Do you think that your proposed commission in India to regulate rates would be at all consistent with railways being made by private enterprise, or would that be confined to the case in which railways were aided by, and to a great extent under the control of Government?—I do not think you will get any private enterprise, and I do not think it is desirable that you should. When you get private enterprise there is probability of failure; and there will always be pressure put on the Government to take a failure over. You get the thing made at a much heavier cost, and the Government, after all, have to take possession of it.

5975. I think you said there were vast portions of the country not yet penetrated by railways?—Yes.

5975. Are there any great provinces not yet tapped by railways and so in direct communication with the sea?—"Tapped," perhaps; but you want a great deal more than tapping. I want to see India covered with railways.

5977. Do you think the want of India is to have more through lines, or branch lines?—Local lines; I do not care much about the export traffic; I care for the Indian traffic, that never goes to the sea.

5978. You told us if another through line was made it would take a great deal of the traffic off the Rajpootana line?—A great deal of the through traffic.

5979. Do you think that would be an advantage or a disadvantage, upon the whole?—An advantage; I would rather see traffic scattered over India than concentrated. For instance, it is a very great question when you come to the point when you have to consider about the doubling of a line, whether you should not consider the desirability of making a new line.

5980. Take this Calcutta and Nagpur line. You say there will not be through traffic from Calcutta to Bombay?—I think not; sea transport is much cheaper.

5981. You are aware that the district between Rangunjee and Chattisgurh is a poor district?—Yes.

5982. And you do not think the corn would come from Central India?—That would depend upon the freight.

5983. Is not your suggestion that the minerals would go from Rangunjee westward, inconsistent with the representations of the Indian Government, namely, that a great part of the advantage of this system of lines through Central India would be to utilise the coal of Rewah?—I do not know much about that. As to the coal in Hyderabad, and so on, I do not think we can say much for it; it is very bad coal.

Sir *George Campbell*—continued.

Mr. *Samuelson.*

5984. I think you stated that the local traffic is, upon the whole, the most important traffic of the Indian railways?—I think so.

5985. Would that apply to the Rajpootana railway?—Yes, certainly.

5986. Notwithstanding that it passes through a country which is only sparsely populated?—Well, but the population will grow if you encourage cultivation there.

5987. And even at the present time the local traffic is important?—I cannot tell you what it is at the present time; but what I hope is, that it will become important.

5988. Is it increasing?—I have no doubt that it will increase.

5989. Is it increasing?—I have no statistics to say, but I know that on the East Indian Railway there is a great deal of cultivation now all along the line where there was jungle before.

5990. So that you do believe that in those parts of India which are sparsely peopled, the railways will have the tendency to increase the cultivation and the population?—Certainly, very largely.

5991. You spoke of 2,000 miles as being necessary for the Nizam state?—I should put it at more than that; it is larger than Great Britain. I do not know why you should not have something approaching our length in England, and if you can make it cheaply it can be made to pay.

5992. So that by a sum of proportion your estimate of 60,000 miles for the whole of India is by no means large?—It seems to be very small.

5993. You are aware that the number of miles constructed of late years in India has not been more than about 700 per annum?—Somewhere about that.

5994. And that the number of miles projected is something like 1,000 per annum?—About that, I gather.

5995. So that at the present rate of construction the mileage, which you consider to be extremely moderate, would take between 50 and 60 years?—Oh, but I take it there would be accelerated force in the matter as you went on.

5996. So that when you state we might safely look for an increase of construction of, say, 20 per cent. you would take another 20 per cent. upon that 20 per cent.?—Oh, yes; it would go on adding as you went on. I have a very keen recollection of the terrible waste that went on in the early days of Indian railways by beginning too soon, and I do not want to see it repeated.

5997. But you by no means wish it to be understood that if 1,200 miles were constructed next year, 1,400, or something approaching that, might not be constructed in the year following?—That is how I should expect it to go on. I will not pledge myself to figures.

5998. Otherwise you would consider that the wants of India in regard to railways would not be

Mr. *Samuelson*- continued.

be fulfilled within the time which might be reasonably looked for?—Just so.

5999. I have just one or two points to clear up with respect to the Southern Mahratta Railway; is it the case that the company undertakes the risk of the line being constructed within the company's estimates?—No.

6000. With regard to the other lines to be constructed upon the Southern Mahratta principle, would you think it desirable that the company should undertake to construct the lines within a given sum to be fixed beforehand?—No, because if you do that you will scare away the investor, and then you let in the speculator.

6001. Even if you were to give a somewhat higher rate of guarantee?—Then you are paying for that risk heavily.

6002. And you think the Government had better run that risk than pay for it to a company?—Yes.

6003. The Chairman asked whether, notwithstanding any arrangements with regard to rates, you thought that a commission of three members, such as you propose, might be allowed to regulate those rates; is there any reason why it should not be one of the initial conditions between the Government and a company undertaking the working or construction of the railway, or both, that this should be reserved to that commission?—In all new railways of course it should be so, and I would make it so.

6004. And the new railways would be in a majority after a time?—Yes; and the Government would control some of the rest.

6005. Have you ever known materials, and especially those imported from Europe, to be cheaper than they are at this time on the average?—No; you mean rails.

6006. Rails and sleepers especially?—Rails and sleepers were never so cheap, and never so good, as they are now.

6007. With regard to rolling stock, is there any dearth of rolling stock, any difficulty as to obtaining it?—None whatever.

6008. At reasonable prices?—There never was a time when railway material of all kinds was so cheap. Even with regard to locomotives (although you cannot get a locomotive for love or money just now), still prices are not extravagant; everything else is wonderfully cheap.

6009. A comparative small increase in the demand for railway materials would probably lead to a considerable increase in price?—I do not know about rails. There is a league amongst railmakers at the present moment trying to make a price, and they are beating the consumer, at the present time, hollow; but I should think the production is so large that it would take a very considerable increase in the demand to make much increase in the price.

6010. Cast-iron sleepers, I believe, are selling under 3 *l.* a ton?—Yes; and I am getting what is better, stamped steel. I am getting steel sleepers delivered in Bombay now at 4 *s.* 9 *d.* a piece; that is about 9 *l.* a ton, including the fastenings, delivered in Bombay.

Mr *Kynaston Cross.*

6011. I want to read you a paragraph from a Despatch from India, and to ask you how far you

Mr. *Kynaston Cross*—continued.

agree with it: "We understand the policy in respect of gauge, accepted for some years past by the Government of India and the Secretary of State, to be as follows: The metre gauge is to be invariably adopted for provincial and local railways 'specially constructed for a slow goods traffic,' designed 'to stimulate the exchange of commodities, and provide for a goods traffic with special reference to local needs and local means,' regarding which 'it may certainly be said that the traffic on them will be light,' and that 'a network of subsidiary lines' of this nature, at the lowest possible cost, is to be promoted as far as possible. The broad gauge, on the other hand, is recognised as suited to 'supplementary through lines of communication,' or those which are 'desirable on strategic and military grounds;' and while demands for such are to be examined with caution, they may be admitted where the traffic can be shown to require it, and in the case of existing metre gauge lines, relief to the trade of the country may be afforded even 'by re-laying them on the broad gauge.'" I only wish to ask you how far you agree with that?—Well, it is a very general way of putting it.

6012. It rather points to making a great many small lines on the narrow gauge principle even connected with the broad gauge lines?—I agree with it generally, but you see there are so many provisos: 'Regarding which it may be certainly said that the traffic on them will be light." I know what the result would be, viz., that whenever you proposed a line on the narrow gauge system, you would be told that that was not a line upon which the traffic would be light. Then it says: "The broad gauge, on the other hand, is recognised as suited to supplementary through lines of communication." Well, you might make every line in India broad gauge upon that principle. It is far too general a statement. I repeat what I said before, that my own opinion is that I do not believe there are more than two lines in India worth considering as broad gauge lines as far as the traffic is concerned. There may be military, or political, or strategic grounds, for other broad gauge lines. If you are going to make a line also in connection with the East Indian, from Burrackur to Allahabad, you might make that broad gauge, but *quâ* traffic, I should be inclined to work that clause, if I said I agreed to it, from a narrow gauge point of view, and not from the broad.

6013. You spoke about the Wardha coal being bad; one of the reasons for the Hyderabad Railway being so strongly advocated was, that it would open up this coal field?—Yes. I know the Government of India had the most extraordinary ideas on the subject; not only was the Hyderabad coal to find all that part of India with coal, but the Hyderabad iron was to be immediately developed, and the Hyderabad railways were to be made with steel rails made in Hyderabad, and 2,961 miles, I think it was, besides. I remember the "1."

6014. If you made the Hyderabad Railway on the narrow gauge, would not there be a very great difficulty in disposing of the coal?—If there be any coal that can go outside of Hyderabad, it would have to be shifted, but all we know about Hyderabad coal at present, is that in one coal

Mr. *Kynaston Cross*—continued.

field there may be hoped to be about 17 millions of tons. It may be so. Some good coal has been said to have been sent to Madras, but I have a letter from the chief engineer of the Nizam's Railway, which I received the other day, in which he said that all the coal he had seen was very bad.

6015. Then you would not think that that railway was very desirable on account of the facilities which it would give for the distribution of coal?—Certainly not. If we got as much coal as would work these railways comfortably, and provide the immediate neighbourhood, it is as much as ever we shall do.

6016. Then would there be no difficulties with regard to break of gauge in that district if a famine were to come, and you had to transfer your wheat from the broad gauge line to the narrow gauge lines?—Well, you would have all the evils of a break of gauge, whatever that may mean. It amounts to from 4 *d.* to 6 *d.* a ton.

6017. I think you said that the break of gauge is simply the cost of transfer?—I believe it to be nothing more than the cost of transfer.

6018. Does it not entail a greater number of waggons and engines than where you have no break of gauge?—It causes a certain amount of delay, but I doubt if that really affects the quantity of waggons at all. The quantity of waggons is governed far more by the management of the railway. If you look at the difference between the work done by waggons on different railways you will be surprised.

6019. Yes; but if you cannot get them over the whole length of the line you wish to serve, is not it necessary to use a great many more than if you could?—Assuming equally good management, there may be some very small percentage represented by some decimal more required with a break of gauge than without, but it would be something so exceedingly small that you would never know what it was.

6020. You spoke about 50,000 miles of railway being required for India?—That is a pure guess.

Mr. *Kynaston Cross*—continued.

6021. But you have not considered how money could be raised for that 50,000 miles of railway, of course?—I think I said I was connected at the present time with about 6,000 miles.

6022. But you have not considered how the money could be raised to make the 50,000 miles of railway?—Oh! that is to be spread over a very long period.

6023. You have not considered it, nor what the effect would be upon Indian finance?—That I have not considered; I have merely considered the thing from an engineering point of view.

Mr. *W. H. Smith.*

6024. There is one discrepancy to which I wish to call your attention in this comparison. The Great Indian Peninsula Railway carries 876 passengers per mile per day at a cost of 2·34, whereas in 1876 there were 678 passengers at a cost of 1·97; how do you explain the increase of the cost per passenger on the Great Indian Peninsula Railway with an increase of 25 per cent. in the passengers per mile per day?—I could not tell you how that would be; if you look at the loads carried in trains, you will find that their loads have fallen from 204 passengers in 1876 to 170 in 1883. There is a smaller utilisation of their train power.

6025. With increased accommodation to the public?—Probably.

6026. More trains run?—More trains run. I take it that would be it; of course that figure of cost is got by dividing the cost per train mile by the number of passengers in the train.

6027. I should like to ask you as to the cost of the transfer of goods; you have given it at 5 *d.* per ton, and 3·18 and 3·17, which is about 5 *d.* per ton?—Yes.

6028. Is that the actual wage paid to the labourer, or does it include all expenses?—It includes not only the wage paid to the labourer, but the management and the interest on capital invested in the sidings necessary for the purpose.

Friday, 13th June 1884.

MEMBERS PRESENT:

Mr. Baxter.	Mr. William Fowler.
Mr. Bolton.	Mr. Gorst.
Mr. Brodrick.	Mr. Samuelson.
Sir George Campbell.	Mr. Slagg.
Mr. Kynaston Cross.	Mr. Edward Stanhope.
Mr. Dalrymple.	Mr. Wodehouse.

THE RIGHT HONOURABLE WILLIAM EDWARD BAXTER, IN THE CHAIR.

Mr. HENRY WATERFIELD, called in; and Examined.

Chairman.

6029. WILL you state to the Committee what your position is?—I am the Financial Secretary at the India Office.

6030. What was the origin of the policy of constructing large public works by the direct agency of the State from borrowed money?—In 1862 Sir Charles Wood urged on the Government of India the importance of using, in the construction of canals and roads, its surplus balances to the amount of 3,000,000 *l.*, which had accumulated in consequence of a loan having been raised in 1861 in England to meet the demands of the guaranteed railway companies, and the remittances from India having been reduced in anticipation of famine, but he forbade their application to works not likely to prove remunerative; and in 1865, when Sir John Lawrence's Government proposed a large scheme for the construction of barracks and canals by means of borrowed money, Sir Charles Wood, though objecting to the measure, undertook to provide any funds necessary for well-considered schemes of irrigation. Lord Cranborne, in 1866, adopted a similar view, provided the works were likely to be remunerative; and he sanctioned a loan of 70 lakhs for public works, expressing his willingness to authorise even a larger amount for the prosecution of works of irrigation; and he approved of a proposal of the Government of India that extraordinary works should be separated from ordinary expenditure, and their cost be not included in the figures on which the surplus of the year was calculated.

6031. When did the separation first appear in the accounts?—In 1867-8 a small sum of about 220,000 *l.* was excluded from the ordinary accounts, and in the following year rather more than 1,000,000 *l.* was treated as extraordinary.

6032. When were the first proposals made for State railways?—In the course of 1867 many proposals for the extension of railways were received from India; and Sir Stafford Northcote, in January 1868, informed the Government of India that, while on the whole considering the guarantee system to be the best for the commercial class of

Chairman—continued.

lines, he did not think that the important lines which had to be made for political reasons should be allowed to weigh heavily on the railway market, and he therefore suggested that a limit of annual charge on the revenues on railway account should be fixed, under which, as the revenues were relieved of charge by old lines becoming self-supporting, new ones might be taken up in their place.

6033. What financial measure was proposed in 1869 for the construction of public works?—In January 1869 the Government of India (under Lord Mayo), concurring in the policy formulated by Lord Lawrence, proposed a large scheme for the extension of public works by loans amounting to six or eight millions a year for the next ten years, which they proposed to raise in India or in England, according to which might, from time to time, afford the cheapest market.

6034. What answer was given to this proposal?—The Duke of Argyll, in replying in March 1869, said that, "as a general principle when a loan is required, it is desirable that it should be obtained in India, if it can be done on terms nearly as favourable as in England; and it is difficult to decide what additional interest would be counterbalanced by the advantages which otherwise attach to loans raised in India. It is only when loans are obtained in India that the native capitalists subscribe to them, and that is a very important consideration. * * * * Moreover, when loans are raised in England, the interest must be paid here; and this adds to the very large sum (above 13 millions), which must be remitted annually to meet the disbursements in this country, and which must increase so long as payments are made into the Home Treasury by the railway companies." And, after quoting the prices of the 4 per cent. securities, which in India were 94½, and in London 102¾ per cent., he added: "Having regard to the comparatively little difference in the value of securities in India and in England thus shown, to the political advantage which attends borrowing in India, and to the fact that the interest of such loans is paid

Chairman—continued.

without the inconvenience or risk of remittance, it appears to be desirable that you should obtain in India as large a portion as practicable of any loans which may be required." He declined to accede to any proposition for borrowing a specific amount in the next five or six years"; but agreed to authorise the raising of sums required for irrigation works, the estimates for which might have been duly sanctioned, the amount being determined from year to year.

6035. As regards railway extension in particular, what views did Lord Mayo's Government put forward in 1869?—In three letters of March 1869, they discussed the most suitable agency for the construction of railways, the relative claims of particular lines to early construction, and other questions of a special character. As regards the agency, they held that the time had arrived when, both in raising and in expending the additional capital required for new lines, the Government should secure for itself the full benefit of its credit and of the cheaper agencies at its command. If guarantees should be granted to any new companies, they urged the importance of giving power to the Government to take over the works from the companies in the event of their not being carried on to the satisfaction of the Government, and of providing that the net profits above the guaranteed rate of interest should be for ever divided equally between the Government and the company.

6036. Did the Duke of Argyll agree to these proposals?—Yes; he concurred with the Government of India, and especially pressed on them the necessity of giving full attention to the view expressed by Lord Lawrence, "that the financial success of a railway depends as much on the limitation of its cost as on the magnitude of its traffic, and that, whether Government agency be employed or not, too much attention cannot be paid to economy in construction, to the selection of lines not involving heavy works, and to the careful avoidance of all expenditure not absolutely required for the stability of the works, or the accommodation of the traffic."

6037. Was the permission to construct works from borrowed money limited to those likely to be remunerative?—Not in 1868, as at that time any works sanctioned as extraordinary were permitted to be constructed from borrowed money or surplus balances; and it thus happened that certain very large projects, particularly the Orissa scheme of irrigation, and the Punjab Northern and Indus Valley State Railways, were undertaken with borrowed capital, although the prospect of their proving remunerative was very remote.

6038. Was the attention of Parliament attracted to the question?—Yes; the Select Committee on Indian Finance, which sat from 1871 to 1874, examined several witnesses on the subject, although they made no report thereon; and it was discussed in almost every debate in the House of Commons on Indian Finance at that time.

6039. What rules were issued in 1874?—In a Despatch of the 23rd of July 1874, Lord Salisbury gave instructions that no works should thereafter be admitted into the Extraordinary Class, unless they were expected to repay the interest on the capital outlay, including interest during construction.

Chairman—continued.

6040. Did Lord Salisbury make no provision for railways or canals needed as a protection against famine?—Yes; he said that they might properly be constructed from borrowed money, but that their cost should be included in the ordinary expenditure of the year, even at the risk of showing a deficit.

6041. What orders did he give regarding the mode of providing money for extraordinary works?—He required that it should be raised in India; and assurances to this effect were given to the House of Commons by the Under Secretary of State, Lord George Hamilton.

6042. Did the Government of India acquiesce in these orders?—Lord Northbrook's Government, on the 7th of April 1876, urged that works already under construction should be completed from borrowed money, even though not likely to be directly remunerative, a proposal which was sanctioned; and they asked permission to continue their operations as before, provided that any additional interest needed were met from the increasing receipts of works brought into operation. Lord Salisbury, however, writing on the 10th August 1876, insisted on the new rules being applied to all future works.

6043. What effect did the fall in the price of silver have on the views of the Government of India?—In October 1876 the Government of Lord Lytton reported their determination to reduce the expenditure on extraordinary works within the amount which could be borrowed annually in India on advantageous terms.

6044. At what amount did they estimate that rate of borrowing?—At not more than 2 or 2½ crores of rupees a year, which might, indeed, be more than could be raised in the local market under a permanent system.

6045. What alteration of account was made as to the mode of representing the action of the Government in regard to extraordinary works?—In order to show the financial result of such works, the designation of which was then changed to Productive Public Works, two heads were introduced into the General Account of Receipts and Disbursements, the one on the receipt side being for debt incurred for Productive Public Works, and that on the side of disbursement being for Capital Expenditure on such works. The ordinary revenue was at the same time separated from that derived from Productive Works, and the ordinary expenditure from the charges for their working and maintenance, and for the interest on debt incurred in their construction, but the surplus or deficit was stated on the joint Account.

6046. Will you briefly describe to the Committee the origin of the Famine Insurance?—In December 1877 the Government of India, finding their finances deranged by the heavy charge for the relief of famine, made a somewhat rough estimate that on an average 15,000,000 *l.* would have to be disbursed on this Account in every 10 years; and accordingly they resolved to improve the annual resources to the extent of 1,500,000 *l.*, partly by a readjustment or reduction of expenditure, and partly by the imposition of

Chairman—continued.

of new taxes. They proposed to reduce their annual borrowings by 1,500,000 *l.*, and to allot that sum from the revenues for the productive works; and they considered that, with the receipts of the new works to aid them, the revenues of the several provincial governments would admit of their paying interest on the whole capital outlay.

6047. Did Lord Salisbury approve of the scheme?—Lord Salisbury sanctioned the provision of 1,500,000 *l.* annually for famine insurance; but he considered that, as in time of pressure from famine the money could not be obtained in the local market, and must be borrowed in London, it was necessary that the famine insurance money should be annually applied to the repayment of debt in England; otherwise the scheme would result in money being practically borrowed in London for productive works, which was opposed to the standing instructions.

6048. Was any special reason assigned for insisting on such loans being only raised in India?—It was stated in a Despatch by Lord Cranbrook of the 31st of July 1878, to have been arranged with the view of attracting native capital and enlisting the interest of the people in the works intended for their benefit, as well as of avoiding the necessity of remitting the interest to England.

6049. What modification of the rules did the Government of India propose?—They thought it unnecessary that the railways, as a whole, should be made absolutely self-supporting, and recommended that a net yearly charge or dead weight (which for the present they wished to fix at 25 lakhs of rupees) should be accepted, whether for productive or protective works.

6050. What meaning did they attach to the word "protective"?—Works not necessarily directly remunerative, but calculated to prevent the occurrence of famine, to give protection against it, or to diminish the expenditure in its relief when it occurred.

6051. Was their proposal sanctioned?—No; Lord Cranbrook would not allow the receipts from famine insurance to be diverted from their primary purpose of cancelling debt in England. Sir John Strachey, however, who was on a visit to England at the time, having personally explained the scheme and urged the importance of making some distinct provision for the protective lines contemplated in Bundelkhand and similar tracts, it was (in modification of Lord Salisbury's order that the whole 1,500,000 *l.* should be applied to the repayment of debt in England) agreed that, after appropriating 750,000 *l.* to the repayment of debt in England, the remainder of the famine insurance money might be used by the Government of India as they should think fit in the relief of famine, the extinction of debt, or the construction of protective works.

6052. Was any money remitted to England for the repayment of debt?—Not at that time, owing to the difficulty in effecting the requisite remittances from India.

6053. Did the Government of India reduce the capital outlay on productive works to 2,500,000 *l.*, as proposed by them in 1876?—No; the expenditure in the seven years ending with the estimates for 1879-80 was never less than 3,500,000 *l.*, and averaged more than 4,000,000 *l.*, but in the estimate of 1879-80 it was reduced to 3,500,000 *l.* (the figures being conventional sterling).

6054. Was Lord Cranbrook satisfied with this reduction?—No, he required it to be reduced to 2,500,000 *l.*, and drew the attention of the Government of India to the necessity of reducing their establishments.

6055. What action did the Government of India take thereon?—They offered special pensions and gratuities, with the view of reducing the establishment of engineers from 1,200 to 900.

6056. What were the chief recommendations of the Select Committee of 1879?—That no new works should be constructed from borrowed money unless likely to repay the interest on their outlay; that the annual expenditure should for the present be limited to 2,500,000 *l.*, and that that sum should be the maximum amount raised for the purpose in any year: that, when, in addition, surplus revenue was spent on such works, it should be treated in the accounts as if the general debt had been relieved, and the productive works debt increased, to that extent; that, when surplus revenue was so used, care should be taken not unduly to increase the establishment; that loans for public works should always be raised in India, unless the difference of interest was so considerable as to afford full compensation for the disadvantage of borrowing in England; and that, whenever possible, a portion of the famine insurance money should be remitted for the discharge of debt in England.

6057. Did these recommendations of that Committee involve any new policy?—No; the limit of expenditure from borrowed money to 2,500,000 *l.* had been determined on by the Government of India itself in 1876, and been enforced by Lords Salisbury and Cranbrook; the restriction of borrowing as a general rule to the funds which could be raised in India, was in accordance with the instructions of successive Secretaries of State from Sir Charles Wood's time, and with the opinion of Lord Lytton's Government in 1876; and the other recommendations were in complete accordance with the orders which Lord Salisbury and Lord Cranbrook had recently given.

6058. What were the instructions given by the Government regarding this Report?—In a Despatch of the 23rd October 1879, the Secretary of State desired the Government of India to act on it generally; but for the present begged that the total expenditure on productive works, whether from borrowed money or from surplus revenues, might be limited to 2,500,000 *l.*

6059. What were his reasons for this restriction of the latitude given by the Select Committee?—The recent reduction of the establishment, which could not prove an economical measure if the expenditure was to be at once enhanced, and the importance of reducing the debt at the earliest opportunity, as the balances had lately been largely increased by borrowing; probably also the prospect of heavy expenditure in consequence of the affairs in Afghanistan

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should be added to the reasons for economy, as Sir Louis Cavagnari had been assassinated in the previous month.

6060. Does the restriction remain in force as regards outlay from borrowed money?—So far as regards outlay on the works to which the recommendation of the Select Committee referred, namely, railways and canals constructed by the direct agency of the State, it remains in force at present; but, when the East Indian Railway was purchased, it was ruled that any money which might have to be borrowed for the improvement of that line might be treated as additional to the 2,500,000 *l.*; and a similar sanction has lately been given regarding the Eastern Bengal Railway.

6061. Is the sum of 2,500,000 *l.* still held to include any money that can be supplied from surplus revenues?—No; the Despatch of the 23rd of October 1879 was crossed by one from the Government of India, dated the 25th of September, remonstrating against the reduction to 2,500,000 *l.*, and saying that they presumed they were at liberty to spend the portion of their surplus balances not required for reduction of debt in either protective or productive works. The answer given on the 13th of November 1879 was that, if spent on works likely to guard against a probable future expenditure in famine relief, it might be devoted to works whether expected also to be remunerative or not, provided that it had actually become surplus revenue and was not merely estimated to be so.

6062. Were the Government of India at liberty to provide in their estimates for outlay from revenue on productive works?—No restriction has been placed on the expenditure which can be met from revenue; only it has been ruled that, if the work to which the revenue is assigned is included in the class of productive works, the amount of revenue so spent must be added to the capital outlay, so that the effect is the same as if the surplus revenue had been applied to discharge debt, and the money then borrowed for outlay on the work.

6063. If money granted for outlay on productive or protective works be not spent at the end of the year, does it lapse?—No, it is still left at the disposal of the Public Works Department; so that they receive an annual average of 2½ crores for productive works from borrowed funds, and 75 lakhs for protective works, besides what can be allowed from surplus revenues.

6064. What action was taken by Lord Hartington regarding the public works policy?—On the 6th of January 1881, Lord Hartington took the occasion of the recent changes in the Government of India, to sum up the existing rules regarding the construction of productive and protective works, and clearly to define what works might be considered as productive, namely, railways which in five years (or canals within 10 years) from their being completed, would pay at least 4 per cent. on their capital cost, including interest in arrear up to that date. He also insisted on the importance of insuring, whenever possible, the construction of railways by private capital, either local or European, on the exclusive security of the success of the undertaking, without a guarantee.

Chairman—continued.

6065. Were the proposals of the Bengal Central Railway Company at that time under consideration?—Yes, it was hoped that that line might have been undertaken without any guarantee, but at length it was found that the promoters would not accept the proposition.

6066. Before coming to the arrangements with private companies, will you explain what alteration was made in regard to the Famine Insurance Rules?—It was decided that provision should every year be made in the Budget for the expenditure of 1,500,000 *l.* on famine relief or insurance, one-half being allotted for protective works, and the remainder, if not needed for actual relief, being paid to a Commission for the reduction of debt.

6067. Then, have there been three phases of the famine insurance arrangements?—Yes. Lord Salisbury in 1878 required the whole of the 1,500,000 *l.* to be annually devoted to the repayment of sterling debt. Lord Cranbrook in 1879 reduced that sum to 750,000 *l.*, and allowed the other moiety to be employed at the discretion of the Government of India in famine relief, extinction of debt, or prosecution of protective works. And finally, in 1881, Lord Hartington permitted the protective works to have the first moiety, leaving the other to be divided between famine relief and extinction of debt. In the event, however, of a large outlay being necessary for famine relief, the grant for protective works may have to be restricted like any other portion of the expenditure, and debt would not be extinguished.

6068. Will you tell the Committee what was the estimate of the Famine Commission as to the outlay required in railways for protective purposes?—They calculated the total outlay at 60,000,000 *l.* for 10,000 miles of railway, which sum they observed spread over 25 years would amount to 2,500,000 *l.* a year, or about the amount appropriated yearly for some years past to the extension of railways. But they considered it probable that less than one-half, or 5,000 miles, in addition to the existing lines, would go far to remove all future risk of serious difficulty in supplying food to any part of any district in the whole country. In view of the recent orders reducing the outlay from borrowed money on all productive works to 2,500,000 *l.* (which left only 1,800,000 *l.* for railways), they added an expression of their hope that nothing might stand in the way of a very early return to the former scale of grants, or the adoption of some other equivalent form of aid.

6069. On receiving the report of the Famine Commission, what scheme did the Government of India propose regarding protective works?—The Government of India reckoned that at least 3,000 miles of the proposed extension would have to be constructed as protective lines. At the existing rate of allotment from the Famine Insurance Grant, this would take 30 years, whereas the Government of India considered it necessary to construct them in four or five years. They therefore proposed to entrust the works to private enterprise, under a reasonable guarantee, and they estimated the cost at 1,835 lakhs of rupees.

6070. What was Lord Hartington's reply to this proposal?—He thought it similar to the "dead

Chairman—continued.

"dead weight" scheme of 1879, except that the annual charge would be 50 instead of 25 lakhs, and he considered a system of unremunerative lines to be unsuited for offer to private capitalists. Famine lines must be constructed by Government agency. He hoped that the improvement of the finances would soon admit of more free expenditure.

6071. You said that Lord Hartington intimated a desire to encourage private enterprise, but, if possible, without a guarantee; and that he objected to offer unremunerative lines to private capitalists. What arrangements have been made in that direction?—The arrangements are of three kinds; a guarantee for a limited period, as in the case of the Bengal Central Company; a permanent low rate of guarantee, as in the case of the Southern Mahratta Company; and a grant of land only, with no guarantee of interest, as in the case of the Bengal and North Western Railway Company.

6072. Will you tell the Committee what are the main provisions in the case of the Bengal Central Company?—The Government provide the land, and advance interest at 4 per cent. on the paid-up capital up to a maximum limit of 1,250,000 *l.*, for the period, not exceeding five years, that the line may be in course of construction. The Company will repay from a moiety of its surplus profits above five per cent. the amount of such advances, with simple interest thereon at 4 per cent. The Government may purchase the line after 30 or after 50 years, paying the amount of capital outlay with a bonus of 25 per cent., but subject to a maximum payment of 1,812,500 *l.* At the end of 99 years the line is to lapse to the Government, if not previously purchased, the rolling stock being bought at a valuation.

6073. How was the maximum payment of 1,812,500 *l.* arrived at?—The estimated cost of the line was 1,000,000 *l.*; but it was agreed, in case of the estimate proving inaccurate, to guarantee interest and the bonus on repayment up to 1,250,000 *l.*, with 25 per cent., or 312,500 *l.*, for bonus. A margin of 250,000 *l.* more was allowed in case the company should find it necessary to spend unguaranteed capital in addition, but no interest or bonus was allowed on that sum.

6074. What effect did the conclusion of this agreement have on the construction of railways by companies?—Numerous schemes were put forward, but in almost all cases dependent on the grant of a guarantee for a certain period, it being held that, if such a concession was made in the case of the Bengal Central Company, it must *à fortiori* be made to other companies whose prospects were less satisfactory.

6075. What was the view taken by the Secretary of State of those proposals?—He was extremely desirous of avoiding the grant of further guarantees, feeling that, so long as they were given, there was no chance of any company coming forward without a guarantee.

6076. What proposals were made respecting the Nagpore and Bengal Railway?—In June and July 1881, two firms, Messrs. Burn & Co., and Messrs. Hoare, Miller & Co., applied for permission to undertake the extension of the Nagpore line to Calcutta. These proposals

Chairman—continued.

were referred, in August 1881, to the Government of India, who, towards the end of October, replied that the question must await the result of surveys. In May 1882 the Government of India wrote that the surveys were not complete, but they recommended the acceptance of Messrs. Hoare, Miller & Co.'s offer, which involved a grant of land, and a guarantee of 4 per cent. on a capital of 5 crores of rupees for seven years, the advances of interest being repayable out of surplus profits above 5 per cent. The Government of India said that the guaranteed interest was to be payable in rupees; but in July Messrs. Hoare & Miller wrote to the India Office, saying that it was an essential part of their proposal that the interest should be paid in sterling. The Secretary of State, accordingly, communicated this in a Despatch of the 27th of July 1882 to the Government of India, saying that he thought the question required more consideration. In two letters written in May and September 1882, the Government of India sent the results of a survey made by Mr. Parker, and between September and December they repeatedly wrote or telegraphed pressing for approval of their recommendation. On the 8th of February 1883, the Secretary of State answered that he could not agree to the proposition, pending a decision on the general financial questions connected with railway policy, and also pending the receipt of more full information regarding the particular line proposed. On the 18th of August 1883 the Government of India, for the first time, sent the reports of the local officers, and gave a full history of the proposed scheme; and the Secretary of State, on the 31st of October, answered that it had been determined to refer the general subject of the extension of railways in India to a Select Committee. In a more recent letter, dated the 29th of January 1884, the Government of India have again pressed for permission to commence operations.

6077. Will you now tell the Committee what were the proposals respecting the railway from Bhopal to Agra and Cawnpore?—In October 1881 the Great Indian Peninsula Railway Company proposed to construct a line 385 miles in length, in extension of their main line, issuing their own debentures at 4 per cent. for 3,500,000 *l.*, the interest being paid from the surplus profits of the guaranteed line. The Secretary of State refused to extend the guarantee, but in January 1882 forwarded the correspondence to India. On the 5th of May 1882 the directors of that company proposed to form a separate (Bombay and North Western) company with a capital of 3,500,000 *l.*, the line being worked by the Great Indian Peninsula Company. On the 5th of July the Secretary of State agreed to negotiate, without giving any direct pecuniary assistance, and negotiations were opened. The principal points of difference which arose were the question whether the Government should receive a share of the surplus profits if they should exceed 6 per cent.; the right of the Government to exercise a control over the fares and rates; the facilities which the promoters desired to receive at the Agra station and for working their own rolling stock between Gwalior and Agra; and the question whether the Government should be bound to

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replace the capital of the company on the line lapsing to them after 99 years. In the meantime the Bengal and North Western Company had brought out its scheme, with but moderate success; and in February 1883 the promoters of the Bombay and North Western Railway announced that the market had now become unfavourable, and that they could not bring out the company; whereupon the Secretary of State postponed the negotiations. In the following month the promoters applied to resume the negotiations, which was agreed to; but in June they distinctly applied for a guarantee of 4 per cent. for 10 years after the completion of the line, as a necessary part of the arrangement. On the 31st of August they were told that the question had been referred to the Select Committee.

6078. What are the conditions under which the Southern Mahratta Railways are being constructed?—The company receive a guarantee of 3½ per cent. on the capital deposited by them with the Government, and construct and work the lines as agents of the Government who are owners of the property. As remuneration for their trouble they also receive one-fourth of the net earnings of the lines which, up to 1889, is guaranteed at a further half per cent., making 4 per cent. in all. The company may claim their capital back on giving a year's notice; the Government may repay the capital at par after the 25th, 35th, or 45th year.

6079. Are the shareholders guaranteed to receive their interest and principal in sterling, or in rupee money?—The guarantee of payment in equivalent of sterling is absolute. The payment is made to the company in India in rupees, but, whatever may be the rate of exchange, the payment must be such a number of rupees as will produce the requisite sterling sum in England.

6080. What is the object of adopting this mode of payment?—Partly in order that the transaction might be kept as an Indian one, so as not to add to the Home charges for which bills are sold each week by the Secretary of State; but partly because successive Secretaries or Under Secretaries of State had, when the system of guaranteed railways was coming to an end, assured Parliament that in future the arrangements regarding the construction of public works would be made with money borrowed in India; and therefore, although experience had shown that in practice much of the money was sent out from England, it was held that, until Parliament had agreed to a reversal of the policy, it was right to keep the revenue transactions of the company, and the repayment of the capital also, on the footing of an Indian transaction, though in actual effect the financial result might not be altered.

6081. How has the money for the Western Deccan Line been raised?—By the issue of debentures to the amount of 1,700,000*l.* at 3½ per cent.

6082. What is the arrangement with the Bengal and North Western Railway Company?—The Government give the land, but no direct pecuniary assistance. The company are allowed to include in their capital outlay interest at 4 per cent. per annum during the period of construction (not exceeding about five years), on the capital sum *bonâ fide* paid up. After 30 or 50 years the Secretary of State may purchase the line on paying 25 times the average annual net earnings of the company, computed on the preceding five years, but reduced by one-half of the surplus profits above 6 per cent.

6083. Was it arranged that the Government should share in the surplus profits of the line?—At first it was agreed that they should have a moiety of the profits above 6 per cent., but this condition has been abandoned.

6084. What do you consider to be the advantages or disadvantages of the respective methods adopted in the case of private companies?—For a line which is reasonably certain to be remunerative, the Bengal and North Western plan seems much the best; it partakes most of the nature of real private enterprise, the company receiving very little aid from the Government, and being little interfered with by them; it is necessary, however, to maintain control over the fares and rates in the general interests of the public. The disadvantage in such a case is that, as there is no guarantee, trustees would not, as a rule, be inclined to make investments in the company. The Bengal Central method, though also unacceptable to many trustees, is much more popular with promoters, as it affords them time to dispose of their allotments at a profit during the currency of the guarantee; it does not appear suitable, however, for a line which is not reasonably sure of proving remunerative within a few years; and the concession of such terms in the case of a line which proved unremunerative might damage greatly the cause of private enterprise in Indian railways. On the other hand, in the case of a line certain to to be remunerative, it would be unnecessary to give a guarantee. This system, therefore, seems suitable for lines sure to be remunerative within (say) five years from their completion, but yet uncertain of being able to bear the extra weight caused by the accumulation of arrears of interest during that period. The Southern Mahratta terms seem well suited for a line which the Government itself desires to make, but is not immediately prepared to undertake. While interest is paid at about the rate that would be granted to the ordinary Indian fundholder, the Government does not add the amount of the capital to its funded debt: and, while it retains the full proprietary rights in the undertaking, it secures, for a comparatively small extra payment, the services of a body of shareholders and directors, who are from the first interested in the line being constructed and worked with economy, and who can make no extra profits for themselves without making three times as much for the Government. Moreover, the guarantee of the Government being absolute, there is no difficulty in trustees investing money in the undertaking.

6085. Coming now to the correspondence between the Government of India and the Secretary of State in 1883, what are the main points of difference between the views of the two authorities?—First, the Government of India desire as far as possible to exclude the action of the State from the construction of productive

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productive lines, a policy to which the Secretary of State has not assented; secondly, the Government of India wish to adopt a scheme for the construction within five years of nearly 4,000 miles of railway, which, although a large portion are expected to be productive, they describe as being, relatively speaking, unprofitable, but which they consider to be indispensable for protection against famine or other urgent purposes, and with this object they desire to give temporary guarantees for such lines; Lord Hartington in 1881, in reply to a similar proposal, said that he was not disposed to admit that the true interests of India would be best secured by such a measure, but Lord Kimberley considers that some relaxation of the existing rules may be permitted; thirdly, the Government of India desire to capitalise part of the famine insurance grant, borrowing money for certain unproductive but protective lines, and charging the interest against that grant; the Secretary of State considers the application of any part of the famine insurance grant to some of those lines to be inadmissible; fourthly, the Government of India wish to adopt a policy involving the outlay of 32 or 33 millions in five years, while the Secretary of State declines to accept such an expansion of the operations. I have mentioned five years, as all the calculations have been made on this basis, according to the proposals made by the Government of India in 1883; but in their last letter of January 1884 (page 77 of the Correspondence), the period is stated to be "a few months more or less than six years."

6086. But was any great expansion of operations contemplated?—The propriety of the term depends upon the manner in which the question is viewed; the annual loan of 2,500,000 *l.*, after setting aside 700,000 *l.* for irrigation, and 300,000 *l.* for the improvement of open railways, left 1,500,000 *l.* available for new lines; from the protective grant 500,000 *l.* could be applied to new railways; and from the provincial balances 170,600 *l.* (on the average), making a total of 2,170,600 *l.* available for new railways. As the Government of India contemplated an outlay of 6,516,400 *l.* a year on new lines, the Secretary of State held this to be a great expansion; the Government of India, on the other hand, claim that the annual charge on the revenues is what should be considered, and that, as an annual outlay of 2,284,000 *l.* can in their opinion be provided by a temporary net charge of only 200,000 *l.* a year, it is the latter, not the former, sum which must be taken, and therefore, that to the extent of 2,084,000 *l.* there is no expansion.

6087. How does the outlay proposed by the Government of India compare with the actual outlay in past years?—I have compiled a Statement from the papers of capital expenditure, Nos. 2A and 3B, which Major Conway Gordon laid before you; but I found it necessary to deduct from his figures sums amounting altogether to about 9½ millions, of which 6½ is the capital representing the amount of the deferred annuity of the East Indian Railway, and the remainder had been expended by the Government in the purchase of the Calcutta and South Eastern and Nalhati Railways, and of the East India and Madras Irrigation Works, but none of which

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was spent on construction within the period embraced in his tables. I find that the average capital outlay on public works of all kinds, spread over the whole period of 17 years from 1867-68 to 1883-84, 8,274,000 *l.*, agrees almost exactly with the average of the last five years only of that period, 8,273,000 *l.*; there has, however, been a considerable difference in the details; the outlay on irrigation works has not greatly varied, 1,133,000 *l.* being the average of the 17 years, and 1,105,000 *l.* being the average of the five years; but the capital outlay on telegraphs, military works, and civil buildings and roads, which was 2,757,000 *l.* a year over the whole period, was reduced to 2,323,000 *l.* in the latter period. Now, confining the attention to the remainder which has been spent on railways, I find that on the average of the whole 17 years the outlay has been, by Government 2,419,000 *l.*, by companies 1,965,000 *l.*, making a total of 4,384,000 *l.*; on the average of the last five years the outlay has been, by Government 3,818,000 *l.*, by companies 1,027,000 *l.*, making a total of 4,845,000 *l.* According to the proposals of the Government of India, there would be in the next five years an average annual outlay, by Government of 3,864,000 *l.*, by companies 3,428,000 *l.*, making a total of 7,292,000 *l.* Thus, while the direct outlay by Government will be little more than in the last five years, when the great expenditure on the frontier railways was in progress, that by companies will be more than trebled, and the total will be increased by one-half. I give the calculations for five years, as reckoned by the Government of India. If the outlay is spread over six years, the annual amount to be spent by Government will be 3,220,000 *l.*, that by companies, 2,857,000 *l.*; and the total, 6,077,000 *l.* This is on railways alone; and it must be remembered that about 1,000,000 *l.* a year besides has to be spent on irrigation.

6088. How has the money laid out on canals and railways during the last five years, amounting to about 6,000,000 *l.* a year (conventional sterling), or 30,000,000 *l.* altogether, been supplied?—From ordinary revenue, including the Famine Insurance Grant, 8¼ millions has been provided (namely, for irrigation, 2,500,000 *l.*, for frontier railways, 4,000,000 *l.*, and for other railways, 2,000,000 *l.*); 11,250,000 *l.* has been borrowed in the open market, and 5,000,000 *l.* obtained by means of savings bank and other deposits, and from monies repaid by municipalities (of which amount of 16,000,000 *l.*, practically borrowed, 3,000,000 *l.* has been spent on irrigation, and 13,000,000 *l.* on railways). The remaining 5,000,000 *l.* has been provided by the railway companies, either guaranteed or subsidised.

6089. In what manner do the Government of India propose to raise the money which they desire to spend in the next five years?—The proposals of the Government of India involve an outlay of 38,212,000 *l.* (conventional sterling) on canals and railways in the next five years (I have not further complicated the question by taking the six years' calculation; I thought it was better to confine it to the five years), as compared with the 30,000,000 *l.* spent in the last five years. The amount to be spent on irrigation is 3,500,000 *l.* from borrowed money, and 1,250,000 *l.* from the Famine Insurance

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Grant. On railways they propose to spend the following sums: for construction of new lines by Government, 14,944,000 *l.*; for improvement of open State lines, 1,500,000 *l.*; for Improvement of East Indian Railway, 1,500,000 *l.*; for the Jumna Bridge (balance yet to be provided), 48,000 *l.*; for working and surplus stores 700,000 *l*; for lines to be built by construction and working companies, 2,100,000 *l.*; making a total of 20,792,000 *l.*; but of this no interest will be chargeable on 2,048,000 *l.*, which will be provided from revenue and provincial balances. Through the medium of limited guarantee companies they would raise 12,670,000 *l.*, on which interest will be payable only for a time, making a total on railways of 33,462,000 *l.*

6090. What, then, is the average total amount to be borrowed in the market in each year?—The total amount to be provided is 38,212,000 *l.*, of which the Famine Grant would give 1,500,000 *l.* for railways, and 1,250,000 *l.* for irrigation; the provincial balances 548,000 *l.*; and it may perhaps be assumed that, as in the last five years, 5,000,000 *l.* can be obtained by means of savings bank and other deposits, &c. This will leave 29,914,000 *l.* to be borrowed in the open market. The various companies are expected to provide the following sums: old guaranteed companies, 1,500,000 *l.*; construction and working companies, 2,100,000 *l.*; limited guarantee companies, 12,670,000 *l.*; or a total of 16,270,000 *l.*, which leaves 13,644,000 *l.* to be provided by the Government. The average, therefore, is 2,729,000 *l.* to be borrowed by the Government, and 3,254,000 *l.* by companies, or a total of 5,983,000 *l.* each year. There is, however, reason to expect that the Port Trusts and Municipalities of the three presidency towns will require to borrow about four crores of rupees in the next four or five years, which must, therefore, be added to the amount that the money market is expected to supply for Indian purposes.

6091. What are the legal powers of the Government of India with regard to borrowing?—There is no restriction on the Government of India as to the extent to which it may borrow in India; but in England the power is strictly limited by Parliament, which from time to time, when occasion arises, grants authority to raise a sum not exceeding a specified amount.

6092. At what rate was the rupee debt in India increased, before and since the practice began of borrowing for productive public works?—The amount of rupee debt on the 1st of May 1813 was 22 crores of rupees, 30 lakhs, and on the 1st of May 1857, 47 crores of rupees 40 lakhs, showing an increase of 25 crores in 44 years, or little more than half a crore a year. In the next three years, in consequence of the Mutiny, 16 crores were added to the debt; and on the 1st of April 1868, when the policy of constructing productive works from borrowed money began, the total of the rupee debt was about the same as in 1860, namely, 63 crores of rupees, 70 lakhs. On the 31st of March 1883 it amounted to 90 crores of rupees, 70 lakhs, showing an addition of 27 crores in the 15 years, or an average of 1¾ crores a year.

6093. Will you state what proportion of this debt is held by Europeans, and what by natives of India?—I put in a statement showing that one-fourth of the rupee securities, the ownership of which is known, is in the hands of natives, and three-fourths in those of Europeans. (*The same was handed in.*) The amounts are 31 crores held by Europeans in India, 22 crores enfaced to London, 17 crores held by natives, 15 crores by holders whose nationality is not known, and six crores in the currency reserve, making a total of 91 crores.

6094. In this latter period of 15 years, what has been the addition to the sterling debt?—On the 1st of April 1868 the sterling debt in England was 30,700,000 *l.*, and on the 31st of March 1883, it was 68,600,000 *l.*; but, for the purpose of comparison, it is necessary to deduct 4,580,000 *l.* incurred in redemption of the dividend on East India Stock, as well as 10,630,000 *l.* in the purchase and redemption of the annuity of the East Indian Railway. The true increase has, therefore, been about 22,700,000 *l.* in the 15 years, or about 1½ millions a year.

6095. What borrowing powers have been granted by Parliament to the Secretary of State in Council since the 1st of April 1869?—For general purposes in 1869, 8,000,000 *l.*, of which, however, only 5,020,617 *l.* was raised within the limit of time prescribed in the Act; in 1873, 2,000,000 *l.*; in 1874, 10,000,000 *l.*; in 1877, 5,000,000 *l.*; and in 1879, 5,000,000 *l.*; besides specific sums authorised for the redemption of the East India Company's dividend, and in connection with the acquisition of the East Indian Railway.

6096. To what extent do those powers remain unexhausted?—The Secretary of State in Council has power to borrow about 4,000,000 *l.* at present, having recently borrowed 3,000,000 *l.* for the discharge of debentures in August, after which he will again have power to the extent of 7,000,000 *l.*

6097. Then, if it were intended to adopt a system of borrowing in England for public works in India, it would be necessary, would it not, to obtain an Act of Parliament for the purpose?—Yes; the power now existing is not in excess of that which is always deemed necessary to meet any sudden emergency, although, on the repayment of the debentures in August, the Secretary of State will have ample power to meet any occurence likely to happen.

6098. Unless Parliament gave to the Secretary of State in Council much larger powers than hitherto, would difficulties be likely to arise in carrying into effect any system of public works, the execution of which depended on the power of raising money in England?—Yes; if the exigencies of Parliamentary business at any time prevented the Government from passing the necessary Act, very great inconvenience might be experienced. Hitherto Parliament has shown itself very unwilling to entrust large borrowing powers to the Home Government.

6099. What effect has the public works' policy had on the Home Charges of India?—I put in a statement, from which it will be seen that the net disbursements in England have risen from 8,832,000 *l.* in 1868–9, to 16,078,000 *l.* in 1883–4 (excluding 1,000,000 *l.* remitted for the payment

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to the Treasury of arrears of Army Non-effective charges). (*The same was handed in.*) Of the increase here shown, amounting to 7,246,000 *l.*, 6,249,000 *l.* was due to Railways and Irrigation Works; 870,000 *l.* to Army Charges; and 127,000 *l.* to all other disbursements, including interest on debt, civil superannuation, &c.

6100. During that period, what has been the alteration in the exchange value of the rupee?—The average rate at which bills on India were sold in 1868–9 was 1 *s.* 11$\frac{1}{2}$ *d.*; in 1871–2 it was as high as 1 *s.* 11$\frac{3}{8}$ *d.*; but from that point it fell to 1 *s.* 10$\frac{3}{4}$ *d.* in 1872–3; 1 *s.* 9$\frac{3}{8}$ *d.* in 1875–6; 1 *s.* 8$\frac{1}{2}$ *d.* in 1876–7; 1 *s.* 7$\frac{3}{4}$ *d.* in 1878–9; and about 1 *s.* 7$\frac{1}{8}$ *d.* in 1882–3.

6101. Do you consider that the great increase of the remittances to England has materially affected the price of the rupee?—The Select Committee which in 1876 inquired into the subject of the depreciation of silver, referred to three main causes as having had a great effect on the price of silver; namely, the cessation of the coinage of silver in Germany and sale of her superfluous silver, combined with the limit of the coinage in the mints of the Latin Union; the large production in America; and the sale of the bills on India. Germany has for a long period not been putting silver on the market; the imports of silver from America have greatly fallen off; but the sale of bills or telegraphic transfers on India has risen from 12,700,000 *l.* in 1876–7 to 16,500,000 *l.* in the estimate for the present year, an increase of 30 per cent. Moreover, owing to the further fall of exchange, the number of rupees for which bills or transfers have to be sold has risen from 1,486 to 2,030 lakhs, an increase exceeding 36 per cent. Without asserting that this is the chief cause of the low price of the rupee, I think there can be no doubt that the necessity for remitting a great quantity of produce to England, in order to discharge payments in this country, tends to prevent the rupee from rising in value.

6102. If loans were raised in England for the prosecution of public works, what would be the effect on the exchange?—As the amount of remittances from India for the purposes of the Government would at first be reduced, the immediate effect would, I think, be an improvement in the exchange value of the rupee, and consequently a diminution in the export trade; since the money or goods sent from England would obtain less articles of Indian produce in exchange. But, when the loans ceased to be raised here, and the increased amount of interest had to be remitted home, the effect would be precisely that which occurred after 1868, when the guaranteed companies' operations began to be restricted; exchange would fall rapidly; the export trade would receive a further stimulus, and the tendency of prices of Indian produce as measured in sterling would be to fall.

6103. Is difficulty now experienced in drawing from India the amount of remittances required?—In a good season the demand for remittance is sure to largely exceed the Government requirements. In 1882, when, owing to an endeavour to maintain the price of the rupee at 1 *s.* 8 *d.*, very few bills were sold, and silver was being exported to India in large quantities, a calculation was made showing that the trade must take the necessary amount of bills if they were not maintained at a prohibitory price, and the result justified this view. Everything, however, turns on the quantity of the produce to be exported. If the crops fail, or if the local demand is too great to admit of their export, there is no resource but to borrow in this country for the current requirements, which only intensifies the difficulty in future years.

6104. Then, do you consider that the construction of public works from borrowed money is wrong?—I think that, so far as the money can be obtained from local savings or hoards, it is an unmixed good; but, directly the money has to be obtained from abroad, an element of danger comes in, and it then becomes a calculation how far the good to be obtained from a profitable employment of the capital outweighs the evil of a drain to pay the interest to the foreigner. I think that foreign capital should be obtained sparingly and equably; sudden expansions of outlay are perhaps even more wasteful than sudden reductions.

6105. Considering that we have had evidence that not more than perhaps a crore of rupees can be borrowed in India itself annually, do you see any advantage in bringing out the loans in the shape of rupee rather than sterling securities?—No doubt at present the rupee loans cost the country more; and, if we could be certain that, while sending the capital to India at 1 *s.* 8 *d.* the rupee, we could for ever remit the interest home at as favourable a rate, and that the demand for remittances would rise in proportion to our need, there would be no financial disadvantage in borrowing in sterling. The tendency, however, seems to be at present for the price of silver to fall slowly, and this is strengthened by any enhancement of the amount of Government remittances to England. By borrowing in sterling, we throw on the Government, that is the people of India, the risk of loss through a fall in exchange; by borrowing in rupees, they have, it is true, to pay a higher rate, but the risk of further loss falls on the holder of the loan. It is, moreover, politically an advantage to have local capital invested in the new works, which cannot take place if the loans are entirely brought out in London.

6106. Do the accounts as published show the true financial result of the railways?—At page 107 of the Accounts of the Government of India for 1882–3 (a yellow book, of which a copy has been sent to each member of the Committee), will be found a table showing the financial result of the working of each of the principal lines constructed by the Government. And at page 52 of Colonel Stanton's Report is a table giving in a compendious form all the information likely to be needed in regard to the chief railways, both guaranteed and State. In both cases, however, it must be remembered that this is the result of the working of the lines in India, no account being taken of the return to the investor if the profits have to be remitted to England. All the guaranteed lines, moreover, publish complete accounts, based on the form of the English railway accounts; and similar accounts are printed in India regarding each of the State lines.

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6107. In the resolution published by the Government of India, which is contained in the papers laid before us, is not exchange taken into consideration?—The capital spent in the construction of the guaranteed lines, which had under the contracts been converted from rupees into pounds at the contract rates, is in that resolution converted back again into rupees, so as to eliminate the question of the contract rate of exchange, and show the real amount of rupees expended. On that capital, with the addition of arrears of interest, the lines are now paying 3·90 per cent. This, however, makes no allowance for the loss by exchange in sending the interest to England. An investor, who sent out his money at 2 *s.* or 1 *s.* 10 *d.* the rupee, and who now had to get the interest home at 1 *s.* 7½ *d.*, would find that he was only receiving 3·17 or 3·45, as the case might be.

6108. Do the Finance Accounts show the real result to the Government of the railway transactions of the year?—Not fully; the account was revised in 1876-77, and the transactions relating to Productive Public Works were separated from the other transactions, in order to show the result distinctly; but, while the figures are all stated in sterling or in pounds of 10 rupees, it must be remembered that 12 or 12½ rupees are really needed for the payment of a pound in England, and the difference is included under the head of exchange, and not in the group relating to Productive Works.

6109. But would there be any difficulty in adding this amount to the Productive Works expenditure?—There are difficulties in attempting, as a matter of account, to appropriate the loss by exchange to specific items of expenditure; but perhaps a subsidiary statement might be inserted under the head of Exchange (in the manner of the specimen which I hand in), showing what is the rateable portion for each of the main heads of account, if the loss by exchange be proportionately divided among the disbursements of the year in England. (*A Table was handed in.*) It might not be a perfectly accurate account, but as an explanatory statement it would be approximately correct; and any one who wished to find out the true cost of one of the great heads of expenditure, such as the Public Works or the Army, would be able to add to the charges as shown under those heads the portion of exchange rateably belonging thereto; I may, however, mention that, in communication with Mr. Westland, I am now endeavouring to exhibit the exchange question more clearly in the accounts.

6110. Does the table contained in Despatch 143 to the Government of India, which has been laid before the Committee, give the total charge for railways that has been borne by the Government?—It gives the complete charges that have appeared on the accounts; but it has been argued that, as the Government has in the course of those 37 years advanced 41 crores of rupees to the companies, including the payment for interest on State lines, and has at the same time been contracting loans, the interest on loans to the amount of 41 crores has really been charged in the accounts as a result of the railway policy, but is not shown in that statement.

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6111. In that view of the matter, what further charge would have to be added to the 41 crores?—*Assuming an average rate of interest at 4 per cent. throughout the period, the additional charge* is about 36¼ crores, against which must be set a credit of 6¼ crores for interest on the balances of the companies in the hands of the Government. This would make a total charge exceeding 71 crores, or, on the average, nearly 2 crores a year for 37 years, which represents the price paid by the people of India for the numerous advantages they have derived and are deriving from the use of the railways.

6112. How do the financial results of the particular railways illustrate the operation of Lord Hartington's definition of a productive work?—I think that they show that it would have admitted all the best of the lines, but would have led to the rejection of those which have proved commercially unremunerative. I think that the rule must be taken as meaning that the railway shall be likely to pay 4 per cent. in five years from the time of its being opened for traffic throughout, or (as it is expressed in regard to irrigation works) from the date of the completion of the works, not, as Major Conway Gordon said, from the mean year of its construction, for the larger lines were not finished within five years from the mean year of construction. I have prepared a table which illustrates the rule. (*The same was handed in.*) The East Indian Railway was virtually completed, including the Jubbulpore line, in either 1867 or 1871, according as the Chord line is included or not; in the one case, the fifth year would be 1872, when it paid 5·25 per cent.; in the other case, 1876, when it paid 7·12 per cent. The other lines show the following results: The Great Indian Peninsula (completed in 1870) in 1875 paid 4·77 per cent.; the Eastern Bengal (completed in 1871) in 1876 paid 5·80 per cent.; the Bombay and Baroda (completed in 1872) in 1877 paid 5·50 per cent.; the Madras Railway (completed in 1873) in 1878 paid 1·44 per cent.; the Scinde, Punjab, and Delhi (completed in 1870) in 1875 paid 1·94 per cent. So with the principal State lines; the Rajpootana Railway may be viewed as practically completed in 1880; in 1882 it was paying 5·57 per cent.; the Patna-Gaya (completed in 1879) in 1882 paid 5·43 per cent.; the Northern Bengal (completed in 1878) in 1882 paid 5·23 per cent.; the Burma Railway (completed in 1877) in 1882 paid 4·74 per cent. The Indus Valley (completed in 1878) in 1882 paid 1·94 per cent. The Hathras Railway (completed in 1875) in 1880 paid 5·30 per cent. The Tirhoot (completed in 1877) in 1882 paid 3·25 per cent. Thus, it appears that almost all the lines which are really remunerative did fulfil the condition; and that, whatever may be the importance of the other lines, it would not have been justifiable to execute them as commercial ventures.

6113. Then, how are the famine lines to be constructed?—The Despatch of Lord Salisbury in 1874 provided for the case. He refused to permit the cost of such lines to be shut out of the accounts for the year, on the plea that they were likely to be eventually remunerative, or that

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that their charge would be covered by the productive lines; but he said that, when it was essential to construct such a work, it might be undertaken, and that, if the result were to show a deficit, he should be prepared to replenish the balances by a loan.

6114. Can you illustrate the operation of this rule?—The Quetta Railway this year affords an example; for, whether the urgency for the line is caused by political or by protective considerations, the principle is the same. If the determination to construct it had been announced before, instead of shortly after, the Financial Statement, Sir Auckland Colvin might have had to show in his Budget a deficit instead of a surplus; but it would have been quite legitimate to have said, "The Government do not propose any new taxation to cover the deficit caused by the undertaking of this railway; if the result of the year should prove better than we can now venture to anticipate, the cost may be met from revenue; otherwise we shall borrow to cover the deficiency."

6115. Then, do you think this rule would not prevent the construction of the famine lines?—It should not prevent the construction of lines really needed; but it would probably make the Government very chary of undertaking lines not absolutely necessary, which would not be a result to be regretted.

6116. If the distinction between productive and protective lines were abolished, and the Government of India were allowed to borrow for any lines which, on its responsibility, it considered necessary, what in your opinion would be the result?—A revival, I think, of the disputes which continually took place in and out of Parliament before 1874, when the Punjab Northern Railway and Orissa Irrigation Works were pointed to as specimens of extraordinary works, and the Government was accused of endeavouring to conceal the true result of its policy by excluding their cost from the expenditure of the year. By omitting to show among the annual charges the capital outlay on all railways, whether expected to be directly remunerative or not, continual additions would be made to the debt which may be held to have already accumulated as the result of the railway policy in times past; for it must be remembered that that accumulation, whether taken at 41 or at 71 crores, mainly represents payments for interest, and is in addition to the debt which has been incurred in the actual construction of the lines, and which may be supposed to be covered by the property. Any surplus accruing from the receipts of productive works, instead of being available for the general purposes of the Government, or for the reduction of that accumulation of debt, would be appropriated to meet the loss on further unproductive lines.

6117. Returning to the question of loans, was there an unusual fall in the price of rupee securities at the beginning of 1884?—The diagram which I hold in my hand (*handing in the same*) shows the fluctuations of price in the 4 per cent. rupee securities since 1861, when they were at 79. They rose to 99¾ in 1863, fell to 92⅛ in 1864, but rose again immediately to 97¾; then fell with slight fluctuations to 85¾ in 1866, whence they rose pretty steadily to 105 in 1873. Thence they fell to 91¼ in 1879, and rose again to 106⅜ in 1881, whence they dropped to 94½ early this year, but very soon rose again above par. It is a mistake to suppose that the recent drop to 94½ is anything very unusual; the price has in recent years been unduly high, owing to exceptional circumstances.

6118. What is the saving that would be effected by borrowing in England, if exchange were to remain unaltered?—If a crore of rupees be borrowed in India at 4 per cent. at par, the charge for interest is 4 lakhs of rupees; and if that crore of rupees be remitted to England at 1 *s.* 7⅛ *d.* the rupee, it will realise 812,500 *l.*; if, on the other hand, this sum of 812,500 *l.* be borrowed in London at 3½ per cent., at par, instead of being raised by the issue of a rupee loan, the charge for interest will be 28,437 *l.*, while the four lakhs that would have been so paid in India, if remitted to England at 1 *s.* 7½ *d.*, will give 32,500 *l.* The saving is therefore 4,063 *l.* on each crore of rupees; and, if invested as a sinking fund at 3½ per cent., would redeem the sterling loan in 60½ years.

6119. Where, in your opinion, should the line be drawn between the raising of a loan in India or England?—I do not think it possible to lay down any precise rule; but, speaking generally, I hold that loans in sterling should only be raised in repayment of other sterling liabilities, or in cases of emergency. I think it better to pay more interest, and to let the generation which incurs the debt feel the pressure of doing so, than to risk the imposition of a greater burden on posterity. It seems to me better now to borrow a crore at 4 per cent. in the metal in which India receives her revenue, the interest charge being four lakhs a year, than to borrow 928,571 *l.* at 3½ per cent. in a metal only connected with her revenue by a fluctuating rate of exchange. The latter course would, it is true, at 1 *s.* 7⅛ *d.* the rupee, supply the Government of India with 114¼ lakhs of capital for the same annual charge of four lakhs; but this would be coupled with the risk of having the burden of paying the interest, and eventually the capital, increased through a fall in the exchange. I do not consider that the Government ought to speculate. The London market will always have to be resorted to in times of real pressure in India, and I think that the power of borrowing in it should be used very sparingly.

6120. Have you some Statements, in conclusion, which you wish to give to the Committee?—Yes; the first is a Statement of the payments under the head of Famine Relief and Insurance, from 1881-2 to 1884-5, which illustrates Mr. Westland's replies to Questions 5146 to 5150. The second Statement gives the detail of the total of 14,710,000 *l.* which, in reply to Question 5157, he mentioned as having been expended on famine relief from 1873-4 to 1882-3. The third Statement shows the extraordinary or abnormal items, amounting to 36,105,000 *l.*, which, in answer to Question 5181, he stated to have been charged from 1871-2 to 1882-3. (*The Tables were handed in*) Perhaps on this point I may be allowed to say that there seems to have been some misapprehension in Sir George Campbell's ex-

Chairman—continued.

amination of Mr. Westland in regard to this statement; on the 12 years there has been a net deficit of 559,240 *l.* (which, however, vanishes, as Mr. Westland said, if Imperial and provincial figures are taken together; that is to say, the increase of the provincial balances is greater than the net deficit). And this was the result after defraying 36,105,000 *l.* of abnormal expenditure. The transfer of charges in the Debt Account, from the ordinary to the Productive Works portion, on account of outlay in former years on the Ganges and Jumna Canals and similar works, has nothing to do with this statement, and in no way affects the surplus or deficit of those years.

Mr. *Samuelson.*

6121. You spoke of borrowing from "the foreigner"; is that an accurate expression in regard to the relations between this country and India?—I referred to "the foreigner" from an Indian point of view. I meant foreigners to India; I meant English capital chiefly.

6122. Is it not a very ordinary expression, and to a certain extent true, that "capital knows no country"?—Yes, that is true.

6123. And is it not generally held that it is to the advantage of each country to borrow in the cheapest market, whether that country be its own or some foreign country?—I think that the point lies entirely in what is the cheapest market; it is the question of exchange; that was my point.

6124. And that you took care to make plain in your statement?—I think so.

6125. But I think you assumed that the tendency of silver was to fall?—Yes; I say, I think there is such a tendency.

6126. Has that been borne out by the course of the price of silver within the last two or three years?—The average rate at which bills have been sold, was in 1877-78, 1 *s.* 8$\frac{3}{4}$ *d.*; in 1878-79, it was 1 *s.* 7$\frac{7}{8}$ *d.*; and in 1879-80, it was 1 *s.* 7$\frac{15}{16}$ *d.*, very nearly 1 *s.* 8 *d.*, a little rise above what it was in 1878-79. In 1880-81, it was the same price; in 1881-82 there was a slight fall, viz., to 1 *s.* 7$\frac{29}{32}$ *d.*; in 1882-83, it was 1 *s.* 7$\frac{13}{16}$ *d.*, and in 1883-84 it was 1 *s.* 7 $\frac{11}{32}$ *d*; therefore, the last two years show the lowest average which has as yet been touched.

6127. But, comparing the average price of the last two years with the average price of the two preceding years, has there been any fall?—It is a fall, although a slight one.

6128. A very slight one?—It was not quite a halfpenny in the rupee.

6129. I think it is rather less than a halfpenny?—It is not quite a halfpenny.

6130. Is it not much less than a halfpenny?—It is $\frac{1}{64}$ less compared with what it was in 1879-80, and it is $\frac{1}{32}$ less compared with what it was in 1881-82.

6131. You said it was desirable to avoid disputes as to the correctness of the Accounts; but, of course, you would consider it would be a minor consideration as regards the actual advantage to the country to be derived from public works; you would not put any risk of disputes as to cost in the scale against profits to be derived from the

Mr. *Samuelson*—continued

execution of works, whether they gave rise to disputes as to the accounts or not?—I was speaking of the alteration of the accounts solely with the view of arriving at accuracy; I consider that the question as viewed by private capitalists would be looked at including the question of exchange, which cannot be shown in the accounts distinctly.

6132. Then as regards borrowing in rupees, you stated that you thought the Government should not run the risk of borrowing in a metal which was not the circulating medium of the country; but, if it should be the case that the borrowing, whether in rupees or sterling, does ultimately take place in this country, is it not the fact that the speculation is ultimately upon the Government, seeing that private individuals must guard themselves against the risk which the Government must otherwise run?—The Government, as I said, may have to pay a higher price; that they know at the time that they contract the loan; but they will not, in the case of a rupee loan, be subject to an uncertain increase by a fall of the exchange afterwards; any such increase falls upon the holder of the loan.

6133. But he takes that into account in the price which he charges?—No doubt.

Sir *George Campbell.*

6134. Can you tell the Committee, since the famine fund was first started, how much of the money has been devoted to the repayment of debt?—In 1881-82, 715,151 *l.*, and in 1882-83, 1,343,555 *l.*

6135. I think you put in a statement of that kind, but was there nothing paid before that?—Not since the famine insurance fund has been started.

6136. When was the famine insurance fund started?—In December 1877 the measures were proposed; 1878-79 would be the first year in which it would come into force.

6137. Do I understand, that until 1881-82 nothing was paid towards the reduction of the debt?—Not before that; it was at the time of the Afghan war, and there was no possibility of paying off debt.

6138. Is this an accurate statement which you have handed in; in 1882-83 it was 1,300,000 *l.*?—Yes.

6139. And in 1883-84 it was 573,000 *l.*—Yes; the large amount in 1882-23 was consequent on the arrangements made with the Southern Mahratta Company, owing to which very little outlay was charged to Protective Works, so that there was more left for the Reduction of Debt.

6140. I find that according to the Budget Estimate of 1884-85 only 301,000 *l.* are to be applied to that purpose; how is the rest spent?—Chiefly upon Railways; it is a matter of average. The average is 750,000 *l.* annually for the Reduction of Debt, and 750,000 *l.* in Protective Works. But, as I said, the transactions with the Southern Mahratta Company gave an unusual amount in 1882-83 for the Reduction of Debt; and this has left a larger amount than the average to be devoted to Protective Works in the coming year.

6141. Do

Sir *George Campbell*—continued.

6141. Do I understand that out of the whole 1,500,000 *l.*, nearly 1,200,000 *l.* are to be given to protective works in 1884–85?—The amount to be allotted to protective works in 1884–85 is increased by a special apportionment of 250,000 *l.* from the provincial balances. In the table I have given, under the head of famine relief and insurance, the amount is not the usual 1,500,000 *l.*, but is increased to 1,750,000 *l.* for 1884–85.

6142. How is that 1,750,000 *l.* spent?—£. 1,139,000 is on protective railways; 310,000 *l.* on protective canals, and 301,000 *l.* on the reduction of debt.

6143. Does that fairly fulfil what you told the Committee, that nearly one-half of the whole famine fund is to be devoted to the reduction of debt?—If you add up the total amount of payments for the reduction of debt in the four years, I think it comes to as nearly as possible 3,000,000 *l.*, which is 750,000 *l.* a year. The whole calculation is on an average; a larger amount than the average having been given for the reduction of debt in the last three years; the Government of India have assumed that they have a right to give a relatively larger amount to protective works this year.

6144. Do you think that the Government of India are justified in taking into account the excess of the money out of this fund devoted to the reduction of debt in 1882–83, leaving altogether out of account the failure to reduce the debt in due proportion in the three years previous to 1881-82?—There was an entirely new start made in 1881 by Lord Hartington, after the Afghan war had shown the failure of the old system. He then required that 750,000 *l.* should be set aside and given to the Commission which was established for the purpose. Previously to that, the Government of India had contented themselves with saying that they were borrowing so much less; and, as in a time of war it was impossible to say what they would otherwise have borrowed, it was not considered a satisfactory way of fulfilling the promises that had been made. Accordingly, Lord Hartington, when Sir Evleyn Baring was in India, adopted the plan of appointing a Commission for the reduction of debt, and allotting to them 750,000 *l.*, if so much remained over after the famine relief.

6145. Then, as regards the existing orders, do I understand you to say that at present the order is this, that one half of the 1,500,000 *l.*, that is to say, 750,000 *l.*, may be devoted to protective works, and that any famine relief which may be necessary, of a minor character, must come out of the remaining 750,000 *l.*, before the balance is applied to the reduction of debt?—That is the present position of affairs. I said, just now, that the amount for the reduction of debt would almost equal the 3,000,000 *l.* in the four years. If you add the small sum of 67,000 *l.*, which has been spent in actual relief, it will exactly come to that.

6146. When was that 67,000 *l.* spent?—£. 35,000 was spent in 1881–82; 22,000 *l.* was spent in 1882–83, and 10,000 *l.* was spent in 1883–84.

6147. The Committee may assume that, apart from great famines, the amount applied to the

Sir *George Campbell*—continued.

reduction of debt in future will be considerably less than 750,000 *l.*, since all our partial famine or relief work must come out of that 750,000 *l.*?—I do not think we need assume that it will be considerably less, because the average has only been 22,000 *l.* in the last three years; it will be somewhat less, no doubt.

6148. Must we not assume that there will be famine and scarcity in different parts of India at one time and another?—I think so, apart from great famines

6149. But apart from great famines, we must assume that there will be partial scarcity?—No doubt there will be some scarcity; but in the six years the whole outlay has only been about 520,000 *l.*

6150. Then, it being the case that the last two famines in the course of the last 10 years have cost something like 15,000,000 *l.*, is it not the case that at the present rate of progress the probability is that that amount will not be defrayed from the Famine Fund for 20 or 30 years?—The intention is only to repay one half; it has been agreed that the other half shall be devoted to protective works, because it is expected that such works will reduce the amount of the debt to be incurred when famine arises.

6151. Quite so; but what I want to ask you is whether it is not the case that the cost of the last two famines will not be paid out of the Famine Fund for 20 or 30 years at least?—No doubt, but the policy has not been to endeavour to pay off the past debt, but to avoid the incurring of future debt; and, if the protective works answer the purpose of reducing the expenditure in a future famine, the result will be gained.

6152. Take it that we are now putting aside protective works; supposing we wipe off the cost of the past famines, and think it necessary to accumulate a money fund to meet future famines, how long would it take to accumulate 10,000,000 *l.*?—Supposing 650,000 *l.*, upon the average, can be put by, it would be about 15 years.

6153. Has the Government considered whether in reality those protective works will very materially reduce the actual money cost of future famine?—I suppose that each particular work must be viewed separately in that way; in some cases it will absolutely reduce the cost of famine; in other cases it will only give the administrative advantage of enabling the Government to keep the population alive.

6154. Confining ourselves to railways, have the Government considered whether in reality the construction of railways, in districts where they would be otherwise unremunerative, will reduce the money cost of a famine?—I think it is considered that to some extent it will reduce it. You must regard the railways as being none, or scarcely any of them, expected to be a positive loss; you must add the receipts from those railways, which, although they will not amount to 4 per cent., will probably amount to 2 or 3 per cent.

6155. But putting all that aside, has the Government considered whether the existence of those railways, though it will lead to an economy of life, will lead to an economy of cash?—The Government of India of that day did distinctly ex-

Sir *George Campbell*—continued.

pect that it would reduce the cost of a famine when it occurred.

6156. As regards the offers which were made for the construction of the large proposed railways, were not you in error in saying that the Great Indian Peninsular Railway Company proposed to make a railway from Bhopal to Cawnpore; was not it merely that the directors proposed to recommend to the shareholders to do so?—Yes; the proposal had not come before the Company.

6157. Then as regards the offer of Messrs. Hoare, Miller, and Company, to which you alluded, do you think that that offer was even formulated in such a shape that, if the project had not floated, the Government would have been in a position to have compelled Messrs. Hoare, Miller, and Company to carry out the proposals?—I do not think it took that shape, but the negotiations were in India, and I was not conversant with them.

6158. Do you think, where a commercial firm makes an offer of this kind, it would be an offer which could be enforced?—I do not know that the contract was signed.

6159. But supposing the contract was signed, would it be possible to enforce such a contract?—It must depend upon the people who have signed the contract, and upon the possibility of the Government pressing the claim against them.

6160. Do you at all agree with other witnesses who told the Committee that the success of a project of this kind depends upon the shares being run up to a premium for some time, however short; for I think other witnesses told the Committee that, unless the shares could be run up to a premium say for only six weeks, so as to enable the promoters to make a profit, projects could not be floated?—I mentioned, in speaking of the Bengal Central Company's terms, that I thought the advantage of that method was that it enabled the promoters to pass their holding on to more permanent investors; it is impossible to place it at once; there must be a certain medium, a body of promoters who must make their profit.

6161. I think you told the Committee that it is expected that 4,000,000 *l.* or 5,000,000 *l.* will be borrowed in the course of the next four or five years by Port Trusts and Municipalities; how is it proposed to borrow the money? is it to be borrowed from the Government of India under the Public Works Loan Act, or are they to go into the open market?—The present instructions are that they shall borrow in the open market. About 1878 the Government of India decided that they would not continue the plan of advancing money to these great bodies, and that they should stand upon their own security; that policy has not been reversed.

6162. Is it proposed that they should borrow in the open market in this country?—It has been decided that they shall borrow the money they require this year in India, but that will not be a very large amount.

6163. How does the law stand as regards power to borrow in this country?—The Calcutta port Trust has within the last few weeks had a law passed by the Bengal Council to enable it to borrow in London; hitherto it has not been possible to do so. The Port Trust cannot come into the market without the sanction of the Government, who can determine when the amount shall be borrowed, and where; the Government is not at present inclined to give sanction to borrowing in London.

6164. Was that law passed by the Bengal Legislature?—By the Bengal Council, I believe.

6165. Has any legal advice been taken as to the power of the Bengal Council, or the Council of the Governor General of India, to enable bodies to borrow in the London market, seeing that the Government of India itself is altogether prohibited from borrowing in the London market without an Act of Parliament?—It is merely a permissive law, that they may do so if the Government see fit to allow it.

6166. Do I understand that the Government of India cannot borrow in the London market without an Act of Parliament?—I do not know whether I can answer that question positively, because it has never been tried. The Secretary of State cannot without an Act of Parliament, and I should question very much whether the Government of India have the legal power to do so; but I do not think there is any law preventing their doing it; therefore I am not prepared to say whether legally they could. I think it is rather a question of policy, that the Secretary of State will not allow the Government of India to borrow as a rival to himself.

6167. Do you say that this law enabling the Calcutta Port Trust to borrow in the London market has been actually passed?—Yes.

6168. Do you know whether they have legal power to do so?—The introducer of the Bill said that it was the legal power to do so, which it was desirable to obtain. I do not know the whole history of the Act, and have not studied the subject.

6169. Do you think that the point has been considered in the India Office?—The Secretary of State has not given his consent, though the case has come home. I do not think it has yet been before the Secretary of State in Council.

6170. Under the usual rule, did not this Act come home for sanction before it was introduced?—I believe it did not. I believe the point is under consideration as to whether it should not have been so sent; but, as I said before, it is purely permissive; it must have come home if it had been intended to take action upon it.

6171. What are the great undertakings upon which it is proposed to spend 4,000,000 *l.* or 5,000,000 *l.* by the Port Trust or the municipality of Calcutta and other places?—The new docks at Calcutta, the harbour at Madras, and the new dock at Bombay.

6172. Under what head is it proposed to borrow money for the Madras Harbour?—A Port Trust is to be constituted.

6173. For the Madras Harbour?—Yes.

6174. And are they to borrow any money?—They are to borrow.

6175. Upon what security are they to borrow?—When I say they are to borrow, I should say they will have to borrow; they do not exist as yet; it is only under discussion, but it is contemplated that there will be altogether as much money raised as I have said.

6176. I understood

Sir *George Campbell*—continued.

6176, I understood you to say that the export of silver from America had lately diminished very much?—Yes, it has.

6177. Have the Government of India gone into the question of the production of silver in the world at present?—I did not refer to production; I referred to what comes from America.

6178. The Government of India is very much interested in the silver question; have they gone into the question of whether the production of silver in the world is increasing or decreasing?—No correspondence has taken place upon that subject recently.

6179. As regards the protective works which are made out of revenue and not debited as productive works, in what way are the net receipts from those railways re-credited?—They are included in ordinary revenues under the head of State railways; that is to say, public works not classed as productive.

6180. In case of their coming to pay, say, 2 or 2½ per cent., is the outlay ever re-credited in any shape?—You are speaking of lines which have been constructed from revenue, not from borrowed money. The cost is not treated as a question of debt, it is included under expenditure on protective railways, and the receipts come in under the head of receipts from State railways not classed as productive.

6181. Would you refer shortly to the statement you made in correction of what passed between Mr. Westland and myself with regard to the deficit, because it is very much connected with this question of re-credit?—My point is that that re-credit is entirely beside the question of revenue and expenditure; it is merely a question of transfer in the debt account from the ordinary to the productive portion of the debt.

6182. So that in reality, during the period Mr. Westland mentioned of the last 10 or 12 years, there has been a large deficit, which was only avoided by re-crediting those works which were made from revenue in former days?—No, I say there has not been any such deficit, except 509,300 *l.*

6183. I understand Mr. Westland to reduce the deficit to small figures, by re-crediting the large amount from previous works?—I think the statement I have handed in will explain that.

Mr. *Edward Stanhope.*

6184. You spoke just now of the question, which you said had not been decided, as to whether the Government of India have any right to borrow in this country; practically, I suppose any attempt on the part of the Government of India to borrow in this country would be regarded in somewhat the light of an attempt to evade Parliamentary control, and would probably have been forbidden upon that ground?—I think so.

6185. I think you referred to the rule which had been laid down, that you ought to borrow in India for public works, unless the difference in rate of interest were so considerable as to afford full compensation for the disadvantage of borrowing in England?—I think so.

6186. You think that practically that rule ought to be adhered to at the present time?—Yes, certainly.

6187. But at this moment it may be that the difference in the rate of interest is sufficient to justify a moderate amount of borrowing in this country?—I think it should be carefully considered whether it is so or not.

6188. You are not prepared to say that the difference would justify borrowing to any extent in this country now?—Not for a larger expenditure upon public works than has been hitherto incurred.

6189. May I put your objection rather in this way? Supposing you could borrow in England at 3 per cent. and in India at 4 per cent., the effect would be this, that when you borrow at 4 per cent. in India you know the worst of it, but when you borrow at 3 per cent. in England you have to run the risk, if the rate of exchange should fall, of having to remit a larger number of rupees to pay the interest, and the principal?—Yes.

6190. You think it would be better that the present generation should be made to suffer, and that thereby a check upon undue borrowing should be afforded, rather than make the future generation pay for present advantages?—I think so.

6191. I understand your general policy to be that if you borrow for public works you should borrow sparingly and equably?—Yes.

6192. I need not ask you whether borrowing 6,000,000 *l.* a year for five years does not go a good deal beyond the definition of "sparingly"?—Certainly; but may I say that the 6,000,000 *l.* includes the companies' borrowing.

6193. Would you not therefore rather be of opinion that it would be desirable that our public works policy should be continuous and settled for a considerable number of years?—I think that great and sudden changes are very much to be deprecated; I am not sure that it is wise to pledge yourself to what is to be the policy for many years, but at the same time I think that any departure from an existing policy should only be a gradual one.

6194. Let me ask you this; should not your forecast of expenditure be made over a longer period than five or six years?—I think it would be desirable that it should be.

6195. So that although it would be in your power to lower your rate of expenditure if circumstances altered, yet you think it would be desirable upon the whole to make a forecast ahead over a longer period than five or six years?—That I think is desirable; the main point being that the Government should hold itself free to adjust its expenditure to any altered circumstances.

6196. Suppose that the proposals of the Government of India were to be adopted, and you were to borrow between the Government and the companies 6,000,000 *l.* a year for the next five or six years, what do you think would be the effect upon the rate of interest?—I think it is a mistake to suppose, because a loan of 3,000,000 *l.* has lately been raised at practically 3¼ per cent., in repayment of existing debt at 4 per cent., that therefore the Government can raise at the same price twice that amount,

Mr. *Edward Stanhope*—continued.

not in repayment of any other debt, but in addition to the debt already existing.

6197. On the ground that if at any moment during those five years there was to be a great famine in India, we might have to borrow another 10,000,000 *l.*?—Quite so.

6198. And that would almost inevitably have an effect upon the rate of interest?—*I think so*; 10,000,000 *l.* in any one year is a very large sum; it would probably be spread over a longer period.

6199. But I meant if a famine occurred it might be necessary to raise that sum on the whole?—It might.

6200. Would not the probable practical result be that Parliament would step in and upset your policy about Public Works, and restrict them to a very large extent?—*I think it most* likely, judging by the past, that it would.

6201. You have spoken of the large increase of remittances which has taken place since 1868. The effect of this proposal to borrow anything like 6,000,000 *l.* a year for five years would be to add to those remittances, at any rate, one million or a million and a quarter a year at the lowest, would it not?—*Yes, after a time.*

6202. Do you think we can safely increase the amount of remittances at the present time?—No, I think it is not safe to do that; I am not able to say that India may not be able to bear it, but I do not think it is safe to reckon upon her being able to bear it.

6203. Indeed the amount of remittances which have now to be made from India to this country is about as much as the country can bear, is it not?—I think it ought to be reduced if practicable; I do not say that it can be.

6204. Practically the best way of reducing it would be by trying to reduce the sterling debt in this country rather than increase it?—That has been the principle upon which the rules laid down about famine insurance have been instituted.

6205. I wish to ask you a question about the Quetta Railway; you did not mean to suggest that we should include in the estimate of any year less than was likely to be expended in the year?—I meant that we should include all that was to be expended.

6206. Now with respect to the Public Works Department, do you think there is any advantage in the system that was tried for two or three years in putting the Public Works Department more directly under the control of the Financial Department in India?—I do not think that I am competent to give any opinion upon that point; it has not been discussed since I have been Financial Secretary, and I do not think any opinion I could give would be worth giving.

Mr. *Bolton.*

6207. I do not think you expressed any opinion adverse to the proposals of the Indian Government as to the probable or prospective expenditure upon railways, except in so far as it might affect remittances for interest from India to this country?—I did not discuss the question whether, apart from that, a large outlay was desirable, because I think that Mr. Westland has given you better calculations than I can make as to the

Mr. *Bolton*—continued.

prospect of the finances; but I certainly think that the present financial position of India does not justify any very large addition to the future burden on the revenues; I should be very sorry to see any step now taken which would compel us to add largely to our outlay in India.

6208. Although the funds required for that outlay were borrowed in India in silver?—If it were a contingency that it added largely to the expenditure of the year; I do not think the surplus justifies a large addition to the expenditure of the year, apart altogether from the question of the remittances.

6209. Do you consider the proposed outlay by the Indian Government, which we may take at 5,000,000 *l.* or 6,000,000 *l.* a year, too great?—If a large portion falls upon the Government, I think it is too great; my objection upon that point does not at all affect the outlay by companies.

6210. Which might be receiving the Government guarantee?—I do not think the principle of inducing companies to enter upon railways by a temporary guarantee a good one, unless the railways are likely to be remunerative.

6211. But taking the Government proposal as it stands, which you may take to be a proposed expenditure of 35,000,000 *l.* during the next five or six years, if that expenditure is through guaranteed companies, do you then object to it?—The 35,000,000 *l.* includes some outlay on canals; it would be more like 33,000,000 *l.* for railways; I think that the proposal to enlarge the annual expenditure in connection with railways, which would result from the adoption of that scheme, is not a safe one, considering the small surplus that there is at present, and the financial outlook of the country generally. But at the same time it is a question of degree which the Government of India can judge of year by year, provided that it has not fettered itself by arrangements with companies.

6212. You look with some apprehension upon it being carried into effect, even though it were through the medium of guaranteed companies?—Through the medium of guaranteed companies I should.

6213. To what extent should you reduce it?—I do not think I am able to give any precise figures; I understand Mr. Westland's calculations to show that there is an increase to be anticipated of something like 250,000 *l.* a year in the net revenue, and I do not think that it would be safe to spend that 250,000 *l.* on railways, leaving no surplus beyond that which now exists, to meet other contingencies.

6214. What proportion would you say?—I think I would rather say that the Government of India should not fetter themselves by engagements to spend any proportion; I see no objection to their spending it in a particular year, but I should not like them to give guarantees which would compel them to devote this surplus to railways for the next five years, and then, if some unlooked-for deficiency of revenue or an increase of expenditure arose, to immediately put on fresh taxation.

6215. Is not that condemnatory of the system of guarantees?—*Of the system of guarantees* beyond a certain amount, it is, I think.

6216. To what amount would you go; what amount

Mr. *Bolton*—continued.

amount would you think it desirable that the Government should undertake in guarantees?—I think that must be judged year by year as far as possible.

6217. But, once a guarantee is given, it must last for the full term?—Yes, quite so; I meant that the grant of fresh guarantees must be judged of year by year.

6218. Do I understand that you object to the system of forecasts?—I do not object to the system of forecasts with regard to outlay; I think that they are necessary, but at the same time I should be very cautious as to the extent to which I fettered myself by engagements.

6219. Supposing a forecast that gives you a certain probable surplus, how much of that probable surplus would you think it desirable to come under an engagement to expend?—I do not know that it is possible to say what proportion; a certain proportion might be granted to railways no doubt, but not the whole; but whether it should be a half or a third, I am unable to say positively.

6220. You could not determine that?—I do not think I could determine that.

6221. You have evidently a great objection to increasing the amount of interest payable in this country on loans?—I have.

6222. And you have put the saving, I think, of borrowing in this country as compared with borrowing in India, at about a half per cent. per annum in round figures?—I think it is about that.

6223. I think you made it about 4,000*l.* per crore of rupees?—£.4,063 upon each crore of rupees taken at 1 *s.* 7½ *d.*; but then the calculation depends upon the permanence of the rate at which the crore of rupees was remitted. At 1 *s.* 7½ *d.*, a crore of rupees is 812,500*l.*, on which it is exactly a half per cent.

6224. Your objections to borrowing are minimised, provided the borrowing takes place in the metal which is used in the currency of the country, that is, silver?—They are minimised.

6225. Would you limit, do you think, the expenditure to the amount which can be borrowed in India?—I think that the extent to which borrowing should be permitted should not be greatly in excess of that which has been laid down for many years now.

6226. I presume we may take it for granted that it would not be possible to borrow in India at an extra cost of a half per cent. to an extent necessary to carry out the proposals of the Indian Government for the next five years?—I think certainly not.

6227. Have you any opinion as to the amount which could be borrowed at the extra cost of that half per cent.?—We have found that we could occasionally borrow three crores in a year. On one occasion lately it was as much as 313 lakhs, and it did not drive the price down; but that was before the London market had become so shy of taking rupee securities; whether we could borrow to that extent now without driving down the price, I am not certain.

6228. You find that the rupee loans are held in the proportion of about a fourth by natives?—Yes.

Mr. *Bolton*—continued.

6229. Then to the extent of three-fourths of the money borrowed for India, it practically makes no difference whether the money is borrowed in India or in London, except that the risk of the exchange is thrown upon the lender and not upon the borrower, at least, not upon the Indian Government?—And that, if it is borrowed in the shape of sterling debt, it adds to the remittances.

6230. Does not it also add to the remittances if the loan is held by people in Europe?—I was going to say, the remittances which are put upon the market every week.

6231. Would they not be put upon the market in the same way by the holders of the loan?—I think the Indian market is affected by what amount is published yearly as the amount of drawings, but I do not suppose that it does in the long run make any material difference.

6232. Do not you suppose that if the whole of the remittances were in the hands of the Government, they could keep the rate of exchange more favourable to themselves, than if a proportion, say 25 per cent., were in the hands of the public, and 75 per cent. in the hands of the Government?—To a certain extent the Government would have an advantage, from regulating the amount that was to be remitted each week; but I do not think that it is possible for the Government to take the whole of those transactions into its hands, and I see no particular advantage in increasing the amount which is publicly announced as being in the hands of the Government.

6233. And you do not see any disadvantage, looking at the rates of exchange which the Government can obtain, in the larger proportion of the remittances yearly, which are made to England, being in the hands of the public, and therefore competing with the Government?—I think if the amount now in the hands of the public were to be increased, the amount in the hands of the Government remaining unaltered, there would certainly be a disadvantage; that is to say, my objection to the increase of remittances applies, whether it is raised by borrowing through the Government or by companies; but I do not think it makes very material difference how it is allotted between the Government and the companies; the question is what annual amount India has to pay to what I have termed "the foreigner."

6234. You do not think there is much in the fact of there being competition?—Not much.

6235. What there is is adverse to the Government, I should think?—Rather.

6236. Do you feel so certain that the price of silver will continue to tend downwards?—No, I do not feel at all certain about anything connected with the price of silver.

6237. If it took an upward direction, the Government would be gainers by borrowing in this country, would they not?—Yes, they would.

6238. Now that silver is abnormally low?—Yes; but I do not know what America is going to do, or France.

6239. However, that would be the effect, whereas a change in the other direction would bring as much profit to the Government as the change downwards has brought loss?—Yes; that

Mr. *Bolton*—continued.

was what I meant when I said that the Government ought not to speculate.

6240. I think I understand that your principal objection to the proposals of the Indian Government for expenditure upon public works is the increased remittances to this country, which must take place, for interest either through remittances for the holders of the loan themselves in India, or by the Government to meet the interest upon sterling loans?—My chief objection is the increase of remittances, but the increase of the debt also would be an objection.

Mr. *Wodehouse.*

6241. Have you expressed any opinion as to whether the proposals of the Government of India as to railway extension, if sanctioned, would involve an increase of the existing taxation?—No, I have not; I think the Comptroller General, Mr. Westland, is a better judge than I am as to the prospects of revenue; he has given you very full particulars as to the probable result.

6242. And you have no opinion to express upon that point?—None, except that I can see positively what will be the increased charge from a large borrowing. I cannot see what will be the increased receipt from the railways; that is an uncertain matter.

6243. Would there be no necessity for increased taxation in the event of a great falling off in the opium revenue?—Yes; but that would hardly affect the railway proposals of the Government of India, if their prognostication that they would pay their way were to be fulfilled.

6244. Then the calculation rests upon the estimate of railway receipts in the coming years?—Yes, quite so.

Mr. *William Fowler.*

6245. Do I understand that you would desire to continue the limit laid down by the Committee of 1879, or not?—I should be sorry to see it largely departed from. I am not prepared to say that there may not be some expansion, but I should not wish to see any very great expansion.

6246. You would not wish to have a hard and fast line laid down, as I understand?—I consider that no hard and fast line has been laid down; the Select Committee made a recommendation which was in accordance with the policy pursued by successive Secretaries of State; but there is nothing to prevent any Secretary of State, who thought fit, from departing from that, and increasing the amount to be spent in any year.

6247. But practically it would be considered very improper and irregular, would it not?—I do not think so. You must remember that the Select Committee of 1879 made recommendations at the time when, owing to the Afghan war and other matters, there was no surplus of revenue. Circumstances have completely changed, and, if the Secretary of State thought it desirable, there is nothing to prevent the Government from spending freely.

Mr. *William Fowler*—continued.

6248. Your impression is that that recommendation does not apply now?—Yes.

6249. You said a great deal about the limit of borrowing in England, but the Committee have had a great deal of evidence as to the very limited character of the Indian money market, which you have confirmed, I think?—When you say I confirmed it, I would rather say I did not contradict it.

6250. You do not dispute it?—No.

6251. Does not it come to this, that you have either to check the work materially, or have to borrow here in England?—No, you may borrow in rupees, though we should not get the proportion I should like to see raised in India. I should like to add that it is a mistake to suppose that we should have selected a time when the rate of discount was 10 or 11 per cent., to put out a loan.

6252. You do not think that the effect of the peculiar character of the Indian money market would practically be to check the Indian operations of the Government?—No, it is a mere question of price; we might have to put out a loan at 4 or 4½ per cent. according to the circumstances at the time; but I do not think that there is any reason to suppose that money cannot be borrowed in rupees as well as hitherto, if the amount is not too large.

6253. But if you gave 4½ per cent., that would be an extremely adverse operation, as far as the Government of India was concerned, would it not?—Yes, but 4 per cent. rupee paper is above par now. I do not think it would be necessary to pay more than 4 per cent.

6254. You have said a good deal about the value of the rupee as following upon the value of silver; has it not sometimes appeared as if the value of the rupee did not exactly follow the value of silver?—I think that week by week it does not; but generally, I think you will find the two go together very much.

6255. Have you watched that at all?—Yes.

6256. A good deal was said by one of the witnesses as to the beneficial effect upon the natives of India of having a low exchange; have you considered that question as a sort of counter working effect as against the insuring of the Government from having a great loss by exchange?—Yes, a low rate of exchange is a benefit to the producer, not to the consumer.

6257. But then the producers are an enormous class in India, and the prosperity of India depends a very great deal upon their prosperity, does it not?—No doubt; but, as I said in one of my answers, I think that it works round in the end to a reduction of the sterling price of his produce, and that therefore he does not gain to the same extent as would otherwise be the result by the stimulus given to exports.

6258. Is it not a gain to the producer?—A low rate of exchange enables the producer to send more of his goods; but the sending of that larger quantity of goods tends in the end to reduce the price of his goods, and therefore he does not get the full extent of the benefit which the stimulus of cultivation might have otherwise justified him in expecting.

6259. Not the entire benefit, but he gets a great benefit?—No doubt he must get some benefit.

6260. One

Mr. *William Fowler*—continued.

6260. One word more; I should like to ask you with regard to the expression you used that the Government should not speculate; I did not quite follow you there; it seems to me that the Government is in a condition in which it must speculate to some extent; it has a choice of evils; it has either to borrow at a high rate of interest in India, or to pay more upon sterling loans; is not that so?—Yes; the Government can judge in any given year how far the country can bear interest for the loan it proposes to impose; but my opinion is that it should not borrow, except in case of emergency, in gold, because it cannot judge of the effect of that borrowing; it may be the same, or a higher or lower rate of interest than it is professedly paying, but it cannot foresee how it will go.

6261. You think there is greater risk in calculating the future silver value arising out of the payment of interest on sterling loans, than there is in paying a high rate down?—Yes, the paying of a high rate down is not a speculation; it is a certainty.

6262. It is an immediate loss and a permanent loss?—An immediate charge, no doubt.

6263. It is a loss as compared with borrowing cheaper?—It is a loss as compared with borrowing cheaper.

6264. You have told the Committee that you have made a calculation that even upon the very moderate estimate of a half per cent., a loan would be extinguished in 60 years, if the difference were invested?—Yes, if the difference were invested at 3½ per cent.

6265. But in some cases the difference might be a great deal more than a half per cent., might it not?—I do not think so, because the half per cent. is based upon a low rate of exchange, 1*s.* 7½*d.*

6266. You said also a great deal about the Government borrowing sparingly; is it not all a question of degree, having regard to the circumstances; I do not understand that you wish to give the Committee the impression that you are not very strongly impressed with the propriety of extending the railway system as far as possible?—That is not my point; my point is that you should use the London market sparingly, because you must resort to the London market in case of emergency.

6267. I wanted to find out if you agree with other witnesses, many of whom have impressed upon us the almost necessity of a considerable, and as rapid as possible, extension of the railways in India?—I think the views which have lately been taken have exaggerated the time within which the railways are needed. The Famine Commission, which examined the subject very closely, thought the extension they contemplated might be spread over 25 or 30 years. I see no reason why that work should be done in five or six years. I would look forward to doing it steadily, but not so rapidly.

6268. You do not think it very important that a large area should be without railways?—I think it is more important that the people should become gradually familiarised with the extension of railways, than that they should be put down in every district before the people have learnt to take advantage of the extension in many ways.

Mr. *William Fowler*—continued.

6269. The Committee have had evidence before them that they do take advantage very rapidly of the extension of railways?—In some districts they will do so, no doubt.

6270. It has not been a very large operation to have 10,000 miles made in 30 years?—No, but it would be to make 15,000 miles in five years.

6271. Has that proposal come from India?—No, I was rather referring to what was said by the Chamber of Commerce of Bombay.

6272. But by the Government of India?—The Government of India's views are much more moderate than that.

Mr. *Slagg.*

6273. You said, I think, that the Great Indian Peninsula Railway Company have offered to make the Bhopal line without any guarantee whatever?—The directors, first of all, came forward with that suggestion.

6274. Then, at one time it appears that it was within the power of the Indian Government to have that railway constructed without any guarantee?—The Great Indian Peninsula Company made a proposal to raise debentures on a guarantee, which would have fallen upon the State in case of loss; and then, when that was not accepted, the Bombay and North Western Company, as it was intended to call it, proposed to do it without any guarantee, if the terms could have been arranged; but, at the same time, they were watching the result of the Bengal and North Western Company, which was then contemplated, and I believe I should be correct in saying that no really definite proposal was made until that had been tested.

6275. Do you know any other case in which it was possible for the Government to obtain the construction of a line without a guarantee?—I do not think any proposal has been made at all of a *bonâ fide* character. I am not quite sure that some small line was not contemplated in India in that way, but I am not quite certain.

6276. I think you stated that altogether it was proposed to lay out three and three-quarter millions on railway and canal works together out of the Famine Fund?—That would be the total spread over five years.

6277. Do you consider that any limit ought to be imposed with regard to the appropriation of the Famine Fund?—That is the amount that is at present permitted, 750,000*l.* a year, which is divided into about 500,000*l.* for railways and 250,000*l.* for canals.

6278. Do you regard the Famine Fund as a legitimate fund for railway construction or guarantee to any extent, or would you consider that a limit should be put upon that particular sort of supply?—I think the amount allotted to protective works should not be exceeded; that the remainder should be reserved to the payment of debt, and that the works to which this money was allotted should be those which are strictly needed for the prevention or relief of famine.

6279. All the items which I think you have mentioned as contributing to the construction of new lines would be available without fresh taxation?—That is the present estimate of the Government of India.

Mr. *Slagg*—continued.

6280. Are you of opinion that fresh taxation would be entirely avoided without railway extension or guarantee?—I do not think that fresh taxation should be put on for the sake of extending railways more rapidly than they are now being constructed.

6281. Under any circumstances?—No.

Mr. *Kynaston Cross.*

6282. Mr. Slagg asked you a question with regard to the proposed making of a line from Bhopal to Agra and Cawnpore; he asked you whether any definite proposal had been made to construct this line without any Government guarantee?—Yes.

6283. Did any proposal of that kind take such a definite form that it could be considered by the Secretary of State in Council?—I think not; but I have had to derive my knowledge about that rather from others, for so much took place in conversation that the records do not show it clearly; but I understand that no definite proposal was really made, pending the result of the Bengal and North Western Railway being brought out. If that had been a great success, the promoters were prepared to construct the line without a guarantee; but, when that fell somewhat flat upon the market, they said they could not act without a guarantee.

6284. Then you would say that it was the failure of the Bengal and North Western Line to command a market which caused the promoters of this new line to withdraw from the proposals they had made?—That, I think, is so.

6285. The Great Indian Peninsula Company proposed to construct this line?—They did, originally.

6286. The terms upon which they proposed to construct that line were that they should issue debentures?—Yes, at 4 per cent.

6287. These debentures would have to be guaranteed by the Government of India, would they not?—The intention was that the interest should be paid out of the surplus profits of the Great Indian Peninsula Railway Company, and, had the surplus profits not amounted to sufficient to pay that interest, the whole would have fallen upon the Government of India; one-half at any rate would.

6288. Then, in case of necessity, the whole of the interest payable upon those debentures would in the event of failure have come upon the Government of India?—In that case it would.

6289. Your evidence goes generally rather against borrowing either in India or in England?—It goes against any increase of borrowing.

6290. I take it as the general tenour of your evidence that you come to that conclusion from the great uncertainty there is in India with regard to famine, with regard to war, and with regard to what may be the necessary operations upon the frontier?—Yes.

6291. And in times gone by you would say that this has always been before the minds of the Government of India in the recommendations which they have made?—I think so; that they have always had the general financial position in their mind, when they have made proposals in regard to railways.

Mr. *Kynaston Cross*—continued.

6292. And notwithstanding this, the sterling debt has increased very materially in the last 15 years?—Yes, to the extent of 22,500,000 *l.*

6293. So that notwithstanding that the Government of India have always borne in mind the necessity for caution in their expenditure, the sterling debt has increased by 22,000,000 *l.* in the last 15 years, almost in spite of themselves?—Yes.

6294. That is one reason why you say we ought to be exceedingly cautious?—Yes.

6295. Is it not the fact that at present there are certain causes at work which may cause a very considerable increase of expenditure; for instance, the expenditure upon the proposed Quetta Railway?—The expenditure upon the Quetta Railway is, I suppose, large enough to take the whole of the surplus as provided in the Budget.

6296. I think you stated that the amount of the sterling debt which had been discharged from the Famine Fund was only sufficient to pay a very small amount towards any new famine which might occur?—It is sufficient, when there is no important famine in India, to pay about six millions out of the 15 millions that the Government contemplate having to spend in 10 years; but certainly India has been very free from scarcity in the last few years, and I do not know that, apart from great famines, we can reckon upon having as much as 600,000 *l.* a year to devote to the repayment of debt.

6297. With regard to the proposals of the Government of India for expenditure in the next five years upon public works, as compared with the expenditure in the last five years upon public works, I should like to ask you one or two questions. In the last five years I think you said that 8,500,000 *l.* had been spent out of revenue?—Yes.

6298. But in the next five years it was proposed to spend only 3,298,000 *l.* out of revenue?—£. 2,048,000 is the amount from revenue in the next five years, including provincial balances on railways, and 1,250,000 *l.* on canals, making 3,298,000 *l.*

6299. And there has been borrowed in the last five years 11,250,000 *l.* directly by the Government, has there not?—Yes.

6300. And you propose to borrow upon the same method, in the next five years, 13,644,000 *l.*? Yes, that is the amount to be borrowed by the Government.

6301. The amount which has been borrowed by the Government in the last five years is that which I have stated?—Yes.

6302. The Government also propose to obtain from savings banks a repayment of a similar amount to that which has been obtained in the last five years from those means; that is 5,000,000 *l.*?—The Government of India has not said anything about it, but Mr. Westland said it was anticipated that some money could be obtained in that way. I think that the amount of 5,000,000 *l.* which I have taken is rather a favourable assumption for the Government of India.

6303. Mr. Westland reckons upon getting money in this way, but if it is not obtained in this way it will have to be borrowed by the State?—Yes.

6304. Now

Mr. *Kynaston Cross*—continued.

6304. Now 5,000,000 *l.* have been borrowed by the railways?—Yes.

6305. And it is proposed in the next five years that 16,270,000 *l.* should be raised by the railway companies in the same way?—Yes.

6306. But supposing the limited guarantee companies do not come forward under the proposed limited guarantees to provide the 12,670,000 *l.*, do you see at all how that money is to be raised?—I think the answer which the Government of India would make is that some of the railways must be postponed. If it is an essential part of their policy that the whole of the works which they have comprised in Schedule A. shall be constructed within the five years, there is no alternative but for the Government itself to borrow to the extent to which the companies may fail to come forward.

6307. Then if the limited guarantee companies will not come forward to provide this 12,670,000 *l.*, either the railways which would be made by these companies would not be made, or it would be necessary for the Government to give something more than a limited guarantee, or to borrow the money itself, for the construction of these lines? Yes.

6308. Supposing they have to borrow this 12,670,000 *l.* for the construction of those lines, that would necessarily make the borrowing of the Government of India nearly 26,000,000 *l.* sterling in the next five years?—It will be over 26,000,000 *l.*; 26,300,000 *l.*

6309. How would their calculations appear compared with the figures of proposed borrowing which were placed before us by Mr. Westland?—The result of that would be that nearly the whole of the 6,000,000 *l.* to be borrowed annually, somewhat over 5,000,000 *l.*, would have to be borrowed by the Government; but, as I said before, I think the Government of India are not prepared to execute the railways, if so large a proportion falls upon their direct agency.

6310. The lines which they propose to make under the limited guarantee are the Bhopal and Gwalior line and the Central Provinces lines?—Those are the two main lines.

6311. If the limited guarantee companies do not come forward to make the lines, there is a danger that the lines may not be made?—Yes, unless the Government will offer somewhat better terms than what they now call their limited guarantee terms, to induce them to make these lines.

6312. Will you state to the Committee what you consider the limited guarantee terms?—The Government of India's terms are on the model of those which have been given to the Bengal Central Company, which mean advances of interest during construction, for a period which must not exceed five years; the companies are then to repay these advances with simple interest from their surplus profits above a certain amount, five or six per cent.

6313. The forecast Mr. Westland put before us was based upon an idea that those lines would be carried out under the proposals which he laid down?—Yes.

6314. He reckoned upon an increasing surplus of 250,000 *l.* a year?—Yes.

Mr. *Kynaston Cross*—continued.

6315. Added to the normal surplus of 480,000 *l.* a year?—Yes.

6316. In addition to that, I think he took 200,000 *l.* a year, which is now spent as a capital sum, from the famine insurance, and used that as the interest to pay for the capital sum which might be borrowed in the future?—Yes, he adopted the proposal of the Government of India to that effect.

6317. And notwithstanding that, he expected to get 250,000 *l.* a year of constant increase, and the 480,000 *l.* of normal surplus, and the 276,000 *l.* of famine fund; notwithstanding that these were the means taken to provide funds, he found that he had little surplus left at the end of the time?—About 50 lakhs, I think.

6318. Do you consider that that was quite a safe calculation to go upon?—I think it is not safe to enter upon a policy of railway construction, upon a surplus which, with all those points taken into consideration, only amounts to 50 lakhs of rupees, and leaves nothing for any other measures, whether in shape of reduction of taxation or increase of expenditure.

6319. Your experience in the past would rather lead you to suppose that the finances of India are so uncertain, that it would be a dangerous method to calculate for five or six years to come, upon surpluses reckoned in that way?—I think so. I should not think it safe.

6320. You spoke about forecasts for a longer period than five or or six years; but do you think that a forecast for a longer period than five or six years is possible, bearing in mind the answer to the last question?—I think the forecasts made by the Public Works Department as to the expenditure (which is what I understood Mr. Stanhope to be referring to) it is prudent to make, and they might be made, for a longer period than five or six years; the forecast as to probable revenue is another matter, and I should not be disposed to place much reliance upon it.

6321. You mean with regard to the forecast of necessary expenditure, that if you intend to spend 6,000,000 *l.* a year for five years, if anything occurred, you would extend the period during which the 30,000,000 *l.* should be spent?—Yes. I should not like the Government absolutely to put it out of their power to make alterations; but I see no objection to the rate of the expenditure being based upon a forecast, coupled with an estimate of the probable receipts from the railways; that is, speaking with reference solely to the result of railway construction, but Mr. Westland's forecast is made with regard to all the items of expenditure and revenue. I scarcely think the forecast can be prudently extended to those, though he was obliged to do the best he could. I think he would himself say it was hardly very trustworthy for a long series of years.

6322. You spoke of the reduction of the sterling debt; is not really the creation of the rupee debt, so far as it affects the remittance purposes, if the rupee debt is held in England, very much the same as creating a sterling debt?—In some respects it operates very much in the same way; but in other respects it is not the

Mr. *Kynaston Cross*—continued.

same; the political advantage of enabling the natives of India to hold——

6323. I said as far as it was held in England?—That would be so.

Chairman.

6324. The Committee were told by Major Gordon that the railway extension scheme of the Government of India, looking at it in its most unfavourable light, would only at the very worst cause an increase of expenditure of 200,000 *l.* a year, and would certainly not involve any additional taxation on the part of the natives of India; is that in your opinion rather a sanguine view to take of it?—Yes. I think that his view is based upon the propriety of using this famine insurance money to obtain very large sums of money from companies on very favourable terms; and I question very much whether the companies would come forward to the extent that is anticipated on these terms; if they do not, the result must be to involve a greater charge upon the revenues of India than he estimated.

6325. Why so; because, as I understand, the Government have never, either in despatches or by their witnesses, expressed their determination, if the companies do not take up these lines, to make them themselves?—I say "upon those terms," the terms may have to be extended; instead of giving a guarantee for five years, it may have to be given for 10 years. The Nagpore Company did ask for a guarantee for 10 years; any extension of what are called the Bengal Central terms must involve a heavier charge.

6326. But provided that the companies come forward in the manner expected by the Government of India, you would not find fault with the calculations?—I may say that the present proposal, as I understand it, is that all these lines shall be made; a large part of them they hope to have made by these companies, but I think that they are not prepared to put aside such lines as the Nagpore and Calcutta, and the Bhopal and Cawnpore lines permanently, even though the companies should not come forward.

6327. That is your opinion; they have not put in writing, or by their witnesses before this Committee expressed this resolve?—My recollection from reading the papers is that their views are that the whole of the lines in Schedule A. ought to be made in some way or other; they hope to have them made through the Companies, but that they would take them up sooner or later eventually.

Chairman—continued.

6328. Eventually, but in that contingency, in the event of the companies not responding to the invitation to make them under a guarantee, there would require to be an entire change of plan and a new proposal?—Yes.

6329. This Committee have only to deal with the proposal of the Government of India as it stands?—I think the reference to the Committee is as to how the railways shall be extended; not how the Government of India propose to extend them.

Mr. *Kynaston Cross.*

6330. At page 77 of the Despatches (App. No. 1, p. 563), there is this paragraph: "It is of course understood that there would be no objection to handing over to 'construction and working' companies any of the lines entered as to be carried out by State agency. If such companies should come forward, they would relieve the State to the extent of their undertaking from borrowing direct; if they should not, the completion of the schedule will take a few months more or less than six years, according to whether the suggestion in paragraph 18 of this Despatch regarding open lines, is adopted or not"; that is rather the converse of what the honourable Chairman was saying; that is a question of whether the Government might not have less to do than they contemplated, not more?—Yes.

6331. That speaks of railways under Schedule A., does it not?—Yes.

6332. May they not be reckoned to include the 12,000,000 *l.* which in the last line in that Schedule are put down as "By companies on their own account?"—No, the particular clause which you read referred to those to be carried out by the Government of India direct, 13,644,000 *l.*

6333. I want to draw your attention to the last sentence, "If they should not, the completion of the Schedule will take a few months more or less than six years;" what is your reading of the words "the completion of the Schedule?"—I think the Government of India have not contemplated the possibility of their finding any difficulty in getting companies to take up these lines for which 12,000,000 *l.* were devoted.

Chairman.

6334. But, on the contrary, they have contemplated the possibility of companies coming forward to such an extent as to relieve them from making some of the lines?—Yes, that is the point to which that paragraph relates.

Tuesday, 17th June 1884.

MEMBERS PRESENT:

Mr. Baxter.	Mr. Dalrymple.
Mr. Bolton.	Mr. William Fowler.
Mr. Brodrick.	Mr. Jackson.
Sir George Campbell.	Mr. Bernard Samuelson.
Mr. Carbutt.	Mr. William Henry Smith.
Mr. Kynaston Cross.	Mr. Wodehouse.

THE RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

Mr. LIONEL ASHBURNER, called in; and Examined.

Chairman.

6335. WILL you state your connection with India and the opportunities you have had of making yourself acquainted with that country and with the railways in it?—I have been in India for the last 35 years in the Civil Service, and I have served in every district of the Western Presidency. I have also travelled throughout India with a view to obtain information of the capabilities of the different districts. I was a member of the Bombay Government for five or six years.

6336. Will you tell the Committee generally your views in regard to the main lines of traffic, and the railways which in your opinion would best provide for it?—Beginning with the extreme north, I would first advocate the extension of the Sibi line of railway to Quetta, and eventually to the frontier wherever that may be, probably to the foot of the Kojak Pass. That would be extremely important from a political point of view, especially in view of the recent advance of Russia in Central Asia. Next, coming down, I would advocate the connection between Palanpore and Hyderabad. During the monsoon there is great difficulty in forwarding goods and passengers to Scinde by sea, and that link between Palanpore and Hyderabad would get over that difficulty, and perfect the whole system of railways in that direction. Next, I would come down to a line from some point of the Guzerat line through Baroda or Godra, and going eastward *viâ* Rutlam, to Gwalior, and eventually to Cawnpore. I am aware that this line has been objected to on the ground that it will compete with another line which is to be extended, or which it has been proposed to extend from Bhopal to Gwalior, and eventually to Cawnpore.

Sir *George Campbell.*

6337. Where is Godra?—Godra is in the district called the Punch Mahals, to the east of the Mahi River.

6338. On the Bombay and Baroda line?—Yes, it is a branch of the Bombay and Baroda

Sir *George Campbell*—continued.

line, from Anand on the main line to Pali, from there to Godra, where it at present terminates. I would extend this line eastward to Rutlam, and eventually to Cawnpore. I was saying that the objections to this line have been that it would compete with the Bhopal and Cawnpore line, but if the Committee will look at the map, and see the immense district which intervenes between the Great Indian Peninsula on the one side, and the Rajputana line on the other; it will be seen that there is plenty of room for both lines. It has been stated, and I think with fair correctness, by one of the witnesses, that a railway only serves about 40 or 50 miles on either side of the line, and here there must be 200 or 300 miles intervening between these two lines.

Chairman.

6339. I understand you to advocate that railway, not as a substitute, but in addition to the extension of the railway from Bhopal to Gwalior?—Just so. Then there is a very important line from Jaitpore in Katiawar, to the port of Verawal. There is a very large passenger traffic on that line to visit the temples of Dwarka, and other holy places on the coast, and it is very probable, that the Joonaghur Durbar would, if not construct the line at their own expense, at any rate guarantee a certain amount of interest during the construction.

6340. That would be a metre gauge line?—Yes, because the Katiawar system is metre gauge. Then I would say there should be a line from Mysana on the Rajputana line, to Wudwan in Katiawar. The Committee will observe that as far as Ahmedabad the line is metre gauge. At Ahmedabad there is a break of gauge; the line again becomes metre at a place called Wudwan; now if the link between Mysana and Wudwan were completed, there would be a complete metre line, without break of gauge from the metre system of Northern India to the coast at Bhownugger; and, I think, that is very important. I am told and I believe that, if not the whole, a

Chairman—continued.

greater portion of the bridges on the line, between Ahmedabad and Palanpore, have been prepared for the broad gauge. That small link would complete the metre system. Then there should be a line from Anand, on the Bombay and Baroda line, to Ranpore, in Katiawar, through the Guikwar district of Petlad. The Guikwar probably would pay for a portion of that line, at any rate the portion which runs through his district, about 20 or 30 miles. Then there is a line which has also been very much advocated, between Pali in the Broach district to Jambosir. That was almost sanctioned a few years ago, but it broke down, owing to some difference of opinion with the local fund committee at Broach, as to the terminus of the branch. Another line also, which has been very much discussed, is that from Bulsar, on the Bombay and Baroda line, *viâ* Bardoli Nowapore, and the Isabari Pass to Nundorbar. Nundorbar is in Kandish. It there gets into a very rich district, the valley of the Tapti, and would be eventually extended to the Great Indian Peninsula Line, at Julgan. It is a line of great importance. It will enable the traffic to escape the exactions of the Guikwar on that line, which are almost prohibitive of traffic. The Guikwar has consented, I believe, to exempt the through traffic from his transit duties, and on that account it would be very important to accept his offer. Another line is from Perseck, 20 or 30 miles from Bombay *viâ* Pen and Inhar, to the foot of the Poladpore Ghat. This line, in the monsoon, would carry very heavy passenger traffic. At present the passenger traffic is diverted into steamers which run along the coast, and these steamers can only run during the fair season. This line would carry the whole of that passenger traffic, besides a very heavy salt traffic from the salt works at Pen. It would place the whole of the South Maharatta country in direct communication with Bombay, which at present it is not, except *viâ* the Bhor Ghat, which is not only a great detour, but is also very expensive to work. The next line I would advocate is from the Barsi Road Station to Pundipore and Meruj; that is in the Deccan. There is a very much frequented temple at Punderpore, within about 40 miles of that line, which attracts pilgrims from the whole of India. There is an almost mathematical certainty of the line paying. There is also a line from Bunkapore in Darwar to Hurrihur, on the frontier of Madras, on the Mysore and Toomkore line. The last line which I have to advocate is that from the point of Karwar to some point on the Western Deccan line, either by the Sinai Ghat or the Arbyle Ghat, whichever may be found the most convenient for the traffic; that is, most convenient from an engineering point of view.

6341. I observe you have confined your recommendations to a limited district, the district immediately around the north of Bombay?—North and south of Bombay, to the Western Presidency generally. I do not say anything about the rest of India, for I have only a general information on that subject.

6342. Have you formed any estimate of the cost of making the great variety of lines you have advocated?—No, I have not. I leave that

Chairman—continued.

to the local Governments, and to the Government of India, who know what they are about, and will carry them out to the best advantage.

6343. All you wish to state to this Committee, I take it, is that in your opinion these lines are desirable to make in the interest of the people of India, and eventually are likely to pay?—They are likely to pay; not only to pay directly, but indirectly. They will pay as a protection against famine and the loss of life which is the consequence of famine, besides many other indirect advantages which, I think, are generally overlooked in estimating a railway's advantages; for instance, the increase of cultivation which immediately occurs when a railway is carried out. In consequence of the Western Deccan line, which is about to be carried out, the leases of the Hungund and Bunkapore Talooks have lately fallen in, and it has been found possible to increase the land revenue of those districts by 15 per cent. A great portion of that increase is due to the railway advantages about to be carried out in that district.

6344. Then you agree with previous witnesses who have told us that railways develop in a remarkable degree the resources of the country?—Certainly.

6345. Are there any obstacles which, in your opinion, stand in the way of the development of traffic in that part of India with which you are familiarly acquainted?—Yes, there are many obstacles; one of the most important of them is the exactions of the native chiefs on the lines of rail. Practically, they may kill the traffic, and have on several occasions seriously interrupted the traffic to the different railway stations. Then there is the absence of local roads leading to the stations. In many districts directly you leave the railway station you get, in the monsoon, into black mud, which practically renders traffic impossible, and it is in the fair season very difficult, or, at any rate, adds enormously to the cost of carriage. Then there is the break of gauge wherever that occurs. Fourthly, there is the high rate of freight, rendered necessary, no doubt, by the high price of iron and coals, and similar causes.

6346. Then you agree with those who think that the rates of freight on most, if not all, the Indian railways ought to be reduced?—Reduced as far as possible. I have not data sufficient to enable me to say how far they ought to be reduced, or whether any particular rate is too high or too low; I leave that to experts on the question; generally speaking, I think they are too high.

6347. Both in the interest of the public and in the interest of the railways themselves?—Yes, I believe the railways would find it to their interest to reduce them still more. I see that on some of the lines even cart traffic is competing successfully with the railway. I have seen large droves of Brinjari bullocks travelling parallel with the railway during long distances on the Great Indian Peninsula, for instance; and I argue that if a bullock traffic and cart traffic can compete successfully with the railway, the rates are too high.

6348. Can you tell us what, in your opinion, are

Chairman—continued.

are some of the indirect advantages which have accrued to India from the extension of the railway system?—I mentioned one, the increase of revenue, which must immediately follow. Then there is the development of the salt traffic. Directly the salt leaves the railway, it has to pay enormously, not only transit duties and protection duties, and a variety of exactions from native chiefs, but there is the real necessary cost of traffic through a district where the goods and salt must be carried on pack bullocks or carts. To reduce the cost of salt by railway carriage is to enable the Government to reap a larger revenue from the salt throughout India.

6349. That is the first indirect advantage you have mentioned to the Committee; are there others?—The improvement of administration, such as the transport of military stores, and witnesses, and prisoners. These facilities of communication have enabled Government already to reduce their establishment very largely throughout India, and if the railways were more developed, the increase might be still greater.

6350. How long is it since you have left India?—Rather more than a year.

6351. Is there a general consensus of opinion that the railway system should be more rapidly extended than it has been for the last few years?—I think so, certainly.

6352. We have been told, at all events we have read it in printed documents, that there is a fear on the part of the educated natives lest railways will extend too rapidly, and so the taxation of the country will be considerably added to?—That does not agree with the information my native friends have given me; on the contrary, there is the greatest desire to extend them; I do not think that may be feared at all.

6353. You think the Committee may dismiss that consideration from their minds?—Quite. I think it has been put into their mouths by somebody who does not know the feelings of the natives.

6354. That it is confined to a limited circle of writers in the newspapers, and does not faithfully represent the general opinion of the natives?—Certainly.

6355. As to the financial measures to be taken for extending the system of railways in India, what is your opinion?—I think, generally, greater latitude should be allowed to the local governments to pledge provincial revenues in payment of the difference between what the line will earn, and what is necessary to raise the money to build it. Generally I say with regard to finances that the Government of India and the local governments may be trusted to do what is necessary. I have seen, I think in the Railway Report for 1883, a scheme by the Government of India for the extension of the railway system. I concur generally in the views expressed in that report, and I think the Committee could not do better than support it thoroughly.

6356. You agree that the Government of India should itself make the railways that may not be productive at all?—I think Government will be obliged to do that, because you cannot expect a Company to undertake a railway which

Chairman—continued.

is not likely to pay; but I think that Government should build more of the lines; that is to say, should not allow the companies to take all the plums out of the pudding, but should make those which pay pay for those which do not pay, and still must be built for political reasons, as a protection against famine, and for military purposes.

6357. Are you in favour of both systems being adopted to some extent?—Yes.

6358. The Government making part and the guaranteed companies part?—I do not approve of Government taking all the lines which do not pay; but I would not lay down any hard and fast rule, but should do as has been done, for instance, with the South Mahratta Line. I should make that sort of bargain with the companies.

6359. Like very many of the witnesses before this Committee, you think that was a bargain advantageous to both parties?—Yes, I think so.

6360. Do you look forward to a time not very remote when railways will be made in India without a guarantee?—Yes, I think so; not a very remote period; and I think many lines might still be built without a guarantee if the Great Indian Peninsula and the great main lines were allowed a little latitude; for instance, to build branches. The Great Indian Peninsula, I have no doubt, would undertake that line between Barsi Road and Punderpore. It is pretty sure to pay; and I think, generally, the guaranteed lines which are earning their dividends may be allowed, with the sanction of the local government, to extend these sort of lines. I think they have sufficient experience now not to build lines which are not likely to pay.

6361. Looking to the financial improvement in Indian railways during the last two or three years, and to the future, when possibly even greater improvements may be expected, do you believe that the public of this country will, by and bye, be induced to lend their money for Indian railways without the guarantee of the Government?—I have not much experience of financial matters; I leave that to experts; but I should think it was quite possible, not only possible, but probable.

6362. In the course of years?—Yes.

6363. So that, in your opinion, it would be undesirable for the Government to make any arrangements which would stand in the way or hamper them in accepting the services of companies to make needed railways in future?—Just so.

6364. Have you anything to say in regard to the mode of construction of the railroads; how they would be more economically and better made in the future than in the past?—I think Government, with the large staff of trained engineers at its disposal, can generally build a line better than an inexperienced company, which has to raise its staff and to pay for their experience; I should say that Government can carry out these lines more economically than a company; but as I said before, I would not lay down any hard and fast rule I would let the guaranteed lines build branch lines and, with regard to the rest, I would, as I said before, lay down no hard and fast rule.

6365. Then

Chairman—continued.

6365. Then, as I understand, to sum up your evidence, you do not recommend to this Committee any important change of system; but you are in favour of going on a little faster than we have been going the last few years?—Yes; about as fast as the Government of India recommends in that memorandum. I think they know what they are about, and you must trust them.

6366. But not as fast as is recommended by our friends, the merchants in Bombay?—No, I do not go with them; I think it would be very extravagant; it would disarrange all the markets, the prices of iron would increase, and the advance would be not by any means economical.

6367. You do not look to any danger to the finances of India in the event of the expenditure recommended by the Government of India being incurred during the next five years?—No, I think not. I think there is not the least danger.

Mr. *Kynaston Cross.*

6368. You say you do not look to any danger to the finances of India; do you know what the possible charge upon the finances of India, through the establishment of railways which the Indian Government have proposed, would be?—I cannot carry it in my mind; I know it is contained in that report which I read, and its arguments seemed to me to be sufficient.

6369. You do not know what amount would possibly be brought as a charge on the Government of India?—No, I have not carried it in my mind sufficiently; it is a month or two since I read that report; I may refer you to that.

6370. What would you think the Government of India could pay in addition to what they are now paying?—That is beyond me. As I say, I am not prepared with the data sufficient to answer that question.

6371. You would rather not express an opinion upon upon that subject?—No.

6372. I think you said that the local governments may give a guarantee?—Yes: I think the local governments might have greater latitude given them in sanctioning lines. I think the interests of the outlying Presidencies have been sacrificed to head quarters; I mean to say the Government of India have so many urgent lines forced upon them that they naturally prefer those which are under their own eyes to those in a distant provnice.

6373. Would you allow the authorities in the distant provinces to make contracts with companies for construction of lines, irrespective of the control of the central Government?—No; I would not relieve them of all control, but I say I would trust them with greater powers. It is almost impossible to get a line sanctioned when the finances are, I do not say in disorder, but when there is a difficulty in raising money it is almost impossible to get local works, works under the local government, sanctioned, and I would, therefore, give them greater power; I would give greater weight to their recommendations.

6374. You say that when finances are not in very good order, you would give them greater power; would you give them power to make an additional assessment upon the province for the interest which would accrue upon a line which they allowed to be made?—No, not on this account; do you mean specially on account of this?

Mr. *Kynaston Cross*—continued.

6375. Yes?—No, certainly not.

6376. How should you propose to raise the money, when, as you say, the finances might be to some extent in disorder?—There are, for instance, local funds, a greater portion of which are frittered away in little works here and there, and if the Government were allowed to guarantee the difference between the earnings of the line and the interest that it would be necessary to pay in order to raise the money for it, I think, without laying heavy burdens upon the local funds, or the provincial revenue, they might do a good deal in carrying out those works.

6377. You spoke of the local funds being frittered away, that is funds under the control of the Local Government; do you think the Local Government are so careless in the administration of their funds as to fritter them away when they could use them more usefully?—You are, perhaps, not aware that the Local Government do their utmost to prevent this frittering away; but when the expenditure is in the hands of small native committees, each of which is crying for a little bit of work here and there, a well here and a well there, the money is practically wasted, or if not wasted, it is not spent to the best advantage; I speak with authority on this matter, because I have had the administration of local funds in the Western Presidency in my own hands the last 10 years.

6378. Have you found yourself quite unable to control your subordinates?—Practically you cannot resist the pressure. I have done it to a great extent; but practically you cannot resist the pressure of the natives who contribute to this fund. Very naturally they wish to have the control of it, and they say, "We have paid so much to the local funds for the last ten years, and you have not built a bridge over that nullah, when are we to have some return for our money?" whereas the money has been spent probably much more usefully to the general trade and traffic of the country than if it were spent in some little petty work which they would advocate.

6379. Then you think if you guaranteed a considerable sum as interest upon a railway you should have more power to refuse these applications from the native local committee?—Yes.

6380. You spoke of the different guaranteed companies being willing to make additional lines, I think, without any guarantee?—Yes, additional branch lines such as I have advocated.

6381. Can you give me any instance where any of the established companies are willing to do so?—I cannot pledge those gentlemen, but I know most of them. I have heard them advocate these extensions; of course you must not expect me to pledge them to any particular line; but I will mention the line from Bariah to Pundapur. The officials of the Great Indian Peninsula line would, I am sure, be delighted to carry it out.

6382. Which

Mr. *Kynaston Cross*—continued.

6382. Which company would it be connected with?—The Great Indian Peninsula Company.

6383. You think they would be quite willing, without any guarantee, to make this additional line?—I do not know about without a guarantee, but as part of their system.

6384. The question is as to without a guarantee?—I think you had better ask this question of the officers of the Great Indian Peninsula. My remark was a mere suggestion.

6385. You cannot answer the question as to whether they would or would not?—No: I cannot pledge them, of course.

6386. You spoke, I think, about bullock traffic competing with the railway traffic; you said that whenever bullock traffic competed with railway traffic, it was a proof that the railway rates were too high?—Yes.

6387. Would you reduce the railway rates invariably, until it had ruined the bullock traffic that went side with the railway?—Yes, I would. I say that being the test of the rates being too high, I should reduce them until the bullocks were better employed than in carrying salt and grain in packs. They would be better employed in cultivating the soil.

6388. Do they cultivate the soil now?—Of course they do.

6389. Are there any times of the year when it is not possible for them to cultivate the soil?—There are times; just as an English farmer does not find work for the whole of his horses or his cattle at certain times of the year, but they could be better employed in cultivation.

6390. Even at the times of the year when it is impossible to cultivate?—No, the men who cultivate are not those who carry on this traffic.

6391. Then you would turn away those men from the business in which they have been employed all their lives; and by making a railway and reducing the rate you would force them to another occupation?—Practically that would be the result, and that has been the result. Before the railways were carried out there was an immense traffic by cart and by bullock pack throughout India, and the men who were engaged in that traffic have to my knowledge taken to cultivation very largely.

6392. Of course it would be necessary to subsidise those railways, would not it; they could not be made without a guarantee; a guarantee would have to be given to those railways?—Yes.

6393. It would be practically taxing the people of the district or the people of India in order to abolish the cart driving which ran along the sides of the railway?—That is not a fair way to put it, I think.

6394. Might it not be put in that way?—It may be put in that way, but the same may be said of all railways.

6395. You spoke about the high rate of freight; you said the high rate was an obstacle?—Yes.

6396. How would you fix the reduction of the rate of freight; by reducing it to an amount which would pay a certain rate of interest: or how?—Yes, of course I would not work a line at a loss; but there are a variety of ways in which the traffic might be cheapened. For

Mr. *Kynaston Cross*—continued.

instance, carrying grain in bulk; most of the American grain from Chicago is carried in bulk; and in India it has to be bagged. That is a great expense. There are others which would suggest themselves, no doubt, to a man who has had the working of a railway.

6397. Would you suggest that the plan in India which is now current of carrying the grain in bags should be done away with, and that it should be carried in bulk?—Yes, I would. There would be less waste, and less stealage; there would be cheapness in a variety of ways. The break of gauge might be got over in this way very easily. The elevators would lift the grain from one carriage into another, only a few feet distant, and there are many other advantages.

6398. Has that been tried on any of the lines in India?—Not that I am aware of.

6399. Then when the grain came down to the port, would it be better to ship it in bulk?—Certainly; it is done so in America, why not in India?

6400. Have you formed any estimate of the length of the lines that you proposed; I think you said you had not?—No; I have not gone into those details.

6401. Or the cost?—Nor the cost.

6402. You do not like to give any opinion as to finance?—No; I say that had better be left to the Local Governments or the Government of India.

6403. Would you allow the Secretary of State to have much to say in the matter?—Certainly; you cannot work independently of him.

6404. Then you would say the Government of India and the Secretary of State had better settle the matter between them?—Yes.

6405. I think you spoke of the increase of rent due to the increase of cultivation?—Yes.

6406. Could you give any instance in the past where a considerable increase of rent in any particular province has taken place from the establishment of railways?—Yes; I mention particularly the leases of the Hungoona and Bunkapore talooks in the Southern Mahratta country.

6407. That is not an instance in the past; that is in the hope that the railway will confer some benefit on them, because the railway is not yet made?—Excuse me, the rates have been sanctioned, I believe, by the Secretary of State, and are to be in force as soon as the railway reaches that district.

6408. I was speaking of the past; that is a very good instance of the present, of what may be expected to happen in the Southern Mahratta country when the Western Deccan Line is made; can you give me any instance in the past?—I cannot, speaking from memory; but the records of the India House are full of information on this subject. I settled the rates throughout Kandish, as the railway was progressing. One of the considerations in fixing them was, the facilities the ryots derived from the railway. A district 20 or 30 miles from the railway, of course could not pay the same rental as a district immediately served by the railway.

6409. Are you aware of the increase of land revenue which has taken place in India in the last 10 years, in consequence of the increase of

Mr. *Kynaston Cross*—continued.

railways?—I am aware that it is enormous, but I cannot carry in my mind the figures.

6410. You think it is enormous?—Yes; I know it is.

6411. What per-centage would you call enormous?—I should call 15 to 20 per cent. enormous.

6412. That would be an increase in the land revenue of India in 10 years of four millions a year?—Yes.

6413. Are you aware that the increase in land revenue is exceedingly small in the last 10 years?—I am only speaking of the Western Presidency, with which I am familiar, but there I am not aware that the increase has been small. On the contrary, I am perfectly well aware, for I have had to deal with the question, that the increase has been large.

6414. I should like to have the information as to where it has been large, because it is a matter which is very much in dispute, and if we can get information as to the increase of land revenue being very large from the establishment of railways, it will give the Committee a great deal more confidence in reporting; so that if you can give me one instance of any particular province, and tell me what the increase has been, it will be very interesting?—The district of Kandish, in which I was for many years, is a case in point; and if you will compare what the revenue was before railways were introduced with what it is now, you will find the increase has been very large, and that may be taken as typical of the increase generally. I am not prepared with figures, to substantiate my statement; but they can be procured from the India Office.

6415. I think you said that, in the first instance, you would advocate an extension of the railway to Quettah; that was, I think, only because the railway was in the north of India, or was it because you thought it a paramount political necessity?—I think that line will carry sufficient paying traffic, eventually, from Afghanistan and from Central Asia.

6416. You would advocate it as a commercial line as well as a military line?—Just so.

Mr. *Carbutt*.

6417. With reference to the Quettah line, has not the whole of the line been made except putting the rails on. Has it not been used as an ordinary road hitherto, and is it not at present being used as a military road?—It is at present being used as a military road.

6418. Is not the traffic upon it at the present time quite sufficient to pay for what has been spent upon it?—That I cannot tell you.

6419. You have stated that which has been before stated to this Committee, that owing to railways there is an increase of cultivation; have you found that to be so in your experience?—Yes. I mentioned just now the instance of Kandish, which is a very remarkable one, as to the development of cultivation, and, consequently, of revenue in consequence of the railway.

6420. To what extent on each side of the line do you think increased cultivation would come into vogue?—That is difficult to say, because a district might be cut off from a railway by an almost impassable range of mountains, in which

Mr. *Carbutt*—continued.

case the district served by the railway would be very small; and again, on an open plain country the distance would be very great, therefore it would be almost impossible to lay down any distance of that kind.

6421. Mr. Cross asked you a question about the railway driving off the bullock traffic; do not you think the bullock carts would be very much better employed in carting grain from these cultivated districts laterally than in competing with the railway?—Yes. That is what might have been inferred from my remarks. I wish that to be understood, in addition to what I said about cultivation.

6422. Mr. Cross seemed to think that you were acting harshly towards the bullock traffic by driving it away?—In dealing with this question you cannot talk of harshness, you must consider it from a larger point of view. Look at the outcry there was from the coachmen when the coaches were driven off the roads.

6423. You also advocated the transport of grain in bulk. Are you not aware that the grain in India is of such different qualities at the present time; that is, they have not given sufficient attention to the cultivation and to the separation of the corn from the chaff, that they could do what I understand they are doing in America, where the grain, as I understand, is all carried in bulk; but if you buy corn you do not receive the same corn that you buy, but you receive some corn out of the warehouse?—Just so; that is the system. There is no practical difficulty in introducing the same system into India. The want of care is about general throughout India. Three or four separate qualities of corn might be fixed as standards, just as it is done at Chicago, where you get corn of a certain sample. There is no difficulty about it.

6424. You think the people of India are as willing to learn and as apt to follow any improvement that is necessary as any other population?—Quite so.

6425. And that if we only made the railways they would bring the traffic, which would make the railways pay?—I think so.

Mr. *William Fowler*.

6426. You spoke about increased cultivation resulting from lines of railway; have you seen that change in your experience?—Yes, I have.

6427. You have watched it?—I have watched it. I was for many years Collector of the district of Kandesh, I was there for 12 or 13 years; and I was afterwards Commissioner of the same district, therefore I have had that district under my eye for the last 25 years, and I have seen it grow. I have seen districts covered with jungle, where tigers have been shot, cultivated with standing corn within my own recollection.

6428. And that would not have happened but for the railway?—Just so, the railway and the system of roads which has been carried out to assist the railways as railway feeders.

6429. That is subsidiary to the railway?—Yes.

6430. Something was said just now about carrying the grain in bulk; are you aware how it is done in America?—I have seen it done at Chicago.

Mr. *William Fowler*—continued.

6431. You have seen wheat graded at Chicago?—Yes.

6432. In the elevators?—It is graded before it is put in the elevators.

6433. You think that the same kind of thing might be done in India?—I think so, certainly.

6434. Would not the break of gauge interfere very seriously with that?—On the contrary, it would tend to minimise the costs of the break of gauge. The trucks carrying grain might be brought alongside, and the elevator would empty them in a very short time.

6435. You think they could move them from one truck to another more easily in bulk than in bags?—I think so.

6436. Is that because the bags are apt to break?—That is one reason; it has all the advantage of machine handling compared to manual handling.

Mr. *Bolton.*

6437. Could you put in a paper showing the increase of rent in Kandish since the introduction of railways?—I am out of office now, but you have only to ask at the India Office and they will give it you.

6438. You have not got it?—I have not.

Mr. *Wodehouse.*

6439. You advocated the making of some railwrys as likely to be of especial value during the monsoon?—Yes.

6440. In the fine weather months of the year would the traffic of those districts revert to the steamers?—Yes, probably. I presume you allude to the line from Perseck to Pen.

6441. That is the one you mentioned?—That is below the Ghat district. Of course the traffic in the monsoon would be greater than in the fair weather, but I think it would permanently carry a heavy traffic.

6442. Do you anticipate the permanent withdrawal by the railway of all that traffic from the steamers?—No, I think it would be very difficult to do that, because the steamers carry so much cheaper than the railways; for instance, the fare for a native from Bombay to Goa, 300 to 400 miles, is sometimes only four annas, or about sixpence.

6443. Would the resources of the district be sufficient to sustain a traffic both by railway and by steamer?—Yes, I think so, because it serves the Southern Mahratta country, and the interior of India.

6444. You think it would do so all the year round?—I think so.

6445. You spoke of some lines being likely to be remunerative from the existence of a much-frequented temple?—Yes, I spoke of several of that kind; for instance, a line to Dwarka from Jaitpore, which is a railway station in Katewar, to Virawal. That would serve the temples at Dwarka, which you are aware are much frequented by pilgrims from every part of India.

6446. Is the pilgrim traffic limited to particular seasons of the year?—To some of the temples it is at certain seasons; that is to say, the full moons of every month in the year, but in other districts there are certain main festivals which occur once in every 20 or 30 years.

Mr. *Wodehouse*—continued.

6447. Then you think that the presence of a temple combined with a railway to it would greatly develope the resources of the district?—I have not a doubt of it. That line which I have just been speaking of would carry a very heavy traffic, because the port of Virawal, though nothing whatever has been spent on it, and it is in a state of nature, is a very fair port, and steamers can enter there throughout the monsoon, whereas in the southern ports of Bhownuggar, for instance, they cannot enter in the monsoon. They cannot go up the Gulf of Cambay in the monsoon, whereas they can on the open coast of Katewar.

6448. You also referred to the exactions of some of the native chiefs with regard to railways. Have the native chiefs power to exact what terms they please?—They have, and they sell those rights to contractors to the highest bidder. You may imagine what the abuses are when these men are perhaps a hundred miles away from any controlling authority. A line of 40 or 50 carts comes along, and the man in charge of the customs station takes from them just what he pleases, just as much as he can screw out of them.

6449. Have all the native chiefs that power, or is it only the larger ones?—We bought up the rights of some of the smaller ones to levy transit dues and blackmail of different kinds, we have paid for them, and we do not allow them to exact those rights; but all the larger chiefs, for instance, the Guikwar, Scindia, Holkar, and the Nizam, have unlimited powers of exaction.

6450. Looking at it from a political point of view do you think it desirable that railways passing through the territories of native chiefs should be constructed and worked by Government rather than by private companies?—That is a difficult question to answer generally. I think there are many lines which as a rule the Government themselves had better manage. They have a skilled staff of engineers who may be utilised in this way, whereas the railway companies have to form their staff; no doubt after some years of experience they acquire the same advantages as Government. As a general rule, I should say Government can construct and work railways more cheaply than companies can.

6451. You also wish to have a greater power of refusing applications from local bodies for small local works, on the ground of the necessity of railway construction?—Yes, the railways are more important, and public works can stand over.

6452. Do you think if that power were largely exercised it would not prejudice the natives against railway extension?—No, I do not think so. They would get the benefit of that extension They see, as well as anybody can, the advantages of railway extension, and when they see the railways growing, and the advantages they derive from them, so far from being discontented, their feeling would be the contrary.

Mr. *Dalrymple.*

6453. I suppose you would say that the cry of new railways was popular in India?—Yes, I think so.

6454. You do not admit that there is any native

Mr. *Dalrymple*—continued.

native class jealous of railways?—No, on the contrary.

6455. You do not admit that there is opposition to the railways on account of any interest that might be prejudicially affected by them?—No, I think not.

6456. With regard to that class which is connected with the bullock traffic have you before to-day heard any one plead their interests?—No, poor fellows; they are a very wild set. They are very useful, but they are not likely to find anybody to advocate their interests.

6457. When there is an agitation for reduced assessment, from whom does it come?—It generally comes from agitators, who make a business of it.

6458. It would not be from Crown tenants, the bulk of the agricultural population?—No, I think not.

6459. I suppose the circumstances of a country village in India, which means a considerable district, are such that for four or five months of the year it is shut off from any communication of any kind?—There are districts which have been cut off from all railway communication, which is I presume what you mean, but the local roads which have been carried out of late years have very much reduced the number of such districts.

6460. In certain seasons of the year would not the country tracks be almost impassible?—Quite impassible for any traffic whatever.

6461. You say the produce would be liable to be spoilt on a transit that lasted some weeks?—Certainly, and for that reason it is closed; during the monsoon grain, for instance, is liable to so much damage and the difficulties are so great that practically traffic is suspended during the monsoon in many districts.

6462. There would be a manifest saving in every way where produce had only to be carried a comparatively short way to a railway?—Certainly.

6463. Is not the coast traffic suspended during the monsoon?—Yes, quite; when I say quite the larger steamers run, the British Indian steamers run, but the smaller coasting steamers do not run during the monsoon.

6464. What we should call goods traffic would be suspended?—Goods traffic and passenger traffic, for they carry an immense passenger traffic in the fair season.

6465. So that when it is said that the coast line need not be made because the traffic by the sea is sufficient provision for it, that does not apply to several months of the year?—Certainly not.

6466. You were asked a moment ago about exactions by native chiefs. Is it not known that goods have sometimes to pass through two or three jurisdictions within a few miles?—Yes, that is the case on many lines; in Guzerat, for instance, the lines from Godra towards Rutlam would pass two or three jurisdictions; Baria is one, the Guikwar is another, and I think a chief of the name of Umjara is a third. It is very commonly the case.

6467. Duties of a considerable amount might have to be paid on the goods within a short distance?—Yes, so much so as to be almost prohibitive.

Mr. *Dalrymple*—continued.

6468. Are there not also abuses connected with the collection of duties?—Those are the duties which I allude to. The duties are not merely transit duties, but they are customs duties. Sometimes the rate is *ad valorem*, sometimes it is so much per bullock cart or per pack bullock, or camel load, or whatever it may be. There are great abuses connected with the system. The Government of Bombay have been struggling with it for many years, and have very much improved it owing to pressure being put on the native chiefs, and they are being shown how much injury they are doing to themselves. The difficulties are very great owing to the different jurisdictions and the necessity of working the whole together; for instance, you may induce a chief to take off his transit duties and his black mail of different kinds, but his jurisdiction may extend only 10, 15, or 20 miles, and his neighbours immediately put on the amount which he has been induced to remit, so that the traffic does not get the benefit of it.

6469. Do you think there is a disposition on the part of the native chiefs to remit these exactions?—Their revenue depends so much upon them that they are very unwilling to remit them; they have not studied political economy very closely, and it is difficult to make them see the reason for doing so, especially under the circumstances that there are so many conflicting interests, and that the districts beyond them immediately put on the rates which they have been induced to remit. They say, if the rates can be remitted generally we shall be very glad to join, but any partial system will do no good; and they are very right in that respect.

6470. One word as to the break of gauge; we were told the other day that there was nothing in the break of gauge except cost of transport; would you say that there were more than monetary considerations connected with it?—Yes, very much so. I think the witness who gave evidence on that subject was not putting the case very fairly. It is not a mere money loss or gain by break of gauge, but there are indirect evils of all kinds. The goods traffic floods the different stations where there are breaks of gauge; it is impossible to move it, it demoralizes all the subordinates of the railway; the station-masters and the under-strappers of all sorts take large sums in order to give preference to the goods of the different men who pay them. That is one of the evils. Then there is the enormous wastage. There is a pile of cotton bales, for instance, as high as this room, or higher, and extending over an acre or two of soil; the white ants destroy the lower bales of the cotton, and it is impossible for a trader to get at his cotton, it is so surrounded by piles of other cotton and grain and all sorts of goods that he cannot get at it. He cannot save it from rain. There is not sufficient shed accommodation for it. It is out in the open. A storm of rain comes on, as is very often the case in the hot weather, and it is subject to enormous losses. Then again merchants cannot make contracts. I have heard of merchants being almost ruined by the demurrage they have had to pay owing to the block of traffic on the different railways up country. They charter a steamer in the hope that their goods will come down by a certain day

Mr. *Dalrymple*—continued.

day, and then they cannot get them out of the railway.

6471. Is that demoralization of officials at these junctions a well-known thing?—Yes, it was a few years ago the subject of a very important trial in Bombay.

6472. It must be very popular to be in charge of a station where there is a break of gauge?—Certainly. I am only speaking of the subordinates; the upper officials of the railway are perfectly pure, but the subordinates under such pressure, and with such temptations as they are subjected to, cannot be expected to resist.

Sir *George Campbell.*

6473. You spoke of a line from Hyderabad, in Scinde, to Pahlunpore, to unite Scinde with Guzerat?—Yes.

6474. Has a line of that kind been surveyed?—No, I am not aware that it has been surveyed thoroughly, but it has been, prospected I believe is the word.

6475. Has it been ascertained whether there are any great physical difficulties?—The line is well known. There are great difficulties in crossing the Run of Cutch, for instance, which is liable to floods, and there will be sand hills at Omar Kote, as you get further towards Scinde, which will be very troublesome, but nothing that may not be overcome.

6476. There would not be any local traffic; is it desert all the way?—It is almost a desert. There would be a very large through traffic that would find its way down there from Scinde.

6477. What kind of through traffic would that be?—Traffic in cotton, in grain, in wool, carpets, horses, coarse woollen cloth, and traffic in dried fruits, though that, of course, would be small.

6478. As regards the line from the Guzerat country, by Rutlam to Cawnpore, has that line ever been surveyed?—Yes, I believe it has been surveyed, but I cannot speak with authority on this subject.

6479. Would you rely upon the through traffic, or principally upon local traffic?—There would be local traffic as well as through traffic. I think one of the most important points of that line would be the evasion of the heavy cost of working the Tull Ghat. The whole of the traffic of that part of the country has to come over the Tull Ghat, and the expenses of working it are very great. If it came down through Guzerat, where the levels are very easy, that of itself would be one important object gained.

6480. Has that line been sufficiently surveyed to ascertain that the levels are easy?—Do you mean the line from Godra.

6481. By Rutlam?—It is a well-known line; all the officials know it; there are one or two ghats; but there are no engineering difficulties of importance.

6482. Would most of that line run through a productive country?—Yes.

6483. Very productive?—There are bad portions about it. It is in a very wild district, but there is an agricultural population.

6484. Would you go to Gwalior or to Jhansi?—I should go to both.

Sir *George Campbell*—continued.

6485. Supposing that only one additional through line was to be made from Cawnpore to Bombay would you prefer the one by Bhopal or the one by Rutlam?—The one by Rutlam decidedly, because the Bhopal line would carry the goods down over the Tull Ghat.

6486. From an engineering point of view you believe the Rutlam line is much easier?—Yes.

6487. You propose to have a line from Karwar?—Yes.

6488. Karwar and Goa are very near one another; if Goa were a British possession would you propose to have both?—Yes, I think so.

6489. You have advocated a large number of local lines in the Bombay Presidency. Taking those lines one with another and bringing to bear the experience you have had and the attention you have paid to the subject of railways, do you think that the whole of those lines would pay?—I do, that is one line would pay for the other.

6490. You think that upon the whole they would pay?—I think on the whole they would pay.

6491. Do you hold that opinion very strongly?—Yes.

6492. Very decidedly?—Yes.

6493. You speak of making these lines to a certain extent locally, that is to say, the local government to pledge the provincial revenues for those lines. While you were a member of the Government of Bombay, did the Government make any definite proposals of that kind?—They made many definite proposals.

6494. Will you explain to us, not the particular lines, but the principles upon which the Government of Bombay proposed lines of that kind should be guaranteed by provincial revenues, that is to say, that provincial revenues were to be pledged?—I think it would be better to refer to the records for that. It is burdening my mind with a subject as to which some time has passed now. I think you had better get it from the records.

6495. Could not you tell us in general terms the nature of the proposals?—I think we generally proposed that we should be allowed to pledge the local and the provincial revenues in payment of the difference between the earnings of the line and the sum that it might be necessary to guarantee in order to procure the funds for it.

6496. What do you call the provincial revenues?—I presume the provincial revenue is that derived from a province like Bombay; for instance, less certain items of it which are secured and taken by the Imperial Government; for instance, opium and salt.

6497. Is not it rather the other way; is not the present arrangement that most of the revenues, including the land revenue, are treated as Imperial revenue, and that portions are assigned to the local Government for the purpose of administration?—That has been the case since what has been called the decentralization policy has been carried out. The Imperial Government allots certain items of revenue to the provincial Government for their working expenses.

6498. Was not it much more so before the decentralization system; were not the whole of the revenues paid to the Government of India,

Sir *George Campbell*—continued.

and did not the provincial Government merely come for specific expenses for particular purposes?—No, I am not aware of that. I do not remember that that was the case.

6499. Was there any revenue whatever which was treated as a provincial revenue before the decentralization?—No; that is quite true. The Government of India could take any portion of our revenue that might be required for its own purposes, warlike or otherwise.

6500. Was not it quite the other way; was not it the fact that you could not touch one farthing of the revenue unless the Government of India specially gave it to you for a particular purpose?—I have said so.

6501. Is there in Bombay provincial taxation at this moment?—There is municipal taxation.

6502. As distinct from municipal taxation and from the assignment made to you by the Government of India, are any provincial taxes imposed under the original decentralization scheme?—I am not aware of any.

6503. Has there ever been any?—No, I cannot remember any.

6504. Acts were passed to impose provincial taxation, but some of them were not sanctioned by the Governor General; is not that so?—Not provincial, but local. We have several times asked to be allowed to increase the local revenues, and we offered to pay for certain works if certain proposals were carried out, but I think they were rejected by the Government of India. Those were local, not provincial.

6505. Have you no provincial funds as distinguished from municipal funds at the disposal of the Government of Bombay?—None.

6506. As regards the local, district, and municipal funds, does not that question very much hang with the question of local government; is not there a sort of pledge given to the people of the districts and municipalities that money raised by local taxation shall be spent not only for the benefit of the people of the district, but also through the people of the district?—It is so; but it is very difficult to define what is a district. What are local works, for instance? It is very difficult to localise a district in that way. A district may be so situated; I can see districts now which would gain enormously by the construction of a certain ghat road.

6507. Has any pledge been given to the localities in Bombay, such as was given in Bengal, that local funds shall not be diverted for general purposes without the consent of the representatives of the district?—Yes; but what do you call diversion from a district; if every village is to have the money that has been raised in that village, the funds are dissipated.

6508. It is the case, is it not, that there are certain district funds at present, although they are not village funds?—Yes.

6509. And that there has been no pledge given that the cess raised from each village shall be spent in that village, but that it shall be spent in that district?—Yes, there is no distinct legal pledge; but there is an understanding and an instruction of the Government of Bombay, that the local funds shall be spent in each district.

6510. Are any of these local railways which you have mentioned in local and particular districts?—They might be; for instance, the line

Sir *George Campbell*—continued.

to Pundapore: that would be so popular, leading to a popular place of pilgrimage, that I have no doubt the two or three adjoining districts would club together to guarantee the money required if it were placed before them.

6511. You think that there are places in which the district committees would be ready to sanction and guarantee local railways, something on the same principle on which they are guaranteed in Ireland in some cases now?—Yes, I think so.

6512. You think that might be so?—Yes.

6513. Are you aware that in Bengal, in addition to the local cesses imposed for local purposes, a general provincial cess has been imposed for provincial public works of a larger character than local works?—Yes.

6514. Do you think a system of that kind would be applicable to Bombay?—I think so. It would require legal sanction, of course.

6515. You would be in favour of imposing cesses of that kind?—We have already the machinery of local cess and local revenue, and I should extend the system. We raise already a certain local revenue, and a few lacs more would provide all that is desirable for the provincial works to which you allude.

6516. In that case it might be possible to guarantee provincial railways by the provincial cess?—Certainly.

6517. You would advocate such a plan?—Certainly.

6518. Do you think the Government of Bombay would be willing to take the responsibility?—I think so. They are only too anxious to take responsibilities of that kind, and I believe with the best results.

6519. Do you think that in many cases a railway might be in the end cheaper than a very expensive road over a very difficult soil for the purposes of the feeder lines?—Yes; I have no doubt from my own experience that that is the case with the Jambosir line, to which I have alluded. It passes through a black soil district which will take up and absorb any amount of metal; and I have no doubt the sum that has been spent on that road from Broach to Jambosir, about 40 miles, would have paid for a railway over and over again.

6520. As regards the increase of cultivation is not Kandish rather a special case; is not Kandish a very large and fertile district, which was devastated beyond most districts when the Government took possession?—That is quite true.

6521. Do not you think the extension of the cultivation and of the revenue in Kandish is somewhat abnormal as compared with other districts?—There are many other districts similarly situated; take the Punch Mehals, for instance, which we took from Scindia only a few years ago in exchange for districts in Northern India. That is similarly situated; take Guzerat, which was devasted in a similar way before we took it, by plunderers of all kinds.

6522. Has the increase of revenue the last 10 or 20 years in Guzerat been as great as in Kandish?—I think it will be greater as soon as the present leases, which are about to expire, are renewed.

6523. Greater in proportion?—In proportion.

6524. In the Deccan was not there an idea at one

Sir *George Campbell*—continued.

one time, that owing to the new settlement and the cheaper rates, cultivation had been somewhat over done; that the ryots had taken up more land than they could properly cultivate?—That is the case, no doubt. But the ryot knows very well what he is about; he may be trusted to do what is good for him; for us to say that he has taken up more land than he can fairly cultivate, I think is impertinent to the question. He may be left to judge what he can cultivate at a profit or not.

6525. Do you think in the Deccan there is still a great deal of waste land which can be properly cultivated?—In parts of the Deccan, certainly; not a very great deal, because there cultivation has extended very largely, and the population is sparse; but still there are districts which would give some room for extension.

6526. Which are the districts which suffered most from the famine?—The Southern Mahratta districts generally.

6527. There is a very considerable population in these districts, is there not?—A very large population.

6528. So that the famine was mostly felt in the populous districts rather than in the sparsely populated districts?—Yes.

6529. Speaking generally, does the Bombay Presidency grow enough food for its own consumption, or does it habitally import from the East?—That is a subject I have not inquired into. That could be given with greater accuracy by the statistical department of the Government.

6530. In the town of Bombay at any rate there is an habitual importation from the East and from Bengal, is there not?—Yes, but chiefly for export, I have no doubt that the Bombay Presidency produces very much more than it requires for its own consumption, but I am not prepared now to give accurate figures on that subject; grain and food generally is exported very largely through the Bombay ports.

6531. Does any considerable proportion of the wheat that is exported to Europe come from the Bombay Presidency?—An enormous quantity.

6532. Where is it cultivated?—In Guzerat, in Kandesh, and in the Southern Mahratta country. The whole of the Bombay Presidency is a wheat producing country, except the coast districts.

6533. A large proportion of wheat which is now exported from Bombay does come from the Bombay Presidency?—No doubt.

6534. I think you said you would not leave the plums to the companies, and let Government make the worst lines?—Just so.

6535. I think you also accepted a proposition which the Chairman put to you, namely, that you

Sir *George Campbell*—continued.

would not have the Government of India take up lines in so great a hurry as to defeat the hope of eventually getting them taken up by companies?—No.

6536. Do you mean that you would leave some of the most likely lines to be taken up hereafter by companies, although you could not get companies to do them without a guarantee at present?—I also couple with that the remark that we should proceed gradually and reasonably, that the extension of railways should be economical and reasonable; I would not pledge myself to leave any plums for any companies that might be raised eventually.

6537. If you cannot get companies now to construct the lines without guarantee, you would take the plums at once, and construct them either by Government or through guaranteed companies?—I should take those plums at once, provided that the lines could be built economically; I mean to say that the progress of railways would not be excessive.

6538. As regards the break of gauge, the abuses and difficulties which you have mentioned. acres of cotton lying exposed to the weather, and so on, do you think that is a necessary part of a break of gauge, or is not that a case of an abuse and mismanagement?—It is partially owing to the want of sufficient rolling stock; but, more or less, there will always be these disadvantages and these evils. They have been found to exist wherever there has been a break of gauge.

6539. Have you found that, in America, things are exposed to the weather, and that all these evils take place?—Yes, you may see it in America also, not only where there is a break of gauge, but where there is no break of gauge. Look at the goods and the grain which you see lying exposed to the weather and to all sorts of pilferage at the different railway stations in America.

6540. Are not there generally in the course of construction these immense elevators in America?—There are. At Chicago, and all the large centres of traffic, everything is done in order; but look how rude the railway appliances generally are in America, in outlying districts.

6541. Where are the places where you have seen acres of cotton lying exposed to the weather on account of the break of gauge?—I have seen them in the Southern States of America.

6542. I mean in India?—I have seen them at all the railway stations in Kandesh, for instance.

6543. Is there any break of gauge there?—No, but I have seen them also at Ahmedabad.

6544. It also takes place at stations where there is no break of gauge?—It does.

Mr. D. T. ROBERTSON, called in; and Examined.

Chairman.

6545. Will you tell the Committee your connection with India; when you went there, and how long you were in the country, and if you have any connection with India at the present moment?—I went to India in 1854, in connection with one of the Exchange Banks. I re-

Chairman—continued.

turned to London in 1860, and I remained in London in charge of the head office of the bank until 1882.

6546. When did you retire?—I retired in 1882.

6547. Are you familiar with the Government loan operations in India and in London during the

Chairman—continued.

the period which you have mentioned?—Yes, pretty well. I may read to you what I have noted down on that point.

6548. Are you prepared to lay before the Committee a general statement of your views with reference to the Government Rupee Loans?—Yes.

6549. Will you tell us also if that statement contains the capacity of both the Indian and British markets to absorb the capital?—It does.

6550. Will you kindly read it to the Committee?—In December 1853, a 3½ per cent. loan was brought out in India, which was a failure, the amount subscribed being only a few lakhs of rupees. In March 1855, a 5 per cent. Public Works Loan was brought out for 2¾ crores, and closed 19th October 1855. This was the first loan brought out as a Public Works Loan, and was rather unexpected, coming so soon after the attempt to raise money at 3½ per cent., but as far as my memory serves me, it was necessitated, owing to the Government cash balances suddenly running low.

Mr. *Bolton.*] That did not fail?—No.

Witness.] In August 1856, a 4½ per cent. loan for 3 crores was opened, and closed January 1857. In July 1857, a 5 per cent. loan for 3 crores was opened; subscriptions were receivable half in cash, half in 4 per cent. paper, and the amount of the loan was extended and kept open for a long time, all through the mutiny, I think. After the mutiny, and the transfer of India to the Crown in November 1858, money being much wanted, a 5½ per cent. loan was opened May 1859, and remained open until Februry 1860; the subscriptions were receivable half in cash, and half in 5 per cent. paper; the total raised was 8 crores 37 lakhs. Simultaneously almost there was a loan to the East Indian Company by the English Government of 1,000,000 *l.* in 1857, and 5,216,000 *l.* in 1859. That was necessitated by the mutiny. From this time forward the loans were raised at from 5 to 4 per cent.; since 1867, there have been no 5 per cent. loans. In December 1858, on the recommendation of the merchants and bankers in Calcutta, it was announced by the Government that interest on rupee paper would be made payable at the Bank of England by a draft on Calcutta. This was a great relief to the rupee loan market in India, and large amounts were soon transferred to, and taken up in the London market, and permanently held there. The Bank of England returns, which I have received from the Bank, show that on the 31st December 1860, the total rupee principal upon which they had paid interest for that year, was 7 crores 95 lacs rupees. It went on increasing every year, and on 31st December 1870, it was 17 crores 81 lacs; on 31st December 18 crores 75 lacs, and in 1881, 21 crores, at which last figure it has remained almost stationary, there being no increase since 1881. To show the extent to which rupee loans have been absorbed in the English market since 1873, I quote the following figures. Total rupee principal on which interest was paid by Bank of England for 1873, 13 crores 6 lacs. Ditto for 1883, 21 crores. Increase in 10 years, 7 crores 94 lacs. To that must be added the whole of the coupon loan of 1880-81, which was all taken up, and believed to be still held in England, giving a total increase in England in 10 years of 11 crores 7 lacs. During those same 10 years, the total of rupee loans raised by the Government in India was 26 crores 13 lacs; so that if you deduct the amount absorbed in this country, 11 crores 7 lacs, you have a balance left of 15 crores and 6 lacs, which was found in India. According to Mr. Westland, during the same period there was paid off in India 2 crores 85 lacs, so that that leaves the actual amount of new money found in India 12 crores 21 lacs in those 10 years, as against 11 crores and 7 lacs found in this country. The Bank of England figures for 1882 and 1883 show hardly any variation in the total rupees on which interest was paid, and would thus indicate that there has been no increase in the rupee paper held in England the last two years, and that the two loans for 2½ crores each raised in India during that period are all there still. And it is to be remarked in connection therewith that, notwithstanding that the price of money in India has been from 8 to 11 per cent. the last six months, the price of the 4 and 4½ rupee paper has not fallen below 94⅜ and 99, and stands now at 100⅜ and 102½, with an 8 per cent. rate for money. This would indicate that these loans are in the hands of strong permanent holders. Turning to the import and export returns of gold and silver into India, I find that the balance of gold imported into India from March 1877 to 31st March 1884 was 20 crores 25 lacs rupees, giving an average of 2 crores 89 lacs per annum. For 1881 the figures are as follows: 3 crores 65 lacs rupees; 1882, 4 crores 84 lacs rupees; 1883, 4 crores 93 lacs rupees; 1884, 5 crores 49 lacs; a continuous increase. As there is no gold currency in India, I have always considered that the importation of gold into India may be looked upon as a luxury, and as indicating a prosperous state of the country; and the growing export of wheat during the past few years, coincident with the growing import of gold, may be connected as cause and effect to a certain extent. With the general increase of wealth in India, which the yearly large imports of silver and gold over and above what is required for coinage purposes show, I think the absorption of rupee loans should increase; but as the country becomes opened up by railways, new enterprises will spring up, and the agricultural cultivation of the country will be developed, requiring increased capital, all of which will give a better return for money than Government rupee loans; so that I do not look for any rapid expansion of invested capital in this direction in India. Before leaving the subject of rupee loans, I think it would greatly help to make them popular, especially in England and India, if they were consolidated into one or two loans. At present there are 14 loans, with different rates of interest and different conditions, so that the investors have great difficulty in determining which is best to buy. There is also a great hindrance to the free holding of rupee paper in England, by reason of the holder having to deposit his paper at the Bank of England for 10 or 14 days,

Chairman—continued.

days, when he has to draw the interest. This is very much complained of, and should be reduced from three to seven days at most by the employment of more clerks at the Bank of England. The further increase of rupee loans in the English market is almost entirely dependent upon the course of the silver market, about which so little can be said with much confidence, the course of legislation in American and on the Continent as regards silver, being an unknown quantity. As regards sterling loans, from the India Office figures furnished me, I find that the total since 1873 is 17,500,000, bearing interest at 4 to 3½ per cent.; average rate 3·813. The whole of the loans were taken up as a premium. At 3½ per cent., I think the Government could borrow freely in this country at present; but any large additions to the sterling debt would be regarded with apprehension were the price of silver further to decline. I omitted to mention that of the total of 26 crores 13 lacs borrowed during the 10 years from 1873 to 1883, 15 crores were borrowed at a discount; 11 crores 13 lacs at a premium; and the average rate of interest was 4·21 per cent.; that is all I have to say with reference to the subject of loans.

6551-2. Are you connected with Indian railroads at present?—I am a director of the Bengal Central, and of the Rohilkund and Kumaon lines.

6553. A great many of the witnesses before this Committee have expressed their high approval of the contract that was entered into with the Southern Mahratta railroad; do you share that sentiment of approval?—No, I do not; because the stock is still at a discount.

6554. Is that so?—The 5 *l.* shares are still at a discount.

6555. Could you give us the figures?—They are not all fully paid up. There is a very large amount of shares on which only 5 *l.* is paid, and they are at a discount.

6556. Then you do not think that is an advantageous contract?—No. Of course it has been altered since it was originally made, and in this way. The Government came to the rescue the other day, and authorised the raising of one-third of the capital in debentures, and guaranteed the interest on the debentures, leaving therefore the whole of the profits of the undertaking to go to the other two-thirds share capital That was not part of the original agreement; that has benefited the stock in the market considerably; but that was not the original contract.

6557. So that experience has shown, in your opinion, that originally the contract was faulty?—Until that was done the whole of the stock was at a discount in the market, and quite unsaleable at par.

6558. You have mentioned to the Committee the names of several railway companies with which you are connected; now, knowing as you do, the contracts for these railroads, would you explain to the Committee what is your view with reference to the methods suitable for bringing forward new railways in India?—Yes. Assuming that the Government of India are desirous for the construction of railways by public companies, and that they publish all particulars, with survey reports of the lines they wish made by companies, estimates of cost, traffic, &c., in such a form as the public can take up, and enter upon negotiations for the formation of companies; there are three methods by which I think this may be accomplished, on the assumption that Government shows its confidence in these undertakings by giving a complete or partial guarantee of interest on the capital embarked, and this may be considered as only reasonable when the Government selects the line, prepares the estimates, and puts forward the project. First: on the lines of the contract of the Southern Mahratta Railway, with a simpler agreement as regards the repayment to the company of its capital in case of the contract ceasing. I will quote what that agreement is, because it was objected to in the market. By the Southern Mahratta contract, the Government is only obliged to find in India the assumed rupee equivalent of the sterling capital loaned to the Secretary of State in London as follows: "The Secretary of State may, out of the revenues aforesaid, pay to the company in India the equivalent rupees at the market rate of the day for bills drawn on London, payable on demand," leaving this company to find the bills, which it would be very difficult to do if it was a large amount. Instead of this, the claim should be worded as in the Rohilkund and Kumaon contract, as follows: "Pay in rupees to the company in India the actual ascertained cost of providing in India through a bank, for the payment by telegraphic transfer of any specific amount of sterling money in London; the company shall accept the rupees so paid in lieu and satisfaction of the specific amount of sterling money." Again, by the Southern Mahratta Contract the company get one-fourth of the net profits when the 4 per cent. guarantee is reduced to 3½. It is this retrograde step in the Southern Mahratta Contract of reducing the guaranteed interest from 4 to 3½ per cent., which has damaged the market position of the Company's stock. It is, in my opinion, very undesirable to have any reduction in the guaranteed rate of interest which the public are likely to read as an indication of a want of confidence by the Government in the capacity of the line permanently to earn this extra ½ per cent. To make the terms thoroughly acceptable to the public, it would be advisable that the Government should guarantee that the one-fourth share of net profit payable to the company should never be less than ½ per cent. on the share capital. This method is specially applicable to lines of railway that do not promise to earn much over 4 per cent. The second mode I have considered is a fixed guarantee of 3½ per cent., with an equal division of profit over net earnings of 3½ per cent., with a purchase clause enabling the Government to acquire possession at the end of 25 or 45 years, after completion of the line, computed on the basis of returning the company's capital, plus 25 years' purchase of the company's share of the average of the last five years' surplus net profit over the guaranteed 3½ per cent. It is very little better than the Bengal Central. This method, I think, is only practicable when the lines of railway to be made promise

Chairman—continued.

promise to yield a fair revenue over 3½ per cent. The third mode is by the payment of interest at 4 per cent. per annum out of capital during construction, with a guarantee by the Government of 4 per cent. for the first five or 10 years after construction, the company paying back to the Government any sums advanced by them during these same years in respect of this guarantee, plus interest at 4 per cent. per annum out of earnings over 5 per cent. on the capital. That is the same as the Bengal Central. The purchase clause to be the same as the Bengal Central, viz.: "25 per cent. premium on the capital expended on the railway, the option being exercisable either 25 or 45 years after completion of the line." This last method involves the Government in the least possible risk; as, assuming that the railways are to be made either by the Government or by companies, the Government would be very little, if any, the worse if they had to contribute towards the guaranteed interest of 4 per cent. during the first five years, or even beyond that period; and the stipulation for repayment of these advances is made contingent upon a not too remote probability of the company earning over 5 per cent., which if realised makes the option of purchase a favourable one for the Government. This last method is, in my opinion, less likely to be a reliable mode of raising capital than either of the others, as the English public are not familiar with the practice of paying interest out of capital during construction, and are somewhat prejudiced against the principle of doing so in consequence of the Standing Orders of the House of Commons not permitting it in the case of English railways; and I think it is only practicable with lines of railway which have good prospects as dividend-earning concerns. Assuming that the desired extension of railways in India can only be made with money raised in England, the employment of English companies for this purpose relieves the Government of all risk from exchange, since the Government are not bound to exercise the option which would place them under actual liability to pay the sterling value. The option of purchase provided for in methods two and three gives the Government the option of buying up the line, or renewing the contract, if the conditions as to earnings and exchange are favourable; and, having regard to the uncertainty of the next 25 years, alike as regards silver, as also the uncertainty of the earnings of any particular line of railway in India, I think it must be admitted that contracts under this method entail the least possible risk to the Government." That is all I have to say with reference to the raising of the money.

6559. Then with reference to the regulation of rates for traffic, both for passengers and goods; we have had a good deal of conflicting evidence. We should like to hear your views in regard to the control of the Government, and what regulations ought to be laid down for the future?—That question might probably be answered in this way: It will possibly answer the purposes of the Government, and not be deemed unduly severe on the companies, or be likely to deter investors, if the control of tariff is exercised once in eight or ten years somewhat as

Chairman—continued.

follows: If the net profits of the company, on an average of any one interval of eight or ten years, exceed 6 per cent. on the capital raised, the Government to have the right to revise the tariff, fixing such new maximum rates as may be calculated to result in a 6 per cent. return on the capital raised. However, as the carrying out of the reduction might involve the providing of extra rolling stock to carry the additional traffic to make up for loss in rates, a reasonable time should be allowed the company for procuring the additional rolling stock before the reduction in rates becomes operative, and it should be provided that the Secretary of State shall facilitate the raising of the required extra capital, by guaranteeing the same, an interest of 3½ per cent., or such other higher rate as might be found necessary, on the terms that any payments by the Secretary of State for such guaranteed interest shall be recouped to him by the company only out of surplus profits over 6 per cent. If after any revision is put in force the company's profits in any year fall below 6 per cent., the Secretary of State should make good the deficiency, and concur in such a fresh adjustment or adjustments of tariff as should be calculated to produce 6 per cent. on the capital raised.

Mr. *Bernhard Samuelson.*

6560. Did I understand you to say that the third alternative that you propose is the equivalent of the contract with the Bengal Central Railway?—No.

6561. What are the differences between the two?—The difference between the two is that the guarantee to the Bengal Central is interest during the construction, and in the other case the guarantee is after construction.

6562. Do you think it would be possible to find companies to continue to make railways on the Bengal Central terms?—No.

6563. So that that form would be out of court?—Yes, at present.

6564. I asked a question of Mr. Watfield in reference to the course of the silver market, and he answered me that it depended on the terms of the rate of exchange; have the two been always level; has the rate of exchange fallen and risen with the fall and rise of the price of silver of late years?—Yes.

6565. In the same measure?—No; I do not think so; I do not think you could say exactly the same.

6566. Then it is possible that in future also silver might rise without exchange rising, and silver might fall without exchange falling?—It is just possible, but you cannot forecast the future of the silver market; there are so many circumstances affecting it.

6567. It has been so in the past; silver has risen lately, and exchange has not risen?—No.

6568. Then, in point of fact, there must be other causes in operation affecting exchange, besides the price of silver?—Yes.

6569. What are those causes?—I do not know; I have not studied the subject closely the last two years.

6570. I did

Sir *George Campbell.*

6570. I did not catch the date of the first loan which you mentioned; 1854, I think you said?—No, 1853.

6571. What was that loan?—A 3½ per cent. loan.

6572. In India, or England?—In India; that was a remarkable failure.

6573. It was not taken up?—No; there were a few lacs only subscribed.

6574. Then the next one you mentioned was a 4½ per cent.?—A 5 per cent. Public Works loan issued in Lord Dalhousie's time.

6575. What was the date of that?—1855.

6576. On what terms was that taken up?—At par.

6577. Then you mentioned a 4½ per cent. loan in 1856, I think?—Yes, that was three crores.

6578. Previous to that 3½ per cent. loan which was offered, and of which only a few lacs were taken up, is it not the case that a large amount was raised at 4 per cent.?—Yes, but I cannot tell whether at par or not.

6579. Have you looked back at all?—I have looked back at the rates only. They could not tell me at the India Office whether it was raised at par or not.

6580. The great mass of the Government paper previous to that date was 4 per cent.?—Four per cent. There was some as high as 6 per cent., and I have got the papers here.

6581. Then previous to the Mutiny, the Government did raise money at 4 per cent., but you do not know the terms?—No.

6582. Are you not aware that, in former days, there was an open loan of 4 per cent., and a good deal of money came in under that?—Yes.

6583. You have told us, you do not approve of the Southern Mahratta terms because the shares have gone to a discount. I want to ask you, if the shares had gone to a premium, in your opinion would that have been a ground for approval of the terms?—As I understand, you ask me whether I approve it or not as a mode by which you can raise money for railways, that is how I understand your question; and I say I do not approve of any method which would be a failure.

6584. In the case of the Southern Mahratta Railway, if you look upon it from the Government point of view, and not from the promoters' point of view, did not the Government succeed in making very goods terms in rising the money?—They could not repeat it.

6585. Still they did succeed in that case?—In that case they did succeed, but they could not repeat it.

6586. But if the shares had gone to a premium would not that, on the other hand, show that the Government had made a somewhat unnecessary payment?—The bargain must be advantageous to both parties, otherwise you cannot repeat it.

6587. You do not think the Government can with advantage make terms, unless those terms turn out advantageous to the shareholders?—Certainly not.

6588. You have told us, I think, that the Government can borrow at 3½ per cent.?—They can.

6589. But, at the same time, you recommend

Sir *George Campbell*—continued.

that the Government, if they guarantee, should guarantee 4 per cent.?—Only in one case.

6590. And a chance of profits?—After the Southern Mahratta contract, I say they should guarantee the 4 per cent.

6591. What are the advantages of employing such a company as the Southern Mahratta Company, that the Government, being able to borrow at 3½ per cent., ought to guarantee 4 per cent. with a chance of profits?—Because the guarantee is a mere nominal one, in my opinion, for the extra half per cent. You have the company to make the line, and administer it, and work it. If the Government believe the line will pay 4 per cent., it is a nominal guarantee on their part; giving the guarantee for the extra half per cent.

6592. A certain risk is run?—Certainly.

6593. What I want to know is, do you think that the Government, in employing a company of that kind, obtain any advantages beyond what they would obtain if they borrowed the money at 3½ per cent., and made the line themselves?—Yes; as I pointed out, if the company borrow the money, the company run the risk. There is no risk of exchange. But if the Government borrow the money in sterling here, they have to run the risk of repaying that sterling. You cannot pile up a large sterling debt in this country without providing for the repayment of it, and the Government have to provide for it if they borrow the money. If the company borrow it, they do not do that.

6594. Do you propose that the Government should borrow in sterling and guarantee in silver in any case?—I do not understand your question quite.

6595. What I want to understand is, what the advantage is if the Government Guarantee 4 per cent. to a company such as the Southern Mahratta Company in preference to borrowing at 3½ per cent., and making the lines themselves. As I understand, you say there would be some advantage in regard to exchange. I want to understand that?—Yes. If the Government borrow sterling in this country they become responsible for the repayment of that loan, and that is against the silver revenue. If the company borrow the money in this country the Government have no responsibility with reference to the repayment of it except to the company, and they need not exercise the option of paying it, but may continue it.

6596. In that case would not you propose that the Government should be responsible for the guaranteed interest in sterling?—Yes.

6597. In that case would there be any question whatever with reference to the exchange. The Government would have to pay the money in sterling?—Exactly; they have the revenues of the lines to contribute towards it. The revenues of the lines are supposed to contribute the interest that the Government guarantees.

6598. Do you think the form of management through a company is advantageous over Government management?—It saves the Government increasing the establishment and paying for pensions, and so forth.

 6599. Do

Sir *George Campbell*—continued.

6599. Do you think it would be possible for the Government to borrow the money and obtain all the advantages they now have by appointing something in the nature of a trust such as you have with reference to the Bombay Harbour?—I have not looked at the subject in that way to give you my view of it.

6600. We have been told that one great advantage of the guaranteed company system is that there are a very large number of gentlemen of great Anglo-Indian experience whose services are available in that shape?—Yes.

6601. Do you think that that experience avails itself to the full at the present time; are not there a dozen gentlemen who are in the habit of being directors of these companies and who seem to be generally directors of three or four companies, and monopolise those directorships amongst themselves?—I cannot give any opinion upon that.

Mr. *Bolton.*

6602. When you spoke of the rupee loan being held in India to the extent of a little more than a half of the whole, do you infer that those loans are held by the natives?—No.

6603. They are held by Europeans?—I cannot say; we have not sufficient information upon that point to arrive at a sound conclusion.

6604. But the arrangement to pay interest on these loans in London by drafts on Calcutta you said was felt to be a very great relief?—It was.

6605. The inference there is that they are actually held in this country?—We know what is held in this country exactly, and that is that the loans upon which interest is paid at the Bank of England here are held permanently in this country.

6606. All those to which your remark applied that the arrangement was a great relief?—Yes.

6607. Do you think that loans contracted in silver on which interest only was payable in Calcutta would be taken up to any great extent in India?—No, I do not think so beyond a million and a quarter a year.

6608. Do you think they would to that extent?—To that extent seems to be a figure you can rely upon.

6609. With reference to these three modes you have suggested for the construction of railways by guaranteed companies, the Southern Mahratta you condemn, I think?—In its improved form I do not condemn it, because it has been altered from its original form, as I mentioned just now, by the Government guaranteeing the interest on one-third of the capital.

6610. But you added to it, I think, that the Government ought to guarantee a fixed repayment of at least a half per cent.?—I did, in order to make the thing go with the public freely.

6611. Have you calculated what it would cost the Government then as compared with borrowing the money themselves and making the lines by their own officers?—I think, as regards raising the money, that the guarantee of a half per cent. is a mere nominal guarantee, because it is only after construction that I have recommended it. The Government at present guarantee 4 per cent. on the present Southern Mahratta terms for a period of seven years, and then the guarantee lapses to 3½ per cent., the company getting one-fourth of the net profits. I look upon the Government giving the guarantee for that half per cent. as a mere nominal guarantee.

Mr. *Bolton*—continued.

6612. Still, if they did give the guarantee they must either pay it or the company must give the equivalent of half per cent. to meet your views?—Yes.

6613. Consequently the Government might as well guarantee 4 per cent. in perpetuity to companies to raise money which they themselves could raise at 3½ per cent.?—It comes to that.

6614. Then your suggestion is, that the Government should adopt a system similar to that of the Southern Mahratta, which is practically paying 4 per cent. for money in perpetuity which they can raise at 3½ per cent.?—Well, there is this difficulty also. If the companies raise the money, the Government has not the same responsibility; they do not run the risk of the exchange; if the Government raise the money they run the risk of the exchange.

6615. And share the profit, if there is any?—Yes, if the exchange is 2 *s.* when the contract falls in the Government are very great gainers.

6616. You have taken all these matters into consideration, and your recommendation is that the Government should guarantee practically 4 per cent. in perpetuity?—On that system of lines, that is poor lines, not promising to pay much over 4 per cent.; I qualify it with that.

6617. Still, on lines of that kind they should pay 4 per cent.;?—Yes.

6618. Where they can borrow the money themselves at 3½ per cent.?—Yes.

6619. And to pay this extra half per cent. for the advantages, if there are any, of having lines made and marked by companies under their control?—And getting rid of the risk in the exchange.

6620. That risk which may be either profit or loss. Then your second proposition was, I think, 3½ per cent. in perpetuity, with half profits over 3½ per cent.?—Yes.

6621. That you express a rather better liking for?—I think under such a system the money could be got from the public.

6622. What would be the effect of such a thing if it was not got?—The company would not be floated.

6623. And great delay would take place?—I apprehend so.

6624. And the contract would terminate?—I do not think a company could be formed unless they saw the way to float it.

6625. Suppose the contract were taken by a financial house in London, and they failed to raise the money, what would follow; would they pay damages?—That would depend on the contract.

6626. Do you suggest that?—No.

6627. If they had the option of floating a company at 3½ per cent. with half profits over 3½ per cent., and if they failed to raise the capital, they would just simply notify that to the Government, and there would be an end of the matter?—Yes, that is all. The Government must be careful whom they deal with.

6628. Then your third proposition was 4 per cent.

Mr. *Bolton*—continued.

cent. during construction, and for four or five years after construction?—Paid out of capital during construction.

6629. What effect would that have if the Government guaranteed to pay it?—They do not guarantee it. That is not my third proposition.

6630 Your third proposition is without a Government guarantee?—During construction.

6631. Then Government would guarantee interest at 4 per cent. for four or five years afterwards?—Yes.

6632. On the cost, plus the interest?—Yes.

6633. I think there were some additional advantages which the companies were to have under that?—The same as in the Bengal Central contract, that any contribution the Government made towards the guarantee of interest after construction was to be repaid to the Government with interest at 4 per cent. out of earnings over 5 per cent.

6634. Do you think money could be found on those terms?—I think it possible, but as I have stated, I do not think it is a very popular mode. Still, I think that the Government endorsing the scheme by guaranteeing the interest for five or 10 years, according to the outlook of the company, the public would be satisfied to subscribe their money.

6635. Do you think there is any advantage in a variety of suggestions like these three which you have made?—I put down the advantage of this method as the one committing government to the least possible risk, because the guarantee is a limited one and the money advanced in respect of the guarantee is paid back again, and they have no further risk.

6636. With reference to this last proposition, if the line did not pay 4 per cent. five years after construction, the promoters would be losers?—They would.

6637. Whereas, if it paid 6 per cent., 1 per cent. would go towards the repayment?—Everything over 5 per cent. profit would be divided.

6638. It would go towards repayment of the interest advanced by the Government?—Yes.

6639. Would you give a company so formed any control over the management of its own line?—In respect of what, do you mean.

6640. In respect of rates, or in respect of extensions by feeders, or in respect of increase of station accommodation, increase in their rolling stock, and so on?—That must be all under their own control.

6641. Everything?—Everything, and with the provision which I suggested with reference to the regulation of the tariffs.

6642. Would you limit the amount of capital at the outset?—Yes.

6643. How would you arrive at a proper limit?—By the estimates of cost.

6644. Supposing those estimates were not found to be correct?—Then there are generally borrowing powers taken or debenture powers taken in the contract to enable the company to raise money in addition to their capital.

6645. Would that be a preferential claim on the revenue of the company?—Yes.

6646 That you would provide for?—Yes.

6647. Would you allow these companies to borrow their money where they pleased, or would you subject them to the control of the Indian Government in that respect; I think there is some condition of that kind in the Southern Mahratta contract?—Well, I think the question answers itself, because they would borrow in the cheapest market, which would be this country.

6648. Is the Southern Mahratta Company allowed to do so?—As far as I know.

6649. I am told it is the reverse?—I think you refer to the original contract, by which a certain number of shares were reserved for India, and they were offered in India, and only a small amount taken up.

6650. I think the Government of India does look with some jealousy upon borrowings for Public Works of this kind out of India, does it not?—I am not aware what their views are.

6651. I think there is a prohibition practically on the municipality of either Bombay or Calcutta borrowing in London?—I am not aware of that.

Mr. *Jackson.*

6652. You spoke of the Southern Mahratta as not having been advantageous; from what point of view did you speak?—Advantageous as a method of raising money for the construction of railways in India. It is not an operation that could be repeated; that is the sense in which I spoke of it.

6653. That is to say, it would have been an advantage if it could have been worked?—If it could have been repeated; it would have been an advantageous contract if you could repeat the operation.

6654. It is not an advantageous one, because the contract is not good enough?—Exactly; you cannot raise any more money under such a system.

6655. You spoke about reserving the power to buy these railway companies at the end of 25 and 45 years; would you make any provision for notice? You did not mention that?—There is one year's notice generally given, one year before the 25 years expire. At the end of the 24th year the Government gives notice of its intention to purchase.

Mr. *William Fowler.*

6656. I think you have had a good deal of experience as regards the condition of the Indian money market and its character?—Yes.

6657. I understood you to say that you did not think the Indian money market would ever absorb much rupee stock, because of the rival means of using money?—Yes.

6658. I think you said just now a million and a quarter a year would be all they could borrow?—Yes, a crore and a quarter, which is roughly a million and a quarter.

6659. Does not it come to this, that if there is to be any considerable extension of the railway system, you must borrow in England largely?—Yes.

6660. Either through companies or in connection with the Government?—Yes.

6661. I think I understood you to say you strongly advocated any system by which the Government would avoid the danger of loss by exchange in the ultimate repayment of capital?—I think, in the present uncertain condition of the

Mr. *William Fowler*—continued.

the silver market, it is very desirable that Government should restrict its liability in respect of sterling loans in this country as much as possible.

6662. Have you studied the question of the effect of the low rate of exchange upon India generally at all?—It has been of late years a very considerable advantage. It stimulated the export trade to a very large extent by throwing cheap money into the country.

6663. You have not gone very minutely into that question yourself?—I can only give it in this way, that some products, for instance, wheat, could only have come forward from India with a low exchange, and no doubt it stimulates other products likewise.

6664. Has not the extension of railways had a great deal to do with it?—That has had a great deal to do with it.

6665. The two things have combined?—Yes.

6666. You think we should not have had anything like the development of the wheat trade we have had, but for the low exchange?—I think not.

6667. Because that has enabled the merchant to give the cultivator a better price in silver?—Yes.

6668. To what extent do you carry that argument; would you think that a fall in the rate of exchange we have now would be beneficial in India?—No, I do not think it would have much effect.

6669. I do not know that I quite follow you, because you say the effect is to enhance very much the price of silver that the merchant can afford to give the producer. That is a thing that would go on still further, would it not?—To what extent do you mean by a fall in the exchange; do you mean 6 *d.*

6670. Supposing it goes down to a quarter, the same argument would apply, that you would be able to give a much higher price to the cultivator?—Yes, it is a question of degree. You cannot say when a further fall would begin to operate.

6671. I wanted to know whether you had studied it, so that you could indicate any great evil that would result from it apart from the loss to the Government; I am speaking of the people in India; you have not considered it?—I do not think I could answer that exactly.

Mr. *Carbutt.*

6672. You said you thought that the Southern Maharatta shares, that is the 5 *l.* shares, were at a discount?—Yes.

6673. Have you noticed any transactions lately?—I have noticed the quotations.

6674. Since when?—I think a week ago. It is a little more than the interest. There is six months' interest due on them, so that I think it is abouth one-eighth premium. The fact is, I have got some for sale now, and I should be very glad to sell them at a premium.

6675. Would you sell them at par?—No, I will not sell them at par.

6676. That is the question; I understood you to say they were at a discount?—There is interest due on them.

Mr. *Carbutt*—continued.

6677. What is the interest due on them?—Six months' interest.

6678. What is the amount of interest due on 5 *l.* shares?—About 2 *s.* 6 *d.* If you come to sell them and pay brokerage on your shares, you do not get par.

6679. Would you take 5 *l.* and 2 *s.* 6 *d.* for your shares?—No.

6680. Then they are at par?—There is brokerage to pay on that besides.

6681. You would not have to pay brokerage?—Yes, I should be a loser on that transaction.

6682. I should like to get at the value of these shares. Are the 20 *l.* shares at a discount?—No, at a good premium.

6683. At what premium?—I think about three-quarters. Then of course there is six months' interest on that to come off; that would be 10 *s.*

Mr. *Kynaston Cross.*

6684. With a 20 *l.* share at 20¾ and a 5 *l.* share at 5 *l.* and 2 *s.* 6 *d.*, is there a great difference in their comparative value?—The interest is about 10 *s.*

6685. 8 *s.*?—Yes.

6686. There is not a great difference in price?—Yes, there is.

6687. I think you mentioned the various kinds of debt, and advocated a consolidation of the rupee debts in India?—Yes.

6688. You are aware that there are only two kinds of loans, the 4 per cent. and the 4½ per cent., which are current now, are you not?—That is, the Government are borrowing under those two heads. The present loans are all borrowed under those heads.

6689. Are you not aware that 85 crores out of 90 are represented by those two denominations of loans?—I did not sum them up.

6690. That 85 out of 90 crores are represented by the precise conditions of 4 per cent. and 4½ per cent., and that the holders of loans, whenever they might be issued, might convert them into a consolidated loan if they liked?—Of any outstanding loan.

6691. Yes, of any outstanding loan?—I am not aware of that.

6692. Then you complained of the Southern Mahratta contract; you said it was faulty?—I did.

6693. And the reason you gave for it being faulty was, that the shares were at a discount?—The shares are at a discount, because it is faulty.

6694. Then you would lay it down as a principle of every contract that is made, that you must maintain shares above par, or else you would call that a faulty contract?—It is faulty in this respect, that you cannot raise any more money under the same conditions.

6695. You think that you could not raise the money under those conditions?—No.

6696. How is it that you, on worse conditions, have raised the money for the Bengal Central?—The Bengal Central was a fancy article. It was an experiment, and the public have ideas with reference to the prospects of that line from what was put forward in the prospectus, and that line has prospects which the Southern Mahratta never had, and never will have.

6697. Then

Mr. *Kynaston Cross*—continued.

6697. Then it is not the fault of the contract, but the fault of the prospects of the line?—Both.

6698. You said that the Southern Maharatta was a faulty contract; would you call the Bengal Central a perfect contract?—No.

6699. Would you call it faulty?—I would.

6700. But still in the one case the shares are at a premium?—Yes, but we cannot repeat it. One of the things which Sir George Campbell asked me was, if we could raise money under the Bengal Central terms for other railways, and I say we could not.

6701. Then any contract would be faulty, in your opinion, which allowed the shares to go to a discount?—Yes. I pointed in the Southern Maharatta contract to that clause providing for the repayment of the company's capital in India in rupees only, and that is considered a considerable difficulty, because on the termination of the company's contract they might lose very considerably by the exchange.

6702. But is the rate fixed at which they shall receive rupees in the place of their capital in India?—It is stated to be the quoted rate for Bank drafts of the day, according to the contract, without any agreement to send the drafts.

6703. Is not that a guarantee of the exact equivalent of the sterling payment?—No, because the company are left to find the remittance.

6704. It would be known sometime beforehand if such a payment is likely to take place?—It might, or might not be, the Government might not decide to purchase until the very last moment.

6705. What notice have they to give of the purchase? In the case put by you, it would not be the Government purchasing, but it would be the company declaring that they would insist on repayment by the Government?—The Government might wish to take it off their hands.

6706. Not without 12 months' notice?—Not without 12 months' notice.

6707. Is not the 12 months' notice sufficient notice to the market; in that case the Government would have to provide in London the equivalent of the sterling, would they not?—Yes; but the Government might say: "Well, there is the quoted rate for the bank drafts of the day; there are your rupees." Then there might be a combination of the market against the company, and they might say, we are not going to give you bills on London, except at an enhanced rate; you are liable to a combination of a ring, if you are left to find the means of remittance.

6708. Has that any effect on the market price of the shares to-day?—I think it had, and I think it has still in the minds of many investors.

6709. Then you would say where the Government made a contract with a railway company which involved conditions of repurchase, there should be a prospect of the price of repurchase being at a considerable premium?—Yes.

6710. And that would be one of the conditions which you would hope for?—You could not find the money otherwise.

6711. You think the money cannot be found otherwise?—No.

6712. Is it not much better that the Government should borrow money in the market at the lowest rate, and make the lines themselves?—Then I come to the question of risk by the exchange in the repayment of that money.

6713. You have told me that the repayment was fixed at the equivalent of a certain number of sterling pounds?—The Government have to find the equivalent of the pounds in rupees, which may vary according to the Exchange, and in that way they run the risk of the Exchange.

6714. The Government run the risk of the Exchange, and the Government run the risk if they borrow the money in sterling in the same way?—That is by the Southern Maharatta Contract. Borrowing money by sterling in London is the mode you referred to just now. If you borrow the sterling debt in London the Government has to run the risk of repaying that money in London.

6715. It can repay it by an equivalent number of rupees. Is not that the way in which it does repay?—In the Southern Muharatta Contract it is.

6716. Is not that the way it discharges all its sterling debt?—I do not know.

Sir *George Campbell.*

6717. Have you noticed in the "Indian Statesman," a financial paper, figures tending to show there has not been an increase of imports as compared with exports, and that in reality the increase of exports in the last 15 years has been very small?—I have not seen it.

Major CONWAY-GORDON, R.E., called in; and further Examined.

Chairman.

6718. ON the last day of our meeting we had some very striking and remarkable evidence given by Mr. Rendel, which I believe you have had an opportunity of reading, and wish to make some remarks upon?—I wish to make only one or two remarks, because on all the more important issues Mr. Rendel's evidence strongly supports my own. I see he supports me on the most important issues of all, namely, the necessity of extending the railway system in India, and also of working the railways in the most economical manner, and at the lowest rates and fares. He is also with me on other less important points;—such as the practical worthlessness of the maxima rates and fares entered in the railway contracts; the general unwillingness of railway companies to lower their rates, and the necessity both in the interest of the companies and of the public of maintaining some decided control over rates and fares; and he also concurs with me as to the advisability of raising the further capital required on the lowest possible rate of guarantee coupled with a share of the surplus profits. In fact, I may say that his views are entirely in accord with my own

Chairman—continued.

own on every issue which is unconnected with gauge, and even on this point, there is a more material agreement than appears at first sight. I think if the evidence of us both were carefully analysed, it will be found that the only material divergence of opinion between us lies in our respective estimates of the future traffic on the Indian Railways, and on this single point, I hope to show that his evidence is at least somewhat inconsistent. As regards the question of gauge we are at one in insisting on the absolute necessity of economy in first construction: his estimate of the present difference in cost between the metre and the standard gauges, viz., from 1,500 *l.* to 2,000 *l.* a mile is exactly the same as my own; and he further supports me in holding that this is a constant difference, or in other words, that the more expensive and difficult the line, the less the proportionate difference of cost between the two gauges, a point I shall have to notice further on. He agrees with me in thinking that for working a larger traffic, the standard gauge, as the larger machine, is the more economical of the two; and he even concurs with me in considering that the two principal lines now proposed, *i.e.* the Bhopal-Jhansi-Cawnpore, and the Nagpur-Seetarampore lines should both be on the broad gauge. As regards the initial cost of construction, although we are both agreed as to the constant difference of cost between the two gauges as at present constructed, I think Mr. Rendel has rather emphasized the actual proportionate difference. He gives the actual cost of the two gauges as 6,000 *l.* and 4,500 *l.* a mile; thereby making the cost of the metre gauge line only 75 per cent. of the standard gauge. I think those two figures taken for the whole of India are exceedingly low. I take the cost of the broad gauge as from 7,000 *l.* to 9,000 *l.* a mile, on which estimates, a difference of 1,500 *l.* per mile would amount to only about 21 to 16 per cent. instead of 25. This however is hardly a fair way of stating the case. Mr. Rendel I feel sure would himself admit that the present difference in cost between the two gauges arises not so much from the actual difference in gauge as from the fact that the existing broad gauge lines have been designed for carrying a heavy traffic, and the present metre gauge lines for carrying a light traffic. In fact, in his evidence he admits this. In reply to Question, No. 5685, he says that the road is what makes the bulk of the difference in cost; and the cost of the road depends chiefly on the weight placed on the wheels. Assuming a light traffic for a branch broad gauge line, nothing could be easier than to design the branch for a maximum axle load of six to seven tons, say with a 40 to 42lb. rail, which would be worked by special light engines, but which would allow all the broad gauge wagon stock to run through without breaking bulk. The proportionate cost of the two gauges, with different weights of rail on the standard gauge, has been very carefully worked out by Mr. Molesworth, the consulting engineer to the Government of India. Assuming the weight of the rail on the metre gauge to be 40lbs., he estimates that the difference of cost of the standard gauge line with a 60lb. rail is from 1,650 *l.* to 2,000 *l.*, with a 45lb. rail from 720 *l.* to 1,000 *l.*; and with a 40lb. rail from 850 *l.* to 500 *l.* You will notice how nearly this first estimate of a difference of 1,650 *l.* to 2,000 *l.* with rails respectively of 40 and 60 lbs., which are the actual weights now in use, agrees with the estimates both of Mr. Rendel and myself. The last estimate of 500 *l.* a mile curiously enough agrees exactly with the estimate of the probable difference in the cost of the two gauges designed for the same traffic, which was put before the last Committee by Mr. Sowerby in reply to Question No. 283 in the Proceedings of 1879. My own opinion is that it would be far more advisable to spend 350 *l.* to 500 *l.* a mile on light broad gauge lines, which would permit of passengers and goods being worked through without transhipment, than to have all the trunk lines on the broad gauge with their feeder lines on another gauge. On light broad gauge lines when the traffic increased, you could at any time put down a heavier rail, and so provide for the increased traffic at little additional cost. And, on the whole, I believe this would be the cheaper plan as well as the more convenient, as it would do away with the necessity of transhipment platforms and of additional workshops. My opinion is, in fact, that it would be best to solve the question of the gauges in India, as it has been solved in Victoria, viz., to make light lines on the same gauge, and not to have narrow gauge lines.

6719. Have you anything further to say on that point, before coming to the break of gauge, about the weight of metal or the difference of gauge?—No, but I should like to make a few remarks on Mr. Rendel's figures. In the statement he laid before you he has taken the approximate figures shown in the half-yearly accounts, which are based on the supposition that a train mile, whether goods or passenger, costs the same. In fact, his figures are based on a train mileage basis. The statistics drawn up in the Railway Branch of the Government of India are based on the assumption that the cost of hauling a ton of weight over the line, whether in a passenger train or in a goods train, costs the same; and this is the assumption nearly universally accepted. The figures given by Mr. Rendel consequently differ a good deal from the published statistics of the Government of India. For instance, he gives the cost of working a ton of goods on the Rajputana Railway as 4·88 pies, whereas the published accounts give the same figure as 5·31 pies. The difference is very material. In a similar manner you will see that the cost of carrying a ton of goods on the Rajputana Railway during the half-year ending June 1883, was 4·03 pies. In the next half-year the results were not quite so favourable; and although the accurate results are not yet worked out, the actual result for the year cannot be less than about 4·10 pies. I should, however, say that the only difference between Mr. Rendel's figures and the published figures of the Government of India, is in the proportions in which he has divided the total expenses between coaching and goods. By whatever amount he has reduced or increased the coaching, he must have correspondingly increased or decreased the goods. I mention this to account for the differences between Mr. Rendel's figures and the figures I have placed before you in issue

Chairman—continued.

No. IV. The two sets of figures have been got out on an entirely different basis. Similarly with regard to Mr. Rendel's statements regarding the proportion of dead weight to paying load. This is a question independent of the amount of traffic, for, of course, only so many waggons and carriages are run as are required by the traffic. The average per-centage of freight for all lines, as you will see from the statements of goods traffic, is 36·91 per cent. on the broad gauge; and on the narrow gauge, 35·69. There is, consequently, on the average less dead weight on the broad gauge in respect of goods traffic. As regards passenger traffic, the advantage is strongly in favour of the narrow gauge, the percentages of freight to gross load being as 7·61 to 10·32. On the broad gauge the freight is only 7·61 per cent. of the gross weight, and on the narrow gauge the per-centage of freight is 10·2. Further, as regards Mr. Rendel's evidence, I am not prepared to admit that it is fair to compare the working of any line in the year 1883 with that of another line in 1872 or 1875. During the last 10 years the working of the Indian railways has much improved; and the lowering of the rates has caused greater attention to be paid to economy. To take one instance alone; native engine drivers may be said to have been practically introduced since 1875. Mr. Rendel himself admits that in 1870 railway enterprise was in a very low condition, and that the working expenses were very high; he also states that the working expenses were higher formerly than now. He says, in reply to Question 5917, "In the early days of the broad-gauge railways, they were costing a vast deal more than they are now." So that I think his comparison between the narrow-gauge lines of 1883, and the broad-gauge lines of 1872 is not quite a fair one. For his comparisons, Mr. Rendel has selected the Rajputana Railway, a metre-gauge line, which the constant increase in the weight of the engines and in the size of the rolling stock shows, has been for some years worked up pretty nearly to its maximum carrying capacity as it stood from time to time. In fact, as early as 1878, more salt was offered than the railway could carry, and a block of traffic occurred; and last year the manager sent in a proposal for doubling the line between Ajmere and Bandakui. On the whole, I put rather a different construction on Mr. Rendel's figures. Admitting the figures, all I can see that Mr. Rendel has proved is, that with a traffic not exceeding the capacity of a metre-gauge single line, the cost of working on the metre gauge is not heavier than on the broad gauge. This is only what every engineer would expect; in fact, I opened my remarks about the gauge question by saying that the principle underlying all questions of gauge was, that a machine is, comparatively speaking, economical only when working at its full power. It may at once be admitted, to use my former illustration, that for the small cargo of 1,000 tons, the small 1,000-ton steamer should be the more economical. All Mr. Rendel has shown is that when compared with a metre-gauge line, worked with an axle load exceeding that for which the rails were designed, the broad gauge, even with a traffic not perhaps a quarter of the carrying capacity of the line, holds its own remarkably well. The whole of Mr. Rendel's

Chairman—continued.

evidence points to the advisability of making both the trunk and the light branch lines on the broad gauge; for he proves that with a traffic as low as 300 to 500 tons a mile daily, there is no decided superiority in the working of metre-gauge lines. Directly like is compared with like, directly the traffic on the two gauges approaches about the same proportion of their relative carrying capacities, the comparative economy of the broad-gauge line becomes apparent at once. As Mr. Rendel himself admits the superior economy of the broad gauge for a traffic exceeding the capacity of a metre-gauge line, the real point of divergence between us, as I have said before, lies in our estimate of the probable traffic that will eventually come on the lines now proposed. He proposes to make some 50,000 to 60,000 miles of railway, and he suggests that as new railways are made, the traffic will diminish on others. In other words, his opinion is that the additional railways will draw off part of the traffic from the old ones. This opinion is somewhat contrary to his previous evidence on the same point. In 1878 he says, in answer to Question 3936, "The more railways you make, the more traffic you will bring to the rest," and it is with this former view I am inclined to concur. For instance, although, as he says, the Rajputana line runs in competition with the East Indian Railway, no decrease is observable in the tonnage of general merchandise on the East Indian Railway since the Rajputana line opened in January 1881; on the contrary, the tonnage has steadily increased. Mr. Rendel himself dwells on the stimulus given to traffic by the reduction of rates and fares, and he proposes to reduce the rates and fares still lower. It may fairly be asked, what will be the probable amount of traffic on the Indian lines when only say one-half of Mr. Rendel's proposed system is completed and the traffic is further increased by the proposed further reductions in rates. We know, as a matter of fact, the additional length of railway of 5,932 miles, opened between the years 1868 and 1882, combined with a reduction of rates, has increased the annual traffic on the guaranteed trunk lines from 2,175,762 tons to 7,220,817 tons or about three and a-half times, and it is obvious that as further lines are made, the lines now proposed will grow into secondary trunk lines receiving the traffic of numerous feeders; in fact, they will soon become much in the same position as the guaranteed lines now are. Mr. Rendel himself admits that mistakes were made in the estimates of the traffic of the Rajputana line. My fear is lest these mistakes should be repeated in the case of new lines now proposed. Even Mr. Rendel himself has considerably increased his requirements in the last six years, for before the former Committee in 1878, he thought from 30,000 or 40,000 miles of railway would be enough for India, and now he thinks some 50,000 or 60,000 miles are required. The question is really one of the probable traffic on the lines compared with the carrying capacity of a metre gauge line. Before I left India I took considerable pains to try and find out the practical maximum carrying capacity of a single line of railway. In reply to my question as to how many trains a day on a single line would

Chairman—continued.

justify its being doubled, the Onde and Rohilkund Railway said 12 trains a day each way; the Bombay and Baroda and the Central India Railway said 15 trains; the Eastern Bengal Railway, 16 trains, and the Great Indian Peninsula Railway, 17 trains. Of course the number depends somewhat on the average distance apart of the crossing stations. Now to check these estimates by facts, we know there are three sections of railway which it has lately been proposed to double, namely, the section from Ajmere to Bandakui, on the Rajputana line, the section from Bhasawal to Shagaon, on the Great Indian Peninsula Railway, and that from Calcutta to Naihati, on the Eastern Bengal Railway. On the first section I cannot find that they have ever practically run more than 24 trains, 13 trains one way and 11 the other, with crossing stations about 7·7 miles apart. With several new crossing stations interpolated it is not expected they will be able to run more than 14 goods trains a day, or say 16 trains each way; *i.e.* 14 goods trains and two passenger trains. On the Bhasawal to Shagaon section the maximum number of trains run has been 27; 4 passenger and 23 goods trains in both directions, with stations eight miles apart. On the Eastern Bengal Railway line they run 16 trains a day each way, that is 32 trains, with crossing stations only 2½ miles apart. On the whole, I take it that about 28 to 30 trains is the practical maximum on a single line with stations at the average distance apart, of which number, two each way would be passenger trains, leaving say 12 or 13 goods trains daily. Allowing 75 tons as the average freight of a goods train on the Rajputana line (this is much greater than the average capacity of the whole of the narrow gauge), and 120 tons as the average freight, on the broad gauge lines, this would represent a probable practical maximum carrying capacity of say 1,920 tons a day on the single narrow gauge, and 3,120 tons a day on the single broad gauge. I notice that on the section they are now proposing to double on the Rajputana line the maximum traffic ever passed in a day has been 1,290 tons in one direction; or say, taking the traffic up as one-fourth of the traffic down, about 1,612 tons a-day; while on the Indus Valley State Railway, during a glut of traffic, the amount passed over the line in one direction was 1,939 tons in one day. As a railway must be prepared to carry the maximum traffic at any time offered to it, it is evident that the above maxima must be reduced in the proportion that the greatest possible traffic on the line at any one time bears to the average traffic. What that proportion is I am unable to say, but I notice that in the four weeks ending 16th June, 1883, the daily outwards and inwards traffic at Sabarmati, was 1,886 tons, in a half-year when the average daily traffic was about 557 tons over each mile. This would point to the fact that when the *average* traffic on any metre gauge line came to about 500 to 600 tons a mile daily, it would probably be found that there were sections of the line on which during gluts of traffic, the carrying capacity of the line was being stretched to its utmost. I also consider that Mr. Rendel's argument to the effect that the loss to merchants owing to breaking bulk can be fairly

Chairman—continued.

gauged by the amount of compensation bills is most unsound. As railways do not contract to carry within a certain time, it is obvious that a merchant may lose his freight and incur great expense owing to the delays consequent on a break of gauge, without being able to claim a penny from the railway company. On the subject of the disadvantages of a break of gauge, I do not think either Mr. Rendel or myself can give any useful opinion. It is a question regarding which a useful opinion can be given only by the trade that uses the railway, and on this point the Indian merchants are pretty unanimous. I remember, however, that on the Cardigan and Carmarthen line, with which I was connected some time ago, the feeling in South Wales was so strong against the break of gauge, that, during construction, we altered the line from the broad to the narrow gauge, and everybody knows that in 1866, so strong a memorial was sent in to the Great Western Railway by no less than 269 firms, that the line west of Swindon was altered to narrow gauge. I notice that in this memorial, the views of the colliery proprietors regarding the loss in the transhipment of coal are strongly opposed to those of Mr. Rendel. The enormous increase in the tonnage of the Indian lines these last ten years is shown by Mr. Rendel's own figures; the East Indian Railway in 11 years has increased its traffic 2·9 times; the Great Indian Peninsula in eight years has increased from 504 tons daily to 1,120 tons; and the Bombay and Baroda and Central India has increased from 380 to 1,095 tons. The real question is, with an ever increasing trade all over the world, and with the ocean steamers daily becoming larger and larger, whether it is worth while for a difference in cost not exceeding 350 *l.* or 500 *l.* a mile, to accept all the disadvantages of having a line of very limited capacity, to incur all the expense of numerous breaks of gauge, to harass trade, to restrict commerce, and all, as Mr. Rendel has shown so conclusively, with no corresponding advantage in respect to economy in working, even with small traffics. I have nothing further to say on Mr. Rendel's evidence.

Mr. *Kynaston Cross.*

6720. Do you base your advocacy of the standard gauge lines as against the metre-gauge lines on the figures which are before me in the book you have handed to us called "Issue 4"?—These figures are correct.

6721. I have looked into the figures, and I should like to ask you one or two questions upon them; you have given calculations of the expense of working, and I want to ask if you wish us to take these calculations as showing the comparative cost of working the two systems?—I wish you to judge of the comparative cost of the two systems by the figures.

6722. You have also given comparative statements of the cost of construction?—I have.

6723. Do you wish us to take the statements in Issue No. 4 on the first page as a fair indication of the comparative cost of the standard and metre-gauge lines?—If you take the railways recently constructed, yes.

6724. Not as a whole?—Not as a whole, because I may say that with the greater part of the

Mr. *Kynaston Cross*—continued.

the old broad gauge-lines the works to a great extent were made for a double line. In most cases, the bank was made for a double line. In some cases the bridge work was made for a double line, and in a few cases the middle bridge girder was made for a double line.

6725. The figures which are given are 127,000 rupees, on the average, for the broad gauge, and 64,000 rupees, on the average, for the metre gauge, are they not?—Yes.

6726. That, of course, cannot be taken, you say, as a fair indication of the cost of the lines, but with reference to the expenses of working, you say that your figures ought to be taken?—Yes, assuming that you agree that the ton-mileage basis is the proper one to adopt. Mr. Rendel, as I said before, adopts the train-mileage basis.

6727. Are not all his calculations on the ton-mileage basis?—No, on the train-mileage basis. He assumes that a goods train and a passenger cost the same to work. He divides the whole expenses in the proportion of the train-mileage on goods account and on coaching account, and then, having made the primary division of the whole expenses between goods and coaching in that way, he divides goods expenses by the number of ton-miles.

6728. Will you refer yourself to your own figures in No. 2 A.?—I wish to say at once that these are not my own figures. These are the figures published by the Government of India long before this inquiry. I wish it to be clearly understood, that I have had nothing to do with making up the figures.

6729. You find, I think, there, that the dead weight of the gross ton-mileage of coaching trains is 92·11 of the whole?—Yes.

6730. Leaving 7·89 as effective freight?—Yes.

6731. On the metre you have 89·39, leaving 10·61 effective freight?—Yes.

6732. So that effective carriage in this case is 3 per cent. greater in the metre-gauge than in the broad gauge?—Yes, as regards passenger traffic.

6733. If you take the cost of working, excepting the East Indian, the cost of hauling a passenger unit one mile on the broad gauge is 1·27 pies, and on the metre it is 1·26 pies. The highest cost of all, I find, is on two broad gauge lines?—Yes.

6734. The Punjab, Northern, 2·14 pies, and the Indus Valley 1·95 pies. Then, if you go on to 1883, No. 2 E., you find that the dead weight of the broad gauge has increased to 92·48, against a freight weight of 7·52?—Yes.

6735. Whereas the metre gauge has a dead weight of 89·51 and a freight weight of 10·49?—Yes.

6736. And you find there that the haulage of passengers, excluding the East Indian line, is 1·31 pies on the broad gauge, and 1·26 on the narrow gauge?—Yes.

6737. If you take there the comparative lines, would you compare the South Indian with the Madras. They are both in the same neighbourhood, and I think you would say it was not an unfair comparison. It is probably the fairest comparison you can make in all India, is it not?—I do not know that, because the Madras line is

Mr. *Kynaston Cross*—continued.

managed so expensively. It is one of the old broad gauge lines. They have never had a hope of covering their guarantee, and from the very first I think it has been managed in the most expensive way.

6738. That does not matter. This is not a question of the money that has been spent on the line. We are speaking of the cost of haulage?—But the cost of haulage depends on the cost of management.

6739. If you answer that it is badly managed, and set that aside, the good management of the Southern India does something, but I want to draw attention to the Southern India, which costs 0·95 pies against the Madras, 1·13 pies?—Yes.

6740. The Madras being broad gauge and the Southern India narrow. Then, if you go a little further and compare the Rajputana with the Sind, Punjab and Delhi, and the Great Indian Peninsula, you find there the cost of haulage is ·88 as against 1·17 on the Sind, Punjab and Delhi, and 1·16 on the Great Indian Peninsula?—Yes.

6741. Would you think those are fair comparisons?—Yes, I think they are fair enough.

6742. And they show a distinctly less cost of haulage?—I admit there is less dead weight in the haulage of passengers.

6743. Then we come to the haulage of goods, and I will take 3 A. There you have, excluding the East Indian, a dead weight on the broad gauge of 68·46 per cent., as against a freight weight of 31·54 per cent.?—Yes.

6744. And in the metre gauge a dead weight of 63·12 as against 36·88?—Yes.

6645. So you would say that from 100 tons of gross weight on the broad gauge, you get 31·54 tons of freight weight, and from 100 tons of gross weight on the narrow gauge you get 36·88 tons of freight weight?—Yes; but why do you exclude the East Indian?

6646. Because you have excluded the East Indian for the sake of comparison in your own paper?—I have, but if you take it on the whole, you ought to exclude the Rajputana as the best narrow-gauge line too.

6747. The Rajputana is the one line of the narrow gauge?—I think it is hardly right to make the comparison, excluding the very best broad gauge line, and including the very best narrow gauge.

6748. You think there is a fair comparison between the very best broad gauge and the very best narrow gauge, though the best narrow gauge is so much later, and goes through very much more difficult country?—I think there is too much made of the later date; because, of course, in comparing a large machine and a small machine, the carrying capacity of the smaller machine would be reached at a much earlier date than that of the larger one.

6749. Do you think the carrying capacity of the Rajputana has been reached; how many tons is it carrying already?—Five hundred and seventy daily, I think, Mr. Rendel put it.

6750. I think you said you would put the carrying capacity at something more than double that?—The carrying capacity of a line is only that of its weakest point, and the mere fact that

Mr. *Kynaston Cross*—continued.

proposals have come forward to double the line between Ajmere and Bandakui, show that at one point, at least, the carrying capacity has been reached.

6751. Where, sometimes, 1,200 tons are carried?—That is the maximum, worked one way.

6752. The difficulty might be obviated by doubling the line there for a comparatively little distance, I suppose?—I think it would.

6753. From those figures I have given you the freight power is 6 per cent. greater in the narrow gauge than in the broad gauge in proportion to the dead weight?—I think if you take the average figures given at the end you will not find it so.

6754. I put it to you?—You have taken only one half year. I think you ought to take the whole.

6755. If you like, I will go on to 1883, and compare it in the same way?—I think the best way is to take the general abstract at the end. I do not think it a fair thing to take one half-year, because what is a good half-year on one line is a bad one on the other.

6756. Does it materially alter it?—Very materially. Look at the cost of haulage on the lines from half-year to half-year, and see yourself how it varies.

6757. I should rather go on with the figures I have got down here. In 3E., which contains the figures for 1883, you get the cost of haulage of one ton for one mile in comparative lines?—Yes.

6758. Take there the Southern Indian, and the Madras again, and the haulage seems to be very much the same?—Yes.

6759. 6759. Showing that there is no heavier charge for haulage on the narrow line than on the broad?—No; but, with small traffics, there ought to be a lighter one.

6760. You have said all along it was higher?—No; I said so only when worked in the same proportion of the carrying capacity. I started by saying that a small machine ought to be more economical with a small traffic than a large one. The surprise to me is that it is not more so.

6761. On the Rajputana line the charge is 4·03, is it not?—Yes.

6762. And on the Sind, Punjab and Delhi, which is comparative, 4·48?—Yes.

6763. And the Great Indian Peninsula, 3·71?—Yes.

6764. What is the difference in the price of coal on the Rajputana and the Great Indian Peninsula, for instance?—I could not say correctly from memory. I think the price of coal on the Rajputana is about 20 rupees a ton. I cannot say what it is on the Great Indian Peninsula; but I should think 16 rupees.

6765. With a higher price of coal the cost of haulage is very much the same. Now, will you turn to No. 4A. "Carrying capacity; coaching traffic." A train of 206 tons on a broad gauge, with a dead weight of 189·52 tons, gives practically 8 per cent. of effective traffic carrying power. Then if you will take the other line, the ton weight of the narrow gauge train is 133; the dead weight being 119·37 tons, which gives you, I think, 10·2 of effective carrying power?—That is to say, they are the same figures that we have gone through before.

Mr. *Kynaston Cross*—continued.

6766. Very much the same. So that in coaching traffic you would have to move considerably less dead weight in proportion to your freight?—Yes.

6767. The goods weight on the average of trains would come to very much the same thing?—I think so.

6768. Take 5A.?—I think, as far as I can make it out, it is exactly the same, or pretty nearly the same. If there is any shade of difference, it is in favour of the broad gauge.

6769. Take the averages for 1881 in 5A. You have there on the broad gauge train 288·31 tons; the dead weight is 195·31 tons; freight 89·99, or practically 32 per-centage of freight. Then the narrow gauge you have 145·91; dead weight, 92·09; freight weight, 53·81, or 37 per cent.?—Yes.

6770. As against 32 per cent.?—Yes; but the fairest way is to judge by the abstract I have drawn out at the end, that shows all five half-years together.

6771. You object to take the figures in the way I have put them?—Yes, I think it is always unwise to gauge from the results of one half-year.

6772. It is strange that in taking 1881 they should all show very much in favour of the narrow gauge line, is not it?—The abstract comes out as nearly as possible the same. There is very little difference between the two. There is a shade of difference. If you will look at 3F. you will see there the total for five half-years. This, I think, is the fairest statement of the whole.

6773. I have taken this from the particular, and not from the general average, and it seems to show that where you have 1,000 tons of gross tonnage, you have on the broad gauge 284 tons of effective carriage of traffic; and where you have 1,000 tons on the narrow gauge, you have 370 tons of effective carriage?—I think it is allowed that the metre gauge work their passenger traffic with less dead weight.

6774. I am speaking of goods traffic?—In the goods traffic, there is very little difference; it seems to me to be practically the same.

6775. These figures give it, at any rate for the year 1881, as practically 284 tons per 1,000 tons on the broad gauge, and 370 tons per 1,000 tons on the narrow gauge?—That is only for the first half-year.

6776. The effective half-year; the half-year in which the largest quantity is carried, is it not?—To what returns are you referring?

6777. 5 A.?—I think you had better look at Statement No. 3, because there the per-centages are all worked out for you.

6778. They may be worked for you, but I take the number of tons carried, and take it on a broad gauge and narrow gauge, and I want to know from you if what I said is not the fact?—In 100 tons of gross weight in the goods traffic in the first half-year, June 1881, there were 35·51 tons of freight on the broad gauge, and 36·88 tons on the narrow gauge. That you can see from 3 A. If you turn to 3 B. you will find the proportions are exactly inverted. In December 1881 there are 37·00 tons on the broad gauge, and 35·79 on the

Mr. *Kynaston Cross*—continued.

the narrow gauge. In June 1882 the broad gauge again has the higher proportion of freight, and so it is in December 1882.

6779. Altogether, you come to the conclusion that the dead weight on the broad and narrow gauge are, at any rate, about equal?—For goods traffic it is about the same in both gauges. For passenger traffic there is more freight per dead weight on the metre gauge.

6780. So that the metre gauge on the whole with reference to proportion of freight and dead weight has the advantage?—At present, it has.

6781. And you have that with comparatively lighter loads on the average, on the metre gauge trains, than you have on the broad gauge?—The train loads are actually lighter, but comparatively they must be the same as far as goods traffic is concerned. The broad gauge stock is far more antiquated than the metre gauge. That is one thing that has a great deal to do with it. If you had seen the old stock that was sent to me on the Indus Valley line, which was the refuse of all the broad gauge stock in India, you would not be surprised at the proportion of dead weight to freight on the broad gauge lines.

6782. There are some particular figures with reference to the maintenance of the lines given in 7 E. You give the mileage maintenance of broad gauge at 1,309 rupees, and the mileage maintenance of the narrow gauge at 535 rupees?—Yes.

6783. And I think you give the cost of 1,000 gross ton miles on the Rajputana line as 1·53 rupees, and the same on the Bombay and Baroda as 1·91 rupees?—Yes; but, of course, as far as the charge of maintenance is concerned, the expenditure is much affected by the age of the line; the younger the line the less would be the charge for maintenance up to the line when you begin to renew the permanent way.

6784. Would that account for the whole of the difference between the maintenance?—It would account for a considerable proportion but not the whole of it.

6785. Then the cost of working locomotives seems to be considerably higher on the metre gauge than on the broad gauge, does not it?—It is.

6786. And in your account of the carriage and wagon traffic 10 A, you there seem to have a very much less cost on the metre gauge than you have on the broad gauge?—Naturally, because the narrow gauge lines are all new, and their wagons are not yet beginning to fall to pieces.

6787. Is that the only reason?—I should say that is the only reason.

6788. Now as to the difference in the cost, I think you said you agreed with Mr. Rendel that the difference in cost is about 1,500 *l.* to 2,000 *l.* a mile if you have to make the lines on one construction. But on the most favourable terms you could compare them you think the difference would be only 350 *l.* to 500 *l.*?—Yes.

6789. Would that difference be met entirely by simply putting the light rails down?—Those are estimates which have been drawn up by Mr Molesworth long ago as to the amount of probable excess beyond the metre gauge. They are all worked out in detail; the difference in cost is given under the various heads, large bridges, minor bridges, rails and fastenings.

6790. Would the difference be anything like 1,400 *l.* per mile between heavy rails and light rails?—The maximum axle load is 12 tons in one case, and six in the other, 40 lbs. rails in one case, and 60 lbs. in the other.

679.1 What difference would that make in the cost of the rails and the sleepers and everything connected with them?—The difference in cost of the 60 lbs. rails is from 800 *l.* to 875 *l.* per mile above the metre gauge.

6792. You say that a 60 lbs. rail would cost from 800 *l.* to 875 *l.* per mile more than a 40 lbs. rail?—Yes, taking the rails and fastenings, &c., altogether; but I cannot say exactly at what price Mr. Molesworth has taken the iron. This was made out some years ago. Now of course the difference would be much less.

6793. Would not that very materially alter the calculations you make?—Yes, every fall in the price of iron would make the difference less and less between the broad gauge and metre gauge. The lower the price of iron, the less the difference between the two gauges, and when Mr. Rendall increases the weight of his rails up to 50 lbs., the difference will be still less.

6794. You say that the difference between the two in the weight of the rails would be less; I want to know how it is that the difference can be so very great as 1,400 *l.* a mile between a 41 lb. rail and an 80 lb. rail?—I did not say 1,400 *l.*, that is the whole difference.

6795. £. 350 to 500 *l.* a mile, is the difference between the broad and the narrow, whereas Mr. Rendall, and I think you agreed with him, gave the difference between the cost as from 1,500 *l.* to 2,000 *l.* a mile. You say that the difference between 2,000 *l.*, and the 500 *l.* a mile arises from the difference in the weight of rails?—A good deal, but not altogether.

6796. The difference is the 500 *l.*?—Yes, it is.

6797. You have not the least accounted for anything like 1,500 *l.* by the difference of weight of rails?—I can give you all the details. There is a difference in all the works; the works would be lighter if you had a less maximum axle load. There is a difference in the ballast, a difference in the sleepers, and a difference in the rails.

6798. Then when the extra traffic was wanted to go over this line which had been made of this very light construction, you would have to increase all these items, would you not, and re-make your bridges?—Not the least; unless you increase your maximum axle load, you would not have to alter the permanent way.

6799. If you wished to carry the full traffic over the part of the line which had been lightly constructed, you would have to increase the strength of that portion of the line?—You would have to lay down heavier rails, but that would cost little additional expense.

6800. You would have to remake your bridges if they were made so light?—You would only put other girders down and cart those girders off for some other lighter line. It would, at the worst, be only an exchange.

6801. Then you would consider that although the line might cost from 1,000 *l.*, to 1,500 *l.*, or even 2,000 *l.* per mile more, it would be better to have a comparatively smaller mileage of railway made in the next few years, than to have a fourth more made on the metre gauge?—If you adopted my recommendation of making light broad-gauge lines there would be very little difference in the

Mr. *Kynaston Cross*—continued.

mileage opened. The difference would only be 350 *l.* to 500 *l.* a mile, and I do not think there would be even so much difference with the present price of iron.

6802. If the difference in the price of iron made the great difference between the two, when the weight of iron comes very close together, the difference would be mainly in the other parts of construction, and not on the iron itself?—The difference is simply 20 lbs. weight per yard; the lower the price the less the difference in value for that 20 lbs.

6803. That is not between the two gauges, that is between one sort of broad gauge and the other sort of broad gauge?—The price of iron affects all of them. The less the price of iron the less the difference between the two gauges.

6804. Only so far as the iron is concerned?—So far as the whole of the iron-work is concerned.

6805. And is the main difference in the cost of the two not in the iron, but in the rest of the construction?—I beg your pardon; Mr. Rendall says distinctly it is in the road, and I will refer you to where he says so. If you will look to Mr. Rendall's reply to Question 5685, you see that he says, "The road is what makes the bulk of the difference."

Mr. *Carbutt.*

6806. What was the date of Mr. *Molesworth's* Paper that he drew out?—I could not say the exact date, but about three years ago.

6807. And consequently rails are about half the price now that they were then?—Yes.

6808. And therefore the difference of 300 *l.* shown between a light broad gauge and a narrow gauge, with the same rate of rails, would be still more reduced?—Yes.

6809. So that the reduction would make the difference come to under 300 *l.* a mile with the same weight of rails?—Yes, with the same weight of rails I should say the difference would not be more than 300 *l.* a mile.

6810. As I understand the difference made by Mr. Rendall in his price of 1,500 *l.* between the narrow gauge and the broad gauge was, that he took rails at 80 lbs. per mile as against 41 lbs.?—He took 60 lbs. rails.

6811. We have it in answer to one question that it was 80 lbs. a mile; 82 lbs. in 1875?—At the present time, the State railway rail weighs 62 lbs.

6812. What I want to learn from you is this; you are in favour of a light broad gauge railway?—Yes.

6813. And you have taken the same weight of rails, that is 41 lbs. per mile. Are you aware that some main lines of railway in this country were worked for years, some for nearly 20 years, with rails laid at 40 lbs. per mile?—Yes, I see the fact is mentioned in the proceedings of the Civil Engineers.

6814. The Newcastle and Carlisle and the Nottingham and Lincoln were worked on 42 lb. rails, and what has been done in England with a 42 lb. rail surely could be done in India on a 42 lb. rail?—The Nalhati line in India is working with a 36 lb. rail, and a four foot gauge.

6815. I want to ask you about bridges, I have always understood if you had a large bridge to span a river the main difficulty was to get the

Mr. *Carbutt*—continued.

bridge to carry itself, and that in the rolling load you put on the bridge a difference of one or two tons more or less would not affect your calculation; that is to say you have to make your bridge so strong as to stand against all circumstances that the question of the weight of your load going over it is a very infinitesimal matter, and therefore you never take that into consideration?—Mr. Molesworth works out that as regards large bridges, with a maximum axle load of 12 tons on the broad gauge as opposed to an axle load of six tons on the metre gauge, the difference in cost would be 40 per cent.

6816. That would not agree with your suggestion of a light broad gauge?—No, with a light broad gauge it would be nothing; the axle load there would be the same.

7817. You talk about 12 tons on a pair of wheels?—Yes.

6818. Most of the main line engines in this country are weighted with only about 12 tons?—The engines would be designed for the 40 lb. rails with a maximum axle load of six tons.

6819. Which could be very easily accomplished?—Yes.

6820. Then we come to this conclusion that you can do with the same rails and do with the same bridges?—Yes.

6821. Then supposing you were designing a narrow gauge railway, and you thought at some future time you might want to increase it to a broad gauge, would not you, in making your railway, begin with putting down your large bridges so that you could widen to a broad gauge if necessary?—I think it is absolutely necessary to build the foundations of all the metre gauge bridges so that you can make them broad gauge eventually.

6821. That has been done?—It has not, I am sorry to say.

6833. In the railway going up to Lahore, was not that a question three times considered, and was not the railway three times altered during the construction on the question of bridges?—Yes, it was twice altered. It was begun as a broad gauge, opened as a narrow gauge, and then altered to the broad gauge.

6524. Still you would give your opinion that, if you had to construct a narrow gauge railway, you would put the bridges down so that the line could be altered without any expense?—I certainly should put the foundations down as for a broad gauge line.

6825. Your narrow gauge railway to that extent would be increased in price?—Yes.

6826. And therefore there would be less difference between a narrow and a broad gauge line?—Yes.

6827. Then it becomes a question of the cost of your sleepers; you have seen the sleeper which has been brought into the room to-day?—Yes.

6828. A steel sleeper?—Yes.

6829. Which costs 4 *s.* 9 *d.* a ton?—Yes.

6830. That comes to something like 50 *l.* per mile, and supposing you had to make that sleeper wide enough for a broad gauge railway what difference would it add on to the cost of the 50 *l.* per mile?—Just the weight of the iron for the difference in breadth of the gauge.

6831. For the extra 2½ inches?—Yes.

Mr. *Carbutt*—continued.

6832. So that it would not amount to 10 *l.* per mile?—I suppose it would not.

6833. Then the amount of ballast would also be increased?—It would be slightly increased.

6834. I think if you add up all the concessions you have made to me, you could not prove that a light broad gauge railway would cost more than 250 *l.* per mile more than a narrow gauge?—I should say that 300 *l* would be an outside estimate.

6835. Now, on the question of working, is it not a fact that with these narrow gauge locomotives, they have had the greatest difficulty to fit up a proper bearing on all their axles?—I could not give any opinion on that point; I have had so little to do with the narrow gauge railways.

6836. I will put it in another way. Is not one of the main expenses of working a railway, the question of being able to keep your locomotives out of the workshops as long as possible, that is to say, to get the largest amount of haulage done before you take it in for repairs?—Yes.

6837. You began by stating that the cost of working the locomotives on a narrow gauge line was more than on a broad gauge?—Yes.

6838. Would that be accounted for by the fact that you cannot get the same amount of work out of a narrow gauge locomotive before it has to go in for repair as you would with a broad gauge one?—I can only put it this way. They have tried many types of engines on the Rajputana line, and I do not think they have been exactly happy in their experiences as a whole.

Mr. *William Fowler.*

6839. If I understand you rightly, your great anxiety is to have a line of railway which will be fit to meet the expanding trade of the country?—Yes.

6840. That is the great reason why you prefer, even with a slightly increased cost, the broad gauge?—Yes.

6841. You do not consider that you get any economy which would at all compensate for the possible reconstruction of the bridges?—No, I do not see what you gain by the unmechanical device of cramping the wheels together, because the cost of a line depends upon the weight you put on the rails, and on the size of the carriages.

Mr. *Bolton.*

6842. I think you agree on every point except gauge with Mr. Rendel?—Very nearly; I may withdraw from that statement to this extent, that I do not agree with what he says will be the cost of conversion of the Nagpur and Chattisgarh Railway. In one of his answers he says it will cost a million of money. Now Mr. Molesworth's estimate for the conversion was only 427,000 *l.* Mr. M'Gregor's estimate was 250,000 *l.* The amount accepted by the Director General of Railways was about 216,000 *l.*, and the estimate accepted by the Government of India, as you can see from page 50 of the Note I put before you, is 367,000 *l*, or 44 lacs of rupees.

6843. Mr. Rendel says in his evidence, speaking of the great power of the East Indian Railway, that a traffic equal to about 1,600 persons, and 1,824 tons of goods, passes over every mile of it every day; then he says, two-thirds only of that line is single, and the other one-third is double; and he adds, "I believe we could carry 50 times more traffic without doubling a mile;" do you agree with that?—No, certainly not; I think that must be a mistake. Mr. Rendel probably means 50 per cent.

6844. Now Mr. Rendel tells us of a peculiar system of statistics which is in use all over India, in relation to the quantity of work done, and so on; do you agree with Mr. Rendel in the great value of that system as a worker of railways?—I must confess that, as a practical worker of railways, I do not think that any statistics that are got out so late are of much value. If a traffic manager, by watching the traffic on the line, cannot tell whether he has or has not a good deal of empty running he ought to be got rid of, and somebody else appointed.

6845. You do not attach the same importance to statistics?—No; the important thing is being always up and down the line, and seeing yourself how it is working.

6846. Mr. Rendel also says that the East Indian Railway is worked at a lower rate than any other railway in the world; are you of that opinion also?—I do not know much about the railways in other countries; I have never compared the cost of working in India with the working in other countries.

6847. Then as to the extent of traffic upon the East Indian Railway, do you agree with Mr. Rendel when he says that the traffic on the East Indian is fully as large as the traffic on the London and North Western; do you agree with that?—I can give no opinion; I know nothing about the traffic on the London and North Western.

6848. A statement is put in by Mr. Rendel, containing an extract from the "Railroad Gazette," and presume it has his approval, as he put it in, in which it says, that on the East Indian Railway the average of passengers carried is 24,068 daily?—Yes.

6849. It is an extract from the "Railroad Gazette" of the 22nd July 1883, and headed "The Cheapest Railroad Working in the World." If you take the 24,068, and multiply it by 365, I think the total number of passengers carried over the line would be 8,784,820, that is connecting the passenger mileage with the number of passengers. It says 24,068 passengers use its cars daily, consequentially that must be all the passengers that go into the cars every day on the average?—Yes.

6850. If that is correct, that is the number of passengers carried in 12 months; are you aware whether that has any comparison to the number of passengers carried by the passenger lines in this kingdom?—No, I do not know; I can only tell you that the actual number of passengers carried over the East Indian Railway in the half-year ending the 30th of June 1883 was 5,619,414.

6851. One question about the ton mile traffic; to derive any advantage whatever from a statement of that kind, must not the tons carried over the line be equally distributed over the whole length of the line; it is said that the freight traffic on the East Indian line is 1125,171,840 ton miles; to be of any advantage,

Mr. *Bolton*—continued.

a statement of that kind should be also accompanied by another statement showing that that freight was distributed in equal proportions over the whole length of the line?—Necessarily, if you look at it in relation to the doubling of the line.

6852. To the capacity of the line?—Yes.

6853. Given as it is in these statistics, it is practically useless to enable one to judge whether the line requires doubling at any part or is capable of carrying all the traffic that would come upon it at any particular part?—Quite useless.

Chairman.

6854. There is a question that I think it essential to ask you before your evidence closes, with reference to Schedule A., showing the total net amount to be borrowed. You will find it at page 77 of the Papers (App. No. I, p. 563) You are familiar with the figures, and the last item is, "By Companies on their own account, 12,040,000*l.*" I want to ask you, supposing the Government of India are disappointed in getting companies to undertake these railroads, what do they propose to do?—To borrow the money themselves and construct the railways.

6855. Have we any document issued by the Government of India to that effect?—I think you will find an inference to that effect amongst the Papers.

6856. I have looked over the Papers with some care, and the Government rather look at it from a different point of view. They suppose that probably companies will come forward to a larger extent than in this statement, and so relieve the State from making some of the railroads themselves. I do not find that they contemplate, in any document which we have before us, the contingency of any of the companies not coming forward to make the railways?—I think I can find the extract for you at once amongst the Papers.

Mr. *Kynaston Cross.*

6857. "If they should not, the completion of the Schedule will take a few months more or less than six years, according to whether the suggestion in paragraph 18 of this Despatch regarding open lines is adopted or not"?—Yes.

Chairman.

6858. I will read the whole paragraph, because it appears to me that is open to another misconception. The paragraph is this: "It is, of course, understood that there would be no objection to handing over to 'construction and working companies' any of the lines entered as to be carried out by State agency. If such companies should come forward they would relieve the State, to the extent of their undertaking, from borrowing direct. If they should not," that is, if they should not come forward to make more railways than they are asked to do, "the completion of the Schedule will take a few months more or less than six years, according to whether the suggestion in paragraph 18 of this Despatch regarding open lines is adopted or not"?—I understood that paragraph to mean that if no company should come forward Government would be prepared to do the work itself.

6859. I read it entirely differently; as I read that paragraph, it means if the companies should not come forward to make more lines than they are asked to do?—I did not read it in that sense.

6860. Then it will take a little longer?—Yes, that might be the reading.

6861. But it does not appear to me that in any document before us the Government of India have answered the question I now put to you?—I can put in a document to answer your question exactly; but I have not got it with me. It is a telegram which I received only three days ago.

6862. That is exactly what I wanted to know, so that my reading is right?—I will put in that telegram from the Public Works Minister.

6863. You can tell me your answer to this question; if the Government of India should be disappointed in finding companies to come forward to make the railroads to the extent of 12,040,000 *l.*, then the Government of India contemplate borrowing money, and making all these railroads themselves?—Yes; and I put in the telegram. It runs as follows: "We insist on protective necessity of Bilaspur-Etawa equally with other two lines; also on obligation to provide means for completing Schedule A. in six years, by one agency or another."

Mr. *Kynaston Cross.*

6864. Then in that case it will be necessary for the Government in the next six years to borrow directly in the London money market 12,000,000 *l.* sterling more than has been proposed to us by Mr. Westland?—Yes, but the financial position would not be affected; it is a mere question of agency.

Friday, 20th June 1884.

MEMBERS PRESENT:

Mr. Baxter.
Mr. Bolton.
Mr. Brodrick.
Sir George Campbell.
Mr. Kynaston Cross.
Mr. William Fowler.
Mr. Jackson.
Mr. Bernard Samuelson.
Mr. Slagg.
Mr. William Henry Smith.
Mr. Wodehouse.

THE RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

Mr. JULAND DANVERS, called in; and Examined.

Chairman.

6865. WILL you tell the Committee, in the first instance, what is your personal experience in Indian Railway administration, and what is your present official position?—I have been connected with the Home administration of Indian Railways from their commencement, and I have been Government Director since the year 1861. In 1875-76, I visited India, and went over all the railways. I now hold the position of Government Director of the Guaranteed Railway Companies, and I am Secretary in the Public Works Department at the India Office.

6866. You are desirous, I understand, of stating to the Committee the most recent results of railway working in that country?—The most recent results that I am able to give to the Committee are those contained in the proof of a report which I have only just received from Colonel Stanton, R.E., the Director, General of Railways in India. Having only one copy I am sorry that the Members of the Committee are unable to have one each to peruse, but I think by giving them an abstract of the contents they will see what the present position of railways in India is. The length of railway open on the 31st of March this year was 10,832 miles, of which 549 were opened during the past year, and at the same date 3,457 miles were under construction. Excluding the assisted companies the total capital expenditure up to 31st December 1883, amounted to 142,606,911 *l.* This sterling amount has been converted into sterling from rupees, as respects the Indian expenditure on guaranteed lines at the contract rates, and on the State lines at the conventional 2 *s.* rate. The average cost per mile of all open lines is now given as 1,36,108 rupees, being in sterling at the 1 *s.* 8 *d.* rate, 11,342 *l.* per mile. The highest is the East Indian, which amounts to 2,24,000 rupees, and includes the additional capital spent since the purchase of the line. The average cost of the 5 foot 6 gauge is 1,67,725 rupees; of the metre gauge 68,753 rupees. The lowest 5 foot 6 gauge is the Putna-Gya, which has cost 64,925 rupees. The Bengal Central, hardly yet completed, has cost 54,433 rupees per mile. The highest metre

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gauge line is the Rajpootana-Malwa, at 80,869 rupees per mile. The lowest is the Cawnpore-Achnera, at 38,705 rupees. The gross receipts and working expenses were 16,389,381 *l.* in 1883, compared with 15,352,320 *l.* in the previous year. The working expenses were 7,970,430 *l.* in the last year compared with 7,668,100 *l.* of the previous year, the net revenue being in 1883 8,418,951 *l.*, compared with 7,684,220 *l.* in the previous year, or an excess of 734,731 *l.* The total nett earnings in 1883 yielded a return of 5 *l.* 13 *s.* 6 *d.* per cent. per annum as compared with 5 *l.* 7 *s.* 3 *d.* in 1882, and if steamboat service and expenditure in suspense account be excluded, the net profits on open lines return 5 91 per cent. on their cost. The East Indian Railway earned 3,164,296 *l.*, being at the rate of 8 *l.* 14 *s.* 11 *d.* per cent. The other guaranteed companies yielded 3,836,501 *l.*, and paid 5 *l.* 4 *s.* per cent. The State lines yielded 1,331,000 *l.*, and paid 3 *l.* 16 *s.* 10 *d.* per cent. On some lines there was a falling off. The Great Indian Peninsula earned at the rate of 6·96 per cent., instead of 7·29 per cent. in the previous year; and the Eastern Bengal 7·48 per cent., in place of 10·52 per cent. On the other hand, the Bombay and Baroda rose from 5·91 per cent. to 7·61 per cent., the Scinde and Punjaub from 2·94 to 4·17 per cent., the Indus Valley from 2 to 3·97 per cent. The Rajpootana-Malwa from 5·87 to 6·25, the Northern Bengal from 5·33 to 5·52, the Nagpur and Chattesgurh from 2·15 to 7·33. The receipts from the guaranteed lines exceed the interest by 791,805 *l.*, but as some lines were deficient, 538,271 *l.* had to be paid on that account, leaving a net excess of 253,534 *l.* The East Indian also yielded to the Government 84,30,887 rupees as surplus profits. I do not know whether the Committee would care to hear the results of the passenger and goods traffic. It may be interesting. The total number of passengers carried was 65,098,953 as compared with 58,875,918 in 1882. The receipts from this source were 4,606,900 *l.*, as compared with 4,644,000 *l.* in 1882. The falling off appears to be due partly to the reduction of rates during

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the year, and partly to shorter journeys being taken. Of the total number carried, the lower class contributed 97·45 per cent., the second-class 2·08 per cent., and the first-class ·47 per cent.

Sir *George Campbell.*

6867. Are not there four classes?—I have taken the lower class as being the third and fourth. The lowest average cost of hauling one passenger one mile was ·84 pie on the East Indian. The average sum received for the same was 2·72 pie. On the Punjaub Northern those figures were 2·02 and 2·46 respectively. The goods moved amounted to 16,999,264 tons as compared with 14,833,243 of the previous year, being an increase of 14·60 per cent. The receipts from goods were 11,288,861 *l.* as compared with 10,159,674 *l.* in 1882. The lowest average cost of hauling a ton of goods one mile was 2·27 pie on the East Indian, and the average sum received for the same was 6·04 pie. On the Baroda the average cost was 3·84 pie and the receipts 8·69 pie; on the Rajputana 4·22 pie, and 7·77 pie respectively. On the Punjaub Northern 7·56 pie, and 9·31 pie. The working expenses amounted in the aggregate to 7,87,81,945 rupees, the per-centage of gross receipts being 48·39 as compared with 49·77 in 1882. The lowest per-centages were 36·96 on the East Indian, 43·10 on the Bombay and Baroda, and 50·15 on the Eastern Bengal. The traffic in grain, pulses, and seeds amounted to 5,213,976 tons, as compared with 3,986,969 tons in 1882. The number of persons employed to work the open lines was 185,261, of whom 177,289, or 95·69 per cent. were natives, 3,979 were East Indians, and 3,995 were Europeans. That, I think, gives in brief the results of last year's operations.

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6868. In your opinion are these results which you have just now read encouraging?—The results, I think, are very encouraging in showing improved returns and an expansion of traffic. Fluctuations are of course seen, and although in the cases of some lines there is a falling off, generally the results are such as to encourage the hope of future improvement.

6869. What extent of railways is now in process of construction?—From the same report of Colonel Stanton it appears that the length under construction, or sanctioned for commencement in 1884–85 is 3,457 miles, of which 1,311 will be constructed by State agency, 1,355 by assisted companies, 193 by guaranteed companies, and 596 by native states. The Sibi-Quetta line, 160 miles, is not included in the above. It is expected that 1,103 miles will be open for public use in the present year.

6870. What portion of these is included in the Schedule A. of the scheme of the Government of India?—Out of the 3,896 miles therein recommended by the Government of India, 1,434 have been sanctioned, and are in hand, leaving 2,462 miles to be made at a cost of 19,416,000 *l.*

6871. In your opinion, is a more rapid extension desirable?—I am certainly of that opinion, if it were carried out judiciously.

6872. What limit do you think ought to be placed on future expenditure?—I think that no future expenditure should be incurred which would involve any addition to the taxation of

Chairman—continued.

the country. The Government might be left, I think, to exercise its own discretion as to borrowing, but with moderate assistance to private enterprise, there would probably be no necessity for raising more by loan than the 2,500,000 *l.* which has hitherto formed the limit; or even so much. But if private enterprise failed to do what is required on reasonable terms, Government might then borrow more in order to proceed at a reasonable speed with what is so much required to develope the country. The Committee of 1879 did not, I think, recommend that any restriction should be placed upon the promotion of private enterprise. It is true that the effect of a permanent guarantee of interest may be the same as a loan, but the Committee were alluding only to direct Government loans, when they recommended a limit of 2½ millions a year. I do not think they condemned in any way the principle of guarantee when found necessary; and it appears to me that it would not have been inconsistent with their conclusions to have said, limit Government loans, do not add to the funded debt of the country, but give limited guarantee on the best terms that can be obtained if sound projects are proposed. Sir Evelyn Baring's opinion, I may remind the Committee when he was in India, was, that it would be financially safe to embark in a policy which involves a limited guarantee; and he observed, "If railways are made by private enterprise, it will be no longer necessary to continue to borrow 2½ millions for productive public works." I would at the same time add that it seems undesirable to enter into any engagement or plan that so much will be positively spent in each year; I would rather fix upon the lines which are required for important commercial, protective, and political objects, and make such arrangements for constructing them as are most economical and convenient.

6873. What is your opinion of the proposals of the Government of India?—Upon the whole I look upon them as reasonable. It seems to me that looking to the expenditure of past years, and to present prospects, there is very fair ground for expecting that the extension of the railway system of India on the scale proposed will have most beneficial effects, and could be carried out without inconvenient financial pressure. The Government itself is not afraid of the liability which they say "may be incurred with perfect safety," in dependence principally on the growing receipts on the existing and new lines. But as a safeguard and guide, it would be very desirable I think to make forecasts every year, embracing estimates for the four or five next successive years, and regulating the expenditure of each year according to its means.

6874. How and where should the requisite capital be raised?—As regards money raised by the Government for State lines, I would borrow as much as could be obtained on reasonable terms in India. If sufficient could not be supplied from that source, I would go to the cheapest market, which, of course, would be this country. The money raised by or through companies, would necessarily be obtained in England, and the terms I would grant, supposing Government aid to be necessary, would be those contained in the contract with the Southern Mahratta Railway

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way Company, or similar ones to those in the Bengal Central Railway Contract. The former I would apply to undertakings which are not expected to be remunerative, but which are required for protective purposes; the latter I would apply to lines which are likely to pay.

6875. What agency do you yourself prefer for the construction and working of railways in India?—In existing circumstances I think that both the agency of the State, and of private enterprise may usefully be employed, but as a principle, I prefer that of companies, especially for working.

6876. What are your reasons for that opinion?—The advantages of making use of private enterprise even when assisted by guarantees or subsidies, appear to me to be these. It relieves an already overburdened Government of duties which can be equally well performed by others. It prevents an increase to Government establishments and to pension lists; it secures more steady progress by avoiding interruptions to which State undertakings are liable. It secures also the supply of money as required, and its application to the special purpose which an arrangement between the Government and a company is intended to fulfil; whereas, war, famine, and other exigencies of State may interfere with the supply of money when most required for works under Government. It avoids the disadvantages appertaining to State agency, which is liable more or less according to circumstances and to the character of those in authority, to be effected by influences from which a company under proper State and Legislative supervision is free. It insures better than any other way the formation of railway systems or administrations of suitable size. It is the best way of securing a healthy competition. Supposing a system of Goverment agency to be carried out in its entirety, a huge State monopoly would be established which would not be advantageous to the country, or conducive to the interests of the various districts traversed. Upon the whole, therefore, I think that under suitable legislative enactments and with fair competition the best results will be secured by employing companies as far as is practicable. Might I be allowed to quote a high authority in support of this view, namely, Lord Salisbury. When he was Secretary of State he had to consider the question of purchasing the East Indian Railway, and in a Despatch to the Government of India relating to that proposition, he says: "The question is, shall the railway, if purchased by the Government be worked directly by the State, or shall an attempt be made to continue the working through the agency of a company suitably constituted, to which the railway should be leased for a term of years? * * * * I am not disposed to call in question the possibility of carrying out the working of a railway, such as the East Indian, through Government agency in a thoroughly satisfactory manner. But the difficulties in the way of combining the habitual, and indeed necessary, rigidity with which a system of government financial and administrative control must work with the freedom of action required for the successful management of a constantly varying business like that of a railway, made up of a vast mass of details, would be

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considerable, and to avoid them would require both a happy selection of officers and well contrived admininistrative rules and methods, which though, no doubt, attainable, could not be confidently or permanently reckoned upon * * *. I view with no small anxiety the ever-continued expansion of the vast establishments of your Government, which, as they grow, place an ever increasing weight of business on yourself and your officers, whose strenth is already overtaxed, and leave an ever diminishing area for independent action. That such a state of things is to some extent an almost necessary consequence of our position in India, may be true; but this in itself is an argument for resisting the tendency when it may be done without the sacrifice of objects of evident importance. For such reasons I should in the present case, as now advised, gladly hear from your Excellency's Government that you were of opinion that the working of the East Indian Railway might without objection be entrusted to a private company in the event of the purchase of the line being effected." The result we know. The working arrangement was made, and I think it will be admitted that the best results have ensued.

6877. Are you in favour of encouraging private enterprise as much as possible?—I am; and I should be delighted to see pure unassisted private enterprise applied to railways in India. Every facility should be given for its healthy expansion; I look upon it as the motive power of all true progress; and even when backed by State aid, it is, I think, a better means than direct Government agency of promoting concerns which should be managed, on sound commercial principles. We have admirable examples in India of lines being well managed by State officers, but I fear that in the long run officialism or over regulation will be found to be inseparable from State management, and this is incompatible with commercial principles.

6878. Can you suggest any particular course which may be taken in view to extended operations, and more especially to the encouragement of private enterprise?—I think that a comprehensive Railway Act of the Indian legislature, containing provisions for the general regulation of railways, and for the constitution and management of joint stock companies, similar to the Companies Clauses Consolidation Act, and the Railway Clauses Consolidation Act of this country, would be very desirable; and I think that a commission with certain judicial and executive functions would be useful. Such a legislative measure, besides providing for the safety, accommodation, and convenience of the public, as well as protecting the railway administrations against irregularities and improper conduct on the part of those who use the railways, would enable capitalists disposed to enter upon any enterprise, to know exactly what their relations to the State would be, and would very much simplify arrangements between the Government and the companies. Now, each contract contains what the legislation in this country provides, and as it is desirable that there should be uniformity in matters of principle and of regulation, there can, I think, be no objection to make legislative provision which should be of

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general application. I would include in such an Act, provisions for a public official audit, and for laying down definitions of capital and revenue expenditure, and for the regulation of maximum rates. The railway commission might consist of three members, one representing the Government or the general community, another the railway and commercial interest, and the third might be a legal member. It would afford an efficient tribunal for the settlement of all disputes that might arise between different administrations, and dictate what arrangement should be made for carrying out legislative enactments, such as those referring to rates and fares, running powers, interchange of stock, &c.

6879. I gather from your recent answers that you look forward to a time, no very distant time, when railways will be largely made in India without any State assistance at all?—I confess I am not very sanguine that we shall arrive at such a state of things at a very early date, but I certainly do not despair of the time arriving when railway enterprise in this country may be attracted to India without the aid and support of Government.

6880. Assuming that Government assistance is necessary for the present, on what principle would you give assistance and encouragement to private companies for productive works?—On the principle that as little risk as possible should be run by the State, and that the terms should be such as would stimulate exertion and economy, and give the Companies an interest in results.

6881. That was the intention of the old guarantee system, was not it?—The object no doubt of those who settled the terms of the old contracts was to encourage economy, and stimulate exertion, but the result has disappointed expectations from various circumstances, some unavoidable, and some arising out of inexperience. The three main causes are: the high rate of interest, then necessary; the high cost of construction; and the fall in the exchange value of silver below the contract rate. These causes would not apply in the future.

6882. In addition to the causes which you have now mentioned; are there other defects in the terms of the contracts made with those companies which may be remedied in future contracts?—I think so. The onerous terms of purchase by Government should be avoided; in future these should depend upon earnings and not upon the price of the stock, the value of which may, as in some existing cases, be ruled by the rate of interest guaranteed. The length of the term of guarantee might be reduced, and so limited as to fall within a period during which the Government might exercise the option to purchase. The inconveniences of the double system of management, might, I think in, a great measure be avoided by regulations, and by instituting a strict official audit; all matters of dispute being settled by the Commission I have suggested. The limit of the capital to which the guarantee applies, should in future be placed at an amount to be regulated by estimates which can now be made with much more accuracy than in former days.

6883. What is the probability, in your opinion, of the future lines paying?—I think that there is little probability of well-chosen lines being ultimately unremunerative; that is, of not covering interest, if constructed economically and managed skilfully; they may be constructed at nearly half the average cost of existing lines, and most of the lines made will help and be helped by others.

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6884. On what terms do you think assistance might be given to companies for making productive works?—I think the free grant of land might be given on condition that the railway will revert to the State at the end of a term of 99 years: the guarantee of a low rate of interest for a certain number of years after a line is open, upon condition that the advances of Government are repaid out of half excess profits over the rate guaranteed, and that when all is repaid, the Government receive half profits over a certain percentage, say 6 per cent., the Government having power to purchase at certain periods upon paying in rupees a certain number, say 25 times the average receipts of the company during the five years preceding the purchase. In the event of no Act having been passed regulating the principle on which rates and fares should be imposed, a condition giving Government the power to alter the maximum rates from time to time might be given. An official audit should be made half yearly in accordance with rules as to capital and revenue expenditure to be settled.

6885. In regard to the famine lines, would you adopt the South Mahratta terms?—Yes, I should apply those terms to famine lines, and even to other lines which are likely to pay if the terms I have just mentioned were not sufficient.

6886. Would the grant of assistance to companies tend to postpone the time when unaided private enterprise might come forward?—I think not necessarily. As in most cases of progress, we must proceed by little and little. The terms now acceptable and sufficient would not have been thought of 10 years ago, and 10 years before that the 5 per cent guarantee was necessary. I agree with Sir Evelyn Baring that the policy of enlisting private enterprise on railway works in India must be allowed to develope itself as circumstances may require, and this, I think is shown by facts. Of the capital raised by the guaranteed companies more than 7,000,000 *l.* has been raised at 4 per cent., 1,650,000 *l.* has been raised at 3½ per cent. Debentures were in 1867 issued at 5 per cent.; in 1870 at 4½ per cent.; in 1875 at 4¼ per cent.; in 1882 at 4 per cent., and now at 3½ per cent. This shows increased confidence as well as improved credit, the surest steps towards enterprises being directed to purposes of public improvement. The recent contracts also indicate that, with an extended knowledge of the country, and with the help of those who have had personal experience there, comparative small aid will be needed.

6887. What do you find to be the effect of railways on the districts through which they pass?—Their effect is, I think, at first to remove apathy and to induce energy among the people. They increase trade by opening districts to the markets of the world. They stimulate production and sometimes are the means of introducing new industries. They produce improved fiscal arrangements in some cases. They help to increase the revenue. Upon this latter point I may quote the opinion Mr. Pedder, the secretary in

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in the Revenue Department at the India Office, to whom I put the following question: "May it be said generally that the assessment of a district through which a railway is made, or is about to be made, is increased for land revenue," and his answer is, I reply generally in the affirmative. In a revision of settlement the fact that a railway has been or is about to be constructed in the neighbourhood, is taken into a consideration with a view to enhancement of assessment. Please remark, however, that as assessments are guaranteed for the term of the settlement, the enhancement cannot be effected till the current settlement expires. It must also be borne in mind that in the provinces (such as the North Western Provinces) where the assessment is fixed at half the estimated rental value of each estate, the enhancement cannot be a direct one, but must depend on the increase of rental value which the railway has caused or is believed to be likely to cause." I asked him what per-centage of increase is likely, and he says it is impossible to say, but he says: "I can give you two recent instances. The Eastern Deccan Railway will pass through the Bajalkate taluka of the Kaladghi district in Bombay. That taluka has just come under a revision of settlement. Independently of railway its assessment would have been raised 12·5 per cent., not taking the railway into consideration, an enhancement of 27·9 per cent. has been sanctioned. Therefore the enhancement due to the railway is 15·4 per cent. The same railway passes near, but not through, the Hungund taluka of the same collectorate, also just revised. Independently of the railway the enhancement would be 15 per cent. but taking the railway into consideration an enhancement of 26·8 per cent. has been sanctioned. Therefore the enhancement due to the railway is 11·8 per cent." I may also quote from Sir James Ferguson, the Governor of Bombay, who has lately been travelling through the district over which the South Mahratta line passes. He says: "As yet the district is virgin to European enterprise, and almost so to commerce. Gujarat has attracted these since it has been partially opened up, and cotton is manufactured on the spot by steam power. The certainly of the railway to the port of Marmagao has already started a new manufacturing company, and others will surely follow. In fact, the possession of such means of communication, together with the establishment throughout of the telegraph which, at present only runs along the great southern road to Kolhápur, Belgaum, and Dhárwár, with a recent extension to Ratnágiri, would render political and military insecurity obsolete, and a district, which in troubled times was a source of anxiety, will be included in the general spread of civilisation, and its inhabitants enlisted in the powerful confederation of commerce and peace."

6888. Will you tell us how your opinion the question of the gauge of the new lines should be determined?—I would say in the first place that there can be no doubt that there is a considerable saving in the cost of constructing a metre gauge line, and that for lines with a moderate traffic the cost of working is less than on a broad gauge; that in districts where railways have not been introduced, and where a system of its own can be established it may be desirable to adopt the metre

Chairman—continued.

gauge. Having got the two, the practical question in most cases will however be, what will be the effect of a break of gauge, and the gauge of each future line should be determined according to its special circumstances. It would be unwise to introduce a metre gauge line in the midst of a broad gauge system, or *vice versâ*. But whether broad or narrow; the first cost should be kept down as low as circumstances will permit. I think that it was necessary to introduce the most economical system of construction some 15 years ago, and that under the circumstances the narrow gauge was justifiable and necessary, but care is very desirable in deciding now each gauge shall be applied; and I would strongly deprecate the introduction of any other.

6889. The Committee have been told that the Government has generally been in favour of low rates and fares; do you think the rates and fares should be still lower than they are at present?—I have myself generally advocated the lowering of rates, because I thought that the railways could afford to do so, and that they would benefit by the increased traffic which is sure to follow; also because I was sure it was desirable to regulate them according to the capacity of the people and so to assist the development of the produce of the country. I know that in the opinion of some of my colleagues at the Boards I am thought to have been influenced by the desire to benefit the country and people at the expense of the railway, and that I have taken what Mr. Chapman called an "anti-commercial" view of the subject. But this is not the case. I wish first of all to see the railways pay, and thus relieve the taxpayer of the guarantee. I wish also to see the shareholders receive a fair profit, but I am inclined to think that the policy of imposing such rates as will produce the largest business at the least charge to the customer and the highest profit to the railway is founded on true commercial principles. In giving the greatest accommodation at the lowest price compatible with fair profits, a railway company, I think, serves its own interests best. The statistics we have enable a correct judgment to be formed of the profit on the smallest unit, and this should, I think, regulate the rates to be charged. In certain cases rates may still, I think, be lowered to the advantage of all concerned.

6890. Experience has proved, has it not, the importance both to the companies and to the public, and the desirability of reducing the rates?—The results of the attempts which have been made, I think, must be regarded as satisfactory. In those cases where moderatly low rates have been levied, the directors acknowledge that success has attended the trial; the traffic has increased, the net receipts soon recovered the first effects of reduction, and then exceeded those previously realised; economy also results in working; full trains are run, and train miles are not increased. It frequently happens that the largest margin of profit, *i. e.* the difference between the average amount received and the average amount paid for hauling a ton per mile, is on those lines where the rates are the lowest.

6891. What is your opinion about the proposed railway from Calcutta to Nagpur; is it one of considerable importance?—The Government of India, as you are aware, attach great importance

Chairman—continued.

to it on commercial a well as protective grounds. I think there can be no doubt that it will fulfil very important objects. It passes through a country which is destitute of railway communication, and which is described as containing much mineral wealth, and capable of agricultural development, but the traffic will at first be small, I should think. It should be constructed as cheaply as possible, compatible with convenience and safety.

6892. When you say it should be constructed as cheaply as possible, you do not mean that it should be a narrow gauge?—I did not intend to convey that meaning, for I think a narrow gauge line would interfere with convenience.

6893. Generally speaking, do you agree with the witnesses who have told us that all the great trunk lines in the Central Provinces and the northern plains in India should be upon the broad gauge?—I think the chief trunk lines of the country should be on the broad gauge, certainly, but there are some districts in India so extensive, where the narrow gauge has been introduced, and where a system of narrow gauge lines may, I think, be advantageously continued. It is rather difficult to define a trunk line.

6894. Those districts where the narrow gauge is at present at work, however important, are comparatively speaking, isolated, are they not?—There is a district in Southern India, south of the Madras line, which I think might be advantageously supplied with railways on the metre-gauge system. It is an extensive country. That is so also in the case of Burmah. They have begun metre-gauge lines there, and they had much better continue them; also in Assam and Northern Bengal.

6895. What is your opinion of the Bhopels, Gwalior, and Cawnpore Extension?—With regard to gauge I certainly think that should be on the broad gauge; in fact, it has been decided by the Government.

6896. Do you think it very desirable that that railway should be constructed as soon as possible?—I think that is a very important line; and that it may very properly be undertaken at once.

6897. Mr. Chapman complained of the obstructions which the promoters met with at the India Office; can you tell us anything about that negotiation?—I think Mr. Waterfield has already, in his evidence, informed the Committee what took place. All I have to say is, I think, it is to be regretted that so much time was occupied in arriving at a decision on the propositions put forward. But the fact is, the India Office is a place for great deliberation, and it must be admitted that many of the questions which had to be considered were important ones. If the proposal made on the 5th May 1882 to form a company which should receive only the grant of land and facilities for constructing and working could have been promptly acceded to, the line would have been in the course of construction now at no cost to the State beyond the land; but various questions, such as the ultimate right of Government to the line at the end 99 years, the right also to share in profits in excess of 6 per. cent., the question of rates, the question of gauge, that of running powers to neighbouring lines, and so forth, had necessarily to be considered, and much valuable time was taken up in discussing them, so that when the parties were arriving at something like a conclusion, the state of the money market, as regards Indian securities, appeared to have changed, and the feeling of the public was not such as would, in the opinion of the promoters, justify them in asking even the shareholders of the Great Indian Peninsula, who were behind their back, to take the shares up, except on a temporary guarantee. I may add generally that the council at the India Office are in favour of encouraging private enterprise, and would have been prepared, I believe, to have given a temporary guarantee to this company.

Chairman—continued.

Mr. Bernard Samuelson.

6898. You speak of a guarantee for a limited number of years as being desirable in the interests of the Government. Are you of opinion that from the present disposition of people towards railway enterprise in India a limited guarantee would be sufficient in any large number of cases; limited as regards the number of years?—I know that last year we were informed that a guarantee for five years or for 10 years would be sufficient. Whether a change has taken place since that in the state of public feeling I am unable to say, because no attempt has been made, but my own impression is that there are promoters of railway in this country who understand the value of railway works in India, and who would be able to point out the probable profits to be derived from a line; who might raise money upon a guarantee for a limited period; it might be five, 10, or 15 years.

6899. Do you attach much importance to the period being limited?—I think it is desirable to obtain as favourable terms as possible for the Government, and if you limit the guarantee by Government you limit their responsibility.

6900. In order to obtain your end; or rather in the hope of obtaining your end, would you wish to see railway enterprise deferred, or would you rather say: it seems at this moment that we cannot obtain the persons willing to undertake works on these terms, and therefore rather than that the works should be delayed we will give a permanent guarantee?—I should by no means desire to see important lines deferred. I should be disposed to give a permanent guarantee, certainly, if it were necessary to enable railways to be carried on, and I think I said just now, in reply to a question by the honourable Chairman, that the Southern Mahratta terms might be offered to those who were dissatisfied with the temporary guarantee.

6901. You would not hesitate to offer the Southern Mahratta terms, in place of a guarantee for a limited number of years, rather than defer the execution of the railways?—I should not object at all.

6902. Would not there be also another advantage in not limiting the number of years, namely, that you could with more grounds of justice ask for the power of revising the rates; would not there be some difficulty in requiring that all the companies should subject themselves to a revision of rates if the guarantee were limited to a number of years instead of being permanent?—I think there is something to be said in favour of the view you take; but I should be disposed to endeavour.

Mr. *Bernard Samuelson*—continued.

endeavour to regulate rates by legislative enactments in future, and by means of a Commission, which would be independent of the Government.

6903. Still the companies would be liable to a revision of rates which might reduce their profits to a lower rate than the one which they had hitherto been enjoying under the guarantee?—Yes.

6904. And that necessarily would be an obstacle to their willingness to proceed with works of that kind?—That is possible; but I think it is a question that might be settled amicably and satisfactorily.

6905. At any rate, the Committee understand that you have not let this point of limiting the number of years interfere with the progress of railways in India?—Certainly.

Sir *George Campbell.*

6906. Were not some of the lines which you take as low price lines, really laid upon roads already made, such as the Patna Gya Railway, and the one from Cawnpore, which you mentioned as extraordinarily cheap, I think, 38,000 rupees a mile?—Yes, I think that was made upon the side of a road; I merely gave the fact as Colonel Stanton had given it in his Report.

6907. That did not involve the full cost, as if it had been a new railway?—No.

6908. Can you explain to us why the Central Bengal is so very much cheaper than the Eastern Bengal and many other lines?—I can only explain it by the fact that very much better experience has been gained in railway construction in India since the Eastern Bengal was constructed; that materials are very much cheaper than they used to be; that freights are lower for the conveyance of materials from this country, and that everything is lower excepting labour, and that is not a very material point in the construction of railways.

6909. Do you know what the cost of the Eastern Bengal was primarily?—It was high; something like 14,000 *l.* a mile. Then there are some very serious bridges on the Eastern Bengal which have not occured on the Bengal Central.

6910. The Central Bengal you said was to cost only 58,000 rupees a mile?—It has cost that.

6911. That is under 5,000 *l.* a mile?—Yes at the present rate of exchange.

6912. As compared to three or four times as much in the Eastern Bengal?—Yes; but the line is not finished; there is no terminal station. There are no very expensive works on the Central Bengal, it is simply a line taken through a level country joining another line.

6913. Is it a light railway or a full railway?—I think the weight of the rails is about 65 lbs. The line is not finished; in fact it has not a proper supply of rolling stock yet, nor other conveniences.

6914. I think the cost of the East Indian Railway, which you mentioned, was including the premium which was paid on purchase?—No; not the premium, but the additional outlay since the purchase.

6915. As compared with the Great Indian Peninsula is the original cost of the East Indian

Sir *George Campbell*—continued.

greater or less?—Greater. The cost of that line was very much enhanced by circumstances over which they had no control at all; the Mutiny added three millions, and other things increased the cost.

6916. You have expressed a very strong preference for making the lines through companies, and to encourage private enterprise?—Yes.

6917. Do you think the plan you have proposed for a Railway Commission would really succeed in sufficiently controlling the rates; would you give that Commission a power of fixing rates?—Under certain conditions.

6918. What conditions?—It is a matter that requires a great deal of consideration, but it seems to me not impossible that a competent tribunal representing the railway interest, and the interest of the community should be established, which would be able to say what would be fair, right, and reasonable, both in the interests of the railways and of the customer. Of course there ought to be checks upon wrong judgments and improper decisions, but I think that might be settled.

6919. Do not you think there would be apt to be a conflict between the representatives of the public interest, and the private owners of railways?—Not more than could be overcome, I think.

6920. Do you think you could give to a Commission of this kind power to lower the rates against the will of the companies?—I think under certain conditions they might have that power.

6921. You are aware that it is not yet proposed to give such a power in this country?—Yes; then in this country you have competition which regulates it.

6922. Do not you think that if you have not been able in this country to establish any tribunal which shall control or lower the railway rates you would have difficulty in doing so in India?—Is it not a defect in your railway arrangements here.

6923. Does not your evidence tend to show that even under the guarantee system there has been a great difficulty about the control over rates?—Yes, that was in consequence of the terms of the contract which only enabled the Government to reduce rates when a high percentage of profits had been realised.

6924. I saw at a recent meeting of the Oude and Rohilkund Railway Company the chairman stated that he thought the raising of the lowest class of fares, although adopted contrary to the opinion of some people, had been successful. Is it the case that the railway fares of the lowest class passengers on the Oude railway have been recently raised?—They were raised from 2 pie to 2½ pie, but I think it was a mistake.

6925. You did not concur in that?—I did not.

6926. That was a case in which the directors of a guaranteed company raised the rates contrary to the advice of the official director?—Exactly; contrary to his opinion. Those in charge of the railway approved of it, but I thought it a retrograde step myself.

6927. In your opinion that would be a serious drawback?—Yes.

6928. Is not it the case that even after the Government have bought the East Indian Rail-

Sir *George Campbell*—continued.

way under the working arrangement of the present East Indian Railway Company, the Government have lost direct control over the rates?—Not at all; they have power over the rates down to a certain minimum, that minimum being fixed in the expectation that it would be the lowest rate that could properly be imposed, so as to leave a fair profit.

6929. Some of the witnesses have told us that that was originally a maximum rate, and that the Government in order to lower the rate were obliged to compete by lowering the rates upon their Government lines in order to force the East Indian Railway directors to lower their rates?—Yes, I have heard that stated; but then it did not come below the minimum under the contract. It was the Government influence that partly induced the company to reduce the rate as they did.

6930. You are not prepared to say that under private enterprise there would not be very considerable risk of friction with regard to rates?—Of course there might be.

6931. Have you studied the subject sufficiently to be able to say that in your own opinion the railways included by the Government of India under Schedule A, as a whole, would pay tolerably well?—I can only take the opinion of the Government, who are much better able to judge than I am; they are of opinion that they will ultimately pay. There are one or two lines in that scheme which I think might not pay the full interest on the capital for some time; the Vizagapatam Raipur would probably not pay for some years.

6932. You have told us that, in your opinion, a line between Chuttisgurh and Seeterampore, the new part of the Nagpur and Calcutta line, would pay?—No, I said I was doubtful whether it would for some little time.

6933. Have you studied the subject as to whether there is any particular class of traffic that it is likely to come in large quantities on that line?—There is really not sufficient data to enable any sound judgment to be formed as to the probable amount of traffic and profits.

6934. You mentioned various questions which must be disposed of before the lines from Bhopal to Cawnpore could be sanctioned. A witness was before us on the last occasion, who told us that in his opinion it would have been a better line in an engineering and other points of view if it were carried from Cawnpore by Rutlam, to join the Bombay and Baroda line; has that question been considered?—Yes, that line has been considered, but it was not approved; it was not thought so well of as the line from Bhopal to Cawnpore.

6935. That was considered and decided?—The two systems have been considered, but the objects would be quite different. One would take the main line direct to Cawnpore from Bombay, by the Great Indian Peninsula Railway; the other, as I understand you to describe it, is to the left in connection with the Bombay and Baroda.

6936. Yes, but the distance from Cawnpore to Bombay by either line would probably be about the same. Do I understand that the relative advantages of the two lines have been weighed, and that the India Office have decided to prefer the Bhopal line?—The two were not compared with each other. The objects seem to me different, if I understand the line you mention correctly.

6937. They would both equally serve the through traffic between Cawnpore and Bombay, and they would both equally serve the local traffic between Cawnpore and Jhansi, would they not?—The only project I have heard of with regard to Rutlam is a line from the Baroda Railway to Rutlam.

6938. And from Rutlam on to Cawnpore; the witness told us that the gradients upon that line were very much much better, and that it was also a better country than the other line?—The length of new line to be constructed by this route would, I should think, be twice the length of the other, and I suppose more than twice the cost.

6939. Do I understand that those lines have not been compared?—Not that I am aware of.

6940. Do not you think the result of the guarantee system, and the entrusting certain enterprises to private enterprise has hitherto been that it has cost the Government a great deal more than if the Government had made these works directly?—I think it is impossible to say positively.

6941. At all events the Government in every case in which they have taken over a line had to take it over at a *premium*?—Yes.

6942. And in some cases they have taken over lines which were losing lines at a slight premium?—Yes, but that does not prove, I think, that the lines would have been constructed cheaper or managed better if undertaken in the first instance by Government.

6943. Take the most recent lines and the most recent system which has been very much commended to us, what is called the South Mahratta plan; is not it the case that at the present moment the Government can borrow in the market at 3½ per cent., if not lower?—Yes.

6944. Is not it the case, that practically the Southern Mahratta terms amount to a borrowing at 4 per cent., with the chance of additional profit, and with the right reserved to the company to claim back their money in case their profits should fall below the expected 4 per cent. in future?—Those are the terms; but I may say, that within the last month the South Mahratta Company have raised money at 3¼ per cent.; they have raised more than a million and a-half at 3½ per cent.

6945. That is upon debentures?—Yes.

6946. As regards the share capital is it the case that the Government being able to borrow at 3½ per cent., they have been obliged to give to this company 4 per cent., plus the chance of profits?—Yes; it is only for a certain number of years.

6947. At the end of that number of years if the profits should fall below 4 per cent., or if the line should seem in any way unprofitable, the company are entitled in any year to demand back their money?—That is to say, the Government get it at cost price.

6948. The company are entitled to demand their money back?—Yes.

6949. So that that the company are practically guaranteed against at any time receiving less than 4 per cent.?—No; less than 3½ per cent.

6950. Is

Sir *George Campbell*—continued.

6950. Is not it the case, that they are guaranteed 3½ per cent, plus an additional half per cent.?—For a limited time.

6951. And at the end of that limited time they are entitled to call back their money?—Yes.

6952. So that they cannot be kept out of their money?—No.

6953. Receiving not less than 4 per cent.?—They are not guaranteed 4 per cent. beyond seven years.

6954. And then their money back again if they want it?—If they want it then.

6955. With the chance of obtaining a further profit if the line proves profitable?—They are entitled to a quarter of the net receipts in addition to the 3½ per cent.

6956. At all events it was made a good deal more expensively by this agency than if the money had been raised directly by Government so far as the raising of the money is concerned?—It is impossible I think to compare the probable financial effects.

6957. Will you tell us what you think are the advantages of employing a company under the terms of the Southern Mahratta Company?—It relieves Government of much arduous work; it ensures the completion of the line within a certain period, and therefore insures economy of construction. I may say with regard to this very line the Government of India had commenced it, but they said they could not afford to go on with it except at a very slow space. They could not afford more than 30 or 40 lacs a year, and therefore the works would have probably taken six or seven years to complete. This company have raised the money in the course of a year; they will probably complete it within three years; they are induced by the terms of the contract to expedite their operations so as to complete it as soon as possible, so that the country will have the advantage of that line three or four years sooner than if it had remained in the hands of Government; profits will be earned, and the capital made productive earlier.

6958. Would the Government have had any difficulty in raising the money at 3½ per cent., and delegating some gentleman selected by themselves to manage the line?—They might not have had a difficulty, but would they have done it. They would not have done it.

6959. Why not?—Because they probably would not have been allowed to increase the funded debt of the country for the purpose of carrying on public works at a greater rate than has been hitherto sanctioned.

6960. Do you mean that Parliament would not have allowed it?—The Secretary of State, when the arrangement was made, felt that he was not in a position to sanction a larger direct outlay by the Government than was being incurred.

6961. How are the directors of the Southern Mahratta Company appointed?—The promoters, and those who are interested in the country, probably found themselves discussing the advantages of the work, and they agreed I suppose to join, but I do not know exactly whether there is any particular process by which they were brought into the shape of a board.

6962. Is Government consulted as regards the appointment?—No; Government hold themselves aloof from the selection of directors. They know, of course, with whom they are negociating.

Sir *George Campbell*—continued.

6963. Is not it the case that the construction of Indian railways is a great deal in the hands of a limited set of gentlemen almost every one of whom is a director of three or four railways?—No, I think not; I had a list made out of the number of directors connected with Indian railways. There were 60 altogether; out of those, 12 consisted of retired civilians, gentlemen who have retired from the Civil Service, about 15 were retired military officers, some of them Royal Engineers with personal railway experience, four lawyers connected with India who have been in India in the legal profession, seven mercantile men either connected with the commerce of India or in high position in this country, and 22 gentlemen connected with the commercial and monetary affairs and railways of this country.

6964. A great many of the gentlemen are directors of three or four lines a-piece, are they not?—There are cases certainly of the same director being a director of two or three companies.

6965. Have you studied and been officially connected with the question of provincial responsibility for railway and other public works?—No; that comes more under the financial department.

6966. You could not tell us how the matter stands as regards certain railways made by the Government of Bengal?—If you ask me as to any particular ones, perhaps I might be able to answer.

Chairman.

6967. That is not your department?—No.

Sir *George Campbell.*

6968. You are Secretary of the Public Works Department?—Yes.

6969. We were told that certain provincial railways, originally made by Provincial Governments, had been transferred to the productive category. There was the case of the Patna and Gya, was not that originally made by the Government of Bengal?—It was, and it is now being worked under an arrangement with the East Indian Railway Company.

6970. Is the capital still taken out of the Bengal provincial revenue?—Any additional capital if supplied by the Government of India, under the contract with the East Indian Railway Company.

Mr. *Jackson.*

6971. You gave us some figures about the extent of lines sanctioned and in course of construction. I did not catch the figure; I think you told us there were 1,103 miles expected to be opened; is it opened, or completed this year?—Expected to be opened.

6972. Could you give us any information as to the balances, what condition they are in. "Sanctioned" is rather a vague term, is not it?—I do not know to which part you apply. Do you want to know what portion is included in the scheme of the Government.

6973. You gave some figures as to the extent of lines sanctioned?—I said out of the 3,896 recommended by the Government of India 1,134 had been sanctioned and are in hand, that is to say,

Mr. *Jackson*—continued.

say, have been sanctioned by the Secretary of State, and have been commenced by the Government of India.

6974. Is the 3,896 miles in Schedule A.?—Yes; that was the Chairman's question.

6975. Was it in connection with that that you told us that 1,103 miles were expected to be open this year?—No; I referred to lines which have been some time in hand, and are approaching completion.

6976. I wanted, if possible, to get some clear idea as to the condition of the total number of miles sanctioned, as to how they were progressing?—From the same report of Colonel Stanton, it appears that the length under construction, or sanctioned for commencement, is 3,457 miles, of which 1,311 miles will be constructed by State agency, 1,355 by assisted companies, including the Southern Maharatta, 193 by guaranteed companies, and 596 by Native States.

6977. Is it of that total that you told us 1,103 miles were expected to be opened this year?—Yes, it is expected that 1,103 miles of the 3,457 miles will be open for public use in the present year.

6978. I take it that they are all under course of construction?—That is so.

6979. That is to say, they have got considerably beyond the point of being sanctioned?—Quite so.

6980. They are actually in progress?—Yes.

6981. How long do you anticipate it will be before the total is completed?—I was merely quoting from Colonel Stanton's report, and he does not give that; I should think three or four years at least.

6982. I gather you were in favour of having the future railways constructed by companies rather than by the State?—I am, if reasonable terms can be made with them.

6983. I suppose a good many of the new lines to be constructed will at one point or another connect with existing railways?—Certainly.

6984. Would you be in favour then of existing companies being allowed to construct new lines?—Yes, I think that in some cases existing agencies might be very usefully employed in that way.

6985. Would that meet your desire for avoiding double management?—It would involve the necessity of some fresh agreement and in that agreement different arrangements might be made with regard to the double system of management to that which now exists.

6986. Probably to some extent the staff and the general management would control the two companies?—Quite so; there is an objection to increasing the capital expenditure of the existing guaranteed companies in consequence of the contract requiring that the same terms should apply, therefore the only way to avoid embarrassment of that kind is to allow the companies to raise the money by debentures which do not come within the category of shares, the purchase clauses not applying to debentures.

6987. I take it the amount of debentures to be issued is limited?—Yes.

6988. And limited in proportion to the capital which is raised?—It is so, in most cases; not in all.

Mr. *Jackson*—continued.

6989. I suppose there would be no objection to making fresh agreements with these companies for the new lines; that would not interfere with the existing agreement?—I think there would not be any objection. In fact, I think it is desirable to avoid the multiplication of agencies.

6990. Referring to the question of debentures, you gave us some figures showing the different rates of interest; were those debentures raised at par?—In almost every case; and if at a discount, at a very small discount indeed.

6991. Was the 3½ per cent. to which you referred at par?—At par.

6992. In the recent instance of the Southern Mahratta?—Yes.

6993. You spoke about regulating the rates; you said you would regulate the rates by legislative enactments; how would you regulate the rates by legislative enactments?—My idea was that the Legislature might fix upon maximum rates as is done in this country.

6994. For all companies or for each company separately?—For each administration, for railways generally, whether managed by government or not; and that the commission would under certain conditions have power to interfere and say, these rates are too high, and we think there is ground for reducing them; or, these rates are too low, and we think there is ground for raising them. I admit there is some difficulty about it; but it is not a difficulty which I think is not capable of being overcome after careful consideration.

6995. You would give them power to regulate them in the sense of either raising them or lowering them?—Yes, with the view of securing fair and proper rates.

Chairman.

6996. I understand that this point you threw out as important for consideration; you have not elaborated the idea in your mind?—No.

6997. You would not go so far as to recommend it?—No, I would not without further consideration. I only included it as one of the possible duties of this commission.

Mr. *Jackson.*

6998. You would like to see what you call purely unassisted lines made in India?—Yes.

6999. Would you think that the same power ought to be retained by the Government or by the State, or by this railway commission, to regulate the rates, to reduce the rates of purely unassisted companies?—There certainly would not be the same ground for interference, but at the same time I think the Legislature is bound to protect the public against excessive rates, and that there should be some authority for fixing maximum rates in all cases.

7000. No doubt the maximum rates would be fixed when the concession was made?—Yes.

7001. But would not it rather interfere with the development of purely unassisted lines; the power of stepping in in case the line proved to be a success, and reducing the rates?—Yes, I quite admit it.

7002. The people who find the money for purely unassisted lines, if they are to take the risk, are fairly entitled to take the profit if it turns out

Mr. *Jackson*—continued.

out profitable?—I quite admit it under proper conditions protecting the public.

Mr. *Slagg.*

7003. You gave a list in the early part of your evidence of the earnings of the various lines in percentages; do those calculations include the loss by exchange?—No, not at all. They are merely the results of the working in India.

7004. You consider that extension is desirable, if done judiciously?—Yes.

7005. I think you explained that by that term judiciously that no further taxation should be imposed upon the people of India in regard to the construction of new lines or for the guarantee of interest?—I meant it more to apply to the judicious selection of lines, but I also do think that the limit of expenditure should be in a great measure guided by fresh taxation being necessary.

7006. Do you think there is no risk of the present profits to which you have alluded on existing lines being used to pay guaranteed interest upon new lines?—The profits of existing lines could not be used towards paying interest in that way.

7007. There is a certain profit in the hands of the State as you have shown?—I think it is very fair to look upon the profits of the existing system of railways as a source from which interest may be paid on the capital for future lines.

7008. That process would reduce the profits of course?—You would get fresh lines. I do not think it would necessarily reduce profits if the lines are judiciously selected; if good lines are selected which would be profitable, they would help to enhance the profits, and to increase the aggregate.

7009. Then you think there should be no invasion of the present profit fund for the purpose of guaranteeing interest?—No; I think that should be left intact.

7010. You are in favour of a small guarantee being given in order to secure investment in future in new railways?—Yes.

7011. What do you mean by a small guarantee?—The lowest rate of interest that it is possible to obtain acceptance of.

7012. Have you fixed in your own mind a judicious rate?—I should think at the present time 3½ per cent., or 4 per cent., would be quite sufficient.

7013. Do you think so much as 4 per cent?—Not necessarily.

7014. Under any circumstances?—I should think 3½ per cent. ought to be enough to induce capitalists to give their capital towards railways, provided they had the opportunity of increasing that amount by surplus profits.

7015. That is your idea of a guarantee in the future, 3½ per cent?—Yes.

7016. You stated that railways introduced new industries into the countries through which they passed. What is the nature of the new industries?—Some agricultural; many in the shape of manufactures; even metal work, and things of that kind, I am told, are encouraged by it, because a market is found for them.

7017. Manufacturing industries have been established to a greater extent in the country through the influence of railways?—Certainly.

7018. In places remote from the large towns?

Mr. *Slagg*—continued.

—No; generally speaking they are in the large towns.

7019. Have you ever been told that some of the existing industries are rather injuriously affected by the railways?—Some may possibly be. Of course it has the effect of bringing one district into competition with another, and the industry of one district may possibly interfere with the other by more energy, the possession of more capital, natural advantages, and so forth.

7020. You do not attach much importance to the statement that some native industries have suffered?—No, not at all. On the contrary, I think on the whole they have been greatly improved.

7021. You also said that an increase in the land revenue is obtainable from some districts through the influence of railways. Has fresh taxation been imposed to your knowledge in any district where railways have passed?—I think I mentioned just now that in one or two cases the assessment had been increased.

7022. It would appear that in that case the advantage obtained by the inhabitants of the district through the influence of railways is taken from them, on the other hand, by the increase of taxation?—The advantage to the tenants, of course, is reduced by the amount of extra rent they have to pay. At the same time I should think the advantages they derive from the railways greatly exceed the disadvantage.

7023. Do you think the railways in these cases have improved the tax-paying power of the people?—Yes.

7024. Do you think there are many districts where increased taxation can be borne by the people?—I should think not any. I should hope that no increased taxation will be necessary.

7025. Have you any means of estimating from specific data any improvement in the condition of the people during the last twenty years in any special district, either from the influence of railways or otherwise, and in what respect?—I think if a district is found to produce eight or ten times more than it used to produce in the shape of corn, grain, or seeds, that is a proof that it is improving; and I think, if you find manufactures increasing in a particular district, there must be a number of men employed on them, and there must be a general distribution of money, which must have a good effect on the population in the neighbourhood.

7026. There is no doubt there has been a large increase in the export of wheat; but I should like to know have you any reason for thinking that the domestic and personal condition of any of the inhabitants is really better than it was some time ago; their method of living; their surplus profits; their savings; clothing; or any other evidence of increased prosperity?—With regard to clothing, for instance, I think you will find that there has been a large increase in the import of Manchester goods into India since the railways have been introduced. Those goods probably have been used by people in the interior, who had not been in the habit of taking them before; generally, too, their domestic and personal condition must have improved.

7027. From personal observation of the people, do you say that?—No, I have no personal observation;

Mr. *Slagg*—continued.

vation; I have only been in India between three or four months in my life.

Mr. *Kynaston Cross.*

7028. I think, with regard to borrowing, you said you would borrow in India as much as you could, and that you would borrow the remainder in England?—Yes.

7029. Do you think it is desirable to borrow much in England?—Not much.

7030. Is it desirable to increase the present debt at all, if you can help it?—Not desirable.

7031. I think, in your examination in 1878 or 1879, you were very emphatic on that?—I daresay I said I said I thought it very desirable to raise as much as you possibly could in India, and I am still of that opinion; but at the same time, if enough cannot be raised there, I should be very sorry to see important public works postponed for want of money which could be obtained in this country.

7032. You said, "As a rule, I should say it would be very unadvisable to increase the charge in England, on account of the Government in India"?—I think it undesirable to unnecessarily increase the charge; but then, I think, it becomes a necessity, if you cannot get on with important public works required for the interests of the country without doing it.

7033. Would not it be limited to a considerable extent by the question, whether the public works would pay or not in themselves?—Yes, to some extent.

7034. Bearing that in mind, would you say that the railways in Schedule A. ought then to be made out of monies borrowed in England?—I think the railways in Schedule A., if undertaken, should be paid for as much as possible, as I said before, out of money raised in India; but that if money cannot be raised in India, I do not see that there is sufficient ground for expecting embarrassment in the finances by raising money in this country and applying it to these particular lines, provided it is done on favourable terms and not too fast.

7035. The first number of items of railway in Schedule A. amount, I think, to 12,520,000*l.*; that is at page 82 of the Despatch (App. No. 1, p. 568); it is proposed to make these railways in five years; you can only borrow in India, as I think we have in evidence a crore and a quarter of rupees a year?—Yes.

7036. So that you would have to borrow on that account at any rate six millions in England to make these railways?—A year?

7037. No, during a period; you say unless the railways pay you would not like to borrow in England for them?—No, I did not say quite that.

7038. You said you would not like to increase the taxation, or to put any further charge on the Government of India on account of the railways for which the money had to be borrowed in England?—Yes, any further charge that was not requisite to make necessary lines, and which would involve fresh taxation.

7039. If you have to borrow money in England, you have to pay interest in England?—Yes.

7040. And if the railway account of which you borrow that money in England does not provide the interest, where is the interest to come from

Mr. *Kynaston Cross*—continued.

otherwise than out of taxation?—From the surplus revenue of the country, to the creation of which existing railways will be very instrumental.

7041. Yes, the existing railways; but I want to ask you about one particular line in Schedule A, which will cost 2,900,000*l.*; would you think it was desirable to make that out of money borrowed in England if the line itself did not produce enough to pay something like the interest?—I think it all depends upon the value of the line, not altogether in a pecuniary sense, but if it is a famine line, or if it is thought necessary to establish it for the development of a country hitherto perfectly destitute of communication, I think it might be worth while. Each case must depend upon the special circumstances. In the abstract I think it would be justifiable to borrow money in this country for constructing a line in India which might not perhaps pay for some little time. It ought to make one doubly careful, of course.

7042. In that case you would almost go to the length of advocating borrowing in England, for the purpose of making famine lines in India?—Yes, I would in certain circumstances.

7043. Under the circumstances of this particular line?—I do not know much about this particular line. I am doubtful about this particular line being one that will pay at once.

7044. Then you would rather not do it with reference to this line in Schedule A.?—Well, I am not sure of that.

7045. With regard to the next line, Bellary Kistna, in the same way?—Yes, I would do it.

7046. With regard to the one above the Jhansi Manickpur, which is entirely a famine line?—Yes.

7047. Would you like to impose a charge on the revenues of India, the representative of the interest on which would have to be remitted to this country?—If it is a necessary line. It seems to me that remitting to this country does not increase the taxation. If you have to raise in India at 4½ per cent., and you could raise here at 3½ per cent., it does not increase the amount of taxation.

7048. How does it come from India to England?—Through silver.

7049. Have you ever known any silver come from India to England?—You draw bills upon Government, who only hold silver, and silver has to be practically sent to this country in order to pay interest in sterling.

7050. Is not really that which is sent from India to pay the interest on that which is borrowed here, invariably produce?—Yes.

7051. If you spend a lot of money in India in a way which does not increase the produce of the country, that is if you spend it on these famine lines in a way which does not enable you to get more produce to remit to pay the interest, does not that impoverish India distinctly?—I can understand its being looked upon as an embarrassing question by the Financial Department who have to obtain their supplies in this country: but these lines, while mitigating famine and saving life, would also help to increase produce as well as exports.

7052. It would be an embarrassing question for the Financial Department, on which you would rather not give an opinion?—Yes; I think

Mr. *Kynaston Cross*—continued.

think that if a line is said to be absolutely necessary, either to protect life or to develope the country so as to make it productive, in either case I think it would be justifiable for the Government to raise money in this country at a low rate of interest for the purpose of making that line.

7053. Even though there was no chance of the line earning the low rate of interest which the Government bound themselves to pay?—Yes.

7054. That would apply to three principal lines which are to be made under Schedule A., that is the Jhansi Manickpur, the Vizagapatam Raipur, and the Bellary Kistna, would not it?—They are all described as famine lines.

7055. What do they amount to together?—£. 6,300,000. It would probably take five years to make each of them.

7056. And at the end of five years you would hardly expect them to pay?—I think very likely they would pay something by that time.

7057. I thought you said they would not?—No; they are called famine lines, and therefore not expected to pay. I think they might pay 2 or 3 per cent. soon.

7058. You gave us some figures taken from Colonel Staunton's Report which showed that the earnings of the railways were 5 *l.* 13 *s.* 6 *d.* per cent.?—Yes.

7059. That is exclusive, of course, of loss by exchange?—Yes.

7060. Can you suggest any way by which the figures might be given in such a way as to bring home to the people here the real rate of profit which has been earned, including loss by exchange?—It would be very difficult to do so, I think, considering that the capital expenditure on these railways has been going for the last 30 years, and that there has been a very varying rate of exchange during all that time. You may in a single case. I did in one case work it out the other day, the Rajpootana Malwa line.

7061. The Rajpootana Malwa line was not complicated by any guarantee, was it?—No; still supposing it had been a line the earnings of which had to be sent to this country for dividend, I made out, I think, that the earnings in India which are put down by Colonel Stanton at 6·25 per cent., would be reduced to about 6 per cent., making a difference of about one quarter per cent.

7062. Will you tell me how that arose; the difference of the quarter per cent.?—The Rajpootana line has been some years in course of construction. I took the rate of exchange during those years, and then struck an average, and arrived at a capital amount. Thus I was able to divide the existing receipts at the current rate of interest, so as to produce the percentage I have stated.

7063. If the Rajpootana Malwa had been one of the lines established on the old guarantee system, the result would have been very different, I suppose, would it?—If it had been constructed with money on which 5 per cent. had been given you mean?

7064. Yes?—Certainly.

7065. With the stipulations for the guarantee, and also stipulations for payment towards the guarantee?—Yes.

7066. In Colonel Staunton's Report of course no account is taken of these bad bargains which have been made?—No; it merely professes to give the simple results of working.

7067. Of the working in India, reckoned in rupees?—Quite so.

7068. In any future guarantee you would would advise that very great care should be taken not to repeat any of the mistakes which are made in the old guaranteed companies?—Certainly.

7069. You spoke of the traffic in grain pulses and seeds, 5,213,000 tons; do you know how many of those tons are exported at all?—I am afraid I have not any figures as to that with me.

7070. To show what was moved about in the country?—That could be obtained, of course, but I have not got it here.

7071. You say no increase of taxes should be incurred?—No; I think it undesirable and unnecessary.

7072. If you made a five years' forecast, such as you spoke of, and within two years you had some failure of the opium crop, or you had to spend some money on the North Western Provinces on the frontier, what would you propose to do so far as regards your five years' forecast; would you have to limit the expenditure?—Yes, so far as State works were concerned. If your engagements were with companies, of course they would go on as usual, and there would be no interruption to their progress. They would be obliged, under their contracts, to raise money, and to apply it as you desired.

7073. Have companies always been able to find money under their contracts?—During the mutiny I think there was a difficulty for a few months; but the Government were in the same difficulty.

7074. Have there been any difficulties of the same kind lately?—I think not. Advances have sometimes been made by Government to the companies, but that was because Government thought it inexpedient to allow at the time the companies to raise money themselves. It was more convenient for the Government to make advances than to grant the guarantee which was necessary to enable the companies to raise money.

7075. In fact, the companies could not raise the money without the guarantee of Government, and the Government lent them the money temporarily, until they decided what to do?—Quite so, charging interest for it, higher interest than the guarantee.

7076. You said that the propcsals of the Government of India were reasonable?—Yes, I thought so.

7077. Do you mean reasonable in principle rather more than in detail?—Reasonable as a whole.

7078. In amount?—In amount.

7079. You mean reasonable in amount rather than as regards the line?—I think that is a thing we must leave to the Government, who are responsible for going into these things, and who, we must suppose, would not recommend what they think disadvantageous to the country.

7080. Do you understand, from reading the Despatches, how it is proposed to make the lines which come under the limited guarantee system, in case the companies do not come forward to make them on moderate terms?—I do not think

Mr. *Kynaston Cross*—continued.

the Government have suggested any alternative, but I presume they think that if these lines are regarded as important lines, such terms would be given as would secure their acceptance by the companies. I think their inclination rather is not to increase the amount to be expended direct by the Government, but to throw off upon assisted companies what Government might otherwise have undertaken.

7081. You recommended that certain terms should be made with assisted companies?—Yes.

7082. I take it that they were based principally on the Bengal Central terms in the first instance, were they not?—Yes.

7083. And failing the Bengal Central terms, you fall back on the Southern Mahratta terms?—Yes.

7084. Could you make any suggestion as to any change in the Southern Mahratta terms which should be more beneficial to the Government, without running the risk of their being less advantageous to the public or less favourably received by the public?—I am afraid not. I am afraid it would be difficult to propose any alteration which would make them less advantageous to the shareholders so as to make them more favourable for the Government.

7085. I said more advantageous to the Government and not less acceptable to the public?—I am afraid not; but with regard to the Bengal Central, I think that in future if the Government are called upon to give any assistance to a company in the shape of a guarantee, they should also claim a right to share any surplus profits over, say, 6 per cent. That is not included in the Bengal Central terms.

7086. Would you do that even when the guarantee was for a very limited period, and when the amount of advanced interest had to be repaid by the company?—I would.

7087. Do you think you would get any companies at all established on those terms?—I think so. Of course, if it were an insuperable difficulty I would give it up; but I think it would be a very fair and proper thing, if the Government are asked to give assistance, that they should get some *quid pro quo*.

7088. You say you ought to get it, and still you say you would surrender it if you could not get it?—I do not think it would be an obstacle myself. I think if people in this country were pretty well satisfied that they would ultimately get 6 per cent. for their money, they would not grudge allowing Government to share in the profits above that.

7089. Then you would not all despair of establishing other railways, not only on the Bengal Central terms, but on terms which are better for the Government than the Bengal Central terms?—Certainly. I hope some day it will not be necessary to give any guarantee.

7090. Have you had any communication with any number of capitalists, or even promoters, who would now propose to undertake railways on terms even only as good as the Bengal Central?—I have not very recently, but when I have spoken I have not found that objection was taken to the principle of dividing profits in the event of a guarantee being given.

7091. There is one question about the Southern Mahratta which I should like to ask you; the payment of interest is made in rupees in India, and it is guaranteed that the number of rupees given shall be sufficient to produce 3½ per cent. in England?—Yes.

7092. If instead of that being a rupee transaction it were made a sterling transaction, and the sterling amount were guaranteed in England, would that make that security more acceptable to trustees?—I think it might, but I do not see why it should.

7093. It would be a less complicated transaction?—Yes, if they care about the complication; but all an investor here cares for is getting his interest on a certain day, which he would get under the existing arrangement. It is because there has been a talk about its being paid in rupees, and so many rupees being required to produce the amount in sterling, that he has got a little puzzled. I think that will work off when he finds that he regularly receives the interest in sterling.

7094. You have no doubt he will always receive his interest in sterling through the railway company sending those rupees as sterling bills on London?—Yes.

7095. That is the method in which it is done?—Yes.

7096. It is never contemplated under the Southern Mahratta scheme according to that that the shareholder shall receive his dividend in India?—Those who hold shares in India would receive their dividend in India, but not those who hold their shares in this country.

7097. Will the railway company, or will the directors take charge of the dividend, and remit it to this country, paying it in sterling in this country?—The agent of the Company will receive it, and remit it to the Directors.

7098. Those are the terms which you think the most desirable on which to prosecute private enterprise?—Yes; it seems to me that it is a very good arrangement, and likely to work well, and therefore one that may be advantageously adopted.

Mr. *Bernhard Samuelson.*

7099. In the event of the terms upon which railways are undertaken in India being a guarantee either for a considerable number of years, or a guarantee in perpetuity of a certain amount of interest, would you make the companies responsible for the construction of the railways within the guaranteed capital, that is to say, would you limit all guarantee to a certain amount of capital, and if the railway cost more that no interest should be paid by the Government on the excess, or would you let the Government in any way participate in the risk of more capital being required than the first estimate?—No; I should prefer throwing the risk on the company, and limiting the amount.

7100. In that respect the terms would be different from those of the Southern Mahratta?—Yes.

7101. In the Southern Mahratta the company simply find the money; if that money is not sufficient, the Government must find it either through the company, or in some other way?—Yes.

7102. Do you think the difference between the one principle and the other an important one for the Government?—I think the *first* principle, that

Mr. *Bernhard Samuelson*—continued.

that of limiting the amount, is desirable, inasmuch as it introduces more the principle of private enterprise, which the other does not.

7103. It gives the companies an interest in reducing the capital to the lowest possible amount?—Quite so; and therefore makes the Government control less necessary.

Sir *George Campbell.*

7104. One question about the Southern Mahratta; the Southern Mahratta are not bound down to the Government; they may demand their money, and go at the end of any year?—By giving a certain notice.

Sir *George Campbell*—continued.

7105. How far are the Government bound down to the railway company; how long are they under a contract with the railway company?—For 25 years.

7106. They cannot get rid of them for 30 years?—Unless there is default. In case of default, of course they can.

Mr. J. WESTLAND, re-called; and further Examined.

Sir *George Campbell.*

7107. WITH reference to the exact terms under which the Proviucial Government are allowed to undertake the responsibility of railways, of course it is very simple in the case in which the Provincial Government makes the railways out of their own funds; the first question I would ask you is this, what arrangement has been made under which, when a Provincial Government has made a railway out of its own funds, and that railway is proved to pay, the cost of the railway is transferred to the reproduction account?—If a railway is made from provincial funds, and has been charged to the ordinary account, that is to say charged against revenue, and it is afterwards desired to transfer it to productive account, then the amount is charged to the productive account, and the railway is classed as a productive railway.

7108. Is the cost of the railway re-credited to the Local Government?—The cost of the railway is then re-credited to the Local Government, but the re-credit does not affect its balances. I should explain first, that there are two classes of provincial railways, and the provincial responsibility for railways is regulated in two ways. The greater part of them are constructed in this way. The Provincial Government has said to the Imperial Government that it wants a railway constructed, and that it believes the railway will pay, and that it wishes the Imperial Government to set apart part of its capital expenditure for this railway. It says that it will guarantee the amount of interest which the Imperial Government will have to pay upon the capital raised. Then the Imperial Government constructs that railway out of capital account, and it is entirely charged as capital expenditure of the Imperial Government. The revenue of the railway is managed in this way: the entire revenue is credited to the Provincial Government, but the Provincial Government is debited with a portion of the interest on the debt paid by the Imperial Government, which is equal to the capital expenditure upon the railway. In the second place the Provincial Government have latterly been able to set apart part of their provincial balances for the construction of railways, and the way in which that is managed is that the Provincial Government transfers the capital to the Imperial Government, to whom it comes as revenue, and then the Imperial Government spends the money. In this case the receipts entirely come to the Provincial Government, but the charge for interest is borne by the Imperial Government, because it has obtained the capital.

Sir *George Campbell*—continued.

7109. I; want to take the latter case first. Take the case in which that has been done, and that the railway subsequently is proved to be a paying railway?—It is assumed to be a paying railway first of all, because if it is not assumed to be a paying railway, then there is no question of capital account at all as against revenue amount. It is constructed out of revenue, and the charge goes against the Provincial Government on its ordinary account, and the future receipts are credited entirely to the Provincial Government.

7110. What we have been led to understand is, that in the case in which the Local Government has expended the revenue upon a railway which has proved to be a reproductive railway, then the railway will be transferred to reproductive account, and the capital will be re-credited to the revenue from which it was originally derived?—It is transferred to productive account, but the capital is not re-credited; not if it is to remain a provincial railway.

7111. In the case of Bengal, certain railways have been made out of the current revenues of Bengal, have they not?—Yes, some railways have been made out of the present revenues of Bengal, and of the North West Provinces.

7112. That has been taken from the current expenses of the present day?—It was taken from the current expenses about 1881-2 and 1882-3.

7113. When it proves to be reproductive work, it is not re-credited to the Local Government?—No.

7114. Is not that rather hard upon the present generation in Bengal?—No, because the Local Government gets the full receipts.

7115. But the people of the present day have paid their money. Their money is expended for the benefit of future generations?—That is the case everywhere in India, that if any railway is constructed, which it is not believed will pay, it is charged against ordinary revenues.

7116. But then I am supposing, as I believe has been the case with some of these Bengal railways, that railways constructed out of revenue have been proved to be productive?—I think I understand your point now. The amount of the capital expenditure that has recently been made from provincial is charged off the capital account of Imperial, and credited to the revenue account of Imperial. So that the transfer of the charge from the non-productive class to the productive

Sir *George Campbell*—continued.

class brings back the amount into the revenue account as a whole.

7117. But the capital comes out of the provincial savings of the present day?—It has come out of it when first constructed.

7118. Therefore, supposing you have a prudent Lieuenant Governor who, during his five years, has saved a great deal of money and made railways, that has all gone out of the savings of the present day for the benefit of future generations and is not to be credited with it, although it may prove to be a really productive work?—No; he has a choice of giving up the future receipts and receiving the capital or of keeping the receipts; but if he has spent the capital expenditure out of his ordinary revenues, all he can expect is to receive the receipts in the future, but not also the capital.

7119. Did not Sir Ashley Eden expend a large amount on works of this kind, and was not he anxious to extend a system that had been so far successful further. Is it not rather hard when these railways are paying railways that he should not have the means of raising the money for them?—I cannot see that it is hard, he has expended the capital and gets the revenue in the future.

7120. Expended revenue on a capital expenditure which is reproductive?—The Provincial Governments have no power to spend anything but revenue, whether for capital expenditure or anything else.

7121. Then, in the case of all these provincial railways, if made by the Government of India, but guaranteed by the Provincial Government, are any specific funds pledged by way of guarantee?—No; it is simply part of the general provincial contract, that they shall meet out of their provincial revenues the deficit in respect of the working returns of the lines.

7122. In Bengal, at any rate, there are certain revenues which are provincial revenues, the proceeds of existing works. Those are not specifically pledged?—They are not specifically pledged; that is to say, it is part of the general provincial contract that large sums of revenue are placed at the disposal of the Government, and against them they have got to bear certain burdens, namely, certain heads of expenditure, part of which is the working expenditure on part of these lines.

7123. Has there been anywhere any attempt made. I see there is some proposal of the kind in Madras, to make works on the credit of the district funds?—There has been a proposal, but it has not as yet come to anything, and I cannot see that it is in any way different from a pledge on the credit of general revenues.

7124. You are aware of the report of the Famine Commission, which is specially referred to in the reference to this Committee, and how very specially it dwelt on the advantage of a system of provincial responsibility with reference to railways?—I am aware of that.

7125. Have you any suggestion to make by which that would be promoted?—All that it means is that the Provincial Government shall make good the loss in the working of any of those

Sir *George Campbell*—continued.

lines, that is to say, the amount by which the net earnings fall short of 4 per cent. on the capital expenditure. If they have to make it good it is obvious they have to exercise economies in other directions, and that is all this proposal comes to.

7126. I wanted to know whether you have any suggestions to make by which this system of provincial responsibility could be extended?—I think that is the only way it can be extended, by keeping the accounts as regards the contracts between the provincial and Imperial Governments, separately, in the same way as they are now done in respect of the railways that are constructed on provincial responsibility.

7127. On the one hand, I suppose it must be the case that all capital which has to be found out of revenue must necessarily be very limited?—It is limited, especially in the case of the Provincial Governments.

7128. And on the other hand, as regards a provincial guarantee, is not there great danger of confusion, owing to the want of a particular provincial revenue which may be pledged?—A provincial guarantee is altogether a domestic matter between the Provincial Government and the Imperial Government. There can be no such thing as a provincial guarantee as regards public, because the Provincial Government have no possession of revenues of their own, except as a sort of transfer from the Imperial Government, so that the relations of the provincial and Imperial are entirely domestic, and have no reference to outsiders.

7129. Some of the Provincial Governments have some provincial revenues which are independent?—I do not think any.

Mr. *Kynaston Cross.*

7130. No Provincial Government has revenue which can be hypothecated for debts?—No.

Sir *George Campbell.*

7131. Have not the Bengal Government got the revenue of the Patna-Gya Railway, which may be hypothecated?—No, because the original arrangement they made was that they would pay working expenses, and pay 4 per cent. interest on the capital.

7132. It was made out of their own savings?—Not the Patna-Gya Railway.

7133. Some railway?—Some recent railway have been so made.

Mr. *Kynaston Cross.*

7134. I think you want to make some explanation with reference to the Southern Mahratta?—Yes. The arrangement for the payment of the sterling by a silver payment in India was made solely with the object that the amount should come on the working account of the railway at its rupee equivalent. As a matter of fact, the first time the payment was made the sum that was declared to be the equivalent of the sterling amount due was declared upon the basis fixed in the contract, namely, the price of bills in London. The railway

Mr. *Kynaston Cross*—continued.

railway received the money at Bombay, and that particular day the price at Bombay was variable to the extent of one-thirty-second, and the rate declared, on information received from the Presidency Banks, was one-thirty-second more unfavourable to the railway company than the arrangement they had actually made with one of the Exchange Banks. This, of course, was represented by the railway company, namely, that they had not received the amount of rupees which enabled them to pay the sterling charge on account of interest; and that arrangement has been practically set aside, that is to say, in future the agent will communicate with us regarding his arrangement with a bank to make

Mr. *Kynaston Cross*—continued.

the remittance, and will come to us in India to receive what the bank charges. I cannot say, of course, what would be done if the bank charges too much, but, as a matter of fact, the amount will not be paid according to an independently declared rate of bills on London, but according to what it actually costs the company.

7134*. Would you recommend that the interest be simply paid in England in sterling?—Yes, it would be better so; but that does not avoid the difficulty of having to fix a rate of exchange. You must provide for the English payment being brought upon the working accounts in India at some stipulated rate of exchange.

Tuesday, 24th June 1844.

MEMBERS PRESENT :

Mr. Baxter.	Mr. William Fowler.
Mr. Bolton.	Mr. Gorst.
Sir George Campbell.	Mr. Bernhard Samuelson.
Mr. Carbutt.	Mr. Slagg.
Mr. Kynaston Cross.	Mr. William Henry Smith.
Mr. Dalrymple.	

THE RIGHT HONOURABLE W. E. BAXTER, IN THE CHAIR.

The Honourable W. W. HUNTER, C.S.I., C.I.E., called in; and Examined.

Chairman.

7135. YOU have, I think, been Director General of Statistics to the Government of India during 13 years, and are now a Member of the Viceroy's Legislative Council?—Yes.

7136. And you have been deputed to come to England by the Government of India to give evidence on its behalf, upon the relation of railway extension to population, prices, food distribution, and famine relief?—That is so. I may add that my evidence will bear upon the special reference to famine made by the House of Commons in its instruction to this Committee.

7137. You have, I suppose, read the evidence of Mr. Westland and of Major Conway-Gordon, on behalf of the Financial and Public Works Departments; that evidence to some extent, no doubt, has entered upon the ground intrusted by the Government of India to you. I propose, therefore, at this late stage of the proceedings, to confine your examination to points with which their evidence does not deal, or in regard to which we stand in need of further information. But, in the first place, let me ask you whether you agree with those gentlemen upon the main points dealt with in their evidence?—I do. I understand that the main point in Major Conway-Gordon's evidence is to show that the proposals of the Government of India are moderate in character and financially sound. I understand that the main object of Mr. Westland's evidence is to prove that the finances of India are at present in a position to easily and safely bear the small additional burden which those proposals will lay upon it. I am in perfect accord with those gentlemen on both these points.

7138. Can you give the Committee an idea of the railway policy of the Government of India, with reference to food distribution and famine relief?—In one sentence I should say that what the Government of India desires, is continuous broad gauge communications from the centres of food production to the centres of population, and to the famine tracts. But in thus summarising the Government policy, I wish to add that the Government does not undervalue the functions

Chairman—continued.

of the railways as agents of exportation; nor does the Government ignore the merits of narrow gauge railways for isolated tracts where the traffic is light, and where the narrow gauge system would be complete within itself.

7139. Still confining your attention to the subjects of food distribution and famine relief, will you now explain how the Government of India proposes to carry out that policy?—In the year 1881, when the Government of India had to consider the report of the Famine Commission, it found that the Famine Commission laid very great stress upon railway extension as a means of protecting the country from famine. It also found that the Famine Commissioners believed that 5,000 miles of railway would be required to give a fair amount of protection to the country. But when the Government of India came to consider the means at its disposal for carrying out these suggestions, it found that it was quite unable to make 5,000 miles, and that under the rules then existing it had only funds sufficient to make 80 miles of protective railways in each year. It found that this state of things had arisen from three causes: first, that a too rigid distinction had been laid down between protective and productive railways; second, that a too rigid limit had been placed upon its power of borrowing; and third, that the loans thus raised were too rigidly assigned to productive works only. In order to meet the case, the Government of India drew up a scheme, which after passing through various phases, will be found in the Despatch of the 23rd of January 1883, and again in the Despatch of the 29th of January 1884, both of which, I understand, are before this Committee. The outcome was that the Government found that to make a complete system of railways for India, something like 7,300 miles would be required. It found that of the 7,300 miles, about 3,890 were indispensably necessary for the protection of the country from famine, while the remaining 3,400 miles were not so urgently required. It also found that it could not at present or within five years, prudently undertake any

Chairman—continued.

any larger railway extension than the 3890 miles of indispensable lines. The result is that for the time being it excluded from its view the other lines (aggregating about 3,400 miles) which it would like to see made, but which it did not find to be indispensable for the protection of the country. Putting those not indispensable lines aside for the moment, it has submitted to Her Majesty's Secretary of State the proposal in Schedule A. for making the 3,890 miles. I need not trouble the Committee with any further explanation as to Schedule A. But Schedule A. rests upon three postulates: first, the abolition of the untenable distinction between protective and productive lines; second, the raising to a slight extent of the limit of borrowing, viz., from 2½ millions sterling to 2,850,000*l.*; and, third, allowing the Government to raise money by companies for such of the indispensable lines as it is unable to make itself. That is the general proposal. With your permission I will now show how the proposed railway system will carry out the task of famine protection placed before the Government of India, and how it will practically protect the country. The system starts from the centre of a wheat-producing country known as the Chattisgarh Division in the eastern part of the Central Provinces. It connects this tract with all the famine tracts of India. When I say all the famine tracts of India, there will still be isolated parts in Assam or in Scinde, but you may say, generally, the famine tract throughout India. I suppose the honourable members of the Committee are well acquainted with the course which these railways will follow (*showing map*). Starting from the wheat and rice producing country of Chattisgarh, the proposed railway system sends to the east the Nagpur-Bengal line, which will connect this wheat-producing country with Behar; a Province which, as the Committee are aware, suffered severely from famine in 1874. Turning southwards, the system will connect the wheat-producing country of the Central Provinces with the Nizam's dominions, by means of the new Hadrabad line. Starting from a station on that line called Bezwada, the food would proceed down the Buckingham Canal to Madras, and so render available the wheat of the Central Provinces for the famine districts of the Nizam's dominions and and Madras. Without going into further details, it will connect the wheat-producing centres with Bombay and the south-west famine tracts by means of the Great Indian Peninsula Railway and the Southern Mahratta system. But most important of all, it will connect this Chattisgarh wheat-producing country with the afflicted famine tracts in north-western India; (*e.g.*, Bundelkand), by means of a line which will start from Bilaspur, run across Rewah, and debouch upon the Bhopal Jhansi line at Etawah. From Etawah the grain will go up by the Bhopal-Jhansi-Gwalior and Agra line, to the famine districts of the North West and Bundelkand. That is the general protective system which the Government of India now proposes.

7140. Then I understand that you take the Chattisgarh country as the producing nucleus of what may be called the granary lines, and you take Bundelkand at the other end as a famine tract; can you give us any information about the Chattisgarh country, and its food-producing qualities?—Yes; I take Chattisgarh country as the nucleus of this system of granary lines. The Chattisgarh country is a large area of about 24,000 square miles, with a small population of 128 persons per square mile, an abundant and uniform rainfall, and a fertile soil. This country is known to native merchants as the land of threshing floors. The officer who made the land settlement said that the people were wont to feed the chance passers by. The tract owes its fertility partly to a rich soil, but chiefly to the fact that it has the most uniform, and on the whole, the most trustworthy rainfall in India. It forms a sort of meteorological horse-shoe, a great amphitheatre up which the monsoon is driven, and at the northern and western extremities of which the monsoon is arrested by hills, so that it drops a uniform and steady supply of water every year. Several of the great rivers issue from those hills. The Sone river goes from the north and joins the Ganges; the Mahanuddy river strikes to the south-east, and passes through Orissa into the Bay of Bombay; the Nerbuddah flows to the west, and enters the Arabian Sea; and the Godavery rises a little to the southward, and falls into the Bay of Bengal. This country comprises 24,000 square miles, but we have only exact information with regard to three and three-quarter million acres, because a very large part of the country is in the hands of native chiefs. With regard to these three and three-quarter millions the facts are as follow: The peasant holdings are nearly six times the acreage that an average peasant holds in Bengal, and twice the acreage which he would hold in Bundelkand. Besides the area under cultivation, there are close on 2,000,000 acres awaiting cultivation, and of those 2,000,000 acres, 1,000,000 consist of black wheat soil. The Chattisgarh country raises annually 241,000 tons of grain more than the people consume. We also find that the prices are exceedingly low. When I last made the inquiry, wheat had been selling in the local markets at, I think, 1*s.* 4*d.* per cwt., which comes to about 5*s.* a quarter. I do not say that it is selling now at that price; my inquiries referred to the period before 1877. The country is shut out from the adjoining provinces. Bilaspur, you see, is not very far from Jubbulpur (*showing map*); but at Jubbulpur the wheat must fetch 200 per cent. more than it can be bought for at Bilaspur, in order that it should pay the cost of cart-carriage. The crops of this isolated country are rice, which, on the whole, is the staple crop for local consumption, and wheat, which is raised in large quantities, and which could be raised in still larger quantities if there was any chance of selling it with profit. That gives a fair account of the granary country, which the Government of India propose to tap by this system of protective lines.

7141. Now will you give us some idea of the Bundelkand country, which you have called a famine tract?—Perhaps the best idea of Bundelkand will be got from the following fact. If the honourable Committee will turn to the Famine Commissioners' Report they will find five famine maps, showing the tracts which have been afflicted from time to time by famine. In

Chairman—continued.

four of those maps Bundelkand occurs as a famine tract, and borders on a famine tract in the fifth map; whilst Bilaspur only occurs in one of those maps; and then the scarcity is described as slight. Bundelkand consists partly of native States, with regard to which we have little information, and of five British districts, with regard to which we have some information. The population of the whole tract has been decreasing since 1853. In the largest district, Banda, it has decreased from 743,000 people in 1853 to 698,000 in 1881. In this same district wages and prices had both risen during the period, but prices had risen faster than wages; and, to the best of my belief, the people, the landless classes especially, are worse off than they were 35 years ago. Wages have not quite doubled in Banda, whereas common food grains have multiplied in some cases five-fold. You find in the Banda district the population decreasing in number. In the Chattisgarh country the exact *opposite* is the case; the population has been increasing in number and in prosperity. This Banda district suffered from blights from 16 different species of insects, connected with drought and poverty of the soil. Another district, Hamirpur, suffered so much that a certain kind of grass, the Kans grass, got such possession of the land that the peasants were said to give up the cultivation of their land and to abandon it to the Kans for a period, to allow the grass to exhaust the soil and work itself out. In this district of Hamirpur people calculate their ages by a famine era. Elderly men say they are so many years old since the famine of 1837. The district of Jhansi, which is another district, produces, I am told, but I cannot vouch for the fact, one-fifth less food in ordinary years than the people use. I made inquiries into that statement, and I was informed that the people bought one-fifth of their food by means of the sale of *al* (a dye), and of cotton, and by earnings derived from their cart-traffic to the southward. That, I think, will give a fair idea of what a famine tract in India means, and of the kind of tracts which we wish to relieve.

7142. Would the lines, which you have styled granary lines, protect Bundelkand in famine times?—Yes, they would. The lines would protect Bundelkund, in the first place, by giving it cheaper food in a year of prosperity. In ordinary years the price of wheat at Bilaspur, the terminus of these lines, is very low. When I wrote in 1877, the evidence then showed that wheat was sold by the peasants at 1 *s.* 4 *d.* per cwt. in Bilaspur; while in the Bundelkand district, at the other end, the price was 6 *s.* 8 *d.* per cwt. The distance is perhaps about 600 miles, and I should think that the cost of transport would be somewhat less than a farthing per pound. The cost of transit by rail, if taken at a farthing per pound, at the maximum of 600 miles by rail, would give, at Bilaspur, a price of 3 *s* 8 *d.* per cwt. in Bundelkand, instead of 6 *s.* 8 *d.*, which they were paying at the time to which my inquiries referred.

Mr. Gorst.

7143. Does the 3 *s.* 8 *d.* include the initial price?—Yes.

Chairman.

7143*. The calculation was this: the cost of transit was taken at 2 *s.* 4 *d.* per cwt., the initial price at 1 *s.* 4 *d.* per cwt.; total, 3 *s.* 8 *d.* In time of famine the effect of the railway would be this. At present, when a famine occurs in Bundelkand, the only way to relieve the people is by means of carts. Taking the exhausted bullocks of a famine year, and the bad roads, you cannot calculate on conveying more than one-third of a ton on a cart for more than 13 miles a day continuously. What a railway does is this: a single train carries 200 tons, which is equal to the work of 600 carts, and it does not travel 13 miles in a day, but 400 miles, so that one loaded train carries in one day as much as 600 carts would carry in a month. If you take the moderate allowance of 12 trains a day, with a load of 200 tons each, you will find that in one day the railway will carry 7,200 cart loads into the district, while the 7,200 carts would take 30 days to do it. If you put the calculation in another way, you will find that one day's railway work is equal to one day's work done by 220,000 carts, while the carts would involve the presence of about three-quarters of a million of men and bullocks.

7144. Without going into the general question of railway extension and the land revenue, will you tell the Committee what would be the revenue effect of the proposed railway through the Chattisgarh district?—There is an estimate made by Colonel Keatinge, who was Chief Commissioner about 1872, and he then estimated that if he could get a railway into this part of his provinces, he would be able to raise the land revenue by 270,000 rupees. The figures have been confirmed by the present Chief Commissioner, Mr. Jones, who estimates that at the next *settlement*, about the year 1888, the revenue will be raised by three lakhs of rupees, or 30,000 *l.* in the Chattisgarh tract alone from the coming in of a railway.

7145. I observe that, of the three granary lines, the Nagpur Bengal Railway is by far the largest work; in fact, it involves an outlay about equal to the other two put together; can you give the Committee any information as to the commercial prospects of this line, which would justify so large an expenditure and tell us why the Government go round by Sitarampur, instead of in a straight line across the Midnapur district?—I have some acquaintance with both the routes which the Government had to consider, and I will admit that, before I had considered the engineering aspects, I was in favour of the Midnapur route. But when I came to go into the engineering aspects, not as an engineer or as an expert, but as a practical man who knew the country, and had to consider its effect upon the food distribution, I found that the Midnapur route took a line across what is really an impracticable district. The line proposed across the Midnapur district takes the railway over a tract of 8 miles, in which there is at times a flood of from 8 to 18 feet of water; the flats through which the rivers Damoda and Rupnarain come down towards the sea.

7146. That would be a very costly line?—Yes; between Calcutta and Midnapur. The rivers collect the rainfall of about 12,000 square miles of country, and pour it at the *rate of* 305,000 cubic feet per second across the line which the railway was to follow. That was the first reason why

Chairman—continued.

why the Government could not adopt that line. But it also found that coal was cheaper at Barakar and at Sitarampur than at any place along the Midnapur route; and that although the mileage was longer the working would be cheaper. Then, in the third place, the water-traversed country of Midnapur has already abundant means of getting food out of the district; whereas the line which the Government of India has selected for the railway goes across a country which has no waterway, but which forms, as it were, a sort of estuary of traffic that comes down by land; that is to say, all the traffic and goods from Chotanagpur, which come by cart to the East Indian Railway. The proposed line by Sitarampur will not only avoid the Midnapur flooded tract, but it will get its coal cheaper, and supply a commercial route in a part of the country where it is required.

7147. Now will you go into the commercially paying aspects of the line from Calcutta to Nagpur?—We have information of an exact character only with reference to a part of the Chattisgarh country; that is to say, the part known as the Khalsa, which has been under a regular settlement. We find that the surplus of grain in that part is very great. I have examined three calculations, one made by the Deputy Commissioner, one made by the Director of Agriculture, and one sent to the Government of India by Mr. Jones, the present Chief Commissioner. The most moderate of those calculations shows that there is a surplus of about 220,000 tons of grain and seeds raised by the peasantry of the Chattisgarh tract beyond their consumption.

Sir *George Campbell.*

7148. You gave us 241,000 tons for that same country?—Two hundred and forty-one thousand tons is the calculation of the Director of Agriculture, not of the Chief Commissioner.

7149. Are you going back to the same statistics?—Yes, I am; in speaking from an agricultural point of view, I gave you the opinion of the Director of Agriculture.

Chairman.

7149*. The estimate of the Deputy Commissioner is about 300,000 tons; the estimate of the Director of Agriculture is, in round figures, about 241,000 tons; and the estimate of the Chief Commissioner, who takes a most cautious view, is about 220,000 tons. In addition to these 220,000 tons of export of grain, there will be a considerable import, which the Chief Commissioner only estimates at present at 27,000 tons. He estimates according to the probable length of carriage of this export and import trade, that there would be, to quote his words, the result: "The receipts derived from the following goods traffic of the Chattisgarh tract will contribute 2 per cent. to the guarantee which the Government is asked to grant for the whole railway, and will soon rise to 2½ per cent." He then goes on to say that this does not allow for a number of other additions to the revenue. These additions may be summarised as follows. In the first place, there will be the through traffic from Eastern to Western India. I may mention, for example, that jute bags for the Central Provinces, have at present to go round from Calcutta to Bombay, and to pay sea freight and sea insurance; then land at Bombay and pay charges there; and finally be carried from Bombay by train to the Central Provinces. By the Nagpur-Bengal line they would only have to go 300 or 400 miles direct. At present they have to go the whole of the way round India. But besides the through traffic there will be a goods and coaching traffic from the Central Provinces eastwards to Barakar; that is to say, on the Bengal section of the line. There will also be a coaching traffic in the Central Provinces, and there will be a considerable mineral, coal, and timber traffic.

Chairman—continued.

7150. What traffic will come from the frontier?—The traffic that will come from the frontier will chiefly be coal and timber. With regard to the coal I have no information, because the coal fields are still under inquiry. With regard to the timber, we have a very valuable Report by the Inspector General of Forests; and from his calculations we find that there will be about 16,000 tons of wood to be yearly exported, or likely to be exported from the tract under consideration. Most of this wood is sal timber. At present, in Bengal, we get our sal timber largely from Nepaul, but the Nepaul forests are being exhausted, and the quality is not so good as it was. The price is becoming dearer. I am told that they pay 3 *s.* 8 *d.* per cubic foot in Calcutta for Nepaul sal wood. The estimates made by the Inspector General of Forests show that the Nagpur Bengal Railway could bring timber at 2 *s.* 5 *d.* per foot to Calcutta, or at about one-third less than is said to be paid at present. These are some of the reasons which make me speak with hopefulness with regard to the paying qualities of this line. But I beg to mention that while the Chief Commissioner estimates the interest upon the whole line from the local Chattisgarh traffic at 2 per cent. to begin with, rising to 2½ per cent., and exclusive of the other sources of profit which I have just mentioned; the engineer, Mr. Parker, believes that the line will pay 4½ per cent.

7151. Will you state to the Committee, with regard to the Bilaspur Etawa Railway, what sort of business it will do, and whether, in your opinion, it is a line very urgently required, and likely to be of great practical importance?—This line is of great urgency, and of the utmost practical importance. I may say that, since coming home, a telegram has been received from India instructing one of the witnesses in this country to press the importance of this line. The Bilaspur Etawa line starts from Bilaspur (*showing the route on the map*), and connects the Bengal Nagpur line with the Bhopal Jhansi line, which goes north; it is, in fact, the connecting link between the eastern part of the proposed railway system and the western part of the railway system. The functions of this Bilaspur Etawa line will be during famine to pour in grain from the Central Provinces to Bundelkund and the northern famine tracts; it will also tend to reduce prices in ordinary years. In the second place, it will open up the Umeria or Rewah coalfield, which it skirts and partly intersects, and it will supply coal to a considerable section of the East Indian Railway, *viâ* Katni Station; and to the Great Indian Peninsula Railway *viâ* the Bhopal and Jhansi line. I have some information with regard to the quality of the coal, which I can supply to any honourable Member

Chairman—continued.

who desires to ask me about it. In the third place, it will supply the means of developing the iron and steel industry in the Katni and Jabalpur districts, where excellent ore has hitherto been unutilized, or utilized only on a small scale, in consequence of the want of fuel. In the fourth place, it will develop the regular and ordinary trade in rice and wheat, which already exists between the granary districts and Central India, but which is reduced to small limits in consequence of the great cost of carting it. In the fifth place, it will have, we hope, a considerable coaching business, as there are 200,000 pilgrims annually passing along the route through Rewah, down to the Puri district.

7152. You were, I understand, about to say something on the disputed gauge question with reference to the Jhansi and Manikpur line?—As regards the gauge question, I only speak from the practical point of internal distribution. I am not a railway engineering expert, and I understand that that aspect of the case has been very amply submitted to the Committee. As regards the Jhansi and Manikpur line, I should like to say that the Government of India presses in the strongest manner for some declaration from this Committee which will secure the construction of that line upon the broad gauge. I am not instructed to say that the Government of India desires the exceptional mention of that line; but I am instructed to say that it will be a great help to the Government of India, in doing its work of distributing the food supply, if this honourable Committee can see its way to include the Jhansi Manikpur line in a general system of broad gauge railways for Northern India. That is a point which I am instructed to press. As regards my own personal point of view, all I have got to say is, that a break of gauge on this line would be fatal to the purposes for which the line is intended. In the first place it would disclose every evil of break of gauge, for if the Jhansi Manickpur line were made upon the narrow gauge you would have a very short lead. You would have a short line between two broad gauge lines, upon which every ton of stuff would be subject to a break of gauge. One of the objects of this line is to give the famine-stricken tract of Bundelkand a chance. Bundelkand has suffered not only from a bad climate, but it has also suffered from its isolation. When it has a good year it can with great difficulty get its grain out of Bundelkand, and when it has a bad year it cannot get food into Bundelkand. If you put a narrow gauge line as a means of connecting this unfortunate tract with the outside world, you really help to strangle Bundelkand. You give a narrow gauge line to the very kind of country which can least bear the cost of a break of gauge in ordinary years. I refer to this subject because some correspondence has taken place about it. I would only say, that in times of famine the narrow gauge would, in Bundelkand, lead to delay and death.

7153. Those three granary lines are to be made by companies under some form of guarantee at a cost of eleven millions sterling, and we have been told that the interest during the period of the guarantee is to be defrayed by capitalising 200,000 *l.* of the famine grant. The interest on eleven millions at 4 per cent. would be 440,000 *l.* and not 200,000 *l.*; can you explain this discrepancy?—It is true that the amount required for these lines is eleven millions, and it is true that the interest at 4 per cent. would be about 440,000 *l.*; but if the honourable Committee will turn to the Despatch of the 23rd of January 1883, they will find how this discrepancy is explained. In the first place, the eleven millions will only be borrowed by degrees to make the line; in the second place the lines will begin to pay something within their period of construction. The maximum net charge at any time during the first six years of the life of these lines, including the period of their construction, is 255,000 *l.* It will run from a minimum of 85,000 *l.* in the first year to a maximum of 255,000 *l.* in the fifth year, and will then decrease rapidly. In the sixth year the interest will fall to 160,000 *l.* The net charge of interest for the six years which had to be provided for is 1,117,500 *l.*, and dividing that by six, you get an average of less than 200,000 *l.*, while the Government of India has provided 200,000 *l.* from the famine grant to meet the charge.

7154. What will be the practical effect of capitalising the whole or part of that grant as regards the power of the Government of India to meet the charges of famine relief if famine does come?—The object of the famine grant is to defray the charges of two classes of insurance against famine. The first class of insurance may be termed a financial insurance. We have a total famine grant of a million and a-half a year, and of that million and a-half 750,000 *l.* are expended in paying off debt. The other half, or 750,000 *l.*, is devoted to another class of insurance which may be called executive insurance, namely, the creation of public works in ordinary years, which will protect the people during time of famine. I assume that the financial insurance of 750,000 *l.* will be left untouched. It is therefore with the executive insurance alone that we have to do at present. This executive insurance is divided into two parts: 250,000 *l.* are expended upon the construction of irrigation works, and 500,000 *l.* upon the construction of railways. What the Government proposes to do is, to take this 500,000 *l.*, and no longer spend it yearly upon constructing railways, but to devote 200,000 *l.* of it to the payment of interest on the 11,000,000 *l.* sterling to be raised by the companies for the construction of lines. The effect of so doing will be first, that you will increase the financial responsibilities of the country for a time; secondly, that the duration of those responsibilities will be curtailed, and will end on the expiry of the limited guarantee which the Government give; thirdly, that the people will have an enormously greater system of railways at their disposal to relieve them during famine; and, fourthly, that there will be an immense development of trade and industry during ordinary years. This increase of trade in ordinary years will help to strengthen the people to meet famines, and when famine comes to obtain relief. I am aware that there is an objection to this proposal. The objection is, that if you hypothecate your 200,000 *l.* a year as interest on the capital to be raised by the companies, you will not have that 200,000 *l.* to spend when famine comes. But there are two practical answers from my point of view to that objection.

Chairman—continued.

objection. The first is, that in any case you practically hypothecate your 200,000 *l.*; for you lay out railways upon a plan which is devised several years before; and when a year of famine comes the 200,000 *l.* have in any case to be spent. A large portion of it is pledged for payments for railway material, already ordered from England, and another large portion of it is spent upon the wages of engineers and the workmen whom you cannot turn adrift. So that in any case the 200,000 *l.* is practically hypothecated. There is also a second consideration, that, although we do not know where a famine may strike in India, yet there is a probability of these railway works being conducted in or near to the tracts which are striken by famine. In that case the large railway works, which can be undertaken and conducted by means of the eleven millions sterling, would form the very best kind of relief which could be devised for the suffering population.

7155. I want you to clear up a point with regard to which there has been some haziness on the part of the Committee, and upon which I have not been able to get a very clear answer. Supposing that the Government failed in getting companies to undertake those granary lines, is it proposed that the Government should make the lines themselves, or would the whole thing collapse?—The whole thing would certainly not collapse. It is impossible for me to say what the Government would do in the contingency indicated. The Government of India can alone declare what its action would be. But I may say that the proposal of the Government of India to make these lines by means of companies has been for a year and-a-half before Her Majesty's Government at home. I am not aware that this question has been referred by the Home Government to the Government of India during that period; but I confess that it is a question which seems to me to be a very practical one, and it was mentioned to me by a member of this honourable Committee on Saturday just after I arrived in England. I therefore made inquiries as to what was the actual backing of the companies with which we had principally to deal. I will not say anything about the Bhopal-Jhansi line, because I understand that Mr. Chapman, of the Great Indian Peninsula Railway, has been before this honourable Committee, and I have no doubt that he has satisfied them on all the points which were raised. The line with which I am chiefly concerned is the Nagpur-Bengal line. The history of the proposals for that line are, very briefly, as follows: In the year 1882 Mr. Robert Miller, the head of a large Calcutta firm, made proposals to the Government of India on a silver basis for the construction of that line. The London financiers who were supporting Mr. Miller did not, however, on further consideration, adopt his views with regard to a silver basis; and on the 4th of July 1883, Mr. Robert Miller again made a proposal on behalf of a committee of proposers to the India Office in London. The committee of proposers who were backing Mr. Miller, and who would be responsible for the placing of this line, contains the names of Mr. Samuel Hoare, lately a director of the Barnet's Bank, and now a director of Lloyd, Barnet, and Bosanquet's Bank; the name of Mr. Scobel, who is a director of the

Chairman—continued.

Great Indian Peninsula Railway; and the name of Mr. Bullen Smith, who is well known in India as one of our leading mercantile men, who, until the other day when he was appointed to the India Council, was a director of the following undertakings in London: namely, a director of the Chartered Bank of India, a director of the East Indian Railway, and a director of the Bengal and North Western Railway. I only mention these names to show that the committee of proposers contained men of financial position, and that the Government of India had reason to feel confidence in them.

7156. We may take it for granted that you recommend the adoption by the Government of India of the whole scheme as indispensable (I mean the railways in Schedule "A.") and as sound from a financial point of view?—Yes.

7157. You are the author, I understand, of a pamphlet, entitled "The Uncertainties of Indian Finance," and, in recommending this scheme, I wish to ask you if you have taken those uncertainties into your consideration?—I have taken them very carefully into consideration. The uncertainties of Indian finance are chiefly due to the fact, first, that the Government is a great trader, and that its revenue from its chief mercantile sources, viz., opium and railways, is uncertain. Both the opium and the railway estimates have been taken very low. Secondly, an uncertainty arises from the fact that the Government, as the great landowner in India, is subject to losses occasioned by famine and scarcity, and to remissions of rental. But its land revenue has also been cautiously estimated in the proposals of the Government of India. Exchange is another source of uncertainty, and that has also been cautiously estimated. The fourth uncertainty is war; but all I can say on that point is that the fear of war must not be allowed to paralyze the policy of the Government during peace.

7158. There is a very important question which I wish to ask you, because this might probably influence the Committee to some extent; knowing the mind of the Government of India, what is your opinion; do you think that this Committee should fix a limit for the annual borrowing of the Government of India for the extension of railway construction in that country?—Yes, I think it should fix a limit. My last instruction from the Government of India was to press a definite scheme of railways upon this honourable Committee, a scheme involving an expenditure of about 28,000,000 *l.* sterling, and requiring a limit of 2,850,000 *l.* of direct Government borrowing. If the Committee should decide to accept the definite scheme proposed by the Government of India, I have nothing further to add. But since coming home I have observed that a great part of the evidence is directed to augmenting the scheme proposed by the Government of India. If there is a desire on the part of this honourable Committee, from the evidence which it has heard, to depart from the classification of railways in Schedule A., and to open up the question of the Government making additional productive railways, then I would ask this Committee to fix the limit which General Strachey suggested, viz., 3½ millions sterling.

Chairman—continued.

7159. Passing on to another branch of the inquiry, do railways, in your opinion, increase the population of the districts through which they pass?—Railways do not necessarily increase the population of the districts through which they pass, but they usually tend to do so. The increase of population in any district in India is the result of a great many factors, and among those factors the introduction of railways is an important, but not an over-ruling one. Perhaps I might give one or two examples, because this is a very important point. Take, for instance, the railway centre of Allahabad and Cawnpur. These are two districts which lie at the heart of our railway system in Northern India. You will find that these two great railway districts have had scarcely any increase of population between 1872 and 1881. The increase is 103,000 on a total of 2½ millions, so that it is practically no increase of population. The fact is that those great railway districts have already received their full complement of population, and are receiving no more. On the other hand, districts like Balasore and Cattack, which suffered greatly from famine, and which have no railways, have during the same period had an enormous increase of population. On a population of 2½ millions the increase has been nearly half a million. But, while railways do not necessarily increase the population, if you run a railway through a district or a province which is fairly susceptible of increase, the population steadily increases. The railway brings new population from other parts. Take, for example, the Central Provinces, the part of the country which the Goverment of India desires still further to open up, and which on the whole is the part of India which has been distinctively opened up by railways. The total increase in the Central Provinces during the last 10 years has been 25 per cent., or a quarter of the whole population. Where the population is susceptible of increase, and where there is spare land, the railways bring the population from densely crowded tracts to that spare land, and so tend to distribute the people.

7160. How do you reconcile that statement with the view which is generally entertained, that the population of India is exceedingly stationary, and cannot be got to migrate at all; can you give us any practical illustration of the movements of the people to illustrate what you have now stated?—Yes, I think I can. My statement agrees with the true view as to the comparatively stationary character of the Indian population; but it does not agree with the false view as to the absolutely stationary character of the population. I shall first take one general fact about all India. We know the birth-place and the dwelling-place of 247,000,000 of population, and we find that of those 247,000,000, six and-a-half millions have migrated from the provinces in which they were born to provinces in which they live. If you add the children to those six and-a-half millions, you probably get not less than 12 or 15 millions of people in India who have migrated from their native province or are children of such immigrants. The particular example which I would like to take is the Central Provinces. In those Provinces we find three districts in which the per centage of immigrants is from 13 to 15 per cent. of the whole population. I do not say that railways alone have done this, but that railways and the want of population have brought in 13 to 15 per cent. of adults. Those people marry, and the children of the immigrants with the immigrants themselves, form, I believe, about 30 per cent. of the whole population of those districts.

Chairman—continued.

7161. Is there unoccupied land in India which would afford considerable scope for such movements in the future?—Yes, I think there is. If you take India as a whole, we have fairly trustworthy details with regard to about 427,000 miles; that is to say, with regard to rather less than one-half of the whole area of British India. Of these 427,000 miles, 103,000 are cultivable, but not cultivated, against 130,000 which are cultivated at present; the remainder being unclassified or reckoned as uncultivable. We have, therefore, as regards the part of India which we know best, very nearly one quarter of the land cultivable but not cultivated. If you take individual provinces where one can perceive the real bearing of the question better, for instance, the great Gangetic Valley, which is the most densely populated part of India, you will find around its densely populated tracts three provinces, the Central Provinces, Punjab, and Assam, which have an aggregate of 28,000,000 acres of land cultivable, but not cultivated. If you still further confine your view to Assam and the Central Provinces, which stand on both sides of the densest districts, you will find that there are 17,000,000 acres, after all deductions, waiting for cultivation; that is, I believe, an area equal to the whole crop-lands of Great Britain, excluding permanent pasture. I think, therefore, I am justified in saying that there is a large margin of land waiting to be cultivated by the people, if the people will move to it.

7162. When a railway is made in a district does it as a matter of course increase the cultivation?—It usually increases the cultivation but not as a matter of course. Some of the districts of India are so completely cultivated at present that it would be a disaster to the people to have to extend the margin of cultivation. One railway district, Aligargh, on the East Indian Railway, had, 20 years ago, 88 per cent. of its land cultivated, and that district is not likely to receive additional cultivation from a railway coming into it. But the ordinary effect of a railway coming into a district is to increase cultivation in two ways. First, by the extension of cultivation, and secondly, by more intensive husbandry. The Central Provinces had in 1872 half a million tenants-at-will who were called "new men," and who were treated as an insignificant class of the population; during the past ten years those "new men" have increased threefold. There are now a million and-a-half of such holdings, and the number of these holdings is equal to the number of all the other holdings put together. That is an example of a railway coming into a province where the land is abundant, and to which people can migrate with advantage.

7163. What district do you refer to?—I am now speaking of the Central Provinces as a whole.

7164. Can

Chairman—continued.

7164. Can you give us any general idea of what the effect of railways is on the provinces?—Yes, my general answer to that question would be, that the effect of a railway is first to equalise prices as regards locality, and to lessen the variations in the different districts. In the second place, its effect is to equalise prices as regards time; and to render the variations less from year to year. There are some interesting diagrams which I can submit to the Committee if they desire it, in support of this statement.

7165. Have you any other statement which you wish to make to the Committee before closing your examination in chief?—I do not like to raise new questions at this late stage, but in going over the evidence I observed two points which I think I should like to mention. In the first place, I think the Government of India is anxious to place before this Committee the question of charging interest to capital during the construction of railways. I am not aware whether it is too late to go into this matter, but I may mention that the Secretary of State has (I think) accepted that principle as regards the Patna Baraitch Railway; and the House of Commons last year re-opened the question as regards English railways. That is one point which struck me. There is something about it in the correspondence; but I do not know whether you would like to go into it. The other point which struck me was this: that the Public Works Minister, Mr. Hope, has submitted with one of the Despatches a scheme for a quinquennial contract. You will find it in the Papers furnished to the Committee. He wishes to place the Public Works Department on the same footing as the Local Governments in regard to a fixed contract for five years. I will not venture to take up the time of the Committee by urging this, but I beg to refer to the Despatch of the Government of India, and to Mr. Hope's Minute on the subject.

Mr. *Carbutt.*

7166. You referred to the rainfall of the Central Provinces as being great and very equable; can you state what the amount of rainfall per annum is?—The rainfall of the part to which I referred, and which I stated is very equable, namely, Chattisgarh, may be taken at under 50 inches a year; something like from 45 to 50.

7167. I suppose that the collection of rainfall statistics is continued all over India at the expense of the Government, is it not?—It is.

7168. Have you any fear that if railways are made, and if India is induced to export her grain to this country, you would thereby deprive the people of India of their food; that opinion having been expressed to this Committee?—No, I have no fear that we shall deprive the people of India of their food. If I am desired to go into that question, I am prepared to show that while there are local disadvantages connected with exportation, the greater advantages far more than compensate for those disadvantages.

7169. I suppose, judging from your evidence, you are of opinion that India can grow enough food for itself, and still continue the large export that we have hitherto had without any detriment to the population?—Yes, I am of that opinion.

Mr. *Carbutt*—continued.

7170. And that therefore, though it may raise the price in some districts as you have stated, the railways will make it more equable over the whole of India?—That is my belief. Not only do railways render prices more equal all over the country and from year to year, but railways also increase the amount of grain ordinarily raised, and where cultivation can with propriety be extended they tend to increase the cultivation. I do not say, however, that prices will not rise; prices depend on many causes.

7171. You stated to the Committee that if any limit were to be fixed by this Committee, or if the present limit is to be withdrawn the limit fixed should be that of General Strachey, namely, three-and-a half millions; on what ground have you based that limit?—I explained that I have only considered this question of an increased limit since I came home, and that I state merely my personal view. I can only say that, having consulted my colleague, Major Conway-Gordon, and having considered what railways were likely to be undertaken in addition to the railways which the Government regard as indispensable, we thought that three-and-a-half millions would be a fair limit to suggest.

7172. On the ground that if you made more than that they would not pay?—No, on the ground that I doubt whether the Government would be desirous of increasing its yearly financial responsibilities further than by three-and-a-half millions of direct borrowing at present.

7173. Have you any fear that, if a larger limit were fixed, railways could be worked by the staff of engineers in India, and by engineers that could be obtained from this country?—I have no means of estimating the capacity of the staff in India; it is quite out of my Department.

Mr. *William Fowler.*

7174. You have been asked about a limit, but I do not quite understand on what principle you approve of any limit; I mean in this way: that it is obvious that, supposing the Government of India was a self-contained and responsible body, it would sometimes be very profitable to make far more than it would at other times, because of the price of money and the price of materials; it might be well to spend ten millions one year and not a million in another year, having regard to the position of the markets generally, and, therefore, I want to understand what the reasonableness of a limit in itself is?—To take the case which you have put, if the Government were a self-contained individual who could spend with profit more money when the markets were good, such an individual would have to consider not only the cheapness of the markets, but also how far he could prudently add to his monetary responsibilities. It might be very well for him to embark in an enormous railway construction as regards cheapness, but it might be very bad for him to embark, if he had not sufficient capital to carry on the work. I believe that the whole experience of Indian finance tends to show that the Government should not be led into any sudden expansion of its expenditure, and I believe that a limit is a wise arrangement, both because it will prevent any undue and sudden expansion

Mr. *William Fowler*—continued.

of its expenditure under particular influences, and also because it will give a steadiness to the railway development of India, which, on the whole, will be cheaper than sudden expansions and contractions. Sudden expansions involve bringing out a staff, and involve a great many expenses. I think that, on the whole, it is better for the Government of India to have a definite scheme of railway extension. The first limit which I have mentioned (2,850,000 *l.*) is the limit at which the Government of India thinks that it can carry out its scheme.

7175. It has a sort of law laid down for itself, or an indication of what it thinks prudent, but not more than that?—Quite so; it is an indication of what it thinks prudent.

7176. If that is all that it means, I do not know that it is much worth while to discuss it; but you will remember that the Government of India have been trying to get out of the limit, in one sense, and that they have been asking us to sanction their borrowing a large sum of money; how would that money be borrowed; part of that money they receive for the special purpose of protection from famine, namely, the 1,500,000 *l.* a year; we now hear that they are asking us to sanction a very large borrowing, and to treat the famine fund as a fund for paying interest?—That is so, in part.

7177. That is in some sense an alteration of the limit?—Quite so; it would be an alteration of the limit from the original proposal of the Government of India for its own railway construction. But it is included in the general scheme of the Government of India in Schedule A.

7178. Does not that tend to show that these limits must be taken with a considerable qualification, because circumstances change so much from year to year, and if you lay down a very strict limit you might find that it would work in a most inconvenient sense to the Government of India, as is the case now, because it wants a great deal more latitude as regards borrowing powers than it has already got?—The Government of India's proposal is a specific proposal for five years. It has made that proposal after the most careful consideration which it can give to the subject, and it thinks that the limit which it has mentioned will suffice to carry out its definite proposals.

7179. That is to say, you wish us to understand that the Government do not want anything unreasonable or extravagant?—That is the case.

7180. A great deal has been said in this Committee about the importance of the comparison in respect of borrowing in England and borrowing in India; perhaps you may be able to tell us something about it, whether any calculation has been made of an official character which would give us any light upon that point?—Yes, a calculation has been made. I understand that a good deal of evidence was submitted on this point by one of the ablest experts which the Government of India could send, Mr. Westland. But I think since Mr. Westland left India there has been a very careful and elaborate calculation by Colonel Trevor, the Secretary to the Government of India in the Public Works Department. That calculation I am not prepared to criticise, because it consists of mathematical formulæ and tables based upon those formulæ, which I have not had time to examine. But if you desire it, I will read out the conclusion to which Colonel Trevor has arrived. The conclusion to which Colonel Trevor has arrived is this; that if the rupee falls from 1 *s.* 7$\frac{3}{4}$ *d.* to 1 *s.* 4$\frac{3}{4}$ *d.* in 20 years, and if interest has to be paid at 4 per cent. upon a rupee loan raised in India, then under those circumstances it is quite safe to raise a sterling loan at 3$\frac{1}{2}$ per cent.; and if the expected fall was likely to be very slow during the first 10 years of depreciation, as much as 3$\frac{3}{4}$ per cent. would be safe. That is to say, if in 20 years the rupee is to fall to 1 *s.* 4$\frac{3}{4}$ *d.*, it is better, from a mathematical point of view, to borrow at 3·5 per cent. here than at 4 per cent. in India; and if the depreciation is slow, as much as 3$\frac{3}{4}$ per cent. might be a safe rate to borrow here. Colonel Trevor only deals with the question from the mathematical point of view.

Mr. *William Fowler*—continued.

7181. Therefore, with a difference of half per cent., it would be perfectly safe, assuming even a considerable fall in the exchange?—The difference of that half per cent. between 3·5 and 4 per cent. would make it safe.

7182. I suppose you will admit that there is a possibility, if not a probability, of a rise as well as a fall in the exchange?—There is a possibility of a rise, but it is quite impossible for me to say whether there will be a rise or a fall.

7183. Still Colonel Trevor's argument is that he made a large allowance for a fall?—Quite so.

7184. There has been a good deal said about the loss by exchange in its relation to the general condition of the country; and I suppose that you would be of opinion, having regard to what you have told us, that the direct and indirect effect of the development of the country by railways would be so very important and so great that the importance of the loss by exchange to the Government shrinks almost into insignificance; I mean that loss so far as it is caused by making railways more rapidly, because a very great part of the loss by exchange is not caused directly by the railway system, but a good deal is as appears from the papers?—I think that the increase to the prosperity of the country from the railway ystem which the Government proposes, will be so great that the Government is not only justified but is bound to face the contingency of a large fall in exchange with reference to the interest payable on those railways. I believe that any probable fall in exchange will be far more than counterbalanced by the increase in prosperity which railways produce.

7185. A good deal has been said by some of the witnesses with regard to the effect of a fall in exchange on the increased production by the cultivator; that I suppose has been a subject to which you have paid some attention?—Yes, I have paid some attention to it.

7186. Do you think that that is a very important consideration?—A very important consideration.

7187. Have you read Mr. Birkmyre's evidence upon that point?—I have not had an opportunity of doing so.

7188. The general effect, I suppose, of what you now propose would be to bring a very great increase of productions to the ports of export?—That would be one of the effects; but there would

Mr. *William Fowler*—continued.

would also be the other effect of distributing the food in a much more advantageous manner throughout the country itself. There would, in the third place, be an increase in the total produce raised

7189. I should like to ask you one or two questions on the famine point; you referred to the effect of this opening up, as it would be, of the Central Provinces in all directions, in lessening the severity of famine, and providing for the difficulties of famine, but you did not say anything about its effect on the Orissa district; it would have an important effect, would it not, upon the Orissa district?—The system which I proposed would have but a slight effect on the Orissa districts, and I think it is important that I should state how Orissa is provided for. Orissa, as you know, suffered terribly from famine in 1866. I believe that was by far the most intense famine that has occurred since 1769. Orissa was, in 1866, well described by one of the Famine Commissioners as in the position of a ship at sea without provisions. It was almost completely isolated. But since then the Government has made a system of canals which does much to open the country from a harbour called False Point. It is not a very good harbour, but I believe it is the best Indian harbour round the coast from Bombay to Calcutta. If, however, the Government had only done that, it would not have been content to leave Orissa out of its present railway proposals. The Government would have considered it fair to include among the indispensable lines named in Schedule A., the line which you will find in Schedule B., and which will go down from Benares to Puri. That line is not in Schedule A., because a tidal canal has been made from the west bank of the Hoogley River, *viâ* the Midnapur district, into the Balasore district, and the Cuttack district. This tidal canal is nearly completed, and one of my instructions was to say that the Government anticipate that it will probably be finished in June 1885. Orissa, therefore, has been omitted from Schedule A., because protection has been given to Orissa in other ways.

7190. I should like to ask you, with regard to what you stated about the cost of wheat when you were in the Central Provinces, that was in 1877, I think, you say?—I am not speaking as a man who has spent his service in the Central Provinces. I am speaking as an officer who was responsible for getting facts about the Central Provinces at the time.

7191. Was that very low price, which you quoted at Bilaspur, namely in 1877, 1 *s.* 4 *d.* per cwt., the usual price?—That very low price was the average of prices which I received from official sources in 1877, so that it would refer to the period anterior to 1877; it was the average of the local prices actually received by the cultivator.

7192. Have you seen Mr. O'Connor's statement with reference to the sea-borne traffic of India, the last that came out?—I have not seen the last number.

7193. In it, I remember reading that this statement, with regard to the price of wheat at Bilaspur, was entirely disbelieved by a great many of the officials of Calcutta; the estimated cost of wheat at Bilaspur, I think, is something like four or five times as much as that which was stated in this Return to which you have referred;

Mr. *William Fowler*—continued.

I have seen it stated as high as 12 *s.* per quarter, or something of that kind, in Bilaspur; and certainly in Mr. O'Connor's statement about the sea-borne traffic of India, he throws great doubt on these statements; I merely mention that to ask whether you have seen it?—I have not seen it, but the explanation which I would suggest is this, that the earlier figures refer to a time before the railway was made from Nagpur to Raipur. Since the railway was made from Raipur to Nagpur, I have not the least doubt that there has been an enormous rise in prices.

7194. Then the calculation which you have made about the prices at which you could lay down wheat in Bundelkund would not be correct?—It would not be correct now. I guarded myself when I made that statement by saying that I referred to the period, more than seven years ago, at which the two sets of figures were calculated.

7195. Of course, you will admit that it is a part of the good effect of railways to improve the price to the cultivator?—Perfectly so, and I should think that Mr. O'Connor's statement is perfectly correct; unless the prices in Bilaspur have followed a different course from that which our experience leads us to think they would follow. Prices ought to have risen, and I have no doubt they have.

7196. You, of course, know that it has been a very attractive idea to the people on this side of the water that if you could raise wheat at such a price in India, India could compete easily with America; but if you raise the price at Bilaspur to the same price that wheat costs to produce in Dacota you, in fact, put yourself in a very different position to what you were speaking of just now?—But I was not arguing that you could now buy wheat at the price prevailing more than seven years ago.

7197. Have you considered that point?—Certainly, I have considered it, and my answer on that point would not have reference to the prices at Bilaspur, an isolated tract in 1877. My answer to that question would have reference to existing prices. All I can say about wheat-production in India is this, that the Government have instituted a series of experiments. Some of those experiments are direct and some consist of inquiries, and the result seems to be that wheat can be raised with hired labour, but under good supervision, at something like 12 *s.* a quarter. That appears to be the result of direct experiment. The result of the inquiries which have been conducted shows that wheat locally sells at a great variety of prices, and that wheat can certainly be sold, with a good profit to the cultivator, at 16 *s.* or 18 *s.* a quarter. We cannot tell how much profit he makes upon the 16 *s.* or 18 *s.*, but if he can get 18 *s.* a quarter he increases his area of wheat-cultivation; so that we infer that he makes a good profit upon the transaction.

7198. Of course, you are aware that at this moment Indian wheat is about 33 *s.*, 34 *s.*, and 35 *s.* a quarter here, and that that would not leave a very large margin for railway freight?—As a matter of fact, I am not saying that he cannot raise wheat at a lower price than 16 *s.* or 18 *s.*; I am saying that the inquiries show that if he can get 16 *s.* or 18 *s.* a quarter he will extend his cultivation; that is my point.

Mr. *William Fowler*—continued.

7199. Is it not the fact that over a very considerable area, when there happens to be a large harvest, it is not a question so much of any special price, he must get what he can?—It is a fact.

7200. And very often it happens that he takes extremely low prices, even now?—Perfectly so. The price will depend not always upon what the man has expended upon labour and so forth, because he must sell his stuff, and he must take the prices that he can get.

7201. I presume that in a great many cases the cultivator depends very little upon labour except his own?—The ordinary peasant depends on no labour except his own and that of his family. The experiment which the Government made was by hired labour, in order that we might have some basis to go upon; but, as a rule, the Indian peasant is too poor to employ hired labour.

7202. Therefore he would not make any calculation; but he would sell at the best price he could get?—He would have to do so; but if he found it did not pay him one year he would not increase his cultivation the next year.

7203. You said something about estimates of traffic with regard to some special districts; has there not been in India almost universally this result; that your traffic has far surpassed your official estimates?—It is one of the most striking features in the history of railway enterprise in India; our official estimates have almost always proved too cautious.

7204. Therefore you feel more confidence in the proposals which you now make to the Committee?—I can only say that in these proposals I took the lowest of three cautious estimates.

Mr. *Slagg.*

7205. The honourable Member referred to an objection which had been raised with regard to railway extension on the ground of draining the food supply of the country; I think you said that you did not concur in that opinion, and that there were reasons which you could give to the Committee against it; is there not, however, what I may call a half truth in that objection?—There is a half truth in that objection, a very dangerous half truth.

7206. Could you explain what you mean by the half truth which is dangerous?—I sympathise with the motives which lead to this objection; but I dispute the economic arguments by which the objection is supported, and I entirely disagree with the conclusions which are based on that objection. The men who object to exporting grain from India are usually well educated, patriotic natives who discern two facts with great clearness. One fact clearly visible is, that vast quantities of food go every year out of their country, while every 10 years or so there comes a famine when the people have not food enough for themselves. The second fact, which they also discern with great clearness is, that the ordinary price of food, say of wheat in England, is so much higher than the price of wheat in India, that the exportation of food might go on from India to England, even after the prices had reached a height which meant suffering to the natives of India.

7207. What increase in the food rate would you consider constituted a famine price in India?

Mr. *Slagg*—continued.

—The Famine Commissioners after carefully considering this question, came to the conclusion that if prices rose three-fold, the famine standard would be reached; but in fixing the standard at a three-fold rise in prices, the Famine Commissioners have told us that we must apply the principle with great caution. Broadly speaking, the best information goes to show that if prices rise to three times the usual rate, there will be a famine.

7208. What comparison would that rate bear to, say the ordinary wheat prices in England?—I think you may take it that the present local selling price of wheat in India is 16 *s.* to 18 *s.* a quarter. I mean the price which a cultivator would himself get for his wheat in a fairly prosperous district, and in a fairly prosperous year. I am informed that you may take the wholesale price of wheat in the English market before the late fall in prices, at 45 *s.* to 50 *s.* a quarter. I speak of course under correction as to English prices; but I am told by merchants in the wheat trade that before the late fall of prices, you might take 45 *s.* to 50 *s.* as a fair rate. If you take the price of wheat at 40 *s.* before the fall, and if that wheat could be bought at about 16 *s.* to 18 *s.* a quarter in India in the rural districts, you may take it that the price of wheat is nearly three times in England what it is in India. The native of India sees, therefore, that the selling price of wheat in England is nearly the famine price of wheat in India.

7209. Do you think that there is any element of truth in the opinions which have been expressed in some quarters, that owing to the high price of food in England, India might be drained of her food supply even while the people of India were suffering from famine?—I do not agree with that view.

7210. Do you agree with the objections that if exportation is to be allowed, that exportation might go on notwithstanding the prices had reached a point that would cause suffering in India?—I think that exportation might go on after prices had reached a point which would cause suffering in India, but I think that exportation would be very quickly brought to a stand by those prices. If you will permit me to explain; the initial cost of wheat in India may be 16 *s.* or 18 *s.* a quarter, but the initial cost of wheat in India is only one of many elements in the selling price of wheat in England. Besides the initial cost you have the cartage, the train freight, and the sea freight, and a number of per centages and intermediate charges. The President of the Bombay Chamber of Commerce gave me a calculation the other day, which went to show that if wheat were bought at 22 *s.* 4 *d.* in the Jubbulpur market, it cost 44 *s.* by the time it reached the wholesale dealer in London. Now, wheat at 22 *s.* at a railway centre like Jubbulpur means about 18 *s.*, perhaps, to the actual cultivator in the district in which it is grown. The margin between the buying and the selling price of wheat is therefore not three-fold, for the buying price is but one element in the cost of laying down the wheat in Liverpool, and the margin is decreased by the charges which have to be added to the buying price of the wheat in India before it reaches Liverpool. If wheat were to rise, say, three-fold or to famine prices,

Mr. *Slagg*—continued.

prices, or to anything like three-fold in the wheat-producing districts, say from 18 *s.* to 54 *s.* paid to the cultivator, there would be an addition of about 22 *s.* for charges, freight, &c., before it can reach England. The wheat, therefore, which was bought at three times the ordinary price in the Indian districts, would cost from 72 *s.* to 76 *s.* in England, and I think that this would put a stop to exportation. Exportation from India, I believe, would have been checked long before such rates were reached. At the same time, I admit that exportation might go on from some districts whilst others were suffering from scarcity.

7211. The general drift of your evidence appears to be to the effect that the advantages of railways, and of the commercial activity which they induce, more than counterbalance the continued exportation of food during the period preceding a famine?—That is my view. In the first place exportation is a great motive power in the internal trade of India. Exportation has called into existence, and has maintained in a state of high activity, a thousand agencies for moving the produce of the districts. When a famine comes now-a-days it finds those agencies in full activity, and those agencies at once set to work to distribute the food supply, carrying it from provinces where it is cheap to where it is dear. In the second place, those trade agencies, whilst they diminish the total grain supply of India by exportation, render the remainder of that supply far more efficient for feeding the people. In the third place, the existence of this trade activity has, in prosperous years, led, and will still lead, to a large increase of the total food supply. And, in the fourth place, the high prices caused by exportation in ordinary years puts money into the pockets of the cultivator, and gives the country a greater aggregate power of resistance to famine.

7212. Have you ever discussed this point with native authorities, or native representatives of India; and if so, what is the opinion which you have gathered from those sources?—I have not discussed the subject with native representative bodies, because that form of discussion scarcely ever takes place in India. But I have discussed it with many native authorities and native economists, and writers of position, and I confess that I have not always been able to convince them, although in some cases I have. I have usually put the argument in this form. If you take the grain, of which you are now speaking, wheat, you may estimate the total production of wheat in British India at about 7,000,000 tons a year. The greatest exportation of wheat has been about 1,000,000 tons, so far as the Returns shew, but during the last year, for which I have not yet got the Returns, I believe the exportation will amount to about one and a quarter millions. The average exportation may be put down at about three-quarters of a million; that is higher than the average during the last five years for which I have the figures. Any considerable rise of price would at once cause a decline of the export of wheat to certainly not above half a million tons. You would therefore have an exportation of half a million out of 7,000,000, that is one-fourteenth of the whole. You would, therefore, take away from the country in time of impending famine one-fourteenth of this particular grain, wheat; but on the other hand, the remaining thirteen-fourteenths would be made more available for famine relief than if there had been no railway, and none of the trade activity called forth by exportation. The remaining thirteenth-fourteenths of the wheat left in the country would be infinitely more available for feeding the people than if the exportation and if the railways had not existed. In the second place, this commercial activity and the railways would, as I have stated, have led in previous years to an extension of cultivation, so that the total food supply to be calculated upon would be greater than if the exportation and the railways did not exist. In the third place, when the famine came, the railways would do the work of food distribution at one-tenth of the rates which it would have cost if there had been no railways. And in the fourth place, people would have been getting higher prices for their wheat in previous years, and would be better able to stand the strain of a famine.

7213. You are aware that there is another objection to these exports, and that is based on their commercial aspect, namely, that they are necessary or, at any rate, are used in order to pay the home charges; what do you think of that objection?—I think that that objection also contains a half truth, and a somewhat dangerous half truth. The facts are these: the home charges may be taken not unreasonably at 17 millions. I believe the usual figure is taken at 16 millions. The natives of India do not merely export 16 or 17 millions worth of produce every year. They export from 70 to 80 millions worth of stuff at present (the exports vary). This is a much larger amount than they would be compelled to export for any demand made to pay the home charges. The net result of their exportation is, that after they have paid the Home charges and after they have got all they want in the form of imports, they still go on increasing their exports to such an extent that they have seven million sterling in silver and gold left as a surplus, which they put into their pockets every year. The imports of silver and gold during the past 10 years have averaged seven millions more than the exports of silver and gold from India. There is, therefore, a yearly surplus of seven millions worth of gold and silver which the natives obtain in payment of exportations which they certainly make in the most voluntary manner. They make this huge exportation of 80,000,000 *l.* not to defray 17,000,000 *l.* of home charges, but because it pays them to export this 80,000,000 *l.* worth of produce.

7214. Do you regard those exports as presenting anything like a trustworthy guide of the prosperity of the people?—I consider that the largely increasing exports of India form one indication of the increasing prosperity of the people. But I do not accept the argument that a large export is a conclusive proof of the prosperity of the people.

7215. What test would you apply?—I consider a people prosperous when I see the schools filling, and the prisons emptying, and wages rising, and exports increasing without a proportionate enhancement of prices.

Mr. *Slagg*—continued.

7216. What in your opinion are the main proofs, given briefly, of the economic improvement of the people, especially of the labouring and artizan classes, which may be attributed to the influence of railway construction?—That is a question which I find it difficult to answer, unless I go into some detail; I will only say that wages as a rule have risen, and as a rule the rise in wages has more than kept pace with the rise in food prices.

7217. I think you said something with regard to the capabilities of the people for the payment of increased land revenue, from the form of improvements applied to their holdings through the influence of railways; do not you consider that if, on the one hand, you tax the people for the construction of railways or for the payment of guaranteed interest, and on the other hand, if you apply taxes to them with regard to improvements that they have recently made in the land, they are not very likely to get much benefit out of the transaction?—The increase of taxation is slight compared with the extra profits which they derive from their land. A very small increase of taxation takes place in consequence of the increase of the prosperity of the district.

7218. You think there is a considerable likelihood of a substantial balance being left in their hands?—Most distinctly; there is a very large balance left in their hands under the Settlement rules.

Mr. *Dalrymple.*

7219. You referred to the Despatches of the Government of India in the beginning of 1883 and 1884; was your attention called to the evidence of Sir James Caird before this Committee?—I read the report of Sir James Caird's evidence in the newspaper. I do not know how far it was accurate.

7220. When you describe the wishes of the Government of India with regard to the expenditure in future, are you aware that you are scarcely in accord with the description which was given us by Sir James Caird of their wishes on that subject?—Yes, I am aware of that fact, and I am also aware that when the evidence of Sir James Caird came out to India, the Government of India telegraphed home in order to correct what it considered the erroneous impression which his evidence had left behind on that point.

7221. It appeared that there was an extraordinary misconception upon his mind as to the desire of the Government of India with regard to expenditure?—Sir James Caird had not the official facts before him.

7222. I am right in thinking, then, that a greater extension of railways is asked for, especially as a protection against famine?—That is the basis of our proposals; but it is only the basis of our proposals. The Government fully recognises the commercial aspects of the lines as well as their famine and protective aspects.

7223. I understand you to say that the Government of India point out that they would have been glad to recommend more railway extension but that they could not see their way to it at present; and therefore they waived it for the present?—I did not say that the Government of India would have been glad to recommend more railways as a protection at present. What I said was that the Government of India had drawn up a complete system of railways for India (in Schedules A. and B.), of which the portion at present submitted in Schedule A. only forms a part.

Mr. *Dalrymple*—continued.

7224. And they would not press the others?—They are not prepared to press the remainder (in Schedule B.) at present, but they will give the land free to any company which chooses to undertake the railways in Schedule B.

7225. You would not approve of the idea which General Strachey put before us, that each case of extension should be fought out on its own merits?—No, I should not approve of that proposal. But at the same time I think it right to say, that the Government of India and the responsible members of that Government, do not attach too much importance to the inevitable little differences of opinion which must occur between the Government of India and the controlling body at home. I should be very sorry if every point were fought out, but I feel sure that every point would not be fought out.

7226. Would you go further and say that it is that principle of proposing to fight out each case on its own merits which has gone so far to retard the progress of railways hitherto?—I am prepared to say that some of the discussions between the Secretary of State and the Government of India, such, for example, as the discussion with regard to the Jhansi-Manikpur line, has had the effect which you mention.

7227. I will not go into the gauge question, but after what you have said with reference to the Jhansi-Manikpur line you would say that whilst light and cheap railways are advantageous in proper places, on great through routes, they are impracticable and expensive, especially where bulky traffic has to be handled?—Certainly.

7228. I did not quite understand what you said about the recommendation of expenditure which you would make if the recommendations of the Government of India were to be exceeded. I understood you to say that if the proposals of the Government of India were to be exceeded, you would then recommend that only 3½ millions should be borrowed and expended annually?—That is the limit of borrowing which I personally would propose.

7229. Because, as I understand, what the Government of India recommended to be spent annually is about 5½ millions for five years?—Yes, that is 5½ millions total annual railway expenditure, including lines constructed by itself and also by companies.

7230. But that, apparently, was not in addition to, but comprised in the existing annual railway grant?—The indispensable lines in Schedule A. will cost 28,000,000 *l.*, so that if you divide that by five years you will get over 5½ millions annually for our indispensable lines.

7231. With regard to the Midnapur district, when you were comparing the routes *vid* Seetaranpur and Midnapur, you said that Midnapur district would get its food to the country otherwise; was that by means of the canals which you afterwards referred to?—Partly by means of canals, and partly by rivers and tidal

Mr. *Dalrymple*—continued.

tidal channels, along which the food can come to Calcutta.

7232. You gave us some interesting figures to show the enormous proportion at work, that a railway can do beyond what is done by bullock-carts; is it not the case that while railways may have reduced the cart traffic over long distances, they have immensely stimulated short distance cart traffic?—In many districts railways have stimulated short distance cart traffic.

7233. So that there is nothing to be said for the railways driving the cart traffic off the ground?—I do not say that cart traffic of some descriptions has not suffered; the long through cart traffic has suffered, but the aggregate cart traffic has increased.

7234. Is it not within your experience that there is an increase in the number of carts used for short distance traffic in districts where there are now railways?—That is so.

Mr. *Samuelson.*

7235. You spoke of the coalfields, I believe, in the district contiguous to the proposed Jhansi-Manikpur line, and you said that you were prepared to give some particulars as to the quality of the coal; will you have the goodness to give them now to the Committee?—It was the Bilaspur and Etawah line to which I referred.

7236. Will you be good enough to describe the quality of that coal?—The coalfield to which I referred is known as the Umeria coalfield. It is a large coalfield, newly opened. The Government has two analyses of those coals. One analysis was conducted by the Geological Survey from samples taken from the coalfield at different depths. The other examination of the coal was a trial of 15 tons of surface coal, given to the locomotive engineers to test it practically. The analysis by the Geological Department showed that the coal was good. The analyst reports that "the coal is right down good stuff, and the sample as sent to you was a fair average; it is the counterpart of the Karbara, which is our best coal in India." Then he gives a section of the seam, 4 ft. 8 in., which contains bright coal for gas, and a hard coal which he describes as the exact thing for steaming.

7237. Do you mean that the two seams together are 4 ft. 8 in. in thickness?—A seam of 4 ft. 8 in. contained the following bands: hard coal, good, 6 inches; then stone band, 2 inches; bright coal, soft, but good, 7 inches; hard coal, 7 inches; bright coal, 6 inches; hard coal and heavy oil coal, 4 inches, again, stone band and hard coal, 2 inches; and then a seam of 2 feet of hard coal.

7238. Does he give you the analysis of the coal?—He does not give the analysis in this paper, but I can give you the percentage of ash from another series of analyses. The percentage of ash is 19 per cent., which of course, as compared with English coal, is enormous; but which is not enormous as compared with Indian coals. The percentage of ash in the Karbara coal, which is our standard coal, is 18·6 per cent. The other series of experiments were made by locomotive engineers upon certain lines, and the result, as stated by Mr. Molesworth, the consulting engineer for the State railways is, that when we consider that the Karbara coal is the best in India, the

Mr. *Samuelson*—continued.

result of a comparison of this coal with the Karbara coal is satisfactory.

7239. Then you spoke of certain deposits of iron ore being likely to be made available for use in consequence of coal being worked; have you an analysis of the iron ore?—I have not.

7240. What is the distance between the coal and the iron ore?—I should think it is about 100 miles, but I beg to observe that I am speaking without a map before me.

7241. You spoke of large areas as cultivable, but not cultivated land; would it require any large outlay of capital to bring a great portion of that land into cultivation?—In some parts it would require very large capital. For example, there are large tracts that can only be reclaimed by draining; and there are large tracts which would require capital to cut down heavy forests; but there are also enormous tracts which would require very little capital. The Chief Commissioner of Assam describes the cultivable land in his province lying along the banks of the great river Bramaputra, and he says that you only require a lucifer match and a sickle to bring those great tracts of waste land into cultivation.

7242. I suppose the lucifer match is wanted in order to burn the jungle?—To burn the high grass.

7243. Is it your opinion, according to the competent authorities whom you have consulted, that wheat cultivation will be carried on to a large extent by capitalists, as is the case with regard to the production of indigo?—No, that is not my opinion; I have never found anyone in India who anticipated that wheat would be so cultivated.

7244. In fact, it would be cultivated by the ryots?—Yes.

Sir *George Campbell.*

7245. Are you prepared to concur in the opinion that has been expressed to us, that the most acute famines, and the most difficult situations, with, have occurred amongst large, I may say so, and that a very scattered, been less subject to jungle population, prepared to agree with that view, famine?—I am, admit that the famines which have so far as the most stir in the world have been amongst large populations. I am also prepared to admit that amongst a large population the deaths are on a more appalling scale; but I am not prepared to admit that the actual suffering amongst large populations is necessarily greater than amongst sparse populations. The degree of suffering depends to a very large extent upon the degree of isolation of the district.

7246. Has it not been found that amongst a sparse population, or mere jungle countries, the people have subsisted very much upon jungle berries and wild animals and modes of subsistence of that kind?—I can only say that I had a very bitter experience of my own amongst a sparsely peopled tract in 1866. I then went down the frontier between Bengal and Chota-Nagpur, which you are aware is a jungle tract, and I should say that there was as intense suffering amongst those poor jungle people as amongst any other class.

7247. Were you there in the time of the famine?—Yes, in the famine of 1866.

Sir *George Campbell*—continued.

7248. *Do you know of* any other cases where large tracts of very sparsely populated country have been subjected to a very severe famine?—Yes, I think in the famine of 1769 there is evidence to show that the people on the outskirts of the cultivated land suffered intensely, and that the poorer tribes suffered intensely.

7249. There was a special inquiry into the Orissa famine of 1866; did that report bear out what you say?—That report did not bear out entirely what I have said; but all I can say is, that I have given you my personal experience during the Orissa famine.

7250. As railways are generally designed for passengers, are not the most beneficial railways those which lead from great centres of population to other great centres of population?—Will the honourable Member inform me for what purposes he means that they are the most beneficial.

7251. Take the whole aspect of the question?—Speaking from a protective point of view I am prepared to say that the countries which are most isolated are those which, from a protective point of view, are the most immediately in want of railways.

7252. Taking the scheme of the Government of India which you have laid before us, and taking, as you said, Chattisgarh as the great granary from which your proposed railways would radiate; I think you have admitted that 24,000 square miles of area should be attributed to the Chattisgarh country; a very large proportion of that country is almost unexplored, and very little populated?—Quite so. I only supply the facts with regard to the 3¾ million acres about which we have information.

7253. At least we may assume that there is very little production?—I cannot assume anything about the other part, for which I have no trustworthy information.

7254. With regard to the part about which we do know, I think you have told us that the production of the acreage under cultivation we may [illegible] You may take it at 250,000 tons per annum?—

7255. Have you compared that with the production of India as a whole, the Central Provinces of India; have you considered whether that, although from a *local* point of view the production of Chattisgarh is very great, it is really very great as compared with the production of the Central Provinces of India?—I have considered the production of the Chattisgarh district from one point only, viz., as to how far it justifies the making of this Nagpur-Bengal line, and as to the promise which it holds out that this Nagpur-Bengal line will pay a dividend. That is the only point of view from which I have considered the production of the Chattisgarh Division.

7256. It seems to me that your evidence goes further than that; the point that I am coming to is this; whether the production of the Chattisgarh Division is not only such as will justify your railway, but will also justify making four or five railways radiating from this country, which you describe as a great granary to all parts of India. The question which I want to ask you is, whether you have compared the production of Chattisgarh with the production of the Central Provinces of India, and have found that on that score there is really a large production?—Yes, I am able to compare the production of the Chattisgarh Division with other areas of equal size, and if you desire me to compare the Chattisgarh Division with an equal area east of it, I can do so. But I do not know that it would yield any information to compare the Chattisgarh Division with the Central Provinces, because it only contains 3¾ million acres, while the Central Provinces contain an altogether larger area.

7257. Supposing there was a famine in the Central Provinces involving 20 to 30, or 40 millions of people, would the surplus production of Chattisgarh be a very large element in meeting it?—The Central Provinces only contain 11¼ millions of people. I think that the Chattisgarh country would make a very material difference in the relief of famine occurring in the tracts which the railways led to.

7258. Is not the food exportation of the one comparatively small province of British Burmah, alone, four or five times as large as any figure which you can present us with of the surplus produce of Chattisgarh?—I am not prepared to say that it is four or five times greater; but what I am prepared to say is that if we could get the surplus produce of Burmah made available for the famine-stricken tracts, then the problem of famine relief would be nearly solved.

7259. Have you calculated how many people 250,000 tons would feed in a year?—I think I can give you an idea of it. Taking it at one lb. of grain per diem for men and women and children, you would be able to feed about a million and-half of people.

7260. The population of British India consists of 250 millions, so that it would be only a very small proportion of the population that could be fed from that source?—But a famine never strikes 250 millions of people, it only strikes a very small part of them.

7261. It sometimes strikes 20 or 30 millions?—You have never to actually feed 20 or 30 millions at one time.

7262. In Central India and Scinde the general tendency is for grain rather to go from east to west than from west to east; is it not the case that a large proportion of the area of the Bombay Presidency and a part of the Central Provinces is devoted to cotton, and that there is a continual demand for grain in the west, and a continual flow in ordinary years of grain from Chattisgarh from the eastern district towards the west?—That is to some extent because they have got no railway towards the east.

7263. Still at the present time there is a large demand in the west for grain?—There is a large demand in the west because there is a railway to the west, and there is no railway to the east.

7264. Is it not the case that there is a very large district of Bombay and of the Central Provinces where on account of the culture of cotton and other products they do not grow food enough, and have to import their supply?—I find the districts which grow cotton find it convenient and profitable to send the cotton to Bombay.

7265. And which habitually import food from the

Sir *George Campbell*—continued.

the more eastern districts?—Yes, they import food.

7266. I suppose you have calculated whether the railway which is already made is not capable of carrying away the whole of this 250,000 tons per annum which you calculate is the surplus of the Chattisgarh district?—Yes; the existing railway cannot carry it, because the cost of cartage to the railway is so great that it will scarcely pay.

7267. Which side of Raipur is it?—The present terminus is here 146 miles east from Nagpur (*showing map*).

7268. The railway is already sanctioned to Nagpur, is it not?—It is not made to Bilaspur.

7269. Supposing the railway to be made as far as it is already sanctioned to the productive part of the Chattisgarh district, or the railway, that is to say, to Bilaspur, would that railway suffice to carry away those 250,000 tons of surplus produce which you estimate?—No, I do not think it would

7270. Have you calculated how much it could carry away?—No, I have not calculated how much it could carry away. The cartage charges would restrict its area of supply.

7271. Do you think that this 240,000 tons of surplus produce is really enough for at least five railways, radiating from the Chattisgarh district, which the Government of India propose?—I have not cited the production of these 240,000 as sufficient for five railways, nor have I cited the 240,000 tons as sufficient to show what total per-centage would be paid even upon the one railway which passes through the tract.

7272. What I want to know is whether when you have a plan which proposes to make four or five railways, all radiating from this one centre, this comparatively limited centre of production which you can really rely upon one year with another, will supply sufficient traffic for so many railways?—You cannot expect the centre to give sufficient traffic for a number of railways. What I have endeavoured to show is that it is a very excellent food centre through which a railway system should pass.

7273. But the project is that railways should start in three various directions, so that the surplus produce of Chattisgarh should be competed for by several railways proceeding in several directions?—No, not competed for; that is not the intention.

7274. Then the surplus produce of Chattisgarh cannot go in all directions at the same time; if it goes in several directions it must be divided, I suppose?—But the surplus of Chattisgarh is only one small part of the produce which those different railways will carry; it is only a starting point.

7275. Will you tell us what is the comparatively large produce which you expect these railways to carry?—If you will mention any individual railway I will endeavour to do so.

7276. We will assume that you have already a railway to the west and to Bombay, then I come to one of the first additional railways which you have mentioned, and which will compete with it: then there are two branches, one of which is proposed to go to Vizagapatam, and the other is to go through the Nizam's

Sir *George Campbell*—continued.

territory, and so to reach Madras, and I want to know what is the great produce which is to come upon this railway if the surplus of Chattisgarh does not suffice to give them sufficient occupation?—I have not mentioned the Vizagapatam Railway, the one that I mentioned was the Hydrabad line. All I can say with reference to the traffic which will be carried on the Hydrabad line is, that the prospects of that line appeared sufficiently good to enable the company to launch the line in London, without any reference whatever to the Chattisgarh food supply.

7277. Then as regards the Vizagapatam line, do you think that that is a line which is likely to pay?—I have offered no information with regard to the paying qualities of the Vizagapatam line.

7278. Then as regards the Nagpur-Seetarampur line, is it your deliberate opinion that grain from the Chattisgarh district will be at all likely to be habitually carried towards the great food-producing countries of Bengal?—I think that the wheat of Chattisgarh would very likely be divided between the Bombay outport and the Calcutta outport. Wheat is not produced in Lower Bengal to any very large extent, and the Chattisgarh wheat would go partly to Bombay and partly to Calcutta.

7279. There being already an outlet for that wheat at Bombay, do you think that it really would be a very great advantage to have another outlet at Calcutta, which is so much more distant from Europe?—Pardon me, there is no outlet at present, because there is no railway to Bombay from the Chattisgarh districts to which I refer.

7280. There is a railway for the most part made and already sanctioned, is there not?—There is a railway partly made, 160 miles long, from Nagpur, but it does not reach Bilaspur.

7281. But it is in active progress towards Bilaspur, is it not?—It is in progress certainly, but it will not pass through the whole of the district; it will reach the outskirt of the country which I have described.

7282. Assuming that it is already sanctioned and in active progress towards Bilaspur, I want to know, as between Bilaspur and Bengal, do you think there is likely to be a large traffic in grain?—I think that Calcutta will get a part of the wheat export of the Chattisgarh division, and that Bombay will get another part. From the east side the grain will go to Calcutta, and from the west side the grain will go to Bombay.

7283. Then as regards the coal traffic, you have no doubt observed that Mr. Rendel expresses a strong opinion that coal will go from Sitarampur westward; does not that somewhat conflict with your view, that this line will be useful in bringing coal the other way; do not these two opinions make you somewhat doubtful as to the great advantage of carrying coal between Bilaspur and Seetarampur?—I have not had an opportunity of seeing Mr. Rendel's evidence, but all I can say is this, that Sitarampur is a long distance from the centre of the Chattisgarh division, and there is a coalfield called the Hengier coalfield on the margin of that division. I am not aware whether Mr. Rendel was acquainted with the Hengier coalfield.

7284. Taking

Sir *George Campbell*—continued.

7284. Taking it broadly, assuming that the line from Nagpur to Bilaspur is already sanctioned, when you express your belief that the Nagpur and Sitarampur line will pay, is it your deliberate opinion that the portion between Bilaspur and Sitarampur will pay, as distinguished from the other portions which are already sanctioned and for the most part made?—Yes, I believe there is a fair probability of its paying.

7285. You alluded to the amount of iron and steel that is likely to give a traffic; are you aware that a good many trials have been made to produce iron in India, and they have not been very successful so far; and in the neighbourhood of the proposed line, did not the Nerbudda Coal and Iron Company at one time undertake to make iron, and failed to do so; is it not the case that the experiments that have been tried hitherto have been somewhat unsuccessful?—Some experiments have been unsuccessful.

7286. But have any been successful?—I am not prepared to state that the Bengal Ironworks, if properly worked, will be unsuccessful.

7287. They have not been successful hitherto? I am not prepared to give evidence on that point.

7288. As regards the Bundelkund district which has been mentioned, and Banda, and Umeria, and Jhansi, it is the case, is it not, that those districts lie between the Jumna on the one side and the Jhansi-Manikpur line, which we have been told is already sanctioned, on the other?—The Jhansi-Manikpur line will run through the heart of this district.

7289. If the Jhansi-Manikpur line will run through the heart of this district, the River Jumna will be on one side; is not that so?—Yes.

7290. And the result of the construction of that line will be, that there will be complete access to the Bundulkund district from the great populous and producing districts of Behar and Bengal on the one side, and the North-Western Provinces and the Punjab on the other; that is so, is it not?—Yes, if you make the lines which we wish made, there will be access, but at present there is no line from the south-east to Jhansi; we must first make it.

7291. I am supposing that that line, as already sanctioned, is made; then there will be a complete access on either side to the great producing districts of the Upper and Lower Ganges, will there not?—Not under existing circumstances.

7292. I am supposing that the sanctioned line to have been made?—This line which is sanctioned will start from Jhansi, and it will go to Manikpur; but at present there is no line from the south to Jhansi.

7293. I am supposing the line to be made to Jhansi?—But that line is one of the very lines which we now ask for; it will become a part of the granary lines.

7294. I am accepting that line as one of the sanctioned lines?—It is not yet sanctioned; we ask it to be sanctioned.

7295. Supposing it to be sanctioned, is it not the case that it will give you complete communication to the great producing districts of the east on the one side, and the west on the other?—Only if you accept the Government of India's proposal, and make the lines which they desire to make.

Sir *George Campbell*—continued.

7296. But is not the Jhansi-Manikpur line already made?—Certainly not.

7297. If that line is made will it not give complete communication with the East Indian Railway, and so go through to the populous and productive provinces?—The line from Jhansi to Manikpur will start from Jhansi, to which no railway at present comes.

7298. At the other end it will be in immediate communication with Arungabad and the populous provinces beyond?—Yes, if the proposed railway system of the Government of India is carried out.

7299. On the other side it will only have a small link between Jhansi and Gwalior to bring it into communication with the whole of the west?—It will have a western communication, if it is joined with Gwalior.

7300. Supposing that you have a sanctioned railway which will bring this comparatively small district into immediate communication with the Central Provinces, and the east and west, do you think it necessary in order to assure those provinces, to connect them with a district naturally so little connected with them as Chattisgarh?—It is necessary in order to secure the provinces for which the Government desire to obtain protection, to make the connecting lines which are now proposed. The protection to the individual district which you cited, namely, the Banda district, would be inferior, even if the additional lines which you suggest were made, as compared with the protection which would be given if the lines proposed by the Government of India were made.

7301. May there not be such a thing as over protection; is it not the case that it very seldom happens that there has been a famine in certain districts in the Lower Ganges, and Bengal and Behar on the one side, and at the same time in the North Western Provinces and the Punjaub on the other; can you conceive of a case in which, having one good railway running through such districts as those I have mentioned in Bundelkand, you could not feed the districts by those means, without making another expensive railway through a comparatively very populous country in another direction?—I can conceive of such a case. The railway communication which you propose would involve such a long carriage of the grain that I can imagine that the relief would be very inadequate

7302. Considering that the district has complete communication with the Central Provinces, including many populous towns, is it worth while to make a special railway to connect it with Chattisgarh, with its quarter-of-a-million tons of produce already, to a certain extent, if I may so express myself, bespoke by Bombay?—The protection of Bundelkand by the lines which you suggest as suitable lines, would involve a very great cost of carriage, and a very great length of railway carriage in time of famine.

7303. As regards the prices in the Chattisgarh District, you gave a price which you said you had ascertained to be the average price, which is calculated to be equal to about two maunds to every rupee; do I understand you to say that the average price of 1 *s.* 4 *d.* per cwt. is the average price of grain, one year with another, in Chattisgarh, or do you only mean that it is the average

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average of certain localities in the same division in some special year?—That was the average price of a particular kind of grain (wheat) in certain localities during the years for which I have information.

7304. For how many years?—I cannot give you the details of the years at present, because the calculation was made seven or eight years ago.

7305. You have not, I presume, seen those figures which show very much the contrary, namely, that in one year specially low prices prevailed, and in another year the price of wheat at Chattisgarh was almost as dear as in any other part of India?—I have not seen those figures, but I can quite understand that since the railway has come to the borders of Chattisgarh, prices have risen.

7306. As regards the population, there is a considerable migration of population, and you have instanced the Central Provinces as a country where a very large increase has taken place; are you aware of the Central Provinces being a country with a great deal of spare land, and that efforts have been made to colonise it for very many years past?—Yes.

7307. And in the first instance without any very great success. Have you examined the question whether there are districts in the Central Provinces in which a great increase of population has taken place, and which has really been in the nature of colonisation from distant parts of India?—That is a very large question. I will take the district, if you choose, of Jabalpur. We have information to show that that district, which is one of the districts which has had the largest influx of population of late, has to a considerable extent derived its population from other districts. A large proportion of immigrants have settled down upon the land as cultivators.

7308. It has been a good deal in the nature of colonisation, probably from Allahabad and other popular districts of that kind?—There is an immigration of cultivators certainly.

7309. Have you any statistics going a considerable way back in the Chattisgarh districts, showing that the rainfall has been very uniform?—No, I have not. I ought to mention that the statistics which I have of the rainfall were given to me by the proper officers, and I simply reproduce them as I have received them.

7310. And do you find that they are singularly uniform?—Yes, they are singularly uniform.

7311. Does that country get any part of the north-west monsoon?—It depends chiefly upon the south-west monsoon; but it also gets some winter rain.

7312. Do you say that rice is still the main product of that country?—No, I say that rice is the main food eaten by the people in that country.

7313. But wheat is very largely produced there?—Yes, wheat is largely produced.

7314. And you yourself think there is a probability of a very large increase of wheat production?—I think there is a very great probability of increase.

7315. You say that it is principally the soil that we may thank for the great increase?—There is a million acres of black soil waiting to be cultivated, and the cultivators would naturally grow wheat on it.

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7316. Can you explain to us why it is that the Government of India are very anxious to get companies to make those lines?—That is a question of the general financial policy of the Government of India which I am prepared to explain, if required.

7317. You stated that you had occupied yourself in inquiring what was the backing of the people who propose to make the Nagpur-Seetarampur line by a company, and that you ascertained that there are financiers who are ready to find the money to make that line upon the terms which were proposed, namely, the Bengal Central terms?—I am not prepared to say what terms the financiers are now prepared to make the line upon. I am prepared to state the terms upon which they proposed, on 4th July 1883, to make the line, and I am also prepared to say that the names of the gentlemen who belong to the committee of proposers seemed to me to be names of high standing.

7318. Do you understand that those are gentlemen who are prepared to find the money for the railway, or are they only prepared to form a company, and become directors, and go into the market, and try to find the money?—They are prepared to be responsible for launching the company, and for raising the capital.

7319. Do you mean that they are prepared to make themselves personally responsible to find the money?—I hold no authority to say that.

7320. Then you are not prepared to say that there are financiers ready to find the money upon any very definite terms?—A proposal was submitted to the Secretary of State on the 4th of July 1883, and I am prepared to put in that proposal, if it is not already in evidence. I am prepared to state the names of the gentlemen who form the committee of proposers. I have stated the names of some of them.

7321. Then do you understand those gentlemen to be financial gentlemen who propose to find the money, or are they merely directors of a company who propose to launch the scheme upon the money market?—So far as I understand, those gentlemen are men of the highest financial standing, both in India and in England, and I have every reason to believe that they intend to do what they have offered to do.

7322. But you do not know what terms they are prepared to accept?—I can state the terms which they offered; I am prepared to put in the whole of the papers up to the 4th of July last.

7323. Have you now ascertained that they are willing to undertake, and pledge themselves upon those terms?—I had an interview with the secretary to the committee of proposers yesterday. He said that their proposal had gone in to the Secretary of State, and they had received a reply from the Secretary of State to the effect that no orders could be given until this Committee had reported; that the committee of proposers had kept together for the furtherance of the project, and are desirous of going on with it. He concludes his letter by saying, "I have confidence in stating that I believe they will do so."

7324. Did he say on what terms?—No, he did not.

7325. You have said that one remarkable feature about Indian railways was that the traffic had

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had always exceeded the estimate; we will accept it, that on many of the great lines it has undoubtedly been so; but is it not the case that sometimes when lines have been made without sufficient consideration of the amount of traffic, they have not paid so well as has been expected?—I am not prepared to say that every short section of a line has been paying; but I am prepared to say that all the great lines which have been thoroughly considered have paid more than they were expected to pay.

7326. Is it not the case that throughout the Madras Presidency there are several railways which have not paid?—Certain lines have not paid, I believe, in Madras.

7327. May we not assume that even if railways through great populations have paid, it is very possible that if you go further afield amongst more sparse populations you may come upon a set of railways which is not paying?—You may come upon a set of railways that will not pay, but what I maintain is that the Nagpur-Bengal Railway now proposed will pay.

7328. You maintain that the railways in Schedule A. will pay?—No, excuse me, not all the railways in Schedule A.; I was speaking of the Nagpur-Bengal Line, not of Schedule A. as a whole.

7329. Speaking generally, do not you think that railways might be made in parts of India which would be likely to pay much better than many of the lines which have been proposed by the Government of India in Schedule A.?—Some of the lines proposed in Schedule A. are specifically proposed as lines for protection, and the Government does not expect them to pay; for example, the Jhansi and Manikpur is not a line which one can fairly expect to pay.

7330. Do not you think that if many of those lines were refused, some more paying line than those might be found in other parts of India?—There may be more paying lines, but they would not protect the districts which required protection.

7331. So that in your view protection must be put before all other considerations, at least, to the extent to which the Government propose to go at present?—Yes, so far as the Government intend to go at present.

7332. Are you prepared to say that you think that all the other lines in Schedule B., and other paying lines, ought to be postponed until these lines are made?—I am prepared to say that if this Committee will sanction only the money required for Schedule A.; then Schedule B. should, so far as the Government is concerned, be postponed.

7333. Do not you think that there are very many branch railways required into the more populous and productive parts of India?—Yes, there are branch railways required.

7334. Do not you think it might be a pity if so many of those more productive lines were obliged to stand over while we supply the Chattisgarh Division with four or five lines, and Bundelkund with two or three lines, whilst other countries require protection of a similar nature?—Chattisgarh only gets one line, and Bundelkund only gets one line straight through it; and, as regards extensions and branches, the Government

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of India, in their proposals, do not preclude existing lines from making branches.

7335. Do you think that there is any great advantage in limiting the amount of money which the Government is allowed to borrow, if the only sum that they are allowed to guarantee is the income of the guaranteed companies?—I submit no proposals for the Government of India being allowed to embark to an unlimited extent on guaranteed companies.

7336. When you said that you proposed no limit to the amount that the Government of India should borrow, you ought to propose a limit to the amount that they should guarantee?—The proposals of the Government of India are quite specific on that point; they propose not to launch forth to an unlimited extent upon guarantees, but to raise a specified amount of capital by means of guarantees.

7337. Is not this what you would urge upon this Committee: that they should sanction the Government of India making the particular series of lines which they propose, and then that they should be allowed to spend a certain definite amount upon guaranteed railways?—I have tried to explain my view upon that point already. If this Committee simply sanctions the Government of India's proposals under Schedule A., I am instructed to ask only for the amount of capital required to carry out those lines; but if the Committee from the evidence which it has received opens up the question of Schedule B., then I think 3½ millions would be a proper limit.

7338. Supposing the Committee should come to the view that they are not in a position to lay down, specifically, particular lines which ought to be made, and if they should make certain general recommendations, would you place any specific limit upon the amount of railways to be constructed under guarantee, which the Government of India should be allowed to sanction?—If the Committee is not going to make any specific recommendations, then I should not ask them to make a specific recommendation with regard to the limit of guarantee.

7339. Would you leave the limit of guaranteed construction undefined?—If all other matters are left undefined, I would prefer that that should remain undefined too.

7340. If the Committee are not prepared to lay down particular lines which ought to be made, do you think that they ought not to place any specific limit upon the amount of guaranteed construction which may be sanctioned?—I am afraid that I did not quite catch your point. I thought you referred to the contingency of the Committee making no particular recommendations whatever.

7341. The last Committee recommended that the Government of India should be authorised to borrow money for the construction of public works up to a certain narrow limit, and no further; but nothing was said about guaranteed lines, and the consequence was that the Government of India, finding that their hands with reference to direct construction were tied, launched out in the direction of guaranteed lines; of course they could not make them themselves, and in that way the purpose of the last Committee seems

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to me to a certain extent to be defeated; that is to say, although the limit for the expenditure of money upon public works was laid down, still it turned out that there was no limit upon the sanction of guaranteed lines; and I want to know distinctly whether as a certain limit is laid down to the amount which the Government may borrow for direct railway construction, you would propose that there should be any limit with regard to the amount which may be constructed under guarantee?—The Government of India's proposals are specific. The Government of India's proposals contain two sets of railways in Schedule A.; one set of lines to be made by themselves, and requiring that a certain borrowing power should be sanctioned; the other set of lines to be made by companies raising a certain amount of capital. What I am instructed to urge is, the adoption of those proposals, and the permission to raise the requisite capital.

7342. It really comes to this, supposing that the Committee should say, We cannot bind ourselves, we cannot give you authority for these particular lines, but we leave it to be fought out between the Government of India and the India Office at home, would you then place any limit upon the amount which may be guaranteed?—I do not think it would be prudent for the Government of India to annually expend more than 3½ millions of borrowed money.

7343. Do you mean directly, or including guarantees?—I do not think that it would be prudent for the Government of India to propose to raise directly more than 3½ millions at present, instead of the existing limit of 2½ millions of direct loans.

7344. Is that for direct construction only?—That is for direct construction only.

7345. But you are aware that the Government of India propose that a much larger amount of money should be expended upon the construction of railways in India, and therefore, I want to know whether, putting aside the lines which were made under guarantee, you would put any specific limit both upon the amount expended directly, and upon the guaranteed railways?—There would be a limit, I suppose.

Chairman.

7346. The Government propose that a certain number of railways should be made under guarantee?—Yes.

7347. And that necessarily involves a limit, does it not?—Perfectly so.

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7348. Just one question about the export of food grains. It is the case, is it not, that a very large export of food grains took place from Orissa in the year 1866, when the famine took place there; and that during the Bengal famine a large export of rice was going on from Calcutta?—Yes, some export was going on, but not from Orissa, after the famine had developed itself.

7349. In the earlier part of the famine year, after the crop had failed, a large amount was exported, was it not?—Before the famine had declared itself some grain was exported.

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7350. And throughout the Bengal famine a large portion of grain was being exported from Calcutta?—Some was exported.

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7351. You spoke of interest being charged on capital during construction; did you mean that the Government of India should be charged interest on capital during construction on lines made by themselves?—No; I was referring at the time to lines made by private companies.

7352. You would allow them to add that interest on capital to capital account?—Yes, under careful restrictions, they should be allowed to do so.

7353. Would you advocate that the Government guarantee should be given on the whole?—Yes, on the whole.

7354. And you would charge that interest that had to be paid, I suppose, to the debit of the Indian Government, would you not?—The practical effect would be to charge it to the capital of the company, as I understand.

7355. How would it be charged to the capital of the company?—In this way: Take the 11,000,000 *l.* which we shall require for the three granary lines, the interest on that will amount, as estimated, to 200,000 *l.* a year during construction.

7356. Take the actual interest the first year without any receipt, because you will have the interest to pay first before you have any receipt?—The first interest will be added to the capital account.

7357. Where would you obtain the interest from?—Extra capital would be raised.

7358. I suppose you are aware that the Government of India propose to pay the interest out of the revenues of the year?—Perfectly. But, when they made that proposal, they added that if the system of debit to capital of interest during construction should be adopted, the famine insurance grant would be relieved for some years, and any difficulty would disappear.

7359. But still are you not now making quite a different proposal to that which has been made by Mr. Westland and by Major Conway Gordon?—I am not aware of the proposals to which you refer. The Government of India has stated in its Despatch of the 24th of September 1883 the proposal to which I now refer.

7360. Still, at page 29 of the Despatches (App. No. 1, p. 515) there are certain charges which it is proposed to place to the debit of the State annually, with regard to these particular railways of which you are speaking?—Yes.

7361. It is there distinctly stated that there is to be a net charge to the State annually of 85,000 *l.* in the first year; 157,500 *l.* in the second year; 210,000 *l.* in the third year, and so on; do you propose to alter that?—I do not wish to alter that proposal.

7362. Then in that case you do not wish to add the interest paid upon those lines during construction to capital account?—I suggested those lines by way of illustration as to how the system would act, not as lines to which I wish the system to be applied. The Government of India has made provision for those lines by capitalizing the famine grant. But the

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Government has also said that should the Committee not approve of this way of capitalizing the famine grant, the Government would in that case suggest the charging of interest to capital.

7363. That would be equivalent to borrowing the interest?—Yes; it would be equivalent to that; the proposal is made in the event of the Committee not seeing its way to accept the first proposal of the Government of India.

7364. That would be equivalent, would it not, to borrowing the amount which is required for the annual interest, and adding it to the debt?—It would be equivalent to that.

7365. You spoke about a scheme of contracts for five years with the Public Works Department; has the Government of India made any proposals for any such scheme?—If you will kindly refer to the Appendices to the Despatch which you have just referred to, you will find a Minute by the honourable Mr. Hope, the Public Works Minister, dated the 23rd January 1883. In that Minute Mr. Hope proposes and discusses at considerable length the project of a quinquennial contract with the Public Works Department, similar to the existing quinquennial contracts, with the Local Governments. The Government, in sending home that Minute by Mr. Hope, commented upon it in the 74th paragraph of the Despatch of the 23rd January 1883, at page 37 of the Papers (App. No. 1, p. 523). The Government's comment upon it amounts to this: that the Government of India are unable to accept the proposal of the Public Works Minister, but the Government of India add that "the Commander in Chief is of opinion that in practice a contract would produce many of the advantages claimed for it;" while "Mr. Gibbs wishes it to be noted that his experience of two years as Public Works Member leads him to the conclusion that if the contract system could be introduced it would tend to encourage economy in the administration of the Department, and the construction of the works." That is the position of the question at present.

7366. That is to say, Mr. Hope sends a Minute advising that quinquennial contracts should be entered into with the Public Works Department, but the Government of India demur to that entirely?—The Government of India, as a whole, demur to it, but they mention that certain members of the Government of India desire it to be stated that they agree with Mr. Hope's view.

7367. Then in putting that before us, are you putting before us the proposal of the Government of India, or the proposal of Mr. Hope?—I put it forward as a point which I thought Mr. Hope would like to be considered by the Committee.

7368. And not on behalf of the Government of India?—Certainly not; I carefully avoided doing so.

7369. What would be the effect of such a proposal?—That is discussed at considerable length at pages 50 to 54 of the Papers before the Committee (App. No. 1, pp. 536-540). It would be difficult for me to enter into the subject, unless I did so at length, but if you desire me, I am prepared to do so.

7370. I will only just ask you one question. I think in paragraph 10 Mr. Hope says, in speaking of railway extension, "The means for this extension are at last to hand in the new item of the railway profits. Let railways breed railways, and canals too, if there be funds to spare for them after providing adequately for the more generally needed agency of railways." That is on the assumption that railways happened to pay a considerable profit, did it not?—That is on the assumption that railways pay considerable profits.

7371. If it is shown, in Despatch No. 143, that the actual profit realized on the whole of the railways in India annually is not anything at all, would not that very much modify Mr. Hope's proposal with regard to quinquennial contracts?—It might modify Mr. Hope's proposal as regards the particular source from which the funds should be allotted for the contract, namely, from railway profits; but it would not very materially affect Mr. Hope's proposal in other respects. Mr. Hope specifies railway profits as a source from which the money might be found; but the money is being found by the Government, and must be found in any case, so that, although the individual source mentioned by Mr. Hope did not prove so productive a source as he hoped, that fact would not alter the general bearing of his proposal. The general object of Mr. Hope's proposal is to secure economy, to secure efficiency, and to secure steadiness of expenditure on public works.

7372. Would it not amount to this, that the Government would be committed under any circumstances for five years to find a certain amount of money for public works?—It would be committed so far as regards railways, and it is practically committed under the existing scheme.

7373. If for five or six years you added that sum to the amount that you paid, do not you think it would be quite possible to divert some of the money which is now obliged to be applied to public works?—Mr. Hope only proposes a proportion of expenditure on public works to be subject to contract; there would still be a large limit to work upon, and to decrease in the event of war.

7374. Bearing in mind that the proposals of the Government of India will give you a surplus of 250,000 *l.* a-year, quite independent of war, supposing that war, or the necessity for making a frontier railway costing 300,000 *l.* a-year were to be placed upon you, would not that have the effect of neutralizing any possibility of such a proposal as that which Mr. Hope makes?—Scarcely, I think. Mr. Hope's proposal is for the Government to say to itself, We can with certainty afford to spend so much a year during the next five years upon a certain class of public works, namely, upon railways. The expenditure which he desires to be thus assigned by contract is not the whole expenditure of the Public Works Department. There would be a large limit outside that expenditure to retrench in event of an emergency. Mr. Hope's position is, that railways are a class of public works for which arrangements have in any case to be made beforehand, and the more clearly you define the responsibility beforehand, the better bargain you will be able to make, and the more cheaply you will be able to construct. To the extent of the railways which you have already arranged for the finances are pledged.

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pledged. Mr. Hope thinks that, in this particular class of public works, it would be well to render the pledge more distinct; that it would be more economical, and would secure efficiency and steadiness.

7375. Supposing you found that in the next two years you had to spend a couple of millions on a frontier railway which is to guard the North-west, would it not become necessary, as you want to take two millions from the ordinary expenditure, that you might either have to borrow that money or to gain it by increased taxation?—Yes, that might happen whether there was a contract or not.

7376. We have had laid down all through, as you know, that we must not increase the taxation for railways, and you do not intend to borrow more than 3½ millions under any circumstances; we have it in evidence from all the witnesses on behalf of the Government of India, that they do not want to increase the taxation at all, and you have stated that you would not directly borrow more than 3,500,000*l.* under any circumstances; no matter whether for the direct construction in India, or for any purpose, and you might be in a little difficulty in the case I have named; in the case of the failure of the opium contracts, in the case of famine, or in the expenditure on a war in the North-west frontier. You might absolutely be obliged either to borrow money, or to break your contract with Mr. Hope, might you not?—I am not prepared to say that it is impossible to conceive a case in which you might have to break your contract with Mr. Hope. If a war takes place it may be necessary for the Government of India to disturb, for a moment, its arrangements with its local governments, and to disturb for a moment its arrangement with the Public Works Department What Mr. Hope desires to see is the same amount of stability given to the Department of Public Works as is now given to the local governments; so that the same amount of economy and efficiency may be introduced into the Public Works Department as the system of contracts has introduced into the local governments of India. He desires nothing more hard and fast than that.

7377. The Government of India are not persuaded that that would be the best method of working?—The Government of India as a whole are not; you will find the views of the Government of India in their Despatch, with those of the Members of the Government who agree with Mr. Hope.

7378 Supposing that the railways amounting to 12,000,000*l.* in Schedule A., which are proposed to be made by limited companies, are not constructed by the companies, how are they to be made; that is to say, supposing the class of lines marked (*c.*) on page 84 are not made under the limited guarantee system, and that limited guarantee companies do not come forward, have you told us how they are to be made?—I have not answered that question definitely, for I have no instructions on that point, as the question had not been raised. Supposing the companies did not come forward to make those railways, the position of the Government would be this. It would have in its hands the 200,000*l.* a year required to pay the interest for the construction of those

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railways; *i.e.*, the 200 000*l.* out of the Famine Grant for the Bhopal, Jhansi, Gwalior, Nagpur-Bengal, Bilaspur, and Etawah lines. They would have in their hands the 200,000*l.* to pay interest on the money.

7379. You have already said that you have that 200,000*l.* to raise the 11,000,000*l.* which you have allotted for other railways?—No, which we have allotted to the three great granary lines under (*e*) We have in our hands 200,000*l.* to pay interest upon the capital required for these lines. I believe the Government regards these lines of such importance that, under the circumstances you mention, the Government would make the lines itself, and raise the capital. But I have no means of ascertaining the view of the Government of India on that subject. I myself think the lines so important that I should hope the Government of India would make them. It has the interest ready to pay for the capital required.

7380. Although they would have to raise within five years, in addition to the 3,500,000*l.* which you have proposed to borrow, the sum of 12,000,000*l.* sterling, amounting to 2,500,000*l.* more?—That is so, assuming this contingency. This contingency has not, however, been presented to the Government of India. The proposals of the Government of India have been before the Secretary of State during the last 18 months, and this contingency, so far as I know, has never been suggested to the Government of India. Had the contingency been presented, I am sure that the Government of India would have been able to give a definite statement as to what course they would take.

7381. And you could have depended on one main line being made by a syndicate, or by a number of gentlemen whose names were proposed to us?—Yes.

7382. You said that a definite proposal had been made in July 1883. Will you tell me what kind of guarantee was required under that proposal?—Yes. I think the Paper is before the Committee. In the eighth clause of the proposals submitted to the Secretary of State on the 4th of July 1883, it is provided that for a period of 99 years the Secretary of State shall pay to the Company out of the revenues of India half-yearly interest at the rate of 3½ per cent, per annum, that is the proposal.

7383. Is that what you call a limited guarantee?—I have not called it a limited guarantee in my evidence.

7384. I will refer you to page 84 of the Government Despatches (App. No. 1, p. 570), where you find that that capital to make those lines is capital to be raised by private companies under the limited guarantee system. We have had a definition of the limited guarantee system from many witnesses, and it has always been something like the Bengal Central terms?—Perfectly.

7385. The proposal that Messrs. Hoare and Miller made in July 1883 is nothing whatever like the Bengal Central terms, and does not in the least come under the guarantee system described there, does it?—That is so; but please observe that it is the Government of India that proposes to make this railway under the limited guarantee system. Mr. Miller's proposal of 1883 which was submitted to the India Office proposes

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to make it under another system. But that proposal has not been accepted either by the Government of India or by the India Office.

7386. Then clearly it means very much in the air?—The proposal has neither been withdrawn nor accepted; it is hung up pending the Report of this Committee.

7387. For the recommendation of this Committee?—Sir Louis Mallet's reply is: "I am directed to inform you that Her Majesty's Government, having decided to move that the subject of provision for the extension of railways in India shall be referred to a Select Committee of the House of Commons next Session, Lord Kimberley does not deem it expedient, pending the result of that inquiry, to enter into an arrangement with you on the basis proposed in your letter."

7388. In fact, instead of this Bilaspur and Nagpur line being proposed to be made under the limited guarantee system, the proposal is, in fact, to make it under the Southern Mahratta system?—Mr. Miller's proposal is to make it under the Southern Mahratta system; the Government of India desired to make it under the limited guarantee system.

7389. I should like to ask you a few questions about the prices of grain in the Chaatisgarh division; you said that at Bilaspur the price was 1*s.* 4*d.* per cwt. in 1877; can you give me the prices on the 1st of January of each following year?—I did not anticipate that question, and I have not the means of answering it at the moment.

7390. If you found that the prices have varied very much at Bilaspur during the last five years, would that alter your opinion as to whether there was always a very large surplus of grain there?—No, that would not alter my opinion as to the amount of surplus grain, because my opinion as to the surplus grain is not based upon prices. It is based upon the amount of area cultivated, the produce per acre, and the quantity which the people can consume under a fair computation.

7391. What is the test of scarcity?—The test of famine proposed by the Famine Commissioners is, when the staple food of the country, not the food merely used for exportation, but the staple food of the country, rises to three times the ordinary price. But at the same time they give a caution, and one of the things we have been cautioned against is, not to take too low a limit to start from. You may have food almost unsaleable in some parts of the country or selling at a nominal price; and three times that price would not make a famine. But if you take a province with a fair amount of communication, and find that the prices in that province rise to three times the ordinary price, then in the opinion of the Famine Commissioners famine will ensue.

7392. Supposing you found that the prices at Bilaspur, Sambulpur, and Raipur, had from year to year varied very considerably indeed, and that sometimes they were very high, would you say that there was any surplus then?—I should simply say that the prices in isolated districts, where there is no means of transit, vary very considerably from year to year, by great leaps and bounds.

7393. You spoke of a very large quantity of spare wheat as being grown annually, amounting

Mr. *Kynaston Cross*—continued.

to 240,000 tons?—That is the Director of Agriculture's estimate.

7394. And you said, I think, that you depended upon that being carried by the new railway which is to be made?—We have taken 220,000 tons as the traffic to be borne upon the new railway.

7395. What becomes of that 220,000 tons now?—Those 220,000 tons, as far as I can get at the facts, struggle outwards by cart traffic, partly to the Nagpur Railway and partly towards Jubbulpur. A large portion of it gets out in that way.

7396. How much comes by the Nagpur Railway?—I cannot tell you how much comes by the Nagpur Railway, but I can tell you the position which that railway holds among the paying railways of India. It holds a very high position.

7397. Last year it paid very well, I believe?—Yes, and it has only been recently opened.

7398. You cannot tell the Committee how much of that 220,000 tons comes by that railway at the present time?—No.

7399. Or how much would be left for the new railway in the other direction?—No, I cannot tell you that. If such an investigation were ordered by the Government of India, it would involve a separate inquiry. But an estimate might be arrived at.

7400. You have told us that the Bundelkund district was a famine stricken district; and at the same time you said that for want of railway communication, Bundelkund found it difficult to get its stuff out; is it often that Bundelkund requires to get any stuff out?—No, I am sorry to say it does not often require to get grain out, but it requires to get cotton out, and it requires to get its grain out in very good years.

7401. Is it not usual in Bundelkund to store its grain in a good year, knowing that it is likely to be stricken with famine?—If the cultivators have wheat to sell, they sell the wheat and get the money. It is more economical to sell it and keep the product in rupees than to keep it in grain.

7402. Are you aware at all what the production of wheat is in Bundelkund?—I have got no figures here on that subject.

7403. Is any wheat grown in Bundelkund?—Yes; but it is not the staple grain.

7404. Are they a wheat-eating people?—They are a millet rather than a wheat-eating people. Wheat is not usually consumed in large quantities by the poorer populations.

7405. Have you known any exports of wheat from Bundelkund?—I have no information as to its wheat exports; I do not cite Bundelkund as an exporting country; I cite it as a country to which grain would come in years of scarcity.

7406. Then I think you would put, perhaps, Jhansi and Bhopal as being ruled by very much the same conditions as Bundelkund?—No, I am not prepared to say that. We know a good deal about British Bundelkund, while we know little about Bhopal, as it is in a native state.

7407. With regard to Nagpur and Jhansi, can you tell us anything about the productive power of those two places?—Jhansi is a poor district. It contains fertile tracts, but as a whole, it is a poor district.

7408. Evidence was given us by Mr. Miller to the effect that a railway going from Bhopal to Gwalior,

Mr. *Kynaston Cross*—continued.

Gwalior, passing through Jhansi, would pay if only from the local products passing over it; I presume you would not agree with that evidence?—I would not agree with that. All the evidence which I possess goes rather in a different direction; but I beg to observe that Bhopal is in native territory, and I have very little evidence about it.

7409. You made use of a very strong remark when you said that in time of famine the narrow gauge leads to delay and death; could you give us an instance where the narrow gauge has ever led to death?—No, I am not prepared to give instances, because I do not know of any instances in which the case has yet occurred. I was referring to the proposal to make the Jhansi-Manikpur line on the narrow gauge.

7410. Would you not say that a narrow gauge railway is very much less likely to cause death than no railway at all?—Quite so; what I meant was that the narrow gauge on the Jhansi and Manikpur line would lead to a break of gauge on both sides, to the blocking of the stations, and to the destruction of grain during the rainy season; I meant that the narrow gauge would cause a fatal break of gauge at both ends of a short line.

7411. You are aware that we have had it in evidence that the cost of removing grain at many places where there is a break of gauge is not more than 2 *d.* out of 7 *d.* per ton?—The cost of transhipment is small; but that is the least important element that has to be considered. The Bombay Chamber of Commerce, and all mercantile men with whom I have talked, tell me that they do not lay stress upon the cost of transhipment. In time of war, or in time of famine, it is not the cost of transhipment that tells; it is the block, the delay, and the waste through exposure of the grain.

7412. Take the block; can you tell us of any lines which have been blocked through this cause?—I cannot give you the statistics, because they lie beyond my department. But I will say this, that when you are making a military line to the frontier you consider the danger of a block to be so great that you insist, and rightly insist, upon the line being made continuously on broad gauge. If you do this to meet a foreign enemy on the frontier who may or may not come, I consider that you ought to adopt equal precautions against an enemy in our very midst, who strikes at us every few years. The block which would take place in military operations is hardly more serious in its kind than the block which would take place in famine operations is in its kind.

7413. Would not the block caused by the break of gauge in moving a heavy gun from one wagon to another be more than the block caused by the pitching of wheat-bags from one truck to another?—I am speaking of the block with regard to delay and waste.

7414. Can you compare the two things at all?—I have not compared heavy guns and grain bags. If you insist upon my comparing them, I should say that there might be greater delay in moving heavy guns; but if you had the proper mechanism for moving heavy guns you could move them as easily as you would move wheat.

Mr. *Kynaston Cross*—continued.

7415. You know that you can move wheat by a man casting it from one carriage to another, and that one man can move perhaps 60 bags in the course of an hour?—But you would have perhaps, at the outside, a hundred heavy guns, and you would have many millions of bags of wheat.

7416. You spoke of the 200,000 *l.* a year of interest being used to command 11,000,000 *l.* of capital, and you assumed, did you not, that that might be taken from the Famine Grant, without any limit at all?—That is so.

7417. On the ground, as you said, that it was already hypothecated, and that it was no more hypothecating it to use it for the payment of interest upon the 11,000,000 *l.*, than it was to use it for the construction of railways from year to year?—It was a slight additional hypothecation, but my point is that, practically, the money is at present hypothecated for railway construction. I did not say that the pledge was not more complete, but that the money was practically pledged at present.

7418. At present it is allotted to the construction of railways, and those railways may be stopped by giving a couple of years' notice at any time, may they not?—Yes, they might be stopped by giving a couple of years' notice; but we do not get a couple of years' notice of a famine.

7419. If a famine came you would be obliged, as soon as you could, to stop those works if you wanted to use that money for the purpose of the relief of famine?—Yes, if we wished to use that particular money for the purpose of the relief of famine, we should have to stop the works.

7420. Then if you hypothecated it to the interest on the 11,000,000 *l.*, you would absolutely have no power to touch it at all?—It would be impossible to touch it; but I think that at present it is practically impossible to touch it. My point is this, that the objection is not so serious as it looks, because at present the money is practically hypothecated. If we had two years' notice of a famine we should certainly stop the works; but we never get two years' notice of a famine, and it is a very serious thing to stop railway works at three months' notice.

7421. Sometimes you have had famines following each other; you have had three years of famine in which the expenditure was not so great in the first year, and in the second it was very great?—We have had one case of that sort in the present century.

7422. I think you spoke of there having been an increase of population in the Central Provinces, and I notice at Chota Nagpur that there has been a great increase of the population?—There has been an increase.

7423. I think you said, speaking of Jubbulpur, that the increase of population depended considerably upon railways?—To a large extent it has been ascribed to railways.

7424. If you found that the Chota Nagpur population had increased very greatly without any railway at all, to what would you attribute that?—I endeavoured to show that I did not think that a railway necessarily caused an increase of population, and I cited Balasur and Cuttack, which are outside of railway influence, in proof of my view. If I were asked why I

Mr. *Kynaston Cross*—continued.

think the population has increased in Chota Nagpur, I should have to go into the conditions of the country. I believe one of the conditions is that Chota Nagpur suffered very considerably during the famine of 1866, and that, like Balasur and Cuttack, but on a smaller scale, its population has increased in consequence. I took particular care to prevent its being supposed that I thought that the railway was the sole cause of increase of population in a district.

7425. Did you give us any particulars of the traffic that might be expected east and south-east of Bilaspur on the line which is proposed to be made from there to Calcutta?—No; this can only be settled by actual experience. It is a question of where the traffic-shed will fall; whether the rates towards Bombay will exceed the rates towards Calcutta from any particular point. There is the coal from the new Hengier coalfield, and there is timber; I mentioned these as two sources of traffic, besides grain.

7426. You did not give us any estimate of the amount, did you?—It is quite impossible to give it until we know where the point falls, at which it will be more profitable to send grain to Bombay, or more profitable to send it to Calcutta. That can only be worked out in practice, when the line is made.

7427. I think you were asked a question with reference to the difference between borrowing in England and in India, and I think you quoted some tables which have been furnished by Colonel Trevor?—A series of mathematical calculations and tables.

7428. Has Colonel Trevor had any financial experience in large matters?—Colonel Trevor does not write his note as a financier, but as a mathematician. If the Committee desires it, I can put in the Paper. The calculations throughout are mathematical.

Mr. *Kynaston Cross*—continued.

7429. He has never considered for a moment, has he, how he was going to repay the sterling loan which he mentioned?—He has considered it so far that he takes the rate of exchange at which he would have to repay it.

7430. Then on the heavier rate of exchange which he would have to accept, would he venture to send the *corpus* of the loan home?—He says if the rupee falls from so-and-so to so and-so in so many years, then it would be profitable to borrow at so and-so.

7431. That is without for a single moment considering the question of repayment?—He considers the repayment so far that he provides for repaying the money at a specified rate of exchange, namely, 1 *s.* 4$\frac{1}{2}$ *d.*

7432. Supposing he had to repay 10,000,000 *l.*, he does not for a *single* moment propose to tell you how he would do it?—He does not tell us further than what would be the mathematical results of paying at such a price.

7433. Without any consideration as to the repayment of the loan?—Without any consideration as to the means of repaying the loan, but not without any consideration as to the rate at which the loan would be repaid.

7434. If you had to repay a large sum at the end of a given time in this country, you would have to remit a very large sum in addition to your usual annual remittances, and that he has completely left out of sight?—That is outside of his calculations. I endeavoured to show that his calculations were purely of a mathematical character.

7435. As to local *versus* export traffic on railways, do you know the proportion of grain which is carried out to the port of export in proportion to the total quantity of grain that is carried along the line?—That is beyond my information; that is a question for a railway accountant.

Mr. ROBERT WIGRAM CRAWFORD, called in; and further Examined.

Chairman.

7436. I UNDERSTAND that you wish to hand in a Paper to appear in the Appendix to the Committee's proceedings?—Yes. I beg permission to put in as part of my evidence a copy of the Appendix to the Report which the Directors of the East Indian Railway Company have lately circulated amongst their proprietors, showing the practical working of the East Indian Railway since the 1st of January 1880, under the new contract. It is a document which has been prepared with great care; and it is very full as to the financial results, and as to the general working and economy of the railway.

7437. You think that it may be interesting to the Committee and of service to the public, that it should be appended to our Report?—Yes, I think so. I think it conveys very important information.

Mr. *Dalrymple.*

7438. May I ask what advantage this information is to be to us?—At the conclusion of the answer to Question No. 6876, put to Mr. Danvers, with regard to an inquiry on the part of Lord Salisbury's Government, whether the Government of India "were of opinion that the working of the East Indian Railway might without objection be *entrusted* to a private company, in the event of the purchase of the line being effected," Mr. Danvers said, "The result we know. The working arrangement was made, and I think it will be admitted that the *best* results have ensued." The Paper which I have offered to put in contains information of the results to which Mr. Danvers points.

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