

EAST INDIA (RAILWAYS).

ADMINISTRATION REPORT

ON THE

RAILWAYS IN INDIA

FOR THE

Calendar Year 1902.

BY

A. BRERETON, Esq

SECRETARY TO THE GOVERNMENT OF INDIA, PUBLIC WORKS DEPARTMENT, RAILWAYS.

Dated the 23rd May 1903.

Presented to both Houses of Parliament by Command of His Majesty.



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The figures on this scale represent lakhs for the Capital outlay, tens of thousands for Gross earnings, Working expenses and Net earnings, and Miles for length open.

In the case of percentage of Net earnings on Capital outlay, and percentage of Working expenses to Gross earnings, each square represents one and two per cent. respectively.

58

INDIAN RAILWAYS.

Diagram showing for each year the totals up to 31st December 1902 for Capital outlay, Gross earnings, Net earnings, Working expenses, and length in Miles open, also percentage of Net earnings on Capital outlay and percentage of Working expenses to Gross earnings.

The figures on this scale represent Crores for the Capital outlay, Crores of thousands for Gross earnings, Working expenses and Net earnings, and Miles for length open. In the case of percentage of Net earnings on Capital outlay, and percentage of Working expenses to Gross earnings, each square represents one and two per cent. respectively.

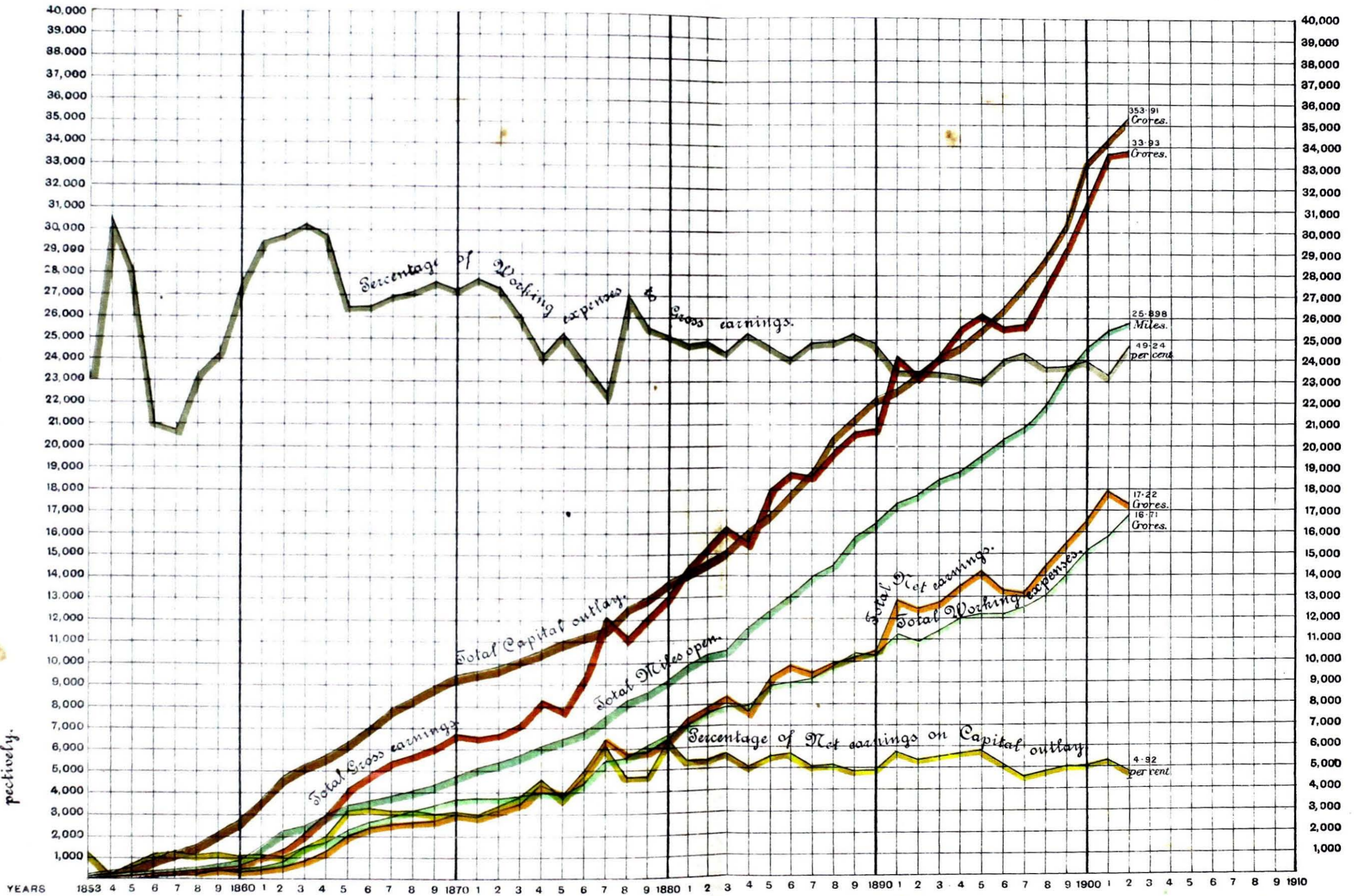
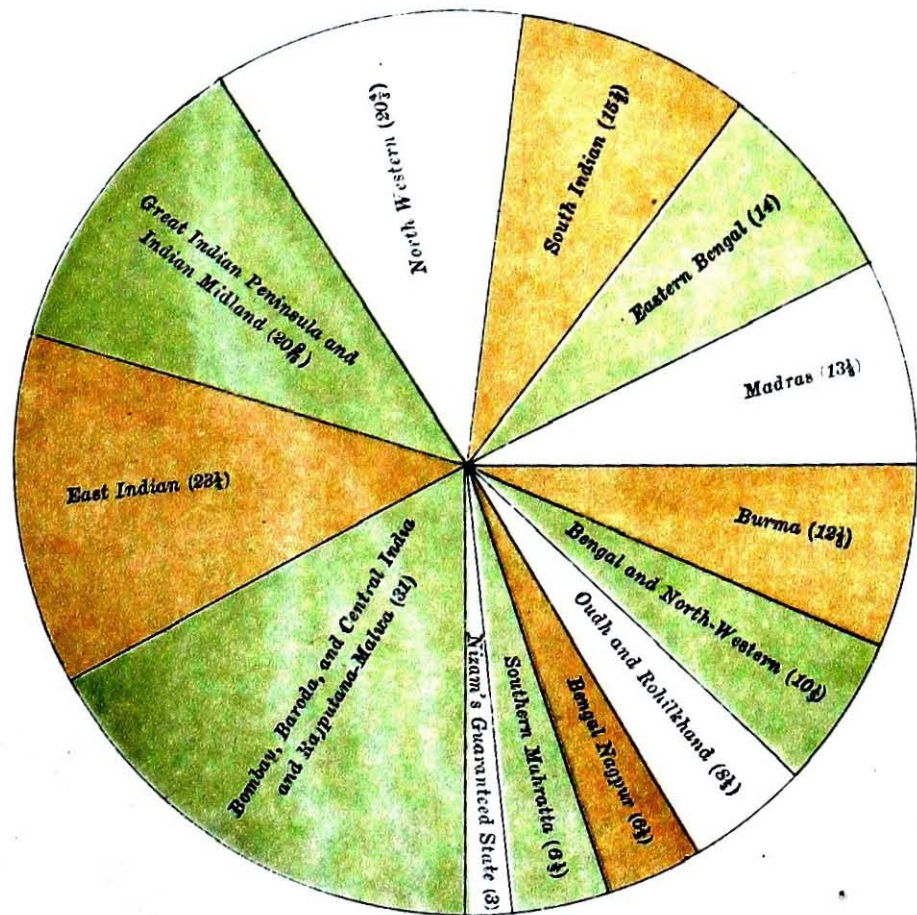
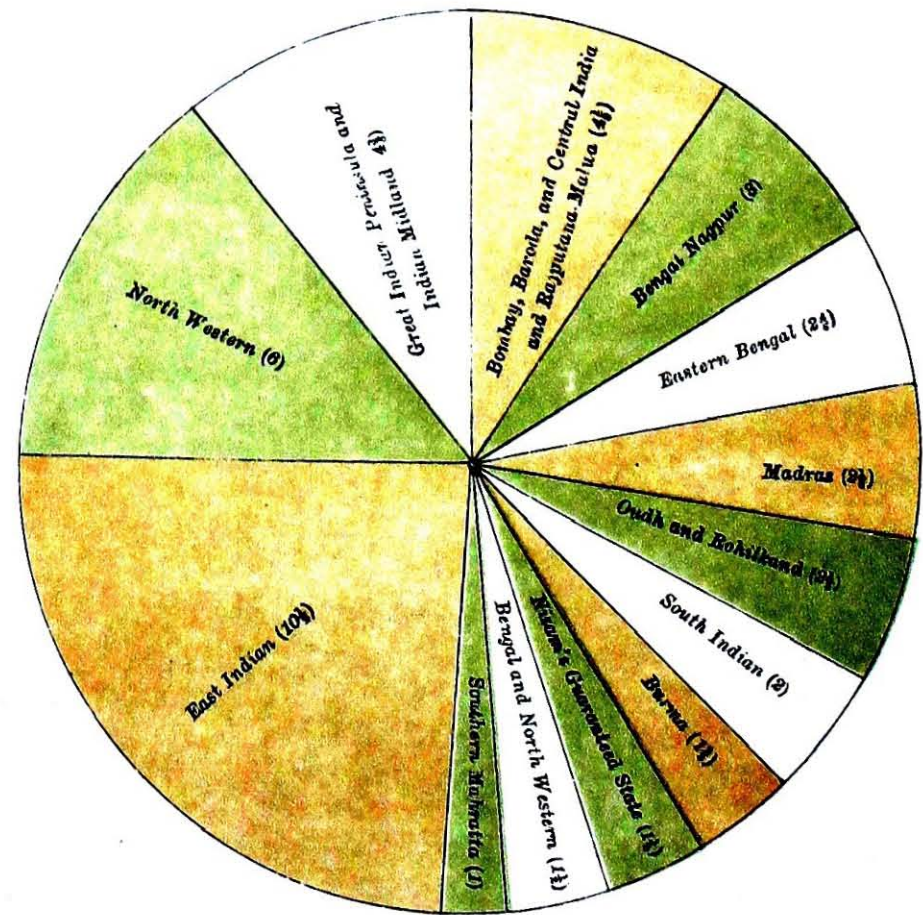


Diagram showing the Number of Passengers and Quantity of Goods in tons conveyed by the principal railway systems in India during the calendar year 1902.

Number of Passengers
(in millions).

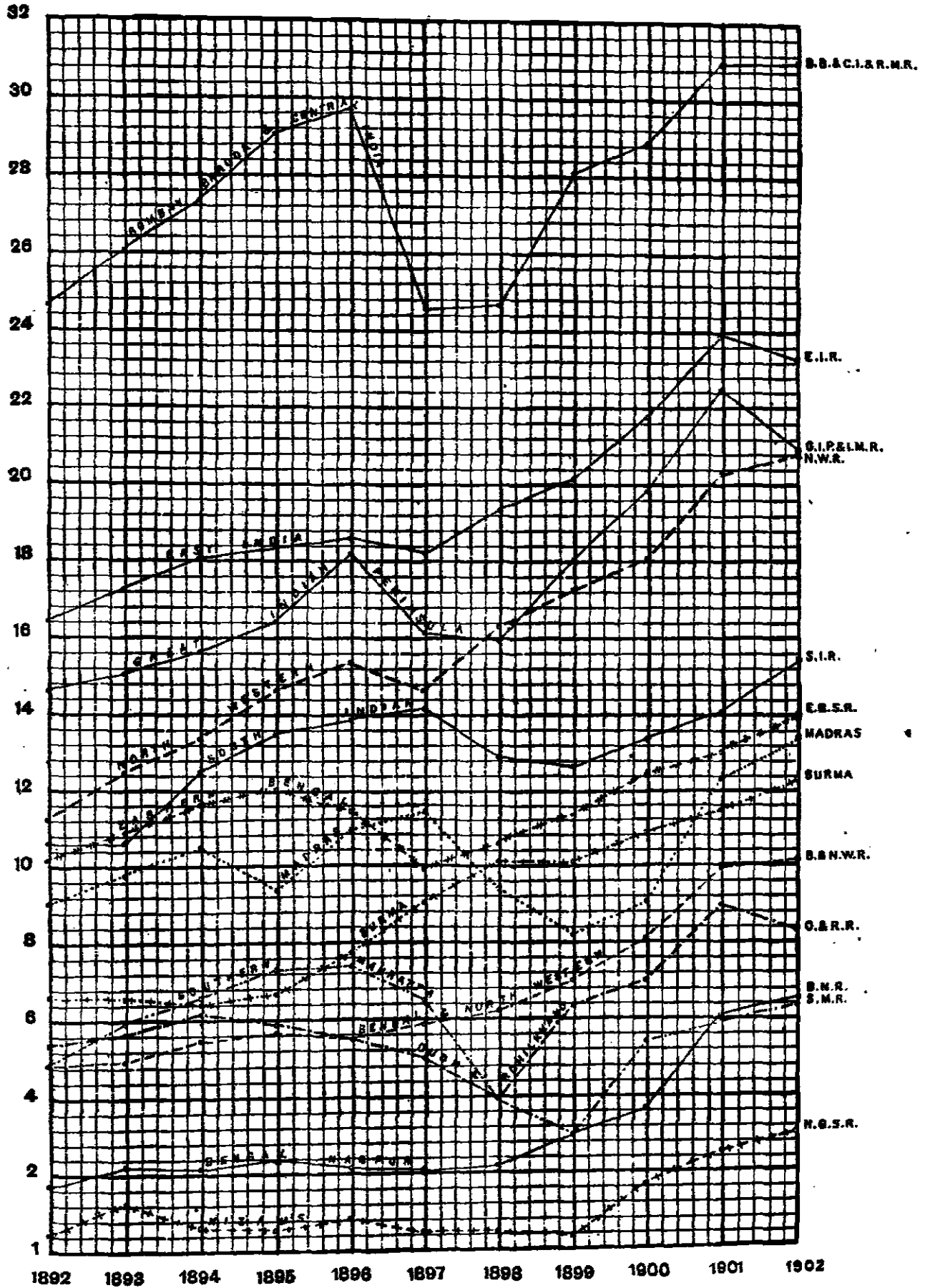


Quantity of Goods in tons
(in millions).

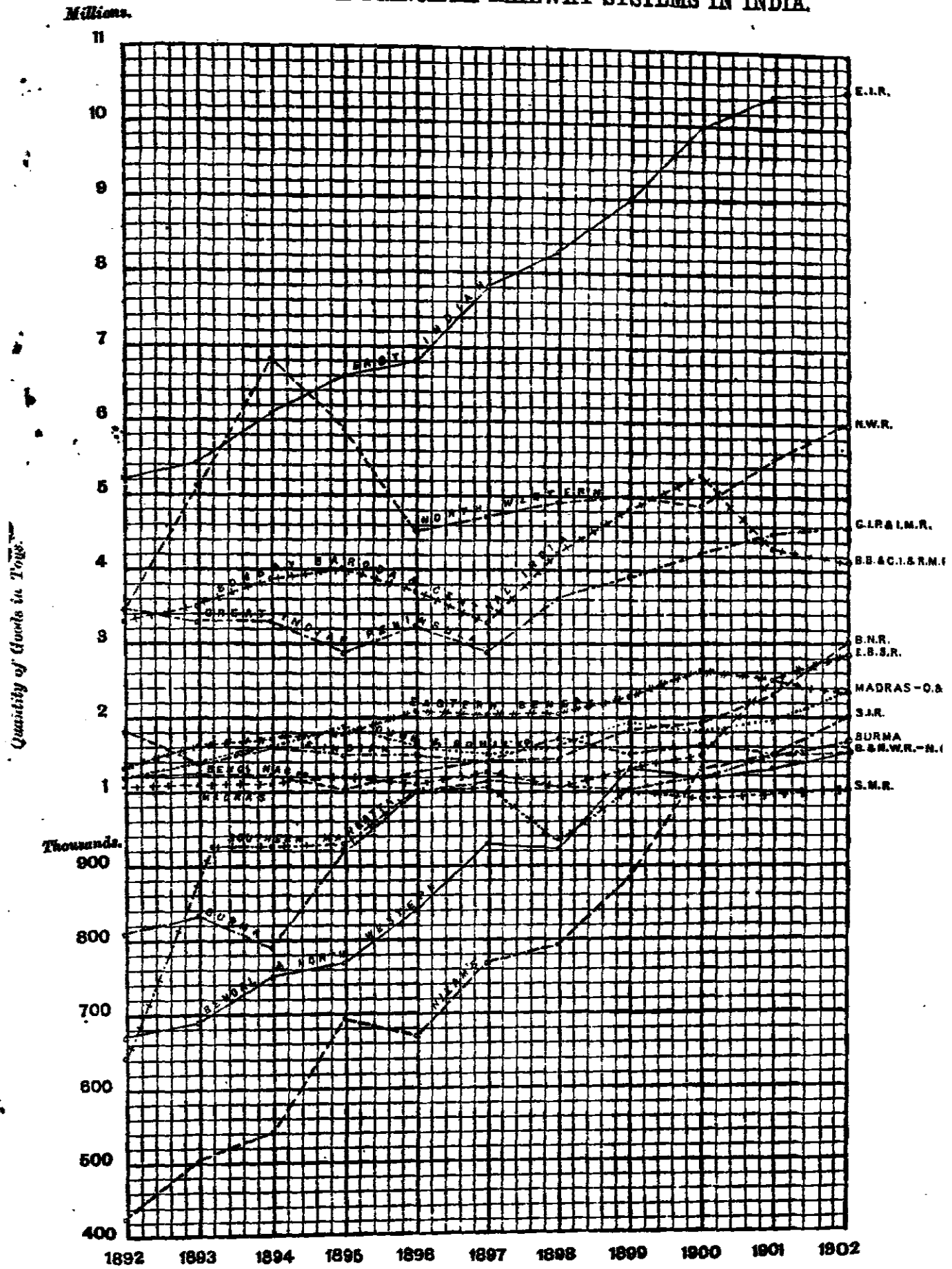


NUMBER OF PASSENGERS CARRIED ON THE PRINCIPAL RAILWAY SYSTEMS IN INDIA.

Millions.



QUANTITY OF GOODS IN TONS CARRIED ON THE PRINCIPAL RAILWAY SYSTEMS IN INDIA.



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PART I.

GENERAL REPORT.

The accounts of the year 1902 disclose a surplus to the State of nearly 20½ lakhs of rupees. This figure is considerably below that obtained last year, principally, as will be seen from the figures in the next paragraph, on account of the large increase under working expenses, caused in the main by renewals of permanent-way and rolling-stock. This is the third year in succession in which railways have been profitable to the State.

General

2. The surplus has been arrived at after charging against Revenue, the expenses incurred in actually working the open lines of railway including interest charges on their outlay, the interest on the capital expenditure on lines under construction, from which no revenue is obtained, and on the unexpended balances of the capital deposited by companies, and also the amount paid yearly, by means of sinking funds and annuities, for the redemption of the commuted capital of those railways which have been purchased by the State. Calculated on this basis the results for the last four calendar years are shown in the following table :

Financial result to the State

	1899.	1900.	1901.	1902.
REVENUE.	Rs.	Rs.	Rs.	Rs.
<i>State railways.</i> —Gross traffic earnings	20,63,82,768	24,01,24,013	27,82,42,003	28,08,52,109
<i>Guaranteed Companies.</i> —Gross traffic earnings	6,33,60,199	4,79,09,158	2,74,25,599	2,75,84,610
<i>Subsidised</i> " Repayment of advances of interest	4,23,202	3,23,046	4,61,226	7,63,462
Total Revenue	27,06,66,169	28,83,57,119	30,61,28,828	30,92,00,181
CHARGES AGAINST REVENUE.				
<i>State railways.</i> —working expenses	20,13,16,951	11,87,07,703	13,41,56,175	14,17,27,993
Interest* on total capital outlay in India and on debentures discharged	4,22,62,678	4,39,11,915	4,49,54,370	4,72,80,834
Interest on debt incurred in, or created for, the purchase of railways	83,83,740	98,22,152	1,13,37,298	1,15,09,617
" " Annuities in purchase of railways	2,94,07,445	3,56,91,431	4,25,83,683	4,22,03,007
" " Interest chargeable against Companies on advances	33,77,277	60,17,752	88,78,497	91,65,078
" " Interest on capital deposited by Companies	56,48,174	59,72,073	60,95,434	54,29,993
<i>Guaranteed Companies.</i> —Working expenses	1,28,12,593	1,40,08,809	1,50,35,322	1,74,68,054
Surplus profits, etc.	3,29,97,754	2,47,72,576	1,28,86,207	1,36,55,568
Land and supervision	43,44,230	30,16,780	18,11,890	12,93,644
Interest	7,26,013	2,68,754	— 1,94,361	— 95,692
<i>Subsidised</i> " Land and subsidy	3,27,70,756	2,39,25,665	1,53,20,302	1,55,69,751
<i>Miscellaneous railway expenditure</i>	7,07,206	3,93,107	1,21,761	6,94,486
" " "	5,16,639	8,86,011	6,98,052	10,55,292
Total charges against Revenue	27,52,72,456	28,74,84,728	29,45,87,630	30,71,58,345
Net loss—Net gain +	—46,06,287	+ 8,72,391	+ 1,15,41,198	+ 20,41,636

3. The net gain or loss shown in the foregoing table has been arrived at without excluding from the annual Revenue charges that portion of the annuity payments which represents redemption of Capital, and the figures do not, therefore, give the real result to the State of the working of the railways. If this portion of the annuities, which actually represents instalments of the price which has to be paid for the railways purchased from companies, were excluded from the ordinary

* Four per cent. on capital outlay to the 31st March 1900, and 3½ per cent. on outlay subsequent to that date, except on capital outlay on the East Indian railway from 1st July 1895, and on the loan of one crore from His Highness the Maharaja Holkar for the Holkar railway, on which interest is charged at 3½ and 4½ per cent., respectively.

Financial results to the State. Railways opened.

Revenue charges, the result to the State of the working of the railways would have been—

In 1899 a loss of Rs.	12,29,010.
In 1900 a gain of „	68,90,143.
In 1901 a gain of „	2,04,19,695.
In 1902 a gain of „	1,12,06,714.

4. The number of miles added to the railway systems in these years were 1,484 in 1899, 1,237 in 1900, 576 in 1901, and 566 in 1902, or a total in the last four calendar years of 3,863 miles.

5. The expenditure side of the account is further heavily weighted by the terms of the contracts of two Guaranteed railways, which require payment of interest at a higher rate than is now necessary, and the calculation of the surplus profits at 22 pence to the rupee, while the current rate of exchange is nearer 16 pence. The two contracts are terminable, one on the 31st December 1905 and the other on the same date in 1907.

Railways opened.

Railways opened. App. 1, 2 and 3.

6. During the year under review, 566 miles were added to the railway systems of India, bringing the total mileage open at the close of the year up to 25,931 miles. The addition, between the 1st January and the 30th April 1903, of 630 miles increased the total on the 1st of May 1903 to 26,561 miles, of which 14,346 were on the 5' 6" gauge, 11,247 on the metre or 3' 3 $\frac{3}{8}$ " gauge, and 968 on narrower gauges. Steam tramways running outside municipal limits are included in these figures, as they are treated as "Light railways" in this report.

Yearly additions to mileage. App. 4.

7. The mileage opened year by year, under each railway administration, and during the Viceroyalty of each Governor General, is detailed in Appendix 4.

8. The principal railways opened during 1902 and between the 1st January and 30th April 1903 were—

- (a) The branch of the East Indian railway on the 5' 6" gauge, 78 miles, from Sone East bank (Barun) to Daltonganj, which has been constructed with the main object of opening up the Palamow coal-fields.
- (b) The extension of the 3' 3 $\frac{3}{8}$ " gauge section of the Eastern Bengal State railway, 39 miles, from Mogalhat to Dhubri, which constitutes a portion of the link to connect the railways in Bengal with those in Assam at present terminating at Gauhati.
- (c) The branch of the Bengal-Nagpur railway on the 5' 6" gauge, 114 miles, from Midnapore to Bhojudih, which constitutes a link in the direction of providing an independent access to Calcutta from the United Provinces of Agra and Oudh *via* Gya; and the first section of the Jubbulpore-Gondia 2' 6" gauge extension, 74 miles, from Gondia to Neinpur, which connects Jubbulpore more directly with stations on the Bengal-Nagpur railway and opens up the isolated Satpura plateau.
- (d) The Siwait-Sultanpur section of the Allahabad-Fyzabad, 5' 6" gauge, branch of the Oudh and Rohilkhand State railway, 47 miles, which will provide more rapid means of communication with Bombay, especially to the districts north of the Lucknow-Fyzabad-Benares loop line, and will greatly add to the prosperity of the fertile and densely populated country traversed by the branch.
- (e) The extension of the military section of the North Western State railway from Khusalgarh West *via* Kohat to Thal, 92 miles, on the 2' 6" gauge; and the Northern section of the Jech-Doab line from Malakwal to Sargodha in the Karana hills, 46 miles, on the 5' 6" gauge, which will help in the development of the large area of waste land to be colonized and brought under cultivation in the Doab.

- (f) The "Branch Line," 3' 3 $\frac{3}{8}$ " gauge, railway, 34 miles, from Sabarmati to Dholka.
- (g) The first section of the Shoranur-Cochin railway, 65 miles, from Shoranur to Ernakulam, on the 3' 3 $\frac{3}{8}$ " gauge, which connects the Native State of Cochin with the Madras railway system.
- (h) The sections of the Bengal Dooars extension railway from Oodlabari to Bagrakote, 3 miles, and from Chalsa to Dalgaon, 29 miles, on the 3' 3 $\frac{3}{8}$ " gauge.
- (i) The last section of the Bikanir-Bhatinda railway, 88 miles, from Suratgarh to Bhatinda, on the 3' 3 $\frac{3}{8}$ " gauge, which affords a direct route between the railways in Northern India and Rajputana.
- (j) The extension of the South Indian railway, 89 miles, from Madura to Mandapam near the Pamban Pass on the 3' 3 $\frac{3}{8}$ " gauge.
- (k) The first section of the Tinnevely-Quilon, 3' 3 $\frac{3}{8}$ " gauge, railway, 19 miles, from Tinnevely Bridge to Kallidaikurichi, which connects the Native State of Travancore with the South Indian railway system.
- (l) The sections of the Ganges-Gogra Doab lines of the Bengal and North-Western railway, (1) from Azamgarh to Shahganj, 35 miles; and (2) from Phepna (Ballia) to Ghazipur Ghat, 31 miles, on the 3' 3 $\frac{3}{8}$ " gauge.
- (m) The last link of the Assam-Bengal, 3' 3 $\frac{3}{8}$ " gauge, railway, 55 miles, from Lakwa to Tinsukia which connects Gauhati with the Dibru-Sadiya railway.
- (n) The last section of the 3' 3 $\frac{3}{8}$ " gauge extension of the Burma railways in the Northern Shan States, 51 miles, from Hsipaw to Lashio; and the extension, 114 miles, from Letpadan, on the Irrawaddy section *via* Henzada to Bassein, also on the 3' 3 $\frac{3}{8}$ " gauge.

9. Sanction was given during the year 1902 to the construction of 1,107 miles of railway, making up a total of 2,895 miles sanctioned and still to be constructed on the 31st December 1902. The principal lines sanctioned were

Mileage to 1
constructed.
App. 5.

5' 6" gauge—

	Miles.
Manpur to Hariharpur, Gya-Katrasgarh line (East Indian railway)	100
Shikohabad to Farukhabad (East Indian railway)	66
Agra-Delhi Chord	121
Ranaghat to Moorshedabad (Eastern Bengal State railway)	75
From a point 12 miles south of Quetta to Nushki (North Western State railway)	82
Godhra to Baroda (Bombay, Baroda and Central India railway).	44
Azhikal-Mangalore	77

3' 3 $\frac{3}{8}$ " gauge—

Golakganj to the Brahmaputra opposite Gauhati (Eastern Bengal State railway)	152
Aunrihar to Jaunpur (Bengal and North-Western railway)	36

Famine lines, Madras Presidency.

Bellary to Rayadrug	33
Hospet to Kottur	38

2' 6" gauge—

Famine lines, Madras Presidency.

Morappur to Dharmapuri	18
Tirupattur to Krishnagiri	26

The principal lines sanctioned between the 1st January and the 30th April 1903 were: a branch of the Oudh and Rohilkhand State railway from Meerut to Hapur, 19 miles, on the 5' 6" gauge; and extensions of the Bengal and North-Western railway from (1) Uska Bazar to Tulsipur, 54 miles, (2) Gaisanri to Jarwa, 13 miles, (3) Gorakhpur to Bagaha, 61 miles, and (4) Kopaganj to Dhorighat, 22 miles, on the 3' 3 $\frac{3}{8}$ " gauge.

Projects for new lines.

Railway surveys.

Projects for new lines.

10. The negotiations which, at the close of last year, appeared to have been practically concluded for the construction, on the 3' 3³/₈" gauge, of the Kurnool Road (Dhone)-Kurnool railway, (Madras), 32 miles, and the Bezwada-Masulipatam railway (Madras), 50 miles, are still proceeding, the Promoters having asked for certain modifications of the terms offered.

The scheme for the construction, on the 2' 6" gauge, of the Raichur-Wondalli railway, (Hyderabad), 43 miles, the concession for which was granted to the Wondalli (Deccan) Gold Mines Company and the Hyderabad (Deccan) Company in June 1900, has not advanced any further.

Revised proposals, which are under consideration, have been received from the Promoters for the construction of the Amritsar-Tarn Taran-Patti railway, (Punjab), about 27 miles in length.

The negotiations for the following lines, which were stated in last year's report to have been progressing, still continue :

	Miles.
Kangra Valley (Punjab)	87
Jullundur-Hoshiarpur (Punjab)	24
Vizianagram-Raipur with Sointilla branch (Madras and Central Provinces)	359
Barun-Ajmer-Marwar (Rajputana)	213
Burdwan-Cutwa (Bengal)	34
Hooghly-Cutwa-Ahmedpur-Ondal (Bengal)	139

Negotiations are also proceeding for the—

Berhampore-Russelkonda (Madras)	49
MacLeod Ganj Road-Fazilka-Ferozepore-Ludhiana (Punjab)	150
Rawalpindi-Murree with extension to Kuldana and Gharial (Punjab)	50

Negotiations which were opened for the grant of concessions for the construction of the Shibnibash (Kissengunge)-Kotchandpur-Magura railway, (Bengal), 64 miles, and the Phulbari-Sumjhia railway, (Bengal), 13 miles, have not progressed.

The concession which was granted for the Tilagaon-Sylhet railway, (Assam), 39 miles, and the Akhaura-Bhairab Bazaar railway, (Bengal), 19 miles, has lapsed, while the negotiations for the Fatehpur-Markundi railway, (United Provinces), 61 miles, have been dropped by the Promoters.

Earnings per mile per week.
App. 6.
Income of each railway.
App. 7.

11. In Appendix 6 are recorded the gross earnings per mile per week of each railway from the date of opening and the proportion of the working expenses to the gross earnings, and in Appendix 7, the subsidies and rebates received by assisted lines under the Branch Line terms, and the time each line took in earning enough to be independent of such assistance.

Railway surveys.

Railway surveys.

12. The following surveys were completed during 1902 :

Bengal-Nagpur railway.—Lines from (1) Gondia to Chanda, 130 miles; (2) Nagpur to Brahmपुरi, 55 miles; and (3) the Bankura-Calcutta Chord, 130 miles; all on the 5' 6" gauge.

Bombay, Baroda and Central India railway system.—A line from Ranu on the Padra-Mhoba extension of the Gaekwar's Dabhoi railway to Dabka, 5.80 miles, on the 2' 6" gauge.

Burma railways.—Lines from (1) Pegu to Martaban and Moulmein, 114 miles; (2) Pegu to Syriam and Dalla to Dedaye, 138 miles; and (3) Thazi to

Eastern Bengal State railway.—(1) Chitpore terminal improvements including the branches to Cossipur Road and Ultadingi, 4 miles; (2) a chord line from Narculdanga to a point of junction with the main line south of Gobra road overbridge on the Southern section, 1·69 miles; (3) a chord line from Kancoorgachi block station to a point of junction with the main line near No. 3 overbridge on the Southern section, 2·26 miles; all on the 5' 6" gauge.

East Indian railway.—Lines from (1) Ondal to Bancola, 7·10 miles; (2) mile 170½ on the Jherriah branch to Chandore, 4·16 miles; (3) Bhagalpur to Barari ghat, 2·14 miles; (4) Tasra siding, 2·36 miles; (5) Direct access to Agra City, 3 miles; and (6) reconnaissance survey from Gya to Katwa, 250½ miles; all on the 5' 6" gauge.

Madras railway.—The final location survey of the Azhikal-Mangalore extension, 77·27 miles, on the 5' 6" gauge.

Morvi railway.—A preliminary survey between Wadhwan and Than *via* Tikar, 31 miles, on the 3' 3½" gauge.

North Western State railway.—Lower Sind Extension from (1) Hyderabad to Badin, 61 miles; (2) Hyderabad *via* Badin to Sarani, 72 miles; (3) Badin to Jungshai, 70 miles; and (4) Tando Mohammad Khan to Mirpore-Batora, 33 miles; all on the 5' 6" gauge.

Oudh and Rohilkhand State railway.—A line from Hardoi to Sandi, 14·39 miles, on the 5' 6" gauge.

Southern Mahratta railway.—A light railway from Guntur to Repalle, 38 miles.

Tarakeshwar-Magra railway.—A branch line from Magra to Tribeni, 2·15 miles, on the 2' 6" gauge.

13. The following surveys are in progress:

Assam-Bengal railway.—A line from Kalaura or Tilagaon to Fenchuganj and thence to Sylhet, 34 miles, on the 3' 3½" gauge.

Bengal and North-Western railway.—A branch line from Burhwal to Sitapur, 58 miles, on the 3' 3½" gauge.

Bombay, Baroda and Central India railway system.—A line from Vijapur on the Vijapur-Kalol-Kadi railway to Zankavao, 37½ miles, on the 2' 6" gauge.

East Indian railway.—A line from Hariharpur to Asansol, 52·35 miles, on the 5' 6" gauge.

Great Indian Peninsula railway.—A railway from Itarsi to Warungal comprising lines from (1) Itarsi to Nagpur, 200 miles; (2) Multai to Wardha, 91 miles; (3) Warora to Bellarpur, 160 miles; and (4) Bellarpur to Warungal, 38 miles; all on the 5' 6" gauge.

North Western State railway.—(1) Southern section of the Jech Doab railway from Sargodha to Shorekot Road or Toba Tek Singh, 105 miles, on the 5' 6" gauge; (2) extension of the proposed Amritsar-Tarn Taran railway from Tarn Taran to the site of the Hariki Weir near Sobraon, on the 5' 6" gauge, and a reconnaissance of two alternative extensions from Sobraon to Ganda Singh Wala and Tarn Taran to Putti Kasur, on the 5' 6" gauge; (3) Ferozepore to MacLeod Ganj, 90 miles, on the 5' 6" gauge; (4) chord line from Shahdera (Lahore) to Lyallpur, 72 miles, on the 5' 6" gauge, and an alternative from Shahdera to Sangla, 52 miles, on the 5' 6" gauge; and (5) an extension of the proposed Jullundur-Hoshiarpore-Kapurthala railway from Kapurthala to Sultanpur, on the 2' 6" gauge.

Oudh and Rohilkhand State railway.—A branch line from Gujraula to Chandpur, 21 miles, on the 5' 6" gauge.

South Indian railway.—An extension of the Pamban branch to Rameswaram 10 miles, on the 3' 3½" gauge.

Capital.
App. 7 & 11.

Capital.

Capital outlay.
App. 7 & 11.

14. The total expenditure borne against Capital, both on railways open and railways under construction, to the close of the calendar year 1902 was Rs. 3,53,91,28,709 made up as follows :

	MILEAGE.*			CAPITAL OUTLAY TO CLOSE OF YEAR.		
	Open.	Under construction.	Total.	Open lines.	Lines under construction.	Total.
				Rs.	Rs.	Rs.
Guaranteed railways under old contracts	1,348'78	61'07	1,409'85	24,87,95,438	81,07,210	25,69,02,648†
Guaranteed railways under new contracts	91'41	...	91'41	57,54,479	...	57,54,479
State lines worked by Companies	13,668'11	625'96	14,294'07	1,95,51,64,692	6,57,48,487	2,02,09,13,179
State lines worked by the State... ..	5,201'05	541'60	5,742'65	82,44,12,854	2,06,66,547	84,50,79,401
Assisted Companies	2,227'38	140'91	2,368'29	15,33,48,022	1,25,24,776	16,58,72,798
Native State lines	3,217'45	79'26	3,296'71	17,92,08,088	17,75,824	18,09,83,912
Lines in Foreign territory	73'61	...	73'61	1,76,01,122	...	1,76,01,122
District Boards' lines	71'11	33'88	104'99	31,58,026	6,60,176	38,18,202
Total open lines and lines partly open	25,898'90	1,482'68	27,381'58	3,38,74,42,721	10,94,83,020	3,49,69,25,741
Railways wholly under construction ... ..	...	707'25	707'25	...	2,40,70,418	2,40,70,418
Grand total outlay on railways ... ..	...	2,189'93	28,088'83	3,38,74,42,721	13,35,53,438	3,52,09,96,159
Unclassified expenditure including surveys and collieries ... ..	...	...	...	...	...	1,81,32,550
Grand total capital outlay in India ... ..	...	...	...	3,38,74,42,721	13,35,53,438	3,53,91,28,709

sterling capital.
App. 8.

15. The total sterling capital raised by Companies and paid over to the Secretary of State up to the close of the calendar year 1902, and the amount subsequently withdrawn for expenditure by Companies during and up to the close of the calendar year 1902 were as follows :

	Amount raised up to 31st December 1902.	Amount withdrawn in 1902.	Amount withdrawn up to 31st December 1902.
	£	£	£
Guaranteed railways	22,411,054	445,313	22,954,421
State lines leased to Companies	33,564,178	1,773,931	37,773,035
TOTAL	55,975,232	2,219,244	60,727,456

Budget allotments for capital expenditure.
App. 9.

16. The total budget allotment for the official year 1901-1902 was originally Rs. 10,32,44,000, but was subsequently reduced to Rs. 9,38,55,000. For the official year 1902-1903 it was Rs. 11,00,00,000, but this was afterwards reduced to Rs. 10,34,58,000 owing to short outlay in England against the amounts placed at the disposal of the Secretary of State and some of the Railway Companies' Boards for purchase of rolling-stock, stores, etc., and as intimation of the failure to spend the money allotted was not received until December, it was not possible to utilise the surplus in India.

* Excludes railways on account of which no capital outlay is recorded.

† Excludes the State outlay on the Patri Branch which is included under "Unclassified expenditure."

Capital

17. The actual capital expenditure during the calendar year 1902 on railways for the financing of which the State is responsible, amounted to Rs. 9,94,00,000, the gross capital outlay on all railways in India during the same period being Rs. 11,59,00,000. This amount was spent in constructing 2,869 miles of railway, 566 miles of which were completed and opened for traffic during the year, and in providing additional rolling-stock and other facilities for carrying the growing traffic of the several railways.

Capital expenditure in 1902.
App. 10.

18. For the official year 1903-1904 provision has been made in the "Railway Programme," that is, for capital expenditure on railways for which the State finds the funds either by direct payment or by guarantee, as follows :

Budget allotments for 1903-04.

	Rs.
For expenditure on open lines	(a) 5,76,68,000
" " " lines under construction	4,44,24,000
" " " new lines proposed to be begun in 1903-04	79,08,000
TOTAL	11,00,00,000

19. In framing this "Programme," the amount required to meet the needs of open lines, so far as they can be foreseen, has been regarded as a first charge upon the money available for railway purposes, and every effort has been made to provide in full for all demands arising out of the development of existing traffic; next in order, provision has been made for the steady prosecution and early completion of lines in progress, preference under this head being given to Companies' lines over those under construction by the agency of the State and, lastly, provision has been made for new projects for which the State provides funds.

20. In Appendix No. 10 is presented the capital expenditure during the past ten years on each railway in India on—

Capital expenditure on new lines, etc.
App. 10.

- (a) New lines in extension of, or now worked by, existing lines.
- (b) Rolling-stock.
- (c) Improvement of existing lines.

Summarised, the figures are as follows :

EXPENDITURE in lakhs ON LINES WHICH ARE INCLUDED IN THE "RAILWAY PROGRAMME," THAT IS, FOR WHICH THE STATE FINDS OR GUARANTEES THE FUNDS.							EXPENDITURE in lakhs ON PRIVATE COMPANIES' LINES OR NATIVE STATES' LINES, WHICH FALL OUTSIDE THE "RAILWAY PROGRAMME."						
YEAR.	Rolling-stock.	Improvement of existing lines.	Suspense.	Total improvements 3+3+4.	New lines in extension of, or now worked by, existing lines.	Total capital expenditure 5+6.	Total capital expenditure 12+13.	Rolling-stock.	Improvement of existing lines.	Suspense.	Total improvements 9+10+11.	New lines in extension of, or now worked by, existing lines.	
1	2	3	4	5	6	7	8	9	10	11	12	13	
1893	70	1,06	8	1,84	2,03	3,87	47	4	12	—8	8	39	
1894	45	1,83	41	2,69	2,83	5,52	60	...	10	—3	7	53	
1895	91	1,10	34	2,35	3,44	5,79	1,66	7	10	22	39	1,27	
1896	65	1,42	36	2,63	4,17	6,80	2,38	14	3	30	47	1,91	
1897	1,25	1,38	33	3,16	5,56	8,72	3,09	12	11	12	35	2,74	
1898	1,20	1,05	—39	1,66	5,45	7,11	3,33	24	17	9	50	2,83	
1899	2,25	1,50	—7	3,68	5,72	9,40	3,00	43	10	—8	45	2,55	
1900	1,49	1,56	23	3,28	4,15	7,43	1,57	29	13	—13	29	1,28	
1901	1,74	1,82	53	4,09	3,73	7,82	1,83	125	29	—2	52	1,31	
1902	2,56	2,15	35	5,06	4,88	9,94	1,65	28	10	—6	42	1,23	

(a) Includes reserve of Rs. 74,08,000 for new lines.

Traffic and earnings.**Passenger traffic.**

It will be seen from the foregoing statement, that for many years the amount of money which was available for capital expenditure was so limited, that the larger portion of it had to be devoted to new lines if any progress was to be made in railway construction. But the needs of existing lines yearly grew more pressing, and to meet them, without at the same time retarding the construction of new lines, the "Railway Programme" has from time to time been increased, until it now stands, as has been shown in paragraph 18, at 11 crores of rupees for the official year 1903-04, over half of which has been appropriated to the improvement of existing lines.

Capital outlay under heads of account.

App. 11.

21. The Capital outlay under the several heads of expenditure on railways, both open and still under construction, up to the close of the calendar year 1902, is presented in Appendix 11.

Traffic and earnings.

Traffic and earnings.

App. 12 and 13.

22. The following statement shows the volume of the traffic, the average distance it was carried and the earnings under the several heads of account during the past five years :

YEAR.	Open mileage.	COACHING (PASSENGER) TRAFFIC.			Earnings from other coaching traffic in thousands of rupees.	GOODS TRAFFIC.			Electric telegraph in thousands of rupees.	Steam-boat and sundries in thousands of rupees.	Gross earnings from all sources in thousands of rupees.
		Number of passengers in thousands.	Earnings in thousands of rupees.	Average miles carried.		Tons in thousands.	Earnings in thousands of rupees.	Average miles carried.			
1898	22,024 ⁹	151,566	7,58,68	38'53	1,10,28	35,642	17,84,97	160'25	7,49	79,89	27,41,31
1899	23,507 ⁹	161,720	8,09,39	38'48	1,13,19	39,748	19,19,82	155'15	8,70	85,68	29,36,78
1900	24,704 [†]	176,308	8,95,07	40'09	1,31,37	42,896	20,36,52	154'94	7,93	83,43	31,54,32
1901	25,332 [‡]	194,749	10,07,17	40'42	1,34,71	43,392	21,23,67	162'75	7,49	87,34	33,60,38
1902	25,898 [‡]	196,648	10,27,48	40'03	1,47,60	45,537	21,23,41	157'54	7,32	86,88	33,92,69

General remarks.

23. With 566 miles added to the railway systems, the total earnings exceeded those of 1901 by about one per cent.

The increase in earnings was contributed wholly by coaching traffic, under which head there would have been still better results had the spread of plague not rendered it necessary to restrict gatherings at the larger fairs.

In the earnings from goods traffic there was a slight decline, although a greater tonnage was carried under all heads, except coal. This is commented upon in paragraph 28.

Passenger traffic.

Passenger traffic.

App. 12, 13, 14 and 15.

24. Turning to the details of traffic, the following table shows the number of passengers of each class carried, the earnings therefrom, and the average rate charged each passenger :

YEAR.	NUMBER CARRIED IN THOUSANDS.					EARNINGS IN THOUSANDS OF RUPEES.					AVERAGE RATE CHARGED PER MILE (INCLUDING SEASON AND VENDORS' TICKETS IN PIES).			
	ORDINARY PASSENGERS.				Season and vendors' tickets.	ORDINARY PASSENGERS.				Season and vendors' tickets.	1st.	2nd.	Inter.	3rd.
	1st.	2nd.	Inter.	3rd.		1st.	2nd.	Inter.	3rd.					
1898	611	2,253	5,073	131,512	12,117	31,24	45,28	49,49	6,25,52	7,15	12'40	4'93	3'13	2'29
1899	526	2,352	5,233	140,321	13,288	31,52	46,97	52,08	6,70,81	8,01	12'39	5'32	3'07	2'30
1900	521	2,285	5,703	153,954	13,845	31,83	47,08	56,03	7,51,66	8,47	12'39	5'49	3'11	2'31
1901	532	2,405	6,670	170,416	14,726	32,78	52,43	64,39	8,48,25	9,32	12'75	5'49	3'09	2'31
1902	563	2,530	6,813	171,716	15,026	38,57	56,59	67,60	8,54,97	9,75	12'86	5'21	3'11	2'33

* Excludes the Cherra-Companyganj and Thaton-Duyinzaik Light railways.

† Excludes the Thaton-Duyinzaik and Powayan Light railways.

‡ Excludes the Thaton-Duyinzaik and Parlakimedi Light railways.

Passenger
traffic.
Goods
traffic.

25. Compared with the previous year, the passenger traffic increased as under :

	Number.	Earnings. Rs.
First class	31,000	5,79,000
Second class	125,000	4,16,000
Intermediate class	143,000	3,21,000
Third class	1,300,000	6,72,000
Season tickets	300,000	43,000
	<u>1,899,000</u>	<u>20,31,000</u>

Although there was a comparatively small increase in the number of first class passengers carried, the additional revenue derived by railways was only Rs. 93,000 less than that derived from the carriage of 1,300,000 additional third class passengers.

The majority of railways report an improvement, a sign that passenger traffic continues to develop generally. Other factors were the opening of new lines and the Coronation Durbar held at Delhi in the early part of January 1903.

The lines which recorded the larger increases were the North Western State, Great Indian Peninsula, Madras, Bengal and North-Western, Southern Mahratta and South Indian railways. The East Indian railway appears on the other side of the account, principally owing to a fall in its pilgrim traffic.

The total number of passengers slightly exceeded 196½ millions, of which 171½ millions, or 87·32 per cent., were third class passengers.

26. It may be of interest to record here the growth of passenger traffic during the last twenty years, and the reduction in the average rate charged per passenger per mile.

YEAR.	OPEN MILEAGE.	NUMBER CARRIED IN THOUSANDS.	EARNINGS IN THOUSANDS OF RUPEES.	AVERAGE RATE CHARGED PER MILE IN PIES.
1882	10,149	58,876	4,64,41	3·08
1887	14,103	95,412	6,03,11	2·83
1892	17,815	127,388	6,91,15	2·52
1897	21,115	150,584	7,61,95	2·47
1902	25,898	196,648	10,27,48	2·50

This represents an increase of 155 per cent. in the mileage, of 230 per cent. in numbers, and of 121 per cent. in earnings, while the average rate charged has decreased by 19 per cent., as compared with 1882.

Goods traffic.

27. The quantity of goods carried and the earnings therefrom are shown under the several heads in the following table :

Goods traffic.
App. 18, 13, 16 and 17.

YEAR.	QUANTITY CARRIED IN THOUSANDS OF TONS.					EARNINGS IN THOUSANDS OF RUPEES.				
	General merchandise.	Coal and coke for the public and foreign railways.	Military stores.	Revenue stores, including coal and material for construction.	Total, including items not detailed.	General merchandise.	Coal and coke for the public and foreign railways.	Military stores.	Revenue stores, including coal and material for construction.	Total, including items not detailed.
1898	21,155	6,031	116	8,074	35,642	14,87,17	1,74,65	21,19	81,38	17,84,97
1899	23,902	6,221	59	9,330	39,748	16,10,55	1,80,41	13,11	94,11	19,19,82
1900	27,301	7,309	58	8,925	42,896	16,90,35	2,11,71	13,78	93,33	20,36,52
1901	25,458	8,249	63	9,528	43,392	17,53,14	2,35,01	14,97	96,41	21,23,67
1902	25,840	8,034	100	11,487	45,537	17,40,78	2,26,75	21,67	1,14,93	21,23,41

Goods traffic.

28. The total weight lifted increased, as compared with 1901, by 2,145,000 tons, while the earnings were less by Rs. 26,000.

A larger quantity of "General merchandise" was carried this year, but, owing to a reduction in the lead in many cases, the earnings under this head were not equal to those of last year. The principal losses occurred under *Grain and pulse* and *Rape and mustard seed*. The country's return to normal conditions rendered necessary a smaller movement in the lower classes of food stuffs, and the loss in this traffic was felt by many railways, but chiefly by the Rajputana-Malwa, the Great Indian Peninsula, the North Western State, the Bombay, Baroda and Central India, and the Oudh and Rohilkhand State railways. Further, railways lying in Bengal earned considerably less from rice, because of the partial failure of the crops in some districts. Wheat on the other hand was more largely exported from Kurrachee and Bombay, which helped to reduce the deficit under *Grain and pulse*.

There was little or no movement to the ports of *Rape and mustard seed*, and the railways most effected thereby were the North Western State, the Rajputana-Malwa, and the East Indian.

29. The East Indian railway accounts for the entire loss under coal, there having been a lull in its export to places where stocks have accumulated, notwithstanding that the rates for coal were reduced from the 17th August 1902.

Coal.
App. 16, 17, 28 and 29.

The output from the collieries increased from 6,635,727 tons in 1901 to 7,360,405 tons in 1902. Exports to Indian ports proper fell from 1,157,892 tons to 974,602 tons, but English coal successfully competed at Bombay principally, with Indian coal, as its imports rose from 112,519 tons to 198,574 tons. The exports to other ports including Burma fell from 845,953 to 728,316 tons, and the imports of other than English coal from 79,108 tons to 20,773 tons.

The quantity of Indian coal consumed by railways increased from 1,956,631 tons to 2,096,095 tons.

30. There was a considerable rise in the earnings from "Military stores," due mainly to the carriage of larger quantities of grass and fodder.

Military stores. App. 16 and 17.

31. The increase under "Revenue stores and material" was derived principally from the carriage of railway material for the Jech-Doab, the Satpura, the Midnapur-Jherriah and the Eastern Bengal State railways for construction purposes. The material for renewals of rolling-stock and permanent-way was also carried in larger quantities, chiefly over the East Indian railway.

Revenue stores and material for construction.
App. 16 and 17.

Principal commodities.
App. 18 and 19.

32. The classified items which contributed most towards the earnings of the year, and their figures in 1901 are given below:

	1902.		1901.	
	Quantity.	Earnings.	Quantity	Earnings.
	Tons.	Rs.	Tons.	Rs.
Grain and pulse	7,539,816	4,88,50,998	8,027,180	5,13,48,342
Coal	8,026,590	2,26,76,009	8,245,804	2,35,01,922
Cotton, raw and manufactured	1,455,869	2,25,27,624	1,348,705	2,20,72,238
Oil seeds	2,356,418	1,65,28,043	2,447,160	1,88,41,600
Sugar	1,378,871	1,07,26,791	1,444,311	1,13,04,219
Salt	1,616,163	95,15,866	1,626,590	93,85,896

The total weight of these six staples amounts to 22,373,727 tons or 67.55 per cent. of the traffic carried for the public, and their earnings were Rs. 13,08,25,331 or 65.77 per cent. of the gross earnings therefrom. These figures in 1901 were 23,139,750 tons (70.11 per cent.) and Rs. 13,64,54,217 (68.12 per cent.).

The first, second and fourth commodities have been remarked upon already.

Cotton, raw and manufactured.—The earnings under this head improved by a little over 4½ lakhs of rupees, entirely because more raw cotton was exported this year. The lines which earned most thereby were the Rajputana-Malwa, the Bombay, Baroda and Central India, the Southern Mahratta and the East Indian railways.

There was a better traffic in Indian twist and yarn. In piece goods, both European and Indian, while the tonnage increased the earnings decreased, owing to the traffic having been carried for shorter distances.

Sugar.—The decrease of nearly 8 lakhs of rupees in the earnings from *gur, rab, jaggery*, etc., was borne almost entirely by the Great Indian Peninsula and the Rajputana-Malwa railways, the crop not having been as good as it was last year. In the case of the Great Indian Peninsula railway, an additional reason was the reduction in freight charges. The North Western State railway reports a larger traffic in refined sugar, chiefly Austrian.

Salt.—The increase was shared between the Bengal-Nagpur and the Great Indian Peninsula railways. The former carried increased quantities of Ganjam and Bhyander, as also Liverpool salt, and the latter secured a longer lead for its traffic.

The principal fluctuations were :

	INCREASE.		DECREASE.	
	Quantity.	Earnings.	Quantity.	Earnings.
	Tons.	Rs.	Tons.	Rs.
Grain and pulse . . . . .	...	...	487,364	24,97,344
Oil seeds . . . . .	...	...	90,742	23,13,557
Metals	151,308	13,90,295	...	...
Jute	186,979	11,93,946	...	...
Coal . . . . .	...	...	219,214	8,25,913
Sugar . . . . .	...	...	65,440	5,77,428
Wood	96,969	5,01,555	...	...
Cotton (raw)	91,993	4,82,861	...	...
Fodder	35,939	4,32,671	..	...

The more important items in the above statement, which have not already been remarked upon, are *Metals* and *Jute*.

Metals.—There was an improvement under all the sub-heads of *metals*. The carriage of Manganese ore to Bombay and Vizagapatam for export, and of "wrought" and "manufactured" iron *via* Kurrachee for the Jech-Doab railway, and *via* Bombay for stations on the Indian Midland railway, gave the largest increases.

Jute.—The Eastern Bengal State and the East Indian railways are the principal carriers of this article, and the increased earnings recorded by them were due chiefly to native dealers getting rid, in the early part of the year, of stocks held over on account of a dull market towards the close of the previous year.

33. The following statement shows, the development of goods traffic during the last twenty years :

YEAR.	MILEAGE OPEN.	QUANTITY CARRIED IN THOUSANDS OF TONS.	EARNINGS IN THOUSANDS OF RUPEES.	AVERAGE RATE CHARGED PER MILE IN PIES.
1882	10,149	14,833	10,15,97	7'91
1887	14,103	20,196	11,92,93	7'17
1892	17,815	26,335	14,77,52	6'70
1897	21,115	33,926	15,88,89	6'36
1902	25,898	45,537	21,23,41	5'68

While the mileage has increased 155 per cent., tonnage has increased 207 per cent., earnings 109 per cent., and the average rate has fallen 28 per cent.

Fares and rates.

Train, vehicle and ton mileage.

Fares and rates.

34. With a view to the development of the coal industry in India, the following reduced scale of rates for coal, coke and patent fuel, at owner's risk, in full wagon loads, subject to a minimum charge of $\frac{1}{10}$ th pie per maund per mile on the through distance, were introduced on the East Indian, Eastern Bengal State, Bengal-Nagpur, Oudh and Rohilkhand State, and North Western State railways, with effect from the 17th August 1902 :

	Pie per maund per mile.
For all distances up to 75 miles inclusive	0'14
Plus for any distance in excess of 75 miles and up to 200 miles, inclusive	0'12
Plus for any distance in excess of 200 miles and up to 450 miles, inclusive	0'10
Plus for any distance in excess of 450 miles and up to 1,000 miles, inclusive	0'09

and rebates on coal other than export coal, were discontinued from the same date.

These rates were also adopted by the administration of the Bengal Central railway in bookings from colliery stations to Khoodna, *via* Khoodna and *via* Jhikergacha Ghât only.

Train, vehicle and ton mileage.

Train, vehicle & ton mileage.
App. 20 and 21.

35. The following table shows the train, vehicle and ton mileage of coaching and goods traffic :

YEAR	TRAIN-MILEAGE. (OMITTING 000.)				VEHICLE-MILEAGE. (OMITTING 000.)			TON-MILEAGE. (OMITTING 000.)		
	Coaching.	Goods.	Mixed	Total including miscellaneous train-mileage.	Coaching.	Goods.	Total.	Coaching.	Goods.	Total.
1898	16,620	28,024	25,449	71,520	551,861	1,102,030	1,653,891	6,468,321	14,604,953	21,073,274
1899	17,039	30,612	26,879	77,207	571,119	1,213,611	1,784,730	6,800,273	15,909,787	22,710,060
1900	18,114	34,252	28,827	84,193	612,017	1,323,001	1,935,018	7,326,297	17,231,511	24,557,808
1901	19,701	34,274	31,561	88,265	670,834	1,325,839	1,996,673	8,147,469	17,956,732	26,104,201
1902	21,588	35,935	31,781	92,527	742,965	1,354,473	2,097,438	8,958,193	18,764,575	27,722,768

36. The mileage in each case was greater than in the previous year, due to more traffic having been carried, and also in the case of train-mileage to the opening of new lines.

The increases in the number of passengers, the earnings therefrom and the passenger train-mileage were 0'98 per cent., 2'02 per cent. and 9'58 per cent., respectively. The improvement reported by some railways in long distance traffic, and the increases in the higher classes of passengers account for the earnings having improved in greater proportion to numbers; but the increase in train-mileage points to the running of unnecessary trains (unnecessary perhaps only at present), since the average number of passengers in a train has fallen in several cases.

The tonnage of goods traffic increased by 4'94 per cent., the train-mileage by 4'85 per cent. while the earnings decreased by 0'01 per cent. The carriage of a greater quantity of "General merchandise" over shorter distances and of "Revenue stores and material" which give a small return, explain these figures.

Earnings per mile worked and per train-mile.
App. 12, 22 and 23.

37. The gross earnings per mile worked and per train-mile showed a decrease and were as follows :

YEAR.	PER MILE WORKED.			PER TRAIN-MILE.
	Gross earnings, excluding steam-boat, in rupees.			
	Coaching.	Goods.	Total, including "other earnings", except steam-boat.	Gross earnings, excluding steam-boat, in rupees.
1898	4,046	8,312	12,703	3'81
1899	4,038	8,405	12,788	3'78
1900	4,254	8,444	13,007	3'73
1901	4,517	8,404	13,236	3'79
1902	4,589	8,293	13,188	3'65

Working expenses.

38. The working expenditure on all railways taken collectively is shown in the following table :

Working expenses.

App. 12, 24, 25,
26 and 27.

Year.	Working expenses in thousands of rupees.	Proportion per cent. of working expenses to gross earnings.	Working expenses, excluding steam-boat, per mile worked in rupees.	Working expenses, excluding steam-boat, per train-mile in rupees.
1898	12,98,68	47.37	6,003	1.80
1899	13,93,36	47.45	6,055	1.79
1900	15,09,31	47.85	6,204	1.78
1901	15,72,45	46.79	6,179	1.77
1902	16,70,49	49.24	6,472	1.79

Increases appear in the expenditure of all departments, but principally in those connected with the up-keep of the permanent-way and rolling-stock. This is due to the heavy renewals some of the older railways are now called upon to undertake. A portion of the increase was also occasioned by a larger traffic.

39. There was an improvement in some respects in the prices paid for material, as the following table shows :

Year.	IRON.								STEEL.			
	BAR.		PIG.		PLATE.		SHEET.		MILD BAR.		RAIL.	
	Highest. Tons.	Lowest. Tons.	Highest. Tons.	Lowest. Tons.	Highest. Tons.	Lowest. Tons.	Highest. Tons.	Lowest. Tons.	Highest. Tons.	Lowest. Tons.	Highest. Tons.	Lowest. Tons.
1898	8 5 0	6 10 0	2 12 6	2 12 6	9 0 0	6 11 3	10 0 0	7 7 6	7 7 6	5 7 6	5 5 0	4 7 6
1899	10 10 0	8 0 0	3 19 0	3 16 0	11 0 0	9 0 0	11 0 0	9 10 0	10 5 0	6 15 0	7 2 6	4 12 0
1900	10 15 0	10 10 0	3 16 6	3 16 6	13 0 0	11 10 0	12 17 6	11 4 0	12 5 0	7 17 6	7 10 0	6 0 0
1901	9 10 0	7 2 6	3 7 6	3 6 6	9 10 6	7 12 6	9 5 0	7 12 6	9 0 0	5 9 6	7 2 6	5 5 6
1902	9 10 0	6 14 6	3 5 0	3 0 0	8 10 0	7 12 6	9 5 0	7 12 6	9 0 0	5 9 6	6 3 0	5 2 6
Difference between 1901 and 1902,	—	— 8 0	— 2 6	— 6 6	— 1 0 6	—	—	—	—	—	— 17 6	— 3 0
Decrease per cent.	—	56	37	98	10.5	—	—	—	—	—	11.3	1.8

40. As anticipated in the last report, the quantity of coal imported for consumption by railways, rose slightly, but the total quantity is inconsiderable when compared with that of Indian coal, as will be seen from the following statement :

Coal.
App. 28 and 29

Year.	Foreign coal consumed by railways.	Indian coal consumed by railways.
1898	Tons. 39,055	Tons. 1,418,241
1899	83,939	1,560,771
1900	56,589	1,858,061
1901	13,248	1,956,631
1902	23,417	2,096,095

41. The railways which own collieries are the East Indian and the North Western State railways, but the latter railway has to look elsewhere for the greater portion of its supply, as the outturn of its collieries is small.

Collieries owned
by railways or the
State.

App. 30.

**Working expenses.
Net earnings.**

Working expenses by departments, App. 24, 25, 26 and 27.

42. The working expenses in the different departments of the railways treated as one system are shown in the following table. (The totals are shown in paragraph 38):

YEAR.	ENGINEERING.			LOCOMOTIVE.			CARRIAGE AND WAGON.			TRAFFIC.			GENERAL.		
	Per cent. on gross earnings.	Per mile worked.	Per train-mile.	Per cent. on gross earnings.	Per mile worked.	Per train-mile.	Per cent. on gross earnings.	Per mile worked.	Per train-mile.	Per cent. on gross earnings.	Per mile worked.	Per train-mile.	Per cent. on gross earnings.	Per mile worked.	Per train-mile.
		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.
1898 .	11'44	1,461	0'44	15'67	2,000	0'60	4'87	621	0'19	8'01	1,022	0'31	4'98	635	0'19
1899 .	11'66	1,499	0'44	16'05	2,064	0'61	4'56	587	0'17	7'85	1,010	0'30	4'85	623	0'18
1900 .	11'47	1,500	0'43	16'69	2,183	0'63	4'42	578	0'17	7'90	1,034	0'30	4'67	611	0'18
1901 .	10'59	1,408	0'40	16'64	2,214	0'63	4'52	601	0'17	7'85	1,044	0'30	4'70	625	0'18
1902 .	11'49	1,522	0'42	17'06	2,261	0'62	5'20	689	0'19	8'07	1,069	0'30	4'83	639	0'18

These results are not unsatisfactory, since the increases under the first, second and third heads are attributable in a great measure to renewals of permanent-way and rolling-stock.

The figures connected with these results are, for individual railways, presented in Appendices 24, 25, 26 and 27.

Net earnings.

Net earnings. App. 12 and 13.

43. Turning now to the net earnings, the following table shows what the net earnings were, and what return they would have yielded on the capital expenditure if all the railways in India were treated as one undertaking. The decrease in net earnings was due to the working expenses having risen in a much higher proportion than the increase in the gross earnings:

Year.	Net earnings in thousands of rupees.	Percentage of net earnings on capital outlay.	NET EARNINGS, EXCLUDING STEAM-BOAT, IN RUPEES.	
			Per mile worked.	Per train-mile.
1898 .	14,42,63	4'94	6,700	2'01
1899 .	15,43,42	5'00	6,733	1'99
1900 .	16,45,01	4'99	6,803	1'95
1901 .	17,87,93	5'27	7,057	2'02
1902 .	17,22,20	4'92	6,718	1'86

44. Recapitulated, the results show an increase in 1902 over 1901 in—

Mileage open of 2'23 per cent.

Coaching traffic—

Passengers, number of— 0'98 "

Train-mileage 9'58 "

Gross earnings from passengers 2'02 "

Goods traffic—

Tonnage 4'94 "

Train-mileage 4'85 "

Working expenses 6'23 "

and a decrease in—

Gross earnings from goods traffic 0'01 "

Net earnings 3'68 "

Summary.

45. Summarised, the general results of working Indian railways during the five years 1898-1902 were as follows:

General results.
App. 7 and 12.

Year.	Mileage open on 31st December.	Gross earnings. (Omitting 000.)	Working expenses. (Omitting 000.)	Net earnings. (Omitting 000.)	Per cent. of net earnings on outlay.	Pro: per cent. of expenses to gross earnings.	PER MILE WORKED. (IN RUPEES.)			PER TRAIN-MILE. (IN RUPEES.)			Gain or loss to State. (Omitting 000.)
							Gross earnings.	Working expenses.	Net earnings.	Gross earnings.	Working expenses.	Net earnings.	
		Rs.	Rs.	Rs.									Rs.
1898	22,024	27,41,31	12,98,68	14,42,63	4'94	47'37	12,703	6,003	6,700	3'81	1'80	2'01	-1,11,63
1899	23,507	29,36,78	13,93,36	15,43,42	5'00	47'45	12,788	6,055	6,733	3'78	1'79	1'99	-46,06
1900	24,704	31,54,32	15,09,31	16,45,01	4'99	47'85	13,007	6,204	6,803	3'73	1'78	1'95	+8,72
1901	25,332	33,60,38	15,72,45	17,87,93	5'27	46'79	13,236	6,179	7,057	3'79	1'77	2'02	+1,15,41
1902	25,898	33,92,69	16,70,49	17,22,20	4'92	49'24	13,188	6,472	6,718	3'65	1'79	1'86	+20,42

46. As compared with last year, while the gross earnings increased, the net earnings, owing to increased expenditure, decreased, but the net result was a gain to the State of Rs. 20,41,636. That the gain was so much less this year was due chiefly to a larger amount having been spent in improving the property of the State.

PART II.

MISCELLANEOUS.

Chief events of the year.

47. The chief events of the year are recorded below :

Report on the working of Indian railways.—Mr. T. Robertson, C.V.O., who had been appointed by His Majesty's Secretary of State for India to investigate the difficulties which exist in the management of Indian railways financially or otherwise, and to report on the best means of overcoming these difficulties, arrived in India in October 1901, and after certain investigations, left the country in April 1902, for the United States. He returned in November 1902, and his report, which was submitted in March 1903, is under the consideration of the Government of India.

Chamber of Indian railways.—A conference of railway delegates assembled at Calcutta in February 1902, to consider whether—

- (a) a permanent conference should be established independent of Government, with a paid Secretary and a President elected by the Members, and, if so,
- (b) what the name, powers and functions of this conference should be ; or
- (c) if they were unable to recommend the establishment of a permanent conference, whether the "Standing Committee" which was created under resolutions Nos. 51 and 3 of the conferences of 1899 and 1900, respectively, should be continued.

The conference recommended the adoption of proposal (a), and, as regards (b), suggested that the body be called "The Chamber of Indian railways." They also framed rules defining the functions of the proposed "Chamber of Indian railways." These have been referred to the Boards of the several railways and are still under their consideration.

Comforts of lower class passengers.—As stated in the previous report, the Government of India addressed railway administrations regarding the inconvenience and hardships experienced by lower class passengers, on account of the absence of latrine accommodation in carriages. It is recorded with satisfaction that railway administrations are giving the matter their earnest attention, and that satisfactory progress is being made in the provision of the required accommodation.

Ambulance institutions to aid passengers wounded in railway accidents.—During the year, instructions were given by the Madras Railway Company's Medical Officer in the art of rendering first aid to passengers wounded in railway accidents, and 22 employes obtained certificates of the St. John Ambulance Association. Ambulance classes were also established at Negapatam, Cuddalore, Villupuram and Madras by the South Indian Railway Company, and certificates were obtained by 47 employes.

Standardisation of locomotives.—Mr. C. W. Hodson, the Director of Railway Construction, was deputed, while in England, by His Majesty's Secretary of State for India to consult the English authorities in regard to—

- (i) the relaxation of the existing Standard Dimensions for Indian railways, as regards fixed and moving dimensions, and regulations regarding the strength of bridges and the axle loads and weight of rolling-stock ; and
- (ii) the placing of orders for rolling-stock in advance.

Mr. Hodson submitted his report to the Secretary of State and its recommendations are now under the consideration of the Government of India.

Agreements calculated to avoid or terminate rate wars.—An agreement was entered into between the East Indian and Bengal and North-Western Railway Companies for the interchange of traffic on the following general basis :

- (i) traffic originating on one of the two systems for delivery on or *via* that line, to be retained by it and not be competed for by the other system ;

- (ii) traffic originating on one of the two systems, for delivery on or *via* the other, to be made over by the booking system at the junction giving it the longest lead, the receiving line quoting tariff rates from that junction to destination.

A similar agreement was entered into between the Madras and South Indian Railway Companies on the following general basis:

- (i) the rates by the shortest route between any two stations to apply to all traffic between those stations, irrespective of the route by which it travelled;
- (ii) the sending railway to have power to select the route most advantageous to itself within a limit of 33 per cent. in excess of the shortest route mileage.

Contracts for working of lines executed.—On the 27th June 1901, an Indenture was executed for the construction and working by the South Indian Railway Company of the Pamban and Travancore branches.

On the 23rd January 1902, an Indenture was executed for the construction and working by the Bengal-Nagpur Railway Company of the Sini-Howrah, Midnapore-Cuttack, Midnapore-Jherria, Jubbulpore-Gondia and Raipur-Dhamtari extensions, and for the working of the Cuttack-Waltair section of the East Coast State railway.

On the 21st February 1902, an agreement was entered into between the administration of the Oudh and Rohilkhand State railway and the Bengal and North-Western Railway Company for the exercise by the latter of running powers over the Cawnpore-Burhwal, 3' 3½" gauge, link of the Oudh and Rohilkhand State railway.

On the 18th March, 1902, an agreement was entered into for the working of the West of India Portuguese railway by the Southern Mahratta Railway Company; the arrangement having effect from the 1st July 1902.

On the 25th March and 18th July 1902, Indentures were executed for the construction and working of the Sabarmati-Dholka Branch railway by the Bombay, Baroda and Central India Railway Company.

On the 27th March 1902, an Indenture was executed between the Government of the French Settlements in India and the South Indian Railway Company for the working of the Peralam-Karaikkal railway.

On the 17th May 1902, an agreement was executed for the working of the Cambay State railway, from Tarapur to Cambay, by the Bombay, Baroda and Central India Railway Company.

On the 23rd June 1902, an agreement was entered into between the administration of the Oudh and Rohilkhand State railway and the Great Indian Peninsula Railway Company for the exercise by the latter of running powers over the Cawnpore-Lucknow section of the Oudh and Rohilkhand State railway.

On the 1st August 1902, an agreement was entered into between the South Indian Railway Company and the British India Steam Navigation Company for the through booking between stations on the Railway Company's system and Colombo *via* Tuticorin, of coaching and goods traffic, excluding parcels, and of passengers, *via* the same route to London.

On the 26th August 1902, an Indenture was executed for the construction, maintenance and working by the Barsi Light Railway Company of two extensions of that railway, the one from Barsi Junction station to Pandharpur, and the other from Barsi Town station to Tadwalla.

On the 31st December 1902, an Indenture was executed for the maintenance, management and working by the Madras Railway Company of the Washermenpet (Madras)-Vizagapatam section of the East Coast State railway.

General.—On the 1st January 1902, the working of the Parlakimedi Light railway was made over to the Bengal-Nagpur Railway Company by the owning Native Chief.

On the 17th March 1902, the Mariani and Titabar junction stations of the Jorhat State railway were made over to the Assam-Bengal Railway Company for joint working.

**Chief events
of the year.**

From the 10th April 1902, through booking of goods traffic was introduced between the Eastern Bengal State and the Bengal-Nagpur railways *via* Dock Junction and the Shalimar wagon ferry.

Consequent on the opening of the Kaunia-Dhubri extension of the Eastern Bengal State railway, the section of the Kaunia-Dharila, 2' 6" gauge, branch from Kurigram to Jatrapur was abandoned from the 23rd September 1902, and through booking with the River Steam Navigation Company's Assam service was introduced *via* Dhubri Ghât instead of *via* Jatrapur.

On the 14th December 1902, through connection was established between the Kathiawar railways and the Rajputana-Malwa railway system by the conversion of the 5' 6" gauge line between Wadhwan and Viramgam to the 3' 3 $\frac{3}{8}$ " gauge.

Arrangements were concluded at the close of the year, for the purchase by the State of the property of the Nilgiri Railway Company on 1st January 1903.

Alternative line to the Jherria coal-fields and to Northern India.—In connection with the recommendation of the committee, referred to in the last report, which investigated the question of the entry of the Bengal-Nagpur railway into the Jherria coal-fields and the provision of an independent access to Calcutta from the United Provinces of Agra and Oudh, the following lines were sanctioned for construction:

(a) by the East Indian Railway Company—

Manpur (Gya) to Haribarpur,
Katrargarh to Khanoodih,*
Jherria to Dhanbaid,*
Northern half of the Mulkeera-Katrargarh cross connection,* and
Tasra siding* ; and

(b) by the Bengal-Nagpur Railway Company—

Bhjudih to Hariharpur,*
Bhjudih to Parthadihi,*
Bhjudih to Mhoda,*
Bhaga connection,*
Southern half of the Mulkeera-Katrargarh cross connection,* and
Bhowra siding.*

Madras famine lines.—With the object of increasing the facilities for distributing food to the population in the Madras Presidency and of lessening the difficulties and troubles incidental to periods of scarcity, sanction was accorded to the construction of feeder lines from Bellary and Hospet on the Southern Mahratta railway to Rayadrug and Kottur, respectively, and from Morrapur and Tirupattur on the Madras railway to Dharmapuri and Krishnagiri, respectively. The agency of the Southern Mahratta Railway Company is to be employed for the construction and working of the two former lines and that of the Madras Railway Company for the two latter lines.

North and South line connecting Ceylon and Upper India.—The Government of India appointed a commission, to sit in Madras in February 1903, chiefly to collect such evidence and information as will enable the commission to advise Government in regard to the general question of the best means of effecting 5' 6" gauge connection between the Indian system of 5' 6" gauge railways and the Ceylon railways on the same gauge; and also to report on (a) the best means for linking Mysore with Southern India; (b) the Podanur-Palni (or Dindigul) connection, and (c) the suggested conversion to 3' 3 $\frac{3}{8}$ " gauge of all the existing lines of railway west of Erode or Podanur.

Branch or feeder line terms.—The questions of the general revision of the terms for the construction, outside the Government of India "Programme," of branch or feeder lines of railway by private enterprise, of the construction of feeder lines by Local District Boards from taxes expressly levied for the purpose, and of the financing of such lines, are under consideration.

Important
works
completed.

Rolling-
stock.

Important works completed.

48. The following works of importance were completed during the year 1902 :

Bengal and North-Western railway system.—The Kosi bridge near Katihar (15 spans of 200-foot girders) on the Tirhoot section on the 10th July 1902 ; and the permanent Gogra bridge at Turtipur (18 spans of 200-foot girders) on the Company's section in December.

Bengal-Nagpur railway.—The wagon ferry between Shalimar and Kidderpore on the 10th April 1902 ; and the doubling of the line between Santragachi and Bauria, 10½ miles, on the 17th June 1902.

Bombay, Baroda and Central India railway.—The conversion of the line from Viramgam to Wadhwan, 39½ miles, from the 5' 6" to the 3' 3¾" gauge, on the 14th December 1902.

Eastern Bengal State railway.—The Dharlla bridge at Mogalhat (10 spans of 150-foot girders) on the 2nd January 1902.

East Indian railway.—The Amanat bridge on the Daltonganj extension (7 spans of 100-foot girders) on the 15th December 1902 ; the provision of additional crossing stations to allow of trains throughout the main line and the Jubulpore branch being worked on the "Absolute Block System" ; the triplication of the line between Boinchee and Debipur, 2.20 miles, on the 30th November 1902 ; and the doubling of the line between Ghaziabad and Shahdara, 2.10 miles, on the 1st July 1902.

Great Indian Peninsula railway system.—The extension of the gas works at Victoria Terminus ; and the building of the new station at Itarsi.

North Western railway.—The Kabul bridge at Nowshera (7 spans of 40-foot girders and 4 spans of 150-foot girders) on the 29th October 1902.

Rajputana-Malwa railway.—The removal of the locomotive shed and the tranship yard at Delhi from their old site in the Central station, to Serai Rohilla, 2½ miles out.

Southern Punjab railway.—The opening of a new station at Punjabi Serai, near Delhi, on the 20th December 1902.

49. Appendices 48 and 49 contain particulars of some of the important railway bridges and tunnels open for traffic on the 31st December 1902.

Bridges and
Tunnels.

App. 48 and 49.

Rolling-stock.

50. During 1901, 223 engines, 563 passenger carriages and 4,695 wagons were added to the rolling-stock of railways ; in 1902 a further addition of 205 engines, 684 passenger carriages and 5,023 wagons was made.

Rolling-stock.

App. 33, 33A,
and 34.

The total outlay on rolling-stock amounted at the close of 1902 to Rs. 47,86,60,000, or at the rate of Rs. 18,503 per mile open, as will be seen from Appendix No. 33. The additions under supply to meet further developments of traffic are shown at the foot of the same appendix, and amount to 505 engines, 1,129 passenger vehicles and 10,295 wagons.

Statistics of the work done by the rolling-stock of the principal railways are shown in Appendix 33-A.

51. During the year 1902, 228 engines and 766 vehicles were fitted with automatic brakes, making the number so fitted at the close of the same year 2,005 engines and 10,064 vehicles, as against 3,109 engines and 107,947 vehicles not yet fitted.

Automatic brakes.

App. 35.

52. During the year 1902, 1,503 vehicles were fitted with Pintsch's gas, making the total number so fitted at the close of the year 8,080, as compared with 7,924 not yet fitted.

Carriages lighted
by gas.

App. 36.

53. During the year under review, 71 stations were fitted with apparatus for interlocking points and signals. The progress in the introduction of automatic instruments for signalling trains between stations was more satisfactory this year ; 90 stations having been provided with these instruments.

Interlocking and
block working.

App. 37.

Accidents.

Accidents.

Accidents.
App. 38.

54. The following is a statement of accidents to persons which have occurred during the last five years :

YEAR.	PASSENGERS.						SERVANTS.						OTHER PERSONS.						Total all classes.					
	From accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.	From accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.	Whilst passing over railways at level crossings.		Tees-passers.	Suicides.	Miscellaneous, not included in preceding columns.		Total.							
	Killed.	Injured.	Killed.	Injured.		Killed.	Injured.	Killed.	Injured.		Killed.	Injured.			Killed.	Injured.		Killed.			Injured.	Killed.	Injured.	
1898.	6	66	63	188	69	254	23	69	174	309	487	371	26	9	428	139	38	8	11	18	533	174	819	799
1899.	7	86	60	191	67	227	30	92	182	339	522	431	21	10	445	149	103	6	25	23	594	188	863	896
1900.	14	85	83	258	97	343	21	84	236	384	627	468	32	17	698	236	164	8	17	35	911	296	1,265	1,106
1901.	3	47	91	251	94	298	44	83	261	375	637	458	41	17	542	180	129	19	33	18	745	214	1,114	970
1902.	117	184	98	289	225	473	37	95	269	364	636	459	29	16	542	162	108	5	21	26	700	209	1,231	1,141

Train accidents.

55. The following are particulars of the more serious accidents :

No. 81 mail train on the 12th September 1902 left Mangapatnam, at 3-29 A.M., Madras railway. with 147 passengers, 4 sorters, 2 guards, and 3 engine-men. At mile $\frac{205}{7-8}$ a short distance north of Mangapatnam, there was a skew bridge with three openings of 30 feet on the square. The line to the south of the bridge is on a curve of 19,800 feet radius, and on a falling gradient of 1 in 568. On the night in question there was, in a limited area, a sudden and violent fall of rain such as had never been approached in magnitude during the existence of the railway. The flood rose to the tops of the girders of 11' 8" over the river bed, washed away two spans of girders and overturned pier No. 2. The mail train with the exception of the rear brake van was precipitated into the gap, and 75 passengers and 4 railway servants were killed, while 6 passengers were injured. In addition to the destruction caused to the bridge, the line was breached at miles 205 $\frac{1}{4}$ and 207-6.

No. 19 up mixed train, while entering Khatauli station at 16-54 hours on the 31st North Western State rail. July 1902 was derailed at the facing points owing to the way. flange of the right leading wheel of the engine having worn sharp and to the speed of the train being in excess of the limit. The train was being admitted on to the platform or loop line. The engine buried itself up to its buffer beam in the bank, and the 4 vehicles behind it were completely wrecked. Eighteen passengers were killed and 27, of whom 10 subsequently died, were injured.

No. 13 up mixed train left Rampore Haut at 14-58 hours on the 29th June 1902. The train encountered a storm near the down distant signal, and after travelling about a mile in it, 13 of the 15 vehicles which composed the train, were overturned by the force of the wind. Thirteen passengers were killed and 15 were injured. The line was blocked for about 7 hours.

Damages by floods and rainfall.

56. The following are particulars of the more serious damages caused by floods and rainfall:

Owing to heavy floods during the months of August and September in the Kosi, Bengal and North-Western railway system. Tiljuga and Bagmatti rivers, twelve bridges and about six miles of line on the Eastern and Bairagnia branches of the Tirhoot State railway were damaged. Traffic to the terminal stations was interrupted for about three months.

On the 11th August, the bank at a 40-foot girder bridge near Bagrakote was damaged by a flood and traffic was suspended till the 14th idem. Bengal Dooars railway.

On the 27th September, an overflow of the Teesta river breached and damaged the embankment at several places in the locality of Bagrakote. Communication was restored to all stations (except Bagrakote) on the 7th October, and to Bagrakote on the 29th November.

On the 5th July, owing to heavy rainfall, the Khandwa section of the Rajputana-Bombay, Baroda and Central India railway system. Malwa railway was breached in several places, between miles 365 and 384, and caused interruption to traffic. Through communication was restored on the 7th of the month.

Owing to heavy rainfall, the banks on the Vijapur-Kalol section of the Vijapur-Kalol-Kadi railway subsided, and necessitated suspension of traffic from the 3rd to the 7th September.

On the 3rd July, owing to very heavy rainfall, the bank at mile 403-20 A on the Burma railways. Alon branch was carried away for a length of 36 feet. Through communication was restored on the 5th idem.

On the 9th July, an overflow of the Brahmaputra river flooded and breached the Dibru-Sadiya railway. Ghat line in several places, and necessitated the closing of the Ghat traffic for three days.

On the 9th September, a sudden flood swept over fifty miles of the Loop East Indian railway. line from Sainthia to near Barharwa. One girder bridge, of four spans of 28 feet at mile 154 $\frac{3}{8}$, was entirely washed away with about 30 feet of bank at each end, and the girder bridge of 2 spans of 28 feet at mile 156 $\frac{3}{8}$ was badly damaged. Eight other minor bridges and the banks at certain places were also injured, and a good deal of ballast was washed away. The traffic between the two stations named was suspended for a month, and that to and from stations north of Barharwa was worked round by the Chord line.

From the 9th to 11th August, owing to an overflow of the Kosi river, the Eastern Bengal State railway. 3' 3 $\frac{3}{8}$ " gauge line on the Kosi branch was breached in several places between Debiganj and Anchara Ghat, and necessitated transshipment. The line was again breached on the 11th September near the Feriani bridge and a diversion was put in. Through communication was restored by the 15th November.

On the 9th August, owing to a sudden flood in the Balla torrent, the third pier of the Balla bridge on the Cooch Behar railway between Buxa Road and Jainti collapsed. The bridge was finally opened to goods traffic on the 18th September and to passenger traffic on the 12th October; in the interim traffic was transhipped.

On the 27th September, an overflow of the Teesta river flooded the country from Jalpaiguri to Haldibari, breached the 3' 3 $\frac{3}{8}$ " gauge line on the Northern section in several places between Mandalghat and Jalpaiguri and damaged the bridge at mile 163-10. The line was closed for three days till the waters subsided, when transshipment was resorted to. Diversions were put in and through communication restored on the 7th October.

On the 28th September, owing to a heavy flood in the Torsa river, the right approach of the Torsa bridge on the Cooch Behar railway was underscoured and its slope cut away for a length of 200 feet. A diversion was made and traffic working resumed on the 7th October, prior to which date traffic was transhipped.

**Damages
by floods
and rainfall.**

**Railway
staff.**

On the 6th November, the embankment at mile 31-6, between Nattore and Madhnagar on the Northern section, suddenly subsided for a length of 76 feet, and interrupted traffic. Diversions were put in and the line restored to traffic on the 25th idem.

On the 29th August, the line was breached between Balotra and Pachpadra for a length of 800 feet, and traffic was interrupted till the 2nd September.
Jodhpur-Bikaner railway.

On the 16th and 17th July, five washouts occurred between miles 372 and 382-16-13 on the South-West line which caused delay to traffic and necessitated transshipment. The through running of trains was resumed on the 18th idem.
Madras railway.

On the 12th September, owing to floods caused by sudden and heavy rainfall and the bursting of the tanks near the line, bridge No. 665, at mile $\frac{205}{7.8}$ north of Mangapatnam station on the North-West line, was destroyed, and the line breached at miles 205-14-15 and 207-6. No. 81 mail of the 11th idem, after passing through Mangapatnam station, was, with the exception of the rear brakevan, precipitated into the gap at mile 205. This accident resulted in considerable damage to property and loss of life, particulars of which will be found in paragraph 55. On the 8th October, heavy floods again occurred at mile 205-7. The line was restored on the 9th idem.

On the 28th and 29th October, a cyclonic storm burst over the Nellore district seriously damaging the works, permanent-way and four bridges on the North-East line between miles 118 and 160. Temporary diversions and bridges were erected, when a second cyclonic storm swept inland from the Bay of Bengal on the 17th and 18th November, and partly destroyed the temporary bridges at miles 134-4-5 and 143-14-15. Through communication was restored on the 26th idem. The diversions were again badly damaged by floods on the 15th December, when breaches occurred at mile 119-9. Traffic was interrupted until the 21st idem, when through communication was restored.

On the 8th January, several landslips occurred between miles 10 and 15, when a quantity of boulders and earth fell on to the line.
Nilgiri railway. Through communication was restored on the 20th idem. Owing to exceptionally heavy rainfall, further damages were done to the line during November and December, and interrupted traffic till the 13th January 1903.

On the 13th May, owing to exceptionally heavy rainfall, the line was badly breached in several places between Kurrachee and Kotri. Through communication was restored on the 20th on the single line, double line working was resumed on the 29th of the month. Heavy rainfall and the overflow of sea water also breached the old Kiamari down line between the City and Cantonment stations of Kurrachee, and the up line between Kurrachee Cantonment and Thal. Railway communication between Kurrachee and Kiamari was cut off till the 19th, when traffic was worked on the up line.
North Western State railway.

Railway staff.

Railway staff.
App. 39

57. The following table shows the number of employes of the different races, European, Eurasian and Native:

Year.	Europeans.	Eurasians.	Natives.	Total.
1898	4,967	6,936	296,700	308,603
1899	5,292	7,393	329,089	341,774
1900	5,229	7,364	337,383	349,976
1901	5,493	8,175	353,278	366,946
1902	5,875	8,269	378,373	392,517

58. Of the Europeans and Eurasians, the following number were enrolled as Volunteers :

Year.	Sergeant Instructors furnished by the Army.	ENROLLED STRENGTH OF VOLUNTEERS.				Total number of employés enrolled as Volunteers.	Total number of European and Eurasian employés on railways.
		EFFICIENTS.			Non- efficient.		
		Officers.	Non-Commis- sioned Officers.	Volunteers.			
1898.	116.	375.	1,362	9,498	270	11,505*	11,903
1899.	123	395	1,460	9,958	152	11,965*	12,685
1900.	122	389	1,406	10,068	175	12,038*	12,593
1901.	120	393	1,345	9,638	300	11,676	13,671
1902.	121	380	1,305	9,723	604	12,022	14,144

59. The Police force employed for the maintenance of law and order on railways and for the protection of railway property is provided by the Civil Department, the State bearing, except in the case of State lines worked by the State and the old Guaranteed railways, three-tenths and the railways paying seven-tenths of the expense incurred.

Police force.
App. 41.

60. There is a Provident Fund, in connection with every railway in India, the object of which is to make some provision for employés against their retirement or for their families in the event of their dying while still in the service of the railway. The money in this fund cannot be attached by courts of law, nor can it be alienated or hypothecated by the employé. Every monthly paid employé, who is neither pensionable nor a menial servant, is obliged to be a member of this fund and is required to subscribe monthly amounts varying on different railways but not exceeding 1-12th of his salary. At the close of the half-year, the railway distributes as bonus among the depositors a first contribution, equal to one-half of such subscriptions, and a second contribution, if the earnings permit of this being done, not exceeding one-half of such subscriptions or one per cent. of net earnings. In the case of the more prosperous railways, the double contribution is now generally obtained by depositors. The amount thus subscribed amounted at the end of 1902 to 413 lakhs of rupees, the bonus paid by railways amounting to over 100 lakhs.

Provident Fund.
App. 39.

61. Fines inflicted on, and bonus contributions to the Provident Fund forfeited by, employés are not credited to the revenues of the railway, but to what is known as the Fine Fund. The amounts thus withheld are shown in Appendix No. 42. On most of the railways the money goes back again to the employés in the shape of contributions to recreation clubs, schools and similar institutions and in the relief of families left in destitute circumstances.

Fine Funds.
App. 42.

62. On the larger railways, schools are provided and maintained at all centres where the number of children is large enough to justify the employment of the teaching staff. The fees charged are graduated so as not to press too heavily on the poorer employés. Government in the Educational Department allow certain grants towards the maintenance of the schools, and any deficit is made good from the revenues of the railway or from the Fine Fund. Where the number of employés is not large enough to justify the provision of a railway school, and there already exists a public or private school in the town, the schooling fees are borne wholly or in part by the railway.

Schools.
App. 43.

* These figures include non-railway employés enrolled in Railway Corps.

**Railway
staff.**

The number attending school amounted, at the close of 1902, to 5,397 children and 3,983 apprentices and workmen, the contributions by Government amounting to Rs. 31,367; by the railways from revenues Rs. 1,17,035; from the Fine fund Rs. 11,887; and by fees to Rs. 1,30,215.

The assistance thus given to employés is much appreciated, and a proper standard of education is ensured by the examination which is conducted yearly by the Government Inspectors of Schools before the grant can be drawn.

SIMLA;

Dated 23rd May, 1903.

A. BRERETON,

*Secretary to the Government of India,
Public Works Department,
Railways.*

APPENDICES
of
MILEAGE AND CAPITAL OUTLAY.

Appendix I.
List of Railways.

APPENDIX I.

*List of Railways at the close of the Calendar year 1902,
alphabetically arranged with their lengths,
the administrations by which worked, gauge and classification.*

(Referred to in paragraph 6 of Report.)

N.B.—For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902, to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

CLASSIFICATION No.	Name of Railway.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	LENGTH OF RAILWAY, IN MILES, ON 31ST DECEMBER 1902, UNDER SEVERAL HEADS OF CLASSIFICATION.							REMARKS.	
					State lines worked by agency of		Guaranteed railway.	Assisted railway.	Lines owned by Native states and worked by agency of				Lines in foreign territory.
					State railway.	Company.			Native state itself.	Company.	State railway.		
Main.	Sub.												
A.													
11	(a)	Agra-Delhi Chord	Agra-Delhi Chord Ry.	...	5' 6"	121-16	...	...	...	...	...	...	Unopen.
8	(c)	Ahmedabad-Dholka	Bombay, Baroda and Central India.	...	3' 3 1/2"	...	...	83-54	...	...	...	...	Unopen.
8	(i)	Ahmedabad-Parantij	Bombay, Baroda and Central India Ry. Co.	1-5-97	3' 3 1/2"	...	...	54-70	...	...	...	...	Open.
7	(c)	Amraoti.	Great Indian Peninsula Ry. Co.	16-2-71	5' 6"	...	5-49*	...	...	...	...	...	Open.
14	(a)	Assam-Bengal	Assam-Bengal Ry. Co.	1-7-95	3' 3 1/2"	...	589-21 155-24	...	...	...	...	...	Open. Unopen.
10	(f)	Ashikal-Mangalore	Madras Ry. Co.	...	5' 6"	...	77-27	...	...	...	...	...	Unopen.
B.													
25	(a)	Barai Light	Barai Light Ry. Co.	1-3-97	2' 6"	...	...	21-59 57-37	...	...	...	...	Open. Unopen.
21	(j)	Bellary-Rayadrug	Southern Mahratta Ry. Co.	...	3' 3 1/2"	...	83-00	...	...	...	...	...	Unopen.
16	(a)	Bengal and North-Western (Company's section).	Bengal and North-Western Ry. Co.	2-4-84	3' 3 1/2"	...	...	747-75 102-11	...	...	...	...	Open. Unopen.
3	(a)	Bengal Central	Bengal Central Ry. Co.	16-10-82	5' 6"	...	125-01†	...	...	...	...	...	Open.
12	(a)	Bengal Dooars	Bengal Dooars Ry. Co.	15-1-93	3' 3 1/2"	...	...	36-40 77-76	...	...	...	...	Open. Open.
12	(b)	Bengal Dooars Extensions.	Bengal Dooars Ry. Co.	20-4-00	3' 3 1/2"	...	...	88-80	...	...	...	...	Unopen.
4	(a)	Bengal-Nagpur	Bengal-Nagpur Ry. Co.	2-11-86	5' 6"	...	1,546-00 176-90	...	...	...	...	...	Open. Unopen.
9	(b)	Bezwa Extension	Nizam's Guaranteed State Rys. Co.	10-2-89	5' 6"	...	20-58	...	...	...	...	...	Open.
20	(a)	Bhavnagar-Gondal-Junagad-Forbandar.	Bhavnagar-Gondal-Junagad-Forbandar Ry.	20-12-80	3' 3 1/2"	...	...	334-19	...	...	...	...	Open.
7	(g)	Bhopal-Itarsi (British section).	Great Indian Peninsula Ry. Co.	1-6-82	5' 6"	...	18-11	...	...	...	...	...	Open.
7	(f)	Bhopal-Itarsi (Native State section).	Great Indian Peninsula Ry. Co.	11-11-95	5' 6"	...	...	...	44-28	...	...	...	Open.
7	(f)	Bhopal-Ujjain	Great Indian Peninsula Ry. Co.	11-11-95	5' 6"	...	...	...	113-27	...	...	...	Open.
18	(b)	Bikaner	Jodhpur-Bikaner Ry.	9-12-91	3' 3 1/2"	...	...	...	245-35	...	...	...	Open.
7	(e)	Bina-Goonn-Baran	Great Indian Peninsula Ry. Co.	23-9-95	5' 6"	...	...	...	145-63	...	...	...	Open.
21	(a)	Birur-Shimoga	Southern Mahratta Ry. Co.	1-12-99	3' 3 1/2"	...	...	...	37-92	...	...	...	Open.
8	(a)	Bombay, Baroda and Central India.†	Bombay, Baroda and Central India Ry. Co.	10-2-60	5' 6"	...	...	460-66‡ 44-00	...	...	...	...	Open. Unopen.
2	(c)	Brahmaputra-Sultampur ||	Eastern Bengal State Ry.	1-4-99	3' 3 1/2"	...	...	39-37	...	...	...	...	Open.
36	(a)	Bukhtiarpur-Bihar	Bukhtiarpur-Bihar Light Ry. Co.	...	2' 6"	...	...	16-75	...	...	...	...	Unopen.
23	(a)	Burma	Burma Railways Co.	2-5-77	3' 3 1/2"	...	1,260-50 76-94	...	...	...	...	...	Open. Unopen.
C.													
5	(c)	Cawnpore-Burhwal (metre gauge link)	Oudh and Rohilkhand State Ry.	24-11-96	3' 3 1/2"	79-60	...	...	...	...	...	...	Open.
2	(e)	Cooch Behar	Eastern Bengal State Ry.	15-9-93	2' 6"	...	...	...	...	33-60	...	...	Open.
D.													
6	(h)	Dasdot	North Western State Ry.	5-7-89	2' 0"	6-18	...	...	...	...	...	...	Open.
29	(a)	Darjeeling-Himalayan.	Darjeeling-Himalayan Ry. Co.	23-8-80	2' 0"	...	...	51-00	...	...	...	...	Open.
1	(b)	Delhi-Umballa-Kaika.	East Indian Ry. Co.	1-3-91	5' 6"	...	...	162-24	...	...	...	...	Open.
15	(a)	Deoghur	Deoghur Ry. Co.	23-12-82	3' 3 1/2"	...	...	4-79	...	...	...	...	Open.
					Carried over	85-78	3,559-90	520-05	1,156-23	579-54	341-10	83-60	Open.
						121-16	519-85	44-00	250-57	...	...	...	Unopen.

* Classed as a State railway in consequence of the lease in perpetuity of the Assigned Districts of the Berars to the British Government with effect from the 1st October 1902.

† Although for convenience classed amongst State lines, this line is the property of the Bengal Central Railway Company.

‡ Guaranteed under terms of old contracts.

§ Includes the Viramgam-Wadhwan section converted from the 5' 6" gauge to the 3' 3 1/2" gauge on the 14th December 1902.

|| Guaranteed under terms of modern contracts.

Appendix I.
List of Railways.

APPENDIX I—contd.

List of Railways at the close of the Calendar year 1902,
alphabetically arranged with their lengths,
the administrations by which worked, gauge and classification.

(Referred to in paragraph 6 of Report.)

N.B.—For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902, to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

CLASSIFICATION No.	Name of Railway.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	LENGTH OF RAILWAY, IN MILES, ON 31st DECEMBER 1902, UNDER SEVERAL HEADS OF CLASSIFICATION.							Lines in foreign territory.	REMARKS.
					State lines worked by agency of		Guaranteed railway.	Assisted railway.	Lines owned by Native states and worked by agency of				
					State railway.	Company.			Native state itself.	Company.	State railway.		
			Brought forward		983-96	9,068-59	552-09	1,232-17	600-37	1,081-44	33-60		Open.
					357-69	745-92	44-00	291-07	...	67-06	...	...	Unopen.
8 (n)	J. Jaipur (Siwal Madhopur).	Bombay, Baroda and Central India.	...	3' 3 1/2"	...	...	...	...	...	72-35	...	...	Unopen.
6 (d)	Jammu and Kashmir (Native state section).	North Western State Ry.	15-3-90	5' 6"	...	...	...	...	...	...	15-92	...	Open.
20 (b)	Jamnagar	Bhavnagar-Gondal-Junagad-Forbādar Ry.	8-4-97	3' 3 1/2"	...	...	...	...	54-22	...	...	...	Open.
20 (c)	Jetalsar-Rajkot	Jodhpur-Bikaner Ry.	12-4-98	3' 3 1/2"	...	...	...	...	46-21	...	...	...	Open.
19 (a)	Jodhpur	Jodhpur-Bikaner Ry.	24-6-92	3' 3 1/2"	...	...	...	...	454-94	...	...	...	Open.
18 (c)	Jodhpur-Hyderabad (British section).	Jodhpur-Bikaner Ry.	18-8-92	3' 3 1/2"	...	123-98	...	...	...	...	...	...	Open.
32 (a)	Jorhat	Jorhat State Ry.	15-12-84	2' 0"	30-00	...	...	...	...	...	...	...	Open.
4 (d)	Jubbulpore-Gondia extension.	Bengal-Nagpur Ry. Co.	...	2' 6"	...	252-67	...	...	...	...	...	...	Unopen.
	K.												
34 (e)	Kalka-Simla	Delhi-Umballa-Kalka Ry. Co.	...	2' 6"	...	...	60-00	...	...	...	...	...	Unopen.
22 (d)	Karaikkal-Peralam	South Indian Ry. Co.	14-3-98	3' 3 1/2"	...	...	...	...	...	...	...	14-65	Open.
7 (b)	Khamgaon	Great Indian Peninsula Ry. Co.	4-3-70	5' 6"	...	97-97	...	...	...	...	...	...	Open.
6 (f)	Khusalgarh-Kohat Thal.	North Western State Ry.	25-5-02	2' 6"	62-03	...	...	...	...	...	...	...	Open.
10 (c)	Kolar Gold-fields	Madras Ry. Co.	1-6-94	5' 6"	...	...	...	...	...	9-88	...	...	Unopen.
21 (f)	Kolhapur	Southern Mahratta Ry. Co.	21-4-91	3' 3 1/2"	...	...	...	...	...	29-27	...	...	Open.
	L.												
12 (b)	Ledo and Tikak-Margherita Colliery.	Assam Railways and Trading Co.	17-2-84	3' 3 1/2"	...	...	11-00	...	...	...	...	...	Open.
17 (b)	Lucknow-Bareilly.	Rohilkund and Kumaon Ry. Co.	12-10-84	3' 3 1/2"	...	231-17	...	...	...	...	...	...	Open.
6 (e)	Ludhiana-Dhuri-Jakkhal.	North Western State Ry.	10-4-01	5' 6"	...	5-93	...	...	...	...	73-66	...	Unopen.
	M.												
10 (a)	Madras†	Madras Ry. Co.	1-7-56	5' 6"	...	...	882-10	...	...	...	...	...	Open.
10 (b)	Madras (North-East line).	Madras Ry. Co.	20-2-93	5' 6"	...	497-19	...	...	...	...	...	...	Unopen.
37 (a)	Madura District	Madura District Light Ry. Co.	...	2' 6"	...	6-36	...	...	...	...	...	...	Unopen.
4 (a)	Moharbhauj	Bengal-Nagpur Ry. Co.	...	2' 6"	...	...	...	35-90	...	...	...	...	Unopen.
10 (g)	Morappur-Dharmapuri.	Madras Ry. Co.	...	2' 6"	...	18-37	...	...	...	...	...	...	Unopen.
24 (a)	Morvi	Morvi Ry.	11-3-88	2' 6"	...	...	...	...	94-86	...	...	...	Open.
2 (d)	Mymensingh-Jamalpur Jagannathganj.	Eastern Bengal State Ry.	15-10-98	3' 3 1/2"	...	...	...	58-14	...	...	...	...	Open.
21 (g)	Mysore-Nanjangud	Southern Mahratta Ry. Co.	1-12-91	3' 3 1/2"	...	...	...	...	...	15-80	...	...	Open.
21 (b)	Mysore section (Southern Mahratta).	Southern Mahratta Ry. Co.	1-2-81	3' 3 1/2"	...	296-22	...	...	...	...	...	...	Open.
	N.												
8 (c)	Nagda-Ujjain	Bombay, Baroda and Central India Ry. Co.	15-4-98	5' 6"	...	...	...	...	...	34-32	...	...	Open.
10 (e)	Nilgiri	Madras Ry. Co.	15-6-99	3' 3 1/2"	...	...	...	16-90	...	...	...	...	Open.
9 (a)	Nizam's Guaranteed State.	Nizam's Guaranteed State Ry. Co.	9-10-74	5' 6"	...	...	...	...	...	330-13	...	...	Open.
14 (b)	Noakhali (Bengal).	Assam-Bengal Ry. Co.	...	3' 3 1/2"	...	...	...	34-95	...	...	...	...	Unopen.
6 (a)	North Western State	North Western State Ry.	13-5-61	5' 6"	3,077-50	...	...	...	...	...	...	...	Open.
6 (g)	Nowahera-Durgai.	North Western State Ry.	1-1-01	2' 6"	183-90	...	...	...	...	...	...	...	Unopen.
	O.												
5 (a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State Ry.	23-4-67	5' 6"	1,039-64	...	...	...	...	...	...	...	Open.
					109-14	...	...	...	...	...	...	...	Unopen.
			Carried over		5,201-05	9,245-12	1,440-19	1,368-21	1,250-10	1,500-84	128-18	14-65	Open.
					862-76	1,023-82	61-07	479-02	...	168-41	...	...	Unopen.

* Classed as a State railway in consequence of the lease in perpetuity of the Assigned District of the Berara to the British Government, with effect from the 1st October 1902.
† Guaranteed under terms of old contracts.
‡ Question of working agency not yet finally settled.

APPENDIX I—concl'd.

Appendix I.
List of Railways.

List of Railways at the close of the Calendar year 1902,
alphabetically arranged with their lengths,
the administrations by which worked, gauge and classification.

(Referred to in paragraph 6 of Report.)

N.B.—For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1904, to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

Classi- fication No.	Name of Railway.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	LENGTH OF RAILWAY, IN MILES, OPEN ON 31st DECEMBER 1902 UNDER SEVERAL HEADS OF CLASSIFICATION.							Lines in foreign territory.	REMARKS
					State lines worked by agency of		Guaran- teed railway.	Assist- ed railway.	Lines owned by Native states and worked by agency of				
					State railway.	Com- pany.			Native state itself.	Com- pany.	State railway		
	P.		Brought forward		5,201'05	1,245'12	1,440'19	1,368'21	1,250'10	1,500'34	128'18	14'65	Open.
8 (k)	Palanpur Deesa	Bombay, Baroda and Central India Ry. Co.	8-11-93	3' 3 1/2"	662'76	...	61'07	479'03	...	168'41	...	...	Unopen.
4 (c)	Parlakimedi Light	Bengal-Nagpur Ry. Co.	23-4-01	2' 6"	...	...	...	...	...	21'53	...	...	Open.
8 (d)	Potlad-Cambay (Anand-Tarapur section).	Bombay, Baroda and Central India Ry. Co.	5-5-90	5' 6"	...	...	...	...	...	21'50	...	...	Open.
8 (e)	Potlad-Cambay (Tarapur-Cambay section).	Bombay, Baroda and Central India Ry. Co.	20-6-01	5' 6"	...	...	...	...	...	10'02	...	...	Open.
29 (e)	Pondicherry	South Indian Ry. Co.	15-12-79	3' 3 1/2"	...	...	...	...	...	...	...	7'55	Open.
17 (c)	Powayan Light	Rohilkund and Kumaon Ry. Co.	17-6-90	2' 6"	...	...	...	39'50	...	...	...	...	Open.
	R.												
4 (b)	Rajpur-Dhamtari	Bengal-Nagpur Ry. Co.	10-9-00	2' 6"	...	6'21	...	...	...	...	...	...	Open.
8 (m)	Rajpipla	Bombay, Baroda and Central India Ry. Co.	1-7-97	2' 6"	...	...	...	...	...	37'37	...	...	Open.
6 (e)	Rajpura-Bhatinda	North Western State Ry.	1-11-84	5' 6"	...	...	...	...	...	...	107'05	...	Open.
8 (g)	Rajputana-Malwa	Bombay, Baroda and Central India Ry. Co.	14-2-73	3' 3 1/2"	...	1,649'36	...	...	...	...	...	...	Open.
27 (a)	Ranaghat-Krishnagar.	Ranaghat-Krishnagar Light Ry. Co.	5-4-99	2' 6"	...	158'32	...	20'25	...	...	...	...	Unopen.
1 (e)	Rewah	East Indian Ry. Co.	...	2' 6"	...	...	...	...	...	31'31	...	...	Unopen.
17 (a)	Rohilkund and Kumaon.	Rohilkund and Kumaon Ry. Co.	12-10-84	3' 3 1/2"	...	...	...	33'03	...	...	...	...	Open.
	S.												
16 (c)	Saganli-Kaxaul	Bengal and North-Western Ry. Co.	1-8-99	3' 3 1/2"	...	...	...	18'00	...	...	...	...	Open.
25 (a)	Shahdara-Saharanpur.	Shahdara-Saharanpur Light Ry. Co.	...	2' 6"	...	...	...	133'00	...	...	...	...	Unopen.
10 (d)	Shoranur-Cochin	Madras Ry. Co.	2-6-02	3' 3 1/2"	...	...	...	...	...	61'75	...	...	Open.
1 (c)	South Behar	East Indian Ry. Co.	5-7-99	5' 6"	...	...	...	73'76	...	...	...	...	Open.
23 (a)	South Indian	South Indian Ry. Co.	15-7-01	3' 3 1/2"	...	1,153'13	...	...	...	...	...	...	Open.
21 (a)	Southern Mahratta	Southern Mahratta Ry. Co.	24-3-81	3' 3 1/2"	...	17'59	...	...	...	...	...	...	Unopen.
6 (b)	Southern Punjab	North Western State Ry.	10-11-97	5' 6"	...	1,043'04	...	...	...	...	...	...	Open.
	T.												
22 (b)	Tanjore District Board (Mayavaram Mutupet).	South Indian Ry. Co.	2-4-04	3' 3 1/2"	...	...	...	71'11	...	...	...	...	Open.
8 (b)	Tapti Valley	Bombay, Baroda and Central India Ry. Co.	1-12-98	5' 6"	...	...	...	23'89	...	...	...	...	Unopen.
26 (a)	Tarakeshwar-Magra	Bengal Provincial Ry. Co.	7-11-84	2' 6"	...	...	...	31'12	...	...	...	...	Open.
1 (d)	Tarkasur	East Indian Ry. Co.	1-1-85	5' 6"	...	...	...	29'23	...	...	...	...	Open.
28 (a)	Tezpur-Balipara	Tezpur-Balipara Ry. Co.	9-8-94	3' 6"	...	...	...	2' 10	...	...	...	...	Open.
23 (a)	Thaton-Duyinzaik	Thaton-Duyinzaik Ry. Co.	11-2-85	2' 6"	...	...	...	7'78	...	...	...	...	Open.
22 (e)	Tinnevelly-Quilon (Travancore) (British Section).	South Indian Ry. Co.	1-6-02	3' 3 1/2"	...	19'05	...	...	...	...	...	...	Open.
22 (f)	Tinnevelly-Quilon (Travancore) (Native State section)	South Indian Ry. Co.	...	3' 3 1/2"	...	31'33	...	...	...	57'95	...	...	Unopen.
16 (b)	Tirhoot	Bengal and North-Western Ry. Co.	1-11-75	3' 3 1/2"	...	516'80	...	...	...	...	...	...	Open.
10 (k)	Tirapattur-Krishnagiri.	Madras Ry. Co.	...	2' 6"	...	30'47	...	...	...	...	...	...	Unopen.
	U.												
19 (a)	Udaipur-Chitor	Udaipur-Chitor Ry.	1-8-95	3' 3 1/2"	...	...	...	...	67'20	...	...	...	Open.
	V.												
8 (j)	Vijapur-Kalol-Kadi.	Bombay, Baroda and Central India Ry. Co.	10-6-02	3' 3 1/2"	...	...	...	...	...	29'44	...	...	Open.
	W.												
21 (h)	West of India Portuguese.	Southern Mahratta Ry. Co.	17-1-87	3' 3 1/2"	...	...	...	...	...	...	...	52'11	Open.
Total railway mileage in India and Burma on the 31st December 1902.					5,201'05	13,668'11	1,440'19	2,306'25	1,317'40	1,689'59	235'23	73'61	Open.
					662'76	1,262'78	61'07	627'00	...	270'37	...	...	Unopen.

Appendix 2.
Railway systems.

APPENDIX 2.

Railways worked by each Railway Administration at the close of the Calendar year 1902.

(Referred to in paragraph 6 of Report.)

N.B.—For classification of railways, see Appendix 1.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

CLASSIFICATION No.		Railway administration by which worked.	Name of railway.	LENGTH OF LINE OPEN ON 31st DECEMBER 1902.				TOTAL OF EACH GAUGE UNDER THE ADMINISTRATION.				Grand total mileage of railways worked by the administration.
Main.	Sub.			5' 6"	5' 3 1/2"	5' 6"	2' 6"	5' 6"	5' 3 1/2"	5' 6"	2' 6"	
1	(a)	East Indian (E. I.)	East Indian	1,923 85	2,186 58	2,186 58
	(b)		Delhi-Umballa-Kalka	162 24	...	...	...		
	(c)		South-Bihar	78 76	...	...	...		
	(d)		Tarkessur	22 23	...	...	...		
2	(a)	Eastern Bengal State (E. B. S.)	Eastern Bengal State	1,277 02	277 02	638 39	68 33	...	1,044 29
	(b)		Eastern Bengal State . . . . .	...	566 33	34 78	...				
	(c)		Brahmaputra-Saltanpur . . . . .	...	89 37	...	...			
	(d)		Mymensingh-Jamalpur-Jagannathganj . . . . .	...	53 14	...	...			
	(e)		Cooch Behar (C. B.) . . . . .	...	...	38 60	...			
3	(a)	Bengal Central (B. C.)	Bengal Central	125 01	125 01	125 01
4	(a)	Bengal-Nagpur (B. N.)	Bengal-Nagpur	1,546 00	1,546 00	...	80 22	...	1,626 22
	(b)		Raipur-Dhamtari (R. D.) . . . . .	...	...	56 24	...			
	(c)		Parlakimedi Light (P. L. L.) . . . . .	...	...	24 68	...			
5	(a)	Oudh and Rohilkhand State (O. & R.)	Oudh and Rohilkhand State	1,037 33	11 81	1,069 87	81 61	1,151 28
	(b)		Hardwar-Delra	32 04	...	...	...		
	(c)		Cawnpore-Burhwal (metre gauge link) . . . . .	...	179 60	...	...			
6	(a)	North Western State (N. W.)	North Western State	3,077 50	3,703 85	...	69 35	6 18	3,779 38
	(b)		Southern Punjab	424 72	...	...	...		
	(c)		Rajpura-Bhatinda	107 05	...	...	...		
	(d)		Jammu and Kashmir (Native state section)	15 92	...	...	...		
	(e)		Ludhiana-Dhuri-Jakhal	78 66	...	...	...		
	(f)		Khushalgarh-Kohat-Thal (K. K. T.) . . . . .	...	...	29 70	...			
	(g)		Nowshera-Durgai (N. D.) . . . . .	...	...	40 35	...			
	(h)		Dandot . . . . .	...	...	...	6 18		
				Carried over				3,908 33	780 30	319 23	6 18	4,914 04

* From Howrah to Moghal Sarai, 470.02 miles, Sitarampur to Barakar, 9.76 miles, Ghaziabad to the east side of the Jumna bridge near Delhi, 10.70 miles, and the Hooghly bridge branch, 4.23 miles, are laid with double track.
† From Calcutta to Poradaha, 102.47 miles, Canal Junction to Chittpore, 1.86 miles, and Calcutta (Sealdah) to Dock Junction, 7.86 miles, are laid with double track.
‡ From Howrah to Bauria, 18.11 miles, and Simachellam to Waltair, 4.24 miles, are laid with double track.
§ Including 16.79 miles of mixed (5' 6" and 3' 3 1/2") gauge from Burhwal to Barabanki and 0.59 mile on Cawnpore bridge.
|| Metre gauge connection between the Oudh and Rohilkhand Cantonment and the Bengal and North-Western railway City station, at Benares.
¶ Excluding 8.66 miles, Aishbagh to Daliganj, of the Lucknow-Bareilly railway but including 16.79 miles of mixed (5' 6" and 3' 3 1/2") gauge from Burhwal to Barabanki and 0.59 mile on Cawnpore bridge.
** Including 5.83 miles military lines not used for public traffic and 26.23 miles of mixed (5' 6" and 3' 3 1/2") gauge mileage between Bhatinda and Kot Kapura.
†† From Kiamari to Kotri, 108.00 miles, Mean Meer East to Mean Meer West, 2.18 miles, Gulistan to Chaman, 36.82 miles, and Ab-i-Gan to Kolpur, 28.54 miles, are laid with double track.

APPENDIX 2—contd.

Appendix 2.
Railway systems.

Railways worked by each Railway Administration at the close of the Calendar year 1902.

(Referred to in paragraph 6 of Report.)

N.B.—For classification of railways, see Appendix 1.
 For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
 For mileage open at the end of each year, see Appendix 4.
 For mileage under construction or sanctioned, see Appendix 5.

CLASSIFICATION No.		Railway administration by which worked.	Name of railway.	LENGTH OF LINE OPEN ON 31st DECEMBER 1902.				TOTAL OF EACH GAUGE UNDER THE ADMINISTRATION.				Grand total mileage of railways worked by the administration.
Main.	Sub.			5' 6"	3' 3½"	2' 6"	2' 0"	5' 6"	3' 3½"	2' 6"	2' 0"	
				Brought forward				8,908'33	780'80	319'25	6'18	9,914'06
7	(a)	Great Indian Peninsula (G. I. P.)	Great Indian Peninsula	*1,548'17	...	...	...		
	(b)		Khamgaon	7'97	...	...	...		
	(c)		Amraoti	5'49	...	...	...		
	(d)		Indian Midland (I. M.)	796'53	...	...	...		
	(e)		Bina-Goonn-Baran	145'68	...	...	...		
	(f)		Bhopal-Ujjain	113'27	...	...	...		
	(g)		Bhopal-Itarsi	57'39	...	...	...		
	(h)		Gwalior Light (G. L.)	...	...	...	126'14	2,674'45	...	...	126'14	2,800'59
8	(a)	Bombay, Baroda and Central India (B., B. & C. I.)	Bombay, Baroda and Central India.	†421'45	‡39'23	...	...			
	(b)		Tapti Valley	155'48	...	...	...		
	(c)		Nagda-Ujjain	34'32	...	...	...		
	(d)		Petlad-Cambay (Anand-Tarapur section).	21'50	...	...	...		
	(e)		Petlad-Cambay (Tarapur-Cambay section).	10'92	...	...	...		
	(f)		Godhra-Bundlam-Nagda	141'14	...	...	...		
	(g)		Rajputana-Malwa (R. M.)	55'17	1,648'19	...	...			
	(h)		Gaekwar's Mehsana	...	92'68	...	...			
	(i)		Ahmedabad-Parantij	...	54'70	...	...			
	(j)		Vijapur-Kalol-Kadi	...	29'44	...	...			
	(k)	Palanpur-Deesa	...	17'28	...	...				
	(l)	Gaekwar's Dabhoi (G. D.)	...	...	78'80	...						
	(m)	Rajpipla (R.)	...	...	37'37	...	739'98	1,876'47	116'17	...	2,732'62	
9	(a)	H. H. Nizam's Guaranteed State (N. G. S.)	H. H. Nizam's Guaranteed State.	339'13	...	...	...		
	(b)		Bezwa Extension	20'58	...	...	...		
	(c)	Hyderabad-Godavari Valley (H. G. V.)	...	391'42	...	...	850'71	391'42	...	...	742'13	
10	(a)	Madras (M.)	Madras	**888'10	...	...	...		
	(b)		Madras (North-East line)	††496'38	††0'31	...	...			
	(c)		Kolar Gold-fields	9'88	...	...	...		
	(d)		Shoranur-Cochin (S. C.)	...	64'75	...	...			
	(e)	Nilgiri (N.)	...	16'90	...	...	1,394'86	81'96	...	...	1,476'82	
12	(a)	Bengal-Doonars (B. D.)	Bengal-Doonars	...	36'40	...	...			
	(b)		Bengal-Doonars Extensions	...	77'76	...	...	...	114'16	...	...	114'16
13	(a)	Dibru-Sadiya (D. S.)	Dibru-Sadiya	...	77'59	...	...			
	(b)		Ledo and Tikak-Margherita Colliery.	...	11'00	...	...	...	38'50	...	...	38'50
				Carried over				14,118'33	3,332'81	335'42	132'32	17,918'88

* From Bombay (Victoria terminus) to Khandwa, 352'39 miles, Bagra tunnel to Towa viaduct, 0'74 mile, Kalyan to Lonavla, 46'42 miles, and Bhusaval to Shegaon, 62'37 miles, are laid with double track.

† From Bombay (Colaba) to Anklav, 197'68 miles, Broach to Baroda, 44'01 miles, and Barejadi to Ahmedabad, 10'21 miles, are laid with double track.

‡ Virangam-Wadhwan section converted from the 5' 6" gauge to the 3' 3½" gauge on 14th December 1902.

§ Standard (5' 6") gauge lines between Jumna East bank and Agra Cantonment (3'07 miles) and 2'10 miles of the extension to Ujjain City.

|| Including 26'28 miles of mixed (5' 6" and 3' 3½") gauge mileage between Bhatinda and Kot Kapura.

¶ From Agra Fort to Agra Cantonment, 1'14 miles and 1'78 miles near Delhi, are laid with double track.

** From Madras to Arkonam, 42'41 miles, and Washermenpet to Veyasarpandy, 1'02 miles, are laid with double track.

†† Including 2'66 miles of mixed (5' 6" and 3' 3½") gauge mileage between Bezwa and Kistna block hut and 0'46 miles (from North facing point to North distant signal at Waltair) laid with double track.

‡‡ Metre (3' 3½") gauge between Kistna block hut and Tadepalli.

Appendix 2.
Railway systems.

APPENDIX 2—contd.

Railways worked by each Railway Administration at the close of the Calendar year 1902.

(Referred to in paragraph 6 of Report.)

N.B.—For classification of railways, see Appendix 1.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

CLASSIFICATION No.		Railway administration by which worked.	Name of railway.	LENGTH OF LINE OPEN ON 31st DECEMBER 1902.				TOTAL OF EACH GAUGE UNDER THE ADMINISTRATION.				Grand total mileage of railways worked by the administration.
Main.	Sub.			5' 6"	3' 3½"	2' 6"	2' 0"	5' 6"	3' 3½"	2' 6"	2' 0"	
				Brought forward				14,118'33	3,332'31	335'42	132'33	17,918'69
14	(a)	Assam-Bengal (A. B.)	Assam-Bengal . . . .	...	589'21	...	...	...	589'21	...	...	589'21
15	(a)	Deoghar (D.)	Deoghar . . . .	...	4'79	...	...	...	4'79	...	...	4'79
16	(a)	Bengal and North-Western (B. & N. W.)	Bengal and North-Western	...	747'75	...	...	...	...	...	...	...
	(b)		Tirhoot . . . .	...	516'89	...	...	...	...	...	...	...
	(c)		Siganli-Bazaul . . . .	...	18'09	...	...	...	1,232'73	...	...	1,232'73
17	(a)	Rohilkund and Kumaon (R. & K.)	Rohilkund and Kumaon . . . .	...	53'92	...	...	...	...	...	...	...
	(b)		Lucknow-Bareilly . . . .	...	231'17	...	...	...	...	...	...	...
	(c)		Powayan Light (P. W. L.)	39'50	285'09	39'50	...	324'39
18	(a)	Jodhpur-Bikaner (J. B.)	Jodhpur . . . .	...	451'94	...	...	...	...	...	...	...
	(b)		Bikaner . . . .	...	245'35	...	...	...	...	...	...	...
	(c)		Jodhpur-Hyderabad (British section).	...	123'98	324'27	...	...	324'27
19	(a)	Udaipur-Chitor (U. C.)	Udaipur-Chitor . . . .	...	67'30	...	...	...	67'30	...	...	67'30
20	(a)	Bhavnagar-Gondal-Junagad-Forbandar (B. G. J. P.)	Bhavnagar-Gondal-Junagad-Forbandar.	...	334'19	...	...	...	...	...	...	...
	(b)		Jamnagar . . . .	...	51'22	...	...	...	...	...	...	...
	(c)		Jetalsar-Rajkot . . . .	...	46'21	...	...	...	...	...	...	...
	(d)		Dhrangadra	20'83	455'45	...	...	455'45
21	(a)	Southern Mahratta (S. M.)	Southern Mahratta . . . .	...	1,042'04	...	...	...	...	...	...	...
	(b)		Mysore section (Southern Mahratta).	...	206'22	...	...	...	...	...	...	...
	(c)		Guntakal-Mysore frontier . . . .	...	119'50	...	...	...	...	...	...	...
	(d)		Hindupur (Yesvantpur-Mysore frontier).	...	51'35	...	...	...	...	...	...	...
	(e)		Birur-Shimoga . . . .	...	87'02	...	...	...	...	...	...	...
	(f)		Kolhapur . . . .	...	29'27	...	...	...	...	...	...	...
	(g)		Mysore-Nanjangud . . . .	...	15'80	...	...	...	...	...	...	...
	(h)		West of India Portuguese	51'11	1,643'21	...	...	1,643'21
				Carried over				14,118'33	3,481'36	374'92	132'32	23,110'43

* Including 5'23 miles of dock estate and quarry lines.

† Including 8'93 miles of dock estate lines.

APPENDIX 2—concl'd.

Appendix 2.
Railway systems.

Railways worked by each Railway Administration at the close of the Calendar year 1902.

(Referred to in paragraph 6 of Report.)

N.B.—For classification of railways, see Appendix 1.
For mileage added from 1st January 1903 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

CLASSIFICATION No.		Railway administration by which worked.	Name of railway.	LENGTH OF LINE OPEN ON 31st DECEMBER 1902.				TOTAL OF EACH GAUGE UNDER THE ADMINISTRATION.				Grand total mileage of railways worked by the administration.
Main.	Sub.			5' 6"	3' 3½"	2' 6"	2' 0"	5' 6"	3' 3½"	2' 6"	2' 0"	
				Brought forward				14,118'33	8,484'86	374'92	132'32	23,110'43
22	(a)	South Indian (S. I.)	South Indian	1,123'13
	(b)		Tanjore District Board (Mayavaram-Mutupet).	...	71'11
	(c)		Tinnevely-Qullon (British Section (Travancore).	...	19'05
	(d)		Karaikkal-Peralam	14'65
	(e)		Poodicherry	7'85	1,235'79	1,235'79
23	(a)	Burma (B.)	Burma . . . . .	...	1,260'50	...	...	1,260'50	...	...	1,260'50
24	(a)	Morvi (M. R. W.)	Morvi . . . . .	...	...	94'36	...	...	94'36	...	94'36
25	(a)	Barni Light (B. L.)	Barni Light . . . . .	...	...	21'59	...	...	21'59	...	21'59
26	(a)	Tarakeshwar-Magra (B. P.)	Tarakeshwar-Magra . . . . .	...	...	31'12	...	...	31'12	...	31'12
27	(a)	Ranaghat-Krishnagar (B. K. L.)	Ranaghat-Krishnagar . . . . .	...	...	20'25	...	...	20'25	...	20'25
28	(a)	Tezpur-Balipara (T. B.)	Tezpur-Balipara . . . . .	...	...	20'10	...	...	20'10	...	20'10
29	(a)	Darjeeling-Himalayan (D. H.)	Darjeeling-Himalayan . . . . .	...	...	51'00	...	...	51'00	...	51'00
30	(a)	Howrah-Amta (H. A.)	Howrah-Amta . . . . .	...	...	28'69	...	...	28'69	...	28'69
31	(a)	Howrah-Sheakhala (H. S.)	Howrah-Sheakhala . . . . .	...	...	19'75	...	...	19'75	...	19'75
32	(a)	Jorhat (J)	Jorhat . . . . .	...	...	30'00	...	...	30'00	...	30'00
33	(a)	Thaton-Duyinzaik (T. D.)	Thaton-Duyinzaik . . . . .	...	...	7'76	...	...	7'76	...	7'76
Total railway mileage open in India and Burma on the 31st December 1902				14,118'33	10,981'15	570'10	261'70	25,931'34

* From Rangoon to Lasein, 9'00 miles, Rangoon to Pasundaung, 0'70 mile and Myohang to Mandalay, 2'45 miles are laid with double track.

Appendix 3.
Additions to mileage.

APPENDIX 3.

Mileage added to the Railway System of India
during the Calendar year 1902.

(Referred to in paragraph 6 of Report.)

Note.—For classification of railways, see Appendix 1.
For particulars of open railways, see Appendix 2.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

CLASSIFICATION NO.		Railway administration to which railway has been added.	Name of owning railway.	Section of line added during 1902.	Date of opening for traffic.	ADDITIONS IN MILES MADE TO OPEN MILEAGE DURING 1902.							
						Length.			Total mileage added to railway administration.				
Main.	Sub.					5' 6"	3' 33"	2' 6"	5' 6"	3' 33"	2' 6"	2' 6"	
1	(a)	East Indian	East Indian	Mile 132 from Howrah to Sitarampur.	15th April	6'99	...	...			
				Some East Bank (Barua) to Rajhara.	3rd May	67'32	...	...			
				Rajhara to Daltonganj	15th December	10'65	...	...			
				Portion of the Moghal Sarai-Gya branch.	3rd May	0'94	...	...	85'89	...	...	...
2	(b)	Eastern Bengal State.	Eastern Bengal State.	Bansra diversion extension	17th November	0'75	...	...			
				Moghalkhat to Gitaldaha junction.	2nd January	...	1'86	...					
				Gitaldaha junction to Dhubri	23rd September	...	36'75	...	0'75	38'61	...	...
4	(a)	Bengal-Nagpur	Bengal-Nagpur	Hooghly foreshore to Kidderpore Docks.	10th April	0'60	...	...	0'60	...	...	...
5	(a)	Oudh and Rohilkhand.	Oudh and Rohilkhand.	Moghal Sarai to Bechupur	31st October	1'41	...	...	1'41	...	...	...
6	(a)	North Western State.	North Western	Phulji branch extension	31st March	0'34	...	...			
	(b)		Southern-Punjab	Delhi Brewery to Delhi	20th December	0'79	...	...			
	(c)		Khushalgarh-Kohat-Thal.	Khushalgarh West to Kohat	25th May	...	...	29'70	1'13	...	29'70	...
8	(f)	Bombay and Central India.	Baroda	Vijapur-Kalol-Kadi.	10th June	...	29'44	...	...	29'44	...	...
10	(a)	Madras	Madras	Badagara to Tellicherry	1st May	14'73	...	...			
	(d)		Shoranur-Cochin	Shoranur to Ernakulam	2nd June	...	64'75	...	14'73	64'75	...	...
12	(b)	Bengal-Doonars	Bengal-Doonars extensions.	Oodlabari to Bagrakote.	1st January	...	3'46	...	...	3'46	...	...
16	(b)	Bengal and North-Western.	Tirhoot.	Kosi bridge and approaches (Katariah to Kursels).	26th June	...	4'75	...	...	...	...	...
18	(b)	Jodhpur-Bikaner	Bikaner	Suratgarh to Bhatinda	9th September	...	88'00	...	...	88'00	...	...
	(a)	South Indian	South Indian	Madura to Mandapam	1st August	...	89'50	...					
	(b)		Tanjore District Board (Mayavaram-Mutupet)	Mutupet to Pattukottai	20th October	...	17'03	...					
22	(c)		Tinnevely-Quilon (Travancore) (British section).	Tinnevely Bridge to Kallidai-kurichi.	1st June	...	19'05	...	...	125'58	...	...
23	(a)	Burma	Burma	Bassein to Henzada.	15th December	...	82'25	...	...	82'25	...	...
Total mileage added during 1902									104'31	432'09	29'70	...	

* Omitted from the total as the length was previously included in the open mileage when traffic was worked over a temporary pile bridge.

APPENDIX 3—concl'd.

Appendix 3.
Additions to mileage.*Mileage added to the Railway System of India
during the Calendar year 1902—concluded.*

(Referred to in paragraph 6 of Report.)

Note.—For classification of railways, see Appendix 1.
For particulars of open railways, see Appendix 2.
For mileage open at the end of each year, see Appendix 4.
For mileage under construction or sanctioned, see Appendix 5.

CLASSIFICATION No.		Railway administration to which railway has been added.	Name of owning railway.	Section of line added during 1902.	Date of opening for traffic.	ADDITIONS IN MILES MADE TO OPEN MILEAGE DURING 1902.							
Main.	Sub.					Length.			Total mileage added to railway administration.				
						5' 0"	3' 31"	2' 0"	5' 0"	3' 31"	2' 0"	2' 0"	
MILEAGE ADDED FROM THE 1ST JANUARY TO THE 31ST MARCH 1903.													
1	(a)	East Indian	East Indian	Katrasgarh to Kanoodih . . .	7th March	7'80	—	—	7'80	—	—	—	
4	(a)	Bengal-Nagpur	Bengal-Nagpur.	Midnapore to Bhojudih . . .	1st February	114'50	—	—	114'50	—	—	—	
				Ramkanali to Chaurashi . . .	1st February	4'67	—	—	119'17	—	—	—	
5	(a)	Oudh and Rohilkhand.	Oudh and Rohilkhand.	Fartabgarh to Siwait . . .	20th March	24'00	—	—	24'00	—	—	—	
8	(a)	Bombay, Baroda and Central India.	Ahmedabad-Dholka.	Sabarmati to Bavla . . .	23rd February	—	25'00	—	—	25'00	—	—	
12	(b)	Bengal-Doonars	Bengal-Doonars extension.	Chalka to Chengmari . . .	1st January	—	15'00	—	—	—	—	—	
				Chengmari to Dalgaon . . .	23rd March	—	14'00	—	—	39'00	—	—	
14	(a)	Assam-Bengal	Assam-Bengal	Lakwa to Bhojo . . .	1st February	—	12'75	—	—	—	—	—	
				Bhojo to Tinsukia . . .	1st March	—	41'75	—	—	54'50	—	—	
16	(a)	Bengal and North-Western.	Bengal and North-Western.	Turtipur bridge and approaches	15th January	—	23'00	—	—	—	—	—	
				Azamgarh to Shahganj . . .	14th February	—	34'81	—	—	—	—	—	
				Phephna to Ghazipur Ghat . . .	10th March	—	31'16	—	—	65'97	—	—	
23	(a)	Burma	Burma	Hsipaw to Lashio . . .	1st March	—	50'94	—	—	50'94	—	—	
Total mileage added from 1st January to 31st March 1903 . . .									150'97	225'41	—	—	
MILEAGE ADDED FROM 1ST TO 30TH APRIL 1903.													
4	(a)	Bengal-Nagpur	Bengal-Nagpur	Bhojudih to Bhaga . . .	20th April	7'00	—	—	—	—	—	—	
	(a)		Jubbulpore-Gondia extension	Gondia to Neipur . . .	18th April	—	—	74'00	7'00	—	74'00	—	
5	(a)	Oudh and Rohilkhand.	Oudh and Rohilkhand.	Sultanpur to Chilibila . . .	10th April	23'00	—	—	23'00	—	—	—	
6	(a)	North Western	North Western State.	Malakwal to Sargodha . . .	1st April	46'50	—	—	—	—	—	—	
	(a)		Khusalgarh-Kohat-Thal.	Kohat to Thal . . .	1st April	—	—	62'03	46'50	—	62'03	—	
8	(a)	Bombay, Baroda and Central India.	Ahmedabad-Dholka.	Bavla to Dholka . . .	1st April	—	8'54	—	—	8'54	—	—	
17	(b)	Rohilkhand and Kumaon.	Lucknow-Bareilly.	Dudhwa to Chandan Chowki . . .	3rd April	—	5'93	—	—	5'93	—	—	
23	(a)	Burma	Burma	Lepadan to Tharawaw . . .	17th April	—	23'00	—	—	—	—	—	
				Henzada to Henzada Shore . . .	17th April	—	3'00	—	—	26'00	—	—	
Total mileage added from 1st to 30th April 1903 . . .									76'50	40'47	136'03	—	
GRAND TOTAL MILEAGE OPEN ON THE 30TH APRIL 1903 . . .									14,345'80	11,247'03	706'13	261'76	

6 Omitted from the total as the length was previously included in the open mileage when traffic was worked over a temporary pile bridge.

Appendix 4.
Mileage open yearly.

APPEN

Railway mileage open for traffic year by year under each railway

(Referred to in para

N.B.—A reference to Appendix 2 will furnish the key

Notes.—For classification of railways, see

For particulars of open railways,

For mileage added from 1st Janu

For mileage under construction

CLASS No.	1	2	3	4	5	6	7		8
Calendar Year.	E. I.	E. B. S.	B. C.	B. N.	O. & R.	N. W.	G. I. P. (a) to (c).	I. M. (d) to (h).	B., B. & C. I.
1853	38	...	...	...	...	...	30	...	...
1854	120	...	...	...	...	...	33	...	...
1855	...	...	...	...	...	...	49	...	...
1856	120	...	...	...	...	...	87	...	...
1857	120	...	...	...	...	...	87	...	...
1858	139	...	...	...	...	...	193	...	...
1859	296	...	...	...	...	...	244	...	...
1860	370	...	...	...	...	...	297	...	...
1861	501	...	...	...	...	110	438	...	35 134
1862	877	123	...	...	...	142	495	...	167
1863	960	136	...	...	...	142	555	...	185
1864	1,131	140	...	...	...	142	588	...	306
1865	1,153	140	...	...	...	350	704	...	306
1866	1,155	140	...	...	...	350	825	...	306
1867	1,380	140	...	...	42	403	855	...	306
1868	1,380	140	...	...	42	403	876	...	307
1869	1,380	140	...	...	42	601	876	...	307
1870	1,380	140	...	...	42	663	1,269	...	312
1871	1,530	185	...	...	42	663	1,290	...	350
1872	1,530	185	...	...	293	663	1,295	...	389
1873	1,530	187	...	...	456	663	1,295	...	524
1874	1,530	187	...	...	540	663	1,313	...	777
1875	1,530	187	...	...	544	725	1,336	...	917
1876	1,530	187	...	...	544	767	1,341	...	996
1877	1,530	321	...	...	544	767	1,341	...	1,001
1878	1,530	419	...	...	547	1,268	1,487	34	1,098
1879	1,588	430	...	...	547	1,268	1,494	66	1,237
1880	1,600	430	...	53	547	1,541	1,494	66	1,412
1881	1,600	454	...	99	547	1,671	1,494	75	1,760
1882	1,603	483	20	149	547	1,732	1,494	86	1,775
1883	1,605	504	52	149	548	1,759	1,494	86	1,866
1884	1,605	519	125	149	595	1,666	1,494	138	2,123
1885	1,633	606	125	149	607	1,873	1,494	152	2,187
1886	1,633	607	125	186	686	1,873	1,493	174	2,188
1887	1,632	645	125	186	692	2,414	1,493	172	2,208
1888	1,632	672	125	225	692	2,458	1,493	268	2,213
1889	1,632	745	125	348	692	2,541	1,493	734	2,219
1890	1,632	761	125	584	692	2,567	1,493	734	2,246
1891	1,794	777	125	831	692	2,482	1,492	734	2,313
1892	1,794	818	125	831	692	2,612	1,490	734	2,313
1893	1,797	834	125	899	741	2,613	1,490	734	2,355
1894	1,848	835	125	992	796	2,615	1,490	734	2,445
1895	1,884	836	125	1,067	797	2,666	1,490	922	2,445
1896	1,884	837	125	1,140	847	2,903	1,491	922	2,505
1897	1,889	840	125	1,176	892	2,406	1,491	922	2,585
1898	1,897	883	125	1,384	1,030	2,406	1,491	970	2,622
1899	1,974	944	125	1,507	1,030	3,556	1,491	1,238	2,738
1900	2,104	989	125	1,603	1,149	3,614	1,561	1,239	2,764
1901	2,101	1,001	125	1,634	1,149	3,749	1,562	1,239	2,753
1902	2,187	1,044	125	1,627	1,151	3,780	1,562	1,239	2,783

Appendix 4.
 Mileage open yearly.

DIX 4.

administration and during the Viceroyalty of each Governor General.

(graph 7 of Report.)

to the code letters used to express railway systems.

Appendix 1.

see Appendix 2.

from 1902 to 30th April 1903, see Appendix 3.

or sanctioned, see Appendix 5.

9	10	12	13	14	15	16	17	18	19	20	CLASS No.
N. G. S.	M.	B. D.	D. S.	A. R.	D.	B. & N. W.	R. & K.	J. B.	U. C.	B. G. J. P.	Calendar Year.
...	...	...	...	...	...	...	...	...	...	...	1853
...	...	...	...	...	...	...	...	...	...	...	1854
...	...	...	...	...	...	...	...	...	...	...	1855
...	65	...	...	...	...	...	...	...	...	...	1856
...	80	...	...	...	...	...	...	...	...	...	1857
...	95	...	...	...	...	...	...	...	...	...	1858
...	95	...	...	...	...	...	...	...	...	...	1859
...	136	...	...	...	...	...	...	...	...	...	1860
...	296	...	...	...	...	...	...	...	...	...	1861
...	447	...	...	...	...	...	...	...	...	...	1862
...	447	...	...	...	...	...	...	...	...	...	1863
...	569	...	...	...	...	...	...	...	...	...	1864
...	609	...	...	...	...	...	...	...	...	...	1865
...	643	...	...	...	...	...	...	...	...	...	1866
...	643	...	...	...	...	...	...	...	...	...	1867
...	676	...	...	...	...	...	...	...	...	...	1868
...	705	...	...	...	...	...	...	...	...	...	1869
...	781	...	...	...	...	...	...	...	...	...	1870
...	830	...	...	...	...	...	...	...	...	...	1871
...	830	...	...	...	...	...	...	...	...	...	1872
...	858	...	...	...	...	...	...	...	...	...	1873
121	858	...	...	...	...	53	...	...	...	...	1874
121	858	...	...	...	...	43	...	...	...	...	1875
121	858	...	...	...	...	43	...	...	...	...	1876
121	858	...	...	...	...	78	...	...	...	...	1877
121	858	...	...	...	...	85	...	...	...	...	1878
121	858	...	...	...	...	85	...	...	...	...	1879
121	858	...	...	...	...	85	...	...	...	105	1880
121	858	...	...	...	...	85	...	...	...	192	1881
121	861	...	15	...	4	85	...	18	...	192	1882
121	861	...	38	...	5	193	...	18	...	193	1883
121	861	...	69	...	5	301	90	44	...	193	1884
121	861	...	77	...	4	529	90	64	...	193	1885
204	859	...	77	...	5	622	146	64	...	193	1886
205	827	...	77	...	5	635	196	114	...	193	1887
306	838	...	77	...	5	649	195	124	...	209	1888
351	839	...	77	...	5	649	195	124	...	332	1889
354	839	...	77	...	5	699	212	124	...	333	1890
351	839	...	77	...	5	739	283	291	...	333	1891
354	839	...	77	...	5	756	283	291	...	333	1892
354	1,067	38	77	...	5	756	307	364	...	380	1893
353	1,072	36	77	...	5	756	324	364	...	380	1894
353	1,070	36	77	129	5	756	324	364	60	380	1895
353	1,082	36	77	286	5	820	324	364	60	380	1896
353	1,081	36	87	361	5	827	324	364	60	434	1897
351	1,259	36	85	379	5	928	324	406	61	455	1898
505	1,256	36	85	435	5	1,193	324	475	67	455	1899
736	1,359	102	85	436	5	1,224	324	609	67	455	1900
742	1,397	111	88	589	5	1,280	324	736	67	455	1901
742	1,477	114	88	589	5	1,283	325	824	67	455	1902

Appendix 4.
Mileage open yearly.

Railway mileage open for traffic year by year under each railway

(Referred to in para

N.B.—A reference to Appendix 2 will furnish the key

For classification of railways, see

For particulars of open railways,

For mileage added from 1st Jan

For mileage under construction

CLASS No.	21	22	23	24	25	26	27	28		29
CALENDAR YEAR.	S. M.	S. L.	B.	M. R. W.	B. L.	R. P.	R. K. L.	T. B.	C. C.*	D. H.
1853	...	...	...	...	...	...	...	...	...	...
1854	...	...	...	...	...	...	...	...	...	...
1855	...	...	...	...	...	...	...	...	...	...
1856	...	...	...	...	...	...	...	...	...	...
1857	...	...	...	...	...	...	...	...	...	...
1858	...	...	...	...	...	...	...	...	...	...
1859	...	...	...	...	...	...	...	...	...	...
1860	...	48	...	...	...	...	...	...	...	...
1861	...	...	...	...	...	...	...	...	...	...
1862	...	82	...	...	...	...	...	...	...	...
1863	...	82	...	...	...	...	...	...	...	...
1864	...	82	...	...	...	...	...	...	...	...
1865	...	90	...	...	...	...	...	...	...	...
1866	...	144	...	...	...	...	...	...	...	...
1867	...	160	...	...	...	...	...	...	...	...
1868	...	184	...	...	...	...	...	...	...	...
1869	...	184	...	...	...	...	...	...	...	...
1870	...	184	...	...	...	...	...	...	...	...
1871	...	184	...	...	...	...	...	...	...	...
1872	...	184	...	...	...	...	...	...	...	...
1873	...	184	...	...	...	...	...	...	...	...
1874	...	184	...	...	...	...	...	...	...	...
1875	...	280	...	...	...	...	...	...	...	...
1876	...	473	...	...	...	...	...	...	...	...
1877	...	598	161	...	...	...	...	...	...	...
1878	...	611	161	...	...	...	...	...	...	...
1879	...	639	161	...	...	...	...	...	...	...
1880	...	653	167	...	...	...	...	...	...	30
1881	58	661	167	...	...	...	...	...	...	40
1882	86	661	167	...	...	...	...	...	...	50
1883	87	668	167	...	...	...	...	...	...	50
1884	354	668	260	...	...	...	...	...	...	51
1885	455	668	333	...	...	...	...	...	...	51
1886	618	668	333	51	...	...	...	...	7	51
1887	1,030	745	333	68	...	...	...	...	7	51
1888	1,044	745	441	68	...	...	...	...	7	51
1889	1,325	745	553	68	...	...	...	...	7	51
1890	1,390	787	550	94	...	...	...	...	7	51
1891	1,432	909	617	94	...	...	...	...	8	51
1892	1,518	1,050	717	94	...	...	...	...	8	51
1893	1,606	1,049	730	94	...	...	...	...	8	51
1894	1,604	1,103	745	94	...	32	...	...	8	51
1895	1,604	1,103	834	94	...	31	...	...	8	51
1896	1,604	1,103	886	94	...	31	...	...	8	51
1897	1,604	1,103	887	94	22	31	...	...	8	51
1898	1,604	1,094	936	94	22	31	...	20	8	51
1899	1,643	1,107	993	94	22	31	20	20	8	51
1900	1,643	1,110	1,124	94	22	31	20	20	8	51
1901	1,643	1,110	1,178	94	22	31	20	20	...	51
1902	1,643	1,236	1,260	94	22	31	20	20	...	51

* Closed for traffic from the

DIX 4—concl.

administration and during the Viceroyalty of each Governor General.

Appendix 4.
Mileage open yearly.

(graph 7 of Report.)

to the code letters used to express railway systems.

Appendix 1.

see Appendix 2.

1799 to 30th April 1903, see Appendix 3.

or sanctioned, see Appendix 5.

30	31	32	33	Total actual mileage opened during the year.	Deduct corrections, abandonments, etc., of mileage.	Net mileage added during the year.	Total mileage open for traffic at close of the year.	Total mileage opened during Viceroyalty.	Viceroy.	CLASS. No.	CALENDAR YEAR.
H. A.	H. S.	J.	T. D.								
...	20	...	20	20	} 169	Marquis of Dalhousie	}	1853
...	50	+1	51	71				1854
...	99	-1	98	169				1855
...	103	...	103	272	} 1,418	Earl Canning	}	1856
...	15	...	15	287				1857
...	140	...	140	427				1858
...	198	...	198	625				1859
...	212	+1	213	838				1860
...	748	+1	749	1,587				1861
...	748	...	748	2,333	} 930	Earl of Elgin	}	1862
...	174	...	174	2,507				1863
...	451	...	451	2,958	} 1,501	Lord Lawrence	}	1864
...	405	...	405	3,363				1865
...	300	...	200	3,563				1866
...	387	-1	386	3,929				1867
...	78	+1	79	4,008				1868
...	248	-1	247	4,255	} 1,086	Earl of Mayo	}	1869
...	518	...	518	4,771				1870
...	802	+1	803	5,074				1871
...	303	-3	298	5,369	} 1,487	Lord Northbrook	}	1872
...	327	+1	328	5,697				1873
...	477	+52	529	6,226				1874
...	366	-51	315	6,541				1875
...	319	...	319	6,860	} 3,621	Lord Lytton	}	1876
...	480	...	480	7,320				1877
...	693	+1	694	8,219				1878
...	269	+6	275	9,494				1879
...	668	...	668	9,162				1880
...	728	...	728	9,890	} 3,489	Marquis of Ripon	}	1881
...	252	+7	259	10,148				1882
...	859	-50	309	10,458				1883
...	...	12	...	1,160	-17	1,173	11,631				1884
...	...	29	S.	651	+1	652	12,283	} 3,945	Earl of Dufferin and Ava	}	1885
...	...	27	S.	643	-34	609	12,892				1886
...	...	31	S.	1,212	-1	1,211	14,103				1887
...	...	31	S.	482	-9	473	14,576				1888
...	...	28	S.	1,328	-15	1,311	15,887	} 3,928	Marquis of Lansdowne	}	1889
...	...	28	S.	515	-1	514	16,401				1890
...	...	28	S.	997	-90	907	17,308				1891
...	...	28	S.	504	+3	507	17,815				1892
...	...	28	S.	689	...	689	18,504				1893
...	...	28	S.	409	-13	396	18,900	} 3,536	Earl of Elgin	}	1894
...	...	28	S.	657	-10	647	19,547				1895
...	...	28	S.	703	...	707	20,254				1896
...	...	28	S.	845	+16	861	21,115				1897
14 28	17 19	28	S.	898	+27	925	22,040				1898
29	20	28	S.	1,484	-1	1,483	23,523	} 3,991	Lord Curzon	}	1899
29	20	30	S.	1,237	-8	1,229	24,752				1900
29	20	30	S.	578	+35	611	25,363				1901
29	20	30	S.	586	+2	588	25,931				1902
								26,931			

28th March 1900, and subsequently abandoned.

APPENDIX 5.

Mileage under construction or sanctioned at the close of the Calendar year 1902.
(Referred to in paragraph 9 of Report.)

N.B.—For classification of railways, see Appendix 1.
For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.

CLASSIFICATION No.		Railway administration by which being constructed.	Name of owning railway.	Section of line the construction of which has been sanctioned.	Date construction was sanctioned.	MILEAGE SANCTIONED AND STILL REMAINING TO BE CONSTRUCTED.								REMARKS.
Main.	Sub.					Mileage sanctioned to be constructed.				Total sanctioned for construction by the railway administration.				
						5' 6"	3' 38"	2' 6"	2' 0"	5' 6"	3' 38"	2' 6"	2' 0"	
	(a)	East Indian	East Indian	Shikohabad to Farukhabad.	13th January 1898.	63'82	...	...	...					Work commenced.
				Katrasgarh to Khanoodih.	1st November 1901.	7'80	...	...	...					Since opened.
				Jherriah to Dhanbaid.	1st November 1901.	3'75	...	...	...					Work commenced.
				Tasra siding	1st November 1901.	1'75	...	...	...					Work commenced.
				Northern half of the Mulkeera-Katrasgarh cross connection.	1st November 1901.	0'71	...	...	...					Work commenced.
				Manpur. to 0'87 mile beyond Gurpa.	23th March 1902.	25'25	...	...	...					Work commenced.
				Mile 0'87 beyond Gurpa to Kodarma.	20th June 1902.	18'19	...	...	...					Work commenced.
				Kodarma to Hariharpur.	20th June 1902.	56'35	...	...	...					Work commenced.
	(a)		Rewah	Rewah to Satna.	18th May 1897.	...	...	31'81	...	179'62	...	31'81	...	Commencement of work not yet authorised.
	(a)		Eastern Bengal State.	Panchooria to the Ganges.	12th December 1890.	6'00	...	...	...					Constructed, but not worked.
				Extension of Chit-pore terminus.	26th March 1901.	1'66	...	...	...					Work commenced.
				Kankurgachi chord.	19th February 1902.	2'25	...	...	...					Not commenced.
				Ranaghat to Moorsheedabad.	20th June 1902.	75'00	...	...	...					Work commenced.
	(b)		Eastern Bengal State.	Golokganj to the Brahmaputra opposite Gauhati.	31st October 1902.	...	151'62	...	...	84'91	151'62	...	...	Work commenced.
				Midnapore to Bhojudih.	1st June 1899.	114'50	...	...	...					Since opened.
				Ramkanali to Noodhesha in the Chaurashi coal-fields.	17th July 1901.	9'48	...	...	...					Portion since opened.
				Bhojudih to Hariharpur.	1st November 1901.	27'90	...	...	...					Work commenced.
	(a)	Bengal-Nagpur...	Bengal-Nagpur	Bhojudih to Parthadihi.	1st November 1901.	1'45	...	...	...					Work commenced.
				Bhojudih to Mhoda including the Bhaga connection.	1st November 1901.	21'36	...	...	...					Portion since opened.
				Bhowra siding	1st November 1901.	1'50	...	...	...					Work commenced.
				Southern half of the Mulkeera-Katrasgarh cross connection.	1st November 1901.	0'71	...	...	...	176'90	...	...	...	Work commenced.
						Carried over				176'90	...	...	...
										264'33	151'62	31'81	...	

APPENDIX 5—contd.

Appendix 5.
Miles in construction.

Mileage under construction or sanctioned at the close of the Calendar year 1902.

(Referred to in paragraph 9 of Report.)

N.B.—For classification of railways, see Appendix 1.

For particulars of open railways, see Appendix 2.

For mileage added from 1st January 1902 to 31st April 1903, see Appendix 3.

For mileage open at the end of each year, see Appendix 4.

CLASSIFICATION No.		Railway administration by which being constructed.	Name of owning railway.	Section of line the construction of which has been sanctioned.	Date construction was sanctioned.	MILEAGE SANCTIONED AND STILL REMAINING TO BE CONSTRUCTED.								REMARKS.
Main.	Sub.					Mileage sanctioned to be constructed.				Total sanctioned for construction by the railway administration.				
						5' 6"	3' 3"	2' 0"	2' 0"	5' 6"	3' 3"	2' 6"	2' 0"	
						Brought forward				264'53	151'68	31'81	...	
										170'50	...	...	...
4	(d)	Bengal-Nagpur— <i>concd.</i>	Jubbulpur-Gondia extension.	Jubbulpore to Gondia.	23rd January 1901.	...	...	143'43	...					Portion since opened.
				Neinpur to Mandla	23rd January 1901.	...	...	21'75	...					Work commenced.
				Neinpur to Chindwara.	23rd January 1901.	...	...	87'49	...					Work commenced.
	(e)		Moharbanj*	Baripada Road station to Baripada.	18th July 1902.	...	...	28'50	...	176'90	...	231'17	...	Work commenced.
5	(a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	Allahabad to Fyzabad.	8th November 1901.	134'67	...	...	...					Portion since opened.
				Pal-mau Madhoganj.	15th August 1902.	14'47	...	...	...	109'14	...	...	...	Work commenced.
	(e)		North Western State.	Jech Doab line (Malakwal to the Karana Hills).	27th November 1901.	51'40	...	...	...					Portion since opened.
6		North Western State.		From a point 12 miles South of Quetta to Nushki.	6th August 1902.	82'50	...	...	...					Work commenced.
	(f)		Khushalgarh-Kuha.-Thal.	Kohat to Thal.	31st October 1900.	...	...	62'03	...	133'90	...	62'03	...	Since opened.
7	(d)	Great Indian Peninsula.	Indian Midland...	Ait to Kunch.	23rd September 1902.	8'85	...	...	...					Work commenced.
	(h)		Gwalior Light ...	Gwalior to Sabalgarh.	2nd October 1901.	...	...	...	57'85	8'25	...	...	57'86	Not commenced.
	(z)		Bombay, Baroda and Central India.	Godhra to Baroda.	6th June 1902.	44'00	...	...	...					Work commenced.
8	(g)		Rajputana-Malwa	Rewari to Phulera	20th December 1901.	...	133'32	...	...					Commencement of work not yet authorised.
	(f)		Vijapur-Kalol-Kadi.	Kalol to Kadi.	15th August 1901.	...	12'20	...	...					Work commenced.
	(l)		Gackwar's Dabhoi	Padhra to Mhoba	12th February 1902.	...	...	9'20	...					Work commenced.
	(n)		Jaipur (Siwai-Madhupur).	Sanganer to Siwai Madhupur.	2nd December 1897.	...	72'85	...	...					Completion stopped for want of funds.
	(o)		Ahmedabad-Dholka.	Saharmati to Dholka.	2nd October 1901.	...	23'54	...	...	44'00	251'91	9'20	...	Since opened.
						Carried over				727'32	403'53	334'21	57'86	

* Question of working agency not yet finally settled.

† Excludes 245 miles of Oudh and Rohilkhand State railway existing line between Sultanpur Road and Partabgarh stations.

Appendix 5:
Miles in construction.

APPENDIX 5—contd.

Mileage under construction or sanctioned at the close of the Calendar year 1902.

(Referred to in paragraph 9 of Report.)

N.B.—For classification of railways, see Appendix 1.
For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.

CLASSIFI- CATION NO.	Miles.	Sub.	Railway admini- stration by which being con- structed.	Name of owning railway.	Section of line the construction of which has been sanctioned.	Date construc- tion was sanctioned.	MILEAGE SANCTIONED AND STILL REMAINING TO BE CONSTRUCTED.								REMARKS.
							Mileage sanctioned to be constructed.				Total sanctioned for construction by the rail- way administration.				
							5' 6"	3' 3 3/4"	2' 6"	2' 0"	5' 6"	3' 3 3/4"	2' 6"	2' 0"	
							Brought forward				737'32	403'53	184'21	57'86	
		(a)	Madras	Madras	Tellicherry to Azhikal.	6th May 1897	17'07	..	..	..					Work com- menced.
		(b)	Madras	Madras (North- East line).	Korukkupettai to Bassein Road.	..	0'93	..	..	..					Work com- menced.
10		(f)	Madras	Azhikal-Manga- lore.	Azhikal to Manga- lore.	28th June 1901	77'27	..	..	..					Work com- menced.
		(e)	"	Morappur-Dhar- mapuri.	Morappur to Dharmapuri.	4th December 1902.	..	..	18'37	..					Work com- menced.
		(h)	"	Tirupattur-Krish- nagiri.	Tirupattur to Krishnagiri.	4th December 1902.	..	..	26'46	..	95'27	..	44'83	..	Work com- menced.
11		(a)	Agra-Delhi Chord	Agra-Delhi Chord	Agra to Delhi	15th Septem- ber 1893.	121'16	..	..	..	121'16	..	..	..	Work com- menced.
12		(b)	Bengal-Doonars	Bengal-Doonars Extensions.	Chalsa to Madari- hat.	2nd March 1893.	..	38'80	..	..	..	38'80	..	..	Portion since opened.
		(a)	Assam-Bengal	Assam-Bengal	Damchara to Lumding.	28th May 1891	..	100'74	..	..					Work com- menced.
14		(b)	Assam-Bengal	Assam-Bengal	Lakwa to Tin- sukia.	28th May 1891	..	54'50	..	..					Since opened.
		(b)	"	Noakhali (Ben- gal.)	Laksam via Noa- khal to Shahib Ghatta.	6th April 1901	..	34'95	..	..	..	190'19	..	..	Work com- menced.
		(a)	Bengal and North-West- ern.	Bengal and North-Western	Azamgarh to Shabganj.	18th May 1897	..	34'81	..	..					Since opened.
16		(a)	"	"	Phepha to Gha- zipur Ghat.	23rd Decem- ber 1901.	..	31'16	..	..					Since opened.
		(b)	"	"	Aunrihar to Jaun- pur.	1st November 1902.	..	36'14	..	..					Not commenc- ed.
		(b)	"	Tirhoot	Sakri to Jainagar	1st June 1899	..	30'47	..	..	..	132'58	..	..	Commence- ment of work not yet autho- rised.
17		(b)	Rohilkund and Kumaon.	Lucknow-Bareilly section.	Dudhwa to the Mohan river.	1st March 1901.	..	5'93	..	..	..	5'93	..	..	Since opened.
21		(i)	Southern Mah- ratta.	Bellary-Rayadrug	Bellary to Rayad- rug.	4th December 1902.	..	33'00	..	..					Work com- menced.
		(j)	"	Hospet-Kottur	Hospet to Kottur	4th December 1902.	..	38'10	..	..	..	71'19	..	..	Work com- menced.
		(a)	"	South Indian	Saidapet to Mad- ras Beach.	7th November 1902.	..	8'38	..	..					Work com- menced.
		(b)	"	"	Mutanandal to Sivagunga.	21st April 1899	..	9'00	..	..					Not commenc- ed.
		(b)	"	"	Pattukkottai to Arantangi.	15th Novem- ber 1900.	..	28'35	..	..					Work com- menced.
		(b)	Tanjore District Board (Maya- varam-Mutupet)	"	Arantangi Quarry Branch.	15th Novem- ber 1900.	..	3'90	..	..					Not commenc- ed.
22		(c)	South Indian	"	Adirampatnam Salt Siding.	15th Novem- ber 1900.	..	1'00	..	..					Not commenc- ed.
		(c)	"	"	Thambikkottai Salt Siding.	15th Novem- ber 1900.	..	0'63	..	..					Not commenc- ed.
		(f)	"	Tinnevely-Quilon (Travancore) (British section).	Kallidaikurichi to the British frontier near Shenkottah.	21st April 1899	..	31'33	..	..					Work com- menced.
		(f)	"	"	Quilon to the British frontier near Shencottah.	21st April 1899	..	57'95	..	..	..	140'54	..	..	Work com- menced.
							Carried over				953'75	982'67	429'04	57'86	

APPENDIX 5—concl'd.

Appendix 5.
Miles in construction.

Mileage under construction or sanctioned at the close of the Calendar year 1902.

(Referred to in paragraph 9 of Report.)

N.B.—For classification of railways, see Appendix 1.
For particulars of open railways, see Appendix 2.
For mileage added from 1st January 1902 to 30th April 1903, see Appendix 3.
For mileage open at the end of each year, see Appendix 4.

CLASSIFICATION No.	Mile	Sub.	Railway administration by which being constructed.	Name of owning railway.	Section of line the construction of which has been sanctioned.	Date construction was sanctioned.	MILEAGE SANCTIONED AND STILL REMAINING TO BE CONSTRUCTED.								REMARKS.
							Mileage sanctioned to be constructed.				Total sanctioned for construction by the railway administration.				
							5' 6"	3' 31"	2' 6"	2' 0"	5' 6"	3' 31"	2' 6"	2' 0"	
							Brought forward				953'75	982'67	489'04	57'86	
23	(a)	Burma	Burma	Hsipaw to Lashio	16th October 1895.	...	50'94	...	...	...	...	...	...	Since opened.
				Letpadan to Tharwa.	7th September 1899.	...	23'00	...	...	...	...	...	...	Since opened.
				Henzada to Henzada Share.	7th September 1899.	...	3'00	...	...	...	76'94	...	...	Since opened.
25	(a)	Barai Light	Barai Light	Barai Town to Pandharpur.	6th January 1898.	...	...	36'67	...	...	...	...	...	Not commenced.
				Barai Town to Tapwala.	20th November 1900.	...	...	26'70	...	...	...	37'37	...	Not commenced.
29	(a)	Howrah-Amta	Howrah-Amta	Jagatballubpur to Antpur.	20th March 1902.	...	...	...	8'50	...	...	...	...	Work commenced.
				Antpur to Champadanga.	20th March 1902.	...	...	...	9'00	...	...	...	...	Commencement of work not yet authorised.
				Antpur to Rajbuhat.	20th March 1902.	...	...	...	3'50	...	...	...	21'00	Commencement of work not yet authorised.
34	(a)	Kalka-Simla	Kalka-Simla	Kalka to Simla	29th June 1898	...	...	60'00	...	...	...	60'00	...	Work commenced.
35	(a)	Shahdara-Saharanpur.	Shahdara-Saharanpur.	Shahdara to Saharanpur.	4th January 1902.	...	...	95'00	...	...	...	...	...	Not commenced.
				Baraut to Meerut	4th January 1902.	...	...	30'00	...	...	...	125'00	...	Not commenced.
36	(a)	Bukhtiarpur-Behar Light.	Bukhtiarpur-Behar Light.	Bukhtiarpur to Behar.	30th May 1901	...	...	18'75	...	...	...	18'75	...	Work commenced.
37	(a)	Madura District Light.	Madura District Light.	Ammayaraklasur to Kotagudi.	30th May 1899	...	...	55'00	...	...	...	...	...	Work commenced.
				Perriyakulam to Kriabna Manai's Top.	30th May 1899	...	...	5'00	...	...	...	...	...	Work commenced.
				Theni to Karuvanath.	30th May 1899	...	...	33'00	...	...	...	93'00	...	Work commenced.
38	(a)	Dwara-Therria	Dwara-Therria.	Therria Ghat to Maolong.	15th May 1902	...	...	19'50	...	...	...	19'50	...	Commencement of work not yet authorised.
				Maolong to Noorpur or Dwara.		...	...	...	...	...	...	...	...	Work commenced.
Total mileage sanctioned and still remaining to be constructed on the 31st December 1902							953'75	1,050'63	802'66	78'86					

Mileage sanctioned from 1st January to 30th April 1903.

		MILEAGE SANCTIONED FROM 1ST JANUARY TO 31ST MARCH 1903.												
1	(a)	East Indian	East Indian	Mile 1704 on Jherriah branch to Chandore.	17th March...	4'16	...	...	...	4'16	...	...	...
16	(a)	Bengal and North-Western.	Bengal and North-Western.	Uska Bazar to Talsipar.	31st March...	53'54	...	...	...	...	...	...	...
				Gaisanvi to Jarwa	31st March ...	12'56	...	...	...	...	...	...	...
				Govakhpur to Bagaha.	31st March...	60'94	...	...	...	...	127'04	...	...
Total mileage sanctioned from 1st January to 31st March 1903										4'16	127'04	...	...
		MILEAGE SANCTIONED FROM 1ST TO 30TH APRIL 1903.												
5	(a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	Meerut to Hapur	3rd April ...	19'50	...	...	...	19'50	...	...	...
16	(a)	Bengal and North-Western.	Bengal and North-Western.	Kopaganj to Dhori-ghat.	28th April ...	21'70	...	...	...	...	21'70	...	...
Total mileage sanctioned from 1st to 30th April 1903										19'50	21'70	...	...

Appendix 6.
Weekly earnings.

APPEN

Gross earnings (average) of individual

and
Proportion of working expenses

(Referred to in paragraph

N. B.—When figures cease to be shown under any railway it is to be understood that such

EAST INDIAN RAILWAY SYSTEM (2,007.35 MILES).														
RAILWAY.	(a) EAST INDIAN (1,407.35 miles).								(b)		(c)		(d)	
	East Indian, 4' 6". (1,407.35 miles).		Patna-City, 5' 6". (57.20 miles).		Nalkati, 4' 6". (37.25 miles).		Dildarnagar-Ghazipur, 5' 6". (12.00 miles).		Delhi-Umthalla-Kalka, 5' 6". (162.24 miles).		South Bihar, 5' 6". (78.70 miles).		Tartarwar, 5' 6". (32.25 miles).	
Calendar year.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.				Rs.		Rs.		Rs.		Rs.	
1853	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1854	131	62.18	...	...	...	...	...	...	...	...	...	...	...	...
1855	108	51.97	...	...	...	...	...	...	...	...	...	...	...	...
1856	167	40.62	...	...	...	...	...	...	...	...	...	...	...	...
1857	832	38.72	...	...	...	...	...	...	...	...	...	...	...	...
1858	979	46.49	...	...	...	...	...	...	...	...	...	...	...	...
1859	853	44.77	...	...	...	...	...	...	...	...	...	...	...	...
1860	831	48.36	...	...	...	...	...	...	...	...	...	...	...	...
1861	240	46.49	...	...	...	...	...	...	...	...	...	...	...	...
1862	192	53.81	...	...	...	...	...	...	...	...	...	...	...	...
1863	222	55.01	...	...	...	...	...	...	...	...	...	...	...	...
1864	253	56.79	...	...	36	48.88	...	...	...	...	...	...	...	...
1865	311	44.82	...	...	41	63.28	...	...	...	...	...	...	...	...
1866	374	44.24	...	...	36	105.15	...	...	...	...	...	...	...	...
1867	362	41.91	...	...	45	68.81	...	...	...	...	...	...	...	...
1868	346	44.88	...	...	57	83.60	...	...	...	...	...	...	...	...
1869	399	44.42	...	...	60	50.64	...	...	...	...	...	...	...	...
1870	424	43.68	...	...	60	48.77	...	...	...	...	...	...	...	...
1871	338	43.36	...	...	55	58.07	...	...	...	...	...	...	...	...
1872	368	41.44	...	...	53	57.14	...	...	...	...	...	...	...	...
1873	382	38.75	...	...	60	60.06	...	...	...	...	...	...	...	...
1874	474	35.70	...	...	61	67.22	...	...	...	...	...	...	...	...
1875	374	39.58	...	...	57	76.42	...	...	...	...	...	...	...	...
1876	452	35.08	...	...	51	111.15	...	...	...	...	...	...	...	...
1877	565	31.85	...	...	64	100.47	...	...	...	...	...	...	...	...
1878	507	35.69	...	...	64	79.41	...	...	...	...	...	...	...	...
1879	552	32.85	121	55.24	65	65.56	...	...	...	...	...	...	...	...
1880	549	33.04	162	56.13	49	105.33	56	128.33	...	...	...	...	...	...
1881	578	31.85	173	65.11	47	79.20	63	99.52	...	...	...	...	...	...
1882	621	36.94	184	60.51	51	73.05	73	85.24	...	...	...	...	...	...
1883	620	36.95	158	51.93	57	69.63	80	49.87	...	...	...	...	...	...
1884	558	37.61	174	57.48	55	90.84	75	58.37	...	...	...	...	...	...
1885	589	35.25	174	52.52	54	82.08	75	52.28	...	...	...	...	227	53.57
1886	591	34.59	180	52.01	59	85.29	76	52.05	...	...	...	...	215	52.15
1887	583	31.70	178	46.53	65	70.57	77	46.45	...	...	...	...	228	49.86
1888	567	33.24	168	47.97	74	78.39	74	91.13	...	...	...	...	242	51.10
1889	557	34.59	175	48.70	73	78.18	...	...	...	...	...	...	246	53.51
1890	538	31.35	174	45.80	71	78.01	...	...	...	...	...	...	248	49.61
1891	615	27.21	204	42.76	66	62.97	...	...	128	48.00	...	...	264	46.42
1892	587	28.47	193	42.94	...	...	...	...	129	48.00	...	...	254	47.23
1893	584	27.44	...	...	...	...	...	...	143	48.00	...	...	245	46.86
1894	604	30.87	...	...	...	...	...	...	159	48.00	...	...	265	48.56
1895	603	31.07	...	...	...	...	...	...	174	48.00	...	...	267	48.37
1896	597	31.98	...	...	...	...	...	...	158	48.00	...	...	271	49.68
1897	640	29.47	...	...	...	...	...	...	166	48.00	...	...	270	48.01
1898	658	31.76	...	...	...	...	...	...	191	48.00	...	...	272	49.54
1899	697	32.84	...	...	...	...	...	...	172	48.00	101	35.00	267	50.58
1900	705	34.78	...	...	...	...	...	...	163	48.00	114	35.00	268	51.61
1901	731	31.06	...	...	...	...	...	...	213	48.00	125	40.02	285	52.23
1902	687	36.55	...	...	...	...	...	...	221	48.00	122	45.00	283	53.32

* Converted to 4' 6" gauge in 1892.

NOTE.—Earnings per mile per week exclude steam-trail
Note.—The length shown against each railway system

DIX 6.

railways per mile per week.

to gross earnings.

11 of Report.)

railway has been amalgamated with the system by which it has been worked.

EASTERN BENGAL STATE RAILWAY SYSTEM (1,044.79 MILES).																				
(a) EASTERN AND SOUTHERN SECTIONS (277.02 miles).				(b) NORTHERN, BEHAR AND DACCA SECTIONS (621.16 miles).								(c)		(d)		(e)		Railway.	Calendar year.	
Eastern and Southern sections. 5' 6". (277.02 miles).		Calcutta and South-Eastern section 5' 6". (58.00 miles).		Northern Bengal State, 3' 3 1/2". (249.25 miles).		Kannal-Dharila, 2' 6". (37.03 miles).		Northern and Behar sec. 3' 3 1/2" gauge, inclg. Kannal-Dharila & Santabari ext. 2' 6" gauge. (51.22 miles).		Dacca section, 3' 3 1/2". (85.02 miles).		Brahmaputra-Saltanpur 3' 3 1/2". (59.37 miles).		Mymensingh-Jamalpur-Jaranathganj, 3' 3 1/2". (53.14 miles).		Cooch Behar, 2' 6". (33.60 miles).				
Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.			
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.				
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1853
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1854
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1855
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1856
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1857
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1858
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1859
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1860
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1861
94	55.59	36	128.39	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1862
149	48.43	38	131.07	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1863
176	53.67	53	137.03	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1864
233	48.98	75	114.32	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1865
243	51.05	79	118.59	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1866
279	48.71	64	133.66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1867
308	46.33	60	173.12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1868
313	50.29	55	145.54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1869
335	55.09	55	104.88	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1870
270	56.01	40	90.82	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1871
344	66.60	40	92.07	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1872
377	49.08	70	102.56	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1873
433	52.18	68	78.35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1874
356	62.16	71	80.48	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1875
401	43.66	68	108.62	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1876
529	41.07	79	81.74	20	140.29	...	...	...	...	...	...	...	...	...	...	...	...	1877
512	43.71	83	75.08	81	75.31	...	...	...	...	...	...	...	...	...	...	...	...	1878
494	45.97	92	66.44	101	90.96	...	...	...	...	...	...	...	...	...	...	...	...	1879
540	44.81	98	71.32	114	60.10	...	...	...	...	...	...	...	...	...	...	...	...	1880
621	40.91	104	66.43	137	51.23	...	...	...	...	...	...	...	...	...	...	...	...	1881
611	40.60	130	97.42	160	49.04	25	92.97	...	...	...	...	...	...	...	...	...	...	1882
466	50.14	109	54.97	169	49.20	33	81.49	...	...	...	...	...	...	...	...	...	...	1883
...	54.06	...	...	156	69.93	39	78.26	...	...	...	...	...	...	...	...	...	...	1884
380	61.25	†	†	153	70.16	31	107.29	...	...	47	141.12	...	...	...	...	...	...	1885
403	61.97	...	...	189	52.85	29	122.87	...	...	56	111.47	...	...	...	...	...	...	1886
268	52.23	...	...	†	†	†	†	...	...	†	†	...	...	...	...	...	...	1887
346	47.47	...	...	...	...	...	...	...	...	†	†	...	...	...	...	...	...	1888
563	44.60	...	...	...	...	...	...	...	...	†	†	...	...	...	...	...	...	1889
521	47.12	...	...	...	...	...	...	...	...	†	†	...	...	...	...	...	...	1890
562	43.61	...	...	...	...	...	...	...	...	181	55.48	93	62.10	...	...	...	...	1891
562	44.32	...	...	...	...	...	...	...	...	165	47.32	85	64.40	...	...	...	...	1892
529	43.74	182	45.77	96	62.41	13	188.94	1893	
621	40.33	191	39.14	112	54.46	35	78.71	1894	
649	35.97	199	40.29	120	51.49	46	63.89	1895	
676	39.74	212	40.64	115	53.27	61	45.00	1896	
678	46.48	195	42.44	114	55.92	51	45.00	1897	
652	41.86	201	41.88	129	51.68	27	45.00	45.00	1898	
649	49.30	218	42.21	131	55.78	38	45.00	35	45.00	53	47.95	1899
689	47.75	245	42.14	146	58.83	58	45.00	58	45.00	50	43.41	1900
678	50.89	225	46.91	157	65.12	64	45.00	60	45.00	72	41.48	1901
728	48.18	235	48.65	146	62.12	78	45.00	74	45.00	71	40.31	1902

* Information not available.
† Included with the Eastern and Southern sections.
and proportion of expenses to earnings includes steamboat.
represents open mileage on the 31st December 1902.

Appendix 6.
Weekly earnings.

APPEN

Gross earnings (average) of individual
and
Proportion of working expenses

(Referred to in paragraph

N.B.—When figures cease to be shown under any railway it is to be understood that such

RAILWAY,	4 BENGAL-NAGPUR RAILWAY SYSTEM (1,602.24 MILES).											
	3 BENGAL CENTRAL 5' 6". (129.01 miles.)		BENGAL-NAGPUR (1,602.24 MILES.)								EAST COAST STATE, 5' 6". (807.57 miles.)	
	Calendar year,	Earnings per mile per week.	Pro: of exp: to earnings.	Nagpur-Chattisgarh, 3' 3". (149.00 miles.)		Katali-Umaria, 5' 6". (57.00 miles.)		(a) Bengal-Nagpur, 5' 6". (1,546.00 miles.)		(b) Raipur-Dhamtari, 2' 6". (56.24 miles.)		Earnings per mile per week.	Pro: of exp: to earnings.
Earnings per mile per week.				Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.		
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1853
1854
1855
1856
1857
1858
1859
1860
1861
1862
1863
1864
1865
1866
1867
1868
1869
1870
1871
1872
1873
1874
1875
1876
1877
1878
1879
1880	51	79.54	...	...	...	...	...	...
1881	87	76.53	...	...	...	...	...	...
1882	114	68.70	...	...	...	...	...	...
1883	170	48.10	...	...	...	...	...	...
1884	171	57.82	...	...	...	...	...	...
1885	82	98.46	...	...	...	...	...	...
1886	87	102.70	...	...	...	...	...	...
1887	100	101.82	...	...	...	...	...	...
1888	110	77.82	...	...	...	...	...	...
1889	113	59.85	...	...	...	...	...	...
1890	103	63.18	...	...	...	...	...	...
1891	125	59.62	...	...	...	...	...	...
1892	118	59.33	...	...	...	...	...	...
1893	121	59.80	...	...	...	...	...	...
1894	126	60.92	...	...	...	...	68	84.69
1895	146	57.90	...	...	...	...	98	89.81
1896	144	62.85	...	...	...	...	90	82.71
1897	175	56.98	...	...	...	...	94	77.98
1898	158	64.08	...	...	...	...	100	69.59
1899	158	61.23	...	...	...	...	94	76.46
1900	185	58.70	...	...	...	...	104	65.11
1901	194	54.25	...	...	...	...	143	56.10
1902	182	56.43	...	...	...	...	25	72.13
											21	77.27

* Converted to 5' 6" gauge in 1888.
 † Information not available.
 ‡ Transferred partly to the Madras railway and partly to the Bengal-Nagpur railway.

Note.—Earnings per mile per week exclude steam-boat
 Note.—The length shown against

DIX 6—contd.

railways per mile per week

Appendix 6.
Weekly earnings.

to gross earnings.

of Report.)

railway has been amalgamated with the system by which it has been worked.

5 ODISH AND ROHILKHAND STATE RAILWAY SYSTEM (1,151.28 MILES.)				6 NORTH WESTERN STATE RAILWAY SYSTEM (3,773.80 MILES).														Railway.
(a) & (c) Odish and Rohilkhand State, 5' 6" and 3' 6" (1,151.28 miles.)		(b) Hardwar-Dehra, 5' 6" (32.04 miles.)		(a) & (b) NORTH WESTERN STATE (3,773.80 miles.)														
Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Sind-Punjab and Delhi, 5' 6" (692.98 miles.)		Panjab Northern, 5' 6" (440.75 miles.)		Indus Valley and Kandahar, 5' 6" (652.48 miles.)		Amritsar- Pathankot, 5' 6" (64.70 miles.)		Commercial section, 5' 6" (12,047.64 miles.)		Military section, 5' 6" (1,034.16 miles.)		Entire line, 5' 6" (3,773.80 miles.)		
				Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Calendar year.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1853
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1854
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1855
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1856
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1857
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1858
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1859
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1860
...	...	...	...	58	97.28	...	...	...	...	...	...	...	...	...	...	...	...	1861
...	...	...	...	112	79.59	...	...	...	...	...	...	...	...	...	...	...	...	1862
...	...	...	...	171	83.04	...	...	...	...	...	...	...	...	...	...	...	...	1863
...	...	...	...	170	87.26	...	...	...	...	...	...	...	...	...	...	...	...	1864
...	...	...	...	101	82.18	...	...	...	...	...	...	...	...	...	...	...	...	1865
...	...	...	...	116	76.15	...	...	...	...	...	...	...	...	...	...	...	...	1866
74	106.97	...	...	121	89.98	...	...	...	...	...	...	...	...	...	...	...	...	1867
120	64.54	...	...	112	95.69	...	...	...	...	...	...	...	...	...	...	...	...	1868
97	81.74	...	...	117	80.70	...	...	...	...	...	...	...	...	...	...	...	...	1869
112	227.93	...	...	140	76.16	...	...	...	...	...	...	...	...	...	...	...	...	1870
217	69.31	...	...	122	99.08	...	...	...	...	...	...	...	...	...	...	...	...	1871
56	68.58	...	...	134	85.77	...	...	...	...	...	...	...	...	...	...	...	...	1872
56	72.91	...	...	154	68.67	...	...	...	...	...	...	...	...	...	...	...	...	1873
72	64.41	...	...	191	55.35	...	...	...	...	...	...	...	...	...	...	...	...	1874
97	59.71	...	...	161	64.08	61	63.41	...	...	...	...	...	...	...	...	...	...	1875
220	63.93	...	...	186	67.03	101	77.27	...	...	...	...	...	...	...	...	...	...	1876
153	52.38	...	...	241	57.46	130	86.81	...	...	...	...	...	...	...	...	...	...	1877
163	54.23	...	...	234	64.50	169	99.36	56	122.97	...	...	...	...	...	...	...	...	1878
153	58.11	...	...	317	60.22	345	79.52	121	81.16	...	...	...	...	...	...	...	...	1879
157	57.25	...	...	352	55.92	360	83.25	209	71.15	...	...	...	...	...	...	...	...	1880
173	59.91	...	...	285	69.76	198	89.64	155	78.73	...	...	...	...	...	...	...	...	1881
185	65.77	...	...	285	66.00	151	83.74	141	69.17	...	...	...	...	...	...	...	...	1882
192	54.54	...	...	296	57.13	144	81.11	203	55.55	...	...	...	...	...	...	...	...	1883
182	55.90	...	...	290	61.26	139	72.34	210	49.49	67	85.78	...	...	...	...	...	...	1884
176	65.59	...	...	373	57.35	165	62.69	309	40.85	84	80.28	...	...	...	...	...	...	1885
184	56.02	...	...	...	...	...	...	...	...	...	...	...	...	...	...	259	52.71	1886
186	52.83	...	...	...	...	...	...	...	...	...	...	...	...	...	...	182	72.73	1887
197	57.38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	202	67.77	1888
209	44.24	...	...	...	...	...	...	...	...	...	...	294	57.01	90	107.75	226	63.76	1889
205	49.14	...	...	...	...	...	...	...	...	...	...	283	54.48	88	110.72	219	62.82	1890
238	42.20	...	...	...	...	...	...	...	...	...	...	344	55.60	86	122.41	261	62.98	1891
237	41.28	...	...	...	...	...	...	...	...	...	...	280	55.58	70	131.08	208	64.25	1892
239	42.44	...	...	...	...	...	...	...	...	...	...	313	60.30	74	118.83	239	66.53	1893
262	45.47	...	...	...	...	...	...	...	...	...	...	347	53.11	54	122.95	253	60.31	1894
248	48.95	...	...	...	...	...	...	...	...	...	...	379	46.79	77	116.14	274	53.30	1895
209	49.97	...	...	...	...	...	...	...	...	...	...	292	54.77	78	97.77	220	59.63	1896
186	56.59	...	...	...	...	...	...	...	...	...	...	309	49.73	53	93.76	225	54.41	1897
190	46.12	...	...	...	...	...	...	...	...	...	...	401	45.98	67	101.26	255	50.61	1898
208	45.45	...	...	...	...	...	...	...	...	...	...	366	47.73	67	123.43	232	54.32	1899
208	51.44	115	50.00	...	...	...	...	...	...	...	...	275	52.34	60	102.47	201	58.02	1900
231	45.53	128	50.00	...	...	...	...	...	...	...	...	350	45.41	69	101.15	255	50.58	1901
230	51.30	152	54.46	...	...	...	...	...	...	...	...	360	53.63	67	112.42	202	58.62	1902

* This line which was originally constructed on the 3' 3 1/2" gauge was converted to 5' 6" gauge in 1878.

and proportion of expenses to earnings includes steam-hoist.
each railway system, represents open mileage on the 31st December 1902.

Appendix 6.
Weekly earnings.

APPEN

Gross earnings (average) of individual
and
Proportion of working expenses
(Referred to in paragraph

N.B.—When figures cease to be shown under any railway it is to be understood that such

6 NORTH WESTERN STATE RAILWAY SYSTEM (3,773.80 MILES).														
RAILWAY.	(b) Southern Panjab, 5' 6". (424.72 miles.)		(c) Rajputana- Bhatinda, 5' 6". (107.05 miles.)		Hyderabad- Shadi-palli, 5' 6". (95.33 miles.)		(d) Jammu and Kashmir (Native state section) 5' 6". (13.92 miles.)		(e) Ludhiana- Dhuri-Jakhal, 5' 6". (78.66 miles.)		(f) Khasbagar-Kohat-Thal, 2' 6". (29.70 miles.)		(g) Nowshera-Dargai, 2' 6". (40.25 miles.)	
	Calendar year.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.	Pro : of exp : to earnings.	Earnings per mile per week.
	Rs.		Rs.				Rs.		Rs.		Rs.		Rs.	
1853
1854
1855
1856
1857
1858
1859
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1861
1862
1863
1864
1865
1866
1867
1868
1869
1870
1871
1872
1873
1874
1875
1876
1877
1878
1879
1880
1881
1882
1883
1884	17	109.72	...	...	...	...	...	...	...	...	...	...
1885	59	106.09	...	...	...	...	...	...	...	...	...	...
1886	79	78.62	...	...	...	...	...	...	...	...	...	...
1887	†	†
1888	†	†
1889	74	55.00	...	...	...	...	...	...	...	...	...	...
1890	101	55.00	...	...	...	...	...	...	...	...	...	...
1891	128	55.00	...	...	...	...	...	...	...	...	...	...
1892	100	55.00	29	105.87	†	†	...	...	...	...	...	...
1893	122	55.00	43	87.41	†	†	...	...	...	...	...	...
1894	224	55.00	47	75.17	†	†	...	...	...	...	...	...
1895	235	55.00	55	72.28	†	†	...	...	...	...	...	...
1896	178	55.00	61	65.67	†	†	...	...	...	...	...	...
1897	35	52.60	124	55.00	67	71.04	†	†	...	...	...	...	...	...
1898	67	52.00	125	55.00	73	68.49	58	55.50	...	...	...	...	...	...
1899	63	52.00	122	55.00	74	60.73	62	55.50	...	...	...	...	...	...
1900	74	52.00	125	55.00	65	65.93	67	55.50	...	...	...	...	...	...
1901	135	51.91	155	55.00	†	†	63	55.50	68	55.00	...	...	...	...
1902	90	52.00	151	55.00	...	...	63	55.50	99	55.00	19	66.44	51	157.73

† Included with the North Western State railway.
‡ Transferred to the Jodhpur-Bikaner railway from the 1st January 1901.

Note.—Earnings per mile per week exclude steam-boat
Note.—The length shown against

DIX 6—contd.

Appendix 6.
Weekly earnings.

railways per mile per week

to gross earnings.

11 of Report.)

railway has been amalgamated with the system by which it has been worked.

GREAT INDIAN PENINSULA RAILWAY SYSTEM. (2,800.39 MILES.)																								Railway.
(a) Great Indian Peninsula, 5' 6". (1,228.40 miles.)		Dhond-Mannad, 5' 6". (144.50 miles.)		Wardha Coal, 5' 6". (44.38 miles.)		(b) Kham-gaon, 5' 6". (7.97 miles.)		(c) Amraoti, 5' 6". (5.49 miles.)		(d) INDIAN MIDLAND.				(e) Bina-Gaons-Barua, 5' 6". (125.63 miles.)		(f) Bhopal-Ujjain, 5' 6". (112.27 miles.)		(g) BHOPAL-ITARI (37.29 miles.)				(h) Gwalior Light, 2' 6". (126.74 miles.)		
Sindia, 5' 6". (74.88 miles.)		Indian Midland, 5' 6". (796.53 miles.)		British section, 5' 6". (13.71 miles.)		Native state section, 5' 6". (44.28 miles.)		Gwalior Light, 2' 6". (126.74 miles.)		Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	
Rs.	Pro: of exp: to earnings.	Rs.	Pro: of exp: to earnings.	Rs.	Pro: of exp: to earnings.	Rs.	Pro: of exp: to earnings.	Rs.	Pro: of exp: to earnings.	Rs.	Pro: of exp: to earnings.	Rs.	Pro: of exp: to earnings.	Rs.	Pro: of exp: to earnings.	Rs.	Pro: of exp: to earnings.	Rs.	Pro: of exp: to earnings.	Rs.	Pro: of exp: to earnings.	Rs.	Pro: of exp: to earnings.	Calendar year.
119	45'90	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1853
88	60'81	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1854
89	70'21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1855
113	42'17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1856
158	45'27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1857
173	42'19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1858
172	51'19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1859
144	60'97	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1860
139	76'35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1861
149	62'03	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1862
175	67'55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1863
119	72'07	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1864
414	50'54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1865
357	58'07	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1866
368	55'69	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1867
357	61'80	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1868
348	67'79	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1869
300	62'25	...	...	...	...	31	186'29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1870
307	65'03	...	...	...	...	56	88'90	70	73'13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1871
284	64'25	...	...	...	...	31	69'63	74	88'03	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1872
284	64'09	...	...	...	...	81	88'69	77	115'01	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1873
303	59'17	...	...	23	104'95	127	52'64	101	96'26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1874
324	47'28	...	...	31	106'68	174	68'55	186	77'51	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1875
369	47'60	...	...	23	116'94	132	72'43	212	41'55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1876
402	48'30	...	...	67	70'25	154	61'72	257	34'19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1877
429	48'91	24	131'01	54	93'84	191	40'65	286	43'74	54	133'30	...	...	...	...	...	...	...	...	...	...	...	...	1878
383	59'64	62	105'92	69	81'64	146	100'69	224	76'86	39	134'95	...	...	...	...	...	...	...	...	...	...	...	...	1879
372	55'49	91	87'31	65	152'90	98	84'44	163	92'85	58	88'05	...	...	...	...	...	...	...	...	...	...	...	...	1880
426	49'40	*	*	197	104'35	*	*	*	*	81	77'35	...	...	...	...	...	...	...	...	...	...	...	...	1881
470	48'00	*	*	255	76'80	*	*	*	*	85	71'99	...	...	...	...	...	...	...	...	...	...	...	...	1882
466	48'67	109	76'65	120	59'80	151	64'14	308	53'84	87	52'82	...	...	...	...	...	...	...	...	...	...	...	...	1883
502	52'21	116	76'77	121	64'80	113	72'16	246	55'49	95	53'14	...	...	...	...	...	...	...	...	...	...	...	...	1884
467	50'46	...	...	108	80'66	...	...	...	...	101	49'33	...	...	...	...	...	...	...	...	...	...	...	...	1885
503	46'49	...	...	114	92'23	...	...	...	...	101	40'69	56	82'03	...	...	...	...	...	...	...	...	...	...	1886
511	46'84	...	...	125	80'70	...	...	...	...	117	46'62	81	80'63	...	...	...	...	...	...	...	...	...	...	1887
526	46'96	...	...	135	74'21	...	...	...	...	95	47'74	99	72'53	...	...	...	...	...	...	...	...	...	...	1888
494	51'42	...	...	142	51'24	...	...	...	...	...	...	92	77'32	...	...	...	...	...	...	...	...	...	...	1889
508	49'80	...	...	140	65'46	...	...	...	...	...	...	86	80'80	...	...	...	...	...	...	...	...	...	...	1890
584	48'25	...	...	...	...	...	...	...	...	...	...	115	67'51	...	...	...	...	...	...	...	...	...	...	1891
525	49'93	...	...	...	...	...	...	...	...	...	...	124	61'45	...	...	...	...	...	...	...	...	...	...	1892
501	53'57	...	...	...	...	...	...	...	...	...	...	123	61'87	...	...	...	...	...	...	...	...	...	...	1893
468	55'18	...	...	...	...	...	...	...	...	...	...	144	57'83	...	...	...	...	...	...	...	...	...	...	1894
436	56'38	...	...	...	...	...	...	...	...	...	...	124	63'30	19	54'43	2	50'00	209	67'68	138	67'07	...	...	1895
444	55'20	...	...	...	...	...	...	...	...	...	...	134	58'41	24	59'60	63	51'17	241	61'73	157	61'63	...	...	1896
367	66'96	...	...	...	...	...	...	...	...	...	...	150	56'16	27	57'57	63	50'40	223	59'84	144	59'84	...	...	1897
450	59'49	...	...	...	...	...	...	...	...	...	...	147	55'35	35	55'36	71	50'82	284	58'81	181	58'90	...	...	1898
462	55'76	...	...	...	...	...	...	...	...	...	...	152	57'03	43	52'83	99	50'28	307	59'89	194	59'88	6	258'32	1899
439	52'49	...	...	...	...	...	...	...	...	...	...	213	46'23	57	49'29	161	50'79	375	50'12	232	50'06	13	100'16	1900
518	48'03	...	...	...	...	120	52'74	365	53'73	...	...	199	48'43	33	51'34	93	51'00	430	07'51	254	50'61	13	100'63	1901
523	50'12	...	...	...	...	120	52'35	468	53'88	...	...	209	50'43	32	52'71	99	52'36	518	51'51	274	49'74	17	91'47	1902

* Included with the Great Indian Peninsula railway.
† Represent earnings and expenses of both sections of the Bhopal-Itari railway.
and proportion of expenses to earnings includes steam-haul.
each railway system, represents open mileage on the 31st December 1902.

Appendix 6.
Weekly earnings.

APPEN

Gross earnings (average) of individual
and
Proportion of working expenses

(Referred to in paragraph

N. B.—When figures cease to be shown under any railway it is to be understood that such

Railway.	BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM. (2,386.6 MILES.)																					
	(a) Bombay, Baroda and Central India, 5' 6" (1,450.68 miles.)		(b) Tapti Valley, 5' 6" (155.48 miles.)		Gackwar's Pottad, 5' 6" (13.25 miles.)		(c) Nagda-Ujjain, 5' 6" (34.31 miles.)		(d) Pottad-Cambay (Anand-Tarapur section), 5' 6" (21.90 miles.)		(e) Pottad-Cambay (Tarapur-Cambay section), 5' 6" (10.92 miles.)		(f) Godhra-Rotlam Nagda, 5' 6" (161.14 miles.)		(g) RAJPUTANA-MALWA. (1,548.36 miles.)							
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Rajputana-Malwa, 5' 3 1/2" (1,548.36 miles.)		Hokar and Sindh-Necmuch, 5' 3 1/2" (280.00 miles.)		Western Rajputana, 5' 3 1/2" (82.62 miles.)			
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
1853	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1854	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1855	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1856	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1857	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1858	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1859	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1860	49	70.17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1861	73	54.97	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1862	94	50.14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1863	138	49.51	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1864	156	85.33	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1865	223	63.83	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1866	278	71.93	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1867	291	66.56	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1868	287	73.66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1869	307	74.32	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1870	327	60.54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1871	300	59.98	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1872	290	59.97	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1873	260	59.23	...	...	...	...	...	...	...	...	...	...	...	...	32	96.59	...	...	...	...	...	...
1874	265	52.12	...	...	...	...	...	...	...	...	...	...	...	...	69	80.37	60	84.02	...	...	...	...
1875	285	54.41	...	...	...	...	...	...	...	...	...	...	...	...	98	64.04	123	91.71	...	...	...	...
1876	296	54.74	...	...	...	...	...	...	...	...	...	...	...	...	114	65.40	99	92.87	...	...	...	...
1877	345	41.97	...	...	...	...	...	...	...	...	...	...	...	...	130	67.99	86	76.86	...	...	...	...
1878	298	46.61	...	...	...	...	...	...	...	...	...	...	...	...	136	61.97	122	67.50	...	...	...	...
1879	309	46.97	...	...	...	...	...	...	...	...	...	...	...	...	153	66.74	128	74.53	86	86.08	...	...
1880	355	42.57	...	...	...	...	...	...	...	...	...	...	...	...	152	66.88	118	74.74	151	85.79	...	...
1881	423	41.04	...	...	...	...	...	...	...	...	...	...	...	...	189	60.41	132	69.11	...	...	...	...
1882	427	50.76	...	...	...	...	...	...	...	...	...	...	...	...	188	53.07	...	...	...	...	...	...
1883	497	43.10	...	...	...	...	...	...	...	...	...	...	...	...	219	52.18	...	...	...	...	...	...
1884	509	42.95	...	...	...	...	...	...	...	...	...	...	...	...	223	56.92	...	...	...	...	...	...
1885	548	43.11	...	...	...	...	...	...	...	...	...	...	...	...	224	52.81	...	...	...	...	...	...
1886	564	41.12	...	...	...	...	...	...	...	...	...	...	...	...	212	50.27	...	...	...	...	...	...
1887	508	41.89	...	...	...	...	...	...	...	...	...	...	...	...	191	50.84	...	...	...	...	...	...
1888	532	44.11	...	...	...	...	...	...	...	...	...	...	...	...	215	48.26	...	...	...	...	...	...
1889	552	42.44	...	...	...	...	...	...	...	...	...	...	...	...	230	45.82	...	...	...	...	...	...
1890	540	42.06	...	...	71	36.08	...	...	...	...	...	...	...	...	200	50.41	...	...	...	...	...	...
1891	590	41.23	...	...	85	38.51	...	...	...	...	...	...	...	...	251	43.47	...	...	...	...	...	...
1892	594	42.92	...	...	88	43.25	...	...	...	...	...	...	...	...	257	41.01	...	...	...	...	...	...
1893	630	36.55	...	...	92	36.47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1894	665	36.85	...	...	100	36.79	...	...	...	...	...	...	...	50	41.61	259	41.12	...	...	...	...	...
1895	732	37.69	...	...	106	36.96	...	...	...	...	...	...	...	106	40.64	285	38.19	...	...	...	...	...
1896	676	45.07	...	...	169	29.52	49	56.36	...	...	...	...	...	184	57.01	269	40.29	...	...	...	...	...
1897	595	54.63	...	...	93	47.56	58	54.36	...	...	...	...	...	189	62.27	227	44.35	...	...	...	...	...
1898	662	44.89	18	48.70	74	44.92	73	44.83	...	...	...	...	...	146	72.02	212	46.60	...	...	...	...	...
1899	729	46.81	71	47.40	102	44.37	83	47.18	...	...	...	...	...	181	51.14	241	42.83	...	...	...	...	...
1900	734	52.50	84	44.00	127	52.86	141	51.96	...	...	...	...	...	172	58.34	285	42.06	...	...	...	...	...
1901	665	44.06	74	43.01	...	...	63	40.19	101	44.47	40	50.46	156	45.15	313	46.29	...	...	...	...	...	...
1902	659	49.00	102	43.95	...	...	88	45.39	95	46.37	45	46.57	140	46.27	291	47.54	...	...	...	...	...	...

* Including Verangan-Wadhwan section, 20-23 miles, converted to metric gauge on the 14th December 1902.

NOTE.—Earnings per mile per week exclude steamboat
NOTE.—The length shown against each railway system

DIX 6—contd.

railways per mile per week

Appendix 6.
Weekly earnings.

to gross earnings.

II of Report.)

railway has been amalgamated with the system by which it has been worked

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd. (2,167.62 MILES).																	
(g) RAJPUTANA-MALWA—contd. (1,648.36 MILES).										(h) Gaekwar's Bichana, 3' 31" (92.63 miles.)		(i) Ahmedabad- Parantij, 5' 29" (54.70 miles.)		(j) Vijapur-Kalol Kadi, 3' 31" (39.44 miles.)		RAILWAY.	
Rewari-Ferozepore, 3' 31" (240.72 miles.)		Muttra-Hathras, 3' 31" (39.00 miles.)		Cawnpore- Farukhabad, 3' 31" (36.50 miles.)		Muttra-Achnera, 3' 31" (32.75 miles.)		Cawnpore-Achnera, 3' 31" (32.23 miles.)		Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.		Calendar Year.
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1853
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1854
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1855
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1856
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1857
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1858
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1859
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1860
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1861
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1862
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1863
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1864
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1865
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1866
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1867
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1868
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1869
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1870
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1871
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1872
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1873
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1874
...	...	108	58'18	...	...	...	...	...	...	...	...	...	...	...	...	...	1875
...	...	55	57'74	...	...	...	...	...	...	...	...	...	...	...	...	...	1876
...	...	66	54'86	...	...	...	...	...	...	...	...	...	...	...	...	...	1877
...	...	65	53'33	...	...	...	...	...	...	...	...	...	...	...	...	...	1878
...	...	83	54'97	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	89	57'35	18	233'15	...	...	...	...	...	...	...	...	...	...	...	1880
...	...	90	69'19	65	69'76	39	89'01	...	...	...	...	...	...	...	...	...	1881
...	...	84	76'97	80	67'36	57	86'42	...	...	...	...	...	...	...	...	...	1882
75	81'28	...	...	...	...	...	...	80	67'98	...	...	...	...	...	...	...	1883
96	67'28	...	...	...	...	...	...	81	69'17	...	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	...	70	87'87	...	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1886
...	...	...	...	...	...	...	...	...	...	33	80'05	...	...	...	...	...	1887
...	...	...	...	...	...	...	...	...	...	43	64'90	...	...	...	...	...	1888
...	...	...	...	...	...	...	...	...	...	37	61'82	...	...	...	...	...	1889
...	...	...	...	...	...	...	...	...	...	41	60'66	...	...	...	...	...	1890
...	...	...	...	...	...	...	...	...	...	49	45'53	...	...	...	...	...	1891
...	...	...	...	...	...	...	...	...	...	54	40'92	...	...	...	...	...	1892
...	...	...	...	...	...	...	...	...	...	70	41'12	...	...	...	...	...	1893
...	...	...	...	...	...	...	...	...	...	79	37'79	...	...	...	...	...	1894
...	...	...	...	...	...	...	...	...	...	70	40'18	...	...	...	...	...	1895
...	...	...	...	...	...	...	...	...	...	88	35'91	...	...	...	...	...	1896
...	...	...	...	...	...	...	...	...	...	70	46'58	46	46'92	...	...	...	1897
...	...	...	...	...	...	...	...	...	...	72	42'55	33	42'70	...	...	...	1898
...	...	...	...	...	...	...	...	...	...	79	42'40	74	42'33	...	...	...	1899
...	...	...	...	...	...	...	...	...	...	89	44'75	93	41'17	...	...	...	1900
...	...	...	...	...	...	...	...	...	...	81	45'16	62	44'00	...	...	...	1901
...	...	...	...	...	...	...	...	...	...	78	46'87	63	44'00	23	52'72	...	1902

* Includes the Muttra-Hathras, Cawnpore-Farukhabad and Muttra-Achnera railways.

and proportion of expenses to earnings includes steam-haul.
represents open mileage on the 31st December 1902.

Appendix 6.
Weekly earnings.

APPEN

Gross earnings (average) of individual
and
Proportion of working expenses

(Referred to in paragraph

N.B.—When figures cease to be shown under any railway it is to be understood that such

RAILWAY.	8 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—consolid. (1,781.62 MILES.)						9 NIZAM'S GUARANTEED STATE RAILWAY SYSTEM. (725.15 MILES.)				10 MADRAS RAILWAY SYSTEM. (1,476.82 MILES.)							
	(b) Palanpur-Deesa, 3' 3 1/2". (17.25 miles.)		(l) Gachwar's Dabhol, 3' 6". (78.80 miles.)		(m) Rajpipla, 3' 6". (37.37 miles.)		(a) & (b) Nizam's Guaranteed State, 5' 6". (350.71 miles.)		(c) Hyderabad-Godavari Valley, 3' 3 1/2". (392.42 miles.)		(e) and (b) Madras, 5' 6". (1,365.19 miles.)		(c) Kolar Gold-fields, 5' 6". (9.88 miles.)		(d) Shoranur-Cochin, 3' 3 1/2". (64.75 miles.)		(e) Nilgiri, 3' 3 1/2". (16.90 miles.)	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
Calendar Year.	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1853
1854
1855
1856	75	51.66	...	...	...	...	...	...
1857	91	47.13	...	...	...	...	...	...
1858	93	55.33	...	...	...	...	...	...
1859	122	60.35	...	...	...	...	...	...
1860	117	73.50	...	...	...	...	...	...
1861	91	71.08	...	...	...	...	...	...
1862	84	74.02	...	...	...	...	...	...
1863	110	68.57	...	...	...	...	...	...
1864	133	49.62	...	...	...	...	...	...
1865	145	45.69	...	...	...	...	...	...
1866	147	45.68	...	...	...	...	...	...
1867	153	43.47	...	...	...	...	...	...
1868	181	41.48	...	...	...	...	...	...
1869	171	49.16	...	...	...	...	...	...
1870	146	52.84	...	...	...	...	...	...
1871	139	51.27	...	...	...	...	...	...
1872	143	52.19	...	...	...	...	...	...
1873	31	98.34	...	...	...	...	...	...	157	56.94	...	...	...	...	...	...
1874	32	75.78	...	...	79	95.01	...	...	132	64.67	...	...	...	...	...	...
1875	33	78.11	...	...	79	113.57	...	...	144	70.28	...	...	...	...	...	...
1876	38	75.35	...	...	92	85.72	...	...	159	64.38	...	...	...	...	...	...
1877	45	78.20	...	...	132	77.53	...	...	225	59.26	...	...	...	...	...	...
1878	43	62.42	...	...	126	85.87	...	...	145	76.05	...	...	...	...	...	...
1879	46	56.15	...	...	110	87.01	...	...	148	68.68	...	...	...	...	...	...
1880	51	49.44	...	...	112	68.08	...	...	138	68.24	...	...	...	...	...	...
1881	46	65.41	...	...	120	61.32	...	...	141	67.11	...	...	...	...	...	...
1882	47	67.54	...	...	141	56.35	...	...	155	62.84	...	...	...	...	...	...
1883	48	73.75	...	...	137	72.12	...	...	148	61.90	...	...	...	...	...	...
1884	49	67.43	...	...	155	63.02	...	...	160	58.89	...	...	...	...	...	...
1885	50	63.47	...	...	178	56.26	...	...	171	57.18	...	...	...	...	...	...
1886	50	74.37	...	...	143	49.71	...	...	178	59.46	...	...	...	...	...	...
1887	51	69.73	...	...	143	64.31	...	...	189	64.76	...	...	...	...	...	...
1888	48	69.91	...	...	118	57.35	...	...	195	58.72	...	...	...	...	...	...
1889	47	65.45	...	...	129	66.90	...	...	209	58.97	...	...	...	...	...	...
1890	57	61.76	...	...	140	59.74	...	...	218	52.44	...	...	...	...	...	...
1891	54	66.13	...	...	151	54.70	...	...	214	58.20	...	...	...	...	...	...
1892	64	55.36	...	...	151	52.35	...	...	221	55.40	...	...	...	...	...	...
1893	33	44.87	68	47.44	...	...	136	53.08	...	...	241	48.39	...	...	...	...	...	...
1894	42	38.35	65	60.29	...	...	177	50.20	...	...	237	52.06	249	61.37	...	...	...	...
1895	42	40.17	63	58.73	...	...	185	53.77	...	...	257	47.55	294	56.60	...	...	...	...
1896	57	43.50	69	51.44	...	...	187	50.02	...	...	249	50.50	299	59.25	...	...	...	...
1897	48	46.55	56	76.91	11	214.53	205	48.67	...	...	263	47.65	402	56.77	...	...	...	...
1898	43	42.50	51	112.65	17	186.33	221	44.20	...	...	246	49.51	392	59.82	...	...	...	...
1899	50	42.37	60	64.40	22	76.32	240	43.45	48	41.82	240	52.43	342	68.01	...	...	175	76.06
1900	53	43.06	57	73.82	25	75.46	286	41.52	70	60.41	254	51.75	402	67.88	...	...	200	42.83
1901	41	45.87	62	71.08	24	77.77	236	35.59	99	54.07	229	51.31	421	57.79	...	...	275	42.87
1902	37	47.01	54	65.69	20	73.84	254	39.89	112	57.70	229	54.78	422	60.83	69	45.64	352	63.73

* Includes 277 miles (3' 3 1/2" gauge) worked over by the Southern Mahratta railway.

NOTE.—Earnings per mile per week exclude steam-boat
NOTE.—The length shown against each railway system

DIX 6—contd.

Appendix 6.
Weekly earnings.

railways per mile per week

to gross earnings.

11 of Report.)

railway has been amalgamated with the system by which it has been worked.

12 BENGAL DOOARS. (114.16 MILES.)				13 DIBRU-SADIYA. (87.50 MILES.)				14 ASSAM-BENGAL. (59.31 MILES.)		15 DEOGHUR, (4.79 MILES.)		RAILWAY.
(a) Bengal Dooars. 3' 31". (106.00 miles.)		(b) Bengal Dooars extensions. 3' 31". (77.76 miles.)		(a) Dibru-Sadiya, 3' 31". (77.50 miles.)		(b) Ledo and Titak- Margherita Colliery, 3' 31". (11.00 miles.)		Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.		Calendar year.
Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Rs.		Rs.		
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
...	1853
...	1854
...	1855
...	1856
...	1857
...	1858
...	1859
...	1860
...	1861
...	1862
...	1863
...	1864
...	1865
...	1866
...	1867
...	1868
...	1869
...	1870
...	1871
...	1872
...	1873
...	1874
...	1875
...	1876
...	1877
...	1878
...	1879
...	1880
...	1881
...	1882
...	79	68.00	1883
...	83	54.90	1884
...	1885
...	1886
...	1887
...	1888
...	1889
...	1890
...	1891
...	1892
...	1893
...	1894
...	1895
...	1896
...	1897
...	1898
...	1899
...	1900
...	1901
...	1902
69	49.80	...	...	127	70.13	...	...	...	...	152	49.47	1893
109	49.20	...	...	132	63.18	...	...	...	...	118	67.17	1894
125	49.73	...	...	149	55.16	...	...	...	...	130	54.46	1895
136	51.26	...	...	161	51.76	...	...	64	103.75	120	61.69	1896
...	71	94.63	...	...	...
145	49.27	...	...	192	68.12	88	22.51	63	92.71	122	63.22	1897
135	57.40	...	...	194	61.85	142	93.22	85	95.83	129	79.44	1898
137	55.41	...	...	213	47.08	162	65.04	75	80.08	134	79.92	1899
168	43.06	13	72.31	224	48.67	169	72.64	75	78.69	140	78.87	1900
156	43.27	47	69.92	230	49.03	123	84.15	70	78.60	232	61.45	1901
144	37.27	62	65.99	211	51.73	102	99.25	136	87.86	120	79.75	1902

and proportion of expenses to earnings includes steam-boat, represents open mileage on the 31st December 1902.

Appendix 6.
Weekly earnings.

APPEN

Gross earnings (average) of individual

and

Proportion of working expenses

(Referred to in paragraph

N.B.—When figures cease to be shown under any railway it is to be understood that such

RAILWAY.	10 BENGAL AND NORTH-WESTERN RAILWAY SYSTEM. (1,287½ MILES.)						17 ROHILKUND AND KUMAON RAILWAY SYSTEM. (324½ MILES.)								JODHPUR.		
	(a) Bengal and North- Western, 3' 31". (747½ miles.)		(b) Tirhoot, 3' 31". (516½ miles.)		(c) Saganh- Razaul, 3' 31". (18½ miles.)		(a) Rohilkund and Kum- aon, 3' 31". (53½ miles.)		(b) LUCKNOW-BAREILLY. (231½ MILES.)				(c) POWAYAN LIGHT, 3' 6". (39½ MILES.)		(a) Jodhpur section, 3' 31". (45½ miles.)		
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.			
1853	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1854	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1855	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1856	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1857	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1858	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1859	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1860	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1861	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1862	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1863	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1864	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1865	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1866	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1867	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1868	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1869	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1870	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1871	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1872	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1873	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1874	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1875	...	...	39	107 62	...	...	...	...	...	...	...	...	...	...	...
1876	...	...	71	68 67	...	...	...	...	...	...	...	...	...	...	...
1877	...	...	77	69 85	...	...	...	...	...	...	...	...	...	...	...
1878	...	...	108	75 34	...	...	...	...	...	...	...	...	...	...	...
1879	...	...	113	76 49	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	102	56 40	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	119	59 57	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	136	61 50	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	103	70 90	...	...	...	...	...	...	...	...	...	...	...
1884	29	133 76	105	77 60	...	51	95 16	32	91 81	...	...	...	...	48	42 74
1885	72	49 32	98	71 90	...	68	66 40	44	83 79	...	...	...	...	54	34 30
1886	106	56 36	109	66 56	...	86	58 75	53	77 46	45	76 29	...	...	62	35 20
1887	90	56 94	122	59 62	...	92	63 42	52	71 47	46	73 49	...	...	55	39 86
1888	102	55 25	123	55 80	...	96	57 46	50	70 31	47	70 81	...	...	56	46 91
1889	103	52 35	122	48 42	...	107	56 98	59	66 45	59	65 10	...	...	56	46 30
1890	121	44 08	...	...	...	90	52 04	64	66 08	62	72 78	...	...	58	47 09
1891	121	40 04	...	...	...	112	58 22	...	...	...	...	...	...	66	45 44
1892	120	41 72	...	...	...	127	54 17	...	...	...	...	56	65 05	...	...
1893	123	43 20	124	56 78	66	59 72	...	74	44 14	
1894	130	41 79	134	52 91	67	62 29	...	52	47 83	
1895	133	42 45	118	62 18	87	59 25	...	65	38 09	
1896	134	43 97	125	63 79	74	61 90	...	58	41 60	
1897	128	43 78	124	59 33	75	63 32	...	70	36 60	
1898	129	43 37	135	52 24	69	59 42	...	67	33 66	
1899	131	46 67	30	40 00	136	49 74	94	51 62	...	73	42 22	
1900	128	49 56	30	52 62	156	48 64	114	50 21	...	102	38 88	
1901	140	44 51	40	63 44	112	45 38	107	48 72	...	81	44 27	
1902	154	46 32	42	52 57	146	46 83	123	44 76	33	70 00	66	54 39
												132	47 05	37	70 24	71	50 17

NOTE.—Earnings per mile per week exclude steam-boat
NOTE.—The length shown against

DIX 6—contd.

Appendix 6.
Weekly earnings.

railways per mile per week

to gross earnings.

(of Report.)

railway has been amalgamated with the system by which it has been worked.

18 BIKANER RAILWAY SYSTEM. (214.27 MILES.)				19 UDAIPUR CHITTOR. (97.30 MILES.)		20 BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM. (455.45 MILES.)								21 SOUTHERN MAHARATTA RAILWAY SYSTEM. (1,043.71 MILES.)						RAILWAY.	Calendar year.
(b) Bikaner section, 3' 31". (145.35 miles.)		(c) Jodhpur-Hyderabad (British section), 3' 31". (139.98 miles.)		(a) Udaipur-Chitor, 3' 31". (97.30 miles.)		(a) Bhavnagar-Gondal-Junagad-Porbandar, 3' 31". (334.19 miles.)		(b) Jamnagar, 3' 31". (54.22 miles.)		(c) Jetalsar-Rajkot, 3' 31". (45.21 miles.)		(d) Dhrangadra, 3' 31". (20.83 miles.)		(a) Southern Maharashtra, 3' 31". (1,043.71 miles.)		(b) Mysore section, 3' 31". (296.28 miles.)		(c) Guntakal-Mysore frontier, 3' 31". (119.30 miles.)			
Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.		
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.			
...	1853	
...	1854	
...	1855	
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...	1898	
...	1899	
...	1900	
...	1901	
...	1902	

* Information not available.
and proportion of expenses to earnings includes steam-boats.
each railway system, represents open mileage on the 31st December 1902.

Appendix 6.
Weekly earnings.

APPEN

Gross earnings (average) of individual
and
Proportion of working expenses

(Referred to in paragraph

N.B.—When figures cease to be shown under any railway it is to be understood that such

RAILWAY.	21 SOUTHERN MAHRATTA RAILWAY SYSTEM—concl'd. (1,643.21 MILES.)										22 SOUTH INDIAN RAILWAY SYSTEM. (1,235.79 MILES.)								23 BURMA, 3' 31". (1,200.50 MILES.)	
	(d) Hindupur (Yesvantpur- Aiyalur Irupu- tial), 3' 31". (51.25 miles.)		(e) Bilur-Shi- moga, 3' 31". (37.92 miles.)		(f) Kolhapur, 3' 31". (29.27 miles.)		(g) Nyasore- Nanjangud, 3' 31". (19.80 miles.)		(h) West of India Portuguese 3' 31". (51.21 miles.)		(a) and (c) South Indian, 3' 31". (1,230.98 miles.)		(b) Tanjore District Board. (Mayaram- Nutanpet), 3' 31". (21.11 miles.)		(c) Tiruchirappalli- Quilon (Travancore) (British section), 3' 31". (19.05 miles.)		(d) Karalkkal-Pera- lam, 3' 31". (14.65 miles.)		Earnings per mile per week.	Proportion of exps. to earnings.
	Earnings per mile per week.	Proportion of exps. to earnings.	Earnings per mile per week.	Proportion of exps. to earnings.	Earnings per mile per week.	Proportion of exps. to earnings.	Earnings per mile per week.	Proportion of exps. to earnings.	Earnings per mile per week.	Proportion of exps. to earnings.	Earnings per mile per week.	Proportion of exps. to earnings.	Earnings per mile per week.	Proportion of exps. to earnings.	Earnings per mile per week.	Proportion of exps. to earnings.				
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.				
1853
1854
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1860
1861	77	47.45
1862	61	44.43
1863	74	44.60
1864	69	57.55
1865	79	49.53
1866	105	49.28
1867	86	49.65	...	...	...	...	...	...	...	...	...
1868	90	48.64	...	...	...	...	...	...	...	...	...
1869	84	64.44	...	...	...	...	...	...	...	...	...
1870	84	62.40	...	...	...	...	...	...	...	...	...
1871	84	55.61	...	...	...	...	...	...	...	...	...
1872	87	50.87	...	...	...	...	...	...	...	...	...
1873	120	49.99	...	...	...	...	...	...	...	...	...
1874	161	60.81	...	...	...	...	...	...	...	...	...
1875	96	48.16	...	...	...	...	...	...	...	...	...
1876	90	53.27	...	...	...	...	...	...	...	...	...
1877	107	50.88	...	...	...	...	...	...	...	61	129.36
1878	102	66.65	...	...	...	...	...	...	...	115	93.03
1879	105	68.38	...	...	...	...	...	...	...	114	85.17
1880	106	73.87	...	...	...	...	...	...	...	158	60.60
1881	109	67.04	...	...	...	...	...	...	...	184	58.21
1882	109	62.69	...	...	...	...	...	...	...	188	50.99
1883	112	65.83	...	...	...	...	...	...	...	187	64.66
1884	122	64.18	...	...	...	...	...	...	...	181	60.56
1885	132	65.12	...	...	...	...	...	...	...	143	78.13
1886	143	69.78	...	...	...	...	...	...	...	156	64.51
1887	148	68.20	...	...	...	...	...	...	...	192	53.12
1888	159	68.98	...	...	...	...	...	...	...	171	62.33
1889	185	...	167	70.11	...	...	...	...	...	...	169	66.45
1890	138	74.24	181	57.50	...	...	...	...	...	...	210	57.08
1891	60	64.26	...	...	157	86.01	154	65.47	...	...	...	...	...	...	199	59.50
1892	...	61.74	...	...	55	67.72	...	62.60	109	106.01	137	63.01	...	...	...	...	...	...	237	52.31
1893	38	60.60	...	...	78	57.67	43	58.59	163	78.13	149	61.25	...	...	...	...	...	...	178	66.64
1894	61	65.06	...	...	82	64.64	47	65.65	157	86.47	148	58.99	103	61.50	...	...	...	...	164	63.05
1895	72	58.43	...	...	80	57.90	49	57.98	167	90.75	165	56.13	86	61.30	...	...	...	...	169	59.73
1896	84	55.50	...	...	80	55.36	50	56.45	90	137.34	165	54.89	88	59.90	...	...	...	...	167	60.76
1897	101	56.09	...	...	63	55.64	42	57.41	55	189.46	170	53.01	95	58.10	...	...	...	...	188	55.25
1898	67	68.66	...	...	52	69.08	40	67.85	65	173.60	157	54.50	88	68.47	...	...	27	60.19	184	57.87
1899	56	66.17	37	69.59	66	65.74	21	66.26	157	83.15	159	52.41	86	60.01	...	...	37	67.36	179	59.45
1900	70	64.32	34	63.43	82	63.87	38	63.20	96	120.04	166	50.27	83	52.02	...	...	32	61.48	195	55.62
1901	74	69.30	31	72.62	75	68.67	35	72.22	205	113.20	188	46.17	103	53.29	...	...	40	56.28	197	58.02
1902	80	63.51	33	63.83	81	62.55	36	63.38	133	85.51	189	45.60	103	52.48	81	44.64	43	55.34	203	57.83

* Information not available.

Note.—Earnings per mile per week exclude steam-haul.
Note.—The length shown against each railway system.

DIX 6—concl.

railways per mile per week.

to gross earnings.

11 of Report).

railway has been amalgamated with the system by which it has been worked.

Appendix 6.
Weekly earnings.

24 MORVI, 2' 6". (94'36 MILES.)		25 BARSII, 2' 6". (91'39 MILES.)		26 TARAKESH- WAR-MAGRA, 2' 6". (91'12 MILES.)		27 RANAGHAT- KRISHNA- GAR, 2' 6". (90'25 MILES.)		28 TEZPUR- BALIPARA, 2' 6". (90'10 MILES.)		CHERRA- COMPANY GANJ, 2' 6". (8'00 MILES.)		29 DARJEELING- HIMALAYAN, 2' 0". (51'00 MILES.)		30 HOWRAH- AMTA, 2' 0". (48'69 MILES.)		31 HOWRAH- SHEA- KHALA, 2' 0". (49'75 MILES.)		32 JORHAT, 2' 0". (30'00 MILES.)		RAIL- WAY.	Calen- dar year.
Earn- ings per mile per week.	Pro: of exp: to earn- ings.	Earn- ings per mile per week.	Pro: of exp: to earn- ings.	Earn- ings per mile per week.	Pro: of exp: to earn- ings.	Earn- ings per mile per week.	Pro: of exp: to earn- ings.	Earn- ings per mile per week.	Pro: of exp: to earn- ings.	Earn- ings per mile per week.	Pro: of exp: to earn- ings.	Earn- ings per mile per week.	Pro: of exp: to earn- ings.	Earn- ings per mile per week.	Pro: of exp: to earn- ings.	Earn- ings per mile per week.	Pro: of exp: to earn- ings.	Earn- ings per mile per week.	Pro: of exp: to earn- ings.		
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.			
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...	1900
...	1901
...	1902

* For first-half of the year only, as traffic was stopped during the next half year on account of damage by earthquake.
 † Closed for traffic from the 23rd March 1900, and subsequently abandoned.
 ‡ Information not available.

and proportion of expenses to earnings includes steam-boat.
 represents open mileage on the 31st December 1902.

Appendix 7.
Gain or loss.

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.											STATE LINES					
GAUGE.											5' 6"					
Class: No.											11 (a)					
Railway.											EAST INDIAN.			BENGAL		
Calendar year.	Length of line open.	Capital withdrawn to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Annuity.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.			
	Miles.	£	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Miles.	Rs.	Rs.			
1879	1,588	31,457,091	34,32,77,360	4,35,46,730	2,86,14,479	8'34	1,65,74,363	...	61,25,877	+ 59,14,239	...	...	...
1880	1,600	...	38,13,33,183	4,35,04,947	2,96,72,035	7'52	1,98,06,263	...	17,72,699	+ 70,93,082	...	...	...
1881	1,600	...	38,65,39,533	4,54,11,472	3,08,35,036	7'98	31,05,426	1,73,92,000	20,63,867	+ 82,73,743	...	10,51,983	...			
1882	1,603	...	38,84,97,311	4,71,17,594	2,06,57,086	7'63	32,81,764	1,73,92,000	17,88,073	+ 71,95,249	20	46,38,355	...			
1883	1,605	...	39,02,67,160	4,94,67,085	3,11,50,980	7'98	38,16,170	1,72,57,772	19,99,731	+ 80,77,307	52	79,36,235	1,07,954			
1884	1,605	...	39,35,14,616	4,38,38,714	2,73,22,003	6'94	35,58,035	1,78,50,459	11,72,323	+ 47,41,188	125	90,54,719	4,54,837			
1885	1,611	...	39,63,72,475	4,63,86,289	3,30,16,960	8'33	38,13,262	1,79,75,714	16,29,502	+ 95,93,482	123	90,04,061	5,35,353			
1886	1,611	...	39,84,61,774	4,66,70,853	3,05,13,359	7'66	39,91,104	1,80,50,137	14,97,276	+ 60,74,842	123	89,65,705	5,67,343			
1887	1,610	...	39,89,90,837	4,60,65,661	3,11,374,263	7'85	40,70,944	1,92,13,333	15,87,252	+ 64,67,734	125	91,09,422	6,48,494			
1888	1,610	...	39,87,03,386	4,54,36,002	3,03,35,075	7'60	40,73,297	2,03,43,330	11,64,693	+ 47,53,555	125	92,53,170	7,18,901			
1889	1,610	...	39,96,98,136	4,49,57,901	2,94,05,230	7'36	41,84,108	2,09,60,000	8,31,347	+ 34,28,775	125	94,46,671	7,37,191			
1890	1,610	...	39,98,98,614	4,40,57,665	2,98,26,815	7'46	41,83,278	2,03,43,330	10,37,019	+ 42,62,988	125	96,88,212	6,67,804			
1891	1,610	...	39,99,94,683	4,56,37,001	3,60,37,028	9'03	43,93,426	1,86,94,054	26,45,392	+ 1,03,04,156	125	99,44,845	8,11,666			
1892	1,610	...	40,02,73,162	4,91,41,600	3,18,16,719	8'70	37,25,754	2,06,47,164	20,88,760	+ 83,55,041	125	1,00,65,784	7,69,347			
1893	1,613	...	40,06,96,213	5,08,44,654	3,60,94,293	8'87	41,26,889	2,34,46,780	17,04,125	+ 68,16,499	125	1,00,88,993	7,83,529			
1894	1,664	...	41,09,12,212	5,26,89,485	3,64,26,405	8'88	43,37,983	2,43,89,382	15,39,767	+ 61,59,068	125	1,01,41,094	8,20,120			
1895	1,700	...	41,59,93,876	5,41,50,856	3,78,34,726	9'10	45,73,681	2,61,01,122	14,29,078	+ 57,30,845	125	1,01,77,466	9,47,391			
1896	1,701	...	42,05,41,859	5,40,69,142	3,67,77,682	8'75	46,90,562	2,58,59,455	12,45,733	+ 49,81,932	125	1,06,38,927	9,33,216			
1897	1,703	...	43,17,67,029	5,88,28,013	4,14,93,469	9'61	48,20,238	2,47,34,406	23,87,763	+ 95,51,062	125	1,17,36,810	11,38,199			
1898	1,712	...	44,49,70,192	5,97,96,060	4,08,07,269	9'17	50,46,514	2,32,64,533	24,99,244	+ 99,96,978	125	1,23,58,300	10,84,657			
1899	1,711	...	46,48,16,064	6,35,45,974	4,26,60,018	9'18	54,64,902	2,21,45,516	30,09,920	+ 1,20,39,680	125	1,26,78,629	11,39,689			
1900	1,840	...	48,06,19,396	6,84,74,972	4,47,15,571	9'30	60,18,054	2,15,60,963	18,09,104	+ 1,53,27,450	125	1,26,96,415	13,31,419			
1901	1,838	...	49,44,34,925	7,03,96,636	4,57,13,311	9'25	65,46,878	2,16,82,360	18,51,450	+ 1,56,32,623	125	1,29,54,075	14,05,248			
1902	1,923	...	50,84,16,708	6,77,38,713	4,29,80,833	8'46	70,34,492	2,16,46,868	16,19,965	+ 1,26,79,508	125	1,31,11,415	13,17,214			

* Including Rs. 3,51,50,587 on account of

† Including annuity charges, as

‡ The gain in 1900 was due to

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Ahmedabad-Parantij	66	Bicur-Shimoga	81
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DIX 7.

Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

WORKED BY COMPANIES.													CLASS OF RAILWAYS.
5 th													GAUGE.
3 (a)													Class No.
CENTRAL.						BENGAL-NAGPUR.						Railway.	
Net traffic earnings.	Per cent on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Calendar year.
Rs.		Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
...	...	...	...	...	...	28,62,990	...	...	...	83,911	...	-83,911	1879
...	...	...	...	...	53	55,49,511	1,03,952	28,215	0.51	1,38,804	...	-1,30,589	1880
...	...	51,616	...	-51,616	98	73,65,710	2,81,529	66,056	0.90	2,62,932	...	-1,96,876	1881
...	...	1,85,534	...	-1,85,534	149	90,64,388	6,04,386	1,89,171	2.05	3,39,067	...	-1,50,796	1882
39,390	...	3,17,449	...	-3,56,839	149	96,43,590	13,20,021	6,83,860	7.09	3,73,283	...	+3,10,577	1883
-1,19,682	...	3,62,189	...	-4,81,871	149	1,06,34,112	13,23,014	6,58,030	6.19	4,24,400	...	+2,33,630	1884
8,233	0.09	3,60,162	...	-3,51,929	149	1,50,66,406	14,14,889	4,93,375	3.28	5,86,281	...	-92,706	1885
-48,528	...	3,75,210	...	-4,17,738	186	1,81,70,455	14,24,521	5,33,514	2.94	7,29,554	...	-1,96,041	1886
-7,928	...	4,60,840	...	-4,68,768	186	2,42,30,987	14,47,705	3,08,277	1.25	13,15,563	...	-10,12,356	1887
1,58,145	1.71	5,19,942	...	-3,61,797	225	5,23,92,291	16,09,195	5,62,971	1.07	22,17,333	...	-16,54,362	1888
2,95,988	3.13	5,18,693	...	-2,22,705	348	7,08,75,456	19,06,930	4,03,160	0.57	29,96,364	...	-25,93,204	1889
2,45,907	2.54	4,39,962	58,992	-2,53,047	584	8,14,66,762	28,64,578	5,47,453	0.67	33,83,852	...	-28,41,389	1890
3,27,736	3.30	4,72,482	73,489	-2,18,175	831	9,08,04,164	54,57,356	26,84,453	2.96	35,05,676	...	-8,21,223	1891
3,12,903	3.11	5,30,251	74,600	-2,91,048	831	9,56,14,736	60,83,362	30,08,166	3.15	39,05,145	...	-8,97,179	1892
3,14,992	3.12	5,37,002	79,647	-3,01,662	862	9,80,08,424	64,17,751	32,62,220	3.33	43,97,594	...	-11,35,374	1893
2,41,182	2.37	6,11,415	...	-3,70,233	861	9,81,73,789	66,90,648	32,58,414	3.32	45,83,993	...	-13,25,579	1894
3,08,809	3.92	6,08,944	85,023	-2,95,158	861	9,88,94,777	68,74,740	35,41,444	3.58	48,56,800	...	-13,15,356	1895
3,44,465	3.20	5,69,175	91,306	-3,16,016	861	11,05,30,319	63,68,525	29,27,869	2.65	48,27,504	...	-28,99,635	1896
5,16,922	4.40	5,36,802	95,271	-1,15,158	861	13,04,58,784	62,00,309	29,79,559	2.28	51,35,240	...	-21,55,681	1897
3,68,008	2.98	5,19,231	1,20,642	-2,71,865	1,067	14,67,03,520	68,79,193	33,63,854	2.29	54,23,186	...	-20,59,332	1898
4,41,813	3.48	5,07,035	97,581	-1,62,803	1,190	16,65,90,365	90,73,460	47,21,814	2.83	59,75,853	...	-12,54,039	1899
5,59,699	4.34	5,04,985	1,24,611	-78,897	1,226	17,41,74,604	1,29,75,223	77,13,050	4.43	64,90,637	...	+12,22,413	1900
6,41,940	4.96	5,08,291	1,46,144	-11,495	1,609	21,19,23,276	1,30,77,769	61,48,648	2.90	79,88,163	1,78,810	-20,18,325	1901
5,73,918	4.38	5,11,298	1,53,667	-91,047	1,602	22,51,91,979	1,42,18,227	69,79,346	3.10	85,44,311	41,604	-16,06,569	1902

premium paid for the purchase of line.
the figures cannot be separated.
exceptional famine traffic.

Jorhat	54	Nilgiri	66	Sagauli-Raxaul	69
Karaikkal-Peralam	88	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palanpur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Tikak-Margherita Colliery.	68	Palanpur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Petalad-Cambay (Anand-Tarapur section).	77	Tanjore District Board (Mayavaram-Mutupet)	59
Ludhiana-Dhuri-Jakhal	84	Petalad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	77	Tarakshwar-Magra	71
Madras (North East line)	40	Powayan Light	89	Tarkessur	03
Mayavaram Mutupet	47	Rajpipla	70	Tezpur-Balipara	72
Morvi	87	Rajputana-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannath-ganj	65	Rajputana-Malwa	83	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranachhat-Krishnagar	40	Vijapur-Kalol-Kadi	70
Mysore section (Southern Mahratta)	44	Rohilkund and Kumaon	72	Wardha Coal	37
Nagda-Ujjain	76		70	West of India Portuguese	82

Appendix 7.
Gain or loss.

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

STATE LINES

CLASS OF RAILWAYS.		STATE LINES								
GAUGE.		3' 6"								
Class No.		7 (a), (b) and (c)								
Railway.		GREAT INDIAN PENINSULA.								
Calendar year.	Length of line open.	Capital withdrawn for expenditure to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Guaranteed interest.	Annuity.	Company's share of net traffic receipts.	Gain or loss to the State.
	Miles.	£	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1879	1,288	23,462,648	25,19,56,152	2,52,48,315	1,01,90,602	3'98	1,24,65,646	...	6,14,291	-28,89,335
1880	1,288	23,457,144	25,58,96,118	2,49,53,253	1,11,05,551	4'34	1,24,93,200	...	5,53,836	-19,11,485
1881	1,288	23,612,059	25,75,86,095	3,20,56,823	1,61,74,097	6'28	1,24,93,200	...	18,23,748	+18,57,149
1882	1,288	23,612,463	25,75,90,499	3,53,63,201	1,80,88,483	7'02	1,24,93,200	...	32,05,883	+23,89,400
1883	1,288	23,902,881	26,07,58,700	3,51,14,365	1,75,36,005	6'72	1,25,12,825	...	33,22,918	+17,00,262
1884	1,288	24,153,947	26,34,97,600	3,36,56,544	1,59,58,250	6'06	1,22,81,503	...	24,76,048	-8,02,301
1885	1,288	24,607,304	26,84,43,316	3,64,32,047	1,79,31,397	6'68	1,51,17,467	...	26,97,344	+1,16,586
1886	1,288	24,685,803	26,92,99,673	3,92,57,907	2,08,78,390	7'75	1,60,91,138	...	39,39,369	+7,97,683
1887	1,288	24,784,517	27,03,76,543	3,99,27,468	2,10,80,237	7'20	1,66,44,368	...	47,03,068	+3,32,601
1888	1,288	24,987,725	27,28,93,364	4,10,59,219	2,16,35,667	7'94	1,72,82,176	...	43,31,246	+23,245
1889	1,288	25,211,998	27,50,39,981	3,70,68,814	1,78,91,616	6'51	1,74,32,160	...	26,82,255	-22,22,799
1890	1,288	25,458,497	27,77,29,064	3,81,45,242	1,90,22,952	6'85	1,55,23,271	...	31,04,971	+2,94,710
1891	1,288	25,439,314	27,75,19,781	4,52,55,333	2,32,50,708	8'38	1,67,57,262	...	51,29,008	+13,04,458
1892	1,287	25,411,582	27,72,17,255	4,06,65,627	2,01,95,097	7'28	1,88,64,314	...	38,18,306	-24,22,723
1893	1,287	25,418,604	27,72,93,860	3,88,13,742	1,79,90,922	6'49	1,91,65,618	...	29,25,475	-41,00,172
1894	1,287	25,585,002	27,91,09,112	3,62,74,296	1,62,42,786	5'82	2,18,32,651	...	30,40,331	-86,30,196
1895	1,287	25,624,430	27,95,39,235	3,37,90,194	1,47,16,901	5'26	2,16,97,060	...	16,20,361	-86,00,520
1896	1,288	25,577,674	27,90,29,173	3,44,19,629	1,54,05,060	5'52	2,02,18,872	...	21,53,237	-69,67,069
1897	1,288	25,601,181	27,92,85,611	3,84,32,402	93,83,654	3'36	1,89,46,479	...	...	-95,62,825
1898	1,288	25,808,652	28,18,37,621	3,48,77,496	1,41,02,033	5'00	1,83,20,513	...	13,57,327	-55,75,787
1899	1,288	26,053,839	28,55,49,756	3,58,09,431	1,56,87,520	5'48	1,79,65,944	...	17,77,032	-40,85,456
1900	1,358	25,082,787	42,77,73,327	3,46,31,925	95,27,130§ 66,30,083‡	1'55	89,65,500§ 24,34,267‡	94,88,889	14,48,203	-8,76,573 -52,93,073
1901	1,548	...	42,88,90,745	4,16,57,453	2,16,48,151	5'05	48,96,908	1,90,87,970	2,72,210	-26,08,937
1902	1,562	...	43,07,94,701	4,23,12,663	2,10,73,893	4'89	49,41,692	1,90,55,785	2,92,872	-32,17,456

* Capital expenditure to 31st December 1900, including expenditure on the Wardha Coal and Dhond-Manmad railways.
 † Including Rs. 12,24,41,611 for premium paid for the purchase of line.
 ‡ For second-half of 1900. § For the first-half of 1900.

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Assam-Bengal	42	Brahmaputra-Sultanpur	58	Guntakal-Mysore frontier	45
Barel Light	71	Burma	48	Gwalior Light	83
Bengal and North-Western (Company's section)	69	Cherra-Companyganj	53	Hardwar-Dehra	53
Bengal Central	34	Coch Behar	84	Hindupur (Yesvantpur-Mysore frontier)	81
Bengal Dooars	67	Derjeeling-Himalayan	73	Howrah-Amta	73
Bengal Dooars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	33	Deoghur	69	Hydersbad-Godavari Valley	80
Bezawada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad-Porbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalsar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
Bikaner	85	East Indian	34	Jodhpur Hyderabad (British section)	43
Bina-Gooena-Baran	75	Gaekwar's Dabhoi	82		

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Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report).

WORKED BY COMPANIES.															CLASS OF RAILWAYS.
5'6"															GAUGE.
DHOND-MANMAD.							WARDHA COAL.							Class: No.	
Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.	
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		
146	98,99,308	4,67,557	-27,664	...	4,07,525	-4,35,189	45	55,99,772	1,65,158	6,073	0'11	2,51,434	-2,45,361	1870	
146	1,07,29,227	6,95,094	65,145	0'61	4,76,299	-4,11,154	45	57,32,921	3,02,879	-1,31,730	...	2,57,032	-3,88,762	1880	
146	99,48,346	6,33,862	1,22,588	1'23	3,93,438	-2,70,850	45	52,80,293	4,75,988	1,19,447	2'03	2,37,916	-1,18,469	1881	
146	99,25,416	7,39,558	1,59,192	1'60	3,97,802	-2,38,610	45	66,94,186	5,95,622	98,287	1'61	2,38,834	-1,40,547	1882	
146	1,00,64,757	8,22,833	1,92,139	1'91	4,02,585	-2,10,446	45	63,93,758	7,64,702	5,89,382	0'22	2,47,602	+3,41,780	1883	
146	1,02,49,438	8,77,100	2,03,785	1'99	4,08,283	-2,04,498	45	66,20,641	6,81,037	2,11,860	3'20	2,61,176	-49,316	1884	
146	1,02,61,278	9,07,422	2,20,693	2'15	4,10,544	+1,29,921	45	66,65,755	6,53,649	1,46,395	2'20	2,64,219	-1,17,924	1885	
146	1,09,26,745	9,84,718	2,33,764	2'14	4,30,353	-1,96,589	45	71,93,093	7,28,205	1,35,036	1'89	2,78,128	-1,42,292	1886	
146	1,09,46,935	9,60,390	2,27,338	2'08	4,37,893	-2,10,555	45	71,00,635	7,68,052	1,31,981	1'86	2,89,465	-1,57,484	1887	
146	1,09,75,115	10,31,762	2,55,445	2'33	4,38,458	-1,83,013	45	70,91,230	8,71,430	1,98,020	2'79	2,84,523	-86,503	1888	
146	1,09,88,830	10,08,616	2,49,427	2'07	4,39,319	-1,89,892	45	70,54,755	8,62,694	2,99,621	4'25	2,82,844	+16,777	1889	
146	1,09,93,448	10,61,316	2,63,184	2'39	4,39,629	+1,76,495	45	70,06,181	9,33,326	2,75,001	3'93	2,81,296	-6,293	1890	
145	1,10,44,039	11,90,340	3,08,583	2'79	4,40,296	-1,31,713	45	49,81,196	2,58,971	60,053	1'21	2,03,779	-1,43,726	1891	
145	1,10,71,028	12,18,412	3,28,335	2'96	4,42,535	-1,14,200	45	49,87,689	2,32,986	34,096	0'68	1,99,337	-1,65,241	1892	
145	1,11,37,125	12,90,798	3,48,572	3'13	4,44,246	-95,674	45	49,87,689	2,10,856	89,213	1'79	1,99,484	-1,10,271	1893	
145	1,12,11,642	13,61,866	3,81,993	3'41	4,48,018	-66,025	45	49,87,689	2,20,237	89,289	1'79	1,99,508	-1,10,219	1894	
145	1,13,18,247	14,04,021	4,08,233	3'61	4,50,104	-41,871	45	49,90,794	1,93,532	76,362	1'53	1,99,539	-1,23,177	1895	
145	1,13,73,050	13,11,585	3,67,395	3'23	4,55,018	-87,623	45	49,96,305	2,06,078	83,859	1'68	1,99,745	-1,15,886	1896	
145	1,14,06,534	12,01,143	2,81,272	2'47	4,56,230	-1,74,956	45	49,96,325	1,98,858	58,531	1'17	1,99,794	-1,41,263	1897	
145	1,14,23,076	11,18,296	2,89,536	2'53	4,56,411	-1,66,875	45	49,96,325	2,09,600	77,827	1'56	1,99,853	-1,22,026	1898	
145	1,15,34,107	11,55,032	2,99,555	2'60	4,59,296	-1,59,741	45	49,96,325	2,07,216	81,500	1'63	1,99,852	-1,17,352	1899	
146	||	7,25,613	2,11,534	...	2,30,220	-18,686	45	||	1,75,380	60,754	...	99,927	-19,173	1900	
Amalgamated with Great Indian Peninsula railway							Amalgamated with Great Indian Peninsula railway							1901	
Amalgamated with Great Indian Peninsula railway							Amalgamated with Great Indian Peninsula railway							1902	

|| Included with the Great Indian Peninsula railway.
 § For the first-half of 1900. The figures for the second-half are included with those of the Great Indian Peninsula railway.
 * Capital withdrawn by the Guaranteed Company to 30th June 1900 on which date the line was purchased by the State.
 †† Including outlay on the Khamgaon and Amraoti railways, leased in perpetuity to the British Government.
 ‡ Including the figures of the Khamgaon and Amraoti railways for the second-half of 1902.

Jorhat	54	Nilgiri	66	Sagauli-Raxaul	60
Karikkal-Perakam	58	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palampur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Tikak-Margherita Colliery	68	Palampur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Petalad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutpet)	59
Ludhiana-Dhuri-Jakhal	84	Petalad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	89	Tarakeshwar-Magra	71
Madras (North-East line)	40	Powayan Light	70	Tarkessur	63
Mayavaram-Mutpet	47	Rajpura	83	Tezpur-Balipara	72
Morvi	87	Rajpura-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannathganj	65	Rajputana-Malwa	40	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kalol-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkund and Kumaon	70	Wardha Coal	37
Nagda-Ujjain	76			West of India Portuguese	88

Appendix 7.
Gain or loss.

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.	STATE LINES											
	5' 6"											
GAUGE.	7 (d)											
Class No.	7 (d)											
Railway.	INDIAN MIDLAND.							BHOPAL-ITARSI				
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.
1879	66	73,22,551	90,916	—31,772	—	3,06,178	—	—3,37,950	—	—	—	—
1880	66	81,61,253	2,01,823	20,129	0'25	3,57,620	—	—3,37,491	—	—	—	—
1881	75	86,16,663	3,01,681	78,342	0'91	3,48,809	—	—2,70,467	—	—	—	—
1882	75	87,63,714	3,29,299	92,231	1'05	3,47,393	—	—2,55,072	11	12,50,000	14,376	2,704
1883	75	92,92,537	3,38,511	1,59,716	1'72	3,56,750	—	—1,97,034	11	12,50,000	25,573	—9,135
1884	75	1,18,68,111	3,68,326	1,72,603	1'45	3,74,122	—	—2,01,519	13	12,50,000	7,664	—1,406
1885	75	1,60,14,107	3,94,091	2,99,680	1'24	6,48,112	—	—4,48,432	13	12,50,000	27,425	—3,874
1886	117	2,48,06,293	3,91,832	2,45,266	0'86	18,69,268	—	—16,54,742	13	12,50,000	27,822	—3,240
1887	117	5,10,96,457	6,32,204	2,78,943	0'54	20,00,184	—	—17,22,141	13	12,50,000	48,227	3,850
1888	211	6,96,63,213	10,27,638	3,74,204	0'54	28,55,488	—	—24,81,284	13	12,50,000	55,117	5,340
1889	677	7,84,45,085	30,69,255	6,33,411	0'81	31,24,456	—	—24,91,045	13	12,50,000	79,163	—5,422
1890	677	8,32,79,427	31,24,365	5,99,780	0'72	36,09,286	—	—30,09,506	13	12,85,077	87,265	—16,572
1891	677	8,52,46,148	41,62,361	13,52,172	1'59	33,12,200	—	—19,60,028	13	15,13,568	1,30,284	48,607
1892	677	8,65,79,006	44,77,625	17,26,260	1'99	37,23,985	—	—19,97,725	13	17,46,208	1,53,099	56,397
1893	677	8,71,62,843	44,59,053	17,00,409	1'93	41,40,194	—	—24,39,785	13	20,25,038	1,69,162	52,038
1894	677	8,78,06,437	52,22,033	22,02,334	2'51	42,59,815	—	—20,57,481	13	21,71,496	1,61,638	61,455
1895	679	8,81,49,985	44,91,707	16,48,360	1'87	45,97,495	—	—29,49,135	13	22,47,063	1,42,658	46,114
1896	680	9,25,51,896	48,51,951	20,17,829	2'18	44,23,983	—	—24,06,154	13	22,71,877	1,63,688	62,744
1897	680	9,77,94,421	54,89,540	24,06,565	2'46	42,53,893	—	—18,47,328	13	22,97,134	1,52,215	61,135
1898	727	9,96,74,805	56,25,823	25,11,911	2'52	39,99,986	—	—14,88,075	13	23,24,365	1,93,364	79,435
1899	796	10,16,34,072	64,77,226	27,82,950	2'74	39,66,461	—	—12,83,511	13	23,61,938	2,09,611	84,080
1900	796	10,31,35,002	90,60,560	48,72,287	4'72	38,18,460	—	+10,53,827	13	23,87,339	2,55,120	1,27,332
1901	796	10,58,27,081	82,43,068	42,50,587	4'02	38,82,861	1,88,164	+1,79,562	13	25,46,891	2,92,861	1,44,235
1902	797	10,62,11,714	90,49,628	44,86,267	4'22	41,04,505	7,330	+3,74,432	13	28,02,330	3,53,111	1,71,236

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Bengal and North-Western (Com-pany's section)	69	Cherra-Companyanj	53	Hardwar-Dehra	58
Bengal Central	34	Cooch Behar	84	Hindupur (Yesvantpur-Mysore fron-tier)	81
Bengal Dooars	67	Darjeeling-Himalayan	73	Howrah-Amra	73
Bengal Dooars extensions	67	Dehli-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	69	Hydersbad-Godavari Valley	80
Bezawada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad-Forbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jatsar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
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Bira-Goon-Baran	75	Gaekwar's Dabhoi	82		

DIX 7—continued.

income derived by railways which are not guaranteed by the State.

Appendix 7.
Gain or loss.

2, 11, 14, 45 and 46 of Report.)

WORKED BY COMPANIES—(contd.)										CLASS OF RAILWAYS.
5' 6"										GAUGE.
7 (g)			9 (b)							Class No.
(BRITISH SECTION).			BEZWADA EXTENSION.							Railway.
Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	1881
0'08	50,000	-47,196	...	...	...	...	...	...	...	1882
...	50,000	-59,135	...	...	...	...	...	...	...	1883
...	50,000	-51,406	...	...	...	...	...	...	...	1884
...	50,000	-53,874	...	...	...	...	...	...	...	1885
...	50,000	-53,240	...	...	...	...	...	...	...	1886
0'31	50,000	-46,150	...	8,11,654	...	...	...	16,363	-16,363	1887
0'43	50,000	-44,660	...	11,36,237	...	...	...	39,357	-39,357	1888
...	50,000	-55,428	21	13,46,302	76,671	16,326	1'21	53,430	-37,704	1889
...	50,351	-66,923	21	13,90,830	74,731	16,318	1'17	54,530	-38,212	1890
3'21	57,713	-9,306	21	14,11,077	81,367	28,699	2'03	56,266	-27,567	1891
3'23	69,131	-12,734	21	14,17,674	98,579	28,347	2'00	56,594	-28,237	1892
2'37	78,429	-26,391	21	14,21,456	1,08,386	33,972	2'39	56,888	-22,916	1893
2'83	83,509	-21,054	21	14,26,901	1,71,016	71,270	5'00	57,122	+14,148	1894
2'05	89,323	-43,209	21	14,31,642	95,119	95,119	6'64	57,239	+37,880	1895
2'76	90,107	-27,363	21	14,35,588	73,057	38,496	2'68	57,466	-18,980	1896
2'66	91,806	-30,671	21	14,95,418	1,66,800	56,645	3'79	58,383	-1,738	1897
3'42	92,477	-13,042	21	15,01,343	1,69,061	95,390	6'35	59,569	+35,821	1898
3'56	93,303	-9,223	21	15,02,651	3,12,172	1,84,365	12'27	60,101	+1,24,264	1899
5'33	95,293	+32,039	21	15,02,618	3,56,446	2,38,989	15'90	60,106	+1,78,883	1900
5'66	98,989	+45,246	21	15,51,678	2,77,177	1,56,929	13'63	35,509	+1,31,420	1901
6'11	1,06,632	+64,604	21	11,60,425	2,89,663	1,40,329	12'08	46,375	+93,954	1902

Jorhat	54	Nilgiri	66	Sagauli-Raxaul	61
Karaikkal-Peralam	58	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Bihar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palampur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Tikak-Margherita Colliery	68	Palampur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Petalad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutpet)	59
Ludhiana-Dhuri-Jakkhal	84	Petalad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	77	Tarakeswar-Magra	71
Madras (North-East line)	40	Powayan Light	89	Tarakeswar	63
Mayavaram-Mutpet	47	Raipipla	70	Tezpur-Bajipara	72
Morvi	87	Raipur-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannathganj	65	Rajputana-Malwa	83	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	40	Vijapur-Kalol-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkhand and Kumaon	72	Wardha-Cral	37
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.		STATE LINES										
GAUGE.		5' 6"						5' 6" & 3' 3 1/2"				
Class : No.		10 (b)						8 (f) and (g)				
Railway.		MADRAS (NORTH-EAST LINE).						RAJPUTANA				
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Miles.	Rs.	Rs.	Rs.	
1879	753	7,06,47,354	38,64,997	15,41,903	
1880	911	8,38,87,014	59,12,511	17,33,714	
1881	1,256	9,30,43,645	94,70,410	35,96,044	
1882	1,251	9,94,83,933	1,14,82,614	52,84,668	
1883	1,346	11,08,57,933	1,35,64,166	63,39,208	
1884	1,603	11,92,08,395	1,46,20,446	61,92,677	
1885	1,667	12,22,63,117	1,73,00,501	79,71,064	
1886	1,668	12,80,59,407	1,82,18,610	89,55,549	
1887	1,668	12,87,69,487	1,65,28,203	87,24,547	
1888	1,665	12,96,59,656	1,86,14,714	96,31,727	
1889	1,672	13,02,53,556	1,99,30,005	91,32,788	
1890	1,672	13,00,01,510	1,74,25,281	86,42,525	
1891	1,674	13,27,20,440	2,17,29,570	1,23,17,065	
1892	1,674	14,34,24,072	2,24,00,454	1,32,14,774	
1893	1,699	14,30,06,325	2,16,33,165	1,33,25,640	
1894	1,789	14,72,89,588	2,51,44,200	1,54,75,342	
1895	1,789	15,05,55,687	2,45,42,974	1,44,02,358	
1896	1,815	15,03,08,348	2,10,21,002	1,13,79,807	
1897	1,815	14,94,51,054	1,84,74,356	1,00,97,008	
1898	1,815	15,03,74,730	2,23,17,315	1,19,05,991	
1899	1,810	15,14,26,773	2,60,94,541	1,47,30,148	
1900	1,819	15,31,25,211	2,91,25,054	1,60,55,050	
1901	497	6,07,27,375	45,68,155	20,31,210	3.34	24,51,072	-4,19,862	1,789	15,43,58,624	2,78,62,296	1,48,89,645	
1902	497	6,16,89,605	45,46,551	16,19,128	2.82	24,46,187	-8,27,059	1,789	15,64,35,445	2,58,96,694	1,36,25,499	

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Anaroti	75	Bombay, Baroda and Central India	36
Assam-Bengal	42	Brahmaputra-Sultanpur	45
Baru Light	71	Burma	58
Bengal and North-Western (Company's section)	69	Cherra-Companyganj	48
Bengal Central	34	Cooch Behar	53
Bengal Doonars	67	Darjeeling-Himalayan	84
Bengal Doonars extensions	67	Delhi-Umballa-Kalka	73
Bengal-Nagpur	35	Deoghur	62
Berwada extension	39	Dhond-Manmad	69
Bhavnagar-Gondal-Junagad-Forbandar	86	Dhrangadra	37
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	50
Bhopal-Itarsi (Native state section)	36	Eastern Bengal State	50
Bhopal-Ujjain	36	East Coast State	34
Bikaner	85	East Indian	82
Bikaner-Ganganagar	75	Gaekwar's Dabhoi	
		Gaekwar's Mehsana	79
		Great Indian Peninsula	36
		Guntakal-Mysore frontier	45
		Gwalior Light	85
		Hardwar-Dehra	58
		Hindupur (Yesvantpur-Mysore frontier)	81
		Howrah-Amra	73
		Howrah-Sheakhala	74
		Hyderabad-Godavari Valley	80
		Indian Midland	38
		Jammu and Kashmir (Native state section)	84
		Jamnagar	86
		Jotalsar-Rajkot	86
		Jodhpur	85
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DIX 7—continued.

Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

(11, 14, 45 and 46 of Report.)

WORKED BY COMPANIES—(contd.)											CLASS OF RAILWAYS.
											GAUGE.
											Class No.
MALWA.											PALANPUR-DEESA (STATE PORTION).
Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
	Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
2'18	28,43,439	...	-13,01,536	...	...	...	...	...	...	...	1879
2'07	35,81,449	...	-18,47,733	...	...	...	...	...	...	...	1880
3'86	37,18,505	...	-1,52,461	...	...	...	...	...	...	...	1881
3'31	38,74,919	...	+14,09,749	...	...	...	...	...	...	...	1882
5'72	40,74,808	...	+22,64,400	...	...	...	...	...	...	...	1883
5'19	43,90,548	...	+18,02,129	...	...	...	...	...	...	...	1884
6'32	49,10,379	...	+30,61,585	...	...	...	...	...	...	...	1885
6'99	51,72,731	6,28,054	+31,54,764	...	...	...	...	...	...	...	1886
6'31	51,86,573	5,06,190	+24,31,779	...	...	...	...	...	...	...	1887
7'43	52,27,345	4,99,908	+39,04,474	...	...	...	...	...	...	...	1888
7'01	52,48,893	8,56,110	+30,27,785	...	...	...	...	...	...	...	1889
6'65	52,61,288	6,57,951	+27,13,236	...	...	...	...	...	...	...	1890
9'35	53,13,844	8,78,835	+61,24,386	...	...	...	...	...	...	...	1891
9'11	56,14,176	13,45,763	+62,54,835	...	46,716	...	...	...	1,031	-1,031	1892
9'32	57,00,808	13,24,918	+62,99,914	17	1,78,953	2,131	1,110	0'63	5,371	-4,261	1893
10'51	58,77,844	15,63,148	+80,31,350	17	2,14,601	20,163	11,781	5'49	8,783	+2,998	1894
9'57	59,78,606	16,21,635	+68,02,117	17	2,15,374	20,539	11,512	5'35	8,378	+3,134	1895
7'37	60,63,242	9,93,351	+43,23,214	17	2,32,746	28,765	15,072	6'47	9,149	+5,923	1896
6'76	60,48,581	5,09,720	+35,38,707	17	2,33,264	24,131	12,243	5'25	9,305	+2,938	1897
7'91	60,77,309	9,53,967	+48,74,715	17	2,33,264	21,306	11,628	4'99	9,331	+2,297	1898
9'73	60,92,658	9,92,364	+76,15,126	17	2,33,264	24,889	13,618	5'84	9,330	+4,188	1899
10'48	61,35,151	21,67,610	+77,52,289	17	2,33,264	26,585	12,616	5'41	9,330	+3,826	1900
9'65	61,89,498	13,785	+86,86,362	17	2,33,264	20,526	10,548	4'52	9,330	+1,218	1901
8'65	62,80,315	...	+73,45,094	17	2,36,786	18,913	8,330	3'52	9,408	-1,078	1902

Jorhat	54	Nilgiri	66	Sagauli-Raxaul	69
Karaikkal-Poralam	58	Nizam's Guaranteed State	78	South Behar	80
Khamgaon	75	North Western State	52	Shoranur-Cochin	62
Kolar Gold-fields	78	Onda and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palanpur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Tikak-Margherita Colliery	68	Palanpur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Pelad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutupet)	59
Ludhiana-Dhuri-Jalhal	84	Pelad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	89	Tarakeshwar-Magra	71
Madras (North-East line)	40	Powayan Light	70	Tarkessur	63
Mayavaram-Mutupet	47	Rajpura	83	Tezpur-Balipara	72
Morvi	87	Rajputana-Dhatinda	83	Tirhoot State	42
Mymensingh-Jamulpur-Jagannathganj	65	Rajputana-Malwa	40	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kalol-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkund and Kumaon	70	Wardha Coal	37
Nagda-Ujjain	76			West of India Portuguese	82

Appendix 7.
Gain or loss.

APPEN
Gain or loss to the State from railway outlay, as also the
(Referred to in paragraphs

STATE LINES

CLASS OF RAILWAYS.	3' 3 1/2"													
	14 (a)							16 (b).						
Gauge.														
Class: No.	ASSAM-BENGAL.							TIRHOOT.						
Railway.														
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Percent. on Capital outlay.	Interest.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Percent. on Capital outlay.	Interest.	Gain or loss to the State.
1879	...	...	...	...	...	...	...	85	53,38,330	4,58,733	1,07,819	2'02	2,37,411	-1,29,592
1880	...	...	...	...	...	...	...	85	56,13,274	5,51,068	2,33,662	4'16	2,50,659	-16,997
1881	...	...	...	...	...	...	...	85	72,02,917	5,74,255	2,36,200	3'28	2,67,245	-31,045
1882	...	...	...	...	...	...	...	85	1,07,92,877	6,60,022	2,54,047	2'36	3,86,612	-1,32,565
1883	...	...	...	...	...	...	...	193	1,32,83,024	8,92,441	2,19,705	1'96	4,99,014	-2,39,309
1884	...	...	...	...	...	...	...	226	1,48,64,982	11,90,072	2,66,582	1'79	5,74,369	-3,07,787
1885	...	...	...	...	...	...	...	236	1,44,47,916	12,78,634	3,59,269	2'49	5,86,195	-2,26,926
1886	...	...	...	...	...	...	...	246	1,54,33,549	1,48,638	5,01,189	3'25	6,30,944	-1,29,755
1887	...	...	...	...	...	...	...	259	1,97,49,193	17,22,953	6,95,725	3'52	7,79,801	-84,076
1888	...	...	...	...	...	...	...	275	2,07,78,252	18,07,283	7,98,875	3'85	8,17,483	-18,610
1889	...	...	...	...	...	...	...	273	2,12,28,094	18,96,674	9,78,246	4'61	8,41,932	+1,36,314
1890	...	...	...	...	...	...	...	323	2,29,94,165	23,92,977	13,21,797	5'75	9,41,207	+3,80,990
1891	...	1,53,203	...	...	...	5,893	-5,893	337	2,31,99,148	24,89,279	13,53,848	5'76	9,34,395	+4,19,463
1892	...	30,16,133	...	...	...	2,66,378	-2,66,378	342	2,43,25,804	21,84,862	13,15,815	5'41	9,30,023	+3,65,790
1893	...	1,07,63,192	...	...	...	7,09,587	-7,09,587	342	2,49,02,833	26,81,190	13,43,133	5'39	10,01,205	+3,41,928
1894	...	2,46,89,198	...	...	...	8,76,954	-8,76,954	342	2,50,08,061	29,42,305	14,63,223	5'85	9,98,388	+4,64,835
1895	130	4,04,58,298	2,14,426	-2,047	...	13,95,636	-14,03,683	342	2,56,02,092	30,89,644	14,88,367	5'81	10,18,013	+4,70,354
1896	286	5,21,39,304	6,18,785	33,238	0'06	23,73,034	-23,39,796	342	2,60,38,653	31,61,172	14,85,330	5'70	10,27,221	+4,57,599
1897	361	6,37,67,401	9,00,640	72,214	0'11	22,56,279	-21,84,065	342	3,11,00,098	32,38,109	15,54,907	5'00	10,38,630	+5,16,177
1898	379	7,56,41,721	13,08,124	54,551	0'07	24,45,275	-23,90,724	342	3,46,48,176	31,44,140	15,91,183	4'59	13,18,764	+2,72,419
1899	432	8,69,56,236	16,19,646	3,22,704	0'37	28,63,084	-25,40,380	342	3,80,27,533	34,24,808	13,80,161	3'63	14,62,603	-82,442
1900	436	9,56,01,772	17,09,955	3,64,364	0'38	33,31,330	-29,67,026	463	4,30,15,249	36,47,197	15,16,850	3'53	16,19,231	+1,02,381
1901	589	10,41,49,467	21,34,252	4,56,654	0'44	35,06,252	-30,49,598	519	4,61,91,293	43,16,760	21,08,807	4'76	17,67,799	+4,31,008
1902	589	11,11,34,922	20,96,058	2,54,418	0'23	38,08,387	-35,53,969	517	4,91,41,200	45,50,632	23,78,530	4'84	18,77,205	+5,01,325

* The loss in 1890 was due to damages by flood and temporary stoppage of traffic.
 † The loss in 1900 was due to the inclusion of the capital outlay on the Hajipur-Katihar extension, only a portion of which was opened in 1900.
 ‡ The gain in 1901 was due to the completion of the Hajipur-Katihar extension.

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Bezwada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad-Porbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state sec-tion)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalsar-Rajkot	85
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
Bikaner	85	East Indian	34	Jodhpur-Hyderabad (British section)	43
Bina-Guoga Baran	75	Gaekwar's Dabhoi	82		

DIX 7—continued.

income derived by railways which are not guaranteed by the State.

(2, 11, 14, 45 and 46 of Report.)

WORKED BY COMPANIES—(contd.)															CLASS OF RAILWAYS.
3 3/4"															GAUGE.
17 (b).							18 (c).							Class No.	
LUCKNOW-BAREILLY.							JODHPUR-HYDERABAD (BRITISH SECTION).							Railway.	
Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1882
...	4,84,915	...	...	...	11,122	...	-11,122	...	...	...	...	...	...	...	1883
36	13,43,699	10,239	899	0.06	36,572	...	-35,733	...	...	...	...	...	...	...	1884
36	25,45,567	82,827	17,243	0.68	53,247	...	-36,004	...	...	...	...	...	...	...	1885
91	42,16,146	1,15,296	28,729	0.68	1,48,570	...	-1,19,841	...	...	...	...	...	...	...	1886
141	52,74,221	2,92,470	67,924	1.30	1,85,046	...	-1,17,122	...	...	...	...	...	...	...	1887
141	52,82,870	3,52,327	99,031	1.87	2,03,503	...	-1,04,472	...	...	...	...	...	...	...	1888
141	54,59,585	4,28,731	1,47,863	2.70	2,16,189	...	-68,321	...	...	...	...	...	...	...	1889
141	65,33,824	4,56,738	1,32,338	2.02	2,30,699	...	-98,361	...	...	...	...	...	...	...	1890
198	79,17,846	4,95,068	1,73,011	2.19	2,72,065	...	-99,034	...	2,31,401	...	...	...	5,356	-5,356	1891
198	81,66,801	6,82,836	2,74,601	3.36	3,07,651	11,501	-44,551	59	16,31,818	33,206	-1,940	...	59,649	-61,598	1892
222	83,89,362	7,28,878	2,73,543	3.26	3,26,770	2,135	-55,364	59	16,61,091	1,37,817	16,471	0.99	65,767	-49,296	1893
231	85,93,058	9,72,269	4,48,218	5.22	3,45,323	79,310	+ 23,585	59	17,27,619	1,45,222	36,062	2.08	68,940	-32,878	1894
231	87,22,466	8,25,934	3,13,116	3.59	3,56,596	15,834	-59,314	59	17,74,095	1,68,139	46,609	2.63	71,080	-24,471	1895
231	89,63,620	8,27,599	3,02,071	3.37	3,48,885	13,415	-60,229	59	18,00,799	1,87,503	64,376	3.57	71,420	-7,044	1896
231	93,02,715	8,27,371	3,35,776	3.61	3,61,550	26,980	-52,754	59	18,37,796	2,05,182	59,433	3.23	73,552	-14,139	1897
231	94,90,476	10,34,088	5,00,200	5.27	3,64,852	66,721	+ 68,627	59	20,19,772	2,22,647	70,159	3.47	77,553	-7,394	1898
231	94,97,485	12,72,160	6,33,355	6.63	3,65,537	76,332	+ 1,91,486	59	33,48,948	2,25,242	88,463	2.64	1,07,380	-18,917	1899
231	99,21,432	12,53,801	6,51,957	6.57	3,73,097	1,47,611	+ 1,31,249	124	41,71,400	1,93,211	65,933	1.10	1,78,984	-1,13,751	1900
231	1,01,83,243	13,72,520	7,58,124	7.44	3,91,795	99,195	+ 2,67,133	124	38,81,861	4,24,307	1,73,567	4.47	1,52,129	+ 21,138	1901
231	1,12,96,019	14,53,329	7,69,568	6.81	4,93,528	71,666	+ 2,74,374	124	40,45,972	5,04,008	2,18,814	5.41	1,59,771	+ 59,043	1902

* Including the Hyderabad-Raholi section.

† The gain in 1901 was due to the completion of the line which was previously only partially open.

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Ichhat	54	Nilgiri	66	Sagauli-Raxaul	69
Karaikkal-Peralam	88	Nizam's Guaranteed State	78	Shravani-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palampur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Tikak-Margherita Colliery.	68	Palampur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Petalad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutupet)	59
Ludhiana-Dhuri-Jakhal	84	Petalad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	77	Tarkeshwar-Magra	71
Madras (North-East line)	40	Powayan Light	89	Tarkeshwar	63
Mayavaram-Mutupet	47	Rajpipla	70	Tespur-Balipara	72
Morvi	87	Rajputana-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannathganj.	65	Rajputana-Malwa	40	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kalol-Kadi	75
Mysore section (Southern Mahratta)	44	Rohilkund and Kumaon	70	Wardha Coal	31
Nagda-Ujjain	76			West of India Portuguese	81

Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.										STATE LINES							
GAUGE.										3' 6"							
Class: No.										21 (a).				21 (b).			
Railway.										SOUTHERN MAHRATTA.				MYSORE SECTION			
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.					
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.					
1879 . . .	...	...	...	...	...	...	...	...	...	7,98,213	...	...			
1880 . . .	...	...	...	...	...	...	...	...	...	21,37,736	...	...			
1881 . . .	...	...	...	...	...	...	...	...	58	36,56,345	1,31,525	53,753
1882 . . .	...	...	...	...	...	...	...	...	86	45,95,058	2,88,390	1,03,495
1883 . . .	...	...	...	...	...	...	...	...	87	57,69,057	3,02,895	99,675
1884 . . .	214	2,77,07,721	2,13,059	—18,131	...	14,77,196	...	—14,95,327	140	62,64,620	3,61,448	1,65,479					
1885 . . .	316	3,61,00,076	8,66,326	1,40,238	0.33	19,81,340	...	—18,41,102	140	64,89,336	4,33,954	2,07,784					
1886 . . .	477	6,15,07,620	16,34,918	4,83,392	0.79	26,43,220	...	—21,54,822	140	71,35,111	4,69,274	1,05,395					
1887 . . .	849	7,87,73,165	39,32,417	10,03,624	1.27	34,64,086	...	—24,60,462	140	91,36,438	5,13,784	1,41,198					
1888 . . .	854	8,68,84,298	38,38,616	8,85,493	1.01	31,89,505	...	—23,04,012	140	1,25,76,692	5,70,657	52,195					
1889 . . .	979	9,18,52,138	40,31,604	9,61,618	1.04	32,91,520	41,700	—23,71,602	296	1,44,24,093	8,96,273	2,22,034					
1890 . . .	1,043	9,32,85,016	44,71,095	9,14,664	0.98	31,39,444	30,036	—22,54,816	296	1,47,11,610	11,26,318	2,61,700					
1891 . . .	1,044	9,42,66,041	47,60,567	16,29,919	1.72	35,89,851	2,58,845	—22,18,777	296	1,50,76,285	13,24,525	4,43,717					
1892 . . .	1,044	9,61,10,671	44,13,107	13,47,999	1.40	31,85,511	3,43,266	—21,80,778	296	1,46,36,205	13,09,463	4,47,906					
1893 . . .	1,044	9,45,71,662	57,29,918	23,16,567	2.45	35,42,479	5,34,949	—17,60,861	296	1,46,42,217	16,83,203	6,74,705					
1894 . . .	1,042	9,51,44,496	58,50,542	20,18,567	2.12	45,87,598	5,57,556	—31,26,587	296	1,47,60,293	14,45,412	4,76,156					
1895 . . .	1,042	9,56,02,591	64,68,011	25,88,948	2.71	46,80,290	5,22,407	—26,11,742	296	1,49,22,452	15,78,281	6,30,769					
1896 . . .	1,042	9,60,94,788	67,12,230	29,11,959	3.03	44,45,740	7,23,698	—22,57,479	296	1,51,08,257	15,84,981	6,76,873					
1897 . . .	1,042	9,67,12,838	64,92,310	27,82,625	2.88	42,62,896	6,97,133	—21,77,394	295	1,51,99,757	18,30,019	7,95,147					
1898 . . .	1,042	9,74,67,550	50,61,871	15,02,414	1.54	41,10,275	5,44,277	—31,52,138	296	1,55,07,319	13,92,851	4,13,421					
1899 . . .	1,042	9,78,60,569	58,70,616	18,95,002	1.94	40,10,557	3,83,332	—25,00,587	296	1,56,75,416	10,60,469	3,29,033					
1900 . . .	1,042	9,82,62,274	64,66,526	22,83,366	2.32	40,02,119	5,81,807	—23,00,360	296	1,58,70,510	13,76,391	4,71,201					
1901 . . .	1,042	9,84,64,118	58,29,471	19,31,134	1.75	40,42,851	4,92,728	—28,04,445	296	1,60,14,879	14,33,240	4,07,791					
1902 . . .	1,042	9,85,13,731	64,59,686	23,02,908	2.34	40,79,645	5,03,168	—22,72,905	296	1,60,76,009	15,97,046	5,58,022					

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Assam-Bengal	42	Brahmaputra-Sultanpur	58	Guntakal-Mysore frontier	45	
Barsi Light	71	Burma	48	Gwalior Light	83	
Bengal and North-Western (Com- pany's section)	69	Cherra-Companyganj	53	Haidwar-Dehra	58	
Bengal Central	34	Cooch Behar	84	Hindapur (Yesvantpur-Mysore fron- tier)	81	
Bengal Doons	67	Darjeling-Himalayan	73	Howrah-Amra	73	
Bengal Doons extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74	
Bengal-Nagpur	35	Deoghur	69	Hyderabad-Godavari Valley	80	
Bezwada extension	39	Dhond-Manmad	37	Indian Midland	38	
Bhavnagar-Gondal-Junagad Porbandar Bhopal-Itarsi (British section)	86	Dhanganadra	87	Jammu and Kashmir (Native state section)	84	
Bhopal-Itarsi (Native state section)	38	Dibru-Sadiya	68	Jamnagar	86	
Bhopal-Ujjain	76	Eastern Bengal State	50	Jetalsar-Rajkot	86	
Bikaner	76	East Coast State	50	Jodhpur	85	
Bina-Coona-Baran	85	East Indian	34	Jodhpur-Hyderabad (British section)	43	
	75	Gaekwar's Dabhoi	82			

DIX 7—continued.

income derived by railways which are not guaranteed by the State.

(2, 11, 14, 45 and 46 of Report.)

WORKED BY COMPANIES—(contd).											CLASS OF RAILWAYS.
3' 3"											Gauge.
21 (c)											Class No.
(SOUTHERN MAHARATTA).				GUNTAKAL-MYSORE FRONTIER.							Railway.
Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
	Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
..	23,960	..	-23,960	..	..	..	..	..	..	..	1879
..	58,908	..	-68,908	..	..	..	..	..	..	..	1880
1'47	98,912	..	-45,150	..	..	..	..	..	..	..	1881
2'25	1,58,989	..	-65,494	..	..	..	..	..	..	..	1882
1'73	2,19,351	..	-1,19,676	..	..	..	..	..	..	..	1883
2'64	2,41,052	..	-75,573	..	..	..	..	..	..	..	1884
3'20	2,51,730	..	-43,946	..	..	..	..	..	..	..	1885
1'48	5,57,104	..	-4,51,719	..	..	..	..	..	..	..	1886
1'55	6,70,864	..	-5,29,666	..	..	..	..	..	..	..	1887
0'42	6,94,210	..	-6,41,915	..	..	..	..	..	..	..	1888
1'54	7,07,500	47,964	-5,38,330	..	..	..	..	..	..	..	1889
0'02	6,48,733	52,831	-4,39,864	..	..	..	..	..	..	..	1890
2'94	6,54,850	96,004	-3,07,137	..	..	..	..	..	..	..	1891
3'06	7,29,624	1,01,305	-3,83,023	63	..	..	..	..	..	..	1892
4'61	7,70,439	1,64,670	-2,60,404	120	58,39,806	1,97,374	78,955	1'35	4,67,933	-1,88,978	1893
3'23	8,38,525	1,43,566	-5,05,935	120	58,58,414	3,68,951	1,27,874	2'18	2,34,529	-1,06,655	1894
4'23	8,70,947	4,23,096	-3,63,274	120	58,71,739	4,39,329	1,81,657	3'09	2,34,639	-59,992	1895
4'48	8,21,588	1,74,768	-3,16,483	120	59,00,158	4,80,992	2,10,690	3'57	2,35,616	-24,926	1896
5'13	7,75,708	1,80,992	-1,61,553	120	59,02,493	6,38,278	2,75,983	4'68	2,36,000	+ 39,983	1897
2'67	7,38,461	1,66,986	-4,92,026	120	58,98,866	4,25,702	1,32,471	3'25	2,36,016	-1,03,555	1898
2'10	7,21,117	76,861	-4,68,945	120	58,98,608	3,84,829	1,28,459	2'18	2,35,996	-1,07,537	1899
2'97	7,18,200	1,11,070	-3,58,069	120	59,00,046	4,36,116	1,57,837	2'68	2,35,960	-78,123	1900
2'55	7,22,244	1,07,697	-4,22,159	120	59,02,583	4,47,373	1,36,659	2'32	2,36,115	-98,456	1901
3'47	7,21,062	1,16,979	-2,79,959	120	59,04,714	4,73,972	1,74,320	2'95	2,36,107	-61,787	1902

Jorhat	54	Nilgiri	66	Sagauli-Raxaul	69
Karaiikkal-Peralam	88	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palampur-Deesa (State portion)	41	Southern Maharashtra	44
Leao and Tikak-Margherita Colliery	68	Palampur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Petalad-Cambay (Amrad-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutpet)	59
Ludhiana-Dhuri-Jalkhal	84	Petalad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	89	Tarakeshwar-Magra	71
Madras (North-East line)	49	Powayan Light	70	Tarkessur	63
Mayavaram-Mutpet	47	Rajpipla	83	Tezpur-Balipara	72
Morvi	87	Rajputana-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannath-Ranj	65	Rajputana-Malwa	40	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kalol-Kadi	79
Mysore section (Southern Maharashtra)	44	Rohilkhand and Kumaon	70	Wardha-Cooli	57
Nagda-Ujjain	76			West of India Portuguese	88

Appendix 7:
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

STATE LINES									
CLASS OF RAILWAYS.	3' 3 1/2"								
GAUGE.	22 (a) and (c)								
Class No.	SOUTH INDIAN.								
Railway.									
Calendar year.	Length of line open.	Capital withdrawn to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.
	Miles.	£	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	631	4,234,506	4,41,96,588	32,62,067	10,63,253	2'40	20,95,206	...	-10,31,953
1880	643	4,291,553	4,46,77,075	35,59,593	9,30,017	2'08	21,28,643	...	-11,98,626
1881	653	4,333,814	4,52,22,730	37,55,688	12,37,726	2'73	22,30,568	...	-8,92,842
1882	653	4,347,889	4,53,69,280	37,58,714	14,02,328	3'09	21,40,871	...	-7,38,543
1883	654	4,350,603	4,53,97,614	38,69,668	13,22,334	2'91	21,46,579	...	-8,24,245
1884	654	4,476,143	4,67,51,662	41,89,049	14,92,491	3'19	25,40,471	...	-10,47,980
1885	654	4,780,278	4,93,74,900	45,60,126	15,81,714	3'20	27,07,145	...	-11,20,431
1886	654	4,919,007	5,13,40,172	49,20,176	14,75,914	2'86	29,80,496	...	-15,04,581
1887	737	5,155,793	5,40,64,399	51,79,324	15,86,729	2'89	31,25,729	...	-15,38,991
1888	737	5,318,431	5,57,91,978	56,58,683	16,31,692	2'92	33,80,057	...	-17,48,365
1889	737	5,936,087	6,25,01,638	59,39,378	17,63,111	2'82	35,29,935	...	-17,66,824
1890	779	...	7,27,13,394	64,25,510	26,87,303	3'66	35,19,564	1,43,341	-9,93,600
1891	901	...	8,39,44,964	70,36,756	23,58,724	2'81	35,89,736	...	-12,31,012
1892	1,042	...	8,50,16,920	77,14,996	27,77,005	3'27	39,51,093	...	-11,74,088
1893	1,042	...	8,30,64,202	80,52,415	30,34,332	3'65	38,58,152	...	-8,23,820
1894	1,042	...	8,31,46,521	80,46,559	32,83,863	3'95	42,81,812	1,06,449	-11,04,396
1895	1,042	...	8,35,71,763	89,14,947	38,96,987	4'66	42,77,578	2,55,271	-6,35,862
1896	1,042	...	8,34,96,484	89,45,581	40,27,489	4'81	40,60,677	2,51,567	-2,84,755
1897	1,042	...	8,33,80,017	91,81,409	42,96,757	5'15	38,76,142	3,25,390	+ 95,225
1898	1,018	...	8,12,55,032	84,67,581	38,35,527	4'72	37,49,521	3,06,473	-2,20,467
1899	1,030	...	8,21,15,782	84,74,462	39,83,540	4'85	36,39,891	2,45,608	+ 98,041
1900	1,034	...	8,37,03,278	85,04,825	43,97,916	5'25	36,77,879	3,68,408	† + 3,51,629
1901	1,034	...	8,91,12,977	1,01,44,657	54,15,176	6'07	37,23,736	4,59,540	+ 12,31,900
1902	1,142	...	9,17,25,914	1,05,98,282	57,14,254	6'23	39,64,367	4,80,185	+ 12,69,702

* Including Rs. 67,33,159 on account

† The gain in 1900 was due to the

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Ahmedabad-Parantij	66	Birur-Shimoga	81	Gaekwar's Mehsana	79
Amraoti	75	Bombay, Baroda and Central India	56	Great Indian Peninsula	36
Assam-Bengal	42	Brahmaputra-Sultanpur	58	Guntakal-Mysore frontier	43
Barai Light	71	Burma	48	Gwalior Light	83
Bengal and North-Western (Company's section)	69	Cherra-Campanyanj	53	Hardwar-Dehra	58
Bengal Central	34	Cooch Behar	84	Hindupur (Yesvantpur-Mysore frontier)	81
Bengal Dooars	67	Darjeeling-Himalayan	73	Howrah-Amta	73
Bengal Dooars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	69	Hyderabad-Godavari Valley	80
Bezwada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavanagar-Gondal-Junagad-Forbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalsar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
Bikaner	85	East Indian	34	Jodhpur-Hyderabad (British section)	43
Bina-Graon-Baraa	75	Gaekwar's Dabhoi	82		

DIX 7—continued.

Income derived by railways which are not guaranteed by the State.

(11, 14, 43 and 46 of Report.)

WORKED BY COMPANIES—(contd.)							CLASS OF RAILWAYS.
3' 3"							GAUGE.
MAYAVARAM-MUTUPET.							Class No.
MAYAVARAM-MUTUPET.							Railway.
Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
..	..	..	..	..	..	..	1879
..	..	..	..	..	..	..	1880
..	..	..	..	..	..	..	1881
..	..	..	..	..	..	..	1882
..	..	..	..	..	..	..	1883
..	..	..	..	..	..	..	1884
..	..	..	..	..	..	..	1885
..	..	..	..	..	..	..	1886
..	..	..	..	..	..	..	1887
..	..	..	..	..	..	..	1888
..	..	..	..	..	..	..	1889
..	61,509	..	..	..	1,230	-1,230	1890
..	4,82,149	..	..	..	10,873	-10,873	1891
..	13,84,423	..	..	..	37,331	-37,331	1892
..	21,62,757	..	..	..	70,947	-70,947	1893
54	23,79,123	1,53,460	62,948	2'65	1,00,701	-37,759	1894
54	24,47,438	2,42,024	93,669	3'83	95,700	-2,031	1895
54	24,49,680	2,47,772	99,361	4'06	97,861	+1,500	1896
54	24,91,854	2,66,081	1,11,496	4'47	99,159	+12,337	1897
54	24,94,905	2,46,199	77,827	3'11	99,843	-22,316	1898
54	24,97,355	2,42,016	96,798	3'88	99,845	-3,047	1899
Purchased by the Tanjore District Board with effect from the 1st January 1900.							

of premium paid for the purchase of line as regards 1891 to 1901.
opening of 131 miles of new line.

Jorhat	Page. 54	Nilgiri	Page. 66	Saganj-Raxaul	Page. 69
Karaikkal-Peralam	58	Nizam's Guaranteed State	78	Shorapur-Cocim	80
Khamgaon	75	North Western State	53	South-Bihar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	57	South India	45
Kelbapur	82	Palampur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Tikak-Margherita Colliery	68	Palampur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Pellad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutupet)	59
Ludhiana-Dhuri-Jakhal	84	Pellad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	77	Tarakeshwar-Magaz	71
Madras (North-East line)	40	Powayan Light	89	Tarkesur	63
Mayavaram Mutupet	47	Raipipla	70	Tezpur-Balipara	72
Morvi	87	Rajputana-Bhatinda	83	Tirhoot State	43
Mymensingh-Jamalpur-Jagannathganj	65	Rajputana-Malwa	83	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	40	Vijapur-Kalol-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkhand and Kumaon	72	Wardha Coal	37
Nagda-Ujjain	76		70	West of India Portuguese	58

Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS: OF RAILWAYS.		STATE LINES						
GAUCH.		3' 31"						
Class: Nb.		23 (a)						
Railway.		BURMA.						
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	161	1,23,86,597	9,55,918	1,41,743	1'14	5,47,438	...	-4,03,695
1880	167	1,25,87,340	13,22,710	5,21,085	4'14	5,62,331	...	-41,246
1881	167	1,36,51,992	15,43,622	6,45,077	4'73	5,86,210	...	+ 38,867
1882	167	1,78,39,222	15,75,691	6,30,430	3'53	6,23,969	...	+ 6,461
1883	167	2,19,77,689	15,62,886	5,60,766	2'55	7,46,068	...	-1,85,302
1884	260	2,56,37,089	21,05,421	8,21,936	3'21	9,69,215	...	-1,47,279
1885	333	2,71,85,343	21,63,656	4,73,123	1'73	10,61,184	...	-5,88,061
1886	333	2,88,32,604	26,57,915	9,41,149	3'26	12,64,242	...	-3,26,093
1887	333	3,66,32,847	33,24,263	15,58,303	4'25	13,15,249	...	+ 2,43,954
1888	441	4,83,73,677	33,76,218	12,71,960	2'63	18,18,560	...	-5,46,600
1889	553	5,12,49,158	46,90,263	15,73,552	3'07	20,17,224	...	-4,43,672
1890	556	5,56,22,296	54,71,432	23,48,191	4'22	21,35,308	...	+ 2,12,883
1891	617	6,08,31,289	58,55,197	23,71,398	3'90	23,28,287	...	+ 46,105
1892	717	6,64,02,875	71,00,518	33,86,088	5'10	24,90,221	...	+ 8,95,867
1893	730	7,03,47,005	67,22,506	22,42,492	3'19	27,19,995	...	-4,77,503
1894	745	7,37,14,721	62,87,354	23,23,328	3'15	28,94,375	...	-5,71,047
1895	834	7,57,29,659	67,11,062	27,02,356	3'57	30,01,163	...	-1,98,807
1896	886	8,13,44,229	76,08,558	29,85,751	3'67	34,43,442	...	-4,57,691
1897	887	8,73,31,890	86,76,403	38,82,673	4'45	38,31,674	1,62,877	-1,11,878
1898	936	9,24,93,509	89,91,451	37,88,523	4'10	39,49,899	1,61,076	-3,22,452
1899	993	10,11,17,647	88,25,724	35,78,407	3'54	38,35,209	1,24,994	-3,81,796
1900	1,124	11,03,96,635	1,10,29,947	48,94,824	4'43	38,49,026	3,47,606	+ 6,98,192
1901	1,178	11,99,22,408	1,18,85,329	49,89,656	4'16	40,41,108	4,42,419	+ 5,06,109
1902	1,261	12,70,23,590	1,25,02,671	52,72,683	4'06	43,94,823	4,69,365	+ 4,06,495

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Barai Light	71	Burma	48	Gwalior Light	83
Bengal and North-Western (Company's section)	69	Cherra-Companyganj	53	Hardwar-Dehra	58
Bengal Central	34	Cooch-Behar	84	Hindupur (Yesvantpur-Mysore frontier)	81
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Bengal Dooars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	69	Hyderabad-Godavari Valley	80
Bezawada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad-Porbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalsar-Rajkot	86
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DIX 7—continued.

income derived by railways which are not guaranteed by the State.

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WORKED BY COMPANIES—(concluded.)

TOTAL STATE LINES WORKED BY COMPANIES.									CLASS: OF RAIL- WAYS.
									GAUGE.
									Class: No.
									Railway.
Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Annuity.	Com- panies' share of net traffic receipts.	Gain or loss to the State.	Calendar year.
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
4,763	75,82,76,205	7,81,60,391	4,16,06,436	5'48	3,58,36,311	...	67,40,168	-3,70,243	1879
5,006	81,63,26,647	8,11,07,830	4,31,77,823	5'28	4,01,41,208	...	23,26,526	+7,10,089	1880
5,474	83,97,37,952	9,46,46,855	5,31,64,366	6'33	2,37,24,777	1,73,92,000	38,87,615	+81,39,974	1881
5,582	86,09,04,239	10,25,29,467	5,59,62,122	6'50	2,45,29,764	1,73,92,000	49,93,956	+90,46,402	1882
5,818	89,33,76,969	10,81,53,100	5,88,45,245	6'58	2,57,73,676	1,72,57,772	53,22,649	+1,04,91,148	1883
6,579	94,84,67,605	10,38,96,970	5,33,24,316	5'62	2,99,49,129	1,78,50,459	36,48,371	+18,76,357	1884
6,824	98,17,85,663	11,39,37,679	6,27,64,324	6'39	3,27,96,267	1,79,75,714	43,26,846	+76,65,397	1885
7,140	1,02,18,18,347	11,96,48,068	6,49,60,028	6'35	3,72,12,162	1,89,50,137	61,14,900	+26,81,829	1886
7,657	1,10,62,82,922	12,10,91,617	6,65,29,041	6'01	4,00,33,164	1,92,13,333	61,96,510	+10,86,034	1887
8,924	1,18,24,25,419	12,60,22,662	6,78,95,940	5'74	4,30,90,239	2,03,43,530	59,95,847	-15,33,676	1888
8,924	1,23,20,13,498	12,76,70,163	6,39,68,574	5'19	4,49,34,667	2,00,60,000	44,59,376	-63,86,469	1889
9,321	1,26,86,63,039	12,88,49,143	6,70,69,318	5'28	4,38,47,928	2,03,43,530	50,85,141	-22,07,281	1890
9,822	1,29,98,82,267	14,67,92,241	8,47,45,715	6'51	4,59,04,240	1,86,94,054	91,41,513	+1,10,05,608	1891
10,189	1,33,31,37,213	14,87,90,579	8,32,68,559	6'24	4,90,49,926	2,06,47,164	77,78,701	+57,92,768	1892
10,359	1,35,85,51,256	15,16,99,678	8,31,93,577	6'12	5,23,86,202	2,34,46,780	67,35,920	+6,24,675	1893
10,575	1,38,77,66,065	15,49,97,835	8,47,02,486	6'10	5,75,27,791	2,43,89,582	70,30,127	-42,45,014	1894
10,832	1,41,81,97,639	15,53,05,548	8,51,14,369	6'00	5,91,18,811	2,61,01,122	56,72,705	-57,78,269	1895
11,069	1,45,72,48,062	15,38,21,861	8,22,17,416	5'64	5,85,30,847	2,58,59,455	56,44,095	-78,16,981	1896
11,149	1,51,79,49,248	15,27,01,770	8,15,13,994	5'36	5,73,68,338	2,47,34,406	43,86,126	-49,74,876	1897
11,452	1,57,33,14,867	16,25,26,825	8,55,78,978	5'43	5,72,94,849	2,32,64,533	61,76,713	-11,57,117	1898
11,760	1,64,63,19,523	17,54,49,213	9,40,94,303	5'71	5,81,35,954	2,21,45,516	67,86,024	+70,26,809	1899
12,332	1,82,24,89,772	19,22,08,266	10,55,49,343	5'79	5,28,47,816	2,10,49,852	71,06,030	+1,45,45,645	1900
13,386	1,96,68,69,863	20,57,89,038	11,19,03,772	5'69	5,11,91,889	4,07,70,270	42,52,162	+1,56,89,451	1901
13,668	2,02,09,13,179	20,59,77,066	10,93,09,266	5'41	5,28,90,110	4,15,03,653	37,56,801	+1,11,58,702	1902

Jorhat	...
Karaikkal-Peralam	...
Khamgaon	...
Kolar Gold-fields.	...
Kolhapur	...
Ledo and Tikak-Margherita Colliery	...
Lucknow-Bareilly	...
Ludhiana-Dhuri-Jakhal	...
Madras	...
Madras (North-East line)	...
Mayavaram-Mutupet	...
Morvi	...
Mymensingh-Jamalpur-Jagannath-ganj	...
Mysore-Nanjangud	...
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.	STATE LINES WORKED													
	5' 6", 3' 3 1/2" and 2' 6"										5' 6"			
Gauge.	5' 6"													
Class No.	2 (a) and (b)													
Railway.	EASTERN BENGAL.										East			
Calendar year.	Length of line open.	Capital withdrawn to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Percent. on Capital outlay.	Interest.	Annuity.	Company's share of surplus profits.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.
1879	430	5,714,910	6,23,44,476	60,22,272	25,79,314	4'14	28,51,165	...	3,67,326	-6,39,177	...	...	...	...
1880	430	5,809,133	6,33,72,354	66,91,060	33,79,186	5'33	29,27,692	...	5,34,950	-87,456	...	...	...	...
1881	454	5,862,258	6,39,51,905	75,05,736	42,86,406	6'70	28,50,922	...	8,24,125	+6,11,359	...	...	...	...
1882	483	6,232,511	6,50,12,846	85,79,404	47,17,459	7'26	27,92,607	...	8,95,329	+10,29,523	...	...	...	...
1883	504	6,433,628	7,01,85,023	80,73,465	47,10,716	6'70	29,46,783	...	4,98,223	+12,54,710	...	...	...	...
1884	519	...	7,52,12,686	78,12,979	24,80,526	3'30	15,92,486	3,50,920	...	+5,37,120	...	...	...	...
1885	606	...	8,25,04,899	72,85,916	25,25,336	3'06	21,82,794	7,22,920	...	-3,80,378	...	...	...	...
1886	606	...	8,94,01,378	82,73,918	30,89,720	3'44	24,34,239	19,04,750	...	-12,40,269	...	...	...	...
1887	645	...	9,04,07,798	94,30,399	45,04,782	4'98	41,71,008	14,90,152	...	-11,56,378	...	...	...	...
1888	673	...	9,52,54,955	1,05,19,210	55,25,424	5'80	28,83,744	20,11,011	...	+6,30,669	...	...	...	...
1889	746	...	9,73,16,142	1,11,76,674	61,91,625	6'36	30,18,703	20,43,953	...	+11,28,069	...	...	...	...
1890	764	...	10,94,13,252	1,14,78,382	60,70,325	5'55	30,96,150	18,14,110	...	+11,60,063	...	3,79,490	...	...
1891	777	...	11,24,90,649	1,36,75,440	65,32,100	5'81	32,01,166	19,48,198	...	+13,82,736	...	1,10,69,894	...	...
1892	812	...	11,53,92,055	1,15,56,446	62,33,727	5'40	38,86,181	16,53,922	...	+6,93,624	...	2,60,11,131	...	...
1893	813	...	11,61,73,626	1,20,51,147	66,35,138	5'71	39,53,310	16,49,185	...	+10,32,643	266	3,58,67,473	4,98,660	1,53,712
1894	813	...	11,66,97,311	1,40,15,726	83,53,559	7'16	41,01,624	18,91,850	...	+23,60,085	354	4,39,47,727	14,80,678	1,50,921
1895	814	...	11,65,36,758	1,45,09,739	89,74,474	7'70	41,50,415	18,72,565	...	+29,51,494	427	5,09,41,876	19,04,251	3,29,184
1896	814	...	11,91,25,239	1,50,81,670	90,02,286	7'56	41,06,132	17,56,153	...	+31,40,001	512	6,33,64,948	24,66,573	5,39,901
1897	818	...	12,41,13,831	1,47,62,233	80,60,612	6'49	42,80,503	16,53,278	...	+21,26,831	547	7,22,26,070	29,21,162	8,92,453
1898	827	...	12,71,99,245	1,47,17,879	83,35,064	6'55	43,89,356	15,75,020	...	+23,70,688	727	8,24,02,269	28,10,742	6,69,831
1899	832	...	13,09,94,403	1,56,12,436	83,01,083	6'34	45,00,276	15,62,391	...	+22,38,416	803	8,65,93,097	43,92,237	15,37,294
1900	843	...	13,51,97,243	1,71,00,460	92,46,424	6'84	47,02,516	15,66,769	...	+29,77,139	808	8,80,71,731	64,04,543	26,51,794
1901	854	...	14,13,39,852	1,65,99,440	83,08,281	5'88	41,11,665	23,37,123	...	+18,59,493	Amalgamated with B N. and			
1902	898	...	14,93,27,007	1,78,93,098	91,48,340	6'13	44,25,883	23,29,895	...	+23,92,562				

* Including Rs. 89,20,143 on account
† Including Rs. 1,09,01,368 on account

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Barsi Light	71	Burma	48	Gwalior Light	83
Bengal and North-Western (Com- pany's section)	69	Cherra-Companyganj	53	Hardwar-Dehra	58
Bengal Central	34	Cooch Behar	84	Hindupur (Yesvantpur-Mysore fron- tier)	81
Bengal Dooars	67	Darjeeling-Himalayan	73	Howrah Amta	73
Bengal Dooars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	69	Hyderabad-Godavari Valley	80
Beswada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad-Porbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalpur Rajkot	86
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
Bikaner	85	East Indian	34	Jodhpur-Hyderabad (British section). .	43
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DIX 7—continued.

income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

BY THE STATE.												CLASS OF RAILWAYS.
5' 6" and 3' 3 1/2"												GAUGE.
5 (a) and (c)												Class: No.
COAST.			ODDH AND ROHILKHAND.									Railway.
Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Length of line open.	Capital withdrawn to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Surplus profits paid to Company.	Gain or loss to the State.	Calendar year.
Rs.	Rs.	Rs.	Miles.	£	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
...	...	...	547	5,803,576	5,80,35,764	43,44,843	18,19,936	3'14	28,00,000	...	-9,80,064	1879
...	...	...	547	5,022,408	6,02,24,081	44,55,150	19,04,409	3'16	28,19,946	...	-9,15,537	1880
...	...	...	547	6,253,093	6,25,30,935	49,28,730	19,75,609	3'16	29,14,137	...	-9,38,438	1881
...	...	...	547	6,527,984	6,52,79,840	52,62,844	18,01,371	2'76	30,67,622	...	-12,66,251	1882
...	...	...	548	7,076,944	7,07,69,446	54,56,255	24,80,362	3'50	31,35,495	...	-6,55,133	1883
...	...	...	595	7,914,338	7,91,43,383	52,75,198	23,26,146	2'94	41,14,587	...	-17,88,441	1884
...	...	...	607	8,543,442	8,54,34,426	55,37,369	17,95,361	2'10	46,53,333	...	-28,57,972	1885
...	...	...	686	8,951,277	8,95,12,775	65,05,409	28,60,755	3'20	51,85,014	...	-23,27,259	1886
...	...	...	692	9,170,667	9,17,06,668	66,46,213	31,35,249	3'42	53,98,339	...	-22,63,090	1887
...	...	...	692	9,184,165	9,18,41,649	70,77,053	30,16,005	3'28	51,67,494	...	-21,51,489	1888
...	...	...	692	...	9,22,32,226	75,39,683	42,04,076	4'56	49,71,892	...	-7,67,822	1889
...	7,590	-7,590	692	...	10,36,90,668	73,81,396	37,59,478	3'62	44,23,109	...	-6,68,631	1890
...	2,33,786	-2,33,786	692	...	10,37,39,746	85,64,209	49,42,458	4'76	47,25,666	...	+2,16,792	1891
...	7,41,621	-7,41,621	692	...	11,43,96,473	85,42,836	50,16,329	4'39	52,79,411	...	-2,63,082	1892
0'43	13,48,868	-11,95,136	741	...	11,18,18,680	87,15,927	50,17,053	4'49	55,01,058	...	-4,84,005	1893
0'34	15,92,909	-14,41,988	797	...	11,37,88,572	1,05,18,836	57,36,138	5'04	63,11,123	...	-5,74,935	1894
0'65	19,12,886	-15,83,702	797	...	11,74,06,536	1,02,94,880	52,55,948	4'48	63,69,949	...	-11,14,001	1895
0'85	23,72,875	-18,32,974	847	...	12,01,70,873	86,97,076	43,50,907	3'62	61,30,729	...	-17,79,822	1896
1'23	26,96,796	-18,04,343	892	...	12,53,20,627	85,15,856	36,96,778	2'95	59,77,486	...	-22,80,708	1897
0'81	30,98,828	-24,28,997	1,030	...	12,73,91,601	98,51,599	53,07,727	4'17	58,76,247	...	-5,68,520	1898
1'78	35,14,602	-19,77,308	1,030	...	13,30,85,811	1,11,38,990	60,76,595	4'57	59,75,202	...	+1,01,393	1899
3'01	34,46,555	-7,91,761	1,117	...	13,64,96,257	1,15,15,132	55,91,727	4'10	62,28,195	...	-6,36,458	1900
Madras railways.			1,117	...	13,97,68,253	1,32,54,991	72,20,007	5'17	63,12,044	...	+0,07,963	1901
			1,119	...	14,74,18,445	1,31,65,792	64,11,336	4'35	64,75,905	...	-64,569	1902

of premium paid for the purchase of line.
of premium paid for the purchase of line.

Jorhat	54	Nilgiri	66	Sagauli-Rawal	69
Karsikkal-Peralam	88	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Bihar	62
Kolar Gold-fields	78	Odhb and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palanpur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Titak-Margherita Colliery	68	Palanpur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Pettlad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutapet)	50
Ludhiana-Dhuri-Jakhal	54	Pettlad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	77	Tarkeshwar-Magra	71
Madras (North-East line)	40	Powayan Light	89	Tarkessur	63
Mayavaram-Mutapet	47	Rajppla	70	Tezpur-Balipara	72
Morvi	87	Rajpura-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannath-ganj	65	Rajputana-Malwa	83	Udaipur-Chitor	35
Mysore-Nanjangid	82	Ranaghat-Krishnagar	40	Vijapur-Kalol-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkhand and Kumaon	72	Wardha Coal	37
Nagda-Ujjain	96		70	West of India Portuguese	88

Appendix 7.
Gain or loss.

Gain or loss to the State from railway outlay, as also the

Referred to in paragraphs

CLASS OF RAILWAYS.		STATE LINES WORKED							
GAVOL.		5 ⁶							
Class No.		6 (a), (f), (g), & (h)							
Railway.		NORTH WESTERN.							
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Annuity.	Surplus profits paid to Company.	Gain or loss to the State.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1879	1,268	21,67,64,247	1,51,27,621	55,36,870	2.55	1,00,29,015	...	...	-44,92,145
1880	1,541	25,05,35,401	1,00,30,666	75,55,561	3.02	1,11,36,919	...	21,122	-36,02,480
1881	1,671	26,38,29,396	90,04,725	46,13,547	1.75	1,17,64,869	...	...	-71,51,301
1882	1,732	27,49,44,870	82,43,072	57,96,011	2.11	1,05,83,712	...	...	-47,87,701
1883	1,759	28,18,15,806	1,03,81,148	87,19,243	3.09	1,07,43,931	...	...	-21,24,688
1884	1,850	29,20,27,775	1,07,68,748	88,21,631	3.02	1,18,26,701	...	...	-30,05,070
1885	1,857	31,69,43,458	1,49,78,983	1,37,44,127	4.34	1,64,98,697	...	1,25,953	-28,80,523
1886	1,857	33,09,90,705	2,53,60,901	1,19,92,839	3.32	1,14,07,148	53,00,733	...	-47,15,042
1887	2,398	38,37,70,872	2,10,03,388	57,77,585	1.51	1,01,56,779	88,30,322	...	-1,24,09,516
1888	2,442	30,71,81,000	2,57,79,305	83,66,598	2.12	1,09,18,938	83,45,756	...	-1,08,98,096
1889	2,432	40,94,31,803	2,82,06,820	1,02,84,741	2.51	1,13,76,516	83,98,768	...	-94,99,543
1890	2,442	43,75,89,322	2,73,99,035	1,09,57,601	2.34	1,16,66,585	74,54,323	...	-88,63,307
1891	2,357	44,08,53,143	3,25,78,355	1,21,32,521	2.75	1,20,67,543	80,05,299	...	-79,40,321
1892	2,428	44,93,12,842	2,64,35,665	94,50,960	2.10	1,24,26,030	89,84,076	...	-1,19,59,146
1893	2,427	45,92,25,753	2,92,68,732	97,97,643	2.13	1,27,61,682	90,98,545	...	-1,20,62,584
1894	2,430	46,99,28,097	3,23,14,097	1,28,25,181	2.73	1,24,63,779	1,03,59,245	...	-99,97,343
1895	2,477	48,49,36,634	3,52,18,382	1,64,46,998	3.39	1,35,01,193	1,03,17,385	...	-73,71,580
1896	2,714	50,03,13,064	2,94,41,749	1,18,86,409	2.38	1,42,35,427	96,43,588	...	-1,19,92,606
1897	2,817	51,00,47,458	3,29,03,448	1,49,78,897	2.94	1,45,85,298	90,50,191	...	-86,56,592
1898	2,818	52,58,34,091	3,76,01,912	1,83,74,360	3.60	1,50,41,459	86,35,849	...	-51,02,948
1899	2,929	52,22,86,203	3,52,21,759	1,60,89,223	3.08	1,50,40,208	85,61,406	...	-75,12,384
1900	3,206	52,78,48,285	3,15,22,237	1,32,19,151	2.50	1,54,25,164	85,76,682	...	-1,07,82,695
1901	3,117	53,25,49,620	4,11,89,777	2,03,56,471	3.81	1,55,50,694	86,02,222	...	-37,96,445
1902	3,154	54,74,38,256	4,22,19,927	1,73,79,094	3.17	1,59,69,560	85,81,455	...	-71,80,921

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Bhavnagar-Gondal-Junagad-Forbandar	86
Bhopal-Itarsi (British section)	38
Bhopal-Itarsi (Native state section)	76
Bhopal-Ujjain	76
Bitner	85
Bina-Gomoh-Baran	75

Biror-Shimoga	81
Bombay, Baroda and Central India	56
Brahmaputra-Sultanpur	58
Burma	48
Cherra-Companyganj	53
Cooch Behar	84
Darjeeling-Himalayan	73
Delhi-Umballa-Kalka	62
Deoghur	69
Dhond-Manmad	37
Dibrangadra	87
Dibru-Sadiya	68
Eastern Bengal State	50
East Coast State	50
East Indian	34
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* Including Rs. 1,92,51,702 on account of premium paid for the

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Guntakal-Mysore frontier	45
Gwalior Light	83
Hardwar-Dehra	58
Hindupur (Yesvantpur-Mysore frontier)	81
Howrah-Amra	73
Howrah-Sheakhala	74
Hyderabad-Godavari Valley	80
Indian Midland	38
Jammu and Kashmir (Native state section)	84
Jamnagar	86
Jetalsar-Rajkot	86
Jodhpur	85
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DIX 7—continued.

Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

(2, 11, 14, 45 and 46 of Report.)

BY THE STATE—(contd.)							CLASS OF RAILWAYS.
							Gauge.
							Class No.
CHERRA-COMPANYGANJ.							Railway.
Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.
Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	1883
...	15,208	...	...	...	608	-608	1884
...	4,81,665	...	...	...	15,360	-15,360	1885
7	5,87,939	4,044	-14,074	...	21,901	-35,975	1886
8	7,11,143	9,705	-22,403	...	26,547	-48,950	1887
8	7,57,596	8,138	-30,622	...	30,102	-50,724	1888
8	7,66,715	10,316	-14,514	...	30,553	-45,067	1889
8	7,72,975	17,490	-2,856	...	30,571	-33,627	1890
8	7,73,281	18,472	-606	...	30,945	-31,551	1891
8	7,77,609	18,571	868	0'11	22,545	-21,677	1892
8	7,78,390	22,841	3,408	0'44	14,595	-11,187	1893
8	7,80,473	24,835	4,393	0'56	14,085	-9,692	1894
8	7,81,590	24,403	2,761	0'35	14,062	-11,301	1895
8	7,78,151	26,340	672	0'09	14,046	-13,374	1896
8	7,69,121	10,969	-31,922	...	13,644	-45,566	1894
8	7,70,027	2,004	-1,22,500	...	13,561	-1,36,061	1898
8	7,69,179	9,015	-34,607	...	13,566	-48,173	1899
...	7,68,723	4,851	-25,221	...	13,371	-38,791	1900
...	...	2,829	-8,594	...	13,531	-22,125	1901
...	Closed.	1902

purchase of line.

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Kolar Gold-fields	73	Oudh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palampur-Deesa (State portion)	41	Southern Mahratta	44
Lado and Tikak-Margherita Colliery	68	Palampur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Pettalad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutapet)	59
Ludhiana-Dhuri-Jakhal	84	Pettalad-Cambay (Tarapur Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	77	Tarakeshwar-Magra	71
Madras (North-East line)	40	Powayan Light	70	Tarkessur	63
Mayavaram-Mutapet	47	Rajpura	83	Tezpur-Balipara	72
Morvi	87	Rajputana-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannath-ganj	65	Rajputana-Malwa	40	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kalet-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkhand and Kumaon	70	Wardha Coal	37
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.		STATE LINES WORKED					
GAUGE.		2' 0"					
CLASS No.		32					
Railway.		JORNAT.					
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.
1879 . . . . .	...	...	...	...	...	...	...
1880 . . . . .	...	...	...	...	...	...	...
1881 . . . . .	...	...	...	...	...	...	...
1882 . . . . .	...	...	...	...	...	...	...
1883 . . . . .	...	...	...	...	...	...	...
1884	12	4,38,338	1,161	-483	...	17,533	-18,016
1885	29	5,14,641	31,828	-7,455	...	19,393	-26,850
1886	27	5,84,608	35,271	-13,887	...	22,026	-35,913
1887	31	6,79,372	49,199	-13,772	...	26,608	-40,380
1888	31	7,10,376	55,477	75	...	27,807	-27,732
1889	31	7,33,649	59,665	-3,543	...	29,057	-32,600
1890	28	7,42,351	61,967	6,162	0'85	29,448	-23,286
1891	28	7,51,421	64,583	1,483	0'20	30,026	-28,543
1892	28	7,54,791	66,079	11,789	1'56	30,107	-18,318
1893	28	7,99,680	69,810	14,436	1'81	32,013	-17,577
1894	28	8,18,184	71,933	11,201	1'37	32,587	-21,386
1895	28	8,23,409	84,696	18,720	2'26	32,919	-14,199
1896	28	8,65,309	89,996	13,745	1'59	33,592	-19,847
1897	28	9,02,426	96,186	14,124	1'57	36,102	-21,978
1898	28	9,09,445	95,958	20,135	2'21	36,179	-16,044
1899	28	9,31,628	96,488	-5,946	...	37,228	-43,174
1900	30	9,08,643	86,695	-15,664	...	36,341	-52,005
1901	30	9,01,038	83,184	-4,169	...	36,248	-40,417
1902	30	8,95,693	86,641	-3,655	...	36,237	-39,892

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Bhavnagar-Gondal-Junagad-Porbandar	86
Bhopal-Itarsi (British section)	38
Bhopal-Itarsi (Native state section)	76
Bhopal-Ujjain	76
Bikaner	85
Binn-Goon-Bara	75

Birur-Shimoga	81
Bombay, Baroda and Central India	56
Brahmaputra-Sultanpur	58
Burma	48
Cherra-Companyanj	53
Coch Behar	84
Darjeeling-Himalayan	73
Delhi-Umballa-Kaifia	62
Deoghur	69
Dhond-Manmad	37
Dhrangadra	87
Dibra-Sadiya	68
Eastern Bengal State	50
East Coast State	50
East Indian	34
Gaekwar's Dabhoi	82

Gaekwar's Mehsana	79
Great Indian Peninsula	36
Guntakal-Mysore frontier	45
Gwalior Light	83
Hardwar-Dehra	58
Hindupur (Yesvantpur-Mysore frontier)	81
Howrah-Amta	73
Howrah-Sheakhala	74
Hyderabad-Godavari Valley	80
Indian Midland	38
Jammu and Kashmir (Native state section)	84
Jamnagar	86
Jetalsar-Rajkot	86
Jodhpur	85
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(11, 14, 45 and 46 of Report.)

BY THE STATE—(contd.)

CLASS OF RAILWAYS.

Gauge.

Class: No.

Railway.

TOTAL STATE LINES WORKED BY THE STATE.

Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Annuity.	Surplus profits paid to companies.	Gain or loss to the State.	Calendar year.
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
2,245	33,71,44,487	1,54,94,736	99,36,120	2'95	1,56,80,180	...	3,67,326	-61,11,356	1879
2,518	37,41,31,836	2,11,76,876	1,28,35,156	3'43	1,68,84,557	...	3,36,072	-46,05,473	1880
2,672	39,03,12,236	2,14,39,191	1,08,75,652	2'78	1,75,29,927	...	3,24,125	-74,78,400	1881
2,762	40,52,37,556	2,20,85,320	1,23,14,841	3'04	1,64,43,941	...	3,95,329	-50,24,429	1882
2,811	32,27,70,275	2,39,10,863	1,59,01,321	4'92	1,68,28,209	...	4,98,223	-14,25,111	1883
2,976	44,68,37,390	2,38,38,086	1,36,27,820	3'05	1,75,51,915	3,50,920	...	-42,75,015	1884
3,100	48,58,79,089	2,78,34,096	1,80,57,369	3'71	2,33,69,579	7,22,920	1,25,953	-61,61,083	1885
3,183	54,10,77,405	4,01,82,542	1,79,15,333	3'31	1,90,73,328	72,50,483	...	-83,63,458	1886
3,774	56,73,65,847	31,71,38,904	1,33,81,441	2'36	1,97,79,281	1,03,20,474	...	-1,67,18,314	1887
3,846	58,57,44,876	4,34,38,223	1,68,87,480	2'88	1,90,28,085	1,03,56,767	...	-1,24,98,372	1889
3,909	60,04,80,335	4,69,93,158	2,06,62,385	3'44	1,94,26,727	1,04,42,721	...	-92,07,063	1889
3,934	65,25,88,058	4,63,38,270	2,00,85,708	3'08	1,92,53,653	92,68,433	...	-84,36,378	1890
3,862	66,96,78,135	5,39,01,059	2,36,07,956	3'52	2,02,89,132	99,53,497	...	-65,34,673	1891
3,968	70,66,44,901	4,66,19,597	2,07,13,673	2'93	2,23,85,895	1,06,37,998	...	-1,23,10,220	1892
4,283	72,46,63,602	5,06,27,117	2,16,21,410	2'98	2,36,11,526	1,07,47,730	...	-1,27,37,846	1893
4,430	74,59,60,364	5,84,26,103	2,70,81,393	3'63	2,45,15,607	1,22,51,095	...	-96,85,303	1894
4,551	77,14,32,803	6,20,36,351	3,10,26,085	4'02	2,59,81,424	1,21,89,930	...	-71,43,239	1895
4,923	80,46,17,575	5,58,03,584	2,57,93,920	3'21	2,68,92,801	1,13,99,742	...	-1,24,98,622	1896
5,110	83,33,79,523	5,92,09,854	2,76,10,942	3'31	2,75,89,829	1,07,03,469	...	-1,06,82,336	1897
5,438	85,45,06,678	6,50,80,094	3,27,84,617	3'84	2,84,55,630	1,02,10,869	...	-58,81,882	1898
5,630	87,46,60,319	6,64,70,925	3,19,63,642	3'65	2,90,81,082	1,81,23,797	...	-72,41,737	1899
5,804	88,92,90,882	6,66,33,918	3,06,71,211	3'45	2,98,52,332	1,01,43,451	...	-93,24,572	1900
5,118	81,45,58,763	7,11,29,721	3,58,71,996	4'40	2,60,24,182	1,09,39,345	...	-10,91,531	1901
5,201	84,50,79,401	7,33,65,458	3,29,26,115	3'90	2,69,07,585	1,09,11,350	...	-48,92,820	1902

Jorhat	54
Karaikkal-Peralam	58
Khamgaon	75
Kolar Gold-fields	78
Kolhapur	82
Lado and Tikak-Margherita Colliery.	68
Lucknow-Bareilly	43
Ludhiana-Dhuri-Jakhal	34
Madras	56
Madras (North-East line)	40
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Palampur-Deesa (Darbar portion)	77
Petalad-Cambay (Anand-Tarapur section)	77
Petalad-Cambay (Tarapur-Cambay Section)	77
Pondicherry	89
Powayan Light	70
Rajpipla	83
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Sagauli-Raxaul	69
Showanar-Cochin	80
South Behar	62
South Indian	46
Southern-Mahratta	44
Southern Punjab	64
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Tarakeshwar-Magra	71
Talassur	63
Tezpur-Balipara.	72
Tirhoot State	42
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CLASS OF RAILWAYS.		LINES OWNED BY COMPANIES, GUARANTEED BY THE GOVERNMENT												
GAUGE.		5' 6"												
Class No.		8 (a)								10 (a)				
Railway.		BOMBAY, BARODA AND CENTRAL INDIA.								MADRAS.				
Calendar year.	Length of line open.	Capital withdrawn for expenditure to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Guaranteed Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital withdrawn for expenditure to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.
	Miles.	£	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Miles.	£	Rs.	Rs.	Rs.
1879	444	7,829,814	8,54,16,162	71,53,788	32,13,354	376	43,69,234	...	-11,55,900	858	10,502,112	11,45,68,493	66,26,486	20,75,170
1880	444	7,767,066	8,47,31,626	82,44,376	47,34,654	558	43,69,234	5,83,846	-8,02,293	858	10,448,004	11,39,78,220	61,62,546	19,57,137
1881	444	7,942,499	8,66,45,448	97,45,133	56,78,753	655	43,69,234	8,30,798	+4,78,703	858	10,450,716	11,40,07,808	63,11,312	20,75,896
1882	461	8,028,990	8,75,89,091	1,01,76,190	59,15,619	573	43,07,734	8,06,346	-98,461	861	10,447,214	11,39,69,608	69,18,571	23,70,841
1883	461	8,157,543	8,89,91,377	1,19,32,209	67,16,067	754	43,38,189	11,44,829	+12,33,049	861	10,449,373	11,39,92,074	66,31,909	23,26,549
1884	461	8,274,713	9,02,69,608	1,21,95,590	68,87,562	763	49,99,341	13,17,768	+5,70,453	861	10,473,022	11,42,51,164	71,41,318	29,35,687
1885	461	8,487,043	9,22,58,636	1,31,40,336	74,01,987	802	52,35,189	3,457,541	+7,09,257	861	10,544,706	11,50,33,160	76,57,993	32,79,168
1886	461	8,495,850	9,26,82,002	1,35,05,635	78,73,228	850	55,87,440	16,07,985	+5,87,803	860	10,631,619	11,59,81,297	79,66,097	32,29,249
1887	461	8,544,452	9,32,12,200	1,21,64,856	69,98,127	750	57,17,318	12,56,055	+24,754	827	10,456,434	11,40,70,190	81,72,535	28,80,129
1888	461	8,670,553	9,45,87,848	1,27,38,933	70,48,164	745	60,29,893	12,68,879	-2,50,608	839	10,576,377	11,53,78,656	85,31,054	33,21,615
1889	461	8,703,365	9,49,45,797	1,32,34,371	75,41,081	794	61,10,257	14,86,390	-55,566	839	10,668,589	11,61,84,605	91,10,894	37,38,481
1890	461	8,737,304	9,53,16,045	1,29,40,370	74,23,195	779	54,66,227	14,22,120	+3,34,848	839	10,815,222	11,79,84,234	95,06,134	43,21,480
1891	461	8,762,123	9,55,86,799	1,41,37,769	82,25,120	860	58,61,096	18,06,348	+5,56,776	839	10,903,942	11,89,52,099	93,44,688	39,06,539
1892	461	8,756,801	9,55,28,735	1,42,44,478	81,30,959	851	65,57,945	17,86,755	-2,13,741	839	10,979,085	11,97,71,835	96,24,670	42,92,133
1893	461	8,803,632	9,62,57,802	1,50,96,045	95,78,044	995	66,44,227	25,09,537	+7,24,280	839	11,035,704	12,03,89,499	1,05,03,030	54,21,742
1894	461	8,960,037	9,77,45,855	1,59,48,484	1,00,70,974	1030	76,09,071	27,35,713	-2,73,810	839	11,048,154	12,05,25,315	1,03,21,012	49,47,863
1895	461	9,147,505	9,97,00,965	1,75,53,067	1,09,37,063	1096	77,03,238	31,37,619	+96,186	839	11,081,749	12,08,91,797	1,12,08,407	58,10,310
1896	461	9,456,068	10,31,57,107	1,62,03,933	89,00,862	860	73,03,613	20,78,128	-4,80,879	839	11,105,608	12,11,52,091	1,08,80,251	53,85,291
1897	461	9,745,104	10,63,10,220	1,42,61,293	64,70,703	609	69,36,853	9,51,545	-14,18,196	839	11,136,169	12,15,01,808	1,14,65,314	59,82,565
1898	461	9,951,347	10,85,69,144	1,58,62,726	87,42,205	805	67,87,071	19,49,477	+5,657	839	11,197,627	12,22,69,990	1,07,20,483	54,12,657
1899	461	10,263,391	11,40,73,858	1,74,65,045	92,90,365	815	67,46,668	21,68,922	+3,74,775	843	11,288,477	12,34,93,025	1,05,45,102	50,16,254
1900	461	10,333,137	11,60,94,044	1,75,98,486	82,28,632	708	68,23,449	15,68,577	-1,75,394	844	11,400,267	12,62,82,369	1,13,39,222	53,70,820
1901	461	10,628,511	11,95,61,022	1,59,38,796	87,53,789	732	70,04,369	18,11,890	-62,670	873	11,880,597	13,13,51,379	1,14,86,803	57,85,603
1902	461	10,782,802	12,18,78,965	1,57,43,336	79,37,622	651	71,28,187	12,93,644	-4,84,309	888	12,171,619	13,50,23,693	1,18,41,074	57,91,420

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Bezawada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad-Porbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalsar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	83
Bikaner	65	East Indian	34	Jodhpur-Hydrabad (British section)	43
Bina-Coona-Baran	75	Gaekwar's Dabhoi	82		

DIX 7—continued.

Income derived by railways which are not guaranteed by the State.

(See 14, 45 and 46 of Report.)

INDIA UNDER OLD CONTRACTS.													CLASS OF RAILWAYS.
TOTAL													Gauge.
LINES OWNED BY COMPANIES, GUARANTEED BY THE GOVERNMENT OF INDIA UNDER OLD CONTRACTS.													Class No.
													Railway.
Per cent. on Capital outlay.	Guaranteed Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital withdrawn for expenditure to end of each year.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Guaranteed Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Calendar year.
	Rs.	Rs.	Rs.	Miles.	₹	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
181	57,04,205	...	-36,29,035	1,302	18,331,926	19,99,84,555	1,37,79,274	52,88,524	3'6"	1,00,73,459	...	-47,24,935	1879
173	57,16,332	...	-37,59,193	1,302	18,215,010	19,87,09,845	1,44,06,922	66,91,791	3'37"	1,00,85,586	3,81,846	-39,77,641	1880
182	57,16,365	...	-36,40,509	1,302	18,393,215	20,06,53,256	1,60,56,445	77,54,611	3'26"	1,00,85,619	8,10,798	-31,61,800	1881
225	56,89,011	...	-31,18,170	1,322	18,476,223	20,15,58,699	1,70,94,761	75,86,460	3'76"	99,96,745	8,06,346	-32,16,631	1882
222	57,08,416	...	-31,81,867	1,321	18,606,815	20,29,83,451	1,85,54,118	92,42,616	4'55"	1,00,46,605	11,44,829	-19,48,818	1883
257	64,23,432	...	-34,87,745	1,322	18,747,735	20,45,20,772	1,93,36,908	98,23,249	4'80"	1,14,22,773	13,17,768	-20,17,292	1884
285	67,26,206	...	-34,57,038	1,322	19,001,728	20,72,91,796	2,07,98,329	1,06,81,155	5'15"	1,19,71,395	14,57,541	-27,47,781	1885
278	71,24,952	...	-38,95,709	1,321	19,127,469	20,86,63,299	2,14,71,732	1,11,02,171	5'32"	1,27,12,392	16,97,085	-33,07,806	1886
252	73,20,207	...	-44,40,178	1,288	19,000,886	20,72,82,390	2,03,37,391	98,78,156	4'76"	1,30,37,525	12,56,055	-44,15,424	1887
303	76,23,851	...	-41,02,236	1,300	19,246,930	20,99,66,504	2,12,69,987	1,05,69,776	5'03"	1,36,53,744	12,68,879	-43,52,844	1888
321	76,69,934	...	-39,31,513	1,300	19,371,954	21,13,30,402	2,23,45,265	1,12,79,502	5'34"	1,37,80,191	14,86,390	-39,87,079	1889
283	68,85,958	...	-43,64,478	1,300	19,552,526	21,33,00,279	2,24,46,504	1,19,44,675	5'60"	1,23,52,185	14,22,120	-18,29,630	1890
328	73,92,186	...	-34,85,657	1,300	19,666,065	21,45,38,898	2,34,82,457	1,21,31,649	5'65"	1,32,54,182	18,06,348	-29,28,881	1891
358	83,62,369	...	-40,70,236	1,300	19,735,886	21,53,00,570	2,38,69,148	1,24,23,092	5'77"	1,49,20,314	17,86,755	-42,83,977	1892
450	84,82,732	...	-30,60,990	1,300	19,859,336	21,66,47,301	2,56,01,081	1,49,99,786	6'02"	1,51,26,959	25,07,537	-26,36,710	1893
410	96,56,469	...	-47,08,606	1,300	20,008,191	21,82,71,170	2,62,69,496	1,50,18,837	6'88"	1,72,65,540	27,35,713	-49,82,416	1894
480	96,27,435	53,195	-38,60,320	1,300	20,229,254	22,06,82,762	2,87,61,472	1,67,47,373	7'56"	1,73,20,693	31,90,814	-37,64,134	1895
444	89,92,684	...	-36,07,393	1,300	20,561,676	22,43,09,198	2,70,84,184	1,42,86,153	6'37"	1,62,96,297	20,78,128	-40,88,272	1896
492	84,81,597	91,135	-25,90,167	1,300	20,881,273	22,78,12,028	2,57,26,607	1,24,52,767	5'40"	1,54,18,450	10,42,680	-40,08,363	1897
443	82,40,191	90,546	-29,18,020	1,300	21,188,974	23,08,30,134	2,65,83,209	1,41,54,862	6'13"	1,50,27,262	20,10,023	-29,12,423	1898
406	80,58,144	...	-30,41,890	1,304	21,551,868	23,75,66,883	2,80,10,147	1,43,06,619	6'02"	1,48,04,812	21,68,922	-26,67,115	1899
425	81,24,701	...	-27,53,881	1,305	21,823,404	24,23,76,413	2,89,37,708	1,35,09,452	5'61"	1,49,60,750	15,68,577	-29,29,275	1900
440	83,15,733	...	-25,30,130	1,334	22,599,108	25,09,12,401	2,74,25,596	1,45,39,392	5'79"	1,53,20,302	18,11,890	-25,02,800	1901
429	84,41,464	...	-26,50,044	1,349	22,954,421	25,69,02,648	2,75,84,610	1,37,29,042	5'03"	1,55,69,751	12,93,644	-31,34,353	1902

Yerhat	54
Karaikkal-Peralam	58
Khamgaon	75
Kolar Gold-fields	78
Kolhapur	82
Ledo and Tikak-Margherita Colliery.	68
Lucknow-Bareilly	43
Ludhiana-Dhuri-Jakhal	84
Madras	56
Madras (North East line)	40
Mayavaram-Mutupet	47
Morvi	87
Mymensingh-Jamalpur-Jaganmalth-ganj	65
Mysore-Nanjangud	82
Mysore section (Southern Mahratta)	44
Nagda-Ujjain	76

Nilgiri	54
Nizam's Guaranteed State	78
North Western State	52
Ondh and Rohilkhand State	51
Palanpur-Deesa (State portion)	41
Palanpur-Deesa (Darbar portion)	77
Petalad-Cambay (Anand-Tarapur section)	77
Petalad-Cambay (Tarapur-Cambay section)	77
Pondicherry	89
Powayan Light	70
Rajpipla	83
Rajputana-Bhatinda	83
Rajputana-Malwa	40
Ranaghat-Krishnagar	72
Robikund and Kumaon	79

Saganji-Raxaul	60
Shoranur-Cochin	80
South Bihar	62
South Indian	46
Southern Mahratta	44
Southern Punjab	64
Tanjore District Board (Mayavaram-Mutupet)	39
Tapti Valley	64
Tarakeshwar-Magra	71
Tarakesur	63
Tezpur-Balipara	72
Tirhoot State	42
Udaipur-Chitor	85
Vijapur-Kalol-Kadi	79
Wardha Coal	37
West of India Portuguese	88

CLASS OF RAILWAYS.		LINES OWNED BY COMPANIES, GUARANTEED BY THE GOVERNMENT OF INDIA UNDER														
GAUGE.		3' 3"							5' 6"							
Class No.		2 (c)							5 (d)							
Railway.		BRAHMAPUTRA-SULTANPUR.							HARDWAR-DEHRA.							
Calendar year.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net traffic receipts.	Gain or loss to the State.
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897	...	2,07,919	...	...	...	†	...	...	...	1,96,017	...	...	...	†	...	...
1898	...	12,55,457	...	...	...	†	...	...	...	10,70,345	...	...	...	†	...	...
1899	25	19,58,137	36,300	...	...	†	...	...	...	23,42,687	...	...	...	†	...	...
1900	59	24,20,811	1,36,587	...	...	†	...	...	31	25,67,093	1,60,485	...	...	†	...	...
1901	53	28,27,619	1,96,848	61,375	2'17	42,414	...	+ 18,961	32	28,12,301	2,13,456	1,06,728	3'80	84,220	...	+ 22,508
1902	59	29,79,953	2,40,424	1,22,753	4'21	86,751	...	+ 36,003	32	28,36,486	2,52,485	1,14,989	4'45	85,048	...	+ 29,941

* Paid over to the Company.
† Interest was charged to Capital.

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Amraoti	75	Great Indian Peninsula	36
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Barvi Light	71	Gwalior Light	83
Bengal and North-Western (Company's section)	69	Hardwar-Dehra	58
Bengal Central	34	Hindupur (Yesvantpur-Mysore frontier)	81
Bengal Doonars	67	Howrah-Amta	73
Bengal Doonars extensions	67	Howrah-Sheakhala	74
Bengal-Nagpur	35	Hyderabad-Godavari Valley	80
Berwada extension	39	Indian Midland	38
Bhavnagar-Gondal-Junagad Porbandar	86	Jammu and Kashmir (Native state section)	84
Bhopal-Narsi (British section)	38	Jamnagar	86
Bhopal-Narsi (Native state section)	76	Jetalsar-Rajkot	85
Bhopal-Ujjain	76	Jodhpur	85
Bilaspur	85	Jodhpur-Hyderabad (British section)	43
Bina-Goonna-Baran	75		

DIX 7—continued.

Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

(2, 11, 14, 45 and 46 of Report.)

MODERN CONTRACTS.								DISTRICT BOARD LINE.							TOTAL GAIN OR LOSS TO THE STATE FROM RAILWAYS.	CLASS OF RAILWAYS.		
TOTAL								3' 3 1/2"									Gauge.	
LINES OWNED BY COMPANIES, GUARANTEED BY THE GOVERNMENT OF INDIA UNDER MODERN CONTRACTS.								22 (b)										Class.
								TANJORE DISTRICT BOARD (MAYAVARAM-MUTUPET).											Railway.
Length of line open.	Capital expenditure to end of each year.	Gross Earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Company's share of surplus profits.	Gain or loss to the State.	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Calendar year.			
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-1,18,66,564	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-78,73,025	1880
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-24,80,212	1881
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	+8,05,342	1882
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-71,17,719	1883
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-53,16,150	1884
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-12,43,467	1885
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-89,88,535	1886
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-2,00,47,704	1887
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-1,83,84,813	1888
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-1,05,80,611	1889
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-1,24,73,289	1890
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	+14,42,354	1891
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-1,08,01,429	1892
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-1,47,49,881	1893
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-1,89,12,739	1894
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-1,66,85,692	1895
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-2,44,03,875	1896
...	398,936	...	...	...	...	...	...	...	...	...	...	...	...	...	-1,06,65,395	1897
...	23,26,002	...	...	...	...	...	...	...	...	...	...	...	...	...	-99,51,422	1898
25	43,00,824	36,300	...	...	...	...	...	...	...	...	...	...	...	...	-28,81,543	1899
91	49,87,904	2,97,072	...	...	...	...	...	54	26,50,776	2,32,280	97,782	3'69	1,02,734	-4,952	+22,86,846	1900
91	56,39,920	4,10,304	1,68,103	2'98	1,36,634	...	+41,469	54	32,17,511	2,90,637	1,35,765	4'22	1,35,831	-3,076	+1,20,43,513	1901		
91	57,54,179	4,92,909	2,37,742	4'13	1,71,798	...	+65,944	71	38,18,202	3,08,879	1,46,764	3'84	1,63,157	-16,300	+31,81,080	1902		

Jorhat	54
Karaikal-Peralam	58
Khamgaon	75
Kolar Gold-fields	78
Kolhapur	82
Leao and Tikak-Margherita Colliery	68
Lucknow-Bareilly	43
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Mayavaram-Mutupet	47
Morvi	87
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Palampur-Deesa (Darbar portion)	77
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Petalad-Cambay (Tarapur-Cambay section)	77
Pondicherry	89
Powayan Light	70
Rajpipla	83
Rajputana-Bhatinda	83
Rajputana-Malwa	40
Ranaghat-Krishnagar	72
Rohilkhand and Kumaon	70

Sagauli-Raxaul	69
Shoranur-Cochin	80
South-Bihar	62
South Indian	46
Southern Mahratta	44
Southern Punjab	64
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Tapti Valley	64
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.	GAUGE.	Class No.	Railway.	OTHER CHARGES.												
				COLLIERIES.						UNCLASSIFIED EXPENDITURE.			39. Guaranteed companies—Land and supervision.	40. Subsidised companies—Land, interest and subsidy.	41. Miscellaneous railway expenditure	TOTAL GAIN OR LOSS TO THE STATE.
				Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Capital outlay.	Gain or loss to the State.	Rs.				
				Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
				1879						6,32,840	—	1,96,830	—1,26,96,234			
				1880						5,76,140	—	5,77,080	—90,26,245			
				1881						7,47,450	1,32,260	5,18,600	—38,78,542			
				1882						7,81,820	2,59,920	25,39,950	—27,16,348			
				1883						1,60,520	—6,421	6,75,260	5,45,730	—12,94,050	—71,85,858	
				1884						2,77,269	—10,076	6,14,570	3,95,510	9,75,540	—73,11,846	
				1885	2,27,954	34,895	—38,355	...	6,868	—45,223	2,93,561	—11,413	7,95,530	4,41,250	9,92,740	—35,29,623
				1886	5,59,657	45,051	—61,309	...	13,930	—76,239	48,00,526	—1,91,842	6,62,350	4,52,430	9,43,990	—1,13,15,146
				1887	6,20,414	1,03,639	17,878	2'88	23,291	—5,413	37,53,926	—1,50,168	5,14,350	4,36,270	5,18,470	—2,16,72,375
				1888	8,64,343	1,58,680	91,505	10'38	33,087	+59,418	47,05,423	—1,88,203	4,43,450	2,80,710	7,06,340	—1,99,44,177
				1889	8,46,302	2,08,633	—19,748	...	34,217	—54,165	36,96,648	—1,47,866	3,09,520	6,91,300	14,91,240	—2,22,74,702
				1890	9,09,570	3,64,292	1,05,450	11'59	35,117	+70,333	60,01,712	—2,39,338	4,29,880	3,62,880	14,91,970	—1,49,27,024
				1891	24,75,244	8,60,255	1,63,447	6'60	1,00,320	+63,127	63,50,103	—2,53,834	1,92,570	3,31,300	9,20,600	—1,92,823
				1892	25,53,361	8,58,941	58,863	2'31	1,01,844	—42,981	63,19,388	—2,61,588	2,94,230	2,90,260	—1,08,600	—1,15,81,888
				1893	25,54,329	9,04,575	50,120	1'95	1,02,660	—52,540	64,91,787	—2,61,790	3,40,040	2,10,000	10,34,390	—1,66,48,641
				1894	30,84,484	10,20,808	76,103	2'47	1,16,121	—40,019	65,60,878	—2,62,080	3,15,410	1,66,940	10,03,600	—2,07,00,788
				1895	30,96,232	9,16,896	1,09,765	3'35	1,22,496	—12,731	66,67,155	—2,64,714	2,88,080	1,82,510	7,16,490	—1,81,50,217
				1896	30,84,097	9,23,522	1,65,096	5'35	1,23,225	+41,871	66,89,067	—2,67,564	—15,938	6,96,486	5,81,803	—2,58,91,921
				1897	30,75,712	8,88,935	1,41,307	4'60	1,23,765	+17,542	67,40,736	—2,69,474	1,61,611	9,58,305	5,87,519	—2,16,24,962
				1898	29,49,005	10,44,140	2,11,183	7'16	1,20,269	+90,914	67,55,803	—2,71,796	2,98,114	6,75,823	56,973	—1,11,63,214
				1899	28,35,874	7,32,267	1,74,385	6'15	81,628	+92,757	73,79,773	—2,90,852	7,26,013	2,84,004	5,16,639	—46,06,294
				1900	16,65,993	6,07,603	2,03,523	12'22	68,646	+1,34,877	73,87,308	—3,24,506	2,68,754	70,061	8,86,011	+8,72,391
				1901	16,23,122	6,91,280	2,58,355	15'02	66,682	+1,91,673	73,81,954	—5,26,762	—1,94,361	—3,35,465	6,98,032	+1,15,41,198
				1902	15,25,388	7,00,028	2,61,030	17'11	63,281	+1,97,749	74,44,156	—4,46,569	—95,692	—68,976	10,55,292	+20,41,636

* The figures up to 1895 are for official years, those for calendar years are not available.

† Arrived at thus:	Rs.
Total charge	6,94,486
Deduct—Repayment of advances of interest	7,63,462
	—68,976

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Ahmedabad-Parantij	66	Birur-Shimoga	81	Gackwar's Mehsana	79
Amraoti	75	Bombay, Baroda and Central India	56	Great Indian Peninsula	36
Assam-Bengal	42	Brahmaputra-Sultanpur	58	Guntakal-Mysore frontier	45
Barsi Light	71	Burma	48	Gwalior Light	83
Bengal and North-Western (Company's section).	69	Cherra-Companyganj	53	Harwar-Dehra	58
Bengal Central	34	Cooch Behar	84	Hindupur (Yesvantpur-Mysore-Frontier).	81
Bengal Doars	67	Darjeeling-Himalayan	73	Howrah-Amra	73
Bengal Doars extensions	67	Delhi-Umballa-Kalka	62	Howrah Sheakhala	74
Bengal Nagpur	35	Deoghur	69	Hyderabad-Godavari Valley	80
Bezawada extension	39	Dhund-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad-Forbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section.)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetisar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
Bikaner	85	East Indian	34	Jodhpur-Hyderabad (British section)	45
Binn-Goonn Baran	75	Gackwar's Dabhoi	82		

DIX 7—continued.

income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

State expenditure on Patri branch.	Capital expenditure on surveys (excluding abandoned surveys).	Stores suspense balances.	LINES UNDER CONSTRUCTION.										TOTAL.	Calendar year.
			5' 6"	5' 6"	3' 31"	3' 31"	3' 31"	3' 31"	2' 6"	3' 6"	5' 6"	3' 6"		
			10 (f)	11	8 (n)	8 (o)	14 (b)	22 (f)	1 (e)	4 (d)		34		
			Azhikal-Mangalore.	Agra-Delhi chord.	Jaipur (Siwai Madhopur).	Ahmedabad-Dholka.	Nonkhali (Bengal).	Tinnevely Qui on (Travancore) Branch (Native state section).	Rewah.	Jubbulpur-Gondia extension and branches.	Moorshedabad branch, E. B. S. Ry.	Kalka-Simla.		
Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.	Capital outlay.				
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
8,08,405	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
8,08,405	...	...	...	...	...	...	...	...	...	...	...	...	...	1880
8,08,405	...	...	...	...	...	...	...	...	...	...	...	...	...	1881
8,08,405	7,24,624	...	...	...	...	...	...	...	...	...	...	...	...	1882
8,08,405	9,72,535	...	...	...	...	...	...	...	...	...	...	...	...	1883
8,08,405	13,24,163	...	...	...	...	...	...	...	...	...	...	...	...	1884
8,08,405	16,20,228	...	...	...	...	...	...	...	...	...	...	...	...	1885
8,08,405	32,59,100	...	...	...	...	...	...	...	...	...	...	...	...	1886
8,08,405	14,72,443	...	...	...	...	...	...	...	...	...	...	...	...	1887
8,08,405	28,78,666	9,07,968	...	...	...	...	...	...	...	...	...	...	...	1888
8,08,405	32,82,526	6,24,951	...	...	...	...	...	...	...	...	...	...	...	1889
8,08,405	42,79,147	9,27,308	...	...	...	...	...	...	...	...	...	...	...	1890
8,08,405	49,35,844	8,40,529	...	...	...	...	...	...	...	...	...	...	...	1891
8,08,405	46,36,757	34,12,093	...	...	...	...	...	...	...	...	...	...	...	1892
8,08,405	38,55,759	8,56,505	...	...	...	...	...	...	...	...	...	...	...	1893
8,08,405	47,13,172	16,31,104	...	...	...	...	...	...	...	...	...	...	...	1894
8,08,405	51,48,973	17,12,436	...	...	...	...	...	...	...	...	...	...	...	1895
8,08,405	49,73,509	21,31,290	...	...	...	...	...	...	...	...	...	...	...	1896
8,08,405	49,11,956	5,60,764	...	...	33,457	...	...	...	...	...	...	...	33,457	1897
8,08,405	48,66,514	4,23,362	...	...	1,25,646	...	...	...	...	...	...	...	1,25,646	1898
8,08,405	51,02,708	9,26,315	...	...	6,44,495	...	...	38,187	...	...	...	5,53,228	10,35,910	1899
8,08,405	54,70,849	5,89,959	...	...	7,33,467	...	...	8,16,407	...	...	...	13,18,465	28,68,339	1900
8,08,405	56,62,368	21,60,756	...	...	8,40,591	...	34,303	30,59,022	...	9,41,725	...	34,86,993	83,58,694	1901
8,08,405	60,59,990	6,40,525	87,503	1,42,681	8,88,133	6,01,558	†	75,81,838	1,61,037	53,17,690	8,332	92,81,656	2,40,70,418	1902

† Information not available.

	Page.		Page.		Page.
Jochat	54	Nileiri	66	Sagauli-Raraul	69
Karaikkal-Peralam	58	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oadh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palampur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Tikak-Margherita Colliery.	68	Palampur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Pettad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutpet)	59
Ludhiana-Dhuri-Jakhal	84	Pettad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	77	Tarakshwar-Magra	71
Madras (North-East line)	40	Powayan Light	89	Tarkessur	63
Mayavaram-Mutpet	47	Rajpipla	70	Tezpur-Balipara	72
Morvi	87	Rajputana	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannathganj.	65	Rajputana-Malwa	83	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	40	Vijapur-Kalol-Kadi	79
Mysore section (Southern Mahratta).	44	Rohilkhand and Kumaon	72	Wardha Coal	37
Nagda-Ujjain	76		70	West of India Portuguese	88

Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.		ASSISTED									
GAUGE.		5' 6"									
Class: No.		1 (b)									
Railway.		DELHI-UMBALLA-KALKA.							SOUTH		
Calendar year.	Length of line (1) open.	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (3). (5)	Subsidy from Government. (6)	Total income. (4) + (6). (7)	Percentage of (7) on (3). (8)	Length of line (1) open.	Capital outlay. (2)	Gross earnings. (3)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.
1879	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...
1887	...	...	...	...	...	...	...	...	...	...	...
1888	...	...	...	...	...	...	...	...	...	...	...
1889	...	58,00,335	...	...	...	...	...	...	...	...	...
1890	...	1,35,35,580	...	...	...	...	...	...	...	...	...
1891	162	1,55,44,690	9,07,697	4,72,002	3'04	...	4,72,002	3'04	...	...	...
1892	162	1,58,22,137	10,81,769	5,62,520	3'56	...	5,62,520	3'56	...	...	...
1893	162	1,55,24,600	11,08,508	6,23,224	4'01	...	6,23,224	4'01	...	...	...
1894	162	1,55,25,547	11,37,526	6,05,514	4'48	...	6,05,514	4'48	...	...	...
1895	162	1,55,06,120	14,60,519	7,59,470	4'90	...	7,59,470	4'90	...	5,17,988	...
1896	161	1,54,49,783	13,18,840	6,85,797	4'44	...	6,85,797	4'44	...	30,88,026	...
1897	162	1,53,26,585	15,73,319	8,18,126	5'34	...	8,18,126	5'34	...	62,72,345	...
1898	162	1,51,43,587	16,07,512	8,35,906	5'45	...	8,35,906	5'45	...	97,45,791	...
1899	162	1,53,01,272	14,49,378	7,29,541	4'77	...	7,29,541	4'77	79	1,18,16,730	2,03,318
1900	162	1,53,15,467	13,72,523	7,13,712	4'66	...	7,13,712	4'66	79	1,23,15,110	4,67,133
1901	162	1,52,92,648	18,05,858	9,39,046	6'14	...	9,39,046	6'14	79	1,23,66,533	5,14,870
1902	162	1,54,23,791	18,66,695	9,70,681	6'29	...	9,70,681	6'28	79	1,19,88,612	4,99,899

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medabad-Parantij	66	Birur-Shimoga	81	Gaekwar's Mchana	79
raoti	75	Bombay, Baroda and Central India	56	Great Indian Peninsula	36
Sam-Bengal	42	Brahmaputra-Sultanpur	58	Guntakal-Mysore frontier	45
rai Light	71	Burma	48	Gwalior Light	83
ugal and North-Western (Com-pany's section)	69	Cherra-Companyganj	53	Hardwar-Dehra	56
ugal Central	34	Cooch Behar	84	Hindupur (Yesvantpur-Mysore frontier)	81
ugal Dooars	67	Darjeeling-Himalayan	73	Hewrah-Amta	73
ugal Dooars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
ugal-Nagpur	35	Deoghur	69	Hyderabad-Godavari Valley	80
rwada extension	39	Dhond-Manmad	37	Indian Midland	38
avnagar-Gondal-Junagad-Porbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section).	84
opal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
opal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalsar-Rajkot	86
opal-Ujjain	76	East Coast State	50	Jodhpur	85
ikaner	85	East Indian	34	Jodhpur-Hyderabad (British section).	48
ana-Coona-Baran	75	Gaekwar's Dabhoi	82		

DIX 7—continued.

Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

COMPANIES.											CLASS : OF RAILWAYS.
5 0'											GAUON.
1 (c)					1 (d)					Class : No.	
BENAR.					TARKESSUR.					Railway.	
Net traffic earnings.	Percent- age of (4) on (2).	Rebuts from E. I. Ry.	Total income (4) + (6)	Percent- age of (7) on (2).	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital out- lay.	Calendar year.	
(4)	(5)	(6)	(7)	(8)	(1)	(2)	(3)	(4)	(5)		
Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.			
..	1879	
..	1880	
..	1881	
..	1882	
..	1883	
..	1884	
..	22	16,88,995	2,62,313	1,24,474	7'37	1885	
..	22	17,24,717	2,49,003	1,19,136	6'91	1886	
..	22	17,28,410	2,63,792	1,32,274	7'65	1887	
..	22	17,34,822	2,79,717	1,36,780	7'88	1888	
..	22	17,28,138	2,84,895	1,36,578	7'90	1889	
..	22	17,28,778	2,86,526	1,44,283	8'35	1890	
..	22	17,29,021	3,05,132	1,61,478	9'45	1891	
..	22	17,32,567	2,93,674	1,54,837	8'94	1892	
..	22	17,47,280	2,83,051	1,50,420	8'61	1893	
..	22	17,47,840	3,06,159	1,56,469	8'95	1894	
..	22	17,53,340	3,08,156	1,59,091	9'07	1895	
..	22	17,56,898	3,13,243	1,57,005	8'95	1896	
..	22	17,57,160	3,12,656	1,62,563	9'25	1897	
..	22	17,77,085	3,14,036	1,58,461	8'92	1898	
1,32,163	1'12	33,403	1,65,566	1'40	22	17,84,166	3,08,759	1,52,491	8'55	1899	
3,03,636	2'47	1,44,404	4,48,040	3'64	22	17,84,166	3,32,965	1,61,132	9'03	1900	
3,08,822	2'50	1,28,082	4,36,904	3'53	22	17,92,293	3,30,390	1,57,828	8'81	1901	
2,74,295	2'29	1,35,445	4,10,340	3'42	22	17,91,612	3,28,510	1,53,348	8'56	1902	

Yorhat	Page. 54	Nilgiri	Page. 66	Sagauli-Raxaul	Page. 69
Karaikkal-Peralam	55	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South India	46
Koikapur	82	Palanpur-Deesa (State portion)	41	Southern-Mahratta	44
Ledo and Tikak-Margherita Colliery.	68	Palanpur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Petalad-Cambay (Anand-Tarapur sec- tion)	77	Tanjore District Board (Mayavaram- Mutupet)	59
Ludhiana-Dhuri-Jakhal	84	Petalad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	77	Tarakeshwar-Magra	71
Madras (North-East line)	40	Powayam Light	89	Tarkessur	63
Mayavaram-Mutupet	47	Rajpura	70	Terapur-Balipara	72
Morvi	87	Rajputana-Bhatinda	83	Tirhoot State	48
Mymensingh-Jamalpur-Jagannath- ganj	65	Rajputana-Malwa	83	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	40	Vijapur-Kolal-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkhand and Kumaon	72	Wardha Coal	37
Nagda-Ujjain	76		70	West of India Portuguese	88

Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.		ASSISTED														
GAUGE.		5' 6"														
Class: No.		6 (b)								8 (b)						
Railway.		SOUTHERN PUNJAB.								TAFTI VALLEY.						
Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per-centage of (4) on (2). (5)	Rebate from N. W. Ry. (6)	Total income. (4) + (6) (7)	Per-centage of (7) on (2). (8)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Per-centage of (4) on (2). (5)	Rebate from B. B. & C. I. (6)	Total income (4) + (6) (7)	Per-centage of (7) on (2). (8)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1887	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1888	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1890	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1891	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1892	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1893	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1894	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1895	...	21,49,441	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1896	...	1,30,67,048	...	...	...	...	...	...	...	8,390	...	...	...	...	...	...
1897	400	1,99,08,812	1,03,641	49,748	0'25	21,579	71,327	0'36	...	20,06,294	...	...	...	...	...	...
1898	400	2,23,62,921	13,96,774	6,70,451	3'00	66,922	7,37,373	3'30	36	6,04,45,413	2,836	...	...	...	...	...
1899	424	2,26,68,262	13,82,094	6,63,406	2'93	1,37,293	8,00,699	3'53	139	1,21,09,133	2,42,593	...	...	...	...	...
900	424	2,36,57,063	16,23,788	7,79,418	3'44	13,504	7,92,922	3'50	155	1,28,31,291	6,68,475	†	...	...	†	...
901	424	2,25,70,734	29,85,680	14,35,804	6'36	-1,76,707	12,39,597	5'49	133	1,29,18,730	6,00,553	3,42,243	2'65	33,226	3,75,469	2'90
902	425	2,27,93,660	19,85,122	9,52,859	4'18	-2,270	9,50,589	4'17	135	1,29,70,581	8,26,435	1,63,242	3'57	45,196	5,08,438	3'92

* Credited to interest on capital.

† The net earnings for the first-half of 1900 were credited to interest on Capital and those for the second-half of 1900 (including rebate)

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Ahmedabad-Parantij	66	Birur-Shimoga	81	Gaekwar's Mehsana	79
Amraoti	75	Bombay, Baroda and Central India	56	Great Indian Peninsula	36
Assam-Bengal	42	Brahmaputra-Sultanpur	58	Guntakal-Mysore frontier	45
Barsi Light	71	Burma	48	Gwalior Light	83
Bengal and North-Western (Com-pany's section)	69	Cherra-Companyganj	53	Hardwar-Dehra	58
Bengal Central	34	Coch Behar	84	Hindupur (Yesvantpur-Mysore-Fron-tier)	81
Bengal Doars	67	Darjeeling-Himalayan	73	Howrah-Amta	73
Bengal Doars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	69	Hyderabad-Godavari Valley	80
Bezvada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad Porbandar	86	Dhrangadra	37	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalsar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
Bikaner	85	East Indian	34	Jodhpur-Hyderabad (British section)	49
Bina-Goonn-Baran	75	Gaekwar's Dabhoi	82		

DIX 7.—continued.

income derived by railways which are not guaranteed by the State.

(2, 13, 14, 45 and 46 of Report.)

COMPANIES—(contd.).								CLASS: OF RAILWAYS.
3' 3 3/4"								GAUGE.
2 (d)								Class: No.
MYMENSINGH-JAMALPUR-JAGANNATHGANJ.								Railway.
Length of line open.	Capital outlay.	Gross earnings.	Net-traffic earnings.	Percentage of (4) on (2).	Rebate from E. S. Ry.	Total income (4) + (6).	Percentage of (7) on (2).	Calendar year.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		
...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	...	1886
...	...	...	...	...	...	...	...	1887
...	...	...	...	...	...	...	...	1888
...	...	...	...	...	...	...	...	1889
...	...	...	...	...	...	...	...	1890
...	...	...	...	...	...	...	...	1891
...	...	...	...	...	...	...	...	1892
...	...	...	...	...	...	...	...	1893
...	...	...	...	...	...	...	...	1894
...	...	...	...	...	...	...	...	1895
...	1,950	...	...	...	...	...	...	1896
...	5,54,688	...	...	...	...	...	...	1897
33	10,44,638	7,660	4,213	0'40	...	4,813	0'40	1898
53	16,11,248	66,499	36,575	2'27	...	36,575	2'27	1899
53	18,78,395	1,62,028	89,116	4'74	...	89,116	4'74	1900
53	20,84,346	1,67,755	92,265	4'43	...	92,265	4'43	1901
53	22,85,677	2,05,251	1,12,888	4'94	...	1,12,888	4'94	1902

treated as a set off against the charge to Capital for interest in the accounts for the first half of 1901.

Jorhat	54	Nilgiri	66	Seganfi-Raxaul	69
Karainkal-Peralam	88	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palanpur-Deesa (State portion)	41	Southern-Mahratta	44
Ledo and Tikak-Margherita Colliery	68	Palanpur-Deesa (Darbar portion)	77	Southern-Punjab	64
Lucknow-Bareilly	43	Petlad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutupet)	59
Ludhiana-Dhuri-Jakhal	84	Petlad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	89	Tarakeshwar-Magra	71
Madras (North-East line)	40	Powayan Light	87	Tarkessur	63
Mayavaram-Mutupet	47	Rajpura	70	Tezpur-Balipara	73
Morvi	87	Rajputana-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannathganj	65	Rajputana-Malwa	83	Udaipur-Chitor	25
Mysore-Nanjangud	82	Rana ghat-Krishnagar	40	Vijapur-Kalol-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkund and Kumaon	72	Wardha Coal	37
Nagda-Ujjain	76		70	West of India Portuguese	88

Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

ASSISTED

CLASS OF RAILWAYS.		3' 3 1/2"															
GAUGE.		8 (i)								10 (e)							
Class No.		AHMEDABAD-PARANTIJ.								NILGIRI.							
Railway.	Calendar year.	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of B. B. & C. L. Ry. (4) on (2). (5)	Rebate from B. B. & C. L. Ry. (6)	Total income (4) + (6). (7)	Percent. of (7) on (2). (8)	Length of line open. (1)	Capital outlay. (2)	Gross earnings. (3)	Net traffic earnings. (4)	Percentage of (4) on (2). (5)	Subsidy from Government. (6)	Total income (4) + (6). (7)	Percent. of (7) on (2). (8)
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1887	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1888	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1890	...	...	...	...	...	...	...	...	...	67,950	...	...	...	...	...	...	...
1891	...	...	...	...	...	...	...	...	...	2,89,134	...	...	...	...	...	...	...
1892	...	...	...	...	...	...	...	...	...	8,89,751	...	...	...	...	...	...	...
1893	...	...	...	...	...	...	...	...	...	15,50,000	...	...	...	...	...	...	...
1894	...	...	...	...	...	...	...	...	...	18,50,000	...	...	...	...	...	...	...
1895	...	...	...	...	...	...	...	...	...	22,60,000	...	...	...	...	...	...	...
1896	...	13,12,752	...	...	...	...	...	...	...	18,92,610	...	...	...	...	...	...	...
1897	55	19,42,211	69,069	36,665	1'89	...	36,665	1'89	...	36,84,977	...	...	...	...	...	...	...
1898	55	19,42,971	1,49,790	85,836	4'42	...	85,836	4'42	...	44,54,085	...	...	...	...	...	...	...
1899	55	19,49,616	2,10,634	1,12,687	6'24	...	1,12,687	6'24	17	47,89,944	84,448	20,209	0'42	24,392	44,600	0'93	...
1900	55	19,55,305	2,65,105	1,55,952	7'98	...	1,55,952	7'98	17	48,96,490	1,76,032	86,642	1'77	23,006	1,19,648	2'44	...
1901	55	19,49,355	1,77,438	99,365	5'10	...	99,365	5'10	17	48,74,254	2,41,336	1,37,883	2'83	...	1,37,883	2'83	...
1902	55	19,70,012	1,79,794	1,00,685	5'11	...	1,00,685	5'11	17	49,08,431	3,09,063	1,12,111	2'28	...	1,12,111	2'28	...

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	Page.		Page.		Page.
Ahmedabad-Parantij	66	Birur-Shimoga	81	Gakwar's Mehsana	79
Amraoti	75	Bombay, Baroda and Central India	56	Great Indian Peninsula	36
Assam-Bengal	42	Brahmaputra-Sultanpur	58	Guntakal-Mysore Frontier	45
Barsi Light	71	Burma	48	Gwalior Light	83
Bengal and North-Western (Company's section)	69	Cherra-Companyganj	53	Hardwar-Dehra	58
Bengal Central	34	Cooch Behar	34	Hindupur (Yesvantpur-Mysore-Frontier)	81
Bengal Dooars	67	Darjeeling-Himalayan	73	Howrah-Amra	73
Bengal Dooars extensions	67	Dehli-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	69	Hyderabad-Godavari Valley	80
Bozwada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad-Forbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	59	Jetaisar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	59	Jodhpur	85
Bikaner	85	East Indian	34	Jodhpur-Hyderabad (British section)	43
Bina-Goonn-Baran	75	Gakwar's Dabhoi	82		

DIX 7—continued.

Appendix 7.
Gain or loss.

Income derived by railways which are not guaranteed by the State.

(11, 14, 45 and 46 of Report.)

COMPANIES—(contd.)														CLASS OF RAILWAYS
3' 3 1/2"														GAUGE.
12 (a)								12 (b)						CLASS: No.
BENGAL DOOARS.								BENGAL DOOARS EXTENSIONS.						Railway.
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percentage of (3) on (4).	Subsidy from District Board.	Total income. (4) + (5).	Percentage of (7) on (2).	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percentage on Capital outlay.	Calendar year.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)	(3)	(4)	(5)		
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.			
...	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	...	...	...	...	...	...	1886
...	...	...	...	...	...	...	...	...	...	...	...	...	1887
...	...	...	...	...	...	...	...	...	...	...	...	...	1888
...	...	...	...	...	...	...	...	...	...	...	...	...	1889
...	...	...	...	...	...	...	...	...	...	...	...	...	1890
...	16,479	...	...	...	...	...	...	...	...	...	...	...	1891
...	12,67,626	...	...	...	...	...	...	...	...	...	...	...	1892
32	18,49,091	1,14,812	57,639	3'12	...	57,639	3'12	...	...	...	...	...	1893
36	22,84,224	2,05,286	1,04,291	4'57	4,000	1,44,291	6'32	...	...	...	...	...	1894
36	23,26,476	3,53,537	1,27,458	3'48	4,000	1,31,458	5'65	...	...	...	...	...	1895
36	24,33,213	2,70,450	1,31,813	3'42	...	1,31,813	5'42	...	...	...	...	...	1896
36	16,50,713	2,86,407	1,45,239	5'48	...	1,45,239	5'48	...	72,151	...	...	...	1897
36	26,68,050	2,69,089	1,10,610	4'15	4,000	1,14,610	4'30	...	4,03,611	...	...	...	1898
36	26,26,748	2,73,037	1,18,416	4'51	...	1,18,416	4'51	...	26,75,455	...	...	...	1899
36	26,42,693	3,32,730	1,89,461	7'17	...	1,89,461	7'17	66	47,11,632	16,191	5,015	0'11	1900	
36	16,44,873	3,10,920	1,76,399	6'67	...	1,76,399	6'67	74	62,26,567	1,76,399	68,237	1'11	1901	
36	26,50,627	2,73,340	1,71,435	6'47	...	1,71,435	6'47	78	72,66,166	2,53,634	86,266	1'19	1902	

Orbat	...
Arakkal-Peralam	...
Chamgaon	...
Gold-fields	...
Colhapur	...
Edo and Tikak-Margherita Colliery	...
Ucknow-Bareilly	...
Adhiana-Dhuri-Jakhal	...
Madras	...
Madras (North-East line)	...
Mayavaram-Mutupet	...
Porvi	...
Jyemsingh-Jamalpur-Jagannath-ganj	...
Mysore-Nanjangud	...
Mysore section (Southern Mahratta)	...
Magda-Ujjain	...

Page 54	Nilgiri
58	Nizam's Guaranteed State
75	North Western State
78	Oodh and Rohilkhand State
82	Palanpur-Deesa (State portion)
68	Palanpur-Deesa (Darbar portion)
43	Petlad-Cambay (Anand-Tarapur section)
84	Petlad-Cambay (Tarapur-Cambay section)
40	Pondicherry
47	Powayan Light
87	Rajpipla
65	Rajpura-Bhatinda
82	Rajputana-Malwa
44	Ranaghat-Krishnagar
76	Rohilkhand and Kumaon

Page 66	Sargauli-Raxaul
78	Shornour-Cochin
52	South Bihar
51	South Indian
41	Southern Mahratta
77	Southern Punjab
77	Tanjore District Board (Mayavaram-Mutupet)
77	Tapti Valley
89	Tarakeshwar-Magra
70	Tarakesur
83	Tezpur-Balipara
83	Tirhoot State
83	Udaipur-Chitor
40	Vijapur-Kalol Kadi
72	Wardha Coal
20	West of India Portuguese

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.		ASSISTED												
GAUGE.		3' 3 1/2"												
Class No.		13 (a)							13 (b)					
Railway.		DIBRU-SADIYA.							LEDO AND TIKAR-MARGHERITA COLLIERY.					
Calendar year.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percentage of (4) on (2).	Subsidy from local Government.	Total income. (4) + (6).	Per cent. of (7) on (2).	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)	(3)	(4)	(5)	
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
1879	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...	...	...
1883	38	22,22,253	48,220	-35,375	...	...	-35,375	...	...	...	...	...	...
1884	69	40,65,288	2,06,133	-68,406	...	54,550	-13,856	...	...	...	...	...	...
1885	77	49,46,729	2,57,335	-63,864	...	54,500	-9,364	...	...	...	...	...	...
1886	77	49,73,753	3,46,479	53,154	1'07	54,654	1,07,808	2'17	...	...	...	...	...
1887	77	53,32,605	4,04,928	1,02,540	1'92	1,00,000	2,02,540	3'80	...	...	...	...	...
1888	77	53,73,445	4,25,530	1,01,759	1'89	1,00,000	2,01,759	3'75	...	...	...	...	...
1889	77	55,18,750	4,64,018	1,25,147	2'27	1,00,000	2,25,147	4'08	...	...	...	...	...
1890	77	57,06,682	5,14,266	1,76,960	3'10	1,00,000	2,76,960	4'85	...	...	...	...	...
1891	77	67,05,474	4,98,682	1,70,526	2'54	1,00,000	2,70,526	4'03	...	...	...	...	...
1892	77	69,56,304	5,13,213	1,63,719	2'35	1,00,000	2,63,719	3'79	...	...	...	...	...
1893	77	71,70,562	5,12,098	1,52,972	2'13	1,00,000	2,52,972	3'53	...	...	...	...	...
1894	77	70,97,487	5,31,645	1,95,732	2'76	1,00,000	2,95,732	4'17	...	...	...	...	...
1895	77	74,02,729	6,01,142	2,69,543	3'64	1,00,000	3,69,543	4'99	...	...	...	...	...
1896	77	74,01,496	6,47,360	3,12,286	4'22	1,00,000	4,12,286	5'57	...	...	...	...	...
1897	77	74,20,119	7,74,189	2,64,750	3'57	1,00,000	3,64,750	4'92	10	11,46,240	43,871	8,024	0'70	
1898	77	74,40,474	7,81,415	2,82,478	3'80	50,000	3,32,478	4'33	8	12,00,698	55,313	3,752	0'31	
1899	77	74,56,183	8,59,414	4,49,688	6'03	27,978	4,87,666	6'54	8	12,83,416	63,084	22,053	1'72	
1900	77	77,14,349	9,00,847	4,62,381	5'99	...	4,62,381	5'99	8	12,84,375	65,724	17,981	1'40	
1901	77	82,00,747	9,28,578	4,73,307	5'77	...	4,73,307	5'77	11	16,30,162	70,293	11,145	0'68	
1902	77	82,00,694	8,51,880	4,11,187	5'01	...	4,11,187	5'01	11	16,53,446	58,259	457	0'03	

* Subsidy due for previous period

† Credited to interest

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	Page.		Page.		Page.
Ahmedabad-Parantij	66	Birur-Shimoga	81	Gackwar's Mehsana	79
Ahraoti	75	Bombay, Baroda and Central India	56	Great Indian Peninsula	36
Assam-Bengal	42	Brahmaputra-Sultanpur	58	Gnatakal-Mysore frontier	45
Barai Light	71	Burma	48	Gwalior Light	83
Bengal and North-Western (Company's section)	69	Cherra-Companyganj	53	Hardwar-Dehra	58
Bengal Central	34	Cooch-Bihar	84	Hindupur (Yesvantpur-Mysore frontier)	81
Bengal Dooars	67	Darjeeling-Himalayan	73	Howrah-Amta	73
Bengal Dooars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	69	Hyderabad Godavari Valley	80
Bozwada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Jungad-Porbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalsar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
Bikaner	83	East Indian	34	Jodhpur-Hyderabad (British section)	43
Bina-Coona-Baran	75	Gackwar's Dabhol	82		

DIX 7—continued.

Appendix 7.
Gain or loss.

Income derived by railways which are not guaranteed by the State.

(as at 31st Dec 1902)

COMPANIES—(contd.)															CLASS OF RAILWAYS.
3' 3"															GAUGE.
15 (a)					16 (a)					16 (c)					Class: No.
DEOGHUR.					BENGAL AND NORTH-WESTERN					SAGAUJI-RAXAUL.					Railway.
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percent. on Capital outlay.	Calendar year.
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1882
5	2,73,331	19,639	6,242	2'28	...	...	...	...	...	...	...	...	...	...	1883
5	2,75,000	23,735	10,794	3'90	75	1,52,47,428	77,670	-26,221	...	...	...	...	...	...	1884
4	2,75,000	23,987	9,908	3'60	303	2,01,86,980	12,05,330	6,10,799	3'03	...	...	...	...	...	1885
5	2,75,042	25,017	11,743	4'27	376	2,36,16,102	18,54,074	8,09,189	3'43	...	...	...	...	...	1886
5	2,75,043	24,532	12,108	4'40	376	2,56,22,684	19,44,002	8,37,004	3'27	...	...	...	...	...	1887
5	2,81,180	25,812	11,521	4'10	376	2,61,51,593	22,09,553	9,98,844	3'78	...	...	...	...	...	1888
5	2,82,876	28,533	12,695	4'49	376	2,63,41,872	22,11,824	10,53,964	4'00	...	...	...	...	...	1889
5	2,82,616	26,095	10,915	3'86	376	2,57,94,904	22,18,615	12,32,397	4'86	...	...	...	...	...	1890
5	2,82,752	31,165	15,429	5'46	401	2,76,68,842	24,76,909	16,23,993	5'87	...	...	...	...	...	1891
5	2,88,329	26,964	9,707	3'37	414	2,83,58,821	29,39,077	17,01,254	5'99	...	...	...	...	...	1892
5	2,87,364	37,809	19,103	6'65	414	2,84,84,234	26,14,546	16,48,702	5'79	...	...	...	...	...	1893
5	2,87,526	29,425	9,659	3'36	414	2,87,24,887	26,17,242	17,67,623	6'15	...	...	...	...	...	1894
5	2,88,086	33,611	15,308	5'31	414	3,12,95,704	25,71,036	17,55,675	5'61	...	...	...	...	...	1895
5	2,87,797	30,014	11,498	4'00	479	3,43,36,114	26,26,033	17,41,786	5'07	...	1,26,044	...	...	...	1896
5	2,87,942	30,320	11,152	3'87	485	4,10,32,207	27,55,718	17,99,182	4'38	...	6,68,783	...	...	...	1897
5	2,88,453	32,100	6,601	2'28	586	4,66,78,822	31,31,890	20,50,805	4'39	...	8,07,550	...	...	...	1898
5	2,87,525	33,262	6,678	2'32	743	5,16,06,763	43,44,861	27,32,851	5'30	18	10,81,740	5,433	†	...	1899
5	2,87,379	34,900	7,376	2'56	743	5,24,73,019	44,56,593	25,28,996	4'82	18	12,12,073	25,830	†	...	1900
5	2,85,265	48,293	18,616	6'53	743	5,59,91,830	53,66,794	31,74,225	5'76	18	10,67,014	37,182	13,593	1'27	1901
5	2,75,738	29,758	6,025	2'19	748	5,84,82,525	55,60,238	30,48,854	5'21	18	10,73,481	39,296	18,638	1'74	1902

received during 1899-
on capital.

Jorhat	54	Nilgiri	66	Sagauli-Raxaul	69
Karikkal-Peralam	58	Nizam's Guaranteed State	78	Shoranpur-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South India	46
Kolhapur	82	Palaupur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Tikak-Margherita Colliery	68	Palaupur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Barwilly	43	Petalad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Maysaram-Mutupet)	59
Ludhiana-Dhuri-Jakhal	84	Petalad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	89	Tarakeshwar-Magra	71
Madras (North-East line)	40	Powayan Light	70	Tarkessur	63
Maysaram-Mutupet	47	Rajpipla	83	Tezpur-Balipara	72
Morvi	87	Rajpura-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannathganj	65	Rajputana-Malwa	40	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kalab-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkhand and Kumaon	76	Wardha Coal	37
Nagda-Ujjain	76			West of India Portuguese	88

Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraph

CLASS OF RAILWAYS.													ASSISTED	
GAUCR.													3' 38"	2' 6"
Class No.													17 (a)	17 (c)
Railway.													ROHILKUND AND KUMAON.	POWAYAN LIGHT.
Calendar year.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percent of (4) on (2).	Subsidy from Government.	Total income. (4) + (5).	Per cent. of (7) on (2).	Length of line open.	Capital expenditure to end of each year.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)	(3)	(4)	(5)		
Miles	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Miles	Rs.	Rs.	Rs.	Rs.	Rs.		
1879	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...	...	...	...
1884	54	29,40,266	36,543	1,734	0'09	...	1,734	0'09	...	...	...	...	...
1885	54	21,71,124	2,38,572	40,153	1'85	40,000	80,153	3'69	...	...	...	...	...
1886	55	22,52,962	3,00,191	83,832	3'72	40,000	1,23,832	5'50	...	...	...	...	...
1887	55	22,91,619	3,19,274	76,800	3'35	40,000	1,16,800	5'10	...	...	...	...	...
1888	55	23,40,100	3,34,092	1,02,120	4'36	40,000	1,42,120	6'07	...	...	...	...	...
1889	55	23,96,624	3,72,270	1,20,135	5'01	40,000	1,60,135	6'69	...	...	...	...	...
1890	55	20,37,223	3,14,834	1,11,003	5'45	40,000	1,51,003	7'41	...	...	...	...	...
1891	54	20,49,458	3,85,084	1,33,440	5'62	20,000	1,53,440	7'49	...	...	...	...	...
1892	54	20,58,575	5,20,557	1,57,790	6'32	40,000	1,97,780	9'61	...	...	...	...	...
1893	54	20,82,280	4,25,909	1,43,180	6'17	40,000	1,83,180	8'80	...	...	...	...	...
1894	54	20,80,140	4,59,315	1,75,191	7'16	40,000	2,15,191	10'34	...	...	...	...	...
1895	54	20,78,251	4,01,504	1,52,973	7'36	...	1,52,973	7'36	...	...	...	...	...
1895	54	20,79,363	4,26,905	1,54,595	7'43	...	1,54,595	7'43	...	...	...	...	...
1897	54	21,20,128	4,23,720	1,73,184	8'17	...	1,73,184	8'17	...	...	...	...	...
1898	54	21,42,552	4,67,108	2,21,899	10'36	...	2,21,899	10'36	...	...	...	...	...
1899	54	21,43,313	4,65,623	2,34,020	10'89	...	2,34,020	10'89	...	...	...	...	...
1900	54	21,53,125	4,37,572	2,28,043	10'59	...	2,28,043	10'59	...	...	...	...	...
1901	54	22,09,123	3,81,314	2,09,896	9'50	...	2,09,896	9'50	40	8,41,018	66,862	20,059	2'39	
1902	54	23,36,911	4,10,620	2,18,317	9'37	...	2,18,317	9'34	40	8,93,456	75,675	22,521	2'52	

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Ahmedabad-Parantij	66	Birur Shimoga	81	Gackwar's Mehsana	79
Amraoti	75	Bombay, Baroda and Central India	56	Great Indian Peninsula	36
Assam-Bengal	42	Brahmaputra-Sultanpur	58	Guntakal-Mysore frontier	45
Barsi Light	71	Burma	48	Gwalior Light	83
Bengal and North-Western (Company's section)	69	Cherra-Companyganj	53	Hardwar-Dehra	58
Bengal Central	34	Cooh Behar	84	Hindupur (Yesvantpur-Mysore frontier)	81
Bengal Doorgs	67	Darjeeling-Himalayan	73	Howrah-Amra	73
Bengal Doorgs extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	69	Hyderabad-Godavari Valley	80
Bozwada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Jungad Porbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jatalsar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
Bikaner	85	East Indian	34	Jodhpur-Hyderabad (British section)	43
Bina-Goonn-Baran	75	Gackwar's Dabhai	82		

DIX 7—continued.

Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

(As at 1st 45 and 46 of Report.)

COMPANIES—(contd.)										CLASS OF RAILWAYS.
										GAUGE.
25 (a)					26 (a)					Railway.
HEAR.					TARAKESHWAR-MAGRA.					Class No.
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Calendar year.
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	...	...	...	1886
...	...	...	...	...	...	...	...	...	...	1887
...	...	...	...	...	...	...	...	...	...	1888
...	...	...	...	...	...	...	...	...	...	1889
...	...	...	...	...	...	...	...	...	...	1890
...	...	...	...	...	...	...	...	...	...	1891
...	...	...	...	...	...	...	...	...	...	1892
...	...	...	...	...	...	...	...	...	...	1893
...	...	...	...	...	...	...	...	...	...	1894
...	...	...	...	...	...	...	...	...	...	1895
...	2,357	...	...	...	...	...	...	...	...	1896
...	10,06,657	...	...	...	...	...	...	...	...	1897
22	13,43,891	1,07,778	21,560	1'60	...	...	...	...	...	1898
22	13,42,597	1,30,321	24,559	1'83	31	9,44,627	74,074	21,002	2'22	1899
22	13,56,809	1,56,118	64,475	4'75	31	9,62,446	66,168	12,192	1'27	1900
22	13,56,501	1,24,440	42,440	3'13	31	9,61,811	76,594	20,961	2'18	1901
22	12,99,589	1,68,238	79,588	6'13	31	9,72,175	83,150	19,830	2'04	1902
22	13,18,242	1,50,275	52,879	4'02	31	9,76,194	84,272	24,842	2'54	1902

Yorhat	54
Karaikkal-Peramb	58
Khamgaon	75
Kolar Gold-fields	78
Kolhapur	82
Ledo and Tikak-Margherita Colliery	68
Lucknow-Bareilly	43
Ludhiana-Dhuri-Jakhal	84
Madras	56
Madras (North-East line)	40
Muyavaram-Mutupet	47
Morvi	87
Mymensingh-Jamalpur-Jagannathganj	65
Mysore-Nanjangud	82
Mysore section (Southern Mahratta)	44
Nagda-Ujjain	76

Nilgiri	66
Nizam's Guaranteed State	78
North Western State	52
Oudh and Rohilkhand State	51
Palanpur-Deesa (State portion)	41
Palanpur-Deesa (Darbar portion)	77
Petlad-Cambay (Anand-Tarapur section)	77
Petlad-Cambay (Tarapur-Cambay section)	77
Pondicherry	89
Powayan Light	70
Rajpura	83
Rajpura-Bhatinda	83
Rajputana-Malwa	40
Ranaghat-Krishnagar	72
Rohilkhand and Kumaon	70

Sagauli-Raxaul	69
Shorann-Cochin	80
South Hehar	62
South Indian	46
Southern Mahratta	44
Southern Punjab	64
Tanjore District Board (Maysavaram-Mutunet)	59
Tapti Valley	64
Tarakeshwar-Magra	71
Tarakesur	63
Tezpur-Balipara	72
Tirhoot State	42
Udaipur-Chitor	85
Vijapur-Kalol-Kedi	79
Wardha Coal	37
West of India Portuguese	88

Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

ASSISTED

CLASS OF RAILWAYS.	2' 6"															
	27 (a)								28 (a)							
GAUGE.																
Class : No.	RANAGHAT-KRISHNABAR.								TEZPUR-BALIPARA.							
Railway.	RANAGHAT-KRISHNABAR.								TEZPUR-BALIPARA.							
Calendar year.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percentage of (4) on (2).	Subsidy from District Board.	Total income (4) + (6).	Percentage of (7) on (2).	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percentage of (4) on (1).	Subsidy from District Board.	Total income (4) + (6).	Percentage of (7) on (2).
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898	...	7,22,369	...	...	...	...	...	20	4,56,927	85,745	20,157	4.41	5,000	25,157	5.51	...
1899	20	7,27,809	46,348	8,415	1.16	12,352	20,767	2.85	4,74,177	95,137	26,156	5.52	5,000	31,156	6.57	...
1900	20	7,51,809	69,303	19,442	2.59	9,472	28,914	3.85	4,87,240	95,981	25,797	5.29	5,000	30,797	6.32	...
1901	20	7,51,157	69,117	15,185	2.02	1,465	16,650	2.22	4,87,240	83,840	16,898	3.47	5,000	21,898	4.49	...
1902	20	7,51,158	76,180	21,353	2.84	15,960	37,313	4.97	4,87,240	85,012	21,651	4.43	5,000	26,651	5.47	...

* Due to repayments to Government by the Railway Company on account
† Share of profits exceeding 4 per cent.

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Ahmedabad-Parantij	66	Birur-Shimoga	81	Gaekwar's Mehsana	79
Amraoti	75	Bombay, Baroda and Central India	56	Great Indian Peninsula	36
Assam-Bengal	42	Brahmaputra-Sultanpur	58	Guntakal-Mysore frontier	45
Barai Light	71	Burma	48	Gwalior Light	33
Bengal and North-Western (Company's section)	69	Cherra-Companyganj	53	Hardwar-Dehra	58
Bengal Central	34	Cooch Behar	84	Hindupur (Yesvantpur-Mysore frontier)	81
Bengal Dooars	67	Darjeeling-Himalayan	73	Howrah-Amra	73
Bengal Dooars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	69	Hyderabad-Godavari Valley	30
Bezwada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad-Porbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	24
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	50	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalsar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	34	Jodhpur	85
Bikaner	85	East Indian	82	Jodhpur-Hyderabad (British section)	43
Bina-Guona-Baran	75	Gaekwar's Dabhoi			

DIX 7—continued.

income derived by railways which are not guaranteed by the State.

(2, 11, 14, 45 and 46 of Report.)

COMPANIES—(contd.)

2' 6"								2' 0"								CLASS OF RAILWAYS.
29 (a)								30 (a)								Gauge.
DARJEELING-HIMALAYAN.								HOWRAH-AMTA.								Class No.
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percentage of (4) on (2).	Subsidy from local Government.	Total income (4) + (6).	Per cent. of (7) on (2).	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percentage of (4) on (2).	Subsidy from District Board.	Total income (4) + (6).	Per cent. of (7) on (2).	Railway.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Calendar year.
Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
30	14,33,681	...	34,197	2'39	...	34,197	2'39	...	...	...	...	...	...	...	...	1880
50	18,18,723	2,61,154	1,15,522	6'35	...	1,15,522	6'35	...	...	...	...	...	...	...	...	1881
50	23,56,112	3,66,474	89,045	3'78	...	89,045	3'78	...	...	...	...	...	...	...	...	1882
50	26,04,304	4,21,944	1,55,725	5'98	...	1,55,725	5'98	...	...	...	...	...	...	...	...	1883
51	27,23,210	4,35,024	1,46,725	5'39	...	1,46,725	5'39	...	...	...	...	...	...	...	...	1884
51	27,27,823	4,31,103	1,63,350	5'99	...	1,63,350	5'99	...	...	...	...	...	...	...	...	1885
51	27,32,136	4,06,476	2,42,109	8'86	...	2,42,109	8'86	...	...	...	...	...	...	...	...	1886
51	27,43,214	4,77,151	2,10,623	7'68	...	2,10,623	7'68	...	...	...	...	...	...	...	...	1887
51	27,71,926	6,14,833	2,83,327	10'22	...	2,83,327	10'22	...	...	...	...	...	...	...	...	1888
51	29,40,423	5,74,291	2,29,117	7'80	...	2,29,117	7'80	...	...	...	...	...	...	...	...	1889
51	29,52,108	5,76,416	2,32,894	7'89	...	2,32,894	7'89	...	...	...	...	...	...	...	...	1890
51	30,59,693	6,13,387	2,58,253	8'44	...	2,58,253	8'44	...	...	...	...	...	...	...	...	1891
51	31,09,079	6,35,778	2,66,647	8'57	...	2,66,647	8'57	...	...	...	...	...	...	...	...	1892
51	31,72,223	6,34,181	2,83,903	8'50	-1,55,418	1,27,485	4'02	...	...	...	...	...	...	...	...	1893
51	31,77,536	6,36,284	2,56,286	8'10	-29,756	2,26,530	7'13	...	...	...	...	...	...	...	...	1894
51	31,99,765	7,39,618	3,59,933	11'25	-61,740	2,98,193	9'32	...	...	...	...	...	...	...	...	1895
51	33,12,732	7,81,594	3,59,667	10'25	-62,087	2,97,580	8'98	...	...	...	...	...	...	...	...	1896
51	33,15,455	7,44,266	3,33,188	10'05	-55,929	2,77,259	8'36	...	...	...	...	...	...	...	...	1897
51	33,65,993	7,54,520	3,41,109	10'13	-59,432	2,81,667	8'37	29	11,24,713	1,89,519	78,910	7'02	-15,062	63,848	5'68	1898
51	35,08,469	7,14,985	2,49,770	7'12	-34,933	2,14,837	6'12	29	11,41,307	2,50,763	1,12,794	9'28	-27,835	84,959	7'44	1899
51	34,99,487	8,09,159	3,51,840	10'34	...	3,51,840	10'34	29	11,88,283	2,16,418	1,23,104	10'36	-30,244	92,860	7'81	1900
51	34,78,411	7,87,941	3,13,618	9'02	...	3,13,618	9'02	29	11,96,697	2,60,330	1,14,082	9'53	-26,146	87,936	7'35	1901
51	34,96,507	8,50,280	3,78,005	10'18	611	3,78,616	10'83	29	12,68,532	2,65,497	1,33,120	10'49	-29,703	1,02,417	8'15	1902

of the up-keep and maintenance of the cart road utilized by the railway, per annum paid to District Board.

Jorhat	Page 54	Nilgiri	Page 66	Sagauli-Raxaul	Page 69
Karaikal-Peralam	54	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palanpur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Tikak-Margherita Colliery	68	Palanpur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Petlad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutupet)	59
Ludhiana-Dhuri-Jakhal	84	Petlad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	89	Tarakshwar-Magra	71
Madras (North-East line)	40	Powayan Light	70	Tarkes-ur	63
Mayavaram-Mutupet	47	Rajpipla	83	Tezpur-Balipara	71
Morvi	87	Rajputana-Bhatinda	83	Tirhoot State	41
Mymensingh-Jamalpur-Jagannathganj	65	Rajputana-Malwa	40	Udaipur-Chitor	8
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kaloi-Kadi	7
Mysore section (Southern Mahratta)	44	Rohilkhand and Kumaon	70	Wardha Coal	3
Nagda-Ujjain	76			West of India Portuguese	1

Appendix 7.
Gain or loss.

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.		ASSISTED COMPANIES--(concluded.)															
GAUGE.		2'								3' (a)							
Class: No.		HOWRAH-SHEAKHALA.								TOTAL ASSISTED COMPANIES.							
Railway.		HOWRAH-SHEAKHALA.								TOTAL ASSISTED COMPANIES.							
Calendar year.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percentage of (4) on (2).	Subsidy from District Board.	Total income (4) + (6).	Percent. of (7) on (2).	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Percentage of (4) on (2).	Rebate and subsidy.	Total income (4) + (6).	Percent. of (7) on (2).	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	30	14,33,681	...	34,197	2'39	...	34,197	2'39
1881	...	...	...	...	...	...	...	...	50	18,18,723	-2,61,154	1,15,522	6'35	...	1,15,522	6'35
1882	...	...	...	...	...	...	...	...	65	23,56,112	3,66,474	89,045	3'78	...	89,045	3'78
1883	...	...	...	...	...	...	...	...	93	50,99,888	4,89,803	1,26,592	2'48	...	1,26,592	2'48
1884	...	...	...	...	...	...	...	...	254	2,42,51,222	7,79,105	64,536	0'27	54,530	1,19,086	0'40
1885	...	...	...	...	...	...	...	...	511	3,19,95,651	24,18,630	8,84,770	2'77	94,500	9,79,270	3'06
1886	...	...	...	...	...	...	...	...	586	3,55,74,712	32,71,240	12,19,163	3'71	94,654	14,13,817	4'21
1887	...	...	...	...	...	...	...	...	586	3,79,93,575	34,33,679	13,71,349	3'60	1,40,000	15,11,349	3'98
1888	...	...	...	...	...	...	...	...	586	3,86,53,066	38,89,597	16,24,351	4'20	1,40,000	17,64,351	4'56
1889	...	...	...	...	...	...	...	...	586	4,50,99,018	39,35,834	16,77,636	3'72	1,40,000	18,17,636	4'03
1890	...	...	...	...	...	...	...	...	586	5,21,25,741	39,36,772	19,28,452	3'70	1,40,000	20,68,452	3'97
1891	...	...	...	...	...	...	...	...	772	5,73,45,545	52,18,056	28,37,121	4'95	1,20,000	29,57,121	5'25
1892	...	...	...	...	...	...	...	...	785	6,05,13,179	60,11,042	30,16,464	4'98	1,40,000	31,56,464	5'22
1893	...	...	...	...	...	...	...	...	827	6,18,67,634	58,20,914	30,79,143	4'98	1,54,418	30,63,725	4'95
1894	...	...	...	...	...	...	...	...	821	6,27,75,487	61,22,882	33,60,765	5'35	1,14,244	34,75,009	5'54
1895	...	...	...	...	...	...	...	...	821	6,87,80,257	64,72,123	35,99,451	5'23	42,260	36,41,711	5'39
1896	...	...	...	...	...	...	...	...	824	8,75,61,373	64,41,439	35,54,447	4'06	37,913	35,92,360	4'13
1897	...	...	...	...	...	...	...	...	1,379	11,16,01,001	72,26,954	38,23,431	3'43	65,650	38,89,081	3'48
1898	20	6,09,398	76,166	16,768	2'75	4,267	21,035	3'45	1,647	13,29,13,320	97,21,148	49,33,527	3'71	55,695	49,89,222	3'75	
1899	20	6,09,434	73,396	21,453	3'52	-250	21,203	3'48	2,085	14,99,76,955	1,13,95,382	59,06,032	3'94	1,87,400	60,93,432	4'63	
1900	20	6,09,446	76,019	26,824	4'40	-999	25,825	4'24	2,167	15,49,66,511	1,28,46,348	63,49,274	4'10	1,64,143	65,13,417	4'20	
1901	20	6,09,446	75,579	23,165	3'50	1,108	24,263	3'98	2,218	16,08,40,527	1,57,41,920	82,61,859	5'14	-53,472	82,08,387	5'13	
1902	20	6,09,365	82,019	31,739	5'20	-550	31,189	5'12	2,228	16,58,72,798	1,53,46,970	78,23,874	4'70	1,87,689	79,91,563	4'82	

* Share of profits exceeding 4 per cent. per annum paid to District Board.

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Assam-Bengal	42	Brahmaputra Sultanpur	58	Guntakal-Mysore frontier	45
Barsi Light	71	Burma	48	Gwalior Light	83
Bengal and North-Western (Company's section)	69	Cherra-Companyganj	53	Hardwar-Dehra	58
Bengal Central	34	Cooch Behar	84	Hindustan (Yesvantpur-Mysore frontier)	81
Bengal Dooars	67	Darjeling-Himalayan	73	Howrah-Amra	73
Bengal Dooars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	69	Hyderabad-Godavari Valley	80
Bezawada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal Junagad-Porbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalsar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
Bikaner	85	East Indian	34	Jodhpur-Hyderabad (British section)	43
Bina-Goonn-Baran	75	Gaekwar's Dabhoi	82		

DIX 7—continued.

Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.															CLASS OF RAILWAYS.
5' 6"															Gauge.
7 (b)					7 (c)					7 (d)					Class: No.
KHANGAON.					AMRAOTI.					BINA-GOONA-BARAN.					Railway.
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Calendar year.
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
Miles	Rs.	Rs.	Rs.		Miles	Rs.	Rs.	Rs.		Miles	Rs.	Rs.	Rs.		
8	5,35,617	38,086	—266	...	6	4,77,043	69,904	16,175	3'59	...	...	...	...	...	1879
8	5,19,888	27,863	4,922	0'94	6	4,45,385	50,866	3,639	0'82	...	...	...	...	...	1880
8	4,94,271	41,306	4,561	0'92	6	4,45,663	53,934	34,424	7'72	...	...	...	...	...	1881
8	4,91,164	75,066	30,389	6'19	6	4,44,651	85,147	39,535	8'89	...	...	...	...	...	1882
8	4,90,996	62,657	22,469	4'58	6	4,44,860	96,160	44,387	9'98	...	...	...	...	...	1883
8	4,90,903	46,830	13,037	2'66	6	4,44,774	76,782	34,174	7'68	...	...	...	...	...	1884
8	4,90,739	41,863	11,020	2'25	6	4,44,730	80,803	34,447	7'75	...	...	...	...	...	1885
8	4,89,613	59,452	20,233	4'13	6	4,44,686	95,111	44,137	9'93	...	...	...	...	...	1886
8	4,89,180	53,479	16,990	3'47	5	4,44,308	88,137	35,855	8'07	...	...	...	...	...	1887
8	4,88,357	52,635	15,796	3'23	5	4,43,892	81,710	30,886	6'96	...	...	...	...	...	1888
8	4,90,911	65,372	22,528	4'59	5	4,45,615	1,02,073	41,671	9'35	...	...	...	...	...	1889
8	4,90,520	55,288	26,092	5'32	5	4,45,155	1,01,502	46,254	10'39	...	...	...	...	...	1890
8	4,90,408	66,675	32,620	6'65	5	4,49,395	1,12,909	53,393	11'88	...	51,905	...	...	...	1891
8	4,89,132	65,548	30,909	6'32	5	4,50,160	1,05,762	48,637	10'80	...	2,57,611	...	...	...	1892
8	4,87,567	21,697	21,997	4'51	5	4,49,998	43,941	43,056	9'57	...	35,18,701	...	...	...	1893
8	4,86,003	21,966	21,667	4'46	5	4,49,461	42,795	41,910	9'32	...	47,79,618	...	...	...	1894
8	5,20,947	26,031	26,031	5'00	5	4,49,988	39,137	38,252	8'50	72	49,81,035	...	...	...	1895
8	5,22,603	24,446	24,446	4'68	5	4,51,119	43,756	42,871	9'50	72	54,16,974	91,140	36,821	0'68	1896
8	5,22,150	13,901	13,901	2'66	5	4,51,445	30,746	29,062	6'60	72	87,73,621	1,02,386	43,446	0'50	1897
8	5,22,150	24,326	24,326	4'66	5	4,51,408	40,057	39,172	8'62	72	97,66,068	1,30,004	58,040	0'59	1898
8	5,22,150	14,850	14,850	2'84	5	4,54,417	33,079	32,214	7'09	145	99,31,680	2,67,359	1,26,108	1'27	1899
8	5,22,150	33,783	13,924	2'67	5	4,54,418	78,532	32,436	7'14	146	1,00,21,603	4,34,847	2,10,190	2'20	1900
8	5,22,150	49,378	23,337	4'47	5	4,51,915	1,08,578	50,737	11'12	146	1,00,43,286	2,52,716	1,22,970	1'23	1901
†	†	132,968	117,209	...	†	†	179,582	141,099	...	146	99,14,442	1,38,825	1,19,792	1'21	1902

† Included with the Great Indian Peninsula railway.

‡ For the first-half of 1902.

Jorhat	54	Nijeri	66	Saganli-Raxaul	69
Karaikkal-Peralam	88	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khangaoon	75	North Western State	52	South Behar	61
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South Indian	45
Kolhapur	82	Palanpur-Deesa (State portion)	41	Southern Mahratta	44
Lado and Tikak-Margherita Colliery	64	Palanpur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Petlad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutupet)	59
Ludhiana-Dhuri-Jakkal	84	Petlad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	89	Tarakeshwar-Magra	71
Madras (North-East line)	40	Powayan Light	70	Tarakesur	63
Mayavaram-Mutupet	47	Rajpura	83	Tazpur-Balipara	72
Morvi	87	Rajpura-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannathganj	65	Rajputana-Malwa	40	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kalol-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkund and Kumaon	70	Wardha Coal	37
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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAY:		LINES OWNED BY NATIVE STATES														
GAUGE.		5' 6"														
Class: No.		1 (f)					7 (g)					8 (c)				
Railway.		BHOPAL-UJJAIN.					BHOPAL-ITARSI (NATIVE STATE SECTION).					NAGDA-UJJAIN.				
Calendar year.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	1,21,846	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	15,78,157	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	34,60,091	14,376	2,704	0'08	...	...	...	...	...
1883	...	...	...	...	...	...	38,23,236	25,573	-9,135	...	...	...	...	...	...
1884	...	...	...	...	...	44	45,83,261	28,102	-5,152	...	...	...	...	...	...
1885	...	...	...	...	...	44	47,71,375	1,04,683	-14,789	...	...	...	...	...	...
1886	...	...	...	...	...	44	48,26,036	1,47,416	-12,501	...	...	...	...	...	...
1887	...	...	...	...	...	44	48,09,939	1,85,576	14,813	0'31	...	...	...	...	...
1888	...	...	...	...	...	44	48,01,701	1,86,548	18,072	0'38	...	...	...	...	...
1889	...	...	...	...	...	44	48,40,846	2,67,936	-18,351	...	...	...	...	...	...
1890	...	...	...	...	...	44	50,00,000	2,97,049	-56,093	...	...	...	...	...	...
1891	...	...	...	...	...	44	50,00,000	4,66,431	1,73,154	3'46	...	...	...	...	...
1892	...	88,462	...	...	...	44	50,00,000	4,47,797	1,65,883	3'32	...	...	...	...	...
1893	...	22,76,863	...	...	...	44	50,00,000	4,24,236	1,30,923	2'62	...	...	...	...	...
1894	...	53,51,849	...	...	...	44	50,00,000	3,80,217	1,44,679	2'89	...	...	...	...	...
1895	124	69,69,331	...	...	...	44	50,00,000	3,18,074	1,02,821	2'06	...	5,33,660	...	...	...
1896	114	77,77,604	3,69,114	1,80,218	2'32	44	50,00,000	3,61,363	1,38,532	2'77	35	20,71,251	40,701	17,762	0'86	
1897	114	75,36,180	3,72,337	1,84,660	2'45	44	50,00,000	3,31,379	1,31,070	2'66	35	22,19,919	1,04,639	47,756	2'15	
1898	114	75,85,789	4,16,940	2,05,051	2'70	44	50,00,000	4,17,010	1,71,375	3'43	34	22,31,596	1,89,627	71,509	3'20	
1899	113	76,54,890	5,82,341	2,77,911	3'63	44	50,00,000	4,47,225	1,79,444	3'59	34	22,34,346	1,41,175	77,732	3'48	
1900	113	76,88,020	9,46,349	4,65,681	6'06	44	50,00,000	7,90,489	2,67,288	5'35	34	22,29,753	2,51,783	1,20,956	5'42	
1901	113	77,61,369	5,45,956	2,62,044	3'38	44	50,00,000	5,85,152	2,88,838	5'77	34	22,31,982	1,12,366	67,208	3'01	
1902	113	78,02,855	5,82,063	2,92,357	3'75	44	50,00,000	6,30,030	3,16,683	6'33	34	22,39,663	1,57,211	85,851	3'83	

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Amraoti	75	Bombay, Baroda and Central India	56	Great Indian Peninsula	36
Assam-Bengal	42	Brahmaputra-Sultanpur	58	Guatukul-Mysore frontier	45
Barsi Light	71	Burma	48	Gwalior Light	82
Bengal and North-Western (Com- pany's section)	69	Cherra-Companyganj	53	Hardwar-Dehra	58
Bengal Central	34	Coch Behar	84	Hindupur (Yesvantpur-Mysore fron- tier)	81
Bengal Doars	67	Darjeeling-Himalayan	73	Howrah-Amia	73
Bengal Doars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	69	Hyderabad-Godavari Valley	80
Bezwada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad- Porbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	50	Jannagar	26
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalsar-Rajkot	56
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
Bikaner	85	East Indian	34	Jodhpur-Hyderabad (British section)	43
Bina-Coosa-Baran	75	Gaekwar's Dabhoi	82		

DIX 7—continued.

Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

(2, 11, 14, 43 and 46 of Report.)

AND WORKED BY COMPANIES—(contd).

CLASS OF RAILWAYS.

GAUGE.

Class: No.

Railway.

Calendar year.

5' 6"

3 (d)					3 (e)					3 (f)					Calendar year.
PETLAD-CAMBAY (ANAND-TARAPUR SECTION).					PETLAD-CAMBAY (TARAPUR-CAMBAY SECTION).					PALANPUR-DEESA (DARBAR PORTION).					
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1886
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1887
...	11,030	...	...	...	...	...	...	...	...	...	...	...	...	...	1888
...	4,71,822	...	...	...	...	...	...	...	...	...	...	...	...	...	1889
13	6,47,922	32,649	20,870	3'22	...	...	...	...	...	...	...	...	...	...	1890
13	7,10,118	59,113	36,346	5'12	...	...	...	...	...	...	...	...	...	...	1891
13	7,11,061	61,243	34,757	4'89	...	...	...	...	...	...	20,000	...	...	...	1892
13	7,12,768	63,953	40,627	5'70	...	...	...	...	...	...	1,85,000	2,255	1,335	0'72	1893
13	7,23,482	69,668	44,037	6'09	...	...	...	...	...	...	1,85,000	17,381	11,365	6'14	1894
13	7,23,139	73,891	46,584	6'44	...	...	...	...	...	...	1,85,000	17,643	11,333	6'13	1895
13	7,23,616	1,17,540	82,847	11'45	...	...	...	...	...	...	1,85,000	22,864	14,101	7'62	1896
13	7,35,769	64,737	33,946	4'49	...	...	...	...	...	...	1,85,000	19,133	10,883	5'88	1897
13	7,49,047	51,121	28,156	3'76	...	...	...	...	...	...	1,85,000	16,893	10,334	5'39	1898
13	7,52,439	70,668	39,312	5'22	...	...	...	...	...	...	1,85,000	19,739	12,102	6'54	1899
13	7,52,997	88,481	41,713	5'55	...	...	...	...	...	...	1,85,000	21,084	14,238	7'70	1900
22	11,26,381	93,233	51,749	4'36	11	7,49,676	12,011	5,950	0'79	...	1,85,000	16,279	9,375	5'97	1901
22	11,25,930	1,05,951	36,818	4'79	21	7,49,676	25,497	13,622	1'81	...	1,85,000	14,777	8,329	4'50	1902

Mileage shown with Palanpur-Deesa (State portion).

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Karaikkal-Peralam	88	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South Indian	46
Koihapur	82	Palanpur-Deesa (State portion)	41	Southern-Mahratta	44
Ledo and Tikak-Margherita Colliery	68	Palanpur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Barailly	43	Petlad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutupet)	50
Ludhiana-Dhuri-Jakhal	84	Petlad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	80	Tarakeshwar-Magra	71
Madras (North-East line)	40	Powayan Light	70	Tarkessur	63
Mayavaram-Mutupet	47	Rajpipla	83	Tezpur-Balipara	72
Morvi	87	Rajputana-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jaganath-ganj	65	Rajputana-Malwa	40	Udaipur-Chitor	85
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kajol-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkhand and Kumaon	70	Wardha Coal	37
Nagda-Ujjain	76			West of India Portuguese	28

Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

LINES OWNED BY NATIVE STATES										
CLASS OF RAILWAYS.	5' 6"									
Gauges.	9 (a)					10 (c)				
Class No.	NIZAM'S GUARANTEED STATE.					KOLAR GOLD-FIELDS.				
Railway.										
Calendar year.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	121	1,16,46,997	6,94,401	89,925	0'77	...	...	...	...	...
1880	121	1,21,90,870	7,02,716	2,48,604	2'04	...	...	...	...	...
1881	121	1,22,25,291	7,56,234	2,88,666	2'35	...	...	...	...	...
1882	121	1,22,27,794	8,59,418	3,75,099	3'07	...	...	...	...	...
1883	121	1,22,83,560	8,53,521	2,37,932	2'94	...	...	...	...	...
1884	121	1,23,03,720	9,72,917	4,70,227	3'82	...	...	...	...	...
1885	121	2,05,60,998	11,13,950	4,87,024	2'37	...	...	...	...	...
1886	204	2,71,49,342	13,81,077	6,94,524	2'56	...	...	...	...	...
1887	205	2,69,71,143	15,48,891	5,52,905	2'05	...	...	...	...	...
1888	306	3,55,11,854	17,76,075	7,57,467	2'13	...	...	...	...	...
1889	330	3,59,46,922	22,57,462	7,72,513	2'15	...	...	...	...	...
1890	333	3,77,11,194	25,07,268	10,39,590	2'76	...	...	...	...	...
1891	333	3,95,18,791	27,76,437	12,57,860	3'18	...	...	...	...	...
1892	333	3,95,48,395	27,80,642	13,24,959	3'35	...	27,461	...	...	...
1893	333	4,01,96,909	30,61,603	14,36,451	3'57	...	5,27,634	...	...	...
1894	332	4,02,33,826	32,56,825	16,22,028	4'03	10	6,56,175	75,771	29,273	4'46
1895	332	4,06,43,818	32,15,541	15,77,149	3'88	10	6,61,654	1,52,953	66,379	10'03
1896	332	4,08,14,737	33,03,522	17,28,196	4'24	10	7,45,004	1,55,317	63,887	8'50
1897	332	4,09,60,944	36,10,354	19,38,769	4'73	10	7,91,074	2,08,854	90,278	11'41
1898	330	4,10,54,449	39,07,612	22,74,580	5'54	10	8,09,537	2,04,002	82,133	10'15
1899	330	4,15,68,731	41,10,201	25,01,046	6'02	10	10,79,552	1,77,667	56,827	5'27
1900	330	4,17,49,124	49,12,056	28,41,085	6'81	10	10,77,901	2,08,892	67,093	6'22
1901	330	4,24,30,543	40,77,927	26,48,120	6'24	10	11,20,330	2,17,661	91,277	8'20
1902	330	4,28,89,527	44,06,494	26,82,533	6'25	10	11,38,480	2,16,629	84,864	7'45

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Bengal Central	34
Bengal Dooars	67
Bengal Dooars extensions	67
Bengal-Nagpur	35
Berwada extension	39
Bhavnagar-Gondal-Junagad- Porbandar	86
Bhopal-Itarsi (British section)	38
Bhopal-Itarsi (Native state section)	76
Bhopal-Ujjain	76
Bikaner	85
Bina-Goonn-Baran	75

Birur-Shimoga	81
Bombay, Baroda and Central India	56
Brahmaputra-Saltanpur	58
Burma	48
Cherra-Companyganj	53
Cooch Behar	84
Darjeeling-Himalayan	73
Delhi-Umballa-Kalka	62
Deoghur	69
Dhond-Manmad	37
Dhrangadra	87
Dibru-Sadiya	68
Eastern Bengal State	50
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DIX 7—continued.

income derived by railways which are not guaranteed by the State.

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AND WORKED BY COMPANIES—(contd).											CLASS OF RAILWAYS.
3' 3 3/4"											Gauge.
8 (a)					8 (7)					Class No.	
GARHWAR'S MEHSANA.					VIJAPUR-KALOL-KADI.					Railway.	
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Calendar year.	
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)		
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.			
...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	...	...	...	1886
27	13,55,492	27,890	5,564	0'41	...	...	...	...	...	1887
28	9,16,365	47,502	16,672	1'82	...	...	...	...	...	1888
28	11,18,446	53,290	20,348	1'82	...	...	...	...	...	1889
28	25,44,340	59,241	23,308	0'92	...	...	...	...	...	1890
93	29,04,050	1,94,247	1,05,801	3'64	...	...	...	...	...	1891
93	29,71,610	2,58,063	1,53,005	5'13	...	...	...	...	...	1892
93	30,26,752	3,36,859	1,98,250	6'55	...	...	...	...	...	1893
93	30,94,578	3,79,972	2,36,387	7'64	...	...	...	...	...	1894
93	32,55,044	3,38,444	2,02,440	6'22	...	...	...	...	...	1895
93	32,61,448	4,23,283	2,71,262	8'32	...	...	...	...	...	1896
93	32,63,900	3,39,125	1,18,358	3'63	...	...	...	...	...	1897
93	32,82,612	3,46,491	1,99,052	6'07	...	...	...	...	...	1898
93	32,83,612	3,76,160	2,16,654	6'60	...	7,534	...	...	...	1899
93	33,01,950	4,28,545	2,36,754	7'17	...	29,885	...	...	...	1900
93	33,48,911	3,92,227	2,15,111	6'44	...	6,60,716	...	...	...	1901
93	33,63,329	3,74,515	1,98,977	5'92	29	10,47,188	19,514	9,226	1'18	1902	

Jorhat	Page. 54	Nilgiri	Page. 66	Sagauli-Rawal	Page. 69
Karaikkal-Poralam	58	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Khamgaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oodh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palanpur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Tikak-Margherita Colliery	68	Palanpur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Petlad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutupet)	59
Ludhiana-Dhuri-Jakkhal	84	Petlad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	89	Tarakeshwar-Magra	71
Madras (North-East line)	40	Powayan Light	70	Tarakesur	63
Mayavaram-Mutupet	47	Rajpipla	83	Tespur-Balipara	72
Morvi	87	Rajpura-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannathganj	65	Rajputana-Malwa	40	Udaipur Chitor	25
Mysore-Nanjangud	82	Ranaghat-Krishnagar	72	Vijapur-Kalol-Kadi	70
Mysore section (Southern Mahratta)	44	Rohilkhand and Kumaon	70	Wardha Coal	37
Nagda-Ujjain	76			West of India Portuguese	88

Appendix 7.
Gain or loss,

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.		LINES OWNED BY NATIVE STATES								
Gauge.	3' 31"									
Class No.	9 (c)					10 (d)				
Railway.	HYDERABAD-GODAVARI VALLEY.					SHORANUR-COCHIN.				
Calendar year.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896	...	3,74,350	...	...	...	...	...	...	...	...
1897	...	17,64,352	...	...	...	...	...	...	...	...
1898	...	86,55,416	...	...	...	...	53,921	...	...	...
1899	154	2,00,21,971	63,181	36,877	0.18	...	80,927	...	...	...
1900	885	2,31,94,817	10,63,023	4,20,826	1.81	...	28,47,394	...	...	...
1901	391	2,44,37,419	20,10,033	9,23,300	3.77	...	50,82,280
1902	391	2,57,75,220	22,88,043	9,67,892	3.76	65	63,66,301	1,34,845	73,299	1.15

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Amraoti	75	Bombay, Baroda and Central India	58	Great Indian Peninsula	36
Assam-Bengal	42	Brahmaputra-Saltapour	56	Guntakal-Mysore frontier	45
Barsi Light	71	Burma	58	Gwalior Light	83
Bengal and North-Western (Com-pany's section)	69	Cherra-Companyanj	48	Hardwar-Dehra	58
Bengal Central	34	Cochin-Bihar	53	Hindupur (Yesvantpur-Mysore Fron-tier)	81
Bengal Dooars	67	Darjeeling-Himalayan	84	Howrah-Amta	73
Bengal Dooars extensions	67	Delhi-Umballa-Kalka	73	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	62	Hyderabad-Godavari Valley	80
Bezavada extension	39	Dhond-Manmad	69	Indian-Midland	38
Bhavnagar-Gondal-Junagad-Porbandar	86	Dibru-Sadiya	37	Jammu and Kashmir (Native State section)	84
Bhopal-Itarsi (British section)	38	Eastern Bengal State	68	Jamnagar	86
Bhopal-Itarsi (Native State section)	76	East Coast State	50	Jetalsar-Rajkot	86
Bhopal-Ujjain	76	East India	34	Jodhpur	85
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Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

(5, 11, 14, 45 and 46 of Report.)

AND WORKED BY COMPANIES—(contd.)										CLASS OF RAILWAYS.
3' 3 1/2"										Gauge.
21 (d)					21 (e)					Class No.
HINDUPUR. (YESVANIPUR-MYSORE FRONTIER).					BIRUR-SHIMOGA.					Railway.
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent on Capital outlay.	Calendar year.
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	...	...	...	1886
...	...	...	...	...	...	...	...	...	...	1887
...	...	...	...	...	...	...	...	...	...	1888
...	...	...	...	...	...	...	...	...	...	1889
...	...	...	...	...	...	...	...	...	...	1890
...	...	...	...	...	...	...	...	...	...	1891
...	...	...	...	...	...	...	...	...	...	1892
20	24,41,741	...	...	...	...	...	...	...	...	1893
51	24,46,186	57,635	22,708	0'93	...	...	...	...	...	1893
51	24,34,999	1,61,704	56,504	2'32	...	...	...	...	...	1894
51	24,19,698	1,92,159	79,886	3'30	...	...	...	...	...	1895
51	23,94,762	2,23,800	99,592	4'16	...	2,90,226	...	...	...	1896
51	24,79,210	2,69,527	1,18,358	4'77	...	6,27,263	...	...	...	1897
51	24,98,316	1,80,091	56,430	2'26	...	15,70,079	...	...	...	1898
51	24,98,162	1,49,363	50,518	2'02	38	20,85,473	6,186	1,881	0'09	1899
51	24,98,047	1,88,183	67,135	2'69	38	22,94,457	66,227	24,219	1'06	1900
51	24,04,729	1,97,798	60,724	2'43	38	24,01,338	62,058	16,993	0'71	1901
51	24,97,811	2,13,486	77,908	3'12	38	24,05,667	64,606	23,367	0'97	1902

Jorhat	...
Karaikkal-Peralam	...
Khamgaon	...
Kolar Gold-fields	...
Kolhapur	...
Lado and Tikak-Margherita Colliery	...
Lucknow-Barcilly	...
Ludhiana-Dhuri-Jakhal	...
Madras	...
Madras (North-East line)	...
Mayavaram-Mutpet	...
Morvi	...
Mymensingh-Jamalpur-Jagannath-ganj.	...
Mysore-Nanjangud	...
Mysore section (Southern Mahratta).	...
Nagda-Ujjain	...

Page. 54 Nilgiri	...
58 Nizam's Guaranteed State	...
75 North Western State	...
78 Oudh and Rohilkhand State	...
82 Palampur-Deesa (State portion)	...
68 Palampur-Deesa (Darbar portion)	...
43 Petlad-Cambay (Anand-Tarapur section)	...
56 Petlad-Cambay (Tarapur-Cambay section)	...
40 Pondicherry	...
87 Powayan Light	...
65 Rajpura-Bhatinda	...
82 Rajputana-Malwa	...
44 Ranaghat-Krishnagar	...
76 Rohilkhand and Kumaon	...

Page. 66 Sagauli-Raxaul	...
78 Shoranur-Cochin	...
59 South Behar	...
51 South Indian	...
43 Southern-Mahratta	...
77 Southern Punjab	...
77 Tanjore District Board (Mayavaram-Mutpet)	...
77 Tapti Valley	...
77 Tarakeshwar-Magra	...
80 Tarkapur	...
70 Tezpur-Balipara	...
83 Tirhoot State	...
85 Udaipur-Chitor	...
40 Vijapur-Kalol-Kadi	...
72 Wardha Coal	...
70 West of India Portuguese	...

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Appendix 7.
Gain or loss.

APPEN

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

LINES OWNED BY NATIVE STATES															
3' 3 1/2"															
CLASS: OF RAILWAYS.															
GAUGE.															
CLASS: No.	21 (f)					21 (g)					9 (f)				
Railway.	KOLHAPUR.					MYSORE-NANJANGUD.					GAEKWAR'S DABHOI.				
Calendar year.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent on Capital outlay.
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	...	...	...	...	...	...	...	...	...	...	40	9,62,450	72,063	31,608	3'28
1880	...	...	...	...	...	...	...	...	...	...	57	11,65,540	1,28,825	65,138	5'39
1881	...	...	...	...	...	...	...	...	...	...	60	12,57,448	1,41,233	48,849	3'88
1882	...	...	...	...	...	...	...	...	...	...	59	12,78,942	1,44,022	46,747	3'66
1883	...	...	...	...	...	...	...	...	...	...	59	12,73,630	1,46,970	38,585	3'05
1884	...	...	...	...	...	...	...	...	...	...	59	12,80,177	1,49,091	48,360	3'80
1885	...	...	...	...	...	...	...	...	...	...	59	13,11,229	1,52,283	55,623	4'24
1886	...	...	...	...	...	...	...	...	...	...	59	13,58,502	1,53,699	39,398	2'90
1887	...	...	...	...	...	...	...	...	...	...	59	13,46,259	1,56,352	47,339	3'31
1888	...	...	...	...	...	...	...	...	...	...	59	13,74,295	1,45,757	43,854	3'19
1889	...	13,59,602	...	...	...	...	...	...	...	...	59	16,10,398	1,42,989	49,398	3'07
1890	...	21,37,629	...	...	...	...	...	...	...	...	72	17,53,877	1,95,028	74,570	4'23
1891	29	23,16,183	58,381	20,866	0'90	15	...	...	...	...	72	17,94,157	2,01,165	68,126	3'80
1892	29	23,81,946	90,308	29,182	1'23	15	5,92,414	16,478	6,163	1'03	72	18,47,403	3,38,609	1,06,510	5'77
1893	29	23,21,687	1,88,096	49,991	2'15	15	6,18,551	33,812	14,001	2'26	72	18,55,158	2,52,106	1,32,507	7'14
1894	29	23,05,817	1,23,390	43,632	1'89	15	6,03,095	37,448	12,866	2'13	72	18,88,774	2,40,316	95,429	5'05
1895	29	23,69,206	1,21,147	51,006	2'15	15	6,09,212	39,100	16,432	2'69	72	19,08,757	2,34,473	96,784	5'02
1896	29	23,05,912	1,21,653	54,205	2'35	15	6,09,681	39,322	17,125	2'81	72	20,74,756	2,58,788	1,25,657	6'06
1897	29	23,24,807	94,610	41,981	1'80	15	6,34,764	33,497	14,265	2'25	79	21,08,574	2,20,901	50,949	2'42
1898	29	23,24,807	78,271	24,201	1'04	15	6,43,821	31,493	10,124	1'57	79	21,18,491	2,10,240	26,592	...
1899	29	23,24,807	99,193	33,986	1'46	16	6,46,051	16,810	5,671	0'88	79	21,17,586	2,45,974	87,571	4'14
1900	29	23,24,807	1,24,215	44,875	1'93	16	6,53,741	30,860	11,357	1'74	79	21,17,528	2,35,281	61,606	2'44
1901	29	23,24,807	1,14,114	35,750	1'54	16	6,56,462	28,302	7,263	1'20	79	21,14,302	2,53,936	73,427	3'47
1902	29	23,25,587	1,23,913	46,407	2'00	16	6,56,462	29,870	10,938	1'67	79	22,31,829	2,22,573	76,367	3'62

* Information not available.

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Bara Light	71	Gwalior Light	83
Bengal and North-Western (Company's section).	69	Hardwar-Dehra	58
Bengal Central	34	Hindupur (Yesvantpur-Mysore frontier)	81
Bengal Doars	67	Howrah-Amta	73
Bengal Doars extensions	67	Howrah-Sheakhala	74
Bengal-Nagpur	35	Hyderabad-Godavari Valley	80
Bezawada extension	39	Indian Midland	38
Bhavnagar-Gondal-Junagad-Porbandar	86	Jammu and Kashmir (Native state section).	84
Bhopal-Itarsi (British section)	38	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Jetalsar-Rajkot	85
Bhopal-Ujjain	76	Jrdhpur	85
Bikaner	85	Jodhpur-Hyderabad (British section).	43
Bina-Goonn-Baran	75		
Birat-Shimoga	51		
Bombay, Baroda and Central India	56		
Brahmaputra-Sultanpur	58		
Burma	48		
Cherra-Companyganj	53		
Cooch Behar	84		
Darjeeling-Himalayan	73		
Delhi-Umballa-Kalka	62		
Deoghur	69		
Dhond-Manmad	37		
Dhrangadra	87		
Dibru-Sadiya	68		
Eastern Bengal State	50		
East Coast State	50		
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Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

2, 11, 14, 45 and 46 of Report.)

AND WORKED BY COMPANIES—(conold.)										LINES OWNED BY NATIVE STATES AND WORKED BY STATE RAILWAY AGENCY.					CLASS OF RAILWAYS.
8 (m)					7 (h)					6 (c)					GAUGE.
RAJPIPLA.					GWALIOR LIGHT.					RAJPURA-BHATINDA.					Class No.
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Railway.
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	Calendar year.
Miles	Rs.	Rs.	Rs.		Miles	Rs.	Rs.	Rs.		Miles	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	...	...	16	11,12,359	5,111	-456	...	1884
...	...	...	...	...	...	...	...	...	...	16	12,29,141	48,769	-4,255	...	1885
...	...	...	...	...	...	...	...	...	...	16	12,29,141	64,613	15,816	1'12	1886
...	...	...	...	...	...	...	...	...	...	15	12,43,250	0	15,485	2'12	1887
...	...	...	...	...	...	...	...	...	...	16	21,61,990	0	18,640	0'82	1888
...	...	...	...	...	...	...	...	...	...	108	62,83,918	1,08,480	58,403	0'93	1889
...	...	...	...	...	...	...	...	...	...	108	64,00,534	5,66,946	2,55,126	3'99	1890
...	...	...	...	...	...	...	...	...	...	105	65,81,553	7,19,899	3,23,937	4'98	1891
...	...	...	...	...	...	...	...	...	...	105	66,41,382	5,64,053	2,53,824	3'82	1892
...	...	...	...	...	...	...	...	...	...	108	67,26,941	6,84,337	3,07,956	4'58	1893
...	12,647	...	...	...	...	...	...	...	...	108	67,01,669	12,59,032	5,66,565	8'45	1894
...	77,265	...	...	...	...	...	...	...	...	108	67,02,457	13,18,902	5,93,506	8'86	1895
...	4,09,141	...	...	...	...	2,166	...	...	...	105	66,25,813	9,97,826	4,49,022	6'71	1896
19	7,55,792	5,705	-6,534	...	...	1,03,559	...	...	...	108	66,96,451	6,96,917	3,13,617	4'68	1897
19	11,03,333	10,624	-9,172	...	...	9,30,815	...	...	...	108	67,04,520	7,07,637	3,16,187	4'72	1898
37	13,07,820	35,809	8,478	0'65	126	22,79,267	4,094	-4,113	...	107	67,05,785	6,79,510	3,05,764	4'56	1899
37	13,10,159	49,463	12,139	0'93	126	27,10,557	84,517	-137	...	107	67,05,785	6,93,804	3,12,211	4'66	1900
37	13,06,822	47,182	10,487	0'80	126	31,07,277	81,217	-520	...	107	67,10,823	8,60,642	3,87,289	5'77	1901
37	13,05,415	28,726	10,131	0'78	126	39,77,104	1,09,577	9,346	0'33	107	67,12,977	8,40,947	3,78,426	5'64	1902

Jorhat	54
Karaikkal-Peralam	88
Khamgaon	75
Kolar Gold-fields	78
Kolhapur	82
Ledo and Tikak-Margherita Colliery	68
Lucknow-Bareilly	43
Ludhiana-Dhuri-Jakkhal	84
Madras	56
Madras (North-East line)	40
Mayavaram-Mutupet	47
Morvi	87
Mymensingh-Jamalpur-Jagannathganj	65
Mysore-Nanjangud	82
Mysore section (Southern Mahratta)	44
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North Western State	52
Oudh and Rohilkhand State	51
Palampur-Deesa (State portion)	41
Palampur-Deesa (Darbar portion)	77
Petlad-Cambay (Anand-Tarapur section)	77
Petlad-Cambay (Tarapur-Cambay section)	77
Pondicherry	89
Powayan Light	70
Rajpura	83
Rajpura-Bhatinda	83
Rajputana-Malwa	40
Ranaghat-Krishnagar	72
Rohilkhand and Kumaon	70

Sagauli-Raxaul	60
Shoranur-Cochin	80
South Behar	62
South Indian	46
Southern Mahratta	41
Southern Punjab	64
Tanjore District Board (Mayavaram-Mutupet)	59
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Tarakeswar	63
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Appendix 7.
Gain or loss.

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.		LINES OWNED BY NATIVE STATES AND WORKED BY STATE RAILWAY AGENCY—(conold).														
GAUGE.		5' 6"										2' 6"				
Class: No.		6 (d)					6 (e)					2 (e)				
Railway.		JAMMU AND KASHMIR. (NATIVE STATE SECTION).					LUDHIANA-DHURI-JAKHAL.					COOCH BEHAR.				
Calendar year.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
1879	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1880	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1882	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1883	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1884	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1885	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1887	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1888	...	29,545	...	...	...	...	...	...	...	...	...	...	...	...	...
1889	...	7,51,458	...	...	...	...	...	...	...	...	...	...	...	...	...
1890	16	12,37,071	45,167	13,770	1'11	...	...	...	...	...	...	...	...	...	...
1891	16	13,80,033	57,312	15,004	1'13	...	...	...	...	...	...	14,665	...	...	...
1892	16	9,45,302	34,005	15,444	1'63	...	...	...	...	...	...	4,09,136	...	...	...
1893	16	9,56,327	14,332	14,332	1'50	...	...	...	...	...	22	6,65,172	5,846	-2,435	...
1894	16	9,59,773	17,556	17,556	1'83	...	...	...	...	...	22	7,14,318	40,280	8,576	1'20
1895	16	9,60,020	18,262	18,262	1'90	...	...	...	...	...	22	7,30,953	53,174	19,200	2'63
1896	16	9,60,021	31,321	31,321	3'26	...	...	...	...	...	22	7,66,734	70,128	38,570	5'03
1897	16	9,65,151	35,731	31,587	3'24	...	...	...	...	...	22	9,01,219	64,262	35,344	3'92
1898	16	9,62,246	49,164	31,431	3'23	...	...	...	...	...	22	10,32,938	66,124	6,687	0'65
1899	16	9,60,220	51,332	33,932	3'59	...	...	...	...	...	33	12,99,031	82,773	43,073	3'32
1900	16	9,60,402	55,215	34,571	3'56	...	...	...	...	...	34	12,83,906	94,792	51,602	4'02
1901	16	9,60,536	52,424	33,355	3'43	79	43,10,407	2,02,297	91,034	2'11	34	13,04,913	1,27,596	74,667	5'35	
1902	16	9,62,471	51,865	33,080	3'40	79	43,24,799	4,05,005	1,52,252	4'21	34	13,95,766	1,24,741	50,289	3'60	

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Assam-Bengal	42	Brahmaputra-Saltanpur	58	Guntakal-Mysore frontier	45
Barai Light	71	Burma	48	Gwalior Light	82
Bengal and North-Western (Company's section)	69	Cherra-Companyganj	53	Hardwar-Dehra	58
Bengal Central	34	Cooch Behar	84	Hindupur (Yosvantpur-Mysore frontier)	81
Bengal Doars	67	Darjeeling-Himalayan	73	Howrah-Amra	73
Bengal Doars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	67	Deoghar	69	Hyderabad-Godavari Valley	76
Beswada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad-Porbandar	86	Dibrugarh	67	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jalsar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	34	Jodhpur	85
Bikaner	85	East Indian	34	Jodhpur-Hyderabad (British section)	43
Bina-Coona-Baran	75	Gaekwar's Dabhol	82		

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Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.
2, 11, 14, 45 and 46 of Report.)

LINES OWNED AND WORKED BY NATIVE STATES.															CLASS OF RAILWAYS.
5' 3 1/2"															GAUGE.
18 (a)					18 (b)					19 (a)					Class No.
JODHPUR-BIKANER (JODHPUR SECTION).					JODHPUR-BIKANER (BIKANER SECTION).					UDAIPUR-CHITOR.					Railway.
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Calendar year.
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1883
18	4,99,866	40,361	23,110	4'62	...	...	...	...	...	...	...	...	...	...	1884
44	8,09,995	64,262	31,748	3'92	...	...	...	...	...	...	...	...	...	...	1885
64	15,49,335	1,70,691	1,12,505	7'30	...	...	...	...	...	...	...	...	...	...	1886
64	21,28,593	2,05,728	1,33,318	6'23	...	...	...	...	...	...	...	...	...	...	1887
124	22,81,433	3,18,703	1,91,677	8'40	...	...	...	...	...	...	...	...	...	...	1888
124	22,80,006	3,60,803	1,92,558	8'40	...	...	...	...	...	...	...	...	...	...	1889
124	22,73,978	3,59,358	1,92,258	8'45	...	...	...	...	...	...	...	...	...	...	1890
124	22,73,338	3,70,825	1,96,192	8'63	...	4,15,590	...	...	...	...	...	...	...	...	1891
247	41,87,110	6,12,839	3,34,364	7'99	44	14,32,706	5,139	2,724	0'19	...	...	...	...	...	1892
247	60,39,552	9,46,980	5,28,941	8'73	44	9,48,622	76,547	24,994	2'63	...	...	...	...	...	1893
380	64,74,611	8,31,765	4,38,895	6'70	44	9,65,771	66,725	25,735	2'66	...	7,000	...	...	...	1894
320	64,49,374	10,81,156	6,69,373	10'38	44	9,69,407	80,274	40,447	4'17	...	2,70,472	...	...	...	1895
320	64,82,934	9,74,738	5,69,246	8'85	44	9,71,084	86,539	45,096	4'64	60	13,30,850	54,702	18,778	1'40	1896
320	64,76,328	11,64,465	7,38,273	11'40	44	9,73,294	1,20,727	75,382	7'75	60	15,61,721	1,35,229	53,750	3'44	1897
320	74,90,176	11,22,658	7,44,799	9'94	44	9,73,473	1,17,010	65,504	6'73	60	15,99,040	1,23,175	...	...	1898
320	1,00,85,594	12,22,726	7,30,956	7'25	86	13,14,152	1,37,472	77,616	3'35	61	17,89,232	1,43,822	61,364	3'43	1899
380	1,13,42,183	19,09,097	11,66,844	10'29	95	28,61,917	1,74,539	1,04,344	3'65	67	19,89,912	2,10,540	1,04,829	5'27	1900
455	1,24,28,508	16,28,478	9,07,480	7'94	86	11,60,432	1,98,358	1,01,962	3'22	67	19,80,010	2,17,128	1,25,703	9'38	1901
455	1,17,24,896	15,67,973	7,14,836	6'10	157	48,93,535	2,46,875	1,05,697	2'16	67	20,61,858	2,29,175	94,112	4'56	1902
455	1,18,69,424	16,76,216	8,35,202	7'04	245	52,49,339	3,28,022	1,42,530	2'72	67	20,65,630	2,17,388	97,131	4'70	1902

Jorhat	54
Karaikkal-Peralam	83
Khamgaon	75
Kolar Gold-fields	78
Kolhapur	82
Ledo and Tuleak-Margherita Colliery	68
Lucknow-Bareilly	43
Ludhiana-Dhuri-Jakkhal	81
Madras	56
Madras (North-East line)	49
Mayavaram-Mutupet	47
Morvi	87
Mymensingh-Jamalpur-Jagannath-ganj	65
Mysore-Nanjangud	82
Mysore section (Southern Mahratta)	44
Nagda-Ujjain	76

Nilgiri	66
Nizam's Guaranteed State	78
North Western State	52
Oudh and Rohilkhand State	51
Palampur-Deesa (State portion)	41
Palampur-Deesa (Darbar portion)	77
Petalad-Cambay (Anand-Tarapur section)	77
Petalad-Cambay (Tarapur-Cambay section)	77
Pondicherry	89
Powayan Light	70
Rajpipla	83
Rajputana-Bhatinda	83
Rajputana-Malwa	40
Ranaghat-Krishnagar	72
Rohilkhand and Kuzoon	79

Sagauli-Raxaul	60
Shoranur-Cochin	80
South Behar	62
South Indian	46
Southern Mahratta	44
Southern Punjab	64
Tanjore District Board (Mayavaram-Mutupet)	59
Tapti Valley	64
Tarakeshwar-Magra	71
Tarkessur	63
Tazpur-Balipara	72
Tirhoot State	42
Udaipur-Chitor	85
Vijapur-Kalol-Kadi	79
Wardha Coal	27
West of India Portuguese	88

Appendix 7.
Gain or loss.

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.	LINES OWNED AND WORKED BY NATIVE STATES—(contd).														
	20 (a)					20 (b)					20 (c)				
GAUGE.	3' 6"														
Class: No.	BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR.					JAMNAGAR.					JETALSAR-RAJKOT.				
Railway.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.
Calendar year.	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
879	...	4,80,177	...	...	...	...	...	...	...	...	...	...	...	...	...
880	105	49,19,304	...	...	...	...	...	...	...	...	...	...	...	...	...
881	193	74,46,353	6,88,385	8,31,706	3'11	...	...	...	...	...	...	...	...	...	...
882	193	86,73,711	8,76,836	1,34,648	4'09	...	...	...	...	...	...	...	...	...	...
883	193	90,49,232	8,94,179	3,26,513	3'61	...	...	...	...	...	...	...	...	...	...
884	193	92,97,040	10,92,312	4,98,107	5'36	...	...	...	...	...	...	...	...	...	...
885	193	96,23,031	10,04,660	3,91,247	4'07	...	...	...	...	...	...	...	...	...	...
886	193	98,37,353	9,65,379	4,15,149	4'21	...	...	...	...	...	...	...	...	...	...
887	193	1,08,28,023	9,80,827	4,42,103	4'08	...	...	...	...	...	...	...	...	...	...
888	209	1,30,68,663	11,20,260	5,06,545	3'88	...	...	...	...	...	...	...	...	...	...
889	333	1,62,60,477	12,80,417	7,04,177	4'33	...	...	...	...	...	...	...	...	...	...
890	333	1,68,42,051	15,71,788	6,00,267	3'56	...	...	...	...	...	...	...	...	...	...
891	333	1,71,24,771	14,77,263	4,75,786	2'78	...	...	...	...	...	...	...	...	...	...
892	333	1,72,37,030	15,73,178	4,37,876	2'54	...	...	...	...	...	...	7,89,792	...	...	...
893	334	1,72,18,860	20,63,104	8,88,708	5'16	...	...	...	...	...	46	14,35,593	1,03,006	50,896	3'55
894	334	1,73,63,592	18,40,287	7,91,333	4'56	...	17,000	...	...	...	46	14,99,605	1,55,556	61,132	4'08
895	334	1,76,00,032	19,52,221	8,21,220	4'67	...	62,056	...	...	...	46	15,03,585	1,83,338	77,448	5'15
896	334	1,75,63,393	19,80,878	9,89,274	5'63	...	14,91,727	...	...	...	46	15,29,265	1,97,116	84,238	5'51
897	334	1,76,33,652	18,21,640	8,19,081	4'64	54	22,50,538	84,476	28,954	1'29	46	15,47,463	2,05,253	84,720	5'47
898	334	1,78,36,340	16,08,657	7,09,781	3'98	54	23,18,496	1,02,945	31,782	1'37	46	15,78,017	1,78,941	76,037	4'82
899	334	1,79,36,172	18,53,483	9,26,933	5'16	54	23,08,558	1,26,323	51,340	2'23	46	15,83,208	1,98,927	78,726	4'97
900	334	1,80,00,618	19,33,865	10,10,773	5'62	54	23,09,481	1,49,133	59,540	2'58	46	15,74,082	2,02,718	86,214	5'48
901	334	1,80,96,671	15,37,378	6,80,089	3'76	54	23,09,969	1,36,314	57,401	2'22	46	15,74,033	1,76,388	67,251	4'27
902	334	1,80,87,538	13,71,837	5,66,342	3'13	54	23,58,240	1,31,104	53,751	2'28	46	15,76,583	1,44,317	54,485	3'45

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	Page.		Page.		Page.
Ahmedabad-Parantij	60	Hirur-Shimoga	81	Gaskwar's Mehsana	79
Amraoti	75	Bombay, Baroda and Central India	56	Great Indian Peninsula	36
Assam-Bengal	42	Brahmaputra-Sultanpur	58	Guntakal Mysore frontier	45
Barai Light	71	Burma	48	Gwalior Light	83
Bengal and North-Western (Company's section)	69	Cherra-Companyganj	53	Hardwar-Delra	58
Bengal Central	34	Cooch Behar	84	Hindupur (Yesvantpur-Mysore frontier)	81
Bengal Doonars	67	Darjeeling-Himalayan	73	Howrah-Amra	73
Bengal Doonars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghur	62	Hyderabad-Godavari Valley	80
Bhawada extension	39	Dhond-Manmad.	37	Indian Midland	38
Bhavnagar-Gondal-Junagad-Porbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamnagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jetalsar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
Bikaner	85	East Indian	34	Jodhpur-Hyderabad (British section)	43
Dina-Goon-Baran	75	Gaskwar's Dabhoi	82		

DIX 7—continued.

Appendix 7.
Gain or loss.

(2, 11, 14, 45 and 46 of Report.)

LINES OWNED AND WORKED BY NATIVE STATES—(concl'd).															CLASS OF RAILWAYS.
DHRANGADRA.					MORVI.					TOTAL NATIVE STATE LINES.						Gauge.
31					31					TOTAL NATIVE STATE LINES.					Class No.
20 (d)					24 (a)					TOTAL NATIVE STATE LINES.						Railway.
DHRANGADRA.					MORVI.					TOTAL NATIVE STATE LINES.					Railway.
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.		Calendar year.
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	175	1,41,02,284	8,74,474	1,37,442	0'97	1879
...	...	...	...	...	...	...	...	...	...	207	1,93,63,033	9,09,770	3,22,303	1'66	1880
...	...	...	...	...	...	...	...	...	...	388	2,35,07,183	16,81,892	6,08,206	2'59	1881
...	...	...	...	...	...	...	...	...	...	387	2,65,78,353	20,55,765	8,49,132	3'19	1882
...	...	...	...	...	...	...	...	...	...	405	2,78,65,380	21,19,421	6,83,861	2'45	1883
...	...	...	...	...	...	...	...	...	...	491	3,03,22,129	24,35,407	10,90,205	3'39	1884
...	...	...	...	...	51	...	...	...	...	511	3,99,73,578	27,17,202	10,72,822	2'68	1885
...	...	...	...	...	68	6,88,671	34,822	...	...	648	4,81,66,137	31,07,207	13,48,074	2'80	1886
...	...	...	...	...	68	11,06,500	1,29,407	16,994	1'54	742	5,08,75,527	34,89,282	13,39,665	2'63	1887
...	...	...	...	...	68	11,77,842	1,62,087	21,984	1'87	867	6,23,95,740	39,33,377	16,21,474	2'60	1888
...	...	...	...	...	94	18,90,548	1,77,321	56,726	3'00	1,107	7,57,44,941	49,14,648	18,99,671	2'58	1889
...	...	...	...	...	94	20,25,863	2,95,277	87,550	4'32	1,178	7,99,25,154	60,98,528	23,27,496	2'91	1890
...	...	...	...	...	94	20,55,509	3,09,419	1,08,617	5'28	1,454	8,60,11,514	71,17,189	29,09,498	3'50	1891
...	...	...	...	...	94	21,04,519	3,09,171	1,30,370	6'19	1,474	9,19,77,951	76,94,314	32,91,364	3'58	1892
...	...	...	...	...	94	21,57,365	3,22,817	1,45,732	6'75	1,646	10,02,41,414	85,78,127	39,56,647	3'93	1893
...	...	...	...	...	94	22,23,526	3,20,348	1,42,667	6'42	1,656	10,33,78,060	96,02,002	46,57,448	4'42	1894
...	...	...	...	...	94	23,99,396	3,69,972	2,00,127	8'34	1,902	11,00,13,010	97,80,441	46,77,960	4'45	1895
...	...	...	...	...	94	23,82,315	3,86,883	1,81,621	7'62	1,937	11,58,44,053	1,06,81,174	53,38,473	4'78	1896
...	5,830	...	...	...	94	24,76,757	4,27,484	2,11,642	8'55	2,017	12,38,19,063	1,05,20,167	51,89,196	4'19	1897
21	5,93,589	23,395	10,617	1'79	94	24,79,448	3,76,220	1,63,990	6'61	2,078	13,98,01,222	1,08,95,895	54,85,189	3'90	1898
21	6,06,104	63,876	20,978	3'46	94	25,06,414	4,20,486	1,70,053	6'78	2,571	15,00,67,560	1,26,38,392	67,81,117	4'32	1899
21	5,86,534	57,366	18,934	3'24	94	27,28,115	4,23,308	1,58,794	5'82	2,870	16,09,04,092	1,58,05,693	78,23,412	4'90	1900
21	5,86,100	46,196	11,765	2'01	94	27,59,452	3,58,683	1,25,534	4'35	3,047	17,12,58,222	1,47,93,215	73,29,974	4'32	1901
21	5,85,911	37,721	8,075	1'38	94	27,32,748	3,05,058	1,13,299	4'56	3,216	18,09,83,912	1,57,37,926	77,18,927	4'26	1902

* Information is not available.

Jorhat	54
Karaikkal-Peralam	88
Khamgaon	75
Kolar Gold-fields	78
Kolhapur	82
Ledo and Tikak-Margherita Colliery	68
Lucknow-Bareilly	43
Ludhiana-Dhuri-Jakkal	84
Madras	56
Madras (North-East line)	40
Mayavaram-Mutupet	47
Morvi	87
Mymensingh-Jamalpur-Jagannath-ganj	65
Mysore-Nanjangud	82
Mysore section (Southern Mahratta).	44
Nagda-Ujjain	76

Nilgiri	66
Nizam's Guaranteed State	78
North Western State	52
Oudh and Rohilkhand State	51
Palanpur-Deesa (State portion)	41
Palanpur-Deesa (Darbar portion)	77
Petlad-Cambay (Anand-Tarapur section)	77
Petlad-Cambay (Tarapur-Cambay section)	77
Pondicherry	89
Powayan Light	70
Rajpipla	83
Rajpura-Bhatinda	83
Rajputana-Malwa	40
Rasghat-Krishnagar	78
Rohilkhand and Kumaon	70

Sagauli-Raxaul	69
Shoranur-Cochin	80
South Bihar	62
South Indian	46
Southern Mahratta	44
Southern Punjab	64
Tanjore District Board (Mayavaram-Mutupet)	59
Tapti Valley	64
Tarakeshwar-Magra	71
Tarakesur	63
Tezpur-Balipara	72
Tirhoot State	42
Udaipur-Chitor	85
Vijapur-Kalol-Kadi	79
Wardha Coal	37
West of India Portuguese	88

Appendix 7.
Gain or loss.

Gain or loss to the State from railway outlay, as also the

(Referred to in paragraphs

CLASS OF RAILWAYS.		LINES IN FOREIGN TERRITORY.								
GAUGE.		5' 3"								
Class No.		21 (A)				22 (A)				
Railway.		WEST OF INDIA PORTUGUESE.				KARAIKKAL-PERAKAM.				
Calendar year.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
	Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.	
1879	..	..	..	..	..	..	..	..	..	..
1880	..	..	..	..	..	..	..	..	..	..
1881	..	..	..	..	..	..	..	..	..	..
1882	..	..	..	..	..	..	..	..	..	..
1883	..	..	..	..	..	..	..	..	..	..
1884	..	..	..	..	..	..	..	..	..	..
1885	..	..	..	..	..	..	..	..	..	..
1886	..	..	..	..	..	..	..	..	..	..
1887	47	..	..	..	..	..	..	..	..	..
1888	51	..	..	..	..	..	..	..	..	..
1889	51	..	..	..	..	..	..	..	..	..
1890	51	1,63,14,170	4,75,437	67,001	0'41	..	..	..	..	..
1891	51	1,63,22,139	5,44,014	1,21,583	0'74	..	..	..	..	..
1892	51	1,63,00,001	3,74,681	11,107	0'07	..	..	..	..	..
1893	51	1,63,74,816	5,86,705	1,65,069	1'01	..	..	..	..	..
1894	51	1,63,19,813	5,43,673	1,19,332	0'73	..	..	..	..	..
1895	51	1,63,31,056	5,83,077	1,12,135	0'69	..	4,759	..	..	..
1896	51	1,63,80,444	1,97,176	-78,893	..	..	89,009	..	..	..
1897	51	1,63,40,108	1,79,722	-1,60,785	..	..	3,93,082	..	..	..
1898	51	1,63,97,448	2,20,870	-1,10,145	..	14	7,21,665	19,733	7,855	1'09
1899	51	1,63,06,412	5,72,475	1,64,665	1'01	14	7,25,344	27,685	9,037	1'25
1900	51	1,63,29,262	3,33,596	-66,845	..	13	7,19,715	24,603	9,478	1'30
1901	51	1,63,42,023	3,68,120	-48,589	..	15	7,23,786	30,450	13,314	1'84
1902	51	1,63,08,793	3,54,657	51,387	0'37	15	7,23,786	32,736	14,619	2'02

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	Page.		Page.		Page.
Ahmedabad-Parantij	66	Bihar-Shimoga	81	Geokwar's Melsana	79
Amraoti	75	Bombay, Baroda and Central India	56	Great Indian Peninsula	36
Assam-Bengal	42	Brahmaputra-Sultanpur	58	Guntakal-Mysore frontier	45
Assam Light	71	Burma	48	Gwalior Light	83
Bengal and North-Western (Com- pany's section).	69	Cherra-Companyganj	53	Hardwar-Dehra	58
Bengal Central	54	Cooch Behar	84	Hindupur (Yesvantpur-Mysore fron- tier)	81
Bengal Doonars	67	Darjeeling-Himalayan	73	Howrah-Armta	73
Bengal Doonars extensions	67	Delhi-Umballa-Kalka	62	Howrah-Sheakhala	74
Bengal-Nagpur	35	Deoghut	69	Hyderabad-Godavari Valley	80
Beawada extension	39	Dhond-Manmad	37	Indian Midland	38
Bhavnagar-Gondal-Junagad-Portbandar	86	Dhrangadra	87	Jammu and Kashmir (Native state section)	84
Bhopal-Itarsi (British section)	38	Dibru-Sadiya	68	Jamunagar	86
Bhopal-Itarsi (Native state section)	76	Eastern Bengal State	50	Jalsar-Rajkot	86
Bhopal-Ujjain	76	East Coast State	50	Jodhpur	85
Bikaner	85	East Indian	54	Jodhpur-Hyderabad (British section)	12
Bina-Coona-Baran	75	Geokwar's Dabhoi	82		

DIX 7—concluded.

Appendix 7.
Gain or loss.

income derived by railways which are not guaranteed by the State.

(2, 11, 14, 45 and 46 of Report.)

LINES IN FOREIGN TERRITORY—(concl'd).										CLASS OF RAILWAYS.
3' 3 1/2"					TOTAL LINES IN FOREIGN TERRITORY.					Gauge.
22 (e)										Class: No.
PONDICHERRY.										Railway.
Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Length of line open.	Capital outlay.	Gross earnings.	Net traffic earnings.	Per cent. on Capital outlay.	Calendar year.
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
Miles.	Rs.	Rs.	Rs.		Miles.	Rs.	Rs.	Rs.		
...	...	...	...	...	...	...	...	...	...	1879
...	...	...	...	...	...	...	...	...	...	1880
...	...	...	...	...	...	...	...	...	...	1881
...	...	...	...	...	...	...	...	...	...	1882
...	...	...	...	...	...	...	...	...	...	1883
...	...	...	...	...	...	...	...	...	...	1884
...	...	...	...	...	...	...	...	...	...	1885
...	...	...	...	...	...	...	...	...	...	1886
...	...	...	...	...	41	Information not available.	...	...	...	1887
...	...	...	...	...	51	...	...	...	...	1888
...	...	...	...	...	51	...	...	...	...	1889
...	5,68,543	...	...	...	51	1,68,82,713	4,75,437	67,001	0'40	1890
8	5,68,543	20,106	20,107	3'54	59	1,68,00,692	5,64,120	1,41,690	0'84	1891
8	5,68,543	15,341	15,341	2'70	59	1,68,69,444	3,90,022	26,448	0'16	1892
8	5,68,543	18,014	18,014	3'17	59	1,68,43,359	6,04,719	1,83,083	1'09	1893
8	5,68,543	27,958	18,425	3'24	59	1,68,81,356	5,71,631	1,37,757	0'82	1894
8	5,68,543	50,328	22,711	3'99	59	1,69,05,268	6,33,405	1,34,847	0'79	1895
8	5,68,543	39,081	17,776	3'13	59	1,70,07,996	3,35,857	-61,117	...	1896
8	5,68,543	36,502	17,169	3'02	59	1,75,01,793	2,16,314	-1,43,616	...	1897
8	5,68,543	31,830	14,394	2'53	73	1,75,87,656	2,72,433	-87,896	...	1898
8	5,68,543	45,305	21,627	3'80	73	1,75,90,319	6,45,445	1,05,329	1'11	1899
8	5,68,543	59,583	23,193	4'08	74	1,76,27,520	4,17,787	-34,174	...	1900
8	5,68,543	60,174	32,366	5'69	74	1,76,34,352	4,58,744	-2,909	...	1901
8	5,68,543	70,478	37,960	6'68	74	1,76,01,122	4,57,871	1,03,966	0'59	1902

Jorhat	54	Nilgiri	66	Sagauli-Raxaul	60
Karaikkal-Peralam	88	Nizam's Guaranteed State	78	Shoranur-Cochin	80
Kharagaon	75	North Western State	52	South Behar	62
Kolar Gold-fields	78	Oudh and Rohilkhand State	51	South Indian	46
Kolhapur	82	Palampur-Deesa (State portion)	41	Southern Mahratta	44
Ledo and Itak-Margherita Colliery	68	Palampur-Deesa (Darbar portion)	77	Southern Punjab	64
Lucknow-Bareilly	43	Pelad-Cambay (Anand-Tarapur section)	77	Tanjore District Board (Mayavaram-Mutupet)	59
Ludhiana-Dhuri-Jakhal	84	Pelad-Cambay (Tarapur-Cambay section)	77	Tapti Valley	64
Madras	56	Pondicherry	89	Tarakeshwar-Magra	71
Madras (North-East line)	47	Powayan Light	80	Tarkessur	62
Mayavaram-Mutupet	87	Rajpipla	70	Tezpur-Balipara	72
Morvi	87	Rajpura-Bhatinda	83	Tirhoot State	42
Mymensingh-Jamalpur-Jagannathganj	65	Rajputana-Malwa	83	Udaipur-Chitor	85
Mysore-Nanjangud	82	Rangghat-Krishnagar	40	Vijapur-Kaloi-Kadi	79
Mysore section (Southern Mahratta)	44	Rohilkhand and Kumaon	72	Wardha Coal	37
Nagda-Ujjain	76		70	West of India Portuguese	88

Appendix 8.
Sterling capital authorised.

APPEN

Capital authorised to be raised for each Guaranteed railway and State line leased to

(Referred to in paragraph

Classification.	RAILWAYS.	AMOUNT AUTHORISED TO BE RAISED BY THE COMPANIES UP TO THE 31ST DECEMBER 1902.				AMOUNT RAISED BY THE COMPANIES AND TAXY OF STATE IN ENGLAND TO THE		
		Share Capital.	Debentures.	Debenture stock.	Total.	Share Capital.	Debentures.	Debenture stock.
							Cash received.	Cash received.
		£	£	£	£	£	£	
<i>Guaranteed.</i>								
8 (a)	Bombay, Baroda and Central India	7,550,300	3,005,400	...	10,555,700	7,528,628	3,004,400	...
10 (a)	Madras	10,257,630	1,563,700	...	11,821,330	10,257,630	1,560,197	...
	Total	17,807,930	4,569,100	...	22,377,030	17,786,258	4,564,597	...
<i>State lines leased to Companies.</i>								
3 (a)	Bengal Central	500,000	500,000	...	1,000,000	500,000	...	...
4 (a) } (d) {	Bengal-Nagpur	3,000,000	1,700,000	...	4,700,000	3,000,000	1,699,875	...
	Do. Extension . . . . .	...	2,805,000	...	2,805,000	...	2,802,625	...
7 (d)	Indian Midland	3,000,000	3,654,100	...	6,654,100	3,000,000	3,651,994	...
14 (a)	Assam-Bengal	1,500,000	1,355,900	...	2,855,900	1,500,000	1,353,650	...
17 (b)	Lucknow-Bareilly section (Rohilkund and Kumaon) . . . . .	...	147,000	...	147,000	...	147,000	...
21 (a)	Southern Mahratta	3,500,000	1,193,100	...	4,693,100	3,491,540	1,192,350	...
21 (b)	Mysore section (Southern Mahratta) . . . . .	...	...	1,200,000	1,200,000	...	...	1,200,000
23 (a)	Burma	2,000,000	...	1,250,000	3,250,000	2,000,000	...	1,199,819
	Total	13,500,000	11,355,100	2,450,000	27,305,100	13,491,540	10,847,494	2,399,819
	Grand Total	31,307,930	15,924,200	2,450,000	49,687,130	31,277,798	15,412,091	2,399,819

Details of Debenture loans on 31st December 1902 and the dates at which the loans expire.

Bombay, Baroda and Central India Railway—

£			
100,000	2½ per cent.		5th May 1903.
149,400	2½ "		15th June 1903.
100,500	3 "		8th July 1903.
500,000	2½ "		10th July 1903.
100,000	2½ "		1st April 1904.
120,000	3½ "		1st February 1905.
100,700	3 "		8th July 1905.
536,000	3 "		1st December 1905.
500,000	3½ "		30th June 1907.
198,800	3½ "		8th July 1908.
300,000	3½ "		7th November 1908.
300,000	3½ "		1st January 1909.
<hr/>			
3,005,400			

Madras Railway—

£			
100,000	2½ per cent.		31st December 1903.
103,100	2½ "		30th June 1904.
300,000	3½ "		30th June 1904.
100,000	3 "		31st December 1905.
111,500	3 "		30th June 1906.
140,000	3½ "		30th June 1906.
100,000	3½ "		30th April 1907.
200,000	3½ "		31st October 1907.
81,400	3½ "		31st December 1907.
53,300	3½ "		31st December 1907.
174,400	3½ "		30th June 1909.
<hr/>			
1,563,700			

Appendix 9.
Budget allotments.

Amount allotted to each Railway Administration for expenditure on capital account
(Referred to in para

CLASS No. RAILWAY.	1 (a). EAST INDIAN.					2 (a), (b), (c) AND (d). EASTERN BENGAL STATE.					3 (a) BENGAL.							
	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.	Capital actually expended.	Mileage opened during the year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.	Capital actually expended.	Mileage opened during the year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.					
Year.																		
1893-94	72,00,000	27,25,000	24,11,000	24,15,772	...	18,30,000	14,68,000	10,04,000	10,56,438	...	6,52,000	1,55,000	47,000					
1894-95	66,10,000	24,00,000	25,41,000	28,81,382	50'97	21,75,000	9,00,000	6,48,000	6,03,660	...	5,58,000	62,000	58,000					
1895-96	56,70,000	31,00,000	21,50,000	21,11,142	27'32	13,00,000	12,00,000	14,16,000	14,25,285	...	5,06,000	1,01,000	82,000					
1896-97	1,00,00,000	11,22,000	68,00,000	64,94,213	4'81	40,00,000	40,75,000	45,59,000	42,79,950	...	17,47,000	7,25,000	9,04,000					
1897-98	1,20,00,000	1,05,00,000	1,10,00,000	1,28,04,101	1'25	69,14,000	71,28,000	49,22,000	56,02,739	...	14,83,000	7,00,000	6,79,000					
1898-99	1,50,00,000	1,63,65,000	1,46,00,000	1,25,59,624	5'61	1,07,69,000	66,57,000	29,82,000	32,05,840	9'49	27,10,500	4,00,000	7,21,000					
1899-1900	1,28,00,000	1,50,00,000	1,05,00,000	1,08,81,508	12'48	78,49,000	64,97,000	52,43,000	51,50,381	21'82	16,60,000	4,00,000	4,00,000					
1900-01	1,27,50,000	1,18,10,000	1,69,70,000	1,68,06,566	3'22	97,60,000	61,55,000	51,95,000	43,06,000	53'84	2,63,000	2,50,000	2,50,000					
1901-02	1,27,50,000	1,27,50,000	1,47,51,000	1,44,15,000	...	96,08,000	77,00,000	82,01,000	82,92,190	6'97	3,03,000	1,50,000	1,78,000					
1902-03	1,27,50,000	1,27,50,000	1,42,00,000	...	87'75	1,14,20,000	90,99,000	42,78,000	...	36'75	2,74,000	2,00,000	2,41,000					
4 (a) to (d). ODISHA AND KOHILMUND STATE.													5 (a), (b) & (c). NORTH WESTERN STATE.			7 (a). GREAT INDIAN.		
1893-94	5,22,400	40,85,000	21,04,000	21,20,616	48'56	1,40,00,000	92,63,000	96,28,800	7,39,205	...	18,24,100	32,81,000	2,48,000					
1894-95	21,71,000	22,19,000	27,18,000	25,18,142	58'07	29,91,000	91,21,000	1,21,20,000	1,14,89,842	...	15,28,000	15,01,000	17,33,000					
1895-96	44,06,000	30,43,000	20,81,000	28,28,276	...	1,67,00,000	1,22,27,000	1,52,38,000	1,52,72,545	103'29	25,46,000	10,73,000	6,70,000					
1896-97	22,75,000	22,34,000	24,77,000	21,21,947	49'76	1,22,92,000	1,37,24,000	1,21,17,000	1,55,79,773	263'88	16,02,000	16,35,000	3,43,000					
1897-98	21,10,000	21,70,000	21,79,000	22,82,210	45'03	21,88,000	25,10,000	65,69,000	37,78,432	...	12,90,000	40,47,000	14,24,000					
1898-99	22,35,000	22,95,000	24,59,000	44,20,090	128'39	76,67,000	29,46,000	77,21,000	73,18,184	...	45,75,000	63,64,000	20,73,000					
1899-1900	71,35,000	24,73,000	28,75,000	29,81,021	37'05	51,99,000	54,24,000	46,77,000	43,87,895	124'61	45,45,000	45,34,000	20,09,000					
1900-01	40,50,000	20,35,000	29,79,000	29,63,018	80'77	97,49,000	42,28,000	64,06,000	22,50,202	128'13	37,69,000	18,50,000	29,81,000					
1901-02	20,44,000	22,31,000	22,91,000	22,94,125	...	25,61,000	68,87,000	29,15,000	23,94,914	...	18,42,000	12,63,000	8,16,000					
1902-03	40,78,000	28,78,000	47,43,000	...	...	92,92,000	90,26,000	17,19,000	...	31'00	21,20,000	2,30,000	16,25,000			
9 (f), (g) AND (j). KARNATAKA-MALWA.					10 (a), (b) AND (f). MADRAS.					14 (a). ASSAM.								
1893-94	27,00,000	44,19,000	48,82,000	48,60,479	17'28	9,75,684	10,55,000	4,72,000	2,89,210	...	1,22,40,000	1,26,09,000	98,11,000					
1894-95	20,45,000	23,20,000	28,34,000	20,20,064	...	11,44,000	6,16,000	2,98,000	1,28,002	...	1,08,24,000	22,95,000	1,07,75,000					
1895-96	40,20,000	24,50,000	26,74,000	28,63,244	...	5,98,731	9,62,000	3,41,000	2,29,454	8'55	2,09,58,000	1,47,17,000	1,42,82,000					
1896-97	16,40,000	14,44,000	3,47,000	60,693	25'21	2,21,700	5,66,000	6,02,000	4,85,779	...	2,24,55,000	1,75,00,000	1,17,06,000					
1897-98	9,52,000	6,55,000	1,20,000	1,27,224	...	11,17,000	12,18,000	2,78,000	3,05,723	...	1,08,55,000	1,23,00,000	1,20,94,000					
1898-99	17,41,000	15,00,000	6,63,000	1,15,006	...	45,88,000	55,05,000	9,07,000	7,79,654	...	1,44,15,000	1,15,20,000	1,20,24,000					
1899-1900	23,65,000	9,00,000	18,00,000	11,50,566	...	16,00,000	26,04,000	20,16,000	16,06,789	...	1,24,00,000	80,00,000	1,00,36,000					
1900-01	20,80,000	18,00,000	27,44,000	20,89,202	...	60,73,000	31,12,000	39,47,000	42,77,502	...	1,26,92,000	1,26,10,000	91,60,000					
1901-02	28,14,000	21,28,000	14,91,000	15,05,915	...	46,76,000	47,00,000	41,28,000	37,31,800	28'75	83,72,000	83,45,000	75,00,500					
1902-03	24,14,000	20,01,000	24,04,000	...	54'25	68,25,000	52,09,000	58,54,000	...	78'75	67,34,000	62,04,000	72,44,000					
18 (c). JODHPUR-BIKANER [JODHPUR-HYDERABAD (BRITISH SECTION)].					21 (a) TO (c). SOUTHERN MADRAS.					22 (a), (c) SOUTH.								
1893-94	...	...	...	...	...	25,56,000	18,57,000	5,67,000	5,07,466	50'55	26,29,900	11,37,000	7,25,000
1894-95	...	...	...	...	...	2,40,000	14,69,000	7,31,000	6,21,842	...	17,74,000	6,00,000	2,00,000
1895-96	...	...	...	...	...	11,77,000	12,62,000	8,18,000	7,56,237	...	14,06,000	8,50,000	4,50,000
1896-97	...	...	...	...	...	15,01,000	14,75,000	9,20,000	9,04,205	...	6,15,000	5,00,000	1,50,000
1897-98	...	...	25,000	7,039	...	19,70,000	13,07,000	9,22,000	2,17,542	...	2,35,000	5,00,000	2,70,000			
1898-99	23,75,000	1,00,000	10,02,000	9,70,528	...	18,65,000	15,20,000	7,95,000	2,12,707	...	14,70,000	18,44,000	20,00,000					
1899-1900	24,21,000	8,90,000	10,00,000	8,42,349	...	9,65,000	6,00,000	4,75,000	4,60,852	...	5,00,000	5,00,000	10,83,000					
1900-01	17,03,000	10,00,000	3,95,000	3,23,659	68'49	12,10,000	6,00,000	6,06,000	7,38,060	...	60,00,000	12,00,000	43,12,000					
1901-02	5,000	1,25,000	2,25,000	1,28,899	...	2,25,000	6,00,000	4,28,000	1,26,593	...	1,28,44,000	1,16,44,000	91,37,000					
1902-03	20,500	40,000	69,000	...	83'00	10,70,000	10,70,000	6,90,000	...	...	53,00,000	53,00,000	52,93,000			

NOTE.—(1) The credit items represent the amounts by which credits under suspense and on account of capital outlay
(2) Only the figures for the year 1902-03 include information relating to Frontier Reserve material, "Stores"
* Transferred partly to the Bengal-Nagpur
† Includes Rs. 29,72,000 for special items
‡ Includes Rs. 1,43,000 for special items
§ Includes Rs. 69,40,000 for special items
|| Includes Rs. 2,26,12,000 for special items

DIX 9.

during each official year from 1893-94 and the amount actually expended.
graph 16 of Report).

Appendix 9.
Budget allotments.

CENTRAL.		4 (a), (b) AND (d). BENGAL-NAGPUR.					8 EAST COAST STATE.					CLASS & NO. RAILWAY.	
Capital actually expended.	Mileage opened during the year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.	Capital actually expended.	Mileage opened during the year.	Capital asked for.	Capital at first allotted.	Capital allotted on revision of Budget.	Capital actually expended.	Mileage opened during the year.	Particulars.	
													Year.
1,38,305	...	20,60,000	23,98,000	13,73,000	11,94,152	...	1,00,04,600	91,85,000	99,73,000	97,64,893	174'31	1893-94	
53,730	...	8,78,000	6,48,000	3,16,000	3,33,482	...	90,66,000	176,10,000	78,35,000	83,21,831	90'71	1894-95	
95,662	...	7,07,000	6,94,000	20,98,000	21,12,021	...	53,00,000	53,00,000	87,30,000	87,63,811	137'37	1895-96	
9,55,582	...	2,55,84,000	1,69,64,000	1,55,77,000	1,37,83,306	...	1,03,78,000	99,78,000	1,15,66,000	1,10,43,810	47'15	1896-97	
6,97,668	...	3,82,23,000	2,12,84,000	1,94,00,000	1,84,86,149	...	1,06,30,000	1,06,30,000	90,73,000	82,48,643	2'66	1897-98	
6,16,262	...	2,77,56,000	2,07,00,000	1,86,10,000	1,84,49,088	323'53	85,18,000	90,44,000	89,58,000	83,86,098	932'38	1898-99	
1,07,764	...	2,35,10,000	1,77,00,000	1,77,00,000	1,70,70,994	5'75	20,55,000	29,00,000	50,95,000	20,09,719	...	1899-1900	
2,36,634	...	1,47,72,000	1,05,00,000	81,04,000	70,81,187	92'54	34,25,000	14,00,000	11,40,000	...	7'16	1900-01	
1,78,232	...	1,82,39,000	1,74,51,000	1,60,39,000	1,44,06,124	2'25	...	...	...	...	...	1901-02
...	...	2,84,45,000	2,08,09,000	1,74,93,000	...	180'00	...	...	...	...	...	1902-03
PENINSULA.		7 (d) AND (g). INDIAN MIDLAND.					8 (a). BOMBAY, BARODA AND CENTRAL INDIA.						
4,80,123	...	16,40,800	21,49,000	11,48,000	8,78,552	...	12,30,000	13,05,000	10,35,000	9,40,633	...	1893-94	
16,58,750	...	12,99,810	22,07,000	9,25,000	7,46,722	...	15,95,000	9,75,000	17,70,000	16,65,198	...	1894-95	
5,69,796	...	3,59,700	2,86,000	8,89,000	4,86,315	1'77	30,40,000	25,50,000	28,13,000	27,53,588	...	1895-96	
4,00,409	1'07	1,00,66,980	96,07,000	68,14,000	70,19,373	...	39,75,000	47,11,000	31,02,000	28,83,994	...	1896-97	
15,45,812	...	35,55,000	26,01,000	29,24,000	30,13,399	47'83	50,00,000	67,46,000	27,00,000	25,51,368	...	1897-98	
28,57,021	...	33,00,000	20,10,000	20,84,000	19,24,558	68'21	53,50,000	66,43,000	45,91,000	40,21,367	...	1898-99	
26,74,659	29'00	19,59,000	17,50,000	23,46,000	19,97,374	...	49,00,000	41,00,000	31,82,000	41,49,383	...	1899-1900	
36,93,175	51'06	22,46,000	7,30,000	17,79,000	13,15,142	...	41,50,000	10,00,000	13,08,000	14,72,183	...	1900-01	
3,73,378	...	33,50,000	33,50,000	27,49,000	28,06,847	...	30,25,000	28,00,000	37,72,000	38,24,169	...	1901-02	
...	...	32,48,000	29,13,000	14,74,000	...	...	16,25,000	16,25,000	35,09,000	...	...	1902-03
BHOVAL.		16 (b). BHOVAL AND NORTH-WESTERN (TIRHOOT SECTION).					17 (b). ROHILKHAND AND KUMAON (LUCKNOW-BAREILLY SECTION).						
66,50,636	...	2,06,500	1,99,000	1,82,000	1,24,598	...	2,20,000	4,41,000	2,78,000	2,10,363	7'37	1893-94	
1,66,51,385	...	10,36,000	8,00,000	5,03,000	2,58,104	...	2,75,000	2,80,000	1,66,000	1,17,806	1'75	1894-95	
1,37,36,608	158'90	7,71,000	7,00,000	6,03,000	5,08,232	...	2,20,000	2,05,000	3,08,000	2,09,454	...	1895-96	
7,15,55,591	201'73	4,06,000	43,48,000	24,41,000	16,99,234	...	4,06,000	3,43,000	2,37,000	2,00,608	...	1896-97	
1,18,24,159	...	73,11,000	71,00,000	53,50,000	47,24,254	...	3,25,000	8,28,000	4,48,000	3,57,384	...	1897-98	
1,24,72,607	53'82	59,50,000	62,00,000	40,70,000	34,38,341	...	2,20,000	1,50,000	1,53,000	1,28,139	...	1898-99	
1,01,54,508	20'31	35,01,000	24,00,000	30,00,000	32,77,918	73'17	1,60,000	69,000	69,000	...	...	1899-1900
90,29,828	142'20	47,86,000	33,38,000	50,88,000	53,92,450	92'18	1,12,000	3,74,000	3,74,000	3,63,582	...	1900-01	
70,47,015	10'75	30,46,000	25,46,000	27,48,000	25,99,442	11'36	2,95,000	2,95,000	4,80,000	4,86,328	...	1901-02	
...	54'50	31,85,000	21,80,000	33,63,000	...	66'00	13,40,000	11,40,000	9,88,000	...	...	1902-03
IND (f). INDIAN.		23 (e). BURMA.					TOTAL.						
7,50,345	...	54,76,400	43,82,000	35,13,800	33,39,972	12'89	7,16,83,384	6,23,10,000	5,44,87,600	4,35,68,414	217'46	1893-94	
1,85,032	...	36,31,000	36,28,000	33,93,000	33,48,504	15'46	5,33,00,810	4,187,01,000	3,86,93,030	3,57,60,819	220'90	1894-95	
2,82,340	...	15,54,700	11,11,000	16,09,000	16,71,732	141'07	7,05,01,131	5,29,22,000	6,20,00,000	6,02,00,520	374'77	1895-96	
1,49,527	...	8,75,000	76,18,000	71,33,000	66,22,514	...	11,38,36,680	9,97,19,000	9,17,89,000	8,82,53,584	390'21	1896-97	
2,07,266	...	77,10,000	77,10,000	55,16,000	52,35,328	50'00	13,31,68,000	10,97,61,000	8,94,80,000	8,79,43,393	146'77	1897-98	
29,58,798	...	99,59,000	1,00,00,000	70,00,000	72,12,233	...	18,45,14,500	11,50,75,000	9,43,75,000	8,81,38,509	831'37	1898-99	
10,48,002	4'49	1,18,13,000	80,00,000	78,00,000	78,14,726	57'21	11,42,97,000	8,76,41,000	9,43,33,000	9,12,64,483	404'80	1899-1900	
38,97,329	1'45	1,02,85,000	88,00,000	97,85,000	98,58,957	130'66	11,65,05,000	7,30,84,000	8,30,75,000	8,03,15,467	247'71	1900-01	
88,12,176	...	1,22,00,000	96,74,000	95,64,000	92,05,122	53'70	11,06,99,000	110,32,44,000	8,28,55,500	8,99,99,982	153'78	1901-02	
...	128'00	1,00,00,000	54,80,000	58,50,000	...	133'25	11,80,89,500	11,00,00,000	110,34,58,000	...	878'25	1902-03	

transferred from one railway system to another exceed the amounts allotted and expended on works of construction.
and "Collieries."
railway and partly to the Madras railway from the 1st January 1901,
not included in the statement.
not included in the statement.
not included in the statement.
not included in the statement.

Appendix 10.
Annual capital outlay.

Capital expenditure in thousands of rupees

(Referred to in paragraphs

Railways (including branches worked.)	EXPENDITURE ON NEW LINES IN THOUSANDS OF RUPEES EXCLUDING SUSPENSE.											EXPENDITURE ON ROLLING STOCK IN THOUSANDS OF RUPEES EXCLUDING SUSPENSE.									
	YEARS.											YEARS.									
	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	
East Indian	28,32	11,36	11,96	18,06	80,80	1,07,94	62,09	39,09	33,15	28,67	9,57	3,60	16,91	12,02	27,27	36,32	1,06,52	64,34	73,57	34,29	
Eastern Bengal	6,80	61	18	4	3,00	13,89	29,15	31,10	40,07	35,32	3,53	55	8,26	7,30	16,63	10,52	18,21	4,57	13,01	18,12	
Bengal Central	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11,59	4,37	1,95	27	3	4
Bengal-Nagpur	6,88	80	1,36	69,32	1,71,83	1,71,20	1,67,01	79,14	40,25	1,42,51	17,89	26	2,15	2,26	32	1,13	33,92	27,35	4,29	57,16	
Ordh and Rehilkhand State	47,19	30,21	15,14	23,03	39,38	23,72	39,27	27,17	9,30	20,61	60	57	8,06	59	3,51	7,06	5,68	79	5,85	17,93	
North Western State	57,85	77,51	1,15,54	2,13,31	1,26,86	62,24	41,82	41,48	54,68	49,91	1,82	87	2,08	10,63	36,31	21,23	5,70	79	12,30	22,21	
Great Indian Peninsula	12,76	34,83	65,36	27,30	65,88	80,87	67,71	18,77	2,19	4,12	4,75	9,85	2,68	2,40	7,85	1,63	8,27	13,36	21,27	12,27	
Bombay, Baroda and Central India	11	6	6,03	18,76	16,82	49,86	60,95	24,05	13,72	9,76	6,85	5,55	6,94	2,08	21	6,00	13,84	13,34	4,24	2,51	
Nizam's Guaranteed State	...	...	...	...	15,32	40,79	78,37	37,06	...	...	16	1	27	2,22	49	3,06	12,80	12,67	1,51	5,86
Madras	...	6,45	...	24,41	10,91	7,47	11,38	20,80	54,50	39,56	2,29	45	33	1,65	6,57	1,47	3,66	3,26	10,11	25,43	
Besgal Doars.	...	...	...	...	71	1,86	7,98	18,19	15,61	15,36	...	...	1	1	52	1	4,09	2,32	1,40	7
Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...	1,37	60	1,06	78	14	20	16	2,52	1,13	...
Assam Bengal	39,62	1,06,03	1,39,34	1,11,06	1,09,69	1,35,82	1,05,81	97,65	88,10	71,24	95	4,63	17,52	16,29	4,25	2,65	1,63	87	3,05	7,69	
Deoghar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bengal and North-Western	...	3	21,09	32,03	1,04,74	62,86	70,90	28,89	30,86	26,15	7,49	14	9,03	2,25	9,98	24,03	15,84	18,58	18,47	19,49	
Robilkund and Kumaon	1,58	1,54	96	4	...	...	...	...	3	43	3	2	33	18	2	2,42	1,02	3,39	2,06	6,86
Rajputana-Malwa	50,13	54,05	14,22	18,44	12,09	8,58	2,67	59	21	1,07	50	4,86	1,12	2,15	-12	-1,59	3,07	1,83	89	8,70	
Jodhpur-Dikaner	...	...	...	23	10,04	25,40	4,86	6,61	4,00	6,77	1,60	-1,56	-11	39	...	6,08	14,14	22	2,22	1,95
Udaipur-Chitor	...	3,05	10,26	18	26	1,13	2,16	45	21	...	...	...	...	...	2,25	5	...	...	42	...
Bhavnagar-Gondal-Juagad-Portbandar	9,84	17	16	9,24	9,30	5,43	...	...	...	...	17	8	2	1,80	87	1,24	8	16	80	35
Southern Mahratta	...	...	...	...	...	...	...	...	...	...	43	1,30	37	45	1,40	5,34	3,42	1,44	1,88	26
South Indian	-19,43	7,49	1,00	53	5,19	-27,05	2,70	14,00	36,50	73,39	12,78	1,59	87	29	1,22	43	73	26	-3	1,46	
Burma	40	...	67,44	43,40	39,67	43,29	62,52	50,63	56,41	35,77	38	10,84	9,93	8,80	1,50	6,36	11,96	4,74	20,85	26,60	
Morvi	...	...	...	...	...	...	...	2,32	11	3	41	24	-10	24	2	12	4	6	10	-12
Baral Light	...	...	...	...	...	...	...	...	...	...	...	...	...	2,49	1,77	27	...	...	-39	...
Tarakeshwar-Magra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18	...	...	...	...
Ranaghat-Krishnagar	...	...	...	...	1,01	5,01	5	...	...	...	...	...	...	...	...	1,20	...	24	...	...
Tespur-Balipara	...	2,32	62	...	...	...	...	...	...	...	...	58	27	18	...	6	12	...	...	...
Darjeeling-Himalayan	...	...	...	...	...	...	...	...	...	...	46	-42	1	24	2	-25	54	-16	1	9
Howrah-Amra	...	...	...	3,62	4,01	29	5	1	8	...	...	...	...	1,08	1,26	99	11	46	...	72
Howrah-Sheakhala	...	...	...	1,31	2,81	33	...	...	...	...	...	...	...	...	1,17	48	...	...	...	...
Jorhat	...	...	...	...	...	...	...	...	...	...	16	4	6	-7	38	20	...	...	-31	4
Kalka-Simla	...	...	...	...	...	...	3,39	4,51	23,53	49,99	...	...	...	...	...	...	...	...	...	1,07
TOTAL	2,42,03	3,36,51	1,70,60	6,07,51	8,39,33	8,77,93	8,26,24	5,42,51	5,03,52	6,11,46	74,19	44,75	98,07	78,70	1,37,44	1,43,71	2,67,68	1,77,67	1,08,73	1,84,05	

DIX 10.

during each of the past 10 years.

Appendix 10.
Annual capital outlay.

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EXPENDITURE ON IMPROVEMENT OF EXISTING LINE IN THOUSANDS OF RUPEES EXCLUDING SUSPENSE.											TOTAL CAPITAL EXPENDITURE IN THOUSANDS OF RUPEES INCLUDING SUSPENSE.											RAILWAYS (INCLUDING BRANCHES WORKED).
YEARS.											YEARS.											
1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.		1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.		
20,76	19,95	14,28	15,75	19,82	28,96	40,78	48,92	64,24	58,69	66,09	33,52	62,80	70,12	1,42,83	1,66,97	2,18,13	1,62,49	1,41,12	1,15,82	1,15,82	East Indian.	
1,82	3,93	5,91	18,06	27,23	7,64	8,72	13,85	11,37	15,40	10,38	5,73	14,62	27,24	51,23	35,51	56,49	49,25	66,77	81,57	81,57	Eastern Bengal.	
24	69	34	69	86	8,15	75	1,66	1,18	1,15	23	55	26	4,59	10,29	6,90	3,04	34	2,58	1,58	1,58	Bengal Central.	
3,31	3,18	3,13	10,08	3,56	57	23	1,68	3,37	1,61	19,33	91,92	6,19	1,16,54	1,99,28	1,62,45	1,98,87	75,84	77,61	1,76,45	1,76,45	Bengal-Nagpur.	
79	1,33	7,09	2,61	4,01	4,38	9,74	8,30	9,45	12,73	49,51	36,11	35,29	20,23	44,90	33,16	55,69	39,26	32,76	76,47	76,47	Oudh and Rohilkhand State.	
40,37	23,38	20,18	30,47	28,30	18,92	20,58	19,10	14,67	48,44	1,00,39	1,07,47	1,72,05	2,63,14	1,66,19	82,47	66,46	83,47	93,87	1,30,10	1,30,10	North Western State	
16,00	13,31	9,99	6,09	4,37	8,04	6,75	10,28	11,65	17,04	22,33	61,82	74,39	51,02	71,81	79,51	78,98	53,02	44,54	23,58	23,58	Great Indian Peninsula.	
1,98	7,59	16,10	23,86	28,88	15,33	36,60	8,42	21,74	9,89	6,00	16,18	26,16	54,14	38,06	89,09	98,82	28,58	56,63	29,50	29,50	Bombay, Baroda and Central India.	
3,44	3,97	1,79	82	3,15	1,24	-1,05	2,78	6,53	8,14	6,52	42	4,15	1,85	18,30	60,31	96,90	32,24	18,40	15,84	15,84	Nizam's Guaranteed State.	
3,53	2,11	3,66	4,07	3,30	3,16	2,43	3,93	9,33	4,56	6,00	7,98	4,32	27,45	19,63	12,65	19,27	55,11	63,58	60,36	60,36	Madras.	
-	-	49	84	1,08	53	38	16	2	5	-	-	42	1,07	2,7	4,25	22,26	19,77	15,23	10,45	10,45	Bengal Douars.	
41	27	21	-25	2,41	7	-	6	7,20	23	1,78	87	1,28	53	2,55	27	17	2,57	8,39	1,73	1,73	Dihru-Sadiya.	
-	-	-	-	-	-	-	-	-	-	72,94	1,43,79	1,57,49	1,17,01	1,16,28	1,18,74	1,13,15	86,46	85,47	69,86	69,86	Assam-Bengal.	
-1	-	1	-	-	1	-1	-	-	-	-1	-	-	1	-	-	1	-1	-	-	-	-1	Deoghur.
-77	3,29	1,53	49	2,86	5,03	6,63	12,21	7,19	25,66	2,38	3,56	45,34	35,46	1,68,40	79,06	70,13	55,94	48,78	63,47	63,47	Bengal and North Western.	
93	63	59	2,56	1,71	79	21	1,15	1,02	66	2,52	2,23	2,50	2,61	3,79	2,10	13	5,37	4,34	12,92	12,92	Rohilkhand and Kumaon.	
3,76	3,18	5,04	5,14	2,81	3,32	3,98	3,53	8,20	13,81	64,37	43,87	34,23	11,46	-2,83	9,43	10,59	17,19	18,74	22,33	22,33	Rajputana-Malwa.	
4,83	1,58	-4	13	7	6,35	-81	-1,58	3,16	3,77	4,32	-21	-15	48	10,12	39,16	18,04	4,89	19,78	6,64	6,64	Jodhpur-Bikaner.	
-	-	-	-	-	-	-	-	19	4	-	-	3,05	10,26	18	2,51	1,18	2,16	43	82	4	4	Udaipur-Chitor.
25	1,34	2,66	1,03	73	2,10	91	31	16	40	6,23	2,19	2,83	14,18	8,67	8,05	92	17	96	44	44	Bhavnagar-Gondal-Junagad-Porbandar.	
6,92	5,25	7,63	4,01	5,60	6,29	7,60	5,79	4,59	3,29	71	7,87	7,31	6,59	8,19	11,05	8,74	8,15	4,83	1,22	1,22	Southern Malwata.	
3,80	8,63	92	1,01	76	1,52	3,59	3,03	3,83	1,46	-11,71	5,25	5,25	-14	4,59	-19,38	7,35	17,47	47,49	99,17	99,17	South India.	
4,92	1,00,89	7,66	17,27	6,24	8,09	11,31	25,14	22,03	7,91	2,33	1,24,03	74,82	82,48	59,87	31,62	86,24	92,79	95,26	71,01	71,01	Burma.	
5	53	1,37	10	49	7	5	-16	1	-	53	66	1,76	-17	94	3	27	2,22	31	-26	-26	Morvi.	
-	-	-	-	-	-	-	-	7	-	-	-	-	-	2,49	1,77	27	-	-	-39	19	19	Baru Light.
-	-	-	-	-	-	1	1	-	2	5	-	-	-	-	-	2	24	-1	10	20	20	Tarakshwar-Magra.
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,01	6,21	15	24	-	-	-	Ranaghat-Krishnagar.
-	-	-	9	3	1	5	13	-	-	-	-	3,30	89	27	3	7	17	13	-	-	-	Tezpur-Balipara.
18	40	20	42	38	49	83	10	21	12	64	-3	21	65	41	24	79	-6	22	20	20	Darjeeling-Himalayan.	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,70	5,27	1,28	16	47	8	72	72	Howrah-Amra.
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,31	3,98	82	-	-	-	-	-	Howrah-Sheekhala.
29	13	3	10	-	-	4	-	17	3	45	18	10	37	37	7	22	-23	-8	-5	-5	Jorhat.	
-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	5,81	6,10	22,96	57,95	57,95	57,95	Kalka-Simla.
1,17,80	1,93,12	1,20,15	1,45,44	1,48,49	1,22,09	1,39,64	1,68,79	2,11,55	2,35,35	4,34,28	6,12,31	7,44,95	9,17,85	11,80,61	10,44,17	17,40,27	3,92,98	3,65,10	11,39,20	11,39,20	TOTAL.	

Appendix II.
Capital outlay.

APPEN

Capital outlay on each railway to the close of the year
(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED.		EAST INDIAN RAILWAY.					EASTERN BENGAL		
NAME OF RAILWAY.		EAST INDIAN.	DELHI-UMBALLA-KALKA.	SOUTH BEHAR.	TARRASUR.	REWAR.	EASTERN AND SOUTHERN SECTIONS.		
Classification Number.		1 (a)	1 (b)	1 (c)	1 (d)	1 (e)	2 (a)		
Gauge.		5' 6"	5' 6"	5' 6"	5' 6"	2' 6"	5' 6"		
Items.	Length of railway and main heads of expenditure.	Open line.	Under construction.	Open line.	Open line.	Open line.	Under construction.	Open line.	Under construction.
LENGTH OF LINE.									
(a)	Single track . . . Miles.	1,428'65	179'62	162'24	78'76	22'23	31'81	164'81	84'91
(b)	Double " . . . "	494'70	...	...	...	...	...	112'21	...
(c)	TOTAL MILEAGE	1,923'35	179'62	162'24	78'76	22'23	31'81	277'02	84'91
Outlay—									
1	Purchase of line . . . Rs.	37,20,00,000	...	...	...	...	...	4,41,55,749	...
2	Overdrawn Capital . . . "	26,45,269	...	...	...	...	...	4,24,482	...
3	Expenditure incurred since purchase . . . "	12,18,12,951	...	...	...	...	...	4,08,20,858	...
4	TOTAL outlay on railway to end of 1902—								
	Sum of 1 to 3 . . . Rs.	59,64,58,220	...	...	...	...	...	8,54,01,089	25,34,553
	" XIX and XX . . . "		19,58,488	1,54,23,791	1,19,88,612	17,91,612	1,61,037		
I	Preliminary expenses . . . "	17,16,975	2,89,115	8,07,400	7,46,511	...	...	...	17,075
II	Land "	39,11,132	28,136	...	...	...	...	...	14,33,704
III	Formation "	2,48,24,007	1,91,825	...	7,82,699	...	...	...	2,05,712
IV	Bridgework "	7,78,02,393	1,21,174	39,40,747	37,46,215	...	...	...	37,093
V	Fencing "	40,03,216	16,527	...	79,278	...	...	...	1,60,030
VI	Electric telegraph . . . "	29,82,766	...	...	...	...	...	...	...
VII	Ballast and permanent-way . . . "	11,90,66,923	8,58,743	20,89,175	36,48,721	...	...	...	4,74,480
VIII	Stations and buildings . . . "	4,76,97,054	1,899	14,38,798	7,33,508	...	...	...	1,30,937
IX	Colliery works "	22,74,369	...	...	...	...	...	...	...
X	Plant "	68,24,473	3,64,597	2,38,836	3,86,376	...	...	...	4,495
XI	Rolling-stock "	11,17,38,710	...	...	...	...	...	...	...
XII	General charges "	5,64,30,578	86,472	9,13,480	7,86,437	...	...	...	62,695
XIII	Exchange . . . . . "	...	...	11,759	...	...	...	...	...
XIV	TOTAL OF I TO XIII . . . "	45,89,72,596	19,58,488	144,40,195	1,09,09,745	17,91,612	...	7,03,78,770	†25,34,553
XV	Ferries, etc. "	13,20,338	...	...	...	...	...	15,54,377	...
XVI	Suspense "	1,00,25,355	...	1,43,691	6,884	...	...	45,47,798	...
XVII	Sundries "	18,57,172	...	11,27,287	10,71,983	...	...	...	...
XVIII	TOTAL Items XV to XVII . . . "	1,32,02,865	...	9,83,356	10,78,867	...	...	61,02,175	...
XIX	GRAND TOTAL expenditure in construction of railway (XIV + XVIII). . . . "	47,21,75,461	19,58,488	1,54,23,791	1,19,88,612	17,91,612	1,61,037	7,64,80,945	25,34,553
XX	Amount paid in premia, &c., on purchase of railway "	3,51,30,587	...	...	...	...	...	89,20,144	...
XXI	Average cost, exclusive of steam-boat service and suspense, per mile open.	2,39,252	...	95,953	1,52,130	80,593	...	2,86,257	...

Note.—The total outlay borne against the capital account of each
 * Includes Rs. 975,428 on account of surplus stores less sale proceed from
 † Including the outlay on the Moorsheadabad

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1902, distributed over main heads of expenditure.

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Appendix II.
Capital outlay.

STATE RAILWAY.							BENGAL-NAGPUR RAILWAY.				Items.	
NORTHERN & BEHAR SECTIONS.		DACCA SECTION.	COOCH BEHAR-SANTRABARI EXTENSION, BRITISH SECTION.	BEHMA-PUTRA-SULTANPUR.	MYNEN-SINGH-JAMALPUR-JAGANNATHGANJ.	COOCH BEHAR.	BENGAL CENTRAL.	BENGAL-NAGPUR.		RAIPUR-DHARTARI.		JORBULPUR-GONDIA EXTENSION.
2 (b)		2 (b)	2 (b)	2 (c)	2 (d)	2 (e)	3 (a)	4 (a)		4 (b)		4 (d)
3' 3 1/2" and 2' 6"		3' 3 1/2"	2' 6"	3' 3 1/2"	3' 3 1/2"	2' 6"	5' 6"	3' 6"		2' 6"		12' 6"
Open line.	Under construction.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Under construction.	Open line.	Under construction.	
515'45	151'62	85'92	19'79	59'37	53'14	33'60	125'01	1,328'65	176'90	56'24	252'67	(a)
...	...	...	...	...	...	...	...	17'35	...	...	...	(b)
515'45	151'62	85'92	19'79	59'37	53'14	33'60	125'01	1,346'00	176'90	56'24	252'67	(c)
...	...	...	...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	4
4,54,13,572	78,19,513	74,22,061	7,44,351	29,17,993	22,85,677	13,95,766	1,31,11,413	21,43,17,662	94,88,349	13,85,968	53,17,680	
1,07,023	1,01,432	1,27,561	2,999	1,28,272	1,32,108	11,508	1,48,132	19,74,155	1,10,506	10,637	69,723	I
13,68,502	53,281	5,33,311	309	...	...	14,435	76,360	82,51,816	4,51,490	5,499	52,359	II
34,41,039	5,05,533	6,99,703	1,25,909	4,37,361	1,55,327	1,57,975	7,73,977	2,54,96,120	14,28,969	1,00,615	10,91,493	III
77,76,506	46,43,459	5,20,108	1,22,671	3,91,569	1,72,287	3,83,276	14,77,235	4,20,50,135	18,50,653	1,13,618	9,67,653	IV
11,65,347	30,874	1,14,431	2,468	16,076	41,743	1,952	4,18,496	9,88,348	12,174	3,219	7,579	V
25,415	...	...	...	...	...	1,825	...	5,012	...	...	...	VI
1,07,49,460	11,33,103	18,77,371	2,71,239	14,01,540	13,40,974	4,47,619	45,88,699	6,06,69,577	46,58,436	6,54,978	20,17,869	VII
54,45,413	1,67,960	13,60,690	69,102	2,80,991	2,67,176	80,175	12,09,218	1,38,59,172	89,860	67,312	46,260	VIII
...	...	...	...	...	...	...	...	...	...	...	...	IX
12,13,717	3,35,474	2,47,832	8,303	25,496	24,494	10,376	3,97,877	36,73,300	2,20,177	12,903	64,679	X
83,08,473	4,10,835	11,03,099	1,11,320	...	...	1,88,242	28,30,288	3,07,99,814	...	3,24,932	4,04,400	XI
30,42,450	4,33,562	3,63,455	29,731	1,53,613	82,426	81,695	8,44,197	1,25,18,962	5,80,601	92,255	5,03,793	XII
9,31,358	...	3,05,500	...	...	...	...	...	6,53,185	...	...	...	XIII
4,38,53,203	78,19,513	74,22,061	7,44,351	29,04,920	22,15,637	13,87,378	1,27,64,699	20,69,39,596	94,07,468	13,85,968	53,15,812	XIV
15,58,369	...	...	...	...	68,000	3,618	...	21,41,447	...	...	...	XV
...	...	...	...	11,073	966	4,770	3,46,716	52,36,619	80,881	...	1,868	XVI
...	...	...	...	...	1,054	...	...	...	...	...	...	XVII
15,58,369	...	...	...	13,073	70,040	8,388	3,46,716	73,78,066	80,881	...	1,868	XVIII
4,54,13,572	78,19,513	74,22,061	7,44,351	29,17,993	22,85,677	13,95,766	1,31,11,413	21,43,17,662	94,88,349	13,85,968	53,17,680	XIX
...	...	...	...	...	...	...	...	...	...	...	...	XX
85,081	...	86,383	37,623	48,929	41,714	41,291	1,02,109	1,33,907	...	24,644	...	XXI

railway, i. e., for lines open and lines under construction, is shown in Appendix 7. same, and Rs. 8,43,724 on account of commission on debenture loan, branch (Rs. 8,332) not included in the details.

Capital outlay on each railway to the close of the year

(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED.		ODDH AND ROHILKHAND STATE RAILWAY.				NORTH WESTERN			
NAME OF RAILWAY.		ODDH AND ROHILKHAND.	HAR-DWAR DEHRA.	RAWHPUR-BURHWAL (3' 3 1/2" GAUGE) LINK.	ALLAH-ABAD FYZABAD.	NORTH			
Classification Number.		5 (a)	5 (b)	5 (c)		6 (a)			
Gauge.		5' 6"	5' 6"	3' 3 1/2"	5' 6"	5' 6"			
Items.	Length of railway and main heads of expenditure.	Open line.	Under construction.	Open line.	Open line.	Under construction.	Open line.		
							Military section.	Commercial section.	Total.
LENGTH OF LINE.									
(a)	Single track Miles	1,039'64	14'47	32'04	79'60	94'67	969'88	1,943'31	2,913'19
(b)	Double " . . . . . "	...	...	...	...	...	60'36	110'13	170'49
(c)	TOTAL MILEAGE.	1,039'64	14'47	32'04	79'60	94'67	1,030'24	2,053'44	3,083'68
Outlay -									
1	Purchase of line Rs.	10,33,69,490	...	...	...	...	...	...	14,00,91,244
2	Overdrawn Capital . . . . . "	...	...	...	...	...	...	...	38,70,470
3	Expenditure incurred since purchase "	3,78,35,957	...	...	...	...	...	...	39,53,73,692
4	TOTAL outlay on railway to end of 1902 -								
	Sum of 1 to 3 }	14,11,96,447	4,298	28,36,486	25,11,319	37,06,381	15,98,72,672	37,84,62,734	53,83,35,406
	" XIX and XX }								
I	Preliminary expenses "	12,89,247	...	97,588	31,729	57,348	12,53,533	29,88,248	42,41,881
II	Land "	9,82,685	...	...	94,804	2,21,970	10,36,633	24,24,665	34,61,298
III	Formation "	44,57,581	108	6,23,625	1,37,459	2,16,287	3,95,44,411	2,79,45,912	6,74,90,323
IV	Bridgework "	8,24,22,857	310	5,68,667	2,65,770	5,21,423	3,59,68,994	7,06,12,382	10,65,81,376
V	Fencing "	31,02,869	17	51,754	2,56,379	2,019	6,85,734	74,02,110	80,87,844
VI	Electric telegraph "	46,129	...	...	...	...	86,306	7,98,396	8,84,702
VII	Ballast and permanent-way "	3,86,22,611	1,297	8,90,049	12,16,118	5,06,134	4,50,73,395	9,59,43,226	14,10,16,621
VIII	Stations and buildings "	1,40,66,444	119	2,21,319	4,01,314	54,569	1,08,24,534	3,77,62,802	4,85,87,335
IX	Colliery works . . . . . "	...	...	...	...	...	...	...	...
X	Plant "	25,85,709	1,488	24,652	4,760	2,14,781	22,39,311	78,91,873	1,01,31,184
XI	Rolling-stock "	1,94,24,635	...	...	...	3,041	1,13,51,262	5,63,73,362	6,77,24,624
XII	General charges "	98,30,931	939	2,37,894	1,02,985	2,28,030	74,64,911	2,46,19,290	2,20,84,201
XIII	Exchange . . . . . "	...	...	...	...	...	40,70,560	46,38,856	87,18,416
XIV	TOTAL OF I TO XIII	12,68,61,698	4,298	27,35,548	25,11,319	21,15,602	15,06,08,584	33,94,01,222	49,90,09,806
XV	Ferries, &c. . . . . "	...	...	...	...	...	2,64,088	4,21,975	6,86,063
XVI	Suspense "	36,31,670	...	...	...	15,91,427	...	1,33,92,747	1,33,92,747
XVII	Sundries "	1,98,309	...	1,00,938	...	648	...	59,95,088	59,95,088
XVIII	TOTAL items XV to XVII	34,33,351	...	1,00,938	...	15,90,779	2,64,088	1,95,09,810	2,00,73,898
XIX	GRAND TOTAL expenditure in construction of railway (XIV + XVIII)	13,02,95,059	4,298	28,36,486	25,11,319	37,06,381	15,98,72,672	35,92,12,032	51,90,83,704
XX	Amount paid in premia, &c., on purchase of railway "	1,09,01,388	...	...	...	...	...	1,02,51,702	1,02,51,702
XXI	Average cost, exclusive of steam-boat service and suspense, per mile open	1,22,046	...	88,530	31,549	...	1,54,924	1,78,090	1,70,572

NOTE.—The total outlay borne against the capital account of each railway is shown in the column headed "Total".
* Including Dandot
† Including 2970 miles.

DIX II—continued.

1902, distributed over main heads of expenditure.

Appendix II.
Capital outlay.

(14 and 21 of Report.)

STATE RAILWAY.							GREAT INDIAN PENINSULA (SEE NEXT PAGE FOR REST OF SYSTEM).			Items.
WESTERN.	SOUTHERN PUNJAB.	RAJPURA- BHATINDA.	JAMMU AND KASHMIR (NATIVE STATE SECTION).	LUDHIANA- DHURI- JAKHAL.	KHUSHAL- GARH-KOMAT- THAL.	NOWSHERA- DURGAL.	GREAT INDIAN PENINSULA.	KHARSAON.		
	6 (b)	6 (c)	6 (d)	6 (e)	6 (f)	6 (g)	7 (a)	7 (b)		
	5' 6"	5' 6"	5' 6"	5' 6"	2' 6"	2' 6"	5' 6"	5' 6"		
Under construction.		Open line.	Open line.	Open line.	Open line.	Under construction.	Open line.	Open line.		
Jock Doab.	Quetta- Nushki.									
51'40	82'50	424'72	107'05	15'99	78'66	† 91'73	40'25	1,086'25	7'97	(a)
—	—	—	—	—	—	—	—	461'92	—	(b)
51'40	82'50	424'72	107'05	15'92	78'66	91'73	40'25	1,548'17	7'97	(c)
—	—	—	—	—	—	—	—	40,78,15,679	—	1
—	—	—	—	—	—	—	—	25,81,999	—	2
—	—	—	—	—	—	—	—	1,04,25,988	—	3
13,40,785	3,19,971	2,27,93,660	67,12,977	9,62,471	43,24,799	49,49,378	24,92,716	42,98,23,666	5,22,149	4
12,388	2,13,955	12,04,166	59,422	23,934	36,390	55,225	30,807	10,47,149	369	I
—	—	—	46,494	—	—	2,30,561	18,726	2,08,894	1,115	II
34,412	1,03,897	11,36,984	2,75,955	34,958	2,28,719	10,87,592	74,555	44,036	44,036	III
31,944	66	8,22,841	5,37,820	1,35,428	2,41,325	10,80,442	5,76,668	11,60,60,143	57,634	IV
27,452	—	1,96,494	2,04,472	2,176	1,01,477	21,040	11,739	7,366	7,366	V
—	—	—	—	170	—	—	—	18,28,528	—	VI
10,25,424	26,828	1,40,98,774	41,57,855	5,66,608	29,11,892	9,70,744	6,67,747	7,55,93,956	3,10,958	VII
1,08,892	16,384	26,19,963	10,79,937	2,33,420	4,43,580	2,88,542	1,40,570	2,91,26,316	53,602	VIII
—	—	—	—	—	—	—	—	—	—	IX
24,781	18,054	70,861	82,433	5,336	51,196	77,645	1,48,694	4,58,84,776	3,434	X
—	—	—	—	—	—	80,830	6,69,592	11,669	11,669	XI
52,410	38,305	15,67,621	2,68,589	60,444	2,15,399	9,91,097	1,04,882	2,10,22,929	31,966	XII
—	—	—	—	—	—	—	—	8,14,432	—	XIII
13,17,903	3,17,489	2,18,07,704	67,12,977	9,62,471	42,49,978	42,83,718	24,43,980	30,15,86,183	5,22,149	XIV
—	—	—	—	—	—	57,378	28,283	—	—	XV
23,082	2,482	6,641	—	—	74,821	6,08,282	20,453	57,95,872	—	XVI
—	—	9,79,315	—	—	—	—	—	—	—	XVII
23,082	2,482	9,85,956	—	—	74,821	6,65,660	48,736	57,95,872	—	XVIII
13,40,785	3,19,971	2,27,93,660	67,12,977	9,62,471	43,24,799	49,49,378	24,92,716	30,72,82,055	5,22,149	XIX
—	—	—	—	—	—	—	—	12,24,41,611	—	XX
—	—	51,651	62,709	60,457	54,030	—	60,720	1,95,448	65,514	XXI

railway, i.e., for lines open and lines under construction, is shown in Appendix 7.
(2' 6" gauge), 6' 18 miles.
opened on the 29th May 1902.

Appendix II.
Capital outlay.

Capital outlay on each railway to the close of the year

(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED.		GREAT INDIAN PENINSULA RAILWAY—concl'd.						
NAME OF RAILWAY.		AMRAOTL.	INDIAN MIDLAND.	BINA-GOONA-BARAN.	BHOPAL-UJJAIN.	BHOPAL-ITABSI.	GWALIOR LIGHT.	
Classification Number.		7 (c)	7 (d)	7 (e)	7 (f)	7 (g)	7 (h)	
Gauge.		5' 6"	5' 6"	5' 6"	5' 6"	5' 6"	3' 0"	
Items.	Length of railway and main heads of expenditure.	Open line.	Open line.	Open line.	Open line.	Open line.	Under construction.	
LENGTH OF LINE.								
(a)	Single track Miles.	5'49	796'53	145'63	113'27	57'39	126'14	57'86
(b)	Double " . . . . "	...	...	...	...	...	...	...
(c)	TOTAL MILEAGE.	5'49	796'53	145'63	113'27	57'39	126'14	57'86
Outlay—								
1	Purchase of line Re.	...	...	...	...	...	...	...
2	Overdrawn Capital . . . . "	...	...	...	...	...	...	...
3	Expenditure incurred since purchase . . . . "	...	...	...	...	...	...	...
4	TOTAL outlay on railway to end of 1902—							
	Sum of 1 to 3 Re.	...	...	...	...	...	...	...
	„ XIX and XX "	4,48,886	10,62,11,714	99,14,442	78,02,855	78,02,330	28,41,444	11,35,660
I	Preliminary expenses "	11,799	9,95,314	92,220	94,758	...	13,857	75,747
II	Land	2,450	9,78,574	2,267	2,771	16,470	162	...
III	Formation	20,377	1,01,55,370	13,91,455	8,07,815	15,99,750	5,29,944	53,545
IV	Bridgework	62,106	2,37,11,885	21,47,437	17,33,768	18,69,399	1,44,041	42,353
V	Fencing	11,639	26,31,879	2,75,300	82,266	2,18,087	5,687	64
VI	Electric telegraph "	...	17,382	2,155	28,993	582	...	...
VII	Ballast and permanent-way "	2,43,889	3,41,36,727	45,23,880	38,34,607	26,77,512	14,37,121	2,24,985
VIII	Stations and buildings "	54,425	93,56,138	5,79,795	5,00,932	9,59,422	1,79,078	7,679
IX	Colliery works . . . . .	...	...	...	...	...	...	...
X	Plant	3,016	14,48,262	57,576	21,005	43,345	27,810	4,265
XI	Rolling stock	8,641	1,77,10,751	18,384	...	55,651	3,47,371	5,642
XII	General charges	29,709	43,39,747	8,23,973	6,95,840	3,62,112	1,30,693	47,484
XIII	Exchange . . . . .	...	2,52,050	...	...	...	...	...
XIV	TOTAL OF I TO XIII "	4,48,111	10,57,34,079	99,14,442	78,02,855	78,02,330	28,15,764	4,01,764
XV	Ferries, &c. . . . .	...	...	...	...	...	...	...
XVI	Suspense	775	4,77,635	...	...	...	...	7,33,896
XVII	Sundries . . . . .	...	...	...	...	...	25,680	...
XVIII	TOTAL items XV to XVII "	775	4,77,635	...	...	...	25,680	7,33,896
XIX	GRAND TOTAL expenditure in construction of railway (XIV + XVIII)	4,48,886	10,62,11,714	99,14,442	78,02,855	78,02,330	28,41,444	11,35,660
XX	Amount paid in premia, &c., on purchase of railway . . . . "	...	...	...	...	...	...	...
XXI	Average cost, exclusive of steamboat service and suspense, per mile open	81,633	1,32,743	68,080	68,887	1,35,953	22,516	...

NOTE.—The total outlay borne against the capital account of each

DIX II—continued.

Appendix II.
Capital outlay.

1902, distributed over main heads of expenditure.

14 and 21 of Report.)

BOMBAY, BARODA AND CENTRAL INDIA (SEE NEXT PAGE FOR REST OF SYSTEM).									Items.
BOMBAY, BARODA AND CENTRAL INDIA.		TAPTI VALLEY.	NAGDA-UJJAIN.	PETLAD-CAMBAY (ANAND TARAPUR SECTION).	PETLAD-CAMBAY (TARAPUR CAMBAY SECTION).	GODHRA-RUTLAN-NAGDA.	RAJPUTANA-MALWA.	GEAKWAR'S MERSANA.	
8 (a)		8 (b)	8 (c)	8 (d)	8 (e)	8 (f)	8 (g)	8 (h)	
5' 6"		5' 6"	5' 6"	5' 6"	5' 6"	5' 6"	3' 3 1/2"	3' 3 1/2"	
Open line.	Under construction.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	
208'78	44'00	155'48	34'32	21'50	10'92	141'14	1,645'44	92'63	(a)
251'90	...	...	...	...	...	...	2'92	...	(b)
460'68	44'00	155'48	34'32	21'50	10'92	141'14	1,648'36	92'63	(c)
...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	3
12,22,75,209.	4,12,161	1,29,70,581	22,39,663	11,85,939	7,49,676	1,77,99,805	13,86,35,640	33,63,329	4
Details not available.	Details not available.	4,17,932	10,938	11,684	4,771	1,80,184	22,71,381	10,067	I
		...	...	...	...	35,570	14,35,320	...	II
		26,35,367	1,24,167	44,086	25,016	60,94,896	75,57,891	3,04,742	III
		85,43,794	4,61,448	87,694	44,795	41,32,900	2,17,42,676	5,90,512	IV
		66,292	14,581	29,038	14,941	2,84,713	31,94,458	62,952	V
		3,264	603	...	...	4,065	2,171	...	VI
		45,68,662	13,07,870	7,58,356	4,79,724	46,06,831	3,86,34,574	16,80,960	VII
		8,52,047	88,720	1,87,251	1,52,162	15,07,680	1,08,88,404	4,71,363	VIII
		...	...	...	...	...	...	...	IX
		58,379	1,729	4,027	3,247	73,501	32,64,681	33,139	X
		...	...	...	...	...	2,26,95,357	44,396	XI
		10,17,337	1,60,607	53,259	18,912	7,89,465	83,88,173	1,65,198	XII
		...	...	...	...	...	49,08,971	...	XIII
11,65,24,313	4,12,161	1,21,63,974	22,39,663	11,75,390	7,49,568	1,77,99,805	13,40,04,057	33,63,329	XIV
...	...	...	...	...	...	...	...	...	XV
53,47,837	...	36,197	...	10,540	108	...	46,31,583	...	XVI
4,03,059	...	7,71,310	...	...	...	...	...	...	XVII
57,50,896	...	8,07,307	...	10,540	108	...	46,31,583	...	XVIII
12,22,75,209	4,12,161	1,29,70,581	22,39,663	11,85,939	7,49,676	1,77,99,805	13,86,35,640	33,63,329	XIX
...	...	...	...	...	...	...	...	...	XX
2,65,423	...	83,190	65,258	54,669	68,642	1,26,115	81,551	36,309	XXI

railway, i. e., for lines open and lines under construction, is shown in Appendix 7.
 * Includes State outlay of Rs. 8,08,405 on the Parti branch.

Appendix II.
Capital outlay.

Capital outlay on each railway to the close of the year

(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED		BOMBAY, BARODA AND CENTRAL INDIA RAILWAY—concl'd.								
NAME OF RAILWAY.		AHMEDA- BAD- PRANTIJ.	VIJAPUR-KALOL- KADI.	PALANPUR- DEESA.	GASEWAR'S DABHOL.	RAJPIPLA.	JAIPUR (SIWAI-MA- DHOPUR.)	AHMEDA- BAD- DHOLKA.		
Classification Number.		8 (i)	8 (j)		8 (k)	8 (l)		8 (m)	8 (n)	
Gauge.		3' 3½"	3' 3½"		3' 3½"	2' 6"		2' 6"	3' 3½"	
Items.	Length of railway and main heads of expenditure.	Open line.	Open line.	Under construc- tion.	Open line.	Open line.	Under construc- tion.	Open line.	Under construc- tion.	Under construc- tion.
LENGTH OF LINE.										
(a)	Single track . . . Miles.	54'70	29'44	12'20	17'28	78'80	9'20	37'37	72'85	33'54
(b)	Double " . . . "	...	...	...	...	...	...	...	...	...
(c)	TOTAL MILEAGE .	54'70	29'44	12'20	17'28	78'80	9'20	37'37	72'85	33'54
Outlay—										
1	Purchase of line . . . Re.	...	...	...	...	...	...	...	...	...
2	Overdrawn Capital . . . "	...	...	...	...	...	...	...	...	...
3	Expenditure incurred since purchase . . . "	...	...	...	...	...	...	...	...	...
4	TOTAL outlay on railway to end of 1902—									
	Sum of 1 to 3 . . . Re.	...	...	...	...	...	...	...	...	...
	" XIX and XX . . . "	19,70,012	7,78,711	2,68,477	4,21,786	21,09,813	1,25,016	13,05,415	8,88,133	6,01,558
I	Preliminary expenses . . . "	64,565	4,861	2,003	1,973	19,781	840	14,935	3,213	...
II	Land "	17,335	...	...	...	...	...	...	...	...
III	Formation "	1,30,676	13,599	4,952	64,413	4,07,345	1,554	1,28,528	1,80,545	13,585
IV	Bridgework "	2,76,400	1,31,588	27,116	59,499	...	12,471	3,03,067	3,05,571	1,39,193
V	Fencing "	20,572	55,898	24	10,037	...	1,188	14,919	6,413	5,222
VI	Electric telegraph "	1,367	...	...	...	63	...	584	...	...
VII	Ballast and permanent-way "	10,04,525	4,36,537	1,72,451	2,09,667	9,50,901	94,547	4,49,027	1,18,283	3,46,759
VIII	Stations and buildings "	2,08,860	87,867	44,077	54,698	2,68,881	7,719	95,015	2,05,032	50,329
IX	Colliery works . . . . . "	...	...	...	...	...	...	...	...	...
X	Plant "	12,430	6,178	298	6,672	8,490	745	7,544	4,798	4,095
XI	Rolling-stock . . . . . "	...	...	...	...	2,83,109	...	1,34,897	...	...
XII	General charges "	1,59,323	42,183	17,556	14,897	1,40,203	5,932	64,956	58,868	38,777
XIII	Exchange . . . . . "	...	...	...	...	...	...	...	...	...
XIV	TOTAL OF I TO XIII "	18,06,253	7,78,711	2,68,477	4,21,786	20,78,773	1,25,016	13,03,472	8,82,728	5,97,760
XV	Ferries, &c. . . . . "	...	...	...	...	...	...	...	...	...
XVI	Suspense . . . . . "	...	...	...	...	...	...	1,943	5,405	3,798
XVII	Sundries "	73,759	...	...	...	31,040	...	...	...	...
XVIII	TOTAL items XV to XVII "	73,759	...	...	...	31,040	...	1,943	5,405	3,798
XIX	GRAND TOTAL expenditure in construction of railway (XIV+XVIII) "	19,70,012	7,78,711	2,68,477	4,21,786	21,09,813	1,25,016	13,05,415	8,88,133	6,01,558
XX	Amount paid in premia, etc., on purchase of rail- way . . . . . "	...	...	...	...	...	...	...	...	...
XXI	Average cost, exclusive of steam-boat service and suspense, per mile open "	36,015	26,451	...	24,409	26,380	...	34,880	...	...

NOTE.—The total outlay borne against the capital account of each

DIX II—continued.

Appendix II.
Capital outlay.

1902, distributed over main heads of expenditure.

(14 and 21 of Report.)

NIZAM'S GUARANTEED STATE RAILWAY.			MADRAS RAILWAY.							AGRA-DELHI-CHORD.	Items.
NIZAM'S GUARANTEED STATE.	BELWADA EXTENSION.	HYDERABAD-GODAVARI VALLEY.	MADRAS.		MADRAS (NORTH-EAST LINE).	KOLAR GOLD-FIELDS.	SHORANUR-COCHIN.	NILGIRI.	AZHIKAL-MANGALORE.	11 (a)	
9 (a)	9 (b)	9 (c)	10 (a)		10 (b)	10 (c)	10 (d)	10 (e)	10 (f)	11 (a)	
5' 6"	5' 6"	3' 3"	5' 6"		3' 6"	5' 6"	3' 3"	3' 3"	5' 6"	5' 6"	
Open line.	Open line.	Open line.	Open line.	Under construction.	Open line.	Open line.	Open line.	Open line.	Under construction.	Under construction.	
330'13	20'58	391'42	844'67	17'07	496'73	9'88	64'75	16'90	77'27	121'16	(a)
...	...	...	43'43	...	0'46	...	...	...	...	...	(b)
330'13	20'58	391'42	888'10	17'07	497'19	9'88	64'75	16'90	77'27	121'16	(c)
2,30,30,382	...	...	...	...	...	...	...	18,04,448	...	...	1
...	...	...	...	...	...	...	...	...	...	...	2
1,08,59,145	...	...	...	...	...	...	...	31,03,983	...	...	3
4,28,89,537	11,60,425	2,57,75,220	12,73,28,634	76,95,049	6,16,89,605	11,38,480	63,66,301	49,08,431	87,503	1,42,681	4
1,85,226	15,319	4,26,091	1,09,665	68,481	3,43,886	8,400	49,767	3,10,602	87,406	45,394	I
...	47,109	...	...	...	14,88,722	32,016	3,87,392	...	...	47,028	II
15,89,515	1,69,533	33,38,643	3,99,20,984	11,14,136	5,70,026	...	8,05,712	6,95,524	...	5,089	III
14,05,587	1,62,008	30,81,960	3,99,20,984	12,63,959	1,77,05,387	3,47,753	13,75,279	3,78,210	13	...	IV
1,06,552	17,644	2,23,289	...	2,85,594	4,86,367	...	78,502	2,114	...	...	V
...	...	...	11,62,817	369	9,826	2,945	10,077	...	...	...	VI
68,54,394	5,26,455	68,89,409	3,98,98,692	24,27,448	1,85,97,426	5,11,499	14,57,381	4,08,846	...	...	VII
21,49,492	76,443	24,47,138	1,09,88,287	5,66,502	42,83,348	1,55,105	4,16,284	83,119	...	...	VIII
...	...	...	...	...	...	...	...	...	...	...	IX
4,25,091	8,255	3,53,323	13,38,505	3,72,212	12,48,805	8,029	1,53,985	11,639	...	624	X
52,44,663	20,284	36,48,666	1,68,74,924	9,16,281	76,85,917	...	10,19,090	5,15,922	...	...	XI
11,04,421	1,17,275	17,37,075	1,25,28,473	5,33,621	38,62,170	60,383	3,55,345	3,09,052	84	24,850	XII
...	...	...	...	...	...	...	...	...	...	...	XIII
1,91,54,941	11,60,425	2,21,55,594	12,28,29,347	75,48,683	6,11,81,880	11,16,135	61,08,814	27,15,028	87,503	1,22,985	XIV
...	...	...	...	59,165	2,98,936	...	76,636	...	...	...	XV
7,04,204	...	2,52,548	45,06,287	87,201	2,13,789	12,345	1,80,851	37,291	...	19,696	XVI
...	...	33,67,078	...	...	...	...	...	3,51,664	...	...	XVII
7,04,204	...	36,19,626	45,06,287	1,46,356	5,07,725	12,345	2,57,487	3,88,955	...	19,696	XVIII
1,08,59,145	11,60,425	2,57,75,220	12,73,28,634	76,95,049	6,16,89,605	11,38,480	63,66,301	31,03,983	87,503	1,42,681	XIX
2,30,30,382	...	...	...	...	...	...	...	18,04,448	...	...	XX
1,27,784	56,386	65,205	1,45,452	...	1,23,647	1,13,981	95,528	2,88,233	...	...	XXI

railway, i.e., for lines open and lines under construction, is shown in Appendix 7.

Appendix II.
Capital outlay.

APPEN

Capital outlay on each railway to the close of the year
(Referred to in paragraph

ADMINISTRATION BY WHICH WORKED.		BENGAL DOOARS.		DIBRU-SADIYA RAILWAY.		ASSAM-BENGAL.		NOAKHALI (BENGAL).	DIBROGHUR.
NAME OF RAILWAY.				DIBRU-SADIYA.	LEDO AND TIKAK-MAR-GHERITA COLLIERY.				
Classification Number.		12 (a) and (b)		13 (a)	13 (b)	14 (a)		14 (b)	15 (a)
Gauge.		3' 3 1/2"		3' 3 1/2"	3' 3 1/2"	3' 3 1/2"		3' 3 1/2"	3' 3 1/2"
Items.	Length of railway and main heads of expenditure.	Open line.	Under construction.	Open line.	Open line.	Open line.	Under construction.	Under construction.	Open line.
LENGTH OF LINE.									
(a)	Single track . . . Miles.	16'40	6'116'56	77'50	11'00	589'21	151'81	...	4'79
(b)	Double ,, . . . ,,	...	...	...	...	...	3'43	...	...
(c)	TOTAL MILEAGE.	36'40	116'56	77'50	11'00	589'21	155'24	...	4'79
Outlay—									
1	Purchase of line . . . Rs.	...	...	...	...	...	...	...	...
2	Overdrawn Capital . . . ,,	...	...	...	...	...	...	...	...
3	Expenditure incurred since purchase . . . ,,	...	...	...	...	...	...	...	...
4	TOTAL outlay on railway to end of 1902—								
	Sum of 1 to 3 . . . Rs.	...	...	...	...	...	...	...	...
	,, XIX and XX . . . ,,	26,50,627	72,66,166	82,00,694	16,53,446	7,29,57,655	3,81,77,267	...	2,75,738
I	Preliminary expenses . . . ,,	1,66,849	3,86,341	1,73,469		14,61,305	9,88,195		
II	Land . . . . . ,,	...	...	39,264		35,02,111	1,71,919		
III	Formation ,,	3,52,761	6,92,730			1,79,73,899	2,35,10,018		
IV	Bridgework ,,	3,70,332	14,62,970			1,02,28,441	53,03,261		
V	Fencing ,,	1,783	17,633			12,66,444	21,988		
VI	Electric telegraph . . . ,,	...	...			...	...
VII	Ballast and permanent-way . . . ,,	7,22,543	17,08,800	18,66,476		1,38,07,667	31,55,242		
VIII	Stations and buildings . . . ,,	2,00,287	4,00,491	2,44,732		63,24,189	2,51,228		
IX	Colliery works . . . . . ,,	...	...	...		...	...
X	Plant ,,	11,368	1,86,937	3,36,395		13,60,443	3,58,438		
XI	Rolling-stock ,,	3,85,211	7,87,600	19,18,650		47,12,305	12,41,558		
XII	General charges ,,	2,14,979	6,53,033	17,74,874		1,01,43,794	26,72,600		
XIII	Exchange . . . . . ,,	...	...	...		...	...
XIV	TOTAL OF I TO XIII . . . ,,	24,26,133	62,96,535	77,61,120	16,53,446	7,07,80,688	3,76,74,447	...	2,75,000
XV	Ferries, etc. ,,	1,67,462	...	22,513		3,39,494	...		...
XVI	Suspense ,,	...	4,17,416	1,50,186		18,37,473	5,02,820		738
XVII	Sundries ,,	57,038	5,52,215	2,66,875		...	...		...
XVIII	TOTAL Items XV to XVII . . . ,,	2,24,494	9,69,631	4,39,574	...	21,76,967	5,02,820	...	738
XIX	GRAND TOTAL expenditure in construction of railway (XIV + XVII) ,,	26,50,627	72,66,166	82,00,694	16,53,446	7,29,57,655	3,81,77,267	...	2,75,738
XX	Amount paid in premia, &c., on purchase of railway . . . ,,	...	...	...	...	...	...	...	...
XXI	Average cost, exclusive of steam-boat service and suspense, per mile open . . . ,,	68,219	...	1,03,587	1,50,313	1,20,704	...	...	57,565

NOTE.— The total outlay borne against the capital account of each railway includes 77.76 miles opened for traffic.

DIX II—continued.

1902, distributed over main heads of expenditure.

(14 and 21 of Report.)

BENGAL AND NORTH-WESTERN.				ROHILKUND AND KUMAON RAILWAY.					Items.
BENGAL AND NORTH-WESTERN.		TIRHOOT.	SABOULI- RAKAUL.	ROHILKUND AND KUMAON.		LUCKNOW-BAREILLY.		POWATAN LIGHT.	
16 (a)		16 (b)	16 (c)	17 (a)		17 (b)		17 (c)	
3' 3½"		3' 3½"	3' 3½"	3' 3½"		3' 3½"		2' 6"	
Open line.	Under construction.	Open line.	Open line.	Open line.	Under construction.	Open line.	Under construction.	Open line.	
74775	102'11	51689	18'09	53'92	...	231'17	5'93	39'50	(a)
...	...	...	...	...	...	...	...	...	(b)
74775	102'11	51689	18'09	53'92	...	231'17	5'93	39'50	(c)
...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	4
5,32,31,393	52,51,132	4,91,41,200	10,73,421	23,29,572	7,339	1,12,49,859	46,160	8,93,456	
5,25,522	3,08,121	2,17,428	59,158	90,660	7,339	1,62,700	...	...	I
...	...	26,54,127	...	2,277	...	2,54,729	...	161	II
35,78,840	1,67,745	37,46,391	88,576	1,28,276	...	5,68,444	102	10,061	III
99,69,558	22,71,888	92,63,225	2,70,178	1,33,387	...	7,85,667	...	17,434	IV
8,88,469	5,677	22,00,017	7,552	46,197	...	2,01,348	...	166	V
27,491	542	21,620	...	...	...	...	...	...	VI
1,46,80,407	10,69,412	1,20,11,163	3,54,180	8,98,385	...	37,48,147	45,550	71,150	VII
53,71,901	1,23,486	45,21,093	78,450	1,74,487	...	10,29,570	...	10,801	VIII
...	...	...	...	...	...	...	...	...	IX
15,22,885	4,51,485	11,37,142	23,275	48,415	...	2,42,718	16	3,421	X
87,29,423	...	86,96,056	...	5,14,050	...	28,01,570	...	1,40,886	XI
32,26,886	3,21,429	28,19,404	1,01,845	1,82,911	...	4,84,249	492	19,586	XII
...	...	7,04,770	...	...	...	42,150	...	...	XIII
4,85,21,388	47,19,785	4,69,92,436	9,83,214	22,39,045	7,339	1,03,21,292	46,160	2,73,666	XIV
21,33,906	...	8,35,723	...	...	...	68,934	...	...	XV
8,26,697	2,03,602	13,13,041	62,634	90,527	...	8,18,604	...	797	XVI
17,49,408	3,27,745	...	27,573	...	...	41,029	...	6,18,993	XVII
47,10,011	5,31,347	21,48,764	90,207	90,527	...	9,28,567	...	6,19,750	XVIII
5,32,31,393	52,51,132	4,91,41,200	10,73,421	23,29,572	7,339	1,12,49,859	46,160	8,93,456	XIX
...	...	...	...	...	...	...	...	...	XX
64,890	...	90,913	55,281	41,525	...	45,124	...	22,599	XXI

railway, i.e., for lines open and lines under construction, is shown in Appendix 7.

Appendix II.
Capital outlay.

APPEN

Capital outlay on each railway to the close of the year

(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED.		JODHPUR-BIKANER RAILWAY.				BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY.			
NAME OF RAILWAY.		JODHPUR SECTION.	BIKANER SECTION.	JODHPUR-HYDERABAD (BRITISH SECTION).	UDAIPUR-CHITOR.	BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR.	JANNAGAR.	JETALSAR-RAJKOT.	DHRAN-GADRA.
Classification Number.		18 (a)	18 (b)	18 (c)	19 (a)	20 (a)	20 (b)	20 (c)	20 (d)
Gauge.		3' 3½"	3' 3½"	3' 3½"	3' 3½"	3' 3½"	3' 3½"	3' 3½"	3' 3½"
Items.	Length of railway and main heads of expenditure.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.
LENGTH OF LINE.									
(a)	Single track Miles	454'94	245'35	123'98	67'30	334'19	54'22	46'21	20'83
(b)	Double " . . . . "	...	...	...	...	...	...	...	...
(c)	TOTAL MILEAGE . . .	454'94	245'35	123'98	67'30	334'19	54'22	46'21	20'83
Outlay—									
1	Purchase of line Rs.	...	...	...	...	...	...	...	...
2	Overdrawn Capital . . . "	...	...	...	...	...	...	...	...
3	Expenditure incurred since purchase . . . . "	...	...	...	...	...	...	...	...
4	TOTAL outlay on railway to end of 1902—								
	Sum of 1 to 3 . . . . "	...	...	...	...	...	...	...	...
	" XIX and XX "	1,18,69,424	52,49,339	40,45,972	20,65,630	1,80,87,538	23,58,240	15,78,583	5,85,911
I	Preliminary expenses . . . "	82,042	24,988	39,058	7,729	1,19,442	18,973	14,238	5,813
II	Land "	1,621	2,325	37,364	...	63,889	...	15,369	685
III	Formation "	6,46,355	3,58,274	4,47,151	2,89,001	17,31,528	2,40,675	2,44,962	62,745
IV	Bridgework "	2,97,291	35,513	4,61,646	2,14,192	43,66,125	5,23,814	2,29,786	49,190
V	Fencing "	4,325	3,506	40,043	18,046	1,02,003	18,096	67,090	5,225
VI	Electric telegraph "	89,698	20,606	...	...	11,775	...	...	...
VII	Ballast and permanent-way . . "	68,75,710	32,86,291	22,00,516	9,30,070	50,50,886	8,00,908	6,82,158	3,36,455
VIII	Stations and buildings . . . "	6,27,735	2,04,787	3,70,225	1,81,542	16,64,127	2,02,359	2,26,091	89,495
IX	Colliery works . . . . . "	...	...	...	...	...	...	...	...
X	Plant "	1,72,822	27,531	31,581	31,214	3,29,795	17,471	15,915	8,144
XI	Rolling-stock "	27,64,861	7,05,458	7,377	2,72,419	24,11,113	4,29,773	...	3,772
XII	General charges "	1,67,506	72,764	3,05,694	1,11,417	8,93,480	95,232	82,974	24,387
XIII	Exchange . . . . . "	...	...	...	...	...	...	...	...
XIV	TOTAL OF I TO XIII . . . "	1,17,29,666	47,82,083	39,60,655	20,65,630	1,77,44,163	23,47,301	15,78,583	5,85,911
XV	Ferries, &c. . . . . "	...	...	26,907	...	...	...	...	...
XVI	Suspense "	1,39,458	4,67,256	58,410	...	3,43,375	10,939	...	...
XVII	Sundries . . . . . "	...	...	...	...	...	...	...	...
XVIII	TOTAL items XV to XVII . . "	1,39,458	4,67,256	85,317	...	3,43,375	10,939	...	...
XIX	GRAND TOTAL expenditure in construction of railway (XIV + XVII) . . . "	1,18,69,424	52,49,339	40,45,972	20,65,630	1,80,87,538	23,58,240	15,78,583	5,85,911
XX	Amount paid in premia, &c., on purchase of railway . . . . "	...	...	...	...	...	...	...	...
XXI	Average cost, exclusive of steam-boat service and suspense, per mile open "	26,090	21,395	32,634	30,698	53,006	42,202	34,161	28,128

DIX II—continued.

Appendix II.
Capital outlay.

1902, distributed over main heads of expenditure.

14 and 21 of Report.)

SOUTHERN MAHRATTA RAILWAY.								Items.
SOUTHERN MAHRATTA.	MYSORE SECTION.	GUNTAKAL-MYSORE FRONTIER.	HINDOPUR (YESVANTPUR-MYSORE FRONTIER).	BIRUR-SHIMOGA.	KOLHAPUR.	MYSORE-NANJANGUD.	WEST OF INDIA PORTUGUESSE.	
21 (a)	21 (b)	21 (c)	21 (d)	21 (e)	21 (f)	21 (g)	21 (h)	
3' 31"	3' 31"	3' 31"	3' 31"	3' 31"	3' 31"	3' 31"	3' 31"	
Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	Open line.	
1,042'04	296'22	119'50	51'35	37'92	29'27	15'80	51'11	(a)
...	...	...	...	...	...	...	...	(b)
1,042'04	296'22	119'50	51'35	37'92	29'27	15'80	51'11	(c)
...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	4
9,85,13,731	1,60,76,009	59,04,714	24,97,811	24,05,667	23,25,587	6,56,462	1,63,08,793	
10,50,895	2,95,374	39,327	64,092	17,627	13,358	15,210	90,501	I
21,69,216	1,56,462	28,457	25,337	20,837	30,900	10,884	...	II
4,91,87,573	24,70,316	7,83,933	5,50,112	5,60,346	2,68,590	1,41,447	61,41,366	III
4,87,17,516	21,51,030	20,32,587	5,47,041	4,54,355	11,22,548	98,923	24,48,329	IV
15,56,444	1,42,641	58,681	65,247	55,114	41,668	28,173	14,024	V
...	...	1,345	...	...	...	...	74,945	VI
2,17,89,655	51,00,249	18,23,247	9,09,862	7,69,725	4,91,136	2,52,931	14,76,949	VII
1,22,33,962	16,37,665	4,73,465	1,45,912	2,40,751	2,29,259	62,312	9,34,229	VIII
...	...	...	...	...	...	...	...	IX
30,63,294	3,64,571	29,980	35,846	44,226	7,059	6,100	2,89,007	X
1,13,33,041	25,02,600	...	...	...	...	...	7,47,167	XI
63,09,954	9,28,177	6,13,692	1,41,886	1,62,642	1,20,369	40,280	13,60,403	XII
4,91,090	...	...	...	...	...	...	...	XIII
9,73,62,642	1,57,49,085	59,04,714	24,87,335	23,55,623	23,25,587	6,56,462	1,25,77,125	XIV
...	...	...	...	...	...	...	25,32,299	XV
11,51,089	3,26,924	...	10,476	50,044	...	...	1,99,369	XVI
...	...	...	...	...	...	...	...	XVII
11,51,089	3,26,924	...	10,476	50,044	...	...	27,31,608	XVIII
9,85,13,731	1,60,76,009	59,04,714	24,97,811	24,05,667	23,25,587	6,56,462	1,63,08,793	XIX
...	...	...	...	...	...	...	...	XX
93,435	53,167	49,412	28,439	62,121	79,453	41,548	2,61,645	XXI

railway, i.e., for lines open and lines under construction, is shown in Appendix 7.

Appendix II:
Capital outlay.

Capital outlay on each railway to the close of the year

(Referred to in paragraphs

ADMINISTRATION BY WHICH WORKED.		SOUTH INDIAN RAILWAY.							BURMA.		
NAME OF RAILWAY.		SOUTH INDIAN.	TANJORE DISTRICT BOARD (MAYAVARAN-MUTUPET).	TINNEVELLY-QUILON (TRAVANCORE) (BRITISH SECTION).	KARAIKAL-PERALAM.	PONDICHERRY.	TINNEVELLY-QUILON; TRAVANCORE (NATIVE STATE SECTION).	BURMA.			
Classification Number.		22 (a)	22 (b)		22 (c)		22 (d)	22 (e)	22 (f)		
Gauge.		3' 3 3/4"	3' 3 3/4"		3' 3 3/4"		3' 3 3/4"	3' 3 3/4"	3' 3 3/4"		
Items.	Length of railway and main heads of expenditure.	Open line.	Open line.	Under construction.	Open line.	Under construction.	Open line.	Open line.	Under construction.	Open line.	Under construction.
LENGTH OF LINE.											
(a)	Single track . . . Miles	1,123'13	71'11	33'88	19'05	31'33	14'65	7'85	57'95	1,248'38	76'94
(b)	Double " . . . "	"	"	"	"	"	"	"	"	12'15	"
(c)	TOTAL MILEAGE . . .	1,123'13	71'11	33'88	19'05	31'33	14'65	7'85	57'95	1,260'50	76'94
Outlay—											
1	Purchase of line . . . Rs.	3,69,25,570	"	"	"	"	"	"	"	7,69,12,324	"
2	Overdrawn Capital . . .	"	"	"	"	"	"	"	"	"	"
3	Expenditure incurred since purchase . . .	3,16,35,689	"	"	"	"	"	"	"	3,61,69,157	1,39,42,109
4	TOTAL outlay on railway to end of 1903—										
	Sum of 1 to 3 . . .	8,85,61,259	"	"	"	"	"	"	"	"	"
	" XIX and XX . . .		31,58,026	6,60,176	10,28,541	21,36,114	7,23,786	5,68,543	75,81,838	11,30,81,481	1,39,42,109
I	Preliminary expenses . . .	11,23,855	22,170	12,120	19,105	31,368	4,250		1,18,222	24,47,647	4,02,887
II	Land . . .	10,73,227	2,05,882	75,540	1,39,511	2,50,336	"		1,57,848	16,87,942	4,33,387
III	Formation . . .	55,46,171	2,73,082	47,569	91,342	1,88,852	55,291		32,91,011	1,69,60,809	34,90,550
IV	Bridgework . . .	1,48,93,973	9,22,690	40,311	2,28,995	2,18,110	72,497		12,53,821	1,71,86,991	23,33,720
V	Fencing . . .	17,10,118	44,590	1,060	18,192	27,565	29,223		65,915	28,91,192	45,240
VI	Electric telegraph . . .	1,05,571	2,033	"	"	"	106		"	9,238	"
VII	Ballast and permanent-way . . .	2,11,51,331	10,19,725	29,828	2,46,998	4,45,761	3,39,686		3,67,867	2,72,42,414	38,01,982
VIII	Stations and buildings . . .	85,93,743	2,87,667	8,838	57,591	98,713	1,06,537		1,81,278	1,01,67,704	5,52,339
IX	Colliery works . . .	"	"	"	"	"	"		"	"	"
X	Plant . . .	17,78,908	19,873	4,850	6,898	11,530	8,863		1,78,013	18,16,974	2,14,827
XI	Rolling-stock . . .	1,30,83,810	"	"	"	"	"		"	1,68,33,294	11,28,876
XII	General charges . . .	85,60,171	3,59,314	28,000	1,19,909	2,02,042	1,14,837		7,35,964	93,91,989	14,06,399
XIII	Exchange . . .	2,42,360	"	"	"	"	"		"	12,50,610	"
XIV	TOTAL OF I TO XIII . . .	7,18,63,275	31,58,026	2,49,016	10,28,541	14,74,277	7,24,370	5,68,543	63,49,939	10,78,86,806	1,38,10,117
XV	Fences, &c. . .	"	"	"	"	"	"		14,592	7,06,446	1,31,990
XVI	Suspense . . .	28,31,016	"	4,11,160	"	6,61,837	"		12,17,307	44,88,229	2
XVII	Sundries . . .	11,18,280	"	"	"	"	-524		"	"	"
XVIII	TOTAL items XV to XVII . . .	39,69,296	"	4,11,160	"	6,61,837	-524		22,31,899	51,94,675	1,31,990
XIX	GRAND TOTAL expenditure in construction of railway (XIV + XVIII) . . .	8,18,32,571	31,58,026	6,60,176	10,28,541	21,36,114	7,23,786	5,68,543	75,81,838	11,30,81,481	1,39,42,109
XX	Amount paid in premia, &c., on purchase of railway . . .	67,28,688	"	"	"	"	"	"	"	"	"
XXI	Average cost, exclusive of steam-boat service and suspense, per mile open . . .	70,323	44,410	"	53,992	"	49,405	52,426	"	85,590	"

NOTE.—The total outlay borne against the capital account of each

DIX II—concluded.

Appendix II.
Capital outlay.

1902, distributed over main heads of expenditure.

(14 and 21 of Report.)

MORVI.	BARSI LIGHT.	TARAKESWAR-MAGRA.	RANA-GHAT-KRISH-NAGAR.	TEZPUR-BALIPARA.	DAR-JEELING-HIMA-LAYAN.	HOWRAH-AMTA.	HOWRAH-SHEA-KHALA.	JORHAT.	KALKA-SIMLA.	Items.		
24 (a)	25 (a)	26 (a)		27 (a)	28 (a)	29 (a)	30 (a)	31 (a)	32 (a)	34 (a)		
2' 6"	2' 6"	2' 6"		2' 6"	2' 6"	2' 6"	2' 6"	2' 6"	2' 6"	2' 6"		
Open line.	Under construction.	Open line.	Open line.	Under construction.	Open line.	Open line.	Open line.	Open line.	Open line.	Under construction.		
94'36	...	21'59	31'12	...	20'25	20'10	51'00	28'69	19'75	30'00	60'00	(a)
...	...	...	...	...	...	...	...	...	...	...	...	(b)
94'36	...	21'59	31'12	...	20'25	20'10	51'00	28'69	19'75	30'00	60'00	(c)
...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	4
24,86,077	2,46,671	13,18,242	9,76,055	139	7,31,158	4,87,240	34,96,507	12,68,532	6,09,565	8,95,693	92,81,656	
18,134	8,256	1,51,296	298	139	...	1,970	72,000	...	...	388	3,41,853	I
1,672	1	22,151	90,909	...	123	10,656	33,623	39,454	10,386	6,131	2,966	II
6,99,502	1,82,796	13,859	69,904	...	...	...	...	...	...	81,470	54,62,302	III
...	18,263	71,205	1,45,823	...	5,20,637	51,576	8,05,703	...	...	65,245	4,44,848	IV
...	120	13,065	5,856	...	...	...	...	5,05,278	3,59,270	2,999	14,140	V
...	...	...	56	...	...	...	...	...	...	...	...	VI
11,24,300	5,910	3,05,170	4,02,859	...	...	1,65,884	7,12,586	...	...	3,36,408	4,83,760	VII
62,513	...	1,42,333	38,708	...	77,029	25,513	5,52,664	1,40,560	67,335	89,453	1,51,022	VIII
...	...	...	...	...	...	...	...	...	...	...	...	IX
14,598	4,061	13,857	18,426	...	8,484	30,709	75,270	11,208	7,403	59,994	1,00,576	X
4,97,866	...	4,15,170	1,87,874	...	1,44,885	1,60,417	5,60,557	4,61,518	1,64,815	1,88,592	1,07,459	XI
1,02,847	27,264	99,175	...	...	...	40,515	4,29,203	...	...	41,247	7,43,547	XII
...	...	...	...	...	...	...	...	...	...	...	...	XIII
24,31,432	2,46,671	12,47,281	9,60,713	139	7,31,158	4,87,240	33,31,606	12,68,532	6,09,565	8,71,927	78,52,563	XIV
...	...	...	...	...	...	...	...	...	...	...	...	XV
54,645	...	11,847	15,342	...	...	...	1,64,901	...	...	27,704	10,31,580	XVI
...	...	59,114	...	...	...	...	...	...	...	3,038	3,97,513	XVII
54,645	...	70,961	15,342	...	...	...	1,64,901	...	...	23,766	14,29,093	XVIII
24,86,077	2,46,671	13,18,242	9,76,055	139	7,31,158	4,87,240	34,96,507	12,68,532	6,09,565	8,95,693	92,81,656	XIX
...	...	...	...	...	...	...	...	...	...	...	...	XX
25,768	...	60,509	30,871	...	37,094	24,241	65,125	44,215	30,864	29,064	...	XXI

railway, i. e., for lines open and lines under construction, is shown in Appendix 7.

APPENDICES of STATISTICS.

NOTE.—The statistics for the years 1898 to 1901, printed in the Administration report for 1901, have been revised in consequence of the inclusion, as far as possible, of the statistics of "Light railways" on the 2' 6" and 2' 0" gauges and the exclusion of the Calcutta Port Commissioners' railway.

Appendix 12.
General results.

APPEN

General results
Indian Railways
(Referred to in paragraphs

GENERAL RESULTS

Calendar year.	Total mileage open on 31st December.	Total Capital outlay in thousands of rupees.	Gross Earnings in thousands of rupees.	TOTAL WORKING EXPENSES.	
				Amount in thousands of rupees.	Proportion per cent. to gross earnings.
1	2	3	4	5	6
1898	22,024 (II)	2,92,09,20	27,41,31	12,98,68	47'37
1899	23,507 (II)	3,08,50,12	29,36,78	13,93,36	47'45
1900	24,704 (I)	3,29,53,34	31,54,32	15,09,31	47'85
1901	25,332 (II)	3,39,16,89	33,00,38	15,72,45	46'79
1902	25,898 (II)	3,49,77,34	33,92,69	16,70,49	49'24

GROSS EARNINGS IN THOUSANDS

Calendar year.	COACHING TRAFFIC.						GOODS			
	1st class.	2nd class.	Intermediary class.	3rd class.	Season and vendors' tickets.	Other Coaching Traffic.	Total Coaching Traffic (sum of 17 to 22).	Total Goods Traffic (sum of 25 to 29).	General merchandise.	Coal and coke for the public and foreign railways.
16	17	18	19	20	21	22	23	24	25	26
1898	31,24	45,28	49,49	6,25,52	7,15	1,10,28	8,68,96	17,84,97	14,87,17	1,74,65
1899	31,52	46,97	52,08	6,70,81	8,01	1,13,19	9,22,58	19,19,82	16,10,55	1,80,41
1900	31,83	47,08	56,03	7,51,66	8,47	1,31,37	10,26,44	20,36,52	16,90,35	2,11,71
1901	32,78	52,43	64,39	8,48,23	9,32	1,34,71	11,41,88	21,23,67	17,53,14	2,35,01
1902	38,57	56,59	67,60	8,54,97	9,75	1,47,60	11,75,08	21,23,41	17,40,72	2,26,75

Number of passengers and quantity of goods carried, the average miles

Calendar year.	Total mileage open on 31st December.	PASSENGERS CARRIED IN THOUSANDS, THE AVERAGE MILES CARRIED AND											
		1ST CLASS.			2ND CLASS.			INTERMEDIATE CLASS.			3RD CLASS.		
		No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.	Average rate charged per mile in pies.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1898	22,024	611	74'67	12'40	2,253	48'22	4'93	5,073	58'53	3'13	131,512	37'58	2'29
1899	23,507	526	71'78	12'59	2,357	43'90	5'32	5,233	60'56	3'07	140,321	37'58	2'30
1900	24,704	591	74'65	12'59	2,285	44'04	5'49	5,703	58'93	3'11	153,954	39'16	2'31
1901	25,332	532	92'82	12'75	2,405	76'27	5'49	6,670	59'94	3'09	170,416	41'27	2'31
1902	25,898	565	102'28	12'86	2,530	82'39	5'21	6,813	61'30	3'11	171,716	41'08	2'33

- * Excludes railways wholly under construction.
† This column represents the percentage of net
‡ Including season and vendors' tickets from 1898 to
* Included in the several classes up to 1900.
†† Includes miscellaneous train-mileage.
‡ "Other expenses" include Steam-boat, Contribute
‡ Excludes the Cherra-Companyganj and Thaton
‡ Excludes the Thaton-Duyinzaik and Powayan
‡ Excludes the Thaton-Duyinzaik and Pariakimedi

DIX 12.

of working
treated as one System.

(22, 24, 27, 37, 38, 43 and 45 of Report.)

Appendix 12.
General results.

OF WORKING.

NET EARNINGS.		PER MILE WORKED. (EXCLUDING STEAM-BOAT.)			PER TRAIN-MILE. (EXCLUDING STEAM-BOAT.)			Calendar year.
Amount in thousands of rupees.	Percentage on Capital outlay.†	Gross earnings.	Working expenses.	Net earnings.	Gross earnings.	Working expenses.	Net earnings.	
7	8	9	10	11	12	13	14	15
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
14,42,63	4'94	12,703	6,003	6,700	3'81	1'80	2'01	1898
15,43,42	5'00	12,788	6,053	6,733	3'78	1'79	1'99	1899
16,45,01	4'99	12,007	6,204	6,803	3'73	1'78	1'95	1900
17,87,93	5'27	12,236	6,172	7,057	3'79	1'77	2'02	1901
17,22,20	4'92	12,188	6,472	6,718	3'65	1'79	1'86	1902

OF RUPEES.

WORKING EXPENSES IN THOUSANDS OF RUPEES.

TRAFFIC.			Electric telegraph.	Steam-boat and sundries.	Engineering.	Locomotive.	Carriage and wagon.	Traffic.	General.	Other expenses.‡	Calendar year.
Military Stores.	Revenue stores, including coal and material for construction.	Miscellaneous.									
27	28	29	30	31	32	33	34	35	36	37	38
21,19	81,38	20,58	7,49	79,89	3,13,72	4,29,55	1,33,39	2,19,56	1,36,42	66,04	1898
13,11	94,11	21,64	8,70	85,68	3,42,50	4,71,44	1,33,98	2,30,68	1,42,38	71,38	1899
13,78	93,32	27,36	7,93	83,43	3,61,79	5,26,50	1,39,31	2,49,27	1,47,43	85,01	1900
14,97	96,41	24,14	7,49	87,34	3,55,93	5,59,13	1,57,90	2,63,92	1,57,85	83,72	1901
21,67	1,14,93	19,34	7,32	86,88	3,89,67	5,78,85	1,76,28	2,73,70	1,63,70	88,19	1902

carried and the average rate charged, and the train-mileage run by railways in India.

THE AVERAGE RATE CHARGED.			TRAIN-MILES RUN (IN THOUSANDS).				GOODS TRAFFIC.			Calendar year.		
SEASON AND VENDORS' TICKETS.		TOTAL NO. OF PASSENGERS CARRIED.		Coaching.	Goods.	Mixed.	Total train-mileage. (†)	Tons carried (in thousands).	Average miles carried.		Average rate charged per mile in pies.	
No.	Average miles carried.	Average rate charged per mile in pies.	No.							Average miles carried.		
15	16	17	18	19	20	21	22	23	24	25	26	27
12,117	88	88	151,566	38'53	16,620	28,024	25,449	71,520	35,648	160'25	6'00	1898
13,288	88	88	161,720	38'48	17,039	30,612	26,879	77,207	39,748	155'15	5'98	1899
13,845	88	88	176,308	40'09	18,114	34,252	28,827	84,193	42,896	154'94	5'88	1900
14,726	8'63	1'41	194,749	40'42	19,701	34,274	31,561	88,265	43,392	162'75	5'77	1901
15,036	8'85	1'41	196,648	40'03	21,588	35,935	31,781	92,527	45,537	157'54	5'68	1902

but includes the State outlay on the Patri branch vide paragraph 14 of Report.
earnings on capital outlay, but does not represent the gain or loss to the State, for which information Appendix 7 should be consulted.
1900.

tion to Provident Fund and Special and Miscellaneous expenditure.
Duyinsalk Light railways.
Light railways.
Light railways.

Appendix 13.
Earnings by systems.

Gross earnings in thousands of rupees

(Referred to in paragraphs

N.B.—A reference to Appendix 2 will furnish the key to

Gauge.	V ^o																										
	Class : No.	1			2			3			4			5			6			7			8			9	
		Calendar year.	E. I.	E. B. SYSTEM.		Total.	B. C.	B. N. (a) & (b). ^o	E. C. †	O. & R.	NORTH WESTERN SYSTEM.			G. I. P. SYSTEM.			B., B. & C. I. SYSTEM.			Niz.'s G. STATE SYSTEM.							
Y ^o Gau-ge.	Other Gau-ge.			Com-mercial section.	Milli-tary section.						Total.	G. I. P. (a) to (c)	I. M. (d) to (A)	Total.	B., B. & C. I. (a) to (c) & (i) & (m)	R. M. (j) to (k).	Total.	Niz.'s (a) & (b)	H. G. V. (c)								
PASSENGER TRAFFIC.																											
1898	1,08,09	25,44	20,18	45,62	6,11	12,05	13,19	36,89	97,12	11,01	1,08,19	54,64	20,19	74,83	31,41	57,59	89,00	7,22	...								
1899	1,72,54	26,99	20,07	47,87	6,29	19,47	19,92	38,48	99,45	11,40	1,10,85	63,60	21,13	84,73	43,22	61,07	1,04,29	7,56	9								
1900	18,4,94	27,03	15,19	32,22	6,59	30,46	24,06	42,84	1,06,24	11,37	1,18,11	67,61	21,58	89,17	48,28	58,74	1,07,02	7,33	3,17								
1901	1,90,91	18,16	25,42	53,58	7,12	33,98	...	51,49	1,16,60	13,44	1,30,04	81,42	25,04	1,06,46	51,18	68,55	1,19,73	8,06	7,22								
1902	1,89,37	29,36	26,81	56,61	7,17	34,97	...	59,44	1,23,10	14,53	1,36,63	85,53	26,70	1,12,23	51,84	64,25	1,16,09	3,17	7,48								
PARCELS AND LUGGAGE.																											
1898	14,50	2,34	1,71	4,05	61	1,11	50	2,47	10,52	1,34	11,86	12,96	2,51	15,37	6,23	6,26	12,49	92	...								
1899	15,34	2,88	1,94	4,82	58	1,48	35	2,61	8,78	1,30	9,98	14,14	3,34	17,48	5,93	5,62	11,55	91	1								
1900	16,41	3,31	2,30	5,61	49	2,39	1,43	3,205	9,92	1,42	11,24	15,51	3,30	18,81	6,43	5,96	12,39	98	21								
1901	18,10	3,39	2,30	5,69	32	3,55	...	3,58	11,04	1,59	12,63	14,59	3,03	17,62	6,65	6,06	12,71	104	49								
1902	18,10	3,51	2,32	6,13	55	3,33	...	3,93	11,71	1,53	13,29	16,71	3,53	20,29	6,86	6,69	12,55	1,10	78								
GOODS TRAFFIC.																											
1898	4,10,02	54,25	33,31	87,56	2,54	48,05	11,76	49,49	2,46,46	17,39	2,63,85	2,74,62	41,94	3,16,56	1,18,50	1,58,57	2,77,07	31,45	...								
1899	4,57,39	55,11	37,03	92,74	3,38	63,64	20,54	57,89	2,23,35	15,65	2,40,00	2,72,16	51,76	3,23,92	1,23,17	1,93,45	3,21,62	34,22	53								
1900	4,79,08	60,16	43,11	1,03,27	5,23	91,62	32,06	55,74	1,78,33	17,59	1,95,97	2,52,59	84,60	3,37,19	1,32,11	2,28,06	3,60,17	43,56	6,76								
1901	4,91,23	67,07	43,17	98,24	4,52	65,79	...	65,27	2,73,95	21,59	2,94,64	3,12,23	68,59	3,81,87	1,08,34	2,92,91	3,11,23	32,87	10,87								
1902	4,73,75	64,71	43,32	1,08,33	4,25	77,27	...	64,75	2,71,87	19,53	2,91,45	3,11,23	75,23	3,86,46	1,06,94	1,86,32	2,93,26	35,36	12,76								
ELECTRIC TELEGRAPH.																											
1898	1,06	19	14	33	2	17	11	27	84	14	98	70	22	92	43	77	1,27	18	...								
1899	1,38	19	16	35	2	24	16	30	87	15	1,02	79	34	1,13	62	97	1,59	20	...								
1900	98	19	16	35	2	26	16	29	84	15	99	72	27	99	55	82	1,37	16	6								
1901	88	18	15	33	2	26	...	33	97	16	1,13	63	21	89	45	64	1,09	17	8								
1902	91	16	15	31	2	27	...	33	91	15	1,06	71	19	90	45	58	1,03	16	10								
TOTAL GROSS EARNINGS. **																											
1898	0,17,18	80,81	61,10	1,47,91	10,23	63,79	37,67	98,52	3,63,25	31,47	3,99,72	3,53,23	67,83	4,21,06	1,62,67	2,28,52	3,91,19	40,77	...								
1899	0,55,07	80,38	67,45	1,57,98	11,40	90,78	43,42	1,11,39	3,44,93	30,68	3,75,61	3,62,54	79,83	4,42,43	1,32,07	2,67,26	4,49,33	44,23	63								
1900	7,96,69	96,16	78,78	1,74,94	13,33	1,29,75	60,43	1,16,76	3,66,46	32,41	3,98,87	3,46,22	1,12,17	4,59,49	1,93,92	2,99,16	1,68,08	52,69	10,63								
1901	7,20,60	94,44	76,63	1,70,92	14,05	1,30,78	...	1,34,63	4,14,73	33,17	4,53,30	4,12,15	1,00,02	5,12,17	1,70,58	2,84,69	4,53,27	43,55	20,10								
1902	7,04,24	1,03,63	90,81	1,84,64	13,17	1,42,16	...	1,34,18	4,17,94	37,09	4,55,03	4,24,25	1,09,63	5,33,88	1,71,20	2,65,04	4,36,24	46,96	23,98								
NET EARNINGS.																											
1898	4,16,93	50,47	33,39	83,46	3,68	33,64	6,51	33,06	1,96,93	-40	1,96,53	1,50,03	30,26	1,50,29	83,08	1,23,55	2,17,63	23,70	...								
1899	4,37,30	45,90	36,11	84,01	4,42	47,21	15,13	60,77	1,78,90	-7,19	1,71,71	1,67,15	34,47	2,01,62	96,31	1,52,73	2,49,09	26,87	36								
1900	4,66,79	50,34	44,39	94,83	5,50	77,18	26,55	56,73	1,46,61	-2,47	1,44,14	1,61,15	59,65	3,20,80	88,32	1,64,35	2,52,68	30,81	4,21								
1901	4,72,87	46,37	39,47	85,84	6,43	61,49	...	73,26	2,23,33	-44	2,22,94	2,17,30	51,04	2,68,34	94,67	1,53,12	2,47,73	28,05	9,23								
1902	4,45,54	53,80	40,88	94,68	5,74	69,36	...	65,57	1,93,25	-4,23	1,89,07	2,11,32	33,36	2,63,34	87,37	1,39,35	2,26,62	23,23	2,68								

* Excludes the Parlakimed Light railway
 † Transferred partly to the Bengal-Nagpur railway and partly
 ‡ Excluding the Pondicherry railway. § Excluding the Hardwar-Dehra railway, for which
 ** "Total gross earnings" include earnings from steam
 *** Included with the Southern
 Note.—For net earnings of individual
 Note.—For earnings per mile worked and per

DIX 13.

Appendix 13.
Earnings by systems.

of each Railway Administration.

22, 24, 27 and 43 of Report.)

the code letters used to denote railway systems.

5' 6"		5' 3 1/2"											3' 6"					3' 0"				Gauge.	Class. No.	Calendar year.				
10		12	13	14	15	16	17		18	19	20	21		22	23	24	25	26	27	28	29				30	31	32	TOTAL.
MADRAS SYSTEM.		R. K. SYSTEM.																										
Madras (a) to (c)	Nilgiri (d) & (e)	B. D.	D. S.	A. B.	D.	E. & N. W.	R. and K. (a) & (b)	P. L. (c)	J. B.	U. C.	B. G. J. P.	S. M. (a) to (g)	W. I. P. (h) see	S. L.	R.	M. E. W.	B. L.	B. P.	R. K. L.	T. B.	D. H.	H. A.	H. S.	J.				
PASSENGER TRAFFIC.																												
34,91	...	48	1,11	6,83	26	28,04	5,24	...	4,58	85	8,87	18,12	37	43,37	41,73	2,06	16	67||	...	32||	2,25	1,83	67	12||	7,58,68	1898		
30,14	40	46	1,16	8,58	29	25,85	5,44	...	5,17	90	9,87	16,55	45	41,93	41,01	2,19	19	58	45||	37	2,06	2,38	69	12	8,09,39	1899		
35,27	84	58	1,29	9,08	30	29,46	5,57	...	4,56	82	9,28	25,16	49	47,73	48,72	2,17	23	67	65	39	2,20	2,39	70	13	8,95,07	1900		
53,83	94	83	1,17	10,81	42	37,95	6,93	35	8,41	95	9,81	27,03	50	51,70	51,03	2,37	26	69	65	37	2,53	2,36	72	15	10,07,17	1901		
57,49	192	96	1,22	10,47	26	42,54	7,01	41	8,55	95	8,54	30,15	...	56,36	53,09	1,98	24	70	70	29	2,73	2,41	74	22	10,27,48	1902		
PARCELS AND LUGGAGE.																												
4,73	...	7	10	31	...	87	44	...	38	4	48	2,19	...	11,71	1,39	16	2	...	...	...	72	...	...	...	77,43	1898
4,54	8	7	12	40	...	89	26	...	34	5	50	2,19	...	1,71	1,32	15	2	...	...	...	39	...	...	...	78,88	1899
5,04	22	8	12	42	...	1,18	49	...	41	5	50	2,62	...	1,88||	1,55	15	2	...	...	...	61	...	...	...	91,02	1900
5,96	28	11	11	43	1	1,42	54	1	64	5	42	2,67	6	2,03	1,82	14	2	2	2	...	74	1	...	...	93,63	1901
6,66	86	19	12	46	...	1,69	56	1	79	5	40	3,36	...	2,30	1,87	13	2	2	3	...	87	1	1	...	1,00,92	1902		
GOODS TRAFFIC.																												
66,52	...	1,98	6,67	5,36	5	32,49	7,28	...	8,04	51	10,01	48,85	1,11	39,00	44,53	1,88	1,09	6	...	40	4,32	5	4	83	17,84,07	1898		
69,05	35	2,03	7,42	6,47	4	41,44	8,99	...	14,62	1,09	11,09	54,24	3,43	41,99	43,00	1,67	1,32	6	1	32	4,27	11	4	83	19,19,52	1899		
69,37	61	2,49	7,70	8,72	4	40,07	8,50	...	12,64	2,26	12,85	55,89	1,77	39,73	57,07	1,74	97	9	2	60	5,01	13	5	73	20,36,52	1900		
97,21	1,10	3,41	8,13	8,90	5	47,17	9,08	29	12,53	1,17	7,90	48,58	1,93	47,74	62,78	1,01	1,38	11	1	45	4,33	21	6	67	21,23,67	1901		
94,73	2,03	3,61	7,33	7,96	3	47,09	9,76	33	14,53	1,12	7,09	56,28	...	48,84	66,83	71	1,21	11	3	44	4,62	23	7	63	21,23,41	1902		
ELECTRIC TELEGRAPH.																												
17	...	...	11	12	...	39	7	...	30	1	16	37	...	122	29	5	...	...	...	1	3	...	...	...	7,49	1898
17	...	...	10	14	...	33	10	...	43	1	21	36	...	23	28	7	...	...	...	2	4	...	...	1	8,70	1899
18	...	1	11	13	...	31	8	...	41	2	18	29	...	25	26	7	...	...	...	2	3	...	...	...	7,93	1900
21	...	1	11	15	...	34	8	...	33	1	14	24	6	25	27	4	...	...	...	2	3	...	...	...	7,49	1901
21	...	2	9	15	...	33	7	...	32	1	14	29	...	25	26	4	...	...	...	2	3	...	...	1	7,82	1902
TOTAL GROSS EARNINGS **																												
1,09,69	...	2,69	8,37	13,08	32	64,75	14,96	...	13,60	1,44	20,04	71,70	2,21	87,65	89,01	3,76	1,30	74	...	86	7,55	1,00	76	96	27,41,31	1898		
1,07,73	84	2,73	9,22	16,20	33	77,83	17,38	...	20,84	2,11	22,43	75,87	3,72	87,90	88,28	4,20	1,56	66	46	95	7,15	2,51	73	96	29,30,78	1899		
1,13,39	1,76	3,49	9,67	17,10	35	80,47	16,91	...	18,22	3,18	23,63	86,89	3,24	91,95	1,10,26	4,23	1,24	77	69	96	8,09	2,56	76	87	31,54,32	1900		
1,62,72	2,41	4,87	9,99	21,34	48	97,31	17,57	67	22,38	2,22	18,96	81,12	3,63	1,05,26	1,18,85	3,59	1,62	83	69	84	7,85	2,61	79	88	33,60,34	1901		
1,66,04	4,44	5,27	9,10	20,96	30	1,01,50	18,64	78	25,02	2,17	16,85	93,17	...	1,10,10	1,25,03	3,05	1,59	84	76	85	8,36	2,63	82	87	33,92,69	1902		
NET EARNINGS.																												
56,03	...	1,15	2,87	54	7	36,67	7,94	...	8,09	62	8,28	21,39	-1,10	39,38	37,88	1,64	24	21	...	20	3,48	7	21	26	14,42,68	1898		
51,29	20	1,18	4,71	3,23	6	41,51	8,69	...	12,72	1,05	10,79	24,44	164	40,95	35,79	1,70	65	12	8	36	2,57	1,13	21	-0	15,43,42	1899		
54,37	1,01	1,94	4,81	3,64	7	40,89	8,76	...	10,13	1,86	11,75	30,60	-66	45,29	43,95	1,59	42	21	19	26	3,62	1,23	27	-15	16,45,01	1900		
79,09	1,33	2,45	4,85	4,58	18	53,67	9,68	20	9,94	94	8,10	23,97	-49	55,97	40,89	1,29	79	25	15	17	3,14	1,15	24	-4	17,97,93	1901		
74,95	1,85	2,58	4,12	2,54	6	54,46	9,89	23	11,96	97	6,83	32,52	...	59,18	32,73	1,13	53	25	21	22	3,76	1,3	32	-3	17,32,20	1902		

for which information is not available.
to the Madras railway from the 1st January 1901.
information is not available. || Total coaching traffic. ¶ Excluding the Karaikkal-Peralam and Pondicherry railways.
boat and other items not shown in details above.
Mahratta railway from 1902.
railways, see Appendix 7.
train-mile, see Appendices 22 and 23.

Appendix 14.
Number of Passengers.

Number of passengers carried by each railway, and average
(Referred to in paragraph

GAUGE.		5' GAUGE.										
CLASS: No.	1			2			3			4		
Railway.	EAST INDIAN.			EASTERN BENGAL STATE.			BENGAL CENTRAL.			BENGAL-NAGPUR SYSTEM.		
Calendar year.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pias.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pias.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pias.	Number in hundreds.	BENGAL-NAGPUR. (a) & (b).	
											Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pias.
1ST CLASS PASSENGERS.												
1898	64.2	124.42	13.24	44.6	51.76	13.29	8.9	37.34	9.73	6.0	103.08	13.33
1899	66.0	120.23	15.63	47.6	50.61	12.89	8.8	38.78	12.00	6.6	112.13	13.59
1900	64.8	121.44	15.16	45.0	51.53	13.61	9.3	43.21	14.21	8.6	117.42	13.66
1901	64.2	130.27	14.68	42.4	52.06	13.85	1.9	44.27	14.55	11.4	135.19	15.07
1902	73.0	142.34	14.71	39.7	61.03	13.94	2.1	45.09	14.13	13.3	155.75	14.54
2ND CLASS PASSENGERS.												
1898	183.1	118.96	6.43	137.2	46.34	6.21	35.0	26.07	4.85	16.3	77.88	5.85
1899	186.9	111.14	6.76	132.0	47.92	6.25	33.0	26.03	6.09	21.2	79.51	5.78
1900	185.8	122.14	6.54	126.5	47.39	6.59	33.3	22.97	7.40	25.4	77.55	6.18
1901	197.3	132.40	6.16	126.8	52.13	6.48	19.5	30.35	7.35	38.6	140.78	6.17
1902	215.1	136.27	6.04	117.1	56.86	6.54	18.3	30.44	7.20	38.5	145.54	5.91
INTERMEDIATE CLASS PASSENGERS.												
1898	1,304.1	52.94	3.19	910.5	31.42	3.00	48.9	37.82	3.25	18.9	43.86	2.82
1899	1,314.9	52.26	3.35	946.7	29.92	3.01	49.5	34.17	3.50	27.4	52.87	2.83
1900	1,421.4	52.39	3.28	982.8	28.22	3.08	53.4	32.28	3.50	39.7	64.82	2.93
1901	1,539.8	57.87	3.31	991.5	31.59	2.99	61.4	37.99	3.47	1,63.7	67.40	3.23
1902	1,690.5	57.01	3.13	1,050.3	31.02	3.04	63.9	38.13	3.47	1,49.1	73.26	3.24
3RD OR LOWEST CLASS PASSENGERS.												
1898	16,667.2	60.48	2.31	9,114.0	30.70	2.50	1,481.6	21.00	2.94	2,136.7	48.15	1.99
1899	17,367.6	59.75	2.31	9,920.0	29.95	2.50	1,514.8	22.43	2.92	2,815.0	60.72	1.98
1900	18,737.5	59.80	2.31	10,947.8	30.15	2.50	1,539.9	22.41	3.00	3,585.4	71.93	2.11
1901	20,127.4	62.45	2.46	10,891.0	31.22	2.44	1,610.5	24.79	3.00	5,717.1	71.84	2.28
1902	19,784.1	61.20	2.45	11,201.0	30.89	2.51	1,614.7	24.82	3.00	6,107.2	66.37	2.31
SEASON AND VENDORS' TICKETS.												
1898	1,173.7	...	...	788.9	2.55	2.78	142.6	...	...	68.6	...	...
1899	1,231.1	...	...	847.4	2.51	2.74	141.5	...	...	66.7	...	...
1900	1,307.8	...	...	863.8	2.79	2.73	164.2	...	...	37.7	...	...
1901	1,440.2	11.32	1.82	1,219.0	10.36	2.51	192.2	5.68	3.08	90.2	8.86	1.80
1902	1,563.1	11.32	1.70	1,234.8	10.66	2.49	212.2	5.48	3.05	103.7	8.81	1.76
TOTAL OF ALL CLASSES.												
1898	19,394.3	60.79	2.73	11,004.2	29.32	2.73	1,713.0	22.57	3.03	2,246.3	48.46	2.12
1899	20,156.5	60.01	2.73	11,902.7	28.76	2.70	1,731.5	22.95	3.04	2,930.9	60.88	2.09
1900	21,727.8	60.07	2.72	12,965.9	28.55	2.65	1,783.1	22.79	3.12	3,693.8	72.02	2.10
1901	23,873.1	59.97	2.64	13,271.6	29.61	2.62	1,885.3	23.35	3.11	6,021.0	71.34	2.40
1902	23,855.8	58.52	2.67	12,643.8	29.32	2.69	1,911.2	23.19	3.10	6,471.8	65.73	2.44
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIAS.												
1898	0.73			1.13			1.49			1.76		
1899	0.75			1.25			1.43			1.69		
1900	0.76			1.24			1.33			0.74		
1901	0.76			1.20			1.05			1.06		
1902	0.83			1.13			1.25			1.05		
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIAS.												
1898	2.00			1.56			1.54			0.36		
1899	1.98			1.43			1.60			1.00		
1900	1.96			1.43			1.88			0.46		
1901	1.88			1.41			2.06			1.56		
1902	1.83			1.55			1.85			1.39		

N.B.—Except in the case of Eastern Bengal State railway, the average distance and average rate for season † Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901,

DIX 14.

Appendix 14.
Number of Passenges.

Distance travelled by, and average rate charged to, each passenger.
(4 of Report.)

5' 6" GAUGE—continued.															GAUGE.
5			6			7			CLASS.						
EAST COAST STATE.			ODISH AND BOMILKHAND STATE.			NORTH WESTERN STATE. (a) to (h).			GREAT INDIAN PENINSULA SYSTEM.						RAILWAY.
									GREAT INDIAN PENINSULA. (a) to (c).			INDIAN MIDLAND. (d) to (h).			
Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Calendar year.
1ST CLASS PASSENGERS.															
4.8	53'35	17'18	22.5	90'75	11'26	154.3	51'29	10'42	69.6	87'30	10'72	11.1	107'83	10'41	1898
6.8	91'54	15'54	22.0	86'46	11'37	32.0	116'12	10'89	72.8	87'18	10'95	11.9	186'02	10'80	1899
7.2	130'11	15'23	29.1	87'14	11'32	48.2	135'33	10'72	67.9	88'12	10'96	11.2	173'95	10'86	1900
†	†	†	28.0	89'69	11'41	53.0	131'66	10'37	69.7	131'51	10'94	12.2	175'18	11'15	1901
†	†	†	32.5	97'70	11'30	57.0	131'21	10'81	71.3	152'24	10'95	13.7	229'86	10'65	1902
2ND CLASS PASSENGERS.															
13.7	29'21	8'84	72.3	93'19	4'13	196.2	157'62	3'75	349.1	45'74	3'72	45.2	169'89	4'36	1898
22.7	36'55	7'50	68.8	86'46	5'36	173.6	196'38	4'61	306.7	41'53	4'14	43.1	156'40	4'58	1899
23.8	70'22	6'79	91.4	86'18	5'31	170.5	160'43	4'84	325.0	36'02	4'14	37.3	156'02	5'26	1900
†	†	†	105.2	84'58	5'24	188.8	120'09	4'41	388.6	99'92	4'30	43.5	158'85	5'31	1901
†	†	†	114.2	93'39	5'07	204.4	121'79	4'33	433.2	122'79	3'74	51.5	191'92	4'45	1902
INTERMEDIATE CLASS PASSENGERS.															
8.0	51'94	4'46	395.3	41'66	3'36	700.9	67'72	3'01	321.9	110'71	3'00	353.2	77'03	2'97	1898
10.0	85'60	4'39	347.0	44'30	3'34	744.5	64'83	3'01	364.4	114'62	3'00	319.1	82'03	3'00	1899
15.5	93'90	4'47	392.0	45'13	3'37	916.6	65'32	3'01	405.3	106'37	3'00	292.4	83'37	2'97	1900
†	†	†	507.7	44'87	3'05	1,322.8	55'87	3'01	553.3	101'64	3'00	312.3	83'76	2'91	1901
†	†	†	605.9	45'39	3'03	1,307.5	58'33	3'02	563.0	111'04	3'00	271.1	99'10	2'95	1902
3RD OR LOWEST CLASS PASSENGERS.															
2,633.1	31'53	2'33	5,485.9	43'57	2'50	15,300.0	50'52	2'26	9,105.0	28'00	1'90	1,411.9	60'20	2'35	1898
3,652.5	38'60	2'48	5,954.0	42'47	2'50	16,286.3	44'08	2'26	10,520.3	29'32	1'91	1,659.5	100'14	2'23	1899
4,340.0	39'21	2'47	6,482.4	42'46	2'51	17,054.4	50'06	2'26	11,715.2	28'93	1'91	1,224.8	61'30	2'35	1900
†	†	†	8,122.6	41'05	2'47	18,722.4	49'50	2'27	13,819.0	39'57	2'00	2,160.0	63'41	2'52	1901
†	†	†	7,579.8	43'27	2'43	19,253.1	50'46	2'27	12,472.0	42'12	2'09	2,212.2	64'57	2'55	1902
SEASON AND VENDORS' TICKETS.															
58.6	...	...	...	...	...	...	...	...	4,405.8	...	...	3	...	...	1898
73.8	...	...	...	...	...	...	...	...	4,820.3	...	...	6	...	...	1899
72.0	...	...	...	...	...	...	...	...	5,117.5	...	...	10	...	...	1900
†	†	†	...	...	...	...	...	...	5,278.0	7'03	0'45	6	7'44	10'75	1901
†	†	†	...	...	...	...	...	...	4,809.5	7'39	1'12	2	13'33	12'00	1902
TOTAL OF ALL CLASSES.															
2,738.2	31'60	2'43	5,976.0	44'22	2'68	16,352.3	52'26	2'43	14,251.4	31'49	2'34	1,822.3	74'05	2'87	1898
3,765.8	39'02	2'50	6,392.7	43'22	2'67	17,257.0	45'82	2'42	10,144.5	32'36	2'34	2,034.2	69'42	2'86	1899
4,459.4	39'75	2'60	6,994.9	43'37	2'71	18,189.7	51'59	2'41	17,690.9	31'72	2'31	2,220.7	68'51	2'85	1900
†	†	†	8,764.4	42'79	2'64	20,293.6	50'80	2'42	20,109.1	34'22	2'27	2,528.6	68'29	2'85	1901
†	†	†	8,332.4	44'31	2'62	20,822.0	51'87	2'43	18,349.0	37'47	2'39	2,548.7	72'07	2'87	1902
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.															
1'53	1'20	1'13	1'34	1'45	1898										
1'25	1'12	1'19	1'91	1'60	1899										
1'02	1'31	1'30	1'65	1'61	1900										
†	2'06	1'18 ⁰⁰	1'48	1'48	1901										
†	1'18	1'39	1'53	1'53	1902										
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.															
0'90	1'48	1'29	0'00	1'42	1898										
1'35	1'55	1'23	0'43	1'22	1899										
1'58	'40	1'11	0'66	1'24	1900										
†	1'58	1'24 ⁰⁰	0'90	0'90	1901										
†	1'44	1'04	0'56	0'56	1902										

and vendors' tickets for the years 1891 to 1900 are included under the several classes, as the information is not available separately.
 † Third class by mail trains. ‡ Third class by other than mail trains.
 § Includes the Gwalior Light (2' 6" gauge) in the case of number only, which is shown under 3rd or lowest class and total, as details by classes are not furnished.
 ¶ Excludes the Nowsara-Durgai railway.

Appendix 14.
Number of Passengers.

Number of passengers carried by each railway, and average
(Referred to in paragraph

5' 6" GAUGE—concluded.

GAUGE.	9												10		
	8						NIZAM'S GUARANTEED STATE SYSTEM.						MADRAS		
	BOMBAY, HARIDA AND CENTRAL INDIA SYSTEM.						Hyderabad-Godavari Valley.						MADRAS.		
	Bombay, Harida and Central India. (a) to (c), (l) and (m).			Kajputana-Malwa (f) to (h). (3' 31").			Nizam's Guaranteed State (a) and (b).			(c) (3' 31").			(a) to (c).		
CLASS No.															
RAILWAY.															
Calendar year.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.
1ST CLASS PASSENGERS.															
1898	75.5	19'65	9'67	20.4	88'96	13'34	7.4	81'81	15'10	...	...	...	24.8	126'28	11'23
1899	78.1	20'39	9'71	20.5	90'34	13'52	7.0	80'70	15'24	...	...	...	24.1	136'36	10'79
1900	76.9	20'36	9'66	20.6	84'47	13'34	6.5	82'31	15'13	2.2	68'47	11'56	22.4	141'60	11'32
1901	71.4	35'85	10'97	19.0	97'13	13'35	6.1	88'03	14'49	3.6	99'36	11'29	28.8	129'43	13'04
1902	69.2	38'64	11'25	23.4	103'01	13'05	6.8	92'48	14'39	4.2	99'99	10'87	30.3	142'89	13'04
2ND CLASS PASSENGERS.															
1898	317.9	13'06	4'57	91.4	79'11	5'89	35.3	86'53	4'59	...	...	...	89.5	87'79	4'82
1899	606.1	14'80	4'65	82.7	84'13	6'09	36.3	87'63	4'69	7	...	...	102.4	88'55	4'73
1900	575.5	14'02	4'20	75.3	81'68	6'33	34.7	77'86	4'96	17.6	64'73	5'00	95.4	88'94	4'71
1901	550.1	28'51	5'58	87.9	91'14	5'41	37.9	84'93	4'44	22.6	68'91	4'76	111.2	94'53	6'27
1902	535.0	27'02	5'68	91.0	84'08	6'31	40.6	80'49	4'37	27.2	85'69	4'57	120.3	98'73	6'00
INTERMEDIATE CLASS PASSENGERS.															
1898	305.3	106'61	2'00	227.2	68'75	2'90	252.5	35'18	2'10	...	...	...	...	...	...
1899	381.3	110'61	2'09	259.2	68'78	2'90	255.7	34'12	2'30	...	...	...	...	...	...
1900	404.4	107'50	2'59	275.3	68'17	2'98	246.2	35'65	2'30	...	...	...	...	...	...
1901	420.6	110'60	2'99	308.1	66'53	2'98	271.2	35'45	2'50	...	...	...	19.2	93'31	4'50
1902	378.1	120'52	2'99	288.0	67'53	2'99	271.7	36'90	2'50	...	...	...	20.9	97'33	4'52
3RD OR LOWEST CLASS PASSENGERS.															
1898	8,379.9	14'49	2'27	10,502.4	47'22	2'00	911.2	50'23	2'00	...	...	...	8,935.2	39'48	2'10
1899	10,634.0	16'66	2'30	10,829.6	48'44	2'00	913.2	51'99	2'00	17.9	...	...	7,660.1	28'24	2'11
1900	11,477.6	18'22	2'32	10,730.7	46'95	2'00	1,011.9	50'70	2'00	573.1	48'22	2'03	8,454.3	30'97	2'11
1901	11,713.8	21'99	2'47	12,451.8	47'49	2'00	1,081.6	48'21	2'00	1,145.0	54'01	2'00	11,597.3	34'98	2'25
1902	12,069.8	22'66	2'47	11,683.3	46'83	2'00	1,421.4	37'51	1'98	1,180.9	53'85	2'00	12,141.7	34'96	2'26
SEASON AND VENDORS' TICKETS.															
1898	4,631.6	...	...	3.3	...	...	5.7	...	...	...	...	...	494.1	...	...
1899	5,204.4	...	...	3.3	...	...	18.0	...	...	...	...	...	505.1	...	...
1900	3,285.2	...	...	4.8	...	...	14.0	...	...	...	...	...	510.4	...	...
1901	3,387.9	7'09	1'44	6.0	32'37	1'99	12.0	31'35	6'70	5.3	44'71	6'56	610.9	14'82	0'55
1902	5,821.5	7'92	1'41	5.2	28'36	1'90	9.8	78'08	2'59	4.0	94'33	3'08	688.9	14'94	0'56
TOTAL OF ALL CLASSES.															
1898	13,906.2	16'44	2'64	10,845.4	48'02	2'12	1,212.1	48'37	2'17	...	...	...	9,543.6	30'47	2'30
1899	16,906.0	18'66	2'64	11,197.6	49'31	2'13	1,231.8	49'00	2'18	18.7	43'38	2'28	8,291.7	29'54	2'36
1900	17,849.0	19'99	2'60	11,119.9	47'78	2'12	1,312.3	48'91	2'34	588.3	48'22	2'13	9,091.5	32'10	2'32
1901	18,143.8	20'79	2'61	12,473.7	48'31	2'12	1,402.8	47'47	2'39	1,176.5	54'74	2'15	12,277.4	34'82	2'42
1902	18,893.6	20'26	2'60	12,091.0	47'70	2'14	1,750.3	38'86	2'31	1,216.3	50'48	2'15	13,005.1	34'84	2'43
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.															
1898	...	1'40	...	0'81	...	...	0'85	...	...	...	...	...	...	1'05	...
1899	...	1'39	...	0'78	...	...	0'82	...	...	...	1'44	...	...	1'19	...
1900	...	1'39	...	0'87	...	...	0'87	...	...	...	1'32	...	...	1'11	...
1901	...	1'31	...	0'79	...	...	0'78	...	...	...	1'27	...	...	0'95	...
1902	...	1'49	...	0'95	...	...	0'95	...	...	...	1'40	...	...	1'21	...
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.															
1898	...	1'19	...	1'31	...	...	1'52	...	...	...	...	...	...	1'26	...
1899	...	1'21	...	1'35	...	...	1'56	...	...	...	...	...	...	1'17	...
1900	...	1'17	...	1'35	...	...	1'47	...	...	...	0'84	...	...	1'21	...
1901	...	1'30	...	1'33	...	...	1'54	...	...	...	0'88	...	...	1'47	...
1902	...	1'08	...	1'19	...	...	1'36	...	...	...	0'75	...	...	1'23	...

* Includes the Godhra-Rutlam-Nagda (5' 6" gauge) railway, but excludes Gaekwar's Dabhoi and Rajpipla (2' 6" gauge) railways.

† Excludes the Godhra-Rutlam-Nagda (5' 6" gauge) railway. ‡ Third class by mail trains. § Third class by other than mail trains.

N.B.—The average distance and average rate for season tickets for the years 1898

DIX 14—continued.

Appendix 14.
Number of Passengers.

distance travelled by, and average rate charged to, each passenger.

24 of Report).

SYSTEM.			3' 31" GAUGE.												GAUGE.
			12			13			14			15			
S. C. & N. (d) & (e) (3' 31")			BENGAL DOOARS.			DIBRU-SADIYA.			ASSAM-BENGAL.			DEOGHUR.			RAILWAY.
Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.		Calendar year.
1ST CLASS PASSENGERS.															
...	...	...	6	23'72	25'35	4,1	10'48	22'14	3,3	65'77	15'27	1,0	479	20'04	1898
1,5	16'85	76'00	3	21'80	26'27	4,3	21'39	21'92	3,8	61'02	15'07	1,0	479	20'04	1899
3,2	16'69	76'00	6	21'69	27'36	3,8	21'86	22'18	3,9	61'76	15'23	1,0	479	20'04	1900
3,3	16'65	76'00	7	16'68	20'67	4,1	19'92	22'10	4,0	66'90	15'19	3,2	479	...	1901
3,8	21'06	74'85	6	17'63	28'63	4,0	19'63	21'96	4,5	68'51	14'94	2	...	...	1902
2ND CLASS PASSENGERS.															
...	...	...	1,5	21'39	14'02	2,9	21'58	11'31	6,6	54'04	7'69	...	...	...	1898
3,9	16'13	38'00	1,6	21'10	14'78	2,9	23'17	11'28	8,7	54'89	7'73	...	...	...	1899
5,7	16'28	38'00	1,5	19'67	16'20	2,9	22'30	11'31	9,2	58'22	7'62	...	...	...	1900
5,9	16'18	38'00	1,9	16'43	16'82	3,0	20'86	11'38	10,3	56'13	7'70	...	...	...	1901
10,9	22'62	26'54	2,3	17'32	15'88	3,0	21'04	11'38	10,7	58'80	7'59	...	...	...	1902
INTERMEDIATE CLASS PASSENGERS.															
...	...	...	1,2	24'70	4'83	...	...	...	...	...	...	...	...	...	1898
...	...	...	1,6	23'47	4'61	...	...	...	...	...	...	...	...	...	1899
...	...	...	1,5	21'00	4'98	...	...	...	1,2	43'28	4'50	...	...	...	1900
...	...	...	2,5	17'87	5'00	...	...	...	5,1	47'72	4'50	...	...	...	1901
...	...	...	5,5	15'32	4'72	...	...	...	5,9	51'87	4'47	...	...	...	1902
3RD OR LOWEST CLASS PASSENGERS.															
...	...	...	145,6	16'04	3'00	229,0	20'44	4'02	1,208,2	33'49	3'00	188,9	4'79	5'53	1898
45,1	10'97	7'4	161,4	16'03	3'00	236,7	22'55	4'00	1,410,1	37'21	3'00	222,0	4'79	5'11	1899
73,3	11'84	7'50	217,9	15'35	3'00	272,3	20'30	4'00	1,532,5	35'20	3'00	231,0	4'79	4'27	1900
65,8	16'77	7'00	311,2	15'94	3'00	282,8	17'63	4'00	1,720,9	38'34	3'00	326,7	4'79	...	1901
322,2	22'13	3'42	334,0	16'03	3'00	295,3	17'69	4'00	1,742,4	36'38	3'00	184,8	...	...	1902
SEASON AND VENDORS' TICKETS.															
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1898
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1899
1,2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1900
1,2	12'70	1'90	...	...	...	...	...	...	...	...	...	...	...	...	1901
2,0	11'27	1'49	...	...	...	...	...	...	...	...	...	...	...	...	1902
TOTAL OF ALL CLASSES.															
...	...	...	148,9	16'22	3'31	236,0	20'44	4'12	1,218,1	34'68	3'10	189,9	4'79	5'60	1898
50,0	11'52	13'37	165,1	16'16	3'30	241,9	20'59	4'86	1,422,6	36'87	3'10	222,0	4'79	5'18	1899
83,4	12'75	15'10	221,5	15'45	3'24	279,0	20'34	4'35	1,546,8	36'37	3'09	231,0	4'79	5'34	1900
70,2	16'61	13'71	316,3	15'98	3'16	299,9	17'70	4'38	1,740,3	38'54	3'09	328,9	4'79	5'62	1901
338,9	22'07	4'94	362,4	16'03	3'16	302,3	17'74	4'35	1,763,5	36'69	3'11	185,0	...	...	1902
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.															
...	...	...	...	3'00	...	3'36	...	1'82	...	...	...	...	...	...	1898
...	...	...	...	3'78	...	3'00	...	1'75	...	...	...	...	...	...	1899
...	...	...	...	3'48	...	2'52	...	1'37	...	...	...	Information not furnished.	...	...	1900
...	7'89	...	...	2'88	...	3'00	...	1'80	...	...	...	3'54	...	...	1901
...	3'14	...	...	55	...	...	...	2'18	...	...	...	...	...	...	1902
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.															
...	...	...	...	-0'59	...	1'06	...	1'28	...	...	...	...	...	...	1898
...	...	...	...	-0'48	...	1'86	...	1'85	...	...	...	...	...	...	1899
...	...	...	...	-0'22	...	1'83	...	1'72	...	...	...	Information not furnished.	...	...	1900
...	5'32	...	...	0'18	...	1'38	...	1'29	...	...	...	2'08	...	...	1901
...	1'80	...	...	55	...	...	...	0'93	...	...	...	...	...	...	1902

** Excludes the Bengal Dooars extensions. † Excludes the Ledo and Tikak Margherita colliery branch railway. ‡ Intermediate class introduced from 1st October 1900.

to 1900 are included under the several classes, as the information is not available separately. §§ Information not furnished.

Appendix 14.
Number of Passengers.

Number of passengers carried by each railway, and average
(Referred to in paragraph

GAUGE		3' 31" GAUGE—continued.																	
CLASS No.	16			17						18			19			20			
RAILWAY.	BENGAL AND NORTH-WESTERN.			ROHILKUND AND KUMAON SYSTEM.						JODHPUR-BIKANER.			UDAIPUR-CHITOR.			BHAYNAGAR-GONDAL-JUNAGAD-PORBANDAR.			
	Calendar year.	Number in hundreds.	Average distance travelled by each in miles.	KUMILKUND AND KUMAON (a) and (b).		POWAIYAN LIGHT. (c)		Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.
1ST CLASS PASSENGERS.																			
1898	16.5	28'44	21'43	4.7	53'31	27'02	...	...	...	1.7	79'26	18'00	4	67'19	16'34	8.5	48'99	11'10
1899	17.5	33'27	17'03	4.6	52'74	26'04	...	...	...	1.2	80'32	18'00	2	35'32	18'00	7.8	48'05	11'01
1900	17.2	40'90	18'67	4.6	50'02	26'37	...	...	...	1.0	78'38	18'00	4	60'11	17'06	6.7	45'48	11'13
1901	18.5	41'36	18'69	5.3	52'38	26'47	3	...	...	2.7	95'00	14'40	5	56'08	17'99	6.8	46'80	11'24
1902	24.5	34'21	13'14	5.3	52'04	26'22	2	...	...	3.1	95'90	14'23	5	60'06	17'81	5.3	48'80	11'26
2ND CLASS PASSENGERS.																			
1898	24.6	31'94	10'17	17.4	60'08	9'77	...	...	...	7.0	68'82	6'00	1.4	56'42	8'56	57.4	41'20	5'45
1899	25.3	41'13	7'87	15.9	63'57	11'17	...	...	...	6.9	60'76	6'00	1.3	51'55	9'00	60.2	42'71	5'44
1900	28.7	46'03	6'00	15.9	60'31	9'82	...	...	...	7.1	66'20	6'00	1.1	57'32	9'00	48.8	42'04	5'44
1901	32.0	51'06	5'89	19.4	83'25	7'79	5	...	...	16.8	80'00	5'00	1.3	57'32	9'00	49.9	42'80	5'55
1902	33.2	59'19	5'53	21.4	89'74	7'28	8	...	...	16.8	82'25	6'00	1.5	57'75	8'8	40.8	43'50	5'60
INTERMEDIATE CLASS PASSENGERS.																			
1898	62.2	26'10	3'01	10.7	40'13	4'00	...	...	...	...	...	...	2.2	52'06	4'00	...	...	...
1899	65.7	33'04	4'01	11.7	39'41	4'01	...	...	...	...	...	...	1.9	51'34	3'00	1.6	50'88	4'00
1900	79.7	42'97	3'04	11.5	40'34	3'75	...	...	...	...	...	...	2.4	56'04	3'00	42.6	38'08	4'82
1901	112.4	43'93	3'04	14.0	40'13	4'00	...	...	...	...	...	...	2.5	51'46	3'00	41.2	46'29	4'00
1902	130.7	44'48	3'05	15.1	40'48	4'00	...	...	...	...	...	...	2.9	50'48	2'99	49.0	45'01	4'00
3RD OR LOWEST CLASS PASSENGERS.																			
1898	6,082.8	33'86	2'00	1,088.2	33'52	2'20	...	...	...	760.0	54'42	2'00	175.9	41'24	2'05	1,568.3	34'01	2'75
1899	6,916.6	31'54	2'00	1,139.7	33'28	2'20	...	...	...	869.1	54'47	2'00	183.8	42'84	2'00	1,811.0	34'27	2'75
1900	7,871.8	33'87	2'00	1,180.0	34'04	2'18	...	...	...	778.5	53'58	2'00	165.4	43'00	2'00	1,722.4	33'63	2'75
1901	9,037.3	30'02	2'00	1,500.2	33'26	2'19	221.1	...	...	1,447.6	50'00	2'05	184.8	45'44	1'99	1,724.4	34'78	2'75
1902	9,935.8	39'12	2'00	1,550.3	32'32	2'19	257.1	...	...	1,358.1	54'30	2'06	173.3	47'47	1'99	1,393.9	37'12	2'75
SEASON AND VENDORS' TICKETS.																			
1898	60.9	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2.6	...	...
1899	60.7	...	...	...	...	...	...	...	...	...	...	...	4	...	...	2.5	...	...
1900	67.6	...	...	...	...	...	...	...	...	...	...	...	5	...	...	16.1	...	...
1901	1.6	40'00	3'43	...	...	...	...	...	...	...	...	...	...	...	...	18.9	4'19	3'20
1902	1.6	40'00	4'12	...	...	...	...	...	...	...	...	...	5	...	...	17.1	2'93	3'29
TOTAL OF ALL CLASSES.																			
1898	6,247.0	31'76	2'10	1,121.0	34'23	2'62	...	...	...	768.7	54'62	2'09	180.1	41'54	2'20	1,636.8	34'34	2'93
1899	7,094.8	33'57	2'07	1,171.9	34'42	2'59	...	...	...	877.2	54'63	2'07	190.2	42'96	2'12	1,883.1	34'62	2'90
1900	8,005.0	34'03	2'06	1,218.0	34'04	2'53	...	...	...	786.6	53'73	2'07	169.8	43'28	2'13	1,836.6	33'05	2'93
1901	9,801.8	30'17	2'00	1,530.1	34'31	2'52	221.9	...	...	1,467.1	51'00	2'10	189.1	45'63	2'17	1,842.2	35'00	2'92
1902	10,125.8	39'24	2'06	1,592.3	33'43	2'53	258.1	...	...	1,372.0	54'74	2'18	178.7	48'98	2'13	1,506.0	37'20	2'93
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.																			
1898	0'82	...	...	1'05	...	...	...	...	...	0'89	...	...	1'50	...	...	1'83	...	...
1899	0'90	...	...	1'08	...	...	...	...	...	0'84	...	...	1'35	...	...	1'53	...	...
1900	0'94	...	...	1'02	...	...	...	...	...	0'98	...	...	1'35	...	...	1'52	...	...
1901	0'82	...	...	1'06	...	...	...	...	...	1'22	...	...	1'54	...	...	1'62	...	...
1902	0'94	...	...	1'08	...	...	...	...	...	1'23	...	...	1'50	...	...	1'73	...	...
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.																			
1898	1'28	...	...	1'37	...	...	...	...	...	1'20	...	...	0'70	...	...	1'10	...	...
1899	1'17	...	...	1'31	...	...	...	...	...	1'23	...	...	0'77	...	...	1'37	...	...
1900	1'12	...	...	1'31	...	...	...	...	...	1'09	...	...	0'78	...	...	1'41	...	...
1901	1'24	...	...	1'46	...	...	...	...	...	0'94	...	...	0'58	...	...	1'30	...	...
1902	1'12	...	...	1'48	...	...	...	...	...	0'94	...	...	0'63	...	...	1'20	...	...

† Fares by mail train between Madras and
N.B.—The average distance and average rate for season and vendors' tickets for the years

DIX 14—continued.

Appendix 14.
Number of Passengers.

distance travelled by, and average rate charged to, each passenger.

24 of Report.)

3' 31" GAUGE—concluded.												2' 6" GAUGE.			GAUGE.
21						22			23			24			CLASS: No.
SOUTHERN MAHRATTA.						SOUTH INDIAN.			BURMA.			MORVI.			RAILWAY.
SOUTHERN MAHRATTA.			WEST OF INDIA PORTUGUESE.			SOUTH INDIAN.			BURMA.			MORVI.			RAILWAY.
Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Calendar year.
1ST CLASS PASSENGERS.															
16.2	100'90	11'33	1.1	30'30	12'00	16.6	36'71	11'66	23.3	48'31	13'97	2.5	33'35	14'30	1898
15.6	88'57	11'33	1.9	15'41	12'00	16.8	54'05	11'65	22.9	48'02	13'83	1.9	54'42	14'04	1899
17.0	93'90	11'27	1.7	18'29	12'00	16.7	51'11	11'62	22.8	54'40	14'35	1.6	58'15	14'65	1900
15.8	98'03	11'27	1.8	18'87	12'00	18.1	70'00	11'81	25.3	66'85	15'01	1.8	56'56	12'56	1901
18.6	99'25	12'06	§	§	§	20.4	82'48	11'89	25.6	62'16	16'40	1.5	61'20	12'33	1902
2ND CLASS PASSENGERS.															
47.8	91'72	4'98	8.5	14'34	6'00	99.1	45'58	5'69	170.0	26'62	6'64	9.8	53'83	7'26	1898
69.9	75'33	5'32	11.0	14'07	6'00	93.5	47'51	5'85	163.1	25'34	6'46	9.3	54'02	7'38	1899
68.2	70'67	5'36	12.5	14'71	6'00	91.2	35'16	5'11	149.7	30'93	6'83	8.7	56'24	7'35	1900
56.5	85'47	5'08	11.1	15'10	6'00	100.0	35'65	5'90	154.1	47'72	6'72	10.2	59'33	6'27	1901
77.6	83'58	5'12	§	§	§	114.2	52'46	5'91	146.8	37'54	8'56	9.0	57'25	6'09	1902
INTERMEDIATE CLASS PASSENGERS.															
...	...	...	...	...	...	...	...	...	103.6	90'67	3'74	...	...	...	1898
...	...	...	...	...	...	...	...	...	86.7	60'75	3'70	...	...	...	1899
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1900
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1901
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1902
3RD OR LOWEST CLASS PASSENGERS.															
3,777.8	40'66	2'00	154.4	15'37	2'50	12,579.4	30'91	1'99	9,686.3	27'33	2'65	263.6	42'68	3'01	1898
3,157.0	43'30	2'00	309.0	14'16	2'50	12,449.1	30'19	2'00	9,678.4	27'39	2'66	281.1	43'70	3'00	1899
5,291.5	41'10	2'00	229.3	13'00	2'50	13,002.8	31'29	1'00	10,576.4	27'15	3'01	282.9	43'15	3'00	1900
5,836.1	40'06	2'03	237.6	13'69	2'50	13,591.8	31'69	2'05	11,376.0	26'10	3'04	290.6	46'64	2'84	1901
6,282.0	39'70	2'10	§	§	§	14,911.7	33'42	2'05	11,882.9	26'49	2'99	232.8	48'21	3'00	1902
SEASON AND VENDORS' TICKETS.															
3.9	...	...	...	...	...	202.4	...	...	73.3	...	...	...	...	...	1898
10.0	...	...	...	...	...	196.8	...	...	103.3	...	...	...	...	...	1899
13.7	...	...	...	...	...	261.1	...	...	90.9	...	...	...	...	...	1900
17.0	19'04	1'07	...	...	...	325.2	15'29	0'56	95.2	6'82	3'00	...	...	...	1901
18.8	17'45	1'04	§	§	§	341.0	16'13	0'54	110.4	6'41	2'98	...	...	...	1902
TOTAL OF ALL CLASSES.															
3,845.7	41'55	2'18	164.0	15'35	2'76	12,897.5	31'09	2'07	10,056.5	28'03	2'83	275.9	43'17	3'33	1898
3,252.5	44'21	2'21	221.0	14'16	2'76	12,756.2	30'37	2'07	10,054.6	27'90	2'82	292.3	44'10	3'27	1899
5,390.4	41'75	2'15	243.5	13'08	2'76	13,371.8	31'10	2'07	10,845.8	27'31	3'16	293.2	43'57	3'25	1900
5,927.4	40'62	2'16	250.5	13'79	2'76	14,035.1	33'47	2'11	11,650.6	26'31	3'20	302.6	47'13	3'29	1901
6,397.0	40'34	2'24	§	§	§	15,387.3	33'25	2'12	12,165.5	26'52	3'16	243.3	48'65	3'21	1902
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.															
1'49	...	...	...	0'01	...	1'07	...	...	1'27	...	...	...	2'16	...	1898
1'45	...	...	...	5'18	...	0'94	...	...	1'29	...	...	...	2'28	...	1899
1'27	...	...	...	8'01	...	0'92	...	...	1'29	...	...	...	1'92	...	1900
1'30	...	...	...	7'08	...	0'82	...	...	1'41	...	...	...	2'14	...	1901
1'41	...	...	...	§	...	0'83	...	...	1'48	...	...	...	2'23	...	1902
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.															
0'69	...	...	...	—6'25	...	1'00	...	...	1'56	...	...	...	1'17	...	1898
0'76	...	...	...	—5'42	...	1'13	...	...	1'53	...	...	...	0'99	...	1899
0'87	...	...	...	—5'23	...	1'15	...	...	1'87	...	...	...	1'23	...	1900
0'66	...	...	...	—1'02	...	1'29	...	...	1'79	...	...	...	0'91	...	1901
0'83	...	...	...	§	...	1'29	...	...	1'68	...	...	...	0'82	...	1902

Tuticorin raised to 2'50 pies per mile from the 1st November 1900. † Intermediate class abolished. § Included with the Southern Mahratta railway. 1898 to 1900 are included under the several classes, as the information is not available separately.

Appendix 14.
Number of Passengers.

Number of passengers carried by each railway, and average

(Referred to in paragraph

GAUGE.		1' 6" GAUGE—concluded.											
Class: No.		25			26			27			28		
Railway.		BANSI.			TARAKESHWAR-MAGRA.			RANAGHAT-KRISHNAGAR.			TEZPUR-BALIPARA.		
Calendar year.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	Number in hundreds.	Average distance travelled by each in miles.	Average rate charged per mile in pies.	
1ST CLASS PASSENGERS.													
1898	
1899	
1900	
1901	3	377	2191	3	...	...	25	...	...
1902	4	...	...	...	...	...	23	...	...
2ND CLASS PASSENGERS.													
1898	8	23'31	14'85	...	...	...	...	...	...	...	...	...
1899	7	21'35	23'56	...	...	...	...	...	...	...	...	...
1900	7	21'37	22'00	...	...	...	...	...	...	...	...	...
1901	5	21'02	23'17	8	520	10'55	...	...	...	...	...	...
1902	7	20'95	22'88	9	...	...	...	...	...	...	...	...
INTERMEDIATE CLASS PASSENGERS.													
1898	
1899	
1900	
1901	8,0	7'74	4'44	...	...	...	...	...	...
1902	11,0	...	...	...	...	...	7	...	...
3RD OR LOWEST CLASS PASSENGERS.													
1898	†	49'7	19'44	3'00	1371,1	...	...	...	...	118,5	...	...
1899	...	54,0	20'48	3'00	1326,3	...	...	156,5	...	136,8	...	...
1900	...	64,5	20'65	3'00	1303,1	...	...	226,2	...	144,9	...	...
1901	...	76,8	20'70	3'00	401,4	9'92	3'01	1226,1	...	103,8	...	...
1902	...	71,1	20'12	3'00	403,6	...	...	240,7	...	111,0	...	...
SEASON AND VENDORS' TICKETS.													
1898	
1899	
1900	
1901	8,6	9'00	4'25	...	...	...	9,0	...	...
1902	12,6	...	...	...	...	...	9,0	...	...
TOTAL OF ALL CLASSES.													
1898	...	50,5	19'50	3'22	371,1	...	...	...	...	118,5	...	...
1899	...	54,7	20'29	3'26	326,3	...	...	156,5	...	136,8	...	...
1900	...	65,2	20'76	3'21	393,1	...	...	226,2	...	144,9	...	...
1901	...	77,3	20'71	3'14	419,0	9'86	3'23	226,1	...	116,0	...	...
1902	...	71,8	20'12	3'19	428,5	...	...	240,7	...	125,4	...	...
AVERAGE COST OF CARRYING EACH PASSENGER PER MILE IN PIES.													
1898	...	3'93	...	...	...	...	...	...	...	...	...	...
1899	...	3'97	...	...	...	...	...	...	...	...	...	...
1900	...	3'03	...	...	...	...	...	...	...	...	...	...
1901	...	3'59	...	...	...	...	...	...	...	...	...	...
1902	
AVERAGE PROFIT FROM CARRIAGE OF EACH PASSENGER PER MILE IN PIES.													
1898	...	2'71	...	...	...	...	...	...	...	...	...	...
1899	...	0'29	...	...	...	...	...	...	...	...	...	...
1900	...	0'19	...	...	...	...	...	...	...	...	...	...
1901	...	0'33	...	...	...	...	...	...	...	...	...	...
1902	

* Upper class. † Lower class. ‡ Total shown under 3rd or lowest class, as details by classes are not available.

Appendix 15.
Passenger earnings.

Gross earnings in thousands of rupees from

(Referred to in paragraph

N.B.—A reference to Appendix 2 will furnish the key to

GAUGE.	5' 6" GAUGE.														12	13	14.		
	CLASS No.	1	2		3	4	5	6	7		8		9					10	
	Calendar year.	E. I.	E. B. SYSTEM.		B. C.	B. N. (a) and (b).	E. C.	O. & R. (a) to (c)	N. W. (a) to (k).	G. I. P. SYSTEM.		B. B. & C. I. SYSTEM.		N. G. S. SYSTEM.				M. SYSTEM.	
5' 6" gauge. (a)			Other gauges. (b) to (e).	G. I. P. (a) to (c).						I. M. (d) to (k).	B. B. & C. I. (a) to (e) & (j) to (m).	R. M. (f) to (k).	N. G. S. (a) & (b).	H. G. V. (c).	M. (a) to (c).	S. C. & N. (d) to (e).	B. D.	D. S.	A. B.
1ST CLASS PASSENGERS.																			
1898 . . .	6,92	95	65	6	44	30	1,20	4,26	5,17	1,22	1,26	1,28	52	...	1,99	...	2	9	17
1899 . . .	6,86	1,06	56	7	53	52	1,22	3,77	5,51	1,30	1,41	1,33	52	...	1,98	11	2	11	18
1900 . . .	6,75	1,07	58	7	71	74	1,52	3,64	5,27	1,18	1,36	1,20	46	9	1,98	28	2	10	20
1901 . . .	6,40	1,00	60	6	1,21	||	1,55	3,84	5,22	1,26	1,46	1,32	40	21	2,53	27	2	9	21
1902 . . .	7,96	1,12	64	7	1,57	||	1,83	4,21	6,19	1,75	1,57	1,71	47	24	2,94	31	2	9	24
2ND CLASS PASSENGERS.																			
1898 . . .	8,42	1,16	89	26	42	30	1,69	6,01	7,53	1,77	3,45	2,22	73	...	2,50	...	3	4	15
1899 . . .	8,56	1,18	87	23	62	64	1,66	4,78	8,14	1,72	4,55	2,22	76	1	2,80	9	3	4	19
1900 . . .	8,89	1,18	87	29	85	74	2,18	4,57	7,45	1,55	4,38	2,03	69	20	2,77	22	3	4	20
1901 . . .	8,77	1,26	97	23	1,75	||	2,43	5,21	8,71	1,91	4,36	2,47	74	49	3,44	27	3	4	23
1902 . . .	9,24	1,34	93	21	1,72	||	2,82	5,62	10,35	2,28	4,54	2,51	78	55	3,71	34	3	4	25
INTERMEDIATE CLASS PASSENGERS.																			
1898 . . .	12,91	2,98	1,54	35	26	10	2,88	7,45	5,57	4,22	5,07	2,43	1,16	...	...	...	1	...	...
1899 . . .	13,10	3,00	1,42	34	37	19	2,67	8,00	6,52	4,05	6,61	2,77	1,17	...	...	...	1	...	...
1900 . . .	14,28	2,84	1,61	35	52	34	3,10	9,39	7,73	3,77	6,77	2,92	1,14	...	...	...	1	...	†1
1901 . . .	15,37	3,10	1,77	42	1,86	||	3,62	11,64	8,78	4,05	7,24	3,18	1,25	...	42	...	1	...	6
1902 . . .	16,09	3,29	1,87	44	1,84	||	4,34	11,99	9,77	4,14	7,10	3,03	1,31	...	48	...	2	...	7
3RD CLASS PASSENGERS.																			
1898 . . .	1,38,58	19,33	17,03	5,27	10,90	12,49	31,12	90,47	34,81	12,98	19,02	51,65	4,77	...	30,22	...	37	98	6,52
1899 . . .	1,42,73	20,55	18,08	5,48	17,91	18,57	32,93	94,26	41,71	14,04	27,59	54,73	4,96	8	25,14	19	40	1,01	8,20
1900 . . .	1,51,63	20,86	22,08	5,78	28,36	22,22	36,04	1,00,51	45,31	15,06	32,65	52,55	5,34	2,88	30,25	34	52	1,15	8,67
1901 . . .	1,64,82	21,21	22,02	6,24	49,08	||	43,89	1,09,35	56,87	17,82	34,69	61,36	5,54	6,44	47,17	40	77	1,04	10,31
1902 . . .	1,54,40	21,90	23,31	6,27	48,80	||	41,46	1,14,83	57,13	18,53	35,26	56,99	5,51	6,62	50,06	1,27	89	1,09	9,90
SEASON AND VENDORS' TICKETS OF ALL CLASSES.																			
1898 . . .	1,23	1,04	5	17	3	1	...	...	1,56	...	2,61	1	4	...	20	...	...	...	...
1899 . . .	1,29	1,10	5	17	3	...	...	...	1,72	...	3,03	2	14	...	22	...	...	...	...
1900 . . .	1,39	1,08	5	17	2	2	...	...	1,85	...	3,14	2	20	...	27	...	...	...	...
1901 . . .	1,55	1,39	6	17	8	||	...	...	1,84	...	3,23	2	13	8	26	...	...	...	...
1902 . . .	1,59	1,55	6	18	13	||	...	...	2,03	...	3,28	1	10	6	30	...	...	...	...
TOTAL PASSENGER TRAFFIC.																			
1898 . . .	1,68,09	25,46	20,16	6,11	12,05	13,19	36,89	1,08,19	54,64	20,19	31,41	57,59	7,22	...	34,91	...	43	1,11	6,83
1899 . . .	1,72,54	26,89	20,98	6,29	19,46	19,92	38,48	1,10,81	63,59	21,11	43,24	61,07	7,55	9	30,14	39	46	1,16	8,57
1900 . . .	1,84,94	27,03	25,19	6,59	30,46	24,06	42,84	1,18,11	67,61	21,56	48,30	58,72	7,83	3,17	35,27	84	58	1,29	9,08
1901 . . .	1,96,91	28,16	25,42	7,12	53,98	||	51,49	1,30,04	81,42	25,04	51,18	68,55	8,06	7,22	53,82	94	83	1,17	10,81
1902 . . .	1,89,27	29,20	26,81	7,17	54,06	||	50,45	1,26,65	85,52	26,70	51,85	64,25	8,17	7,47	57,49	192	96	1,22	10,46

* Upper class.
 † Intermediate class introduced on this railway from the 1st October 1900.
 ‡ Intermediate class abolished on this railway from the 1st November 1899.
 § Lower class.
 || Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.
 ... included with the Southern Mahratta railway.

DIX 15.

Appendix 15.
Passenger earnings.

Passenger traffic of each railway (by systems).

24 of Report.)

the code letters used to denote railway systems.

3' 3 1/2" GAUGE.										2' 6" GAUGE.					2' 0" GAUGE.				GAUGE.		
15	16	17		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		CLASS: No.	
D.	R. & N. W.	R. & K. system.		I. B.	U. C.	R. G. J. P.	S. M.	W. I. P.	S. I.	R.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	D. H.	H. A.	H. S.	J.	Totals.	Calendar year.
		R. & K. (a) & (b)	P.L. (c)																		
1ST CLASS PASSENGERS.																					
...	52	35	...	12	2	24	96	2	82	1,01	10	...	...	...	...	35	1	1	...	31,24	1898
...	51	33	...	9	3	31	82	2	77	1,06	8	...	...	...	...	52	1	1	...	31,52	1899
...	46	32	...	7	3	18	94	2	81	1,14	7	...	...	...	...	56	1	...	...	31,83	1900
...	51	40	...	20	3	19	91	2	88	1,32	7	...	...	...	...	59	1	...	...	32,78	1901
...	57	40	...	22	3	15	1,16	88	1,04	1,36	6	...	...	...	...	65	...	...	...	38,57	1902
2ND CLASS PASSENGERS.																					
...	42	61	...	15	4	68	1,14	4	1,58	2,06	20	1	...	...	...	78	...	...	...	45,28	1898
...	42	59	...	15	3	74	1,46	5	1,52	2,01	19	2	...	...	...	70	...	...	...	46,97	1899
...	42	56	...	15	3	59	1,52	6	1,53	2,31	19	2	...	...	...	64	...	...	...	47,08	1900
...	51	65	...	42	3	58	1,33	5	1,71	2,58	20	1	...	...	...	85	...	...	...	52,43	1901
...	57	73	1	44	4	52	1,73	88	1,84	2,45	17	2	...	...	...	81	...	...	...	56,59	1902
INTERMEDIATE CLASS PASSENGERS.																					
...	42	9	...	...	2	...	...	...	...	1,88	...	...	...	...	...	...	10	4	...	49,49	1898
...	45	10	...	...	2	12	...	...	...	1,01	...	...	...	...	...	...	12	4	...	52,08	1899
...	55	10	...	...	2	39	...	...	...	1	...	...	...	4	...	...	11	4	...	56,03	1900
...	78	12	...	...	2	44	...	...	...	...	...	...	1	9	...	...	12	4	...	64,39	1901
...	92	13	...	...	2	46	...	88	...	...	...	...	2	10	...	...	13	5	...	67,60	1902
3RD CLASS PASSENGERS.																					
26	21,67	4,19	...	4,31	77	7,65	16,01	31	40,88	36,71	1,76	15	67	...	32	91	1,72	62	12	6,25,52	1898
29	24,46	4,42	...	4,93	83	8,90	14,27	39	39,55	36,84	1,92	17	59	45	37	85	2,26	64	12	6,70,81	1899
30	28,01	4,59	...	4,34	74	8,11	22,69	41	45,25	45,18	1,91	21	67	61	39	1,00	2,27	66	12	7,51,66	1900
42	36,14	5,76	36	7,79	87	8,59	24,77	43	48,96	47,03	2,00	25	66	56	27	1,09	2,25	68	15	8,48,25	1901
26	40,46	5,76	40	7,90	86	7,41	27,24	88	33,32	49,16	1,75	22	66	60	29	1,27	2,28	69	22	8,54,97	1902
SEASON AND VENDORS' TICKETS OF ALL CLASSES.																					
...	1	...	...	...	...	...	1	...	9	7	...	...	...	...	...	...	...	...	...	7,15	1898
...	1	...	...	...	...	...	1	...	9	9	...	...	...	...	...	...	...	...	...	8,01	1899
...	1	...	...	...	...	1	1	...	14	9	...	...	...	...	...	...	...	...	...	8,47	1900
...	1	...	...	...	...	1	2	...	15	10	...	...	2	...	...	...	...	...	...	9,32	1901
...	1	...	...	...	...	...	2	88	15	11	...	...	2	...	...	...	...	...	...	9,75	1902
TOTAL PASSENGER TRAFFIC.																					
26	23,04	5,24	...	4,58	85	8,57	18,12	37	43,37	41,73	2,06	16	67	...	32	2,25	1,83	67	12	7,18,68	1898
29	25,85	5,44	...	5,17	91	9,07	16,56	46	41,93	41,01	2,19	19	59	45	37	2,07	2,39	69	12	8,09,39	1899
30	29,45	5,57	...	4,56	82	9,28	25,16	49	47,73	48,72	2,17	23	67	65	39	2,20	2,39	70	12	8,95,07	1900
42	37,95	6,93	36	8,41	95	9,81	27,03	50	51,70	51,03	2,27	26	69	65	27	2,53	2,38	72	15	10,07,17	1901
26	42,53	7,02	41	8,56	95	8,54	30,15	88	56,35	53,08	1,98	24	70	70	29	2,73	2,41	74	22	10,27,48	1902

Appendix 16.
Goods traffic.

Goods of the different classes in thousands of tons carried by each railway

(Referred to in paragraphs

Note.—A reference to Appendix 2 will furnish the key

GAUGE.	5' 6"									
	1		2				3		4	
	EAST INDIAN.		E. B. SYSTEM.				BENGAL CENTRAL.		BENGAL-NAGPUR SYSTEM.	
	EAST INDIAN.		5' 6" GAUGE (a).		OTHER GAUGES (b) to (c).		BENGAL CENTRAL.		BENGAL-NAGPUR (a) & (b).	
Calendar year.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.
GENERAL MERCHANDISE.										
1898 . . .	3,416	5'93	1,068	9'17	555	8'95	96	7'44	530	7'72
1899 . . .	3,835	6'00	1,115	8'87	619	10'56	104	6'95	671	6'73
1900 . . .	3,858	6'20	1,230	8'93	783	10'70	159	7'05	893	4'89
1901 . . .	3,656	5'85	1,114	9'59	747	10'66	185	8'12	880	2'01
1902 . . .	3,810	5'78	1,228	9'12	820	10'44	112	8'28	993	6'98
MILITARY STORES.										
1898 . . .	24	16'12	—	22'36	—	27'91	—	125'02	—	15'19
1899 . . .	30	20'60	—	25'05	—	26'11	—	126'26	—	18'71
1900 . . .	11	17'71	—	24'69	—	—	—	132'78	—	13'76
1901 . . .	6	18'08	—	26'05	—	—	—	131'41	—	15'37
1902 . . .	11	20'73	—	21'99	—	—	—	135'25	—	18'60
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.										
1898 . . .	3,745	3'41	220	4'48	—	—	20	4'33	708	3'61
1899 . . .	3,898	3'48	206	4'60	—	—	20	5'48	652	3'57
1900 . . .	4,658	3'46	244	2'54	25	5'31	24	3'50	754	3'64
1901 . . .	5,294	3'44	277	4'65	17	4'57	29	3'85	805	3'65
1902 . . .	5,049	3'63	276	4'82	25	4'99	25	3'96	905	3'16
REVENUE STORES INCLUDING COAL AND MATERIAL FOR CONSTRUCTION.										
1898 . . .	1,124	1'89	223	2'45	—	—	32	2'45	211	2'79
1899 . . .	1,278	1'86	242	2'45	—	—	16	2'45	528	2'64
1900 . . .	1,388	1'94	207	2'44	153	2'48	23	2'41	315	2'38
1901 . . .	1,456	1'83	224	2'45	214	2'45	23	2'45	524	2'38
1902 . . .	1,615	1'89	293	2'45	204	2'32	21	2'45	975	2'45
TOTAL GOODS.*										
1898 . . .	8,325	4'62	1,513	7'98	648	9'32	128	6'12	1,450	6'23
1899 . . .	9,049	4'64	1,564	7'75	747	9'02	140	6'72	1,852	5'34
1900 . . .	10,053	4'59	1,682	7'93	971	8'90	206	6'33	1,970	4'58
1901 . . .	10,418	4'38	1,616	8'26	998	8'97	178	7'09	2,212	5'45
1902 . . .	10,484	4'03	1,800	7'86	1,049	8'71	159	7'46	2,880	4'62
AVERAGE DISTANCE IN MILES GOODS WERE CARRIED.										
1898 . . .	207'74		80'28		106'51		61'02		102'07	
1899 . . .	201'74		87'24		106'36		69'09		123'45	
1900 . . .	209'32		86'58		94'76		77'36		194'70	
1901 . . .	206'30		81'29		97'14		88'85		105'10	
1902 . . .	194'62		87'18		91'32		68'57		106'52	
AVERAGE COST OF CARRYING PER TON PER MILE.										
	Pics.		Pics.		Pics.		Pics.		Pics.	
1898 . . .	1'86		3'11		4'20		5'52		3'11	
1899 . . .	1'80		3'87		3'96		4'92		2'60	
1900 . . .	1'71		3'66		3'76		4'02		2'80	
1901 . . .	1'85		3'26		4'48		4'76		3'33	
1902 . . .	1'73		3'43		4'44		5'31		2'78	
AVERAGE PROFIT PER TON PER MILE.										
	Pics.		Pics.		Pics.		Pics.		Pics.	
1898 . . .	3'06		4'77		4'99		0'63		3'07	
1899 . . .	3'03		3'70		4'98		1'49		2'77	
1900 . . .	2'87		4'04		5'04		1'66		2'38	
1901 . . .	2'74		4'48		4'56		2'31		2'14	
1902 . . .	2'73		4'49		4'36		2'17		2'18	

NOTE.—The blanks shown in the "tons" columns
* Excluding the Coach
& Including livestock and

DIX 16.

Appendix 16.
Goods traffic.

(by systems), average rate charged per ton in pies, and average distance carried.

27, 29, 30, 31 of Report.)

to the code letters used to denote railway systems.

5' 6"										GAUGE.	
5		6		7						Class: No.	
EAST COAST.		ODISH AND ROHILKHAND.		N. W. SYSTEM.		G. I. P. SYSTEM.				Calendar year.	
				NORTH WESTERN. (a) to (k).		GREAT INDIAN PENINSULA. (a) to (c).		INDIAN MIDLAND. (d) to (h).			
Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.		
GENERAL MERCHANDISE.											
355	5'08	1,018	6'15	2,749	5'38	2,056	8'05	480	6'60	1898	
527	5'07	1,171	5'95	2,879	5'56	2,279	7'70	573	6'95	1899	
762	4'21	1,139	6'20	4,526	5'82	2,322	7'50	872	6'01	1900	
||	||	1,287	5'77	3,431	5'28	2,517	7'74	783	6'35	1901	
||	||	1,348	5'67	3,157	5'49	2,577	6'14	872	6'31	1902	
MILITARY STORES.											
...	20'54	4	12'86	64	13'99	8	20'50	4	8'15	1898	
...	18'40	3	16'57	22	18'30	9	19'07	2	11'09	1899	
...	18'89	4	15'11	22	16'08	7	21'29	1	16'22	1900	
||	||	3	17'46	28	15'85	8	19'74	1	16'32	1901	
||	||	8	15'67	36	16'72	11	22'00	13	15'05	1902	
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.											
6	4'43	24	4'05	43	3'64	270	3'12	3	3'52	1898	
98	3'60	30	3'82	34	3'26	138	3'45	11	3'03	1899	
160	3'22	32	3'88	26	3'50	138	3'06	6	3'05	1900	
||	||	34	3'74	35	3'86	146	3'55	13	2'92	1901	
||	||	48	3'33	42	4'43	148	3'51	15	3'11	1902	
REVENUE STORES INCLUDING COAL AND MATERIAL FOR CONSTRUCTION.											
136	2'41	568	2'75	1,083	2'52	542	2'10	282	2'60	1898	
227	2'45	771	2'69	2,120	2'47	558	2'04	413	2'68	1899	
280	2'41	628	2'61	1,775	2'44	520	2'00	332	2'48	1900	
||	||	574	2'61	2,105	2'44	513	2'00	512	2'01	1901	
||	||	898	2'80	2,693	2'51	525	2'39	448	2'47	1902	
TOTAL GOODS.†											
498	4'39	1,615	5'71	4,033	5'26	2,846	7'07	770	6'07	1898	
852	4'23	1,975	5'46	5,070	5'24	2,997	6'99	1,201	6'29	1899	
1,203	3'80	1,803	5'62	5,051	5'42	3,012	6'76	1,226	6'25	1900	
||	||	1,899	5'29	5,604	5'02	3,213	7'22	1,309	5'72	1901	
||	||	2,302	5'06	5,934	5'16	3,278	5'46	1,349	5'67	1902	
AVERAGE DISTANCE IN MILES GOODS WERE CARRIED.											
103'35		103'13		195'33		261'00		172'22		1898	
109'38		103'03		173'74		149'41		157'73		1899	
134'75		105'53		137'66		235'13		214'25		1900	
||		126'09		199'57		257'30		176'97		1901	
||		106'23		180'74		308'42		188'48		1902	
AVERAGE COST OF CARRYING PER TON PER MILE.											
Pies.		Pies.		Pies.		Pies.		Pies.			
4'20		3'06		2'83		3'37		3'06		1898	
3'34		2'66		2'98		3'42		3'62		1899	
2'60		2'97		3'30		3'22		2'79		1900	
||		2'32		2'64		3'05				1901	
||		2'74		3'13		2'78				1902	
AVERAGE PROFIT PER TON PER MILE.											
Pies.		Pies.		Pies.		Pies.		Pies.			
0'38		2'63		2'40		3'48		2'53		1898	
0'39		2'84		2'27		3'32		2'70		1899	
1'14		2'65		2'12		3'54		3'46		1900	
||		2'79		2'37		3'88				1901	
||		2'34		2'09		3'09				1902	

denote that less than 1,000 tons were carried during the year.

Behar State railway.

other miscellaneous goods traffic.

in the case of tonnage only, which is shown under "General merchandise" "Total goods", as details are not furnished.

and partly to the Madras railway from the 1st January 1901.

Durgai railway.

Appendix 16.
Goods traffic.

11761

Goods of the different classes in thousands of tons carried by each railway

(Referred to in paragraphs

Note.—A reference to Appendix 2 will furnish the key

Gauge.	5' 6"												7'		
	8				9				10				11		
	B. B. & C. I. SYSTEM.				N. G. S. SYSTEM.				MADRAS SYSTEM.				BENGAL-DOOARS.		
	BOMBAY, BARODA AND CENTRAL INDIA. (a) to (e) & (l) & (m).		RAJPUTANA-MALWA. (f) to (k).		NIZAM'S GUARANTEED STATE. (n) and (o).		HYDERABAD-GODAVARI VALLEY. (p).		MADRAS. (q) to (r).		S. C. & N. (s) & (t).				
Calendar year.		Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.
GENERAL MERCHANDISE.															
1898	1,558	7'95	1,974	6'97	269	9'10	...	...	786	9'41	...	...	25	61'63
1899	1,680	8'00	2,283	7'17	297	8'11	9	11'68	852	9'33	3	105'52	26	57'67	
1900	1,882	8'11	2,485	6'66	351	8'02	99	10'75	832	9'52	9	70'33	47	59'94	
1901	1,509	7'87	2,011	6'42	307	8'81	132	11'04	1,524	6'88	15	80'63	69	24'82	
1902	1,510	6'72	1,285	6'77	321	8'76	149	10'45	1,441	7'24	33	34'10	75	22'80	
MILITARY STORES.															
1898	...	20'08	6	15'63	1	23'33	...	...	2	27'28	...	...	...	...
1899	...	16'60	7	18'77	1	18'99	...	...	3	28'11	...	127'46	...	...
1900	...	19'83	6	16'95	1	24'01	...	...	3	25'36	...	121'79	...	38'46
1901	...	15'46	3	19'01	1	24'58	...	24'61	4	22'49	1	129'15	...	...
1902	...	19'71	6	19'78	...	30'98	...	16'69	4	19'76	2	141'06	...	...
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.															
1898	49	3'11	21	4'73	323	3'44	...	...	371	4'79	1	...	1	28'25
1899	68	2'83	15	4'41	316	3'74	...	5'36	189	4'69	...	...	3	29'79
1900	96	2'76	17	4'32	418	3'72	2	4'93	200	4'69	...	...	6	27'67
1901	70	2'87	15	4'50	372	3'97	3	4'02	542	4'10	...	...	4	18'31
1902	42	2'88	18	4'80	390	3'99	5	3'92	494	4'10	...	57'54	9	8'26	
REVENUE STORES INCLUDING COAL AND MATERIAL FOR CONSTRUCTION.															
1898	372	2'99	251	2'79	184	3'16	...	...	214	4'17	...	...	77	2'41
1899	475	3'01	329	2'83	251	3'06	3	3'32	276	4'08	1	30'10	11	8'80	
1900	424	2'56	309	2'74	241	3'20	199	4'05	231	4'14	...	78'66	8	4'44	
1901	374	2'90	348	2'80	240	3'53	392	4'98	341	2'72	...	96'63	5	4'19	
1902	352	2'36	316	2'75	223	3'45	432	4'32	378	2'36	5	2'15	7	3'21	
TOTAL GOODS.*															
1898	2,004	7'46	2,229	6'25	797	5'14	...	...	1,174	8'25	...	...	103	30'85
1899	2,256	7'76	2,640	6'29	875	5'42	12	10'45	1,321	8'32	4	93'50	39	45'69	
1900	2,436	7'34	2,914	6'26	1,012	5'57	301	8'68	1,500	8'41	10	71'86	63	39'14	
1901	1,973	7'18	2,393	6'21	920	5'29	527	9'47	2,413	6'10	16	83'17	78	23'22	
1902	1,927	7'36	2,230	6'48	935	5'93	587	9'06	2,319	6'22	40	33'68	91	19'53	
AVERAGE DISTANCE IN MILES GOODS WERE CARRIED.															
1898	152'31	199'74	147'34	...	120'38	...	...	...	...	...	...	...	21'85	
1899	140'66	204'21	139'39	80'93	120'72	...	...	...	...	...	...	16'88	21'40	
1900	141'88	240'68	145'03	47'93	124'86	...	...	...	...	...	...	16'57	19'38	
1901	146'88	261'70	116'32	41'56	126'92	...	...	...	...	...	...	16'09	35'88	
1902	133'69	247'10	122'26	43'88	125'67	...	...	...	...	...	...	23'12	38'62	
AVERAGE COST OF CARRYING PER TON PER MILE.															
1898	Pics. †	Pics. ‡	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	
1899	3'22	3'01	2'16	...	4'31	...	...	...	...	...	...	...	...	...
1900	3'49	2'98	2'11	3'75	4'52	8'68	...	...	...	...	...	...	...	...
1901	3'80	3'03	2'32	5'08	4'65	38'72	...	...	...	...	...	...	...	...
1902	3'99	3'02	2'01	4'30	3'41	35'21	...	...	...	...	...	...	...	...
1902	3'44	3'16	2'24	4'64	3'69	34'17	...	...	...	...	...	...	...	...
AVERAGE PROFIT PER TON PER MILE.															
1898	Pics. †	Pics. ‡	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	Pics.	
1899	4'31	3'66	2'98	...	4'03	...	...	...	...	...	...	...	...	...
1900	4'38	3'86	3'31	6'70	3'79	11'82	...	...	...	...	...	...	...	...
1901	3'34	3'43	3'25	3'60	3'76	33'14	...	...	...	...	...	...	...	...
1902	4'24	3'13	3'59	3'08	2'69	47'96	...	...	...	...	...	...	...	...
1902	4'31	3'27	3'75	4'46	2'55	11'69	...	...	...	...	...	...	...	...

NOTE.—The blanks shown in "tons" columns

* Including live-stock and † Including the Godhra-Rutlam-Nagda; but excluding ‡ Excluding the Godhra-Rutlam-§ Information ¶ The decrease is due to ballast train tonnage being credited

DIX 16—continued.

Appendix 16.
Goods traffic.

(by systems), average rate charged per ton in pies, and average distance carried.

27, 29, 30 and 31 of Report.)

to the code letters used to denote railway systems.

3' 3 1/2"														GAUGE.	
13		14		15		16		17				18		Class: No.	
DIBRU-SADIYA.		ASSAM-BENGAL.		DEOGHUR.		BENGAOL AND NORTH-WESTERN.		ROHILKUND AND KUMAON. (a) & (b).		POWAYAN LIGHT. (c).		JODHPUR-BIKANER.		Calendar year.	
Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.		
GENERAL MERCHANDISE.															
58	34'74	60	8'40	13	17'35	751	5'02	269	7'30	...	...	153	10'26	1898
63	31'92	95	8'74	13	13'08	935	5'88	335	6'91	...	...	292	9'42	1899
77	33'46	110	8'64	12	12'99	945	6'20	316	6'87	...	...	233	8'28	1900
73	37'46	166	6'55	13	8	1,024	6'06	333	7'54	12	...	297	8'23	1901	
64	35'31	149	6'82	8	13	1,081	6'63	370	6'91	22	8	287	8'52	1902	
MILITARY STORES.															
...	...	...	19'94	...	...	...	6'41	1	19'01	...	...	...	32'85	1898
...	...	...	22'61	...	...	...	2'88	...	20'74	...	...	...	31'77	1899
...	...	...	23'29	...	...	...	24'23	...	23'54	...	...	...	30'37	1900
...	...	...	28'22	...	...	...	...	1	14'62	9	...	...	17'73	1901
...	...	...	22'91	...	...	...	7'13	1	19'94	5	5	...	17'23	1902
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.															
384	5'55	6	4'06	...	...	35	3'67	...	4'12	...	...	...	9'67	1898
441	0'06	9	4'14	...	...	44	3'81	1	2'94	...	...	3	0'20	1899
412	6'29	11	3'78	...	...	44	4'10	1	3'37	...	...	10	3'63	1900
499	5'57	13	4'18	...	...	43	4'15	1	3'47	...	...	13	4'23	1901
441	5'59	13	3'89	8	13	58	4'23	...	3'72	1	5	11	4'58	1902	
REVENUE STORES INCLUDING COAL AND MATERIAL FOR CONSTRUCTION.															
4	2'81	395	2'45	...	...	139	2'84	45	2'45	...	...	33	4'58	1898
5	4'66	368	1'61	...	...	277	2'47	36	2'45	...	...	45	2'75	1899
4	4'85	256	1'67	...	...	258	2'62	37	2'89	...	...	58	2'86	1900
8	3'67	60	2'53	...	...	303	2'48	38	2'45	3	...	92	3'46	1901
5	2'87	164	2'81	...	...	321	2'45	60	2'45	2	5	157	3'18	1902
TOTAL GOODS.*															
446	8'96	461	4'46	13	16'94	929	5'55	315	6'95	...	...	189	9'53	1898
509	8'52	472	3'67	13	13'08	1,307	5'30	372	6'72	...	...	347	8'80	1899
494	9'31	324	4'20	12	12'65	2,247	5'64	354	6'64	...	...	326	7'29	1900
577	8'69	1,239	5'49	13	8	1,370	4'83	373	7'17	17	...	403	7'42	1901	
510	9'12	326	5'29	10	8	1,460	5'85	432	6'52	24	5	456	7'47	1902	
AVERAGE DISTANCE IN MILES GOODS WERE CARRIED.															
55'21		50'07		4'79		121'03		63'85		...		87'11		1898	
56'79		71'83		4'79		114'73		69'05		...		93'81		1899	
54'68		79'09		4'79		109'33		69'39		...		80'26		1900	
54'80		127'14		4'79		136'79		65'27		...		80'00		1901	
64'80		87'08		5		119'63		66'30		...		82'00		1902	
AVERAGE COST OF CARRYING PER TON PER MILE.															
Pics.		Pics.		Pics.		Pics.		Pics.		Pics.		Pics.			
5		6'38		5		2'41		4'07		...		3'54		1898	
...		4'92		...		2'51		3'32		...		3'09		1899	
...		5'16		...		2'86		3'42		...		2'82		1900	
...		5'49		3'90		2'48		3'28		...		4'12		1901	
...		5'91		5		2'69		3'61		5		3'74		1902	
AVERAGE PROFIT PER TON PER MILE.															
Pics.		Pics.		Pics.		Pics.		Pics.		Pics.		Pics.			
5		-1'94		5		3'12		2'93		...		6'24		1898	
...		-1'26		...		2'77		3'36		...		5'00		1899	
...		-0'56		...		2'75		3'17		...		3'18		1900	
...		0'05		1'18		3'01		3'24		...		3'32		1901	
...		-0'52		5		3'13		2'86		5		3'04		1902	

denote that less than 1,000 tons were carried during the year.
other miscellaneous goods traffic.
the Gaskwar's Dabhoi and Rajpipla (2' 6" gauge) railways.
Nagda railway.
not available.
to railway materials for construction in previous years.

Appendix 16.
Goods traffic.

Goods of the different classes in thousands of tons carried by each railway

(Referred to in paragraphs

Note.—A reference to Appendix 2 will furnish the key

GAUGE.	3' 3 1/2"													
	19		20		21				22		23		24	
	UDAIPUR- CHITTOOR.		BHAVNAGAR- GONDAL- JUNAGAD- FORBANDAR.		SOUTHERN MAHRATTA.				SOUTH INDIAN.		BURMA.		MORVI.	
					SOUTHERN MAHRATTA.		WEST OF INDIA PORTUGUESE.							
Calendar year.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.
GENERAL MERCHANDISE.														
1898	11	19'41	253	13'00	794	7'18	44	11'95	861	9'53	837	7'89	31	14'93
1899	25	15'08	297	12'74	942	6'91	114	10'91	877	9'49	773	7'86	39	13'54
1900	54	15'01	338	12'20	841	6'98	59	12'42	852	9'48	986	7'92	48	10'50
1901	26	14'29	330	11'60	801	7'92	70	11'43	1,065	8'83	1,086	8'27	27	11'36
1902	25	14'34	332	11'90	800	7'69	§	§	1,094	8'09	1,166	8'03	19	11'22
MILITARY STORES.														
1898	...	35'86	...	30'63	1	25'83	...	51'20	...	15'76	1	15'58	...	20'70
1899	...	32'20	...	35'77	1	19'63	...	...	...	22'95	1	15'85	...	28'21
1900	...	33'15	...	28'17	1	19'76	...	...	...	22'96	1	16'35	...	23'32
1901	...	32'00	...	28'25	2	15'42	...	...	1	26'02	1	13'91	...	20'41
1902	...	34'86	...	23'41	3	9'60	§	§	...	26'49	2	16'19	...	26'53
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.														
1898	...	...	3	6'08	4	3'37	...	...	13	5'15	...	8'17	...	7'94
1899	...	...	4	5'44	3	3'94	...	...	27	5'46	...	9'59	1	13'68
1900	...	9'24	3	5'48	2	3'81	...	27'87	17	5'67	...	7'49	1	10'02
1901	1	2'74	...	5'96	2	4'11	...	...	22	6'38	...	14'10	...	11'13
1902	1	2'72	...	4'64	4	3'59	§	§	15	5'67	...	7'28	...	13'43
REVENUE STORES INCLUDING COAL AND MATERIAL FOR CONSTRUCTION.														
1898	...	2'73	22	2'98	130	2'62	3	5'48	828	2'47	269	2'08	1	2'94
1899	1	2'72	14	4'26	148	2'60	4	5'14	814	2'50	313	2'14	1	3'22
1900	1	3'02	15	3'30	150	2'66	5	5'25	824	2'44	268	2'35	1	7'60
1901	1	3'53	15	2'00	161	2'61	4	3'71	591	2'46	383	2'36	2	4'61
1902	1	5'36	12	1'92	147	2'61	5	§	797	2'48	429	2'21	...	7'58
TOTAL GOODS.*														
1898	11	19'10	278	11'88	930	6'47	47	11'79	1,703	8'60	1,113	6'99	33	14'41
1899	26	15'69	316	12'23	1,094	6'23	118	10'83	1,519	8'74	1,092	6'60	41	13'30
1900	56	14'97	357	11'78	996	6'30	64	12'13	1,607	8'69	1,261	7'05	50	10'75
1901	28	13'60	245	10'26	967	6'89	74	10'96	1,683	8'23	1,475	7'02	29	11'14
1902	27	13'89	245	11'14	1,016	6'76	§	§	1,910	7'49	1,603	7'09	19	11'26
AVERAGE DISTANCE IN MILES GOODS WERE CARRIED.														
1898	46'35	58'18	155'91	41'04	51'15	109'85	55'50							
1899	51'19	55'10	152'70	51'51	60'73	114'52	58'41							
1900	52'11	58'75	170'98	43'53	62'19	123'31	62'07							
1901	57'91	56'98	140'10	45'52	65'89	116'03	60'81							
1902	57'41	49'79	156'57	§	65'22	112'42	63'04							
AVERAGE COST OF CARRYING PER TON PER MILE.														
1898	7'98	Pics. 7'06	Pics. 4'70	Pics. 17'22	Pics. 4'77	Pics. 4'84	Pics. 7'44							
1899	6'56	6'20	4'39	7'59	4'85	4'65	7'45							
1900	5'15	5'99	4'36	12'39	4'51	4'69	7'08							
1901	6'52	6'42	5'00	11'92	4'01	4'77	7'56							
1902	6'29	6'75	4'65	§	3'93	4'58	6'75							
AVERAGE PROFIT PER TON PER MILE.														
1898	11'38	Pics. 4'53	Pics. 1'77	Pics. -5'43	Pics. 3'82	Pics. 2'10	Pics. 6'97							
1899	8'76	6'02	1'84	3'24	3'89	1'96	5'82							
1900	9'37	5'64	1'94	-0'26	4'18	2'35	2'77							
1901	7'21	4'46	1'89	-1'72	4'26	2'27	3'58							
1902	7'59	4'40	2'14	§	3'60	2'54	4'51							

NOTE.—The blanks shown in "tons" columns
 * Including live-stock
 † Information is
 ‡ Total shown under "general merchandise"
 § Included with

DIX 16—concluded.

Appendix 16.
Goods traffic.

(by systems), average rate charged per ton in pies, and average distance carried.

27, 29, 30 and 31 of Report.)

to the code letters used to denote railway systems.

2' 6"								2' 6"								TOTAL	Calendar year.
25		26		27		28		29		30		31		32			
Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.	Tons.	Per ton per mile.		
GENERAL MERCHANDISE.																	
45	21'01	16	...	...	...	25	...	25	68'81	4	...	3	...	17	...	21,155	1898
56	20'38	16	...	...	...	19	...	26	65'01	7	...	3	...	21	...	21,901	1899
41	20'72	18	...	11	...	19	...	32	62'35	9	...	5	...	15	...	27,301	1900
54	21'09	8	26'88	...	...	7	...	29	64'48	14	...	4	...	12	...	25,458	1901
50	21'12	10	...	1	...	6	...	27	60'85	14	...	6	...	12	...	25,340	1902
MILITARY STORES.																	
...	24'86	...	...	...	...	...	...	...	88'38	...	...	...	...	...	...	116	1898
...	35'71	...	...	...	...	...	...	...	139'37	...	...	...	...	...	...	59	1899
...	34'01	...	...	...	...	...	...	...	120'78	...	...	...	...	...	...	58	1900
...	31'32	...	...	...	...	...	...	...	132'98	...	...	...	...	...	...	63	1901
...	41'57	...	...	...	...	...	...	...	143'56	...	...	...	...	...	...	100	1902
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.																	
...	20'17	...	...	...	...	...	...	2	28'30	...	...	...	...	...	...	6,031	1898
...	...	...	...	...	...	...	...	1	46'45	...	...	...	...	...	...	6,221	1899
...	...	...	...	...	...	...	...	2	43'70	...	...	...	...	...	...	7,309	1900
...	11'01	...	...	...	...	1	...	1	38'05	...	...	...	...	...	...	8,249	1901
...	10'45	...	...	...	...	2	...	2	37'01	...	...	...	...	...	...	8,034	1902
REVENUE STORES INCLUDING COAL AND MATERIAL FOR CONSTRUCTION.																	
...	6'82	...	...	...	...	...	...	4	30'32	...	...	...	...	...	...	8,074	1898
...	4'85	...	...	...	...	...	...	5	33'40	...	...	...	...	...	...	9,330	1899
...	...	...	...	...	...	...	...	5	35'91	...	...	...	...	...	...	8,925	1900
...	4'85	1	6'00	...	...	...	...	...	36'61	...	...	...	...	...	...	9,528	1901
...	...	1	...	...	...	...	...	4	37'84	...	...	...	...	...	...	11,487	1902
TOTAL GOODS.*																	
45	20'92	6	...	...	...	5	...	31	64'54	4	...	3	...	17	...	35,642	1898
57	20'35	6	...	...	...	9	...	32	62'87	7	...	3	...	21	...	39,748	1899
41	20'72	8	...	1	...	9	...	38	60'63	9	...	6	...	15	...	42,846	1900
54	21'06	9	26'88	...	...	8	...	31	63'30	14	...	4	...	12	...	43,312	1901
50	21'12	11	...	1	...	8	...	33	63'74	14	...	6	...	12	...	45,537	1902
AVERAGE DISTANCE IN MILES GOODS WERE CARRIED.																	
22'01	...	...	...	...	...	...	...	41'48	...	...	...	...	...	...	...	...	1898
22'27	...	...	...	...	...	...	...	40'78	...	...	...	...	...	...	...	...	1899
21'97	...	...	...	...	...	...	...	41'71	...	...	...	...	...	...	...	...	1900
22'00	...	13'49	...	...	...	...	...	41'65	...	...	...	...	...	...	...	...	1901
22'00	...	...	...	...	...	...	...	41'41	...	...	...	...	...	...	...	...	1902
AVERAGE COST OF CARRYING PER TON PER MILE.																	
...	...	Pies.	...	Pies.	...	Pies.	...	Pies.	...	Pies.	...	Pies.	...	Pies.	...	...	1898
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1899
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1900
...	...	...	...	...	...	...	...	...	46'92	...	...	...	...	...	...	...	1901
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1902
AVERAGE PROFIT PER TON PER MILE.																	
...	...	Pies.	...	Pies.	...	Pies.	...	Pies.	...	Pies.	...	Pies.	...	Pies.	...	...	1898
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1899
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1900
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1901
...	...	...	...	...	...	...	...	...	16'20	...	...	...	...	...	...	...	1902

denote that less than 1,000 tons were carried during the year.
and other miscellaneous goods traffic.
not available.
details are not furnished.
the Southern Mahratta Railway from 1902.

Appendix 17.
Goods earnings.

Gross earnings in thousands of rupees

(Referred to in paragraphs

N.B.—A reference to Appendix 2 will furnish the

5' 6"																					
Gauge.																					
Class No.	1	2			3	4	5	6			7			8			9		10		
Calendar year.	E. I.	E. B. S. system.			B. C.	B. N. (a) & (b).	E. C.	O. and R.	N. W. system.			G. I. P. system.			B., B. and C. I. system.			N. G. S. system.		M. system.	
		5' 6" gauge.	Other gauge.	Total.					Com-mercial section.	Mily. sec-tion.	Total.	G. I. P. (a) to (c).	I. M. (d) to (h).	Total.	B., B. & C. I. (a) to (e) & (l) & (m).	R. M. (f) to (h).	Total.	N. G. S. (a) & (b).	H. G. V. (c).	M. (d) to (e).	S. C. & N. (d) & (e).
GENERAL MERCHANDISE.																					
1898	2,82,077	49,31	21,24	80,55	2,11	29,02	9,66	44,87	2,15,90	13,50	2,29,40	2,32,57	33,84	2,91,41	1,08,75	1,51,45	2,60,20	16,41	...	156,02	...
1899	2,87,27	50,21	25,25	85,36	3,02	32,95	14,37	51,92	2,01,48	12,61	2,14,09	2,34,03	47,39	3,01,44	1,15,40	1,84,01	2,99,41	19,92	50	58,78	32
1900	2,96,43	55,05	39,69	94,74	4,78	78,98	23,86	49,54	1,59,49	14,17	1,73,66	2,32,65	77,72	3,10,37	1,19,32	2,25,20	3,34,52	26,14	5,63	58,82	58
1901	2,85,01	51,85	38,07	10,92	4,16	50,36	0	59,59	2,48,32	16,82	2,65,14	2,94,92	62,90	3,57,82	97,81	1,92,34	2,90,15	19,22	9,33	78,70	1,02
1902	2,74,84	59,18	40,34	99,53	3,06	54,19	0	54,84	2,40,17	14,17	2,54,34	2,90,82	66,12	3,56,94	97,91	1,77,44	2,75,35	21,06	11,09	75,89	1,68
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.																					
1898	1,27,02	1,78	40	2,18	18	4,53	17	75	1,13	48	1,61	8,63	15	8,80	2,36	67	3,03	13,80	...	7,59	...
1899	1,35,30	1,35	43	1,78	20	5,20	3,18	1,00	60	31	91	3,23	55	3,78	2,90	72	3,62	12,19	...	7,18	...
1900	1,57,12	2,04	65	2,69	25	6,73	4,94	1,75	44	20	64	4,36	25	4,61	4,21	76	4,97	14,64	8	7,95	...
1901	1,80,25	2,33	45	2,79	31	8,70	0	1,23	92	30	1,22	3,57	61	4,18	2,82	63	3,45	12,31	19	13,65	...
1902	1,71,79	1,94	64	2,98	26	10,36	0	1,91	1,30	23	1,53	3,54	98	4,52	1,50	66	2,16	12,84	23	12,14	...
MILITARY STORES.																					
1898	4,83	1	...	1	...	8	...	40	10,78	52	11,30	1,65	26	1,91	14	1,14	1,28	10	...	76	...
1899	3,50	1	...	1	...	5	3	26	4,09	39	4,48	2,03	41	2,44	22	90	1,12	26	...	60	1
1900	4,31	1	...	1	...	16	11	52	3,99	61	4,60	1,83	31	1,94	20	71	91	15	1	56	1
1901	3,13	1	...	1	...	4	0	35	5,40	1,28	6,68	1,90	14	2,04	16	49	65	24	6	94	6
1902	3,46	1	...	1	...	3	5	70	7,22	1,81	9,03	2,63	1,77	4,40	20	92	1,12	20	5	129	30
LIVE STOCK.																					
1898	1,74	2	2	4	...	1	1	13	2,08	18	2,26	1,86	17	2,03	3,29	77	4,06	7	...	30	...
1899	1,88	2	2	4	...	4	1	23	1,59	12	1,71	2,47	10	2,57	4,15	1,40	5,55	6	...	46	...
1900	2,21	2	2	4	...	9	8	15	1,19	21	1,39	3,68	57	4,25	3,70	40	4,10	9	4	63	3
1901	1,92	2	...	2	...	23	0	13	1,13	31	1,44	3,70	15	3,85	3,10	2,52	5,62	6	...	44	...
1902	2,08	1	...	1	...	35	0	17	1,74	25	1,99	2,93	19	3,12	3,43	79	4,22	9	9	78	...
REVENUE STORES, INCLUDING COAL, AND MATERIAL FOR CONSTRUCTION.																					
1898	17,21	2,51	2,38	3,29	21	3,46	1,78	3,17	14,21	2,65	16,86	9,46	2,46	11,92	3,78	4,33	8,11	92	...	1,64	...
1899	17,56	2,79	1,77	4,36	8	5,26	2,81	4,27	13,56	3,09	16,65	9,69	3,17	12,86	5,40	6,11	11,51	1,78	2	1,78	2
1900	18,15	2,32	2,50	4,32	19	4,70	2,99	4,10	12,15	2,30	14,45	9,18	4,32	13,30	4,50	6,91	11,41	1,40	96	1,93	2
1901	19,28	2,28	2,33	4,61	3	6,21	0	4,64	14,91	2,73	17,64	7,16	4,95	12,11	4,32	6,64	10,96	1,00	1,23	3,06	1
1902	20,75	3,13	2,52	5,65	9	11,67	0	6,83	18,50	3,02	21,52	9,55	5,53	15,08	3,78	6,25	10,03	1,10	1,25	4,33	2

* Transferred partly to the Bengal-Nagpur railway

† Decrease, due to ballast train earnings usually credited to "Railway material"

‡‡ Included with the

DIX 17.

**Appendix 17.
Goods earnings.**

from Goods traffic of each railway (by systems).

27, 29, 30 and 31 of Report.)

key to the code letters used to denote railway systems.

3' 3"												3' 6"					3' 0"				Gauge.			
12	13	14	15	16	17		18	19	20	21	22	23	24	25	26	27	28	29	30	31		32	Class No.	
B. D.	D. S.	A. B.	D.	B. and N. W.	R. and K. system.		J. B.	U. C.	B. G. J. P.	S. M.	W. L. P.	S. I.	B.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	D. H.	H. A.		H. S.		J.	Totals	Calendar Year.
GENERAL MERCHANDISE.																								
1,84	2,92	3,24	5	29,90	6,96	...	7,64	30	9,65	45,00	1,09	36,96	40,09	1,33	1,08	6	...	49	3,93	5	4	83	14,87,17	1898
1,84	3,11	4,19	4	36,80	8,64	...	14,10	1,06	10,76	50,02	3,40	39,99	38,13	1,38	1,23	6	1	52	3,85	21	4	83	16,10,55	1899
2,27	3,58	4,78	4	36,11	8,07	...	11,34	2,15	19,47	51,41	1,73	37,64	51,65	1,62	97	9	8	50	4,53	15	5	73	16,90,35	1900
3,28	3,30	7,44	5	42,74	8,68	23	11,39	1,13	7,76	44,20	1,89	45,57	56,16	98	1,37	9	1	44	4,07	21	6	67	17,53,14	1901
3,36	3,24	6,03	2	47,72	9,29	32	13,06	1,09	6,97	51,25	††	46,51	60,83	70	1,20	8	3	40	4,10	22	7	63	17,40,72	1902
COAL AND COKE FOR THE PUBLIC AND FOR FOREIGN RAILWAYS.																								
3	3,72	13	...	53	...	...	1	...	8	18	...	18	...	1	...	...	...	...	12	...	...	...	1,74,65	1898
8	4,27	20	...	73	1	...	2	...	11	11	...	39	...	2	...	...	...	...	14	...	...	...	1,80,41	1899
13	4,07	23	...	73	1	...	14	...	8	12	...	22	1	2	...	...	...	...	18	...	...	...	2,11,71	1900
9	4,83	31	...	75	1	...	19	1	...	13	...	27	...	1	...	...	...	...	12	...	...	...	2,35,01	1901
17	4,07	25	1	1,02	1	...	16	3	...	21	††	19	...	...	...	...	...	4	15	...	...	...	2,26,73	1902
MILITARY STORES.																								
...	...	...	...	...	4	...	...	...	...	19	...	3	24	...	...	...	...	...	2	...	...	...	21,19	1898
...	...	2	...	...	2	...	...	...	...	10	...	3	15	...	...	...	...	...	3	...	...	...	13,11	1899
...	...	1	...	...	2	...	...	...	...	15	...	6	19	...	...	...	...	...	2	...	...	...	13,78	1900
...	...	1	...	...	2	...	2	...	...	19	...	19	27	...	...	...	...	...	3	...	...	...	14,97	1901
...	...	5	...	...	8	...	8	...	...	42	††	10	26	...	...	...	...	...	4	...	...	...	21,67	1902
LIVE STOCK.																								
...	1	...	...	1	...	...	1	...	1	7	...	8	1,57	...	...	...	...	...	...	...	...	...	12,41	1898
...	1	1	...	2	1	...	1	...	3	12	...	6	1,17	...	...	...	...	...	...	...	...	...	13,99	1899
...	1	2	...	1	...	...	9	4	5	13	...	18	1,46	6	...	...	...	...	...	...	...	...	15,09	1900
...	...	1	...	2	...	...	2	...	1	12	...	16	1,34	...	...	...	...	...	...	...	...	...	15,44	1901
...	...	1	...	2	...	...	2	...	1	16	††	13	1,68	...	...	...	...	...	...	...	...	...	15,13	1902
REVENUE STORES, INCLUDING COAL, AND MATERIAL FOR CONSTRUCTION.																								
8	1	1,92	...	1,88	23	...	34	...	26	3,21	...	1,52	2,52	3	...	...	...	...	15	...	...	...	81,28	1898
8	4	1,99	...	3,36	20	...	44	1	17	3,71	2	1,28	3,45	1	...	...	...	...	19	...	...	...	94,11	1899
6	4	1,64	...	2,89	26	...	83	2	19	3,97	3	1,24	3,54	1	...	...	...	...	20	...	...	...	93,32	1900
3	2	1,96	...	3,37	27	1	87	1	11	3,72	4	1,33	4,82	2	...	1	...	...	4	...	...	...	96,41	1901
5	3	1,47	...	3,74	35	...	1,16	1	9	3,96	††	1,68	3,82	...	...	3	...	...	23	...	...	...	1,14,93	1902

and partly to the Madras railway from the 1st January 1901.
for construction," having been credited to "Sundries" in 1902.
Southern Mahratta railway.

Appendix 18.
Principal Commodities—Summary.Sum
ofPrincipal commodities carried by Indian railways treated as one
(Referred to in para
(Details for each railway system

Program- ive No.	Description of commodity	QUANTITY.		EARNINGS.		QUANTITY.		EARNINGS.	
		1901.	1902.	1901.	1902.	Increase.	Decrease.	Increase.	Decrease.
		Tons.	Tons.	Rs.	Rs.	Tons.	Tons.	Rs.	Rs.
I	APPAREL, INCLUDING DRAPERY, HAT- DASHERY, MILLINERY, UNIFORMS, ACCOUNTMENTS, BOOTS AND SHOES.	13,415	15,358	3,33,892	3,32,385	1,043	...	...	309
II	COAL AND COKE CARRIED FOR THE PUBLIC AND FOREIGN RAILWAYS	8,245,804	8,026,590	2,35,01,922	2,26,76,009	...	219,214	...	8,45,913
III	COTTON—								
	1. Raw	822,011	914,004	1,30,86,319	1,35,69,180	91,993	...	4,82,861	...
	2. Manufactured—								
	(a) Twist and yarn, European.	42,129	38,141	5,74,823	5,41,152	...	3,688	...	33,671
	(b) Twist and yarn, Indian	130,272	139,444	15,18,808	16,07,701	9,172	...	88,893	...
	(c) Piece-goods, European	812,783	821,172	43,62,593	43,24,258	3,327	...	...	38,265
	(d) Piece-goods, Indian	136,256	136,361	24,24,018	23,43,676	105	...	...	80,349
	(e) Others	5,252	6,747	1,05,747	1,41,657	1,495	...	35,910	...
	TOTAL	1,348,705	1,455,869	2,20,72,238	2,25,27,624	107,164	...	4,53,386	...
IV	CHEMICALS, EXCEPTING SALTPETRE	8,432	10,637	1,61,235	1,89,151	2,405	...	27,916	...
V	DRUGS—								
	1. Intoxicating, other than opium	36,407	1,937	4,30,716	34,354	...	34,470	...	3,96,368
	2. Non-intoxicating—								
	(a) Medicinal preparations	2,267	2,517	30,889	57,769	250	...	6,880	...
	(b) Others	30,831	38,119	5,55,819	5,12,799	...	1,712	...	42,000
	TOTAL	78,505	42,573	10,37,424	6,05,922	...	35,932	...	4,31,502
VI	DYES AND TANS—								
	1. Alizarine and aniline dyes	4,685	4,681	1,04,005	1,16,438	...	4	12,433	...
	2. Cutch	5,336	7,138	84,293	75,177	1,802	...	20,884	...
	3. Indigo	11,110	9,739	2,15,243	1,87,063	...	1,371	...	48,178
	4. Myrabolans	70,926	81,730	5,65,410	6,12,760	10,804	...	47,350	...
	5. Tanning barks	77,300	68,638	2,90,999	3,33,731	...	8,662	...	27,259
	6. Turmeric	64,140	77,606	7,13,335	8,71,778	13,466	...	1,58,443	...
	7. Others	29,778	28,602	2,87,586	3,86,132	...	1,176	...	1,454
	TOTAL	263,275	278,134	24,20,860	25,83,079	14,859	...	1,62,219	...
VII	FODDER—								
	1. Oil-cake	139,646	143,385	5,36,507	6,04,457	12,719	...	67,950	...
	2. Hay, straw and grass	163,439	186,639	5,63,120	9,27,841	23,200	...	3,64,721	...
	TOTAL	304,085	330,024	10,99,627	15,32,298	35,939	...	4,32,671	...
VIII	FRUITS AND VEGETABLES, FRESH	222,473	230,815	24,23,911	25,72,360	2,342	...	1,48,449	...
IX	GRAIN AND PULSE—								
	1. Gram and pulse	1,576,786	1,308,947	1,15,03,558	88,72,543	...	267,839	...	26,31,015
	2. Jawar and bajra	1,174,386	891,668	73,26,006	52,65,930	...	282,718	...	20,60,976
	3. Rice in the husk	1,085,197	1,058,593	45,75,619	43,77,028	...	26,604	...	1,98,591
	4. Rice not in the husk	1,715,325	1,488,948	90,13,363	81,44,903	...	226,577	...	8,68,370
	5. Wheat	1,619,650	1,860,627	1,39,42,726	1,63,39,522	240,977	...	24,16,796	...
	6. Wheat flour	120,310	142,780	7,48,634	8,85,604	22,470	...	1,36,950	...
	7. Others	735,326	788,253	42,38,416	49,45,378	32,927	...	7,05,962	...
	TOTAL	8,027,180	7,539,816	5,12,48,342	4,88,50,998	...	487,364	...	24,97,344
	Carried over	18,501,874	17,929,816	10,34,18,451	10,08,89,824	...	572,058	...	23,28,627

mary

system and the earnings therefrom during the Calendar year 1902.
(Graph 32 of Report.)
are shown in Appendix 19.)

Progressive No.	DESCRIPTION OF COMMODITY—contd.	QUANTITY.		EARNINGS.		QUANTITY.		EARNINGS.	
		1901.	1902.	1901.	1902.	Increase.	Decrease.	Increase.	Decrease.
		Tons.	Tons.	Rs.	Rs.	Tons.	Tons.	Rs.	Rs.
	Brought forward	18,501,874	17,929,816	10,34,18,451	10,08,89,844	...	572,058	...	25,28,627
X	HIDES AND SKINS—								
	1. Hides of cattle—								
	(a) Dressed or tanned	8,977	4,846	1,01,939	57,826	...	4,131	...	44,113
	(b) Raw	82,304	83,554	8,60,796	8,04,063	1,230	...	...	56,733
	2. Skins of sheep and other animals—								
	(a) Dressed or tanned	11,198	8,365	1,16,391	90,466	...	2,833	...	25,925
	(b) Raw	72,195	71,812	6,97,568	7,27,442	...	383	...	29,874
	TOTAL	174,674	168,577	17,76,694	16,79,797	...	6,097	...	96,897
XI	HORNS	5,941	5,887	55,752	63,873	...	84	...	8,121
XII	HEMP (INDIAN) AND OTHER FIBRES, EXCLUDING JUTE	72,366	71,845	5,59,758	5,55,228	...	531	...	4,530
XIII	JUTE—								
	1. Raw	777,011	968,396	50,31,180	63,43,163	191,385	...	...	13,11,983
	2. Gunny bags and cloth	255,384	250,978	21,91,978	20,72,941	...	4,466	...	1,19,037
	TOTAL	1,032,395	1,219,374	72,23,158	84,16,104	186,979	...	...	11,92,946
XIV	LAC	32,333	33,936	3,68,196	3,91,956	1,603	...	...	23,760
XV	LEATHER—								
	1. Unwrought	8,093	8,096	1,24,138	1,21,781	3	...	...	2,387
	2. Wrought, excepting boots and shoes	7,383	6,718	1,34,700	1,13,264	...	665	...	21,436
	TOTAL	15,476	14,814	2,58,838	2,35,045	...	665	...	23,823
XVI	LIQUORS—								
	1. Ale and beer	44,590	50,900	4,79,435	4,56,392	6,310	...	...	36,957
	2. Wines and spirits of all kinds, including country spirit	26,659	28,089	4,20,036	4,21,017	1,430	...	...	40,981
	3. All other sorts, including toddy and fermented liquor other than ale and beer	10,604	10,143	41,933	56,067	...	461	...	24,134
	TOTAL	81,853	89,132	9,41,404	9,33,476	7,979	...	...	92,072
XVII	METALS—								
	1. Brass, unwrought	7,091	11,915	97,560	1,64,925	3,924	...	...	67,365
	2. Brass, wrought	28,106	27,499	3,04,879	3,06,187	...	607	...	1,308
	3. Copper, unwrought	1,985	4,330	26,845	74,257	2,345	...	...	47,412
	4. Copper, wrought	5,816	6,788	81,866	1,13,460	972	...	...	31,594
	5. Iron and steel—								
	(a) Cast	26,025	29,189	2,37,568	3,02,780	3,164	...	...	65,212
	(b) Unwrought	42,817	50,438	2,44,548	3,30,495	7,621	...	...	25,947
	(c) Wrought	236,822	264,597	24,98,932	28,22,768	27,775	...	...	3,73,836
	(d) Manufactures	82,153	98,647	9,28,325	12,73,277	16,494	...	...	2,84,952
	6. Others	199,411	289,031	9,78,598	14,61,767	29,620	...	...	4,22,669
	TOTAL	631,126	782,434	54,59,121	68,49,416	151,308	...	...	13,90,295
XVIII	OILS—								
	1. Kerosine	441,521	436,974	21,05,687	21,39,137	...	4,547	...	33,450
	2. Castor	10,850	19,919	79,193	1,13,843	9,069	...	...	34,649
	3. Coconut	17,550	16,773	1,73,817	1,70,006	...	777	...	3,811
	4. Mustard and rape	17,145	12,549	1,85,565	1,06,965	...	4,616	...	78,600
	5. Others	53,323	55,400	4,09,022	4,34,224	2,167	...	...	25,202
	TOTAL	540,389	541,685	29,53,284	29,64,174	1,296	...	...	10,290
	Carried over	21,088,427	20,857,500	12,39,74,656	12,40,38,863	...	230,927	...	64,207

Appendix 18.
Principal Commodities—Summary.

APPEN

Sum
of

Principal commodities carried by Indian railways treated as one
(Referred to in paragraph
(Details for each railway system

Progressive No.	DESCRIPTION OF COMMODITY—contd.	QUANTITY.		EARNINGS.		QUANTITY.		EARNINGS.	
		1901.	1902.	1901.	1902.	Increase.	Decrease.	Increase.	Decrease.
		Tons.	Tons.	Rs.	Rs.	Tons.	Tons.	Rs.	Rs.
	Brought forward	21,088,427	20,857,590	12,39,74,656	12,40,38,863	...	230,927	64,207	...
XIX	OIL-SEEDS—								
	1. Castor	219,854	243,941	11,90,254	13,44,987	24,087	...	1,54,733	...
	2. Earthnuts	87,193	130,929	1,88,988	2,91,320	43,731	...	1,02,332	...
	3. Linseed	524,596	487,872	35,45,667	35,40,300	...	36,724	...	1,03,367
	4. Poppy	89,378	91,201	7,48,855	7,40,556	1,823	...	...	8,299
	5. Rape and mustard	708,246	562,165	66,03,608	41,13,306	...	146,081	...	24,90,302
	6. Til or jingili	322,487	341,213	25,52,598	26,07,899	18,726	...	1,45,294	...
	7. Cotton seed	232,075	291,746	20,54,739	23,62,021	59,671	...	3,07,282	...
	8. Others	263,326	207,351	18,56,891	14,37,661	...	55,975	...	4,19,230
	TOTAL	2,447,160	2,356,418	1,88,41,600	1,65,28,043	...	90,742	...	23,13,557
XX	OPPIUM	18,777	20,503	4,66,394	4,43,314	1,826	...	...	23,080
XXI	PAPER AND PASTE BOARD	32,890	36,853	4,05,834	4,33,992	3,963	...	28,158	...
XXII	PROVISIONS—								
	1. Dried fruits and nuts	160,846	149,856	18,70,309	17,37,266	...	19,990	...	1,33,043
	2. Ghee	82,788	81,792	11,04,343	11,07,205	...	1,996	2,262	...
	3. Others	334,094	380,857	28,03,343	39,31,982	46,763	...	4,29,639	...
	TOTAL	587,728	612,505	57,76,995	60,76,453	24,777	...	2,99,456	...
XXIII	RAILWAY PLANT AND ROLLING-STOCK carried for the Public and Foreign Railways—								
	1. Locomotive engines and tenders and parts thereof	3,130	3,368	16,346	26,109	238	...	9,763	...
	2. Carriages and trucks and parts thereof	13,538	9,422	76,463	36,163	...	4,116	...	40,300
	3. Materials—								
	(a) Steel rails and fish-plates	26,705	81,267	1,39,918	2,73,235	54,562	...	2,13,317	...
	(b) Sleepers and keys of steel and cast-iron	10,472	12,020	72,093	58,589	1,548	...	...	13,504
	(c) Others	207,945	368,956	10,22,626	12,00,865	161,011	...	1,78,239	...
	TOTAL	261,790	475,033	13,47,446	16,94,961	213,243	...	3,47,515	...
XXIV	SALT	1,626,590	1,616,163	93,85,896	95,15,866	...	10,427	1,29,070	...
XXV	SALTPETRE AND OTHER SALINE SUBSTANCES—								
	1. Saltpetre	43,414	57,095	3,21,501	4,63,716	13,681	...	1,42,215	...
	2. Other saline substances	33,906	40,141	2,74,686	3,13,677	6,235	...	38,691	...
	TOTAL	77,320	97,236	5,96,187	7,77,393	19,916	...	1,80,906	...
XXVI	SILK—								
	1. Raw—								
	(a) Foreign	1,431	1,187	39,553	33,193	...	244	...	6,360
	(b) Indian	3,588	2,755	63,149	48,621	...	833	...	14,538
	2. Piece-goods—								
	(a) Foreign	276	250	11,845	10,280	...	26	...	1,565
	(b) Indian	344	403	10,327	12,349	59	...	1,823	...
	TOTAL	5,639	4,595	1,23,074	1,04,433	...	1,044	...	20,641
XXVII	SPICES—								
	1. Betel-nuts	84,403	89,377	9,18,106	9,75,800	4,924	...	37,694	...
	2. Cardamoms	1,767	2,917	39,431	42,595	1,150	...	10,164	...
	3. Chillies	86,451	105,348	3,66,475	10,10,604	18,897	...	1,44,129	...
	4. Ginger	6,558	7,444	81,305	87,978	886	...	6,673	...
	5. Pepper	5,999	6,568	1,18,351	1,31,315	569	...	12,964	...
	6. Others	66,716	61,659	7,05,266	6,79,649	...	5,957	...	23,611
	TOTAL	251,894	273,263	27,21,934	29,27,941	21,369	...	2,06,007	...
	Carried over	26,398,215	26,359,169	16,36,42,316	16,25,41,259	...	48,046	...	11,01,05

DIX 18—concluded.

Appendix 18.
Principal Commodities—Summary.

mary

system and the earnings therefrom during the Calendar year 1902.

32 of Report.)

are shown in Appendix 19.)

Progressive No.	DESCRIPTION OF COMMODITY— <i>concid.</i>	QUANTITY.		EARNINGS.		QUANTITY.		EARNINGS.	
		1901.	1902.	1901.	1902.	Increase.	Decrease.	Increase.	Decrease.
		Tons.	Tons.	Rs.	Rs.	Tons.	Tons.	Rs.	Rs.
	Brought forward	26,398,215	26,350,169	16,36,49,316	16,25,41,859	...	48,046	...	11,01,057
XXVIII	STONE AND LIME	1,209,789	1,236,606	24,94,587	25,38,923	26,817	...	44,338	...
XXIX	SUGAR—								
	1. Refined or crystallized, including sugarcandy	290,700	310,204	35,19,349	36,65,349	19,501	...	1,47,000	...
	2. Unrefined—								
	(a) Sugar	252,962	242,365	15,12,094	15,58,154	...	10,307	46,060	...
	(b) Gw, rab, jaggery, molasses and other saccharine produce	900,640	826,302	62,72,776	55,08,288	...	74,347	...	7,70,488
	TOTAL	1,444,311	1,378,571	1,13,04,219	1,07,26,791	...	65,440	...	5,77,428
XXX	TEA—								
	1. Foreign	1,261	2,268	27,579	46,931	1,007	...	19,352	...
	2. Indian	100,457	103,105	13,35,163	13,32,060	2,648	...	...	3,103
	TOTAL	101,718	105,373	13,62,742	13,78,991	3,655	...	16,249	...
XXXI	TOBACCO—								
	1. Unmanufactured	220,243	208,070	17,78,433	16,99,093	...	12,173	...	79,340
	2. Manufactured—								
	(a) Cigars	5,087	5,002	93,397	90,076	...	85	...	3,321
	(b) Other sorts	11,228	14,482	1,40,501	1,94,956	3,234	...	54,455	...
	TOTAL	236,558	227,554	20,12,331	19,84,125	...	9,004	...	28,246
XXXII	WOOD—								
	1. Timber, unwrought	857,413	948,666	27,35,169	31,62,941	91,253	...	4,27,772	...
	2. Manufactures	63,727	69,443	4,64,930	5,32,713	5,716	...	73,783	...
	TOTAL	921,140	1,018,109	32,00,099	37,01,654	96,069	...	5,01,555	...
XXXIII	WOOL—								
	1. Raw	28,482	29,445	5,91,482	5,35,590	963	...	...	55,822
	2. Manufactured—								
	(a) Carpets and rugs	2,377	2,568	44,328	45,226	191	...	898	...
	(b) Piece-goods, European	1,988	2,583	46,971	45,286	595	...	...	1,685
	(c) Piece-goods, Indian	5,155	4,860	1,04,453	1,01,276	...	295	...	3,176
	(d) Other sorts of manufactures	3,973	4,281	69,339	65,165	208	...	...	3,974
	TOTAL	41,975	43,737	8,56,572	7,92,743	1,762	...	...	63,829
XXXIV	ALL OTHER ARTICLES OF MERCHANDISE—	2,653,289	2,760,462	1,54,39,851	1,52,49,456	107,173	...	...	1,90,395
	GRAND TOTAL	33,006,995	33,120,891	20,03,12,717	19,89,13,944	113,886	...	...	13,08,773
	ANIMALS—								
	1. Horses	10,562	24,915	3,25,058	4,18,100	14,353	...	93,042	...
	2. Cattle	51,790	33,686	7,01,607	4,17,744	...	18,104	...	2,83,862
	3. Sheep, etc.	32,967	126,397	5,02,571	6,03,231	93,436	...	1,01,179	...
	4. Elephants	6	6	519	519	...	...	...	...
		95,319	(a) 187,207	15,29,236	(a) 15,17,462	98,888	...	...	11,774

(a) Including 2,203 tons and Rs. 77,868 of live stock on the Madras railway not included in the details.

Appendix 19.
Principal Commodities—Details.

Principal commodities carried by each railway (by systems)

(Referred to in paragraph

Progressive No.	GAUGE.		5' 6"							
	CLASSIFICATION No.		1		2		3		4	
	Railway.		East Indian.		Eastern Bengal.		Bengal Central.		Bengal-Nagpur (a) & (b).	
	Description of commodity.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
I	Apparel, including drapery, haberdashery, millinery, uniforms, accoutrements, boots and shoes	3,372	1,02,228	1,300	15,972	49	368	277	7,000	
II	Coal and coke carried for the public and foreign railways	5,042,145	1,71,72,596	295,241	2,58,038	24,597	26,083	906,209	10,55,527	
III	COTTON—	62,457	8,68,235	2,217	11,243	140	903	12,776	1,60,667	
	1. Raw	1,577	43,468	2,754	22,811	478	1,629	1,201	4,556	
	2. Manufactured—	18,772	1,79,461	3,612	26,297	2	11	13,133	1,76,603	
	(a) Twist and yarn, European	61,733	16,50,710	27,490	2,71,597	1,717	5,373	3,954	38,744	
	(b) Twist and yarn, Indian	7,656	1,14,819	1,311	10,487	27	154	3,957	64,349	
	(c) Piece-goods, European	1,868	42,940	...	...	...	...	...	...
	(d) Piece-goods, Indian . . . . .	...	...	...	...	...	...	...	...
	(e) Others . . . . .	...	...	...	...	...	...	...	...
	TOTAL	158,063	28,99,633	37,384	3,42,435	2,364	8,070	35,051	4,44,919	
IV	CHEMICALS, EXCEPTING SALTPETRE	2,952	56,728	376	3,771	16	26	213	3,008	
V	DRUGS—	223	3,936	288	6,245	4	49	34	804	
	1. Intoxicating, other than opium	514	17,974	...	...	25	362	...	...
	2. Non-intoxicating	3,304	45,323	930	13,987	5	39	861	9,321	
	(a) Medicinal preparations . . . . .	...	...	...	...	...	...	...	...
	(b) Others . . . . .	...	...	...	...	...	...	...	...
	TOTAL	4,041	67,233	1,218	20,432	34	450	895	10,125	
VI	DYES AND TANS—	284	7,339	...	...	...	...	...	...
	1. Alizarine and aniline dyes	1,576	19,428	222	1,651	3	14	...	...
	2. Cutch	2,487	69,715	160	1,976	...	...	...	...
	3. Indigo	5,538	48,052	...	...	...	...	21,472	1,72,832
	4. Myrabolans	4,520	12,925	...	...	4	22	...	...
	5. Tanning barks	7,208	1,50,837	3,376	21,098	468	1,935	4,771	39,919	
	6. Turmeric	4,521	52,151	187	2,195	2	22	2,604	14,748	
	7. Others . . . . .	...	...	...	...	...	...	...	...
	TOTAL	26,134	3,60,247	3,945	26,920	477	1,995	28,847	2,27,499	
VII	FODDER—	35,826	1,55,852	6,644	12,777	1,273	2,423	2,384	9,892	
	1. Oil-cake	27,191	1,17,379	20,278	21,396	15	56	971	2,648	
	2. Hay, straw and grass . . . . .	...	...	...	...	...	...	...	...
	TOTAL	63,017	2,73,227	26,922	34,113	1,288	2,479	3,355	12,540	
VIII	FRUITS AND VEGETABLES, FRESH	12,802	1,87,747	6,852	36,648	4,982	13,872	9,605	67,855	
IX	GRAIN AND PULSE—	266,115	17,34,984	58,651	1,06,862	2,183	5,102	33,359	1,70,321	
	1. Gram and pulse	22,603	82,401	...	...	...	...	...	...
	2. Jawar and bajra	30,235	1,01,790	60,695	1,94,830	507	683	55,828	1,07,680	
	3. Rice in the husk	208,785	10,95,285	71,029	1,79,499	1,124	2,734	134,468	8,42,930	
	4. Rice not in the husk	281,542	16,05,272	4,225	15,401	6	20	55,499	4,30,248	
	5. Wheat	30,084	1,64,322	2,950	26,541	325	1,031	2,418	12,757	
	6. Wheat flour	100,614	4,17,327	3,018	7,289	4	19	12,945	37,230	
	7. Others . . . . .	...	...	...	...	...	...	...	...
	TOTAL	939,980	52,01,386	200,568	6,20,422	4,149	9,589	294,427	16,01,166	
X	HIDES AND SKINS—	1,063	17,312	16,412	87,193	553	3,035	9,452	86,691	
	1. Hides of cattle—	20,797	2,93,604	...	...	...	...	...	...
	(a) Dressed or tanned	736	5,559	1,277	6,481	69	473	...	...
	(b) Raw	7,211	1,19,094	...	...	...	...	...	...
	2. Skins of sheep, and other animals—	...	...	...	...	...	...	...	...
	(a) Dressed or tanned . . . . .	...	...	...	...	...	...	...	...
	(b) Raw . . . . .	...	...	...	...	...	...	...	...
	TOTAL	29,807	4,35,569	17,689	93,674	622	3,508	9,452	86,691	
XI	HORNS	752	9,085	226	996	...	...	656	4,910
XII	HEMP (INDIAN) AND OTHER FIBRES, EXCLUDING JUTE	22,675	1,31,024	1,087	7,136	86	381	9,647	52,558	
XIII	JUTE—	116,662	6,74,616	729,553	52,58,509	65,118	2,47,254	...	...
	1. Raw	59,270	6,63,783	15,977	73,136	136	652	13,721	1,55,246	
	2. Gunny bags and cloth . . . . .	...	...	...	...	...	...	...	...
	TOTAL	166,932	13,38,399	745,530	53,31,645	65,254	2,47,906	13,721	1,55,246	
XIV	LAC	19,840	2,87,431	1,075	6,813	...	...	4,695	32,714
XV	LEATHER—	1,115	41,453	...	...	...	...	834	3,402
	1. Unwrought	774	14,262	...	...	...	...	...	...
	2. Wrought, excepting boots and shoes . . . . .	...	...	...	...	...	...	...	...
	TOTAL	1,889	55,715	...	...	...	...	834	3,402
	Carried over	6,494,407	2,85,98,248	1,339,413	67,98,815	103,918	3,14,727	1,317,824	37,65,160	

DIX 19.

and the earnings therefrom during the Calendar year 1902.

Appendix 19.
Principal Commodities—Details.

(of Report.)

5 6										Progressive No.
5		6		7		8				
Oudh and Rohilkhand.		North-Western.		Great Indian Peninsula.		B., B. and C. I. system.				
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	B., B. and C. I. (a) to (c) & (n) & (m).		R. M. (f) to (h).		
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Quantity.	Earnings.	Quantity.	Earnings.	
918	11,425	3,478	80,167	1,842	53,902	479	11,267	722	19,340	I
47,626	1,914,773	42,360	1,531,110	163,390	4,511,898	42,050	1,504,437	17,791	65,782	II
14,161	99,552	74,619	8,92,277	312,427	73,99,257	152,747	15,08,686	82,607	14,10,254	III
2,986	23,767	2,317	55,195	7,811	1,56,659	264	3,954	304	3,173	
7,937	38,595	6,462	1,07,087	14,528	1,65,709	13,326	1,68,675	13,626	3,30,802	
9,976	73,716	22,055	6,22,827	26,582	7,98,023	4,988	1,04,767	8,315	1,00,508	
5,539	47,128	25,100	4,98,525	11,867	2,29,609	26,273	4,37,742	24,284	6,31,456	
376	3,668	782	15,921	664	22,068	695	13,594	875	28,019	
40,915	3,06,436	131,335	21,91,832	373,879	87,71,325	198,493	22,37,048	130,011	25,73,302	
502	5,353	13,196	1,52,007	1,311	39,495	201	3,975	200	1,533	IV
274	4,753	342	9,063	99	2,278	12	326	57	1,385	V
130	2,299	323	9,642	244	8,845	13	335	57	918	
7,313	13,999	9,010	1,38,605	3,249	87,312	4,137	54,099	2,796	46,388	
1,637	20,051	9,875	1,57,310	3,592	98,435	4,162	54,760	2,310	48,691	
126	1,352	556	17,785	1,967	49,992	515	12,019	419	11,311	VI
308	2,335	19	160	839	15,216	146	1,034	184	1,975	
137	1,917	3,625	36,117	266	7,644	69	995	743	6,393	
235	1,534	370	3,384	40,737	3,29,531	226	2,022	235	2,289	
2,575	15,054	314	1,452	11,451	53,520	662	7,087	2,228	15,028	
2,347	29,556	4,925	76,612	11,491	1,75,577	2,979	54,198	3,314	54,806	
736	5,982	5,681	80,806	2,875	42,579	3,173	58,021	3,100	78,314	
6,484	57,730	13,490	2,16,316	69,026	6,74,059	7,770	1,35,436	10,223	1,70,116	
3,879	16,759	8,933	38,725	11,727	70,134	7,188	51,361	7,137	19,293	VII
130,041	34,273	24,280	2,13,382	34,242	2,22,578	35,900	1,92,716	6,828	45,834	
13,920	51,032	43,113	2,52,107	46,569	2,92,712	43,028	2,44,077	12,965	65,127	
12,470	49,822	22,699	1,76,125	23,963	2,06,890	18,369	96,586	31,372	1,97,701	VIII
82,445	3,16,283	229,089	7,56,787	217,834	26,86,962	61,833	2,13,793	123,738	12,48,752	IX
25,881	79,419	122,858	10,68,831	162,405	13,98,290	76,578	2,01,971	126,276	10,68,260	
2,171	8,133	21,610	75,652	1,508	6,685	9,097	39,188	1,424	7,337	
35,761	7,36,746	120,399	3,85,445	117,097	9,34,110	134,940	10,92,383	59,317	3,44,876	
207,177	9,51,878	748,379	83,93,847	190,621	19,81,011	50,100	2,40,234	171,521	20,98,803	
8,494	29,072	43,691	2,02,096	14,985	1,35,797	7,649	60,309	10,362	89,438	
79,385	2,81,793	38,841	1,63,933	37,940	4,10,903	33,873	1,77,342	205,806	21,95,435	
437,314	18,08,324	1,285,677	1,14,46,591	742,390	75,53,818	374,070	20,85,280	698,534	70,52,991	
1	3	441	5,387	334	2,919	22	135	304	2,283	X
4,709	31,265	8,259	95,685	3,286	48,999	1,291	16,209	1,903	20,006	
1,752	9,305	161	1,839	65	1,114	48	680	89	710	
6,462	49,573	9,382	1,07,806	8,581	1,22,759	1,446	20,825	3,204	31,684	
687	2,912	18,243	2,10,717	12,266	1,75,791	2,807	37,919	5,500	54,743	
687	2,912	388	3,530	1,225	23,257	194	3,071	120	906	XI
8,738	26,455	781	5,087	12,891	2,04,563	779	6,631	1,435	11,789	XII
141	904	141	1,616	882	14,244	627	6,492	1,057	19,174	XIII
14,685	64,896	87,200	2,88,476	22,608	2,39,563	10,188	54,993	13,573	1,12,672	
12,826	65,800	37,341	2,90,092	23,490	2,53,807	10,815	61,395	15,530	1,31,846	
1,407	12,767	980	7,422	545	5,721	63	353	654	6,683	XIV
7	58	1,528	21,105	860	15,209	615	9,514	800	6,578	XV
376	2,472	1,886	35,946	1,056	26,238	1,182	13,648	490	7,591	
383	2,330	3,414	57,051	1,916	41,447	1,797	23,162	1,290	14,169	
597,109	26,47,683	1,616,370	1,52,99,474	1,477,695	1,82,46,940	703,137	21,51,397	929,557	1,04,14,629	

Appendix 19.
Principal Commodities—Details.

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Principal commodities carried by each railway (by systems)
(Referred to in paragraph

Progressive No.	GAUGE.		5' 6"							
	CLASSIFICATION NO.		1		2		3		4	
	Railway.		East Indian.		Eastern Bengal.		Bengal Central.		Bengal-Nagpur (a) & (b).	
	Description of commodity—contd.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
	Brought forward	6,494,407	2,85,98,248	1,339,413	67,98,815	103,918	3,14,727	1,317,884	37,65,160	
XVI	Liquors—									
	1. Ale and beer	9,231	78,887	287	2,767	1	11	919	3,829	
	2. Wines and spirits of all kinds, including country spirit	2,275	74,904	1,029	15,119	37	457	632	7,221	
	3. All other sorts, including toddy and fermented liquor other than ale and beer	76	857	...	...	...	...	...	...
	TOTAL	11,582	1,54,648	1,316	17,886	38	468	1,551	11,050	
XVII	METALS—									
	1. Brass, unwrought	893	12,491	397	2,645	2	19	...	...
	2. Brass, wrought	7,537	87,793	2,290	23,892	399	941	914	10,156	
	3. Copper, unwrought	430	10,820	279	2,516	...	...	...	...
	4. Copper, wrought	1,087	89,512	176	2,296	13	17	339	3,675	
	5. Iron and steel—									
	(a) Cast	13,502	1,44,426	876	5,165	11	44	348	5,534	
	(b) Unwrought	22,695	34,452	...	...	...	...	...	...
	(c) Wrought	51,418	6,05,978	17,978	1,27,213	506	2,579	22,660	70,053	
	(d) Manufactures	15,987	2,05,963	4,918	37,654	37	249	2,578	32,249	
	6. Others	6,717	1,27,904	2,422	27,918	594	2,380	156,390	1,74,243	
	TOTAL	120,266	12,59,339	29,336	2,29,299	1,562	6,229	183,229	2,95,910	
XVIII	OILS—									
	1. Kerosine	75,525	7,06,780	130,460	2,75,288	2,469	5,823	16,178	1,52,047	
	2. Castor	2,083	15,056	108	811	3	15	529	4,334	
	3. Coconut	2,210	19,824	1,617	15,452	188	445	659	4,176	
	4. Mustard and rape	3,838	37,579	2,496	24,286	942	2,415	...	...
	5. Others	2,761	42,372	698	3,900	12	44	2,039	16,882	
	TOTAL	86,417	8,21,611	135,379	3,19,737	3,614	8,742	19,493	1,77,439	
XIX	OIL SEEDS—									
	1. Castor	34,135	2,06,372	506	1,513	...	...	...	...
	2. Earthnuts	66	471	...	...	...	...	...	...
	3. Linseed	188,816	13,71,153	27,027	78,646	1,196	2,606	10,319	66,280	
	4. Poppy	31,342	2,21,441	...	...	...	...	...	...
	5. Rape and mustard	200,201	11,05,870	42,053	1,68,557	2,245	4,372	6,040	43,259	
	6. Til or jujill	14,053	64,437	731	3,203	180	442	22,062	2,10,343	
	7. Cotton seed	36,497	1,83,619	...	...	...	...	...	...
	8. Others	6,493	45,058	978	3,302	36	114	11,803	53,612	
	TOTAL	511,423	32,88,421	71,295	2,55,221	3,657	7,534	50,224	3,73,494	
XX	OPIUM	8,066	1,96,589	48	591	2	19	52	1,808	
XXI	PAPER AND PASTE-BOARD	9,732	1,56,136	6,321	8,978	139	1,242	841	12,320	
XXII	PROVISIONS—									
	1. Dried fruits and nuts	6,630	74,290	243	1,866	302	1,254	6,165	53,137	
	2. Ghee	18,980	4,09,306	839	8,747	43	240	2,002	27,970	
	3. Others	78,552	9,04,526	11,470	83,006	192	1,005	2,812	28,497	
	TOTAL	104,162	13,88,122	12,552	93,619	537	2,499	10,979	1,09,604	
XXIII	RAILWAY PLANT AND ROLLING STOCK CARRIED FOR THE PUBLIC AND FOREIGN RAILWAYS—									
	1. Locomotive engines and tenders and parts thereof	1,026	12,184	697	217	...	...	159	2,394
	2. Carriages and trucks and parts thereof	6,696	19,460	51	21	...	...	423	2,118
	3. Materials—									
	(a) Steel rails and fish-plates	19,166	1,74,751	582	3,648	...	...	449	1,915
	(b) Sleepers & keys of steel and cast-iron	249	1,651	4,649	9,580	...	...	1,140	13,527
	(c) Others	77,256	3,76,424	2,606	9,824	...	...	43,297	2,15,596
	TOTAL	104,393	3,84,470	8,385	23,290	...	...	45,468	2,35,460
XXIV	SALT	225,593	10,98,245	73,715	2,65,693	3,799	8,958	81,071	4,58,191	
XXV	SALTPETRE AND OTHER SALINE SUBSTANCES—									
	1. Saltpetre	24,097	2,61,627	4	11	3	22	...	...
	2. Other saline substances	18,721	1,51,410	2,094	6,489	79	327	...	...
	TOTAL	42,818	4,13,037	2,098	6,500	82	349	...	...
	Carried over	7,718,859	3,79,58,666	1,680,058	81,19,629	117,348	3,50,767	1,710,704	54,49,436	

DIX 19—continued.

Appendix 19
Principal Commodities—Details

and the earnings therefrom during the Calendar year 1902.

(of Report.)

5'6"										Progressive No.
5		6		7		8				
Oudh and Rohilkhand.		North Western.		Great Indian Peninsula.		R. H. and C. I. SYSTEM.				
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	B. H. and C. I. (a) to (f) & (i) & (m).		Rajputana-Malwa (f) to (h).		
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
992,109	26,47,683	1,616,370	1,52,99,474	1,477,695	1,88,46,940	705,137	51,51,397	929,557	1,04,14,629	XVI
7,845	30,983	8,277	82,639	8,803	1,14,691	1,764	21,638	2,741	22,467	
2,079	29,807	3,989	1,22,113	3,446	87,271	2,432	26,508	798	16,871	
...	...	160	3,083	407	3,557	43	888	211	3,698	
9,924	60,790	12,426	2,07,837	12,656	1,99,519	4,239	49,034	3,750	43,036	XVII
49	576	555	5,360	2,428	49,901	1,402	17,211	1,696	37,886	
3,571	26,013	1,404	20,333	2,214	43,313	1,415	16,604	2,505	35,016	
91	456	278	4,568	858	19,222	764	9,898	250	20,414	
160	1,259	836	13,678	1,046	21,929	800	10,316	915	17,770	
1,661	11,292	1,532	21,788	2,834	45,344	955	11,425	844	11,502	
27	109	1,638	12,132	11,803	1,30,359	994	8,450	1,099	9,764	
13,062	76,222	41,388	7,07,390	28,443	4,67,000	28,921	1,79,119	17,512	1,00,026	
3,192	21,327	7,819	1,27,686	16,045	3,17,912	8,308	1,03,852	5,890	85,275	
1,028	4,742	2,873	49,757	96,314	2,24,634	3,528	37,546	4,697	79,922	
22,841	1,41,996	58,413	9,62,986	161,984	19,76,274	37,117	3,06,681	36,020	4,96,575	XVIII
15,744	85,328	17,991	3,36,193	45,811	6,42,754	14,563	1,46,060	2,970	78,696	
179	1,248	283	3,613	844	10,594	1,081	7,578	1,593	2,424	
82	407	601	7,379	2,625	41,964	806	10,384	458	9,814	
600	2,736	1,991	19,086	89	2,597	359	1,888	832	4,515	
649	3,570	3,241	31,459	9,482	99,689	2,741	25,894	1,620	14,897	
17,254	93,289	24,017	3,97,790	58,851	8,02,598	19,550	1,91,804	13,383	1,15,426	XIX
4,519	17,181	105	907	56,855	3,82,705	5,304	49,569	12,206	13,196	
36	164	45	942	6,507	61,209	370	3,809	119	1,128	
39,670	1,39,153	9,851	1,44,129	94,921	11,66,076	7,219	52,510	6,170	57,205	
14,084	59,039	677	4,340	18,771	2,71,717	8,299	68,038	10,129	80,334	
53,137	2,06,616	28,572	2,56,249	101,314	14,59,324	26,351	1,85,369	33,032	2,02,081	
7,476	28,790	26,672	2,01,237	105,269	12,16,202	33,795	1,99,748	23,388	1,59,976	
14,163	64,520	39,103	4,17,188	24,400	2,10,436	6,774	38,412	5,501	31,705	
127,385	5,15,463	177,910	13,99,814	572,953	65,27,027	88,112	5,99,475	91,145	6,47,715	
249	15,398	83	968	456	16,718	2,434	76,828	3,382	96,023	XX
2,741	14,822	2,516	40,547	3,241	53,686	2,279	32,874	1,775	30,394	XXI
1,924	19,745	21,828	4,15,164	31,164	5,00,108	16,357	1,64,806	12,138	1,41,641	XXII
3,867	31,466	9,233	1,02,370	16,284	2,21,745	5,027	66,779	7,711	93,284	
1,977	17,725	9,389	1,55,035	35,500	3,63,003	23,578	1,14,614	8,645	60,097	
7,768	58,936	40,450	6,73,189	82,918	10,84,856	44,962	3,45,230	27,494	2,05,022	XXIII
55	215	...	...	517	4,458	93	438	101	647	
6	9	...	...	34	275	1,361	6,920	33	5,273	
6,253	13,649	...	...	5,756	34,055	4,026	21,682	32,079	69,189	
...	...	...	...	3,002	20,603	3	5	803	7,262	
12,952	45,939	170,671	3,73,340	2,675	13,637	21,933	80,023	23,272	4,35,533	
19,266	59,803	170,671	3,73,340	11,824	72,010	28,517	1,00,068	56,288	1,25,004	
64,785	3,10,425	104,667	7,02,167	177,360	17,10,227	181,104	4,67,803	257,378	22,43,711	XXIV
740	2,813	5,126	33,366	315	4,339	2,415	21,051	10,217	85,079	XXV
154	696	7,423	68,380	2,620	30,575	963	11,021	1,007	15,028	
903	3,509	12,549	1,01,745	2,035	34,564	3,378	34,972	12,124	1,01,007	
861,825	39,22,024	2,220,072	2,01,61,638	2,262,063	3,13,26,719	1,116,829	74,17,175	1,432,796	1,45,70,342	

Appendix 19.
Principal Commodities—Details.Principal commodities carried by each railway (by systems)
(Referred to in paragraph

Progressive No.	GAUGE.		5' 6"								
	CLASSIFICATION NO.		1		2		3		4		
	Railway.		East Indian.		Eastern-Bengal.		Bengal Central.		Bengal-Nagpur (a) & (b).		
	Description of commodity—contd.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.		
	Brought forward		7,718,859	3,79,58,666	1,580,058	81,19,529	117,348	3,50,767	1,710,704	54,40,436	
XXVI	SILK—										
	1. Raw—										
	(a) Foreign		1	73	416	7,050	..	..	..	..
	(b) Indian		998	32,729			403	6,860
	2. Piece-goods—										
	(a) Foreign		2	128	..	..	..	..	..	..
	(b) Indian		130	4,214	..	..	..	..	..	..
	TOTAL		1,131	77,204	416	7,050	..	..	403	6,860
XXVII	SPICES—										
	1. Betel-nuts		9,843	2,10,470	11,552	1,01,827	4,698	18,524	3,851	29,493	
	2. Cardamom		466	10,424	239	5,120	..	..	..	..
	3. Chillies		7,245	1,28,866	3,616	23,806	192	533	5,839	67,216	
	4. Ginger		831	7,915	1,186	17,767	..	..	..	..
	5. Pepper		780	20,165	385	6,541	..	..	..	..
	6. Others		8,806	1,51,431	1,554	9,704	273	895	2,732	19,972	
	TOTAL		27,980	3,35,273	18,532	1,69,263	5,164	19,952	11,852	1,11,621	
XXVIII	STONE AND LIME		265,088	9,63,245	24,562	27,686	1,698	1,305	33,032	1,28,632	
XXIX	SUGAR—										
	1. Refined or crystallized, including sugarcandy		21,148	1,83,196	17,021	73,234	592	2,255	11,180	76,045	
	2. Unrefined—										
	(a) Sugar		61,923	4,21,443	10,707	45,808	2,971	7,116	..	..
	(b) Gurr, rab, jaggery, molasses and other saccharine produce		112,723	5,32,676	16,573	88,383	888	2,376	12,582	4,20,055	
	TOTAL		195,794	11,37,315	38,301	2,07,425	4,451	11,747	23,642	1,06,100	
XXX	TEA—										
	1. Foreign		2	5	34,630	7,11,218	..	..	..	..
	2. Indian		1,476	22,118			746	12,296
	TOTAL		1,477	22,123	34,630	7,11,218	..	..	746	12,296
XXXI	TOBACCO—										
	1. Unmanufactured		31,021	3,13,976	26,773	2,75,684	1,075	3,839	5,847	49,730	
	2. Manufactured—										
	(a) Cigars		137	4,510	324	5,255	..	..	..	..
	(b) Other sorts		1,792	31,520			362	6,454
	TOTAL		32,910	3,70,006	27,097	2,80,939	1,081	3,889	6,209	56,184	
XXXII	WOOD—										
	1. Timber, unwrought		63,075	2,30,316	70,099	43,937	1,729	4,025	39,231	1,68,775	
	2. Manufactures		7,776	76,110	2,673	22,329	356	1,770	1,744	13,791	
	TOTAL		70,851	3,06,426	12,772	66,266	2,085	5,795	40,975	1,82,566	
XXXIII	WOOL—										
	1. Raw		1,805	36,760	1,233	20,739	..	..	..	..
	2. Manufactured—										
	(a) Carpets and rugs		665	17,761	79	977	..	..	..	..
	(b) Piece-goods, European		764	3,697		
	(c) Piece-goods, Indian		614	19,824		
	(d) Other sorts of manufactures		814	17,591		
	TOTAL		4,662	95,741	1,312	21,716	..	..	..	..
XXXIV	ALL OTHER ARTICLES OF MERCHANDISE		544,475	35,96,106	102,112	5,89,394	6,490	21,609	71,791	3,43,818	
	GRAND TOTAL		8,863,267	4,50,09,105	1,939,792	1,02,11,088	138,307	4,15,061	1,899,284	64,78,513	
	ANIMALS—										
	1. Horses		5,746	92,745	5	127	..	..	28	3,555
	2. Cattle		9,400	56,213	172	756	..	..	1,810	7,800
	3. Sheep, etc.		62,830	58,877	120	820	..	..	3,700	45,300
	4. Elephants		1	57	..	..	..	..	..	..
	TOTAL		97,977	2,07,892	297	1,703	..	..	5,518	54,715

DIX 19—continued.

Appendix 19.
Principal Commodities—Details.

and the earnings therefrom during the Calendar year 1902.

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5 0'										Progressive No.
5		6		7		8				
Oudh and Rohilkhand.		North Western.		Great Indian Peninsula.		M., B. AND C. I. SYSTEM				
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	B., B. & C. I. (a) to (c) & (j) & (m).		Rajputana-Alalwa (f) to (i).		
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Quantity.	Earnings.	Quantity.	Earnings.	
865,805	39,22,024	2,230,072	2,01,61,658	1,562,963	3,18,26,739	1,116,829	74,47,175	1,432,296	1,42,70,342	
...	...	253	5,653	177	3,200	302	7,610	226	12,385	
...	...	282	9,074	50	2,195	100	4,267	8	187	
...	...	30	767	70	3,498	77	2,382	58	3,376	
2	23	64	2,319	38	1,153	77	2,188	46	2,565	
2	23	609	27,413	335	10,136	616	26,447	338	18,513	
1,713	28,256	429	5,236	7,514	1,64,069	1,066	18,597	789	10,943	
52	649	228	3,777	47	1,882	48	1,004	54	1,048	
1,645	16,188	5,597	51,718	10,791	2,18,444	2,120	20,703	3,411	34,271	
307	2,817	948	10,957	399	10,505	846	7,969	306	9,110	
106	980	745	23,336	466	19,387	546	11,525	438	15,252	
856	5,641	2,668	27,615	8,191	2,29,179	7,799	86,686	10,956	1,14,536	
4,669	54,531	10,678	1,22,699	27,408	4,43,466	12,425	1,46,454	16,044	1,86,109	
28,085	2,20,435	287,095	3,69,758	86,891	1,84,943	21,599	70,831	33,501	1,07,062	
9,094	45,492	67,647	23,37,820	53,833	8,93,089	83,567	3,94,395	22,795	2,39,697	
55,978	2,62,704	26,209	1,17,770	8,783	22,919	235	1,037	45,908	3,76,488	
89,513	3,84,346	1,16,981	8,66,617	84,074	3,05,566	28,394	2,29,555	93,282	10,19,046	
155,395	6,92,542	200,237	23,22,207	146,690	17,81,574	62,196	6,24,987	161,985	16,35,231	
...	...	696	17,335	98	1,357	393	5,331	374	10,282	
1,573	10,747	2,062	31,512	1,387	32,166	299	3,431	200	3,833	
1,573	10,747	2,698	48,847	1,485	33,523	592	8,762	640	14,115	
6,977	25,954	14,681	1,44,714	8,440	82,015	22,576	1,18,940	11,549	1,23,911	
130	1,165	815	6,466	778	25,418	436	4,735	174	4,991	
84	909	1,225	35,197	388	7,337	2,376	24,557	1,233	14,083	
6,291	28,028	16,121	1,86,377	9,606	1,14,770	25,387	1,48,232	12,956	1,42,985	
101,424	1,95,299	85,083	2,88,369	155,245	5,19,653	22,602	1,33,263	15,049	62,126	
3,310	18,361	10,479	82,485	4,839	74,766	3,625	35,238	3,513	20,400	
104,734	2,13,660	95,862	3,70,854	160,084	5,94,419	20,227	1,59,101	18,642	82,526	
313	1,849	11,324	3,00,492	821	15,697	2,976	68,277	3,669	51,364	
1	6	247	4,215	53	2,241	209	4,631	158	7,702	
1	7	669	10,209	163	6,366	307	6,004	309	11,810	
316	3,665	1,446	31,348	541	13,256	302	6,187	514	13,510	
1	6	586	13,775	754	20,354	62	1,173	76	1,097	
632	5,533	14,222	3,60,129	2,332	47,914	3,857	86,872	4,746	86,018	
175,965	7,07,709	388,368	85,29,837	(a) 193,810	(a) 20,48,079	288,542	12,52,465	221,484	10,58,440	
1,493,171	57,45,230	3,235,679	2,64,83,779	3,191,604	3,65,85,563	1,358,270	99,61,326	1,008,032	1,79,01,421	
629	13,425	15,250	1,170,854	910	64,522	224	9,159	457	15,727	
239	3,128	4,513	22,247	6,045	66,741	5,491	1,30,355	679	11,992	
4	259	8,743	6,423	10,682	1,81,354	10,710	2,03,009	3,901	50,662	
...	
872	16,812	28,606	1,09,524	17,637	3,12,517	16,425	3,43,483	5,097	78,681	

(a) including 16,006 tons and Rs. 44,736 of the Gwalior Light railway of which details by commodities have not been furnished.

Progressive No.	GAUGE.	5' 6"				3' 3 1/2"						
		9		10		12		13				
		Nizam's Guaranteed State.		Madras.		Bengal Doonars.		Dibru-Sadiya.				
		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.			
Classification No.	Railway.		Description of commodity.		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
I		Apparel, including drapery, haberdashery, millinery, uniforms, accoutrements, boots and shoes	123	3,262	271	6,268	24	125	...	...	...	...
II		Coal and coke carried for the public and foreign railways	394,540	13,07,384	493,784	12,13,953	8,821	17,169	441,366	4,07,332	...	...
III		COTTON—	19,414	2,23,542	33,619	2,79,293	...	...	177	2,775	...	...
		1. Raw	...	...	...	...	...	...	...	...	...	...
		2. Manufactured—	...	...	...	...	...	...	...	...	...	...
		(a) Twist and yarn, European	2,029	28,027	5,576	52,933	...	...	...	...	...	...
		(b) Twist and yarn, Indian	2,667	40,071	14,120	1,11,877	46	168	...	...	...	...
		(c) Piece-goods, European	2,010	44,875	9,074	1,02,472	539	2,227	...	...	...	...
		(d) Piece-goods, Indian	1,804	25,849	7,347	78,513	11	79	...	...	...	...
		(e) Others	78	1,085	245	2,468	...	...	...	...	...	...
		TOTAL	28,902	3,63,449	69,981	6,27,556	506	2,474	177	2,775	...	...
IV		CHEMICALS, EXCEPTING SALTPETRE	110	1,811	71	1,916	...	...	...	...	...	...
V		DRUGS—	...	...	...	...	...	...	...	...	...	...
		1. Intoxicating, other than opium	17	285	7	81	...	...	...	...	...	...
		2. Non-Intoxicating—	...	...	...	...	...	...	...	...	...	...
		(a) Medicinal preparations	91	1,853	248	5,309	...	...	32	570	...	...
		(b) Others	644	7,104	2,106	27,228	49	297	...	...	...	...
		TOTAL	752	9,242	2,361	33,218	49	297	32	570	...	...
VI		DYES AND TANS—	...	...	...	...	...	...	...	...	...	...
		1. Alizarine and aniline dyes	210	2,666	351	4,074	...	...	...	...	...	...
		2. Cutch	90	1,345	16	94	...	...	...	...	...	...
		3. Indigo	107	1,904	1,392	17,483	...	...	...	...	...	...
		4. Myrabolans	103	1,156	2,610	13,005	...	...	...	...	...	...
		5. Tanning barks	2,832	10,757	20,173	1,51,513	...	...	...	...	...	...
		6. Turmeric	904	10,076	14,402	1,10,002	...	...	...	...	...	...
		7. Others	175	2,045	1,345	12,137	32	143	...	...	...	...
		TOTAL	4,511	36,939	40,289	2,88,962	32	143	...	...	...	...
VII		FODDER—	...	...	...	...	...	...	...	...	...	...
		1. Oil-cake	2,057	15,294	7,263	30,775	78	506	...	...	...	...
		2. Hay, straw and grass	2,933	5,386	1,981	8,271	153	562	...	...	...	...
		TOTAL	4,990	20,680	9,244	39,046	231	1,158	...	...	...	...
VIII		FRUITS AND VEGETABLES, FRESH	3,484	29,880	13,484	91,655	...	...	...	...	...	...
IX		GRAIN AND PULSES—	...	...	...	...	...	...	...	...	...	...
		1. Gram and pulses	10,100	1,01,640	78,765	4,04,795	902	2,746	...	...	...	...
		2. Jawar and Bajra	45,480	2,13,113	46,602	1,50,433	...	...	...	...	...	...
		3. Rice in the husk	2,768	17,499	137,238	5,12,272	794	1,155	...	...	...	...
		4. Rice not in the husk	55,828	4,23,425	133,138	5,14,146	4,403	8,513	15,804	1,26,830	...	...
		5. Wheat	14,588	87,399	3,481	15,285	...	...	...	...	...	...
		6. Wheat flour	2,052	15,605	3,072	20,377	175	601	...	...	...	...
		7. Others	652	4,375	40,193	1,95,451	...	...	...	...	...	...
		TOTAL	141,103	8,63,096	443,059	18,38,759	6,354	12,515	15,804	1,26,830	...	...
X		HIDES AND SKINS—	...	...	...	...	...	...	...	...	...	...
		1. Hides of cattle—	...	...	...	...	...	...	...	...	...	...
		(a)—Dressed or tanned	13	182	2,189	25,935	...	...	...	...	...	...
		(b)—Raw	431	5,459	4,548	36,569	83	318	...	...	...	...
		2. Skins of sheep, and other animals—	...	...	...	...	...	...	...	...	...	...
		(a)—Dressed or tanned	123	1,754	5,613	55,591	...	...	...	...	...	...
		(b)—Raw	2,477	24,413	21,311	1,91,203	...	...	...	...	...	...
		TOTAL	3,044	31,808	31,661	3,08,398	83	318	...	...	...	...
XI		HORNS	298	3,718	567	4,444	...	...	...	...	...	...
XII		HEMP (INDIAN) AND OTHER FIBRES, EXCLUDING JUTE	266	2,280	3,454	12,134	...	...	...	...	...	...
XIII		JUTE—	...	...	...	...	...	...	...	...	...	...
		1. Raw	11	116	218	1,069	12,340	30,563	...	...	...	...
		2. Gunny bags and cloth	4,260	34,077	14,452	98,992	66	141	...	...	...	...
		TOTAL	4,271	35,093	14,670	1,00,061	12,406	30,704	...	...	...	...
XIV		LAC	36	427	121	1,212	...	...	...	...	...	...
XV		LEATHER—	...	...	...	...	...	...	...	...	...	...
		1. Unwrought	628	8,898	791	7,211	...	...	...	...	...	...
		2. Wrought, excepting boots and shoes	199	2,185	414	5,713	...	...	...	...	...	...
		TOTAL	827	11,083	1,205	12,924	...	...	...	...	...	...
		Carried over	557-57	27,20,952	1,126,252	45,80,712	28,596	64,903	457,279	5,37,507	...	...

DIX 19—continued.

Appendix 19.
Principal Commodities—Details.

and the earnings therefrom during the Calendar year 1902.

21 of Report.)

3 31'												Progressive No.
14		15		16		17				18		
Assam-Bengal.		Doogar.		Bengal and North-Western.		ROHILKUND AND KUMAON SYSTEM.				Jodhpur-Bikaner.		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	R. & K. (a) & (b).		Pawayan Light (c).		Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
272	3,620	...	...	897	6,534	411	4,598	...	...	117	1,463	I
12,352	24,838	2,174	587	57,653	1,01,671	402	484	...	...	10,206	16,023	II
1,013	6,275	...	...	1,197	12,991	34	219	...	...	11,110	36,329	III
579	2,347	125	38	278	2,358	10	50	113	219	18	70	IV
133	1,238	110	35	4,526	48,052	1,580	7,422			479	3,205	
2,324	18,597	112	36	17,078	1,53,582	270	1,433			604	5,345	
142	1,618	...	...	5,531	47,898	2,118	12,940			2,481	15,731	
44	298	...	...	135	1,190	78	529	...	...	33	315	
4,235	20,373	347	109	28,745	2,66,071	4,024	22,993	113	219	14,725	60,995	V
208	1,286	...	...	422	2,863	79	684	...	...	2	34	VI
10	226	...	...	182	2,584	68	997	...	...	19	240	VII
31	1,288	...	...	99	254	17	240	...	...	24	310	VIII
43	243	...	...	5,565	29,988	1,470	10,547	...	...	468	3,417	IX
134	1,757	...	...	5,846	32,826	1,549	11,694	...	...	511	3,976	X
...	...	...	...	75	747	10	68	...	...	17	51	XI
59	220	...	...	1,050	10,260	421	1,451	...	...	2	28	XII
...	...	...	...	1,843	15,318	13	78	...	...	22	1,244	XIII
2	6	...	...	50	368	26	146	...	...	7	23	XIV
...	...	...	...	691	3,629	2,039	6,505	...	...	33	171	XV
43	271	...	...	4,124	31,548	442	2,514	...	...	230	1,813	XVI
27	408	...	...	818	5,394	148	803	...	...	306	2,347	XVII
131	995	...	...	8,651	67,264	3,099	11,565	...	...	677	5,671	XVIII
140	509	10	3	6,503	18,134	379	1,346	...	...	46	214	XIX
335	683	...	...	4,272	18,289	1,024	4,691	...	...	838	3,444	XX
475	1,192	10	3	10,775	36,443	1,403	6,037	...	...	884	3,658	XXI
379	2,299	...	...	4,458	20,266	548	2,663	...	...	899	4,054	XXII
2,308	12,945	...	...	75,962	2,92,267	34,634	77,869	328	406	6,076	31,129	XXIII
11,254	43,048	900	238	9,666	29,943	9,889	27,617	...	...	41,858	2,10,128	XXIV
24,462	64,268	400	120	36,556	1,21,370	2,969	8,859	...	...	657	2,610	XXV
204	1,992	203	61	112,902	4,63,983	9,254	19,371	...	...	8,139	32,470	XXVI
1,357	7,978	15	5	50,202	2,54,549	35,357	81,832	1,420	1,974	17,715	78,234	XXVII
77	374	3,087	494	2,366	16,658	828	3,473	...	...	305	1,803	XXVIII
40,322	1,30,606	3,605	918	129,606	5,63,758	20,616	52,239	756	1,144	23,278	2,21,302	XXIX
...	...	...	...	7	55	...	...	...	...	13	168	XXX
478	3,994	...	...	6,122	34,198	603	2,591	...	...	378	3,936	XXXI
...	...	...	...	67	477	...	...	...	...	5	21	XXXII
25	233	...	...	2,348	13,050	298	1,831	...	...	328	1,726	XXXIII
503	4,247	...	...	8,544	47,780	901	3,822	...	...	718	5,251	XXXIV
7	73	...	...	187	1,492	75	395	...	...	1	15	XXXV
52	133	...	...	381	1,329	4,347	19,742	542	1,009	17	83	XXXVI
37,491	73,560	...	...	1,886	11,980	11	51	...	...	48	253	XXXVII
693	3,326	50	15	15,958	81,917	2,872	8,858	...	...	2,412	10,424	XXXVIII
38,124	76,886	50	15	17,784	93,897	2,883	8,903	...	...	2,460	10,977	XXXIX
581	1,852	75	23	2,060	10,100	172	717	...	...	417	2,150	XL
...	...	...	...	10	157	16	133	...	...	25	264	XL I
4	62	...	...	171	804	15	176	...	...	26	192	XL II
4	63	...	...	181	961	31	309	...	...	62	556	XL III
97,229	2,20,130	6,261	1,655	563,904	24,32,085	133,531	2,65,402	2,159	4,752	120,474	6,00,087	XL IV

Progressive No.	GAUGE.	CLASSIFICATION No.	Railway.	Description of commodity—contd.	5' 6"				3' 3 1/2"			
					9		10		12		13	
					Nizam's Guaranteed State.		Madras.		Bengal Desaru.		Dibru, Sadiya.	
					Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.			
				Brought forward	587,257	27,20,052	1,126,252	45,80,712	28,596	64,903	457,279	5,37,597
XVI				LIQUORS—								
				1. Ale and beer	1,238	9,672	3,159	31,447	...	...
				2. Wines and spirits of all kinds, including country spirit	314	4,403	4,580	37,698	44	285	117	1,238
				3. All other sorts, including toddy and fermented liquor other than ale and beer	1,600	7,017	2,107	10,071	...	...
				TOTAL	3,152	21,092	9,846	79,216	44	285	117	1,238
XVII				METALS—								
				1. Brass, unwrought	248	2,008	1,260	11,715	...	...
				2. Brass, wrought	208	2,693	790	6,092	...	...
				3. Copper, unwrought	64	483	136	1,424	...	...
				4. Copper, wrought	124	1,518	143	938	...	...
				5. Iron and steel—							2,183	26,310
				(a) Cast	608	5,614	1,349	12,732	20	99		
				(b) Unwrought	2,204	10,558	2,257	19,338	...	...
				(c) Wrought	3,166	31,347	17,490	1,40,425	1,054	4,377		
				(d) Manufactures	1,351	14,928	9,968	1,04,614	1,166	4,833		
				6. Others	685	8,039	3,023	28,202	1,353	6,293	...	...
				TOTAL	8,718	83,388	36,425	3,76,080	3,593	15,602	2,183	26,310
XVIII				OILS—								
				1. Kerosine	6,582	47,061	26,256	2,07,860	795	2,669		
				2. Castor	417	4,008	4,336	9,971	...	...
				3. Coconut	255	2,838	2,243	24,435	2	4	2,936	11,205
				4. Mustard and rape	...	17	179	1,296	30	193		
				5. Others	2,675	24,886	5,994	36,084	14	95		
				TOTAL	9,929	79,730	39,608	2,79,646	841	2,961	2,936	11,205
XIX				OIL SEEDS—								
				1. Castor	59,315	3,36,031	33,944	1,73,842	...	...
				2. Earthnuts	117	833	1,841	10,176	...	...
				3. Linseed	14,794	83,840	356	1,196	...	...
				4. Poppy	152	854	100	763	...	...
				5. Rape and mustard	148	1,395	765	4,851	153	351		
				6. Til or jinhil	15,855	97,103	20,073	1,27,363	...	...
				7. Cotton seed	...	...	...	...	...	...
				8. Others	32,033	1,76,877	24,943	1,31,739	...	...
				TOTAL	122,434	6,06,833	88,622	4,49,935	153	351	...	...
XX				OPIUM	42	1,835	46	2,343	...	...	...	...
XXI				PAPER AND PASTE-BOARD	677	8,744	1,119	13,072	...	...	...	...
XXII				PROVISIONS—								
				1. Dried fruits and nuts	10,177	93,326	12,090	54,881	3	6		
				2. Ghee	1,145	13,016	3,574	36,177	...	...	226	2,133
				3. Others	6,871	35,718	79,003	5,71,451	170	629		
				TOTAL	18,193	1,42,060	94,667	6,62,509	173	635	226	2,133
XXIII				RAILWAY PLANT AND ROLLING STOCK CARRIED FOR THE PUBLIC AND FOREIGN RAILWAYS—								
				1. Locomotive engines and tenders and parts thereof	464	3,663	53	498	...	...	...	...
				2. Carriages and trucks and parts thereof	...	...	1	18	...	...	...	...
				3. Materials—								
				(a) Steel rails and fish-plates	42	—51	897	10,220	...	...	...	...
				(b) Sleepers and keys of steel and cast-iron	...	...	98	476	...	...	...	...
				(c) Others	589	4,761	477	4,943	1,616	1,276	...	...
				TOTAL	1,095	8,373	1,526	16,155	1,616	1,276	...	...
XXIV				SALT	38,495	2,28,201	75,723	3,51,729	2,886	5,851	436	3,530
XXV				SALTPETRE AND OTHER SALINE SUBSTANCES—								
				1. Saltpetre	108	1,453	191	1,509	...	...	...	...
				2. Other saline substances	955	7,315	8	85	81	227	...	...
				TOTAL	1,183	8,768	199	1,594	81	227	...	...
				Carried over	791,175	39,99,976	1,474,033	67,62,991	37,983	92,091	463,177	5,81,923

DIX 19—continued.

Appendix 19.
Principal Commodities—Details.

and the earnings therefrom during the Calendar year 1902.

(Part of Report.)

3' 31"												Progressive No.
14		15		16		17				18		
Assam-Bengal.		Doogbar.		Bengal and North-Western.		ROHILKUND AND KUMAON SYSTEM.				Jodhpur-Bikaner.		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	R. & K. (a) & (b).		Punayan Light (c).		Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
97,839	2,80,130	6,261	1,635	563,904	24,32,085	133,531	3,65,402	3,159	4,752	139,474	6,00,987	
107	893	...	...	116	582	1,237	47,031	...	...	1	16	XVI
167	2,498	...	...	313	2,371	182	2,345	...	...	81	619	
...	1	...	...	...	...	...	...	...	...	2	28	
274	3,392	...	...	329	2,953	1,419	9,376	...	...	84	663	
11	103	20	6	227	1,687	106	456	...	...	5	26	XVII
169	1,187	15	5	1,787	12,515	497	2,851	...	...	112	987	
...	5	...	...	10	59	20	123	...	...	1	11	
15	69	...	...	168	1,307	46	274	...	...	90	623	
82	597	...	...	1,255	5,915	244	1,506	206	363	38	102	
11	94	30	9	190	1,021	148	584	...	...	127	435	
1,626	9,237	220	70	6,791	34,995	2,549	13,514	...	...	1,711	9,194	
717	6,307	...	...	3,916	23,502	228	1,749	...	...	495	2,636	
835	6,793	...	...	2,101	14,718	229	1,714	...	...	214	1,509	
3,467	24,392	285	90	16,445	95,649	4,058	22,762	206	363	2,703	15,523	
7,170	25,439	200	60	10,876	36,692	2,082	6,199	...	...	391	1,670	XVIII
20	182	5	2	4,490	22,026	27	93	...	...	281	1,932	
74	451	5	2	318	1,649	7	56	...	...	16	49	
350	2,266	...	...	357	2,573	55	333	...	...	5	42	
92	785	100	30	282	1,725	53	461	...	...	535	2,830	
7,812	29,123	310	94	16,323	64,615	2,224	7,144	...	...	1,228	6,523	
50	147	135	40	6,441	25,430	4,130	13,187	...	...	8	14	XIX
4	12	...	...	...	...	...	...	...	...	3	18	
317	692	...	...	76,999	3,20,485	8,362	20,722	...	...	77	338	
1	5	...	...	4,639	21,263	1,543	2,573	...	...	10	122	
1,005	3,027	112	34	48,765	2,15,068	9,416	32,700	459	700	5,569	26,864	
1,806	6,328	...	...	955	4,274	1,945	5,237	...	...	6,782	23,704	
13	46	...	...	...	...	...	...	...	...	5,979	20,874	
83	317	...	...	5,544	21,710	239	749	...	...	...	...
3,279	11,474	247	74	143,343	6,08,230	25,635	75,168	459	700	18,428	71,934	
24	332	...	...	4,807	70,519	155	1,794	...	...	22	284	XX
85	496	...	...	1,849	5,170	89	523	...	...	91	601	XXI
142	821	...	...	1,260	14,149	225	1,506	...	...	2,019	8,802	XXII
226	1,769	10	3	3,479	24,981	304	1,430	...	...	2,013	14,508	
3,559	39,047	40	11	14,345	59,072	5,223	42,934	...	...	1,313	6,190	
6,027	41,634	50	14	19,184	98,202	5,752	45,870	...	...	5,365	29,500	
8	40	...	...	...	...	...	...	...	...	65	320	XXIII
...	...	...	...	...	...	...	...	...	...	415	1,044	
822	1,015	...	...	...	...	31	96	...	...	8,610	26,439	
...	...	...	...	383	2,097	1	1	...	...	2,678	8,324	
2,949	2,974	...	...	...	...	2,488	8,210	...	...	2,578	5,799	
3,779	4,029	...	...	383	2,097	2,500	8,267	...	...	14,366	51,926	
8,312	26,383	600	180	119,735	4,04,151	12,033	31,308	178	265	25,172	2,01,955	XXIV
17	85	...	...	12,571	43,157	103	247	...	...	222	1,020	XXV
17	148	...	...	3,118	11,808	575	1,432	...	...	1,035	4,674	
34	233	...	...	15,769	54,965	678	1,699	...	...	1,257	5,694	
139,952	4,21,618	7,753	2,107	901,991	38,38,636	188,079	5,69,313	4,002	6,080	207,190	9,85,680	

Appendix 19,
Principal Commodities—Details.

APPEN

Principal commodities carried by each railway (by systems)
(Referred to in paragraph

Progressive No.	Gauge.	Classification No.	Railway.	5' 6"				3' 3 1/2"			
				9		10		12		13	
				Nizam's Guaranteed State.		Madras.		Bengal Doonars.		Dibru-Sadiya.	
Description of commodity—concl'd.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.			
	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.			
		Brought forward	791,175	39,99,976	1,474,033	67,62,991	37,985	92,091	463,177	5,81,923	
XXVI	SILK—										
	1. Raw—										
	(a) Foreign	4	85	17	330	...	...	...	...	...
	(b) Indian	1	30	216	4,033	...	...	...	...	...
	2. Piece-goods—										
	(a) Foreign	...	7	8	57	...	...	...	...	...
	(b) Indian	2	91	30	587	...	...	...	...	...
	TOTAL	7	213	271	5,007	...	...	...	...	...
XXVII	SPICES—										
	1. Betel-nuts	1,127	14,519	10,953	1,28,187	182	511	...	...	...
	2. Cardamoms	3	48	180	2,633	32	186	...	...	...
	3. Chillies	6,811	81,169	21,577	1,42,301	...	...	...	...	...
	4. Ginger	98	928	706	4,299	21	40	...	...	...
	5. Peppes	41	453	1,458	19,245	...	...	...	...	...
	6. Others	1,533	14,858	3,664	20,061	...	...	...	...	...
	TOTAL	9,613	1,08,085	38,538	3,16,726	235	737	...	...	...
XXVIII	STONE AND LIME—										
		12,278	41,677	76,503	1,26,907	345	590	917	3,480		
XXIX	SUGAR—										
	1. Refined or crystallized, including sugarcandy	4,497	35,240	11,727	60,892	127	332				
	2. Unrefined—										
	(a) Sugar	1,125	8,896	4,235	26,257	74	196	354	2,812		
	(b) Gurr, rab, jaggery, molasses and other saccharine produce	9,781	75,398	50,932	1,93,924	252	1,017				
	TOTAL	15,403	1,20,534	66,894	2,81,073	453	1,545	354	2,812		
XXX	TEA—										
	1. Foreign	20	364	44	796	...	...		
	2. Indian	51	1,007	588	9,829	30,122	2,11,330	7,764	61,893		
	TOTAL	71	1,371	632	10,625	30,122	2,11,330	7,764	61,893		
XXXI	TOBACCO—										
	1. Unmanufactured	2,280	30,143	19,696	1,22,504	2,509	5,018	...	...	...
	2. Manufactured—										
	(a) Cigars	104	1,613	776	10,546	...	...	...	...	...
	(b) Other sorts	32	535	1,036	15,426	...	...	...	...	...
	TOTAL	2,416	32,291	21,508	1,48,476	2,509	5,018	...	...	...
XXXII	WOOD—										
	1. Timber, unwrought	17,212	72,230	161,802	5,39,090	361	685	4,463	19,606		
	2. Manufactures	1,743	14,476	7,574	39,022	1,314	5,175				
	TOTAL	18,955	86,706	172,376	5,78,112	1,675	5,860	4,463	19,606		
XXXIII	WOOL—										
	1. Raw	131	1,174	1,267	13,507	...	...	...	...	...
	2. Manufactured—										
	(a) Carpets and rugs	98	1,480	396	4,281	...	...	...	...	...
	(b) Piece-goods, European	13	188	223	4,251	...	...	...	...	...
	(c) Piece-goods, Indian	186	2,470	303	3,020	...	...	...	...	...
	(d) Other sorts of manufactures	...	...	795	7,151	...	...	...	...	...
	TOTAL	428	5,312	2,984	32,210	...	...	...	...	...
XXXIV	ALL OTHER ARTICLES OF MERCHANDISE	15,542	1,50,326	120,149	8,68,283	10,938	35,674	(a) 28,505	(a) 61,181		
	GRAND TOTAL	865,882	45,47,391	1,973,888	91,30,410	84,260	3,52,845	505,180	7,30,895		
	ANIMALS—										
	1. Horses	345	13,089			...	...	...	...	...
	2. Cattle	42	990			...	...	...	...	...
	3. Sheep, etc.	215	3,766	2,203	77,868	...	...	51	306	
	4. Elephants	...	...			...	...	...	...	...
	TOTAL	602	17,845	2,203	77,868	...	...	51	306	

(a) Including 18,704 tons and Rs. 11,871 of general merchandise of the Lodo and Tikak-Margharita Colliery Railway of which details by commodities have not been furnished.

and the earnings therefrom during the Calendar year 1902.
(of Report.)

3' 31"												Progressive No.
14		15		16		17				18		
Assam-Bengal.		Daoghar.		Bengal and North-Western.		ROHILKUND AND KUMAON SYSTEM.				Jodhpur-Bikaner.		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	R. & K. (a) & (b).		Pouyan Light (c).		Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
130,953	4,21,618	7,753	2,107	901,971	38,38,656	188,079	5,59,313	4,002	6,080	209,190	2,85,680	
37	396			17	110					9	36	XXVI
	1			1	1					3	23	
										1	13	
37	397			18	111					13	78	
1,612	11,969	30	9	2,705	20,962	158	1,397			91	725	XXVII
646	3,379			690	6,032	24	137			4	36	
38	207			4,050	31,016	377	2,657			744	6,232	
121	802			359	3,370	105	500			30	185	
				453	3,693	28	249			15	120	
				3,228	23,767	490	2,115			614	3,760	
2,417	16,358	30	9	11,485	88,840	1,182	7,015			1,488	11,058	
909	2,117			13,182	29,030	6,447	8,873			28,278	36,441	XXVIII
299	1,233	25	8	22,510	1,36,842	820	3,223			8,324	58,422	XXIX
1,037	4,354			8,478	56,523	5,521	13,377	809	844	4,689	27,432	
2,534	10,633	50	15	58,997	3,02,779	21,447	75,678			8,160	46,892	
3,870	16,220	75	23	89,985	4,96,144	27,788	92,278	809	844	21,173	1,32,746	
12,851	1,11,471			1	4					1	19	XXX
				107	875	259	3,017			3	69	
12,851	1,11,471			108	879	259	3,017			4	88	
576	4,090	100	30	29,782	2,38,962	1,470	7,647			1,280	7,771	XXXI
12	202	10	3	87	715	30	432			63	708	
93	839			1,082	6,815	138	1,103			103	841	
681	5,131	110	33	39,951	2,46,492	1,638	9,128			1,446	9,320	
373	1,415	20	6	17,818	36,510	28,523	1,07,457	617	1,177	906	3,931	XXXII
1,569	9,562			2,799	15,388	1,220	6,415			754	1,652	
1,948	10,977	20	6	20,617	51,898	29,743	1,08,872	617	1,177	1,160	5,583	
	8			127	1,246	272	1,859			1,682	11,300	XXXIII
	3			653	1,489	4	56			15	175	
				35	347	2	16			3	49	
40	87			178	1,708	27	241			172	1,717	
15	202			37	188	90	613			17	171	
25	300			1,030	4,978	395	2,785			1,889	13,412	
7,982	48,383	2,289	622	69,233	(a) 1,16,563 (b) 115,944	1,36,199	16,650	24,386	34,263	(c) 1,36,357	XXXIV	
161,666	6,32,972	10,277	2,800	1,138,580	48,73,571	371,475	9,37,534	22,078	32,487	298,904	13,30,763	
3	58			14	171	15	259			87	2,291	
29	409			31	724	4	59			9	119	
62	737			78	1,504		54					
94	1,204			123	2,399	19	373			96	2,410	

(a) Excluding Rs. 1,85,922 in respect of ferries and steam-boats which are included in other details.
 (b) Including 22,841 tons of traffic booked between Rohilkund and Kumaon and Lucknow-Bareilly sections.
 (c) Excluding a debit of Rs. 6,696 on account of a charge against stores adjusted through the North Western State railway.

Appendix 19.
Principal Commodities—Details.

Principal commodities carried by each railway (by systems)

(Referred to in paragraph

Progressive No.	GAUGE.	CLASSIFICATION No.	Railway.	3' 31"							
				19		20		21		22	
				Udaipur-Chitor.		Bhavnagar-Gondal-Junagad-Porbandar.		Southern Malwatta.		South Indian.	
				Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
				Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
I	Apparel, including drapery, haberdashery, millinery, uniforms, accoutrements, boots and shoes.	7	56	322	4,416	216	3,079	179	4,209		
II	Coal and coke carried for the public and foreign railways	781	765	157	389	4,021	20,085	14,931	19,430		
III	COTTON—										
	1. Raw	71	384	6,467	38,953	77,934	3,99,755	25,379	1,44,582		
	2. Manufactured—										
	(a) Twist and yarn, European	22	3	20	183	2,686	32,104	2,613	28,601		
	(b) Twist and yarn, Indian	17	155	676	3,863	10,455	90,727	11,058	78,264		
	(c) Piece-goods, European	420	185	573	4,598	3,829	56,322	8,208	1,14,838		
	(d) Piece-goods, Indian	1	3,417	1,129	8,287	4,823	68,791	3,987	39,769		
	(e) Others	1	5	6	48	658	8,119	74	931		
	TOTAL	531	4,089	8,871	55,932	100,385	6,55,818	52,419	4,06,285		
IV	CHEMICALS, EXCEPTING SALTPETRE	—	—	46	583	655	9,895	72	2,403		
V	DRUGS—										
	1. Intoxicating, other than opium	1	18	8	111	32	538	18	196		
	2. Non-intoxicating—										
	(a) Medicinal preparations	43	333	69	682	557	5,509	1,678	3,206		
	(b) Others	—	—	—	—	—	—	—	—		
	TOTAL	44	345	129	1,364	765	8,755	1,975	17,616		
VI	DYES AND TANS—										
	1. Alizarine and aniline dyes	5	39	73	474	194	2,846	467	5,835		
	2. Cutch	—	—	6	33	237	1,779	194	1,310		
	3. Indigo	3	38	3	32	207	2,240	598	3,856		
	4. Myrabolins	2	5	65	272	9,364	34,105	519	2,520		
	5. Tanning barks	—	—	5	33	14,776	39,870	6,217	49,445		
	6. Turnerie	81	610	273	1,137	9,362	59,297	4,510	33,725		
	7. Others	27	218	174	1,152	746	9,538	1,591	14,585		
	TOTAL	118	911	539	3,133	34,886	1,49,675	14,096	1,11,476		
VII	FODDER—										
	1. Oil-cake	10	40	474	2,814	7,387	33,813	30,496	1,15,869		
	2. Hay, straw and gram	—	—	1,123	2,977	3,040	26,653	219	1,708		
	TOTAL	10	40	1,597	5,871	10,427	60,466	30,795	1,17,577		
VIII	FRUITS AND VEGETABLES, FRESH	156	946	2,255	10,049	9,364	49,286	31,903	1,76,455		
IX	GRAIN AND PULSE—										
	1. Gram and pulse	1,317	5,149	4,878	15,004	43,875	2,62,881	45,464	2,21,150		
	2. Jawar and bajra	91	334	48,594	1,47,448	74,229	4,22,461	6,940	27,147		
	3. Rice in the husk	8	31	47	129	14,299	66,337	95,650	2,66,191		
	4. Rice not in the husk	887	3,853	19,482	84,372	65,133	3,68,813	109,996	3,66,065		
	5. Wheat	3,407	14,430	5,918	17,154	13,693	73,499	885	3,393		
	6. Wheat flour	18	89	199	1,067	4,146	33,513	1,385	7,745		
	7. Others	10,918	39,646	6,985	20,284	12,141	58,360	8,385	30,921		
	TOTAL	16,646	63,342	86,183	2,81,858	227,516	12,85,864	268,605	9,27,612		
X	HIDES AND SKINS—										
	1. Hides of Cattle—										
	(a) Dressed or tanned	—	—	14	78	9	60	395	3,758		
	(b) Raw	48	283	173	1,496	586	3,714	1,908	13,234		
	2. Skins of sheep and other animals—										
	(a) Dressed or tanned	1	5	18	173	141	903	1,296	21,614		
	(b) Raw	116	733	183	1,207	6,426	45,261	5,215	29,140		
	TOTAL	165	1,021	388	2,954	7,162	49,958	8,808	67,746		
XI	HORNS	4	27	20	138	315	2,897	114	1,274		
XII	HAIR (INDIAN) AND OTHER FIBRES, EXCLUDING JUTE	7	48	1	5	2,556	22,001	2,078	30,155		
XIII	JUTE—										
	1. Raw	2	30	—	1	449	1,408	39	199		
	2. Gunny bags and cloth	215	1,170	1,758	5,286	8,676	59,077	10,791	46,750		
	TOTAL	217	1,190	1,758	5,287	9,125	60,485	10,830	46,949		
XIV	LAC	3	17	4	24	36	183	243	1,372		
XV	LEATHER—										
	1. Unwrought	7	52	130	824	671	6,199	6	40		
	2. Wrought, excepting boots and shoes	3	26	24	239	170	1,952	57	598		
	TOTAL	10	78	154	1,063	841	8,151	63	638		
	Carried over	18,699	73,075	102,424	3,77,066	408,270	23,87,502	437,106	19,31,897		

DIX 19—continued.

Appendix 19.
Principal Commodities—Details

and the earnings therefrom during the Calendar year 1902.

(of Report.)

3' 31"		2' 0"								2' 0"		TOTAL OTHER 3' 0" AND 1' 0"				Progressive No.
23		24		25		26		28		29		3' 0"		32		
Burma,		Morvi.		Barai Light.		Tarakeswar-Magra.		Teapar-Balipara.		Darjeeling-Himalayan.		3' 6"	3' 0"			
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Ra.	Tons.	Ra.	Tons.	Ra.	Tons.	Ra.	Tons.	Ra.	Tons.	Ra.	Tons.	Ra.	Tons.	Ra.	
443	7,119	20	164	2	6	...	...	...	...	217	5,891	...	...	...	...
5	56	43	172	66	79	52	50	4,661	4,218	1,606	15,280	...	...	...	...
2,350	10,708	1,263	9,712	19,612	52,445	...	...	10	78	3	35	...	...	...	...
4,458	79,222	...	...	60	208	1	2	...	...	...	16	...	...	...	...
246	2,535	27	157	158	374	...	...	...	...	150	4,169	...	...	...	...
4,596	74,133	2	29	208	720	98	124	...	...	418	11,605	...	...	...	...
251	3,249	144	899	89	272	...	...	...	...	81	2,174	...	...	...	...
6	55	9	69	10	45	...	...	...	...	3	71	...	...	...	...
11,917	1,69,902	1,445	10,866	20,137	54,064	99	126	10	78	655	18,150	...	...	...	...
93	1,781	5	63	7	22	...	...	...	...	...	...	...	...	...	...
...	...	108	335	...	...	...	...	...	...	...	...	...	...	...	...
74	1,636	16	164	2	6	...	...	...	...	11	75	41	765	...	...
241	2,602	93	529	25	76	...	...	...	...	...	31	787	...	...	...
315	4,238	217	1,028	27	82	...	...	...	...	11	75	72	1,552	...	...
...	...	2	9	10	31	...	...	...	...	...	...	...	...	...	...
1,750	16,777	1	7	14	33	...	...	...	...	...	32	...	...	...	...
...	8	...	4	4	11	...	...	...	...	...	...	...	...	...	...
70	762	4	16	5	12	...	...	...	...	...	...	...	...	...	...
113	700	...	...	5	18	...	...	...	...	...	...	...	...	...	...
2,278	14,664	6	32	128	357	...	...	...	...	...	4	94	...	...	...
125	886	87	409	54	155	...	...	...	...	...	48	1,094	...	...	...
4,336	33,797	100	477	220	617	...	...	...	...	...	53	1,220	...	...	...
1,416	5,836	9	27	59	123	1,097	1,467	70	341	...	...	...	...	...	...
709	2,824	352	1,220	217	311	...	...	...	...	17	364	...	...	...	...
2,125	8,660	361	1,247	270	634	1,097	1,467	70	341	17	364	...	...	...	...
20,541	1,48,684	73	156	52	128	28	51	...	...	117	1,632	...	...	...	...
13,309	93,824	2,565	8,013	2,582	5,489	25	18	280	1,397	430	6,275	...	...	...	...
6,480	54,407	3,103	9,005	4,064	8,661	...	...	...	...	...	...	...	...	...	...
568,151	27,26,358	11	36	76	162	3,510	2,196	...	...	10	77	...	...	...	...
52,230	2,48,759	542	1,368	1,897	4,067	41	43	927	4,381	8,377	1,03,908	...	...	...	...
758	3,242	1,219	4,041	2,455	5,288	...	...	...	...	...	45	...	...	...	...
3,660	32,929	54	246	13	41	38	19	...	...	979	21,990	...	...	...	...
3,278	26,182	446	1,396	39	89	...	...	...	...	410	5,132	...	...	...	...
647,866	32,46,201	8,000	24,165	11,126	23,797	3,614	2,278	1,207	5,778	10,208	1,37,487	...	...	...	...
37	431	4	20	...	...	...	...	...	...	...	...	...	...	...	...
1,241	12,135	34	150	9	25	9	8	...	...	253	3,216	...	...	...	...
1	5	...	...	...	...	...	...	...	...	1	21	...	...	...	...
32	290	41	235	87	304	...	...	...	...	3	59	...	...	...	...
1,311	12,861	79	405	96	229	9	8	...	...	257	3,296	...	...	...	...
32	430	6	32	4	10	...	...	...	...	3	61	...	...	...	...
...	...	1	6	29	79	...	...	...	...	...	...	...	...	...	...
23	230	...	4	...	...	794	850	1	7	2	43	...	...	...	...
11,034	63,383	163	565	1,127	2,631	...	...	...	...	153	2,168	...	...	...	...
11,057	63,612	163	569	1,127	2,631	794	850	1	7	153	2,151	...	...	...	...
917	12,856	11	47	1	2	...	...	...	...	...	...	...	...	...	...
23	383	19	153	...	1	...	...	...	...	1	16	...	...	...	...
48	819	12	86	3	10	...	...	...	...	2	245	...	...	...	...
70	1,202	31	239	3	11	...	...	...	...	9	261	...	...	...	...
701,028	37,11,400	10,515	39,636	33,173	82,391	5,693	4,830	2,930	10,497	13,369	1,87,345	...	...	...	...

Total shown against "All other articles of merchandise," as details by commodities have not been furnished.

Appendix 19.
Principal Commodities—Details.

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Principal commodities carried by each railway (by sys
(Referred to in pa

Progressive No.	GAUGE.	CLASSIFICATION NO.	Railway.	3' 3 1/2"							
				19		20		21		22	
				Udaipur-Chitor.		Bhavnagar-Gondal-Junagad-Forbandar.		Southern Mahratta.		South Indi	
Description of commodity—contd.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Ea			
	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.				
		Brought forward	18,699	73,075	102,424	3,77,066	408,270	23,87,502	437,106	19	
XVI		LIQUORS—									
		1. Ale and beer	2	30	23	151	1,481	16,640	538		
		2. Wines and spirits of all kinds, including country spirit	5	46	103	1,016	2,147	18,065	2,828		
		3. All other sorts, including toddy and fermented liquor other than ale and beer	...	...	...	...	4,927	23,486	480	
		TOTAL	7	76	126	1,167	8,555	58,191	3,846		
XVII		METALS—									
		1. Brass, unwrought	2	7	298	1,518	183	2,176	1,006		
		2. Brass, wrought	4	20	201	1,183	1,080	11,217	828		
		3. Copper, unwrought	3	12	211	1,236	136	1,631	162		
		4. Copper, wrought	1	7	61	482	595	5,785	70		
		5. Iron and steel—									
		(a) Cast	...	...	1,601	4,651	481	3,954	534	
		(b) Unwrought	...	...	312	1,568	4,286	25,506	2,346	
		(c) Wrought	107	682	791	5,215	4,932	40,173	7,636		
		(d) Manufactures	34	243	248	1,714	3,103	31,941	5,193		
		6. Others	66	412	311	1,854	750	10,700	1,968		
		TOTAL	217	1,383	4,034	19,421	15,546	1,33,083	19,833	1	
XVIII		OILS—									
		1. Kerosine	240	1,213	3,021	12,969	20,904	1,35,194	20,174	1	
		2. Castor	3	16	140	806	376	1,803	3,114		
		3. Coconut	2	5	107	492	2,254	13,838	1,410		
		4. Mustard and rape	...	...	138	303	1	14	29	
		5. Others	18	142	370	1,755	3,604	22,266	7,979		
		TOTAL	263	1,376	3,776	16,325	27,139	1,73,115	32,706	2	
XIX		OIL SEEDS—									
		1. Castor	9	39	40	182	14,225	89,092	11,726		
		2. Earthnuts	...	1	69	463	3,371	19,203	117,697	1	
		3. Linseed	1	3	3	11	3,919	24,480	60		
		4. Poppy	132	317	4	...	363	3,281	38		
		5. Rape and mustard	9	27	16	68	501	3,177	1,241		
		6. Til or jingili	82	360	4,313	16,382	22,144	1,80,634	19,220	1	
		7. Cotton seed	...	...	...	...	17,322	79,730	...	
		8. Others	58	167	12,676	26,775	12,620	1,34,266	1,727		
		TOTAL	291	914	17,130	53,881	74,465	5,33,863	151,709	3	
XX		OPIMUM	83	538	8	156	4	65	...		
XXI		PAPER AND PASTE-BOARD	39	277	169	1,325	640	7,630	1,867		
XXII		PROVISIONS—									
		1. Dried fruits and nuts	365	1,914	1,990	9,101	23,174	1,64,070	1,132		
		2. Ghee	251	1,150	1,341	10,762	3,359	26,686	1,173		
		3. Others	287	1,380	4,965	26,937	15,421	91,248	28,232	1	
		TOTAL	903	4,444	8,296	48,800	41,954	2,82,004	30,537	1	
XXIII		RAILWAY PLANT AND ROLLING STOCK CARRIED FOR THE PUBLIC AND FOREIGN RAILWAYS—									
		1. Locomotive engines and tenders and parts thereof	...	...	45	319	14	32	77	
		2. Carriages and trucks and parts thereof	...	...	...	...	174	887	20	
		3. Materials—									
		(a) Steel rails and fish-plates	...	...	...	...	42	105	1,284	
		(b) Sleepers and keys of steel and cast-iron	...	...	...	...	11	64	1,682	
		(c) Others	2	1	3	14	50	826	899		
		TOTAL	2	1	48	333	291	1,914	3,962	1	
XXIV		SALT	854	3,995	3,795	6,221	50,743	4,09,778	72,397	2	
XXV		SALTPETRE AND OTHER SALINE SUBSTANCES—									
		1. Saltpetre	10	66	37	231	236	1,562	567		
		2. Other saline substances	15	65	11	68	100	1,737	2		
		TOTAL	25	131	48	299	426	3,299	569		
		Carried over	21,383	86,210	139,854	5,22,994	628,033	39,90,444	754,532	32	

DIX 19—continued.

Appendix 19.
Principal Commodities—Details.

and the earnings therefrom during the Calendar year 1902.

32 of Report.)

3' 37'		2' 6'										2' 0'		TOTAL OTHER 2' 6' AND 2' 0'.				Progressive No.		
23		24		25		26		28		29		27		30		31			32	
Burma.		Morvi.		Barni Light.		Taralokshwar-Magra.		Tezpur-Balipara.		Darjeeling-Himalayan		R. K. L.		F. A. H. S. J.						
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		Quantity.	Earnings.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
701,028	37,11,400	10,515	39,636	33,173	82,391	5,693	4,830	2,930	10,497	13,369	1,87,345	—	—	—	—	—	—	—	—	
2,673	24,258	2	11	1	5	...	...	20	133	454	2,525	...	...	...	...	...	...	...	...
545	12,194	5	60	7	30	...	...	...	...	131	3,774	...	...	...	...	...	...	...	...
3	50	9	86	...	...	...	...	...	...	1	23	...	...	...	...	...	...	...	...
3,221	36,502	16	157	8	35	...	...	20	133	586	6,322	...	...	...	...	...	...	...	...
43	677	62	422	9	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...
188	2,500	35	249	21	61	...	...	...	...	49	1,264	...	...	...	...	...	...	...	...
6	93	18	124	7	17	...	...	...	...	10	258	...	...	...	...	...	...	...	...
74	974	7	43	12	32	...	...	...	...	...	...	...	...	...	...	...	...	...	...
332	2,987	13	98	27	62	...	...	44	314	12	284	...	...	...	...	...	...	...	...
33	436	45	182	4	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4,040	36,008	32	170	791	1,798	...	...	...	...	2	46	...	...	...	...	...	...	...	...
6,515	64,234	103	684	136	373	...	...	...	...	784	17,217	...	...	...	...	...	...	...	...
372	4,058	24	154	8	26	...	...	...	...	95	1,983	...	...	...	...	...	...	...	...
11,603	1,11,967	339	2,126	1,015	2,402	...	...	44	314	952	21,052	...	...	...	...	...	...	...	...
8,421	75,533	60	188	692	1,601	...	...	...	...	699	11,339	...	...	...	...	...	...	...	...
63	717	25	105	4	11	...	...	280	518	5	91	...	...	...	...	...	...	...	...
727	8,137	8	31	93	250	...	...	...	...	6	105	...	...	...	...	...	...	...	...
6	65	25	96	...	...	...	...	...	...	291	4,516	...	...	...	...	...	...	...	...
7,068	57,330	77	370	104	280	...	...	...	...	37	647	...	...	...	...	...	...	...	...
16,285	1,41,842	195	700	893	2,142	280	518	29	199	1,038	16,698	...	...	...	...	...	...	...	...
13	83	2	6	244	532	...	...	...	...	...	...	...	...	...	...	...	...	...	...
284	2,336	7	28	333	769	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	3	2	7	4,793	10,213	...	...	...	...	...	10	...	...	...	...	...	...	...	...
...	1	3	10	14	33	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	42	13	36	11	28	189	151	...	...	...	112	...	...	...	...	...	...	...	...
6,707	36,202	936	2,849	169	373	...	...	...	...	...	18	...	...	...	...	...	...	...	...
...	...	622	1,428	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	12	4	10	1,762	3,833	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7,009	38,679	1,529	4,374	7,326	15,781	189	151	...	...	6	140	...	...	...	...	...	...	...	...
34	510	6	71	...	...	...	...	...	...	...	15	...	...	...	...	...	...	...	...
416	7,470	94	721	57	179	2	2	...	...	74	1,893	...	...	...	...	...	...	...	...
667	6,715	67	254	759	2,042	...	...	...	...	15	311	...	...	...	...	...	...	...	...
789	13,411	69	292	28	82	8	5	35	196	37	762	...	...	...	...	...	...	...	...
44,405	4,33,433	180	881	66	194	639	459	...	...	1,662	22,951	...	...	...	...	...	...	...	...
45,861	4,53,559	316	1,427	853	2,318	647	464	35	196	1,714	24,024	...	...	...	...	...	...	...	...
...	
...	
328	4,227	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	
...	
...	
18,916	1,79,273	1,236	1,668	3,864	8,780	204	324	11	91	1,076	18,017	...	...	...	...	...	...	...	...
...	
15	276	17	59	...	1	...	...	...	...	...	12	...	...	...	...	...	...	...	...
...	...	2	11	46	117	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	278	19	70	46	118	...	...	...	...	...	12	...	...	...	...	...	...	...	...
804,716	46,85,707	14,325	51,040	47,235	1,14,146	7,015	6,289	3,134	11,641	18,815	2,75,518	...	...	...	...	...	...	...	...

Total shown against "All other articles of merchandise," as details by commodities have not been furnished.

Appendix 19.
Principal Commodities—Details.

Principal commodities carried by each railway (by systems)
(Referred to in paragraph

Progressive No.	GAUGE.		3' 3"							
	CLASSIFICATION NO.		19		20		21		22	
	Railway.		Udaipur-Chitor.		Bhavnagar-Gondal-Junagad-Purbandar.		Southern Mahratta.		South Indian.	
	Description of commodity—concd.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
	Brought forward		21,383	86,210	139,854	5,22,994	628,033	39,90,444	754,532	32,07,045
XXVI	SILK—									
	1. Raw—									
	(a) Foreign		1	7	4	28	154	2,604	15	324
	(b) Indian . . . . .		...	...	1	1	146	704	...	...
	2. Piece-goods—									
	(a) Foreign . . . . .		...	...	3	27	...	...	8	53
	(b) Indian . . . . .		...	...	...	...	...	...	...	...
	TOTAL		1	8	8	56	300	3,314	23	377
XXVII	SPICES—									
	1. Betel-nuts		3	33	502	2,595	11,505	82,376	13,597	63,603
	2. Cardamoms . . . . .		...	3	2	22	117	1,586	500	4,821
	3. Chillies		33	143	268	1,725	17,612	1,01,718	7,377	70,957
	4. Ginger		9	61	8	70	266	2,453	422	3,720
	5. Pepper		1	5	6	58	402	3,239	612	6,060
	6. Others		100	483	564	3,267	6,503	50,809	491	4,046
	TOTAL		146	728	1,350	7,737	36,405	2,42,181	23,059	1,52,307
XXVIII	STONE AND LIME		118	488	63,622	37,090	24,140	56,009	69,705	97,421
XXIX	SUGAR—									
	1. Refined or crystallised, including sugarcandy		225	1,207	5,279	35,524	5,641	31,221	18,317	63,418
	2. Unrefined—									
	(a) Sugar		805	4,075	...	...	6,514	40,759	3,177	15,515
	(b) Gur, rag, jaggery, molasses and other saccharine produce		1,239	6,159	3,897	14,745	43,267	2,62,584	50,991	3,25,478
	TOTAL		2,269	11,441	9,176	40,269	57,422	3,34,564	72,485	4,04,411
XXX	TEA—									
	1. Foreign . . . . .		...	1	4	53	11	196	4	25
	2. Indian		1	10	29	235	48	778	1,605	10,013
	TOTAL		1	11	33	288	59	974	1,609	10,038
XXXI	TOBACCO—									
	1. Unmanufactured		263	1,018	1,349	5,144	10,465	69,122	6,392	38,368
	2. Manufactured—									
	(a) Cigars . . . . .		...	1	5	66	384	3,996	1,415	20,614
	(b) Other sorts		72	440	141	1,405	200	3,320	2,985	9,115
	TOTAL		335	1,459	1,495	6,615	11,049	76,438	10,812	68,097
XXXII	WOOD—									
	1. Timber, unwrought		41	237	8,500	40,985	31,546	1,44,886	75,544	1,30,264
	2. Manufactures		11	72	617	4,050	4,394	30,279	5,736	43,296
	TOTAL		52	309	9,117	45,035	35,940	1,75,165	81,280	1,73,560
XXXIII	WOOL—									
	1. Raw		27	120	343	2,637	481	4,795	2,863	2,934
	2. Manufactured—									
	(a) Carpets and rugs . . . . .		...	6	1	13	...	1	37	351
	(b) Piece-goods, European		1	...	...	...	...	7	2	31
	(c) Piece-goods, Indian		8	61	11	54	10	265	190	3,208
	(d) Other sorts of manufactures . . . . .		...	3	2	12	835	10,395	143	536
	TOTAL		26	190	357	2,716	1,326	15,463	3,235	7,060
XXXIV	ALL OTHER ARTICLES OF MERCHANDISE		1,773	9,078	7,410	34,461	72,583	2,93,328	92,717	5,60,044
	GRAND TOTAL		26,104	1,09,922	232,422	6,97,261	867,257	51,87,880	1,109,457	46,20,360
	ANIMALS—									
	1. Horses		3	43	13	253	347	7,399	10	153
	2. Cattle		3	43	175	1,112	212	4,035	676	4,388
	3. Sheep, etc. . . . .		...	...	8	108	526	4,146	3,213	8,321
	4. Elephants . . . . .		...	...	...	...	5	462	...	...
	TOTAL		6	86	196	1,473	1,090	16,042	3,899	13,362

DIX 19—concluded.

Appendix 19.
Principal Commodities—Details.

and the earnings therefrom during the Calendar year 1902.

(Part of Report.)

31		20										TOTAL OTHER 20 AND 20				Progressive No.				
23		24		25		26		28		29		27		30			31		32	
Burma.		Morvi.		Barai Light.		Tarakeswar-Magra.		Tezpur-Balipara.		Darjeeling-Himalayan.		R. K. L.		H. A.			H. S.		J.	
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		Quantity.	Earnings.	Quantity.	Earnings.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
804,716	48,85,707	14,325	51,040	47,235	1,14,146	7,015	6,289	3,134	11,641	18,815	2,75,518	...	...	...	...	...	...	...	...
36	1,081	...	...	3	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	42	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	48	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	31	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	15
42	1,196	...	...	3	12	...	...	...	...	...	...	...	...	...	...	...	...	...	15
5,193	62,703	12	49	380	1,017	...	...	...	...	33	760	...	...	...	...	...	...	...	...
1	24	...	...	...	1	...	...	...	...	170	2,262	...	...	...	...	...	...	...	...
5,659	1,08,221	48	268	17	48	...	...	...	...	8	25	...	...	...	...	...	...	...	...
489	5,151	1	3	5	14	...	...	...	...	3	34	...	...	...	...	...	...	...	...
17	345	...	...	7	24	...	...	...	...	15	360	...	...	...	...	...	...	...	...
128	1,549	198	1,330	147	392	...	...	...	...	43	809	...	...	...	...	...	...	...	...
11,487	1,77,093	259	1,652	556	1,495	...	...	...	...	264	4,250	...	...	...	...	...	...	...	...
95,519	1,14,098	115	356	27	81	...	...	...	...	35	36	...	...	...	...	...	...	...	...
58	331	185	657	485	1,120	...	...	...	...	38	30	...	...	...	...	...	...	...	...
3,290	33,981	7	24	33	79	...	...	...	...	6	33	...	...	...	...	...	...	...	...
15,131	1,27,311	1,460	4,428	452	1,102	...	...	...	...	54	32	...	...	...	...	...	...	...	...
12,479	1,61,623	1,652	5,109	970	2,301	...	...	...	...	92	62	...	...	...	...	...	...	...	...
680	11,157	1	5	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	502	3	21	...	...	...	...	...	...	3,569	25,000	...	...	...	...	...	...	...	...
708	11,659	4	26	...	1	...	...	...	...	3,569	25,000	...	...	...	...	...	...	...	...
3,194	27,385	576	1,949	28	84	...	...	...	...	7	5	...	...	...	...	...	...	...	...
120	1,414	1	7	6	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...
703	7,910	29	245	5	35	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4,017	36,609	606	2,201	39	139	...	...	...	...	7	5	...	...	...	...	...	...	...	...
103,482	4,20,117	684	2,823	204	538	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3,537	30,088	45	324	49	152	...	...	...	...	4	12	...	...	...	...	...	...	...	...
107,019	4,50,205	729	3,147	253	690	...	...	...	...	4	12	...	...	...	...	...	...	...	...
7	77	94	750	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	677	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
84	1,514	4	26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	338	2	13	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	57	...	4	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
144	2,663	100	800	1	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...
125,564	4,67,993	992	5,514	738	1,630	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1,167,695	61,09,656	18,782	60,846	49,822	1,20,499	...	...	...	...	...	...	...	...	...	...	...	...	...	...
713	26,017	16	251	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4,301	1,06,084	4	34	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1,545	36,131	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	
6,359	1,08,232	20	285	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Total shown against "All other articles of merchandise," as details by commodities have not been furnished.

Appendix 20.
Train, engine and ton-mileage.

APPEN
Train, engine and ton-mileage in
(Referred to in paragraph
N.B.—A reference to Appendix 2 will furnish the key to the

Gauge.	Class No.	5' 6"															
		E. B. S. SYSTEM.			B. C.	B. N. system (a) & (b).	E. C.	O. and R. (a) & (b).	N. W. SYSTEM (a) to (f).			G. I. P. SYSTEM.			B., B. & C. I. SYSTEM.		
		E. I.	5' 6" Gauge.	Other gauges.					Comm. section.	Milly. section.	Total.	G. I. P. (a) to (c).	I. M. (d) to (h).	Total.	B., B. & C. I. (a) to (e).	R. M. (f) to (g).	Total.
TRAIN-MILEAGE.—PASSENGER TRAINS.																	
1898	2,546	316	358	1,074	75	469	9	474	2,087	30	2,207	4,033	472	4,494	862	839	1,801
1899	2,576	794	273	1,067	93	494	18	509	2,052	17	2,269	4,043	4,508	1,203	663	1,866	
1900	2,673	320	358	1,178	47	657	85	670	2,153	27	2,180	4,018	3,611	1,244	651	1,894	
1901	2,627	344	383	1,229	48	1,235	†	840	2,397	29	2,326	3,908	611	4,519	651	2,954	
1902	2,638	378	406	1,284	49	1,494	†	1,238	2,603	41	2,644	4,206	885	5,091	684	3,092	
GOODS TRAINS.																	
1898	7,526	730	366	1,298	48	269	39	734	4,271	803	4,474	4,974	671	5,645	1,032	2,753	3,784
1899	8,123	768	787	1,495	97	358	135	1,013	3,693	337	2,930	4,993	354	5,377	1,252	3,348	4,400
1900	9,104	804	849	1,653	124	1,451	240	1,010	3,233	307	2,140	5,024	31,098	6,122	1,770	4,311	5,811
1901	9,494	753	838	1,631	100	916	†	1,333	4,454	405	4,859	5,303	998	6,301	837	3,508	4,345
1902	9,942	854	820	1,704	101	1,021	†	1,468	4,568	808	5,106	5,801	1,363	7,164	760	2,822	3,281
MIXED TRAINS.																	
1898	2,522	380	944	1,244	242	1,160	815	1,350	2,800	918	2,718	266	723	989	504	2,482	2,686
1899	2,662	406	986	1,392	218	1,249	1,213	1,343	2,991	947	2,928	349	3,195	1,444	506	2,684	3,190
1900	2,902	391	904	1,375	247	1,101	1,418	1,651	3,038	971	4,009	307	3,057	1,364	569	2,748	3,317
1901	4,161	369	1,023	1,408	222	1,408	†	1,794	2,480	1,125	4,905	644	1,246	1,890	436	2,829	3,265
1902	4,287	368	1,036	1,424	215	1,714	†	1,440	3,496	1,265	4,761	698	1,335	2,023	457	3,020	3,477
TOTAL TRAIN-MILEAGE. ††																	
1898	13,068	1,906	1,708	3,738	377	2,051	934	2,660	9,366	1,821	10,507	9,449	1,900	10,349	2,891	6,154	8,745
1899	14,810	2,007	2,739	4,048	410	2,228	1,403	3,066	8,067	1,297	10,264	9,454	2,285	11,739	3,002	6,798	9,400
1900	16,187	2,409	2,799	4,392	424	2,319	1,934	2,436	8,284	1,357	9,641	9,486	2,201	12,377	3,254	7,771	11,023
1901	16,849	2,447	2,395	4,372	273	2,744	†	4,076	10,475	1,648	12,317	9,976	2,060	12,936	2,286	7,225	9,611
1902	16,865	2,177	2,325	4,512	268	4,291	†	4,281	11,176	1,295	12,022	10,809	2,626	14,435	2,711	6,060	9,371
ENGINE-MILEAGE.—PASSENGER TRAINS.																	
1898	5,287	1,051	787	1,838	237	789	474	1,239	3,704	494	4,198	4,189	826	5,015	1,169	2,246	2,415
1899	5,481	1,036	840	1,908	255	832	630	1,428	3,767	509	4,276	4,137	974	5,131	1,458	2,306	2,682
1900	5,076	1,073	809	1,904	220	845	697	1,774	4,035	544	4,579	4,153	1,099	5,252	1,571	2,264	2,821
1901	4,641	1,212	1,437	2,649	195	1,267	†	2,170	5,239	781	6,020	4,246	1,243	5,489	1,652	2,238	2,890
1902	5,054	1,246	1,462	2,708	268	1,524	†	2,302	5,087	821	5,908	4,097	1,153	6,150	1,630	2,950	4,380
GOODS TRAINS.																	
1898	11,715	1,794	1,471	3,176	201	1,363	701	1,895	6,897	877	7,774	6,500	1,335	7,835	1,883	4,787	6,070
1899	12,695	1,786	1,724	3,510	198	1,748	1,023	2,153	8,419	989	7,358	6,611	1,658	8,269	2,035	5,562	7,598
1900	14,034	1,815	1,927	3,741	184	2,333	1,175	2,301	9,73	973	6,453	6,070	2,277	8,947	2,243	6,586	8,129
1901	16,357	1,928	1,441	3,999	272	2,786	†	2,601	6,753	1,083	7,836	7,191	2,207	9,398	1,621	5,363	7,184
1902	16,181	1,822	1,427	3,249	192	2,282	†	2,066	7,659	1,271	8,930	7,538	2,001	10,439	1,747	4,440	6,187
TOTAL ENGINE-MILEAGE.																	
1898	17,003	2,755	2,259	5,014	438	2,152	1,775	3,134	10,601	1,371	11,972	10,689	2,161	12,850	3,052	7,033	10,085
1899	18,176	2,842	2,573	5,413	453	2,481	1,632	3,581	10,196	1,458	11,654	10,768	2,632	13,400	3,491	7,769	11,260
1900	20,010	2,887	2,819	6,706	304	3,678	2,172	4,075	9,517	1,817	11,334	10,823	3,276	14,109	3,814	8,850	12,064
1901	18,038	2,870	2,778	6,748	407	4,173	†	4,771	11,992	1,938	13,930	11,437	2,460	14,897	3,273	8,101	11,374
1902	18,213	2,068	2,880	6,057	460	4,806	†	4,988	12,746	2,092	14,838	12,538	4,054	16,592	3,377	7,390	10,677
FREIGHT TON-MILEAGE.—COACHING.																	
1898	26,376	22,133	9,517	31,696	2,622	7,339	6,812	17,022	37,506	6,275	62,781	35,481	10,518	46,999	19,078	35,248	54,266
1899	29,279	22,990	9,896	39,176	2,719	11,790	9,449	18,236	36,247	6,448	62,695	42,722	12,321	55,043	20,976	37,522	62,801
1900	39,880	12,221	11,079	46,200	2,726	17,268	21,600	20,928	60,681	6,986	67,667	45,904	12,321	57,225	21,165	39,836	63,001
1901	107,060	14,162	12,166	26,328	2,042	28,460	†	25,579	65,174	7,208	72,382	65,935	65,935	128,876	41,360	70,036	107,060
1902	102,226	14,064	12,706	26,770	2,046	28,112	†	24,027	68,772	8,466	77,238	70,127	70,127	29,266	30,736	60,122	
GOODS.																	
1898	1,729,248	230,546	68,919	199,465	7,939	147,098	51,471	216,520	903,324	87,728	993,052	745,399	122,613	877,972	328,510	425,658	754,168
1899	1,852,070	226,442	76,008	215,048	9,918	226,937	93,188	220,458	820,625	58,863	879,488	747,478	157,853	905,331	339,490	514,841	824,070
1900	2,024,307	145,004	91,628	237,232	15,920	283,991	162,050	190,291	639,665	56,310	696,075	717,241	258,413	975,654	374,854	646,018	1,020,278
1901	2,140,217	121,327	85,847	217,174	12,280	230,626	†	220,420	1,047,884	71,096	1,118,980	1,057,031	1,057,031	1,207,189	606,245	613,634	1,820,823
1902	2,040,172	156,010	94,046	230,066	10,016	206,812	†	244,408	1,000,960	71,561	1,072,421	1,262,128	1,262,128	1,262,128	274,054	531,677	806,631
TOTAL FREIGHT TON-MILEAGE.																	
1898	1,815,533	148,679	78,436	221,115	10,581	155,237	52,283	218,442	961,359	64,003	1,025,362	781,840	143,121	924,971	347,588	451,306	800,094
1899	1,941,958	140,432	82,892	223,724	12,027	240,417	104,637	222,274	876,872	65,311	942,183	790,300	169,174	959,374	367,793	552,123	915,826
1900	2,122,293	158,725	102,707	261,432	16,046	401,359	172,450	211,249	700,246	63,436	763,682	763,145	269,744	1,032,889	402,019	681,854	1,083,673
1901	2,256,207	145,489	97,953	243,442	12,280	239,086	†	265,918	1,112,452	78,994	1,191,446	1,122,066	1,122,066	1,326,065	647,605	683,670	2,009,736
1902	2,142,628	170,084	106,952	277,736	12,862	216,025	†	270,189	1,069,632	82,027	1,151,659	1,332,255	1,332,255	1,332,255	304,220	571,433	878,723
GROSS TON-MILEAGE (FREIGHT AND DEAD WEIGHT)—COACHING.																	
1898	1,334,826	231,741	112,807	344,548	40,105	201,087	124,704	237,511	926,010	118,256	1,044,266	902,000	200,868	1,102,868	285,615	337,668	622,483
1899	1,386,190	228,047	115,630	353,677	53,005	211,010	125,437	234,329	961,980	123,202	1,085,182	909,418	227,767	1,127,185	301,741	345,631	707,872
1900	1,452,274	242,256	131,409	373,665	49,306	250,802	220,012	420,142	995,789	129,672	1,125,461	954,023	200,439	1,154,462	308,780	351,418	790,198
1901	1,625,808	222,207	141,244	393,431	46,200	264,912	†	491,796	1,214,482	127,000	1,341,482	1,287,532	1,287,532	1,484,051	364,588	789,579	2,273,631
1902	1,743,220	228,852	122,816	351,667	40,622	217,760	†	226,089	1,200,976	109,120	1,310,096	1,279,096	1,279,096	1,456,395	326,052		

GAUGE.	5'																	
	1			2 (a)			3			4 (a) & (b)			5					
CLASS No.				EASTERN BENGAL STATE.			BENGAL CENTRAL.			BENGAL-NAGPUR.			EAST COAST STATE.*			ODISH AND ROMILKHAND STATE.		
RAILWAY.	EAST INDIAN.			EASTERN BENGAL STATE.			BENGAL CENTRAL.			BENGAL-NAGPUR.			EAST COAST STATE.*			ODISH AND ROMILKHAND STATE.		
Calendar year.	Loaded.	Empt.	Total.	Loaded.	Empt.	Total.	Loaded.	Empt.	Total.	Loaded.	Empt.	Total.	Loaded.	Empt.	Total.	Loaded.	Empt.	Total.

COACHING.

HOME VEHICLE MILEAGE ON HOME LINE.

1898	82,243	18,588	100,831	13,845	1,433	15,278	3,082	419	3,501	10,576	3,161	13,737	6,867	1,359	8,226	17,091	4,358	21,449
1899	84,376	18,113	102,489	14,251	1,166	15,617	3,344	386	3,730	12,417	3,266	15,683	10,293	1,944	12,237	18,253	4,802	23,055
1900	85,281	19,479	103,260	14,969	1,338	16,307	3,120	301	3,511	15,347	3,449	18,796	11,643	2,380	14,023	21,370	5,490	26,860
1901	93,085	19,409	112,494	14,982	2,128	17,110	3,004	349	3,349	23,435	5,007	28,502	...	...	...	23,397	6,025	29,322
1902	94,698	21,030	115,728	15,315	2,004	17,319	2,902	516	3,418	27,748	5,268	33,016	...	...	...	25,242	6,301	31,543

FOREIGN VEHICLE MILEAGE ON HOME LINE.

1898	1,214	207	1,512	6	2	8	...	...	...	906	72	1,068	74	1	75	644	108	752
1899	1,388	228	1,626	8	2	10	...	...	...	865	206	1,069	206	8	214	969	135	1,104
1900	2,868	684	3,532	5	2	7	...	...	...	1,070	473	1,543	260	64	324	1,204	185	1,389
1901	1,003	738	1,741	6	2	8	...	...	...	3,260	553	3,813	...	...	...	2,532	517	3,049
1902	3,033	920	3,753	4	2	6	...	...	...	3,752	372	4,124	...	...	...	2,262	506	2,768

TOTAL COACHING VEHICLE MILEAGE ON HOME LINE.

1898	102,343	15,286	117,629	19,801	3,501	23,302	14,803	8,301	23,201
1899	104,115	15,637	119,752	19,752	3,731	23,483	16,752	12,451	24,159
1900	108,812	16,314	125,126	20,339	3,512	23,851	20,339	14,347	25,249
1901	115,135	17,118	132,253	23,435	3,349	26,784	32,115	...	32,381
1902	119,628	17,225	136,853	27,748	3,418	31,166	40,140	...	34,311

HOME VEHICLE MILEAGE ON FOREIGN LINES.

1898	3,124	11	3,135	...	...	...	483	13	799
1899	3,384	11	3,395	...	...	...	1,016	2	1,018
1900	3,449	11	3,460	...	...	...	1,000	353	1,353
1901	3,954	12	3,966	...	...	...	2,734	...	3,100
1902	4,977	22	5,000	...	...	...	2,889	...	2,840

GOODS.

HOME VEHICLE MILEAGE ON HOME LINE.

1898	154,787	51,652	206,439	18,536	7,291	25,827	1,052	794	1,846	14,132	7,304	21,436	5,169	2,366	7,935	22,483	8,443	30,926
1899	160,487	63,232	223,719	19,705	8,417	28,122	1,491	1,177	2,668	19,310	10,011	29,321	8,482	3,694	12,176	25,535	9,230	34,765
1900	160,359	73,571	233,930	21,345	10,012	31,357	2,484	1,733	4,217	27,069	16,441	43,510	13,013	7,436	20,449	24,812	7,760	32,572
1901	161,132	72,467	233,599	18,578	6,966	25,544	2,073	1,426	3,499	30,458	15,943	46,401	...	...	...	29,235	8,409	37,644
1902	179,396	77,700	257,096	22,478	7,943	30,421	1,703	973	2,676	34,733	16,297	50,940	...	...	...	29,639	9,138	38,777

FOREIGN VEHICLE MILEAGE ON HOME LINE.

1898	21,336	17,110	38,446	1,003	1,003	2,186	326	216	542	2,660	1,886	4,546	322	241	553	2,381	1,727	4,108
1899	20,608	17,685	38,293	835	835	1,670	203	146	354	6,454	4,453	10,607	1,672	1,543	3,215	3,690	2,922	6,612
1900	28,052	20,608	48,660	898	898	1,796	153	143	301	11,699	9,312	20,811	2,682	2,213	4,895	4,348	3,671	7,019
1901	33,059	19,786	52,845	918	918	1,836	242	188	430	4,127	2,783	6,910	...	...	...	6,770	3,607	10,377
1902	38,416	20,766	59,182	922	913	1,835	208	199	407	4,978	2,793	7,771	...	...	...	7,767	3,572	11,339

TOTAL GOODS VEHICLE MILEAGE ON HOME LINE.

1898	244,820	28,013	272,833	23,388	35,982	8,498	35,034
1899	262,072	29,792	291,864	30,222	40,228	15,391	41,377
1900	282,590	33,173	315,763	45,213	64,321	25,344	39,611
1901	288,444	27,380	315,824	39,200	53,311	...	48,221
1902	306,368	31,956	338,324	38,143	58,711	...	59,116

HOME VEHICLE MILEAGE ON FOREIGN LINES.

1898	21,248	1,455	22,703	148	28,505	896	30,987
1899	34,103	1,609	35,712	120	18,936	3,668	29,581
1900	43,206	1,676	44,882	601	20,651	8,546	26,501
1901	25,726	1,727	27,453	534	25,534	...	35,804
1902	28,680	1,786	30,466	219	30,903	...	43,385

* Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.

DIX 21.

Appendix 21.
Vehicle mileage.

thousands of miles of each railway (by systems).

35 of Report.)

5' 6"															GAUGE.
6			7 (a) to (c)			7 (d) to (e)			8 (a) to (f)			9			CLASS No.
NORTH WESTERN STATE.			GREAT INDIAN PENINSULA.			INDIAN MIDLAND.†			BOMBAY, BARODA AND CENTRAL INDIA.			NIZAM'S GUARANTEED STATE.			RAILWAY.
Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Calendar year.
COACHING.															
HOME VEHICLE MILEAGE ON HOME LINE.															
60,565	17,169	77,734	50,890	...	50,890	12,669	...	12,669	16,881	1,686	18,567	4,668	95	4,763	1898
63,095	17,197	80,292	49,485	...	49,485	14,624	...	14,624	20,728	2,044	22,772	4,599	79	4,588	1899
64,477	16,731	81,208	53,476	...	53,476	15,103	...	15,103	23,583	2,073	25,656	6,951	107	7,061	1900
70,528	10,839	81,367	71,487	...	71,487	...	...	...	24,874	3,126	28,000	12,519	167	12,686	1901
74,413	23,157	97,570	76,098	13,884	91,982	...	...	...	25,420	3,069	28,489	12,965	196	13,161	1902
FOREIGN VEHICLE MILEAGE ON HOME LINE.															
771	131	902	3,190	135	3,325	933	446	1,379	39	14	53	116	56	172	1898
711	146	857	3,916	223	4,139	1,084	443	1,527	63	21	84	128	70	198	1899
864	192	1,056	3,256	230	3,486	1,272	511	1,783	45	13	58	119	55	174	1900
1,807	495	2,302	5,622	163	5,785	...	...	...	38	8	46	131	55	186	1901
1,345	424	1,829	6,968	320	7,288	...	...	...	53	13	66	117	49	166	1902
TOTAL COACHING VEHICLE MILEAGE ON HOME LINE.															
78,638			54,215					14,048			18,620			4,935	1898
81,149			53,624					16,151			22,856			4,786	1899
82,264			56,962					16,886			25,714			7,235	1900
83,609			77,272					...			28,046			12,872	1901
99,399			99,270					...			28,555			13,327	1902
HOME VEHICLE MILEAGE ON FOREIGN LINES.															
1,692			3,422					1,032			29			262	1898
1,698			3,521					1,218			64			236	1899
2,050			4,906					932			74			283	1900
1,824			4,926					...			64			253	1901
2,555			5,057					...			60			518	1902
GOODS.															
HOME VEHICLE MILEAGE ON HOME LINE.															
114,450	43,680	163,130	62,797	28,208	91,005	11,861	5,212	17,673	29,750	15,317	45,067	6,691	3,075	9,766	1898
108,353	41,459	149,812	67,295	26,450	93,745	13,001	7,906	21,807	43,228	16,807	60,135	7,021	3,177	10,198	1899
87,822	33,754	121,576	69,381	28,244	97,625	18,766	12,027	30,793	45,290	25,126	70,416	12,467	6,319	18,786	1900
125,118	53,396	178,514	113,483	47,903	161,386	...	...	...	35,554	10,828	46,382	11,417	5,922	17,339	1901
126,618	44,963	171,581	124,603	31,441	156,044	...	...	...	30,934	7,621	38,555	11,431	6,217	17,648	1902
FOREIGN VEHICLE MILEAGE ON HOME LINE.															
3,066	2,766	5,832	22,338	19,926	42,264	5,700	5,577	11,277	1,186	460	1,646	5,347	4,260	9,616	1898
2,934	2,745	5,679	22,086	19,097	41,183	7,126	6,154	13,280	2,671	1,124	3,795	5,343	4,123	9,466	1899
2,778	2,580	5,358	23,434	21,070	44,504	11,098	7,382	18,480	3,774	2,829	6,603	7,396	6,313	13,711	1900
2,853	2,503	5,356	24,449	19,796	44,245	...	...	...	668	603	1,271	4,810	3,163	7,973	1901
2,967	3,470	7,437	33,474	28,254	61,728	...	...	...	1,619	1,402	3,021	5,099	3,596	8,695	1902
TOTAL GOODS VEHICLE MILEAGE ON HOME LINE.															
168,962			133,269					28,950			56,613			19,572	1898
159,491			134,928					31,087			63,930			19,664	1899
116,934			142,130					49,273			77,019			24,497	1900
183,170			205,631					...			47,653			25,312	1901
179,018			217,772					...			49,586			26,343	1902
HOME VEHICLE MILEAGE ON FOREIGN LINES.															
9,419			15,491					9,622			2,919			5,337	1898
12,556			16,485					12,668			3,215			6,476	1899
7,575			16,394					11,489			3,089			7,383	1900
14,606			16,317					...			5,220			9,305	1901
12,583			15,662					...			5,716			8,512	1902

† Included with the Great Indian Peninsula railway system from 1901.

GAUGE.	5' 6"			3' 3 1/2"					
	10			2 (b) to (d)			14		
CLASS: No.	MADRAS.			EASTERN BENGAL STATE.			ASSAM-BENGAL.		
Railway.	MADRAS.			EASTERN BENGAL STATE.			ASSAM-BENGAL.		
Calendar year.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.

COACHING.

HOME VEHICLE MILEAGE ON HOME LINE.

1898	16,387	5,811	22,198	15,306	1,628	16,934	4,129	664	4,793
1899	14,867	6,521	21,388	15,431	1,591	17,022	4,921	710	5,631
1900	16,175	6,850	23,025	16,341	1,678	18,013	4,997	806	5,803
1901	23,390	9,453	32,843	16,318	8,562	24,880	6,710	548	7,258
1902	24,430	9,180	33,710	16,199	9,319	25,518	6,759	488	7,247

FOREIGN VEHICLE MILEAGE ON HOME LINE.

1898	437	565	1,002	...	...	...	...	...	...
1899	496	69	555	...	...	...	...	...	...
1900	184	54	238	...	...	...	...	...	...
1901	2,176	60	2,245	...	...	...	...	...	...
1902	1,912	666	2,578	2	1	3	...	...	...

TOTAL COACHING VEHICLE MILEAGE ON HOME LINE.

1898	23,200			16,934			4,793		
1899	23,633			17,022			5,631		
1900	23,263			18,013			5,803		
1901	35,088			24,880			7,258		
1902	36,288			25,521			7,247		

HOME VEHICLE MILEAGE ON FOREIGN LINES.

1898	1,336			...			...
1899	1,621			347			...		
1900	1,317			354			...		
1901	3,343			417			...		
1902	4,543			332			...		

GOODS.

HOME VEHICLE MILEAGE ON HOME LINE.

1898	23,832	7,011	30,843	20,777	6,721	27,498	4,594	3,072	7,666
1899	24,735	7,652	32,387	23,274	7,059	30,333	9,861	3,594	13,455
1900	23,400	6,973	30,373	22,309	7,390	29,699	6,927	3,514	10,441
1901	31,530	11,658	43,188	21,776	5,161	26,937	5,317	2,723	8,040
1902	38,312	11,385	49,707	25,925	5,931	31,856	5,492	3,441	8,933

FOREIGN VEHICLE MILEAGE ON HOME LINE.

1898	879	854	1,733	...	...	...	...	...	...
1899	1,161	1,153	2,314	...	...	...	...	...	...
1900	2,073	2,060	4,133	...	...	...	...	...	...
1901	7,013	6,871	13,884	422	421	843	...	...	...
1902	3,954	3,549	7,503	860	836	1,696	...	...	...

TOTAL GOODS VEHICLE MILEAGE ON HOME LINE.

1898	32,576			27,498			7,666		
1899	34,701			30,333			13,445		
1900	34,598			29,699			10,441		
1901	61,078			27,780			8,040		
1902	57,210			32,552			8,933		

HOME VEHICLE MILEAGE ON FOREIGN LINES.

1898	999			...			...
1899	3,150			221			...		
1900	2,717			366			...		
1901	5,131			364			...		
1902	8,068			433			...		

DIX 21—continued.

Appendix 2
Vehicle mileage

thousands of miles of each railway (by systems).

15 of Report.)

5 31"												GAUG
15			16			17			8 (g) to (h)			CLASS No.
DEOGHUR.			BENGAL AND NORTH-WESTERN.			ROHILKUND AND KUMAON.			RAJPUTANA-MALWA.			RAILW.
Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Calend. year.

COACHING.

HOME VEHICLE MILEAGE ON HOME LINE.

...	...	...	21,951	128	22,079	4,215	341	4,556	46,607	264	46,871	1898
...	...	...	23,930	143	24,073	4,143	339	4,775	48,773	195	48,968	1899
...	...	...	27,788	106	27,894	4,289	388	4,647	49,042	142	49,184	1900
...	...	...	32,788	2,256	35,044	4,342	1,003	5,345	55,884	187	56,071	1901
8	2	10	39,313	6,808	46,141	4,677	1,036	5,713	59,593	339	60,032	1902

FOREIGN VEHICLE MILEAGE ON HOME LINE.

...	...	...	5	...	5	20	...	20	59	18	77	1898
...	...	...	...	...	...	22	...	22	623	25	648	1899
...	...	...	9	7	16	38	1	39	1,072	31	1,103	1900
...	...	...	8	6	14	42	2	44	84	26	110	1901
...	...	...	26	24	50	56	3	59	131	35	166	1902

TOTAL COACHING VEHICLE MILEAGE ON HOME LINE.

...	...	...	22,084	...	...	4,576	...	...	46,948	...	...	1898
...	...	...	24,073	...	...	4,797	...	...	49,616	...	...	1899
...	...	...	27,910	...	...	4,686	...	...	57,287	...	...	1900
...	...	...	35,058	...	...	5,389	...	...	56,181	...	...	1901
10	...	...	46,191	...	...	5,712	...	...	57,118	...	...	1902

HOME VEHICLE MILEAGE ON FOREIGN LINES.

...	...	...	950	...	...	9	...	...	144	...	...	1898
...	...	...	14	...	...	8	...	...	184	...	...	1899
...	...	...	25	...	...	4	...	...	105	...	...	1900
...	...	...	30	...	...	7	...	...	197	...	...	1901
...	...	...	43	...	...	7	...	...	265	...	...	1902

GOODS.

HOME VEHICLE MILEAGE ON HOME LINE.

...	...	...	21,009	10,899	31,908	4,316	2,972	7,288	84,043	25,998	109,941	1898
...	...	...	25,340	14,411	39,751	4,753	3,221	7,974	100,705	28,526	129,231	1899
...	...	...	26,221	16,159	42,380	4,429	2,840	7,269	118,445	45,138	163,583	1900
...	...	...	30,903	14,475	45,378	4,585	2,356	6,941	103,459	38,546	142,005	1901
8	...	8	33,211	72,274	45,485	4,758	2,602	7,360	89,450	31,561	121,011	1902

FOREIGN VEHICLE MILEAGE ON HOME LINE.

...	...	...	159	131	290	250	207	457	1,796	962	2,758	1898
...	...	...	378	271	649	376	281	657	6,904	4,101	10,905	1899
...	...	...	450	225	675	367	177	544	6,333	4,894	11,227	1900
...	...	...	613	506	1,119	316	164	480	3,863	1,750	5,613	1901
...	...	...	897	576	1,473	359	207	566	6,894	4,396	11,290	1902

TOTAL GOODS VEHICLE MILEAGE ON HOME LINE.

...	...	...	32,198	...	...	7,745	...	...	112,309	...	...	1898
...	...	...	40,400	...	...	8,631	...	...	140,136	...	...	1899
...	...	...	43,055	...	...	7,813	...	...	174,400	...	...	1900
...	...	...	47,407	...	...	7,421	...	...	147,618	...	...	1901
8	...	...	46,958	...	...	7,926	...	...	132,301	...	...	1902

HOME VEHICLE MILEAGE ON FOREIGN LINES.

...	...	...	2,422	...	...	1,079	...	...	3,688	...	...	1898
...	...	...	7,479	...	...	2,961	...	...	6,901	...	...	1899
...	...	...	7,384	...	...	2,835	...	...	6,125	...	...	1900
...	...	...	3,876	...	...	2,171	...	...	4,768	...	...	1901
...	...	...	9,019	...	...	2,471	...	...	4,671	...	...	1902

P. T. O.

Appendix 21.
Vehicle mileage.

Loaded and Empty Vehicle Mileage in
(Referred to in paragraph

GAUGE.	5' 3 1/2"											
	18.			19			20			21 (a) to (g)		
CLASS: No.												
RAILWAY.	JODHPUR-BIKANER.			UDAIPUR-CHITTOOR.			BHAVNAGAR-GONDAL-JUNAGAR-PORBANDAR.			SOUTHERN-MAHARATTA.		
Calendar year.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.
COACHING.												
HOME VEHICLE MILEAGE ON HOME LINE.												
1898	3,294	17	3,311	603	1	604	5,415	936	6,351	14,771	1,706	16,477
1899	3,548	17	3,565	643	2	645	5,858	914	6,772	14,013	1,799	15,812
1900	3,604	12	3,616	675	1	676	6,043	911	6,954	19,701	2,428	22,129
1901	6,384	35	6,419	662	19	681	5,908	940	6,848	21,017	2,705	23,722
1902	8,373	36	8,409	634	29	663	5,704	918	6,622	24,615	5,123	29,738
FOREIGN VEHICLE MILEAGE ON HOME LINE.												
1898	258	25	283	16	2	18	27	...	27	74	23	97
1899	295	21	316	19	2	21	29	...	29	74	23	97
1900	310	18	328	13	2	15	44	...	44	73	24	97
1901	396	26	422	9	8	17	...	...	...	57	24	81
1902	412	22	434	14	10	24	...	...	...	3	1	4
TOTAL COACHING VEHICLE MILEAGE ON HOME LINE.												
1898	3,591			622			6,378			16,576		
1899	3,871			666			6,831			15,909		
1900	3,904			691			6,908			22,226		
1901	6,743			698			6,848			23,903		
1902	8,843			687			6,622			29,742		
HOME VEHICLE MILEAGE ON FOREIGN LINES.												
1898	242			29			...			43		
1899	228			34			...			73		
1900	214			25			...			74		
1901	250			26			...			74		
1902	422			75			...			2		
GOODS.												
HOME VEHICLE MILEAGE ON HOME LINE.												
1898	1,568	616	2,184	96	45	141	4,744	1,899	6,643	31,181	9,967	41,148
1899	1,796	691	2,487	112	45	157	4,908	2,126	7,034	34,065	15,243	49,308
1900	2,156	1,242	3,398	127	50	177	5,597	3,658	9,255	36,924	17,758	54,682
1901	3,636	1,924	5,560	115	39	154	3,890	1,484	5,374	30,643	12,176	42,819
1902	5,172	2,305	7,477	105	37	142	3,327	1,740	5,067	35,907	11,293	47,200
FOREIGN VEHICLE MILEAGE ON HOME LINE.												
1898	1,832	1,473	3,305	83	53	136	40	43	83	645	515	1,160
1899	4,265	2,279	6,544	233	216	449	47	54	101	532	267	799
1900	3,377	2,201	5,578	495	469	964	44	46	90	492	277	769
1901	2,316	1,207	3,523	228	222	450	44	47	91	430	267	697
1902	2,437	1,520	3,957	211	198	409	55	62	117	336	250	586
TOTAL GOODS VEHICLE MILEAGE ON HOME LINE.												
1898	3,489			277			6,726			42,308		
1899	6,611			606			7,335			50,107		
1900	6,236			1,141			9,340			55,451		
1901	5,083			604			5,465			43,716		
1902	7,434			551			5,384			47,846		
HOME VEHICLE MILEAGE ON FOREIGN LINES.												
1898	892			85			2			893		
1899	994			116			3			3,443		
1900	978			105			...			473		
1901	1,285			101			...			762		
1902	1,897			55			17			815		

DIX 21—concluded.

Appendix 27,
Vehicle mileage.

thousands of miles of each railway (by systems).

35 of Report.)

31									GRAND TOTAL.			GAUGE.	
21 (A)			22			23						CLASS No.	
WEST OF INDIA PORTUGUESE.			SOUTH INDIAN.			BURMA.						RAILWAY.	
Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Loaded.	Empty.	Total.	Calendar year.	
COACHING.													
HOME VEHICLE MILEAGE ON HOME LINE.													
Information available.	not		36,553	58	36,611	28,178	4,457	32,635	476,786	64,379	541,065	1898	
			32,874	38	32,912	27,756	4,637	32,393	412,462	66,146	558,608	1899	
			34,414	47	34,461	28,502	4,542	33,044	527,544	69,311	596,855	1900	
	522	...	522	34,950	39	34,989	28,627	7,978	36,605	575,323	74,331	649,654	1901
	36,290	49	36,339	29,379	4,778	34,157	607,795	111,630	719,425	1902
FOREIGN VEHICLE MILEAGE ON HOME LINE.													
Information available.	not		1	1	2	...	...	...	8,808	1,808	10,796	1898
			2	1	4	...	...	...	10,878	1,613	12,491	1899
			4	3	7	...	...	...	12,611	2,519	15,130	1900
	511	...	511	2	4	...	...	...	18,484	2,106	20,590	1901
	1	1	2	20,111	3,429	23,540	1902
TOTAL COACHING VEHICLE MILEAGE ON HOME LINE.													
Information available.	not		36,613		32,635				551,861			1898	
			32,916		32,443				571,119			1899	
			34,468		33,134				612,017			1900	
	1,033	...	34,993		36,605				670,834			1901	
	...	...	36,341		34,157				742,905			1902
HOME VEHICLE MILEAGE ON FOREIGN LINES.													
Information not available.			2						13,538			1898	
			2						14,739			1899	
			4						17,048			1900	
			1						21,212			1901	
	...			5					24,617			1902	
GOODS.													
HOME VEHICLE MILEAGE ON HOME LINE.													
Information available.	not		22,412	6,885	29,297	31,609	13,727	45,336	702,264	268,251	970,515	1898	
			23,284	7,289	30,573	31,612	13,015	44,627	750,253	294,722	1,044,975	1899	
			21,552	6,230	27,782	27,037	13,115	40,152	788,243	338,510	1,126,753	1900	
	168	49	217	23,418	7,284	30,702	38,644	14,502	53,146	879,332	335,637	1,214,969	1901
	24,796	7,811	32,607	37,575	16,393	53,968	865,903	308,746	1,174,649	1902
FOREIGN VEHICLE MILEAGE ON HOME LINE.													
Information available.	not		290	274	564	...	...	...	71,720	50,781	122,501	1898
			1,007	1,007	2,104	...	...	...	88,580	71,046	159,626	1899
			40	38	78	...	...	...	109,785	106,463	216,248	1900
	474	87	561	85	166	...	...	...	95,700	65,170	160,870	1901
	420	392	812	102,273	76,951	179,224	1902
TOTAL GOODS VEHICLE MILEAGE ON HOME LINE.													
Information available.	not		29,851		45,336				1,102,030			1898	
			32,677		44,627				1,213,611			1899	
			27,860		52,152				1,173,001			1900	
	776	...	30,868		53,146				1,325,839			1901	
	...	...	33,419		53,938				1,354,473			1902
HOME VEHICLE MILEAGE ON FOREIGN LINES.													
Information not available.			559						136,647			1898	
			462						105,247			1899	
			300						171,682			1900	
			215						153,745			1901	
	...			586					175,483			1902	

* Included with Southern Malabar railway from 1902.

Appendix 22.
Mileage earnings.

Gross and net earnings in rupees per mile

(Referred to in paragraph

N.B.—A reference to Appendix 3 will furnish the

GAUGE.	5' 6"																					
	CLASS: No.	1		2		3		4		5		6		7		8		9		10		11
		Railway.	E. B. SYSTEM.		B. C.	B. N. (a) & (b).	E. C.	O. & R.	N. W. SYSTEM.		G. I. P. SYSTEM.		B., B. & C. I. SYSTEM.		N. G. S. SYSTEM.		M. SYSTEM.		B. D.			
	Calendar year.		5' 6" gauge.	Other gauges.					Coml. Sec.	Mily. Sec.	G. I. P. (a) to (c).	I. M. (d) to (h).	B., B. & C. I. (a) to (e), (f) & (m).	R. M. (j) to (l).	N. G. S. (a)(b).	H. G. V. (c).	5' 6" gauge.	3' 3 3/4" gauges.				

COACHING TRAFFIC.

1898	9,911	10,963	3,817	5,445	1,473	2,574	4,103	4,458	1,356	4,728	2,496	5,827	3,335	2,379	...	4,780	...	1,365
1899	9,995	11,338	3,619	5,332	1,870	2,710	4,132	4,512	1,296	5,506	2,379	7,256	3,458	2,496	394	4,221	5,258	1,482
1900	10,227	11,475	3,979	5,523	2,246	3,294	4,413	4,683	1,352	5,807	2,120	7,160	3,368	2,608	1,187	4,884	6,751	1,110
1901	11,004	11,952	3,995	5,499	2,658	†	5,059	4,979	1,459	4,821		7,423	3,933	2,635	2,011	4,547	7,743	882
1902	10,190	12,117	4,040	5,605	3,666	†	5,050	5,215	1,535	5,739		8,082	3,763	2,713	2,202	4,759	4,372	958

GOODS TRAFFIC.

1898	21,597	21,037	5,508	2,031	5,194	2,154	4,974	9,687	1,821	18,414	4,293	19,450	8,011	8,867	...	7,756	...	5,386
1899	22,699	20,621	5,817	2,436	5,529	2,611	5,619	8,936	1,546	18,250	4,674	18,616	9,835	9,647	2,097	8,063	3,816	5,569
1900	22,462	22,448	6,115	3,788	7,609	4,346	5,116	6,917	1,707	16,666	6,711	17,003	11,529	12,000	2,324	8,108	3,633	4,101
1901	23,381	21,291	5,782	3,261	4,092	†	5,246	10,266	2,010	14,126		13,707	10,411	9,268	2,792	7,170	6,489	3,146
1902	22,210	23,602	5,835	3,063	4,816	†	5,712	10,156	1,268	14,379		14,433	9,479	9,968	3,259	6,828	3,700	3,161

GROSS EARNINGS PER MILE WORKED.*

1898	31,942	33,553	9,445	8,197	7,436	4,041	9,902	14,459	3,261	23,387	6,947	26,700	11,544	11,493	...	12,789	...	7,000
1899	33,127	33,774	9,562	8,206	7,883	5,425	10,811	13,792	3,000	24,012	7,211	26,444	13,587	12,468	2,497	12,580	9,120	7,144
1900	33,265	35,849	10,218	9,601	10,776	7,824	10,716	11,954	3,114	22,850	8,977	24,315	15,124	14,853	3,657	13,272	10,416	5,500
1901	34,672	35,234	9,901	10,118	8,134	†	11,881	15,589	3,554	19,154		21,381	14,607	12,222	5,164	12,010	14,280	4,499
1902	32,616	37,870	10,043	9,484	8,854	†	11,316	15,580	3,468	19,610		23,104	13,485	13,240	5,845	11,968	8,117	4,482

NET EARNINGS PER MILE WORKED.*

1898	21,685	19,567	5,400	2,914	3,636	1,221	5,334	7,734	—50	9,463	3,103	14,457	6,545	6,682	...	6,532	...	3,327
1899	22,187	17,250	5,546	3,181	4,102	1,907	5,898	7,160	—723	10,613	3,136	13,988	7,767	7,571	1,453	5,989	2,182	3,025
1900	21,540	18,847	5,847	3,965	6,406	2,359	5,206	5,684	—237	10,632	4,722	11,359	8,308	8,686	1,447	6,365	5,955	2,730
1901	22,106	17,301	5,332	4,639	3,824	†	6,463	8,402	—26	9,935		11,977	7,857	7,908	2,372	5,021	8,159	2,265
1902	20,676	19,623	5,473	4,132	4,362	†	5,757	7,234	—431	9,763		11,792	7,085	7,958	2,473	5,402	3,390	2,270

* Includes all other earnings
† Transferred partly to the Bengal-Nagpur
‡ Included with the

DIX 22.

Appendix 22.
Mileage earnings.

worked of each railway (by systems).

of Report):

key to the code letters used to denote railway systems:

3' 3 1/2"													2' 6"					2' 0"				GAUGE.
13	14	15	16	17		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	CLASS No.	
D. S.	A. B.	D.	B. & N. W.	R. & K. SYSTEM.		J. B.	U. C.	B. G. J. P.	S. M.	W. I. P.	S. I.	B.	M. R. W.	E. L.	B. P.	R. K. L.	T. B.	D. H.	H. A.	H. S.	J.	Railway.
				R. & K.	P. L.																		Calendar year.

COACHING TRAFFIC.

1,512	2,533	5,545	2,766	2,168	...	1,341	1,501	2,100	1,379	841	4,128	4,683	2,481	869	2,169	...	1,623	6,116	7,649	3,263	413	1898
1,633	2,244	6,014	2,510	2,219	...	1,286	1,551	2,345	1,273	1,019	4,034	4,566	2,601	969	1,886	1,991	1,833	5,426	8,374	3,191	473	1899
1,782	2,245	6,456	2,755	2,283	...	1,091	1,333	2,438	1,821	1,116	4,559	4,732	2,566	1,128	2,142	3,301	1,947	5,833	8,407	3,577	464	1900
1,558	2,238	9,043	3,188	2,795	953	1,269	1,533	2,369	1,939	1,128	4,927	4,669	2,673	1,301	2,268	3,322	1,574	6,706	8,335	3,684	518	1901
1,620	2,031	5,496	3,306	2,851	1,075	1,242	1,536	2,045	2,139	1	5,136	4,738	2,362	1,208	2,315	3,577	1,707	7,362	8,453	3,773	761	1902

GOODS TRAFFIC.

7,617	1,840	1,136	3,656	2,618	...	2,070	841	2,242	3,139	2,171	3,501	4,756	1,440	3,027	194	...	2,444	8,473	187	173	3,144	1898
8,732	1,566	890	3,915	3,200	...	3,256	1,725	2,437	3,478	6,707	3,817	4,557	1,768	6,125	803	66	2,509	8,320	377	179	3,184	1899
9,062	1,543	810	3,524	3,037	...	2,678	3,356	2,823	3,503	3,470	3,581	5,263	1,841	4,487	293	85	2,506	9,825	528	266	2,765	1900
9,239	1,520	972	3,744	3,243	739	1,702	1,700	1,736	3,046	3,791	4,300	5,429	1,073	6,371	347	52	2,274	8,524	726	287	2,357	1901
8,284	1,351	607	3,679	3,508	840	1,237	1,668	1,556	3,418	1	4,202	5,653	749	5,599	361	137	2,220	9,049	776	372	2,258	1902

GROSS EARNINGS PER MILE WORKED.*

9,563	4,492	6,701	6,719	5,385	...	3,501	2,364	4,488	4,608	3,353	7,869	9,579	3,987	6,030	2,380	...	4,287	14,790	7,248	3,662	3,628	1898
10,853	3,917	6,944	6,803	6,189	...	4,642	3,337	4,927	4,865	1,121	7,991	9,326	4,456	7,231	2,126	3,071	4,758	14,019	8,762	3,375	3,718	1899
12,371	3,897	7,286	6,602	6,046	...	3,861	4,724	5,192	5,449	4,972	8,299	10,134	4,486	5,764	2,461	3,422	4,799	15,866	8,959	3,849	3,276	1900
11,287	3,651	10,082	7,206	6,273	1,693	3,050	3,233	4,166	5,086	5,333	9,481	10,251	3,801	7,792	2,671	3,413	4,197	15,453	9,081	3,079	2,922	1901
10,284	3,528	6,213	7,410	6,698	1,016	3,164	3,230	3,700	5,660	1	9,473	10,550	3,213	6,060	2,708	3,762	4,250	16,672	9,254	4,153	2,988	1902

NET EARNINGS PER MILE WORKED.*

3,271	187	1,378	3,241	2,608	...	2,081	1,009	1,855	1,375	2,669	3,548	4,082	1,738	1,138	673	...	1,008	6,823	2,267	1,021	761	1898
5,550	782	1,394	3,604	3,089	...	2,837	1,661	2,369	1,567	1,368	3,783	3,839	1,802	2,091	398	558	1,308	5,035	3,041	986	229	1899
5,651	838	1,540	2,753	3,110	...	2,146	2,759	2,581	1,919	1,743	4,109	4,568	1,683	1,966	674	960	1,200	7,095	4,301	1,358	592	1900
5,474	780	3,887	4,010	3,457	508	1,250	1,369	1,781	1,503	1,696	5,082	4,356	1,330	3,686	794	750	1,099	6,152	2,976	1,173	147	1901
4,651	403	1,258	3,969	3,550	570	1,513	1,443	1,499	1,976	1	5,132	4,538	1,201	2,449	768	1,054	1,082	7,560	4,640	1,607	126	1902

except those from steam-boat railway and partly to the Madras railway from the 1st January 1901. Southern Mahratta railway.

Appendix 23.
Train-mileage earnings.

APPEN

Gross and net earnings in rupees (excluding steam-boat

(Referred to in paragraph

N.B.—A reference to Appendix 3 will furnish the key to

GAUGE.	5' 6" GAUGE.															3' 3 1/2"					
	Class No.	1	2		3	4	5	6		7		8		9		10		11	12	13	14
		Calendar year.	B. I.	E. B. S. SYSTEM.		B. C.		B. N. (a) & (b).	E. C.	O. & R.	N. W. SYSTEM.		G. I. P. SYSTEM.		B. B. & O. I. SYSTEM.		N. G. S. SYSTEM.					M. SYSTEM.
				5' 6" gauge.	Other gauges.									Com-mercial. Sec-tion.	Milit-ary. Sec-tion.	G. I. P. (a) to (c)	I. M. (d) to (h)	B. B. & O. I. (a) to (m)	B. M. (f) to (k).	N. G. S. (a) & (b).	H. G. V. (c).

EARNINGS FROM COACHING TRAFFIC.

1898	3.61	2.69	2.85	2.87	1.78	2.97	3.05	3.07	2.62	1.68	2.95	3.29	2.84	3.75	...	3.26	...	2.99	3.05	4.85
1899	3.59	2.97	2.78	2.71	2.58	3.38	2.86	2.99	2.57	1.36	2.71	3.48	3.12	3.86	1.77	2.93	3.65	2.55	2.96	4.98
1900	3.02	2.87	3.15	3.25	3.62	3.81	2.74	2.99	2.56	2.12	2.37	3.58	3.11	3.50	2.61	3.16	4.90	2.01	3.22	4.80
1901	3.65	2.95	2.85	3.65	3.30	†	2.64	2.89	2.39	2.85	2.36	3.16	3.41	3.44	2.69	2.94	5.28	1.81	2.56	3.24
1902	3.40	3.01	2.88	3.11	3.05	†	2.49	2.75	2.12	2.32	3.60	3.16	3.25	2.65	3.25	5.19	1.98	3.19	3.25	

EARNINGS FROM GOODS TRAFFIC.

1898	4.80	5.97	3.80	1.81	4.14	2.55	3.29	4.35	2.36	5.28	3.91	3.83	4.06	4.35	...	4.95	...	7.59	3.80	1.72
1899	4.70	5.79	3.80	2.19	4.26	2.88	3.42	4.30	2.11	5.14	3.96	3.28	4.21	4.69	3.21	4.73	2.89	11.27	3.98	1.82
1900	4.69	6.17	3.11	2.58	3.86	2.85	3.36	4.20	2.16	4.74	4.79	7.75	4.24	4.69	2.08	4.70	3.99	9.91	4.29	1.70
1901	4.64	5.03	3.09	2.82	3.43	†	3.43	4.63	2.23	5.50	4.05	9.54	4.16	4.53	3.34	3.79	6.33	4.72	4.05	2.48
1902	4.55	6.03	3.42	1.15	3.28	†	3.27	4.51	1.87	4.69	11.12	4.45	4.95	2.65	3.69	3.82	4.71	4.33	1.94	

GROSS EARNINGS.†

1898	4.41	4.49	3.14	2.72	3.53	2.89	3.46	3.88	2.53	3.69	3.57	6.28	3.71	4.30	...	4.22	...	5.48	3.88	2.82
1899	4.40	4.50	3.12	2.78	3.90	2.88	3.50	3.64	2.34	3.79	3.50	6.06	3.98	4.64	2.85	4.00	3.30	6.64	3.91	2.65
1900	4.35	4.69	3.19	3.14	3.91	3.20	3.43	3.72	2.36	3.65	3.91	5.81	3.97	4.49	2.33	4.03	5.18	5.69	4.27	2.84
1901	4.33	4.61	3.02	3.75	3.54	†	3.30	3.96	2.32	4.19	3.88	6.12	4.00	4.37	2.66	3.49	5.78	3.78	3.91	3.23
1902	4.16	4.77	3.30	3.58	3.81	†	3.13	3.76	2.00	3.71	6.32	3.98	4.65	3.84	3.61	4.48	3.79	4.24	2.74	

NET EARNINGS.†

1898	2.99	2.58	1.70	0.98	1.72	0.72	1.81	2.10	-0.04	1.49	1.69	3.40	2.11	2.40	...	2.17	...	2.58	1.31	0.19
1899	2.95	2.30	3.84	1.08	2.08	1.61	1.91	2.00	-0.56	1.72	1.51	3.21	2.25	2.62	1.66	1.90	0.79	3.65	2.00	0.58
1900	2.82	2.47	1.83	1.30	2.32	0.95	1.66	1.77	-0.18	1.70	2.06	2.68	2.19	2.63	0.92	1.93	2.62	2.83	2.12	0.61
1901	2.81	2.27	1.67	1.72	1.67	†	1.80	2.13	0.02	2.18	1.72	3.40	2.15	2.81	1.22	1.70	3.27	1.93	1.90	0.69
1902	2.64	2.47	1.74	1.58	1.63	†	1.52	1.75	-0.25	1.85	3.22	3.09	2.79	1.20	1.63	1.87	1.85	2.05	0.31	

* Information

† Includes all other earnings except

‡ Transferred partly to the Bengal-Nagpur railway

DIX 23.

Appendix 23.
Train-mileage earnings.

earnings) per train-mile of each railway (by systems).

37 of Report.)

the code letters used to denote railway systems.

GAUGE.										2' 6" GAUGE.				2' 0" GAUGE.				GAUGE.		
15	16	17		18	19	20	21		22	23	24	25	26	27	28	29	30	31	32	Class No.
D.	B. & N. W.	R. & K. SYSTEM.		J. B.	U. G.	B. G. J. P.	S. M. (a) to (g)	W. L. P. (h)	S. I.	B.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	D. H.	H. A.	H. S.	J.	Calendar year.
		E. & K. (a) & (b)	Pow. Yan. (c)																	

EARNINGS FROM COACHING TRAFFIC.

...	2-28	3-52	...	2-39	2-67	2-87	2-49	1-71	2-33	3-16	2-00	0-50				8-16				1898
...	2-08	3-77	...	2-10	2-59	2-22	2-49	1-38	2-68	3-30	2-19	5-47	*	*	*	7-52	*	*	*	1899
...	2-05	3-51	...	2-59	2-79	2-04	2-51	1-38	2-78	3-32	2-16	4-32				7-78				1900
...	2-34	2-81	...	2-34	2-73	2-38	2-28	0-63	2-11	2-39	2-17	1-59	1-08	...	0-96	7-19	2-97	2-12	0-78	1901
...	1-38	5-35	...	2-29	2-52	2-19	2-12		2-24	3-67	1-95	4-78	1-14	...	1-00	1-99	2-29	2-17	0-79	1902

EARNINGS FROM GOODS TRAFFIC.

...	2-74	2-17	...	2-49	4-22	2-79	2-64	2-72	2-53	2-72	2-35	1-21				3-59				1898
...	2-76	2-17	...	2-77	4-70	2-61	2-60	4-10	2-50	2-62	2-36	2-40	*	*	*	2-34	*	*	*	1899
...	2-61	2-12	...	2-55	5-86	2-66	2-39	4-12	2-77	2-76	1-54	2-02				2-24				1900
...	2-61	2-79	...	2-55	4-90	2-62	2-39	2-12	2-01	2-80	2-01	7-76	0-58	...	1-39	2-40	0-26	0-17	0-42	1901
...	2-71	5-71	...	2-79	4-94	2-61	2-58		2-68	2-61	1-95	2-34	0-58	...	1-33	2-45	0-30	0-21	2-07	1902

GROSS EARNINGS.†

2-08	2-62	2-95	...	2-32	2-11	2-39	2-65	4-02	2-53	2-03	2-22	4-31	1-00	...	2-80	4-76	2-66	2-01	2-40	1898
2-38	2-54	2-00	...	2-63	4-12	2-65	2-68	4-01	2-61	2-99	2-30	2-73	0-92	1-64	2-68	4-34	2-51	2-10	2-20	1899
2-27	2-45	2-92	...	2-91	4-88	2-44	2-49	2-02	2-83	2-22	1-88	7-26	0-09	2-28	2-95	4-29	2-42	2-25	2-21	1900
2-18	2-67	2-91	1-16	2-66	4-30	2-62	2-51	2-00	2-15	2-30	2-15	2-50	0-97	2-31	2-57	4-19	2-24	2-29	2-41	1901
2-04	1-63	5-85	1-23	2-64	4-18	2-48	2-58		2-11	2-33	2-08	2-17	0-97	2-49	2-55	4-57	2-60	2-39	1-89	1902

NET EARNINGS.†

0-42	1-59	1-42	...	1-97	1-29	1-49	0-79	-2-00	1-14	1-28	0-97	0-81	0-23	...	0-64	2-12	1-52	0-47	0-71	1898
0-46	1-34	1-50	...	2-21	2-05	1-75	0-85	1-41	1-23	1-23	0-93	2-61	0-18	0-29	0-79	1-58	1-58	0-61	-0-20	1899
0-48	1-24	1-50	...	1-62	2-82	1-72	0-89	-1-06	1-40	1-45	0-71	2-48	0-27	0-64	0-79	1-92	1-64	0-79	-0-58	1900
1-23	1-49	1-60	0-35	1-13	1-82	1-56	0-74	-0-95	1-69	1-40	0-75	4-49	0-23	0-51	0-52	1-79	1-42	0-68	-0-12	1901
0-41	1-31	2-09	0-37	1-28	1-87	1-40	0-89		1-69	1-43	0-75	2-27	0-28	0-70	0-65	2-05	1-80	0-92	-0-08	1902

not available.
those from steam-boat.
and partly to the Madras railway from the 1st January 1901.

Appendix 24.
Working expenses.

APPEN

Working expenses in thousands of rupees

(Referred to in paragraph

N. B.—A reference to Appendix 2 will furnish the key to

Calendar year.	E. I.		R. E. S. SYSTEM.			S. C.	R. W. (a) & (b)	E. C.	O. & R.	M. W. SYSTEM.			G. I. P. SYSTEM.			E., R. AND C. I. SYSTEM.			N. G. S. SYSTEM.			M. S. S.
	E. I.	G' & gauge.	Other gauges.	Total.	Com-mercial section.					Mili-tary section.	Total (a) to (d).	G. I. P. (a) to (c).	L. M. (d) to (h).	Total.	E. R. & C. I. (a) to (c) and (f) and (m).	E. M. (j) to (k).	Total.	N. G. S. (a) and (b).	E. G. V. (e).	Total.	M. S. S. (a) to (c).	
ENGINEERING.																						
1898	44,17	8,30	7,74	16,08	1,65	6,68	8,10	18,50	46,96	12,66	89,82	39,79	7,00	47,39	19,74	21,61	40,35	4,64	...	4,94	12,79	
1899	51,13	13,73	7,47	21,19	1,80	12,52	8,97	13,20	37,21	17,09	54,30	40,63	9,63	50,25	21,90	20,29	51,19	4,72	...	4,72	13,03	
1900	63,84	13,38	8,17	21,48	1,90	12,30	9,02	16,23	34,31	19,45	46,76	29,97	10,70	40,67	27,71	34,27	61,98	7,88	2,07	10,05	13,06	
1901	65,00	10,38	8,29	19,87	1,83	17,79	†	17,01	40,14	13,97	54,11	34,54	8,40	43,03	14,51	30,34	44,85	3,29	3,38	6,67	15,91	
1902	71,18	11,24	10,18	21,40	1,88	18,23	†	17,52	53,99	15,22	69,11	35,04	9,21	44,25	18,51	28,12	46,63	4,56	4,36	8,92	19,10	
LOCOMOTIVE.																						
1898	38,84	9,08	6,11	14,16	1,30	10,14	6,73	13,01	67,95	10,19	78,14	74,79	13,97	88,27	29,78	28,68	63,42	5,63	...	5,63	20,89	
1899	63,51	9,79	6,83	16,68	1,80	11,97	8,90	12,89	69,77	11,21	81,98	79,37	16,77	96,94	39,67	23,79	73,28	5,43	14	5,67	24,63	
1900	72,83	10,26	7,89	17,86	1,67	16,00	11,67	18,64	69,51	12,19	81,70	79,85	20,75	1,00,00	34,14	53,44	86,68	5,85	2,20	8,05	22,91	
1901	75,87	13,36	9,00	22,35	1,61	19,37	†	19,97	80,93	13,65	94,58	87,49	21,20	1,06,79	29,55	49,39	78,94	5,14	3,12	8,26	25,32	
1902	78,04	14,48	8,76	29,24	1,48	22,18	†	19,96	81,10	13,03	94,03	89,65	24,38	1,17,43	29,62	45,76	75,38	6,71	3,54	10,25	26,90	
CARRIAGE AND WAGON.																						
1898	18,23	3,21	1,89	5,10	40	3,67	1,34	4,76	15,07	1,44	16,51	34,93	2,86	40,19	9,74	9,64	19,38	1,29	...	1,29	4,77	
1899	10,30	4,54	1,07	6,81	48	2,80	1,77	4,14	15,32	1,63	16,95	33,73	4,40	28,12	14,05	9,96	24,01	1,15	1	1,15	4,80	
1900	21,40	4,64	2,79	7,43	29	3,58	1,63	6,85	14,14	1,76	15,90	18,07	4,13	22,20	15,31	15,08	30,39	1,33	15	1,48	4,89	
1901	22,20	6,15	3,43	9,58	24	5,49	†	4,66	21,71	2,25	23,96	20,49	4,89	25,38	10,00	16,76	26,76	1,22	34	1,56	7,00	
1902	17,80	3,83	3,39	7,21	45	5,14	†	10,28	26,42	3,73	30,15	22,71	5,64	28,55	13,90	17,66	21,46	1,43	38	1,81	6,51	
TRAFFIC.																						
1898	29,97	10,43	5,67	15,99	1,29	5,99	2,67	6,23	28,33	4,30	32,63	29,91	5,21	35,22	10,29	17,16	27,64	2,65	...	2,65	8,71	
1899	41,63	10,81	6,09	10,93	1,21	7,26	5,27	9,13	26,46	4,66	31,02	30,76	5,07	35,83	10,86	17,23	28,09	2,74	8	2,82	8,87	
1900	45,61	11,12	6,63	17,75	1,50	8,93	5,76	10,18	26,28	4,69	30,95	32,85	6,99	39,24	12,19	18,81	31,03	2,81	1,09	3,90	8,97	
1901	49,66	11,62	7,02	19,61	1,40	12,26	†	11,79	29,99	5,13	35,02	31,80	7,61	39,61	11,35	19,03	30,38	2,70	1,84	4,54	13,31	
1902	50,92	12,81	6,63	19,43	1,53	12,96	†	12,20	32,07	5,08	37,15	33,61	8,64	42,45	11,64	17,97	29,61	2,67	2,10	4,77	12,90	
GENERAL.																						
1898	10,29	2,70	2,71	6,41	1,33	5,34	3,19	4,36	11,85	2,49	14,34	13,41	5,08	18,49	5,81	12,27	17,66	2,67	...	2,67	5,73	
1899	20,84	3,97	2,99	6,78	1,44	7,34	3,97	4,71	11,99	2,61	14,60	13,00	5,87	18,87	5,80	12,31	17,91	2,70	4	2,74	6,90	
1900	22,20	3,89	3,20	7,00	1,48	8,04	4,13	6,06	12,35	2,87	15,22	14,27	5,92	20,19	5,80	10,55	16,25	2,60	85	2,44	6,16	
1901	23,53	4,15	3,40	7,65	1,67	9,78	†	5,40	13,04	2,89	15,93	17,19	4,14	21,33	6,86	11,47	18,33	2,53	1,97	4,50	6,44	
1902	24,20	4,46	3,45	7,91	1,63	10,49	†	5,81	13,21	3,12	16,33	16,92	4,42	21,34	7,41	11,28	18,79	2,38	3,49	4,77	6,97	
TOTAL.*																						
1898	1,00,18	36,34	26,11	64,45	6,67	35,15	21,18	45,44	1,71,32	31,87	2,03,19	2,03,90	37,67	2,40,77	74,59	99,97	1,73,56	17,07	...	17,07	83,66	
1899	2,17,77	44,03	29,34	73,07	6,98	43,52	28,27	60,63	1,66,03	37,87	2,03,90	1,95,39	45,41	2,40,80	95,76	1,14,48	2,00,24	17,36	27	17,63	84,44	
1900	2,45,60	45,93	34,30	80,31	7,83	52,02	33,93	60,61	1,61,65	34,82	1,98,73	1,85,17	53,52	2,38,99	1,00,59	1,34,61	2,35,40	21,88	6,42	29,30	89,02	
1901	2,57,01	42,07	37,01	85,08	7,63	60,29	†	61,43	1,61,35	35,81	2,29,98	2,00,85	49,98	2,49,82	75,91	1,31,67	2,07,48	15,80	10,87	26,37	83,64	
1902	2,68,80	50,03	30,93	89,96	7,43	72,80	†	68,81	2,23,99	41,97	2,65,96	2,12,97	55,97	2,68,54	83,83	1,25,70	2,09,62	18,73	12,20	31,83	91,09	

* Includes working expenses under miscellaneous and steam
 † Transferred partly to the Bengal-Nagpur railway and partly
 ‡ Included with the
 § Information
 Note.—For working expenses per mile

DIX 24

of each railway (by systems).

88 and 42 of Report.)

the code letters used to denote railway systems.

Appendix 24
Working expenses.

S. No.	1911													1912					1913					Totals	Calendar year.
	12	13	14	15	16	17		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32			
	B. D.	D. S.	A. B.	D.	B. & N. W.	R. and K. SYSTEM.		J. B.	U. C.	B. G. J. P.	A. M.	W. I. P.	S. I.	R.	M. R. W.	B. L.	B. P.	B. K. L.	T. B.	D. H.	H. A.	H. S.	J.		
ENGINEERING.																									
...	36	2,73	6,03	5	7,80	1,97	...	1,91	20	2,98	11,87	54	9,26	13,84	30	13	8	...	19	77	28	13	24	3,13,73	1908
20	27	1,53	4,26	5	10,24	2,28	...	2,49	24	2,72	11,93	58	8,19	12,40	49	13	9	8	18	1,03	40	12	20	3,42,50	1909
...	25	1,73	4,43	4	11,05	1,98	...	1,92	26	2,55	13,41	67	9,19	13,71	43	13	9	11	17	70	28	12	49	3,61,79	1900
16	23	1,83	5,46	4	12,00	1,92	§	2,72	30	2,64	14,64	75	8,79	15,49	41	11	9	12	16	1,06	31	14	12	3,55,98	1901
26	45	1,67	5,37	4	12,42	2,25	12	2,45	31	2,48	13,98	‡	10,55	17,01	32	11	9	11	16	1,03	23	12	23	3,59,97	1902
LOCOMOTIVE.																									
...	26	94	3,02	10	5,82	1,51	...	1,03	25	2,45	15,37	83	17,63	16,83	75	23	12	...	13	1,36	23	9	16	4,25,25	1908
20	26	1,05	2,61	8	2,28	1,76	...	3,02	23	2,64	16,50	1,03	17,80	19,20	68	18	14	7	14	1,39	21	11	10	4,71,44	1909
65	27	1,09	2,55	11	9,03	1,96	...	2,64	40	2,81	18,86	84	16,44	22,73	1,20	13	15	10	15	1,20	27	8	17	5,26,80	1900
66	75	1,23	2,15	16	9,86	1,97	§	4,71	29	2,16	17,91	98	19,08	26,43	1,00	17	14	11	15	1,45	46	13	41	5,86,13	1901
1,34	68	1,32	3,97	10	11,20	2,28	15	5,24	24	2,78	21,21	‡	17,88	27,16	78	16	15	12	16	1,45	33	10	27	5,73,54	1902
CARRIAGE AND WAGON.																									
...	5	47	45	3	1,45	50	...	25	3	60	4,23	16	5,27	4,29	15	4	2	...	5	44	9	4	5	1,33,30	1908
3	7	49	52	5	1,98	62	...	35	11	66	4,52	19	4,88	4,15	17	5	4	2	7	51	10	2	22	1,23,92	1909
3	7	53	62	4	2,68	68	...	45	4	72	5,22	21	5,17	5,40	17	2	2	5	7	65	9	2	6	1,20,31	1900
3	17	51	92	1	2,63	79	§	53	15	73	5,86	21	5,41	6,10	16	2	5	2	5	54	9	2	6	1,51,00	1901
16	16	49	102	1	2,56	72	4	69	12	48	5,80	‡	5,85	6,09	14	2	6	2	6	44	9	2	10	1,78,26	1902
TRAFFIC.																									
...	30	52	1,64	6	4,91	1,22	...	71	12	2,16	6,21	49	8,27	9,06	42	23	13	...	15	58	21	18	19	2,19,56	1908
4	31	57	2,08	5	5,63	1,23	...	89	16	2,16	6,43	62	7,86	9,14	42	17	16	16	16	68	45	29	19	2,39,68	1909
10	26	62	2,25	6	6,77	1,26	...	1,01	21	2,25	6,21	27	7,25	10,22	47	15	16	29	16	69	47	29	29	2,49,27	1900
11	45	70	2,93	6	6,22	1,47	§	1,27	20	1,88	6,95	57	7,59	11,11	38	17	16	21	17	61	44	20	16	2,63,92	1901
23	43	65	2,98	6	6,69	1,57	9	1,64	20	1,93	9,25	‡	7,99	11,30	22	16	16	22	16	69	42	19	17	2,72,70	1902
GENERAL.																									
...	29	80	2,27	2	4,04	1,48	...	48	12	2,12	6,97	91	6,20	6,56	29	29	12	...	12	75	19	11	11	1,26,42	1908
2	25	81	2,22	2	4,56	1,51	...	57	12	2,09	6,15	95	6,20	6,96	45	28	12	5	12	82	12	6	12	1,42,25	1909
4	24	68	2,10	2	5,10	1,48	...	59	12	1,95	7,99	98	6,83	6,56	23	27	12	7	12	72	12	5	11	1,47,42	1900
4	55	82	2,71	2	5,57	1,67	§	82	17	2,09	6,46	99	6,79	7,49	24	28	12	7	16	68	15	8	12	1,57,84	1901
19	22	81	4,21	2	5,72	1,59	11	1,14	16	2,09	6,05	‡	7,10	7,95	22	25	12	7	12	68	14	6	12	1,63,70	1902
TOTAL.*																									
...	1,54	5,29	12,84	26	29,08	7,72	...	5,51	89	11,79	60,21	2,21	46,27	62,03	2,12	1,06	23	...	66	4,97	1,11	55	78	22,96,64	1908
64	1,55	4,51	12,97	27	28,22	6,69	...	6,12	1,06	11,84	61,43	4,08	45,95	62,47	2,69	91	84	29	69	6,46	1,26	52	1,02	22,99,20	1909
75	1,55	4,98	13,46	29	30,58	6,15	...	6,08	1,22	11,88	56,29	4,00	45,66	61,25	2,64	82	86	50	70	6,47	1,23	49	1,02	22,99,21	1900
1,03	2,42	5,14	16,78	30	42,24	7,99	47	12,44	1,29	16,96	67,15	4,17	49,29	69,96	2,23	89	88	51	67	6,74	1,46	55	87	26,72,45	1901
2,28	2,09	4,98	16,42	24	47,04	8,76	53	12,06	1,20	10,02	60,65	‡	50,97	72,20	1,92	97	89	55	63	6,72	1,32	50	90	26,70,40	1902

boat, direct charges and contribution to Provident Fund, to the Madras railway from the 1st January 1901. Southern Mahratta railway. not available. and per train-mile, see Appendices 25 and 27.

Appendix 25.
Proportion of expenses to earnings.

Proportion per cent. of working expenses

(Referred to in paragraph

N.B.—A reference to Appendix 2 will furnish the key to

GAUGE.	5' 6"																									
	CLASS No.	1			2			3		4		5		6			7			8			9		10	
		Calendar year.	M. I.	E. B. S. SYSTEM.		B. C.	H. N. SYSTEM.		E. C.	O. & R.	N. W. SYSTEM.			G. I. P. SYSTEM.			B. B. & C. I. SYSTEM.			N. G. S. SYSTEM.		M. SYSTEM.				
1st range.	Other ranges.			Total.	H. N. (a) & (b)		Commercial section.	Military section.			Total.	G. I. P. (a) to (c).	L. M. (d) to (h).	Total.	B. B. & C. I. (e) to (g) & (i).	R. M. (f) to (k).	Total.	N. G. S. (a) & (b).	H. G. V. (c).	M. (a) to (c).	N. (d) & (e).					
ENGINEERING DEPARTMENT.																										
1898.	7.16	9.53	12.66	10.33	16.08	13.36	18.45	12.69	12.48	40.88	14.71	11.41	11.21	11.39	11.52	9.45	10.31	11.38	...	11.68	...					
1899.	8.26	15.16	11.08	13.42	15.82	18.80	10.05	11.85	10.78	55.71	14.46	11.84	12.06	11.47	12.03	10.96	11.39	10.67	...	11.17	27.43					
1900.	9.39	18.80	10.87	12.26	14.23	9.40	14.91	13.90	11.12	33.40	13.71	8.65	9.48	8.85	14.07	11.46	12.70	15.16	19.43	13.34	—					
1901.	8.98	10.99	10.84	10.92	12.93	13.60	†	12.63	9.68	36.50	11.95	8.26	8.49	8.34	8.51	10.66	9.85	7.54	16.82	9.78	6.38					
1902.	10.11	10.82	12.57	11.59	11.68	11.82	†	13.05	12.89	41.01	13.19	8.26	8.40	8.29	10.31	10.61	10.69	9.71	19.08	11.50	12.31					
LOCOMOTIVE.																										
1898.	9.53	9.23	10.00	9.58	11.73	14.74	24.30	13.21	18.45	32.37	19.35	21.42	20.01	21.19	16.43	16.05	16.21	12.32	...	18.81	...					
1899.	9.70	10.05	9.68	9.89	13.19	13.20	20.72	11.40	20.23	36.85	21.59	21.36	21.00	21.70	16.73	16.01	16.31	12.23	21.76	32.32	35.23					
1900.	10.40	10.77	9.51	10.20	11.01	13.00	18.97	16.33	22.53	37.69	23.97	33.06	18.34	21.88	18.07	17.53	17.74	11.10	20.69	20.21	27.43					
1901.	10.26	14.08	11.89	13.08	11.49	14.74	†	14.75	19.51	35.77	20.98	20.95	21.19	20.93	17.33	17.35	17.34	11.80	15.54	21.71	27.41					
1902.	11.03	13.34	10.84	12.59	11.00	13.60	†	14.87	19.40	37.50	20.88	21.93	22.24	21.99	17.30	17.27	17.28	14.29	15.47	22.23	28.02					
CARRIAGE AND WAGON.																										
1898.	2.05	3.70	3.08	3.44	4.31	3.74	4.83	4.83	4.09	4.57	4.13	10.59	4.81	9.84	5.99	4.22	4.95	3.15	...	4.35	...					
1899.	2.06	5.01	2.92	4.12	4.05	3.06	4.09	7.31	4.44	3.30	4.51	6.63	5.51	6.42	7.72	3.73	5.35	2.59	1.16	4.27	2.57					
1900.	3.22	4.83	3.53	4.25	2.14	2.70	3.19	5.86	4.58	5.48	4.66	5.22	3.65	4.92	3.10	5.04	6.23	2.52	1.39	4.30	1.75					
1901.	3.04	6.51	4.40	5.61	2.42	4.20	†	3.46	5.24	5.90	5.29	4.90	4.89	4.96	5.36	5.89	5.88	3.03	1.68	4.30	1.37					
1902.	2.53	3.63	4.18	3.20	3.63	3.61	†	7.65	6.72	10.05	8.32	5.35	5.36	5.35	3.12	6.62	7.21	3.05	1.64	5.13	3.72					
TRAFFIC.																										
1898.	6.33	12.01	8.96	10.76	12.59	8.56	12.27	8.36	7.15	12.67	7.66	8.57	7.83	8.45	6.44	7.51	7.07	6.51	...	7.94	...					
1899.	6.34	11.97	9.03	10.72	11.18	8.01	12.14	8.19	7.67	14.85	8.26	8.59	7.60	8.41	5.96	6.45	6.25	6.21	11.91	8.05	5.23					
1900.	0.46	11.57	8.41	10.15	11.20	6.88	9.52	3.71	8.51	14.48	9.08	9.31	6.18	8.54	6.45	6.30	6.36	5.82	10.23	7.82	4.86					
1901.	6.79	12.30	9.18	10.91	9.99	9.88	†	8.75	7.21	13.42	7.78	7.43	7.61	7.59	6.65	6.63	6.67	6.20	9.13	8.13	4.43					
1902.	7.23	12.34	8.19	10.53	11.31	9.13	†	9.16	7.67	13.71	8.17	7.92	8.07	7.95	6.30	6.78	6.79	5.69	9.16	7.82	7.42					
GENERAL.																										
1898.	3.13	4.26	4.43	4.34	12.98	3.49	11.50	4.42	3.22	7.90	3.59	3.84	7.49	4.44	3.45	5.37	4.57	6.55	...	5.23	...					
1899.	3.14	4.23	4.29	4.27	12.66	3.09	9.15	4.23	3.47	9.50	3.89	3.36	6.97	4.26	3.08	4.61	3.36	6.10	6.36	5.48	1.32					
1900.	3.14	4.05	4.07	4.00	11.12	6.20	6.33	4.34	4.00	8.87	4.47	4.12	3.23	4.38	3.07	3.77	3.49	4.99	8.05	5.46	1.32					
1901.	3.23	4.39	4.45	4.43	11.16	7.46	†	4.01	3.15	7.57	3.52	4.11	4.14	4.13	4.02	4.03	4.03	5.81	9.83	5.13	1.57					
1902.	3.14	4.29	4.37	4.28	12.37	7.38	†	4.33	3.16	8.42	3.59	3.99	4.03	4.00	4.23	4.29	4.31	4.85	10.87	5.59	4.37					
PROPORTION OF TOTAL WORKING EXPENSES TO GROSS EARNINGS.																										
1898.	32.31	41.80	46.01	48.57	61.08	51.16	76.46	46.12	46.52	101.26	50.83	55.36	55.30	57.79	45.31	43.31	44.37	41.67	...	43.92	...					
1899.	33.18	49.30	43.50	46.82	61.23	47.96	65.11	45.45	48.14	123.42	54.29	54.56	56.35	54.98	46.59	42.83	44.57	39.28	41.81	52.39	76.79					
1900.	34.78	47.75	43.66	45.92	58.70	40.56	56.10	51.42	32.47	107.60	57.71	52.47	47.26	51.94	53.58	45.40	43.51	41.52	60.41	53.04	42.83					
1901.	35.27	50.89	43.40	49.84	54.25	39.02	†	45.60	46.14	101.15	56.78	43.13	43.97	43.21	44.50	46.21	45.57	35.59	54.07	51.40	42.87					
1902.	36.74	48.18	49.41	48.72	55.43	31.70	†	51.23	55.59	113.16	58.45	50.17	50.73	50.30	43.96	47.46	48.05	39.59	57.69	54.36	53.23					

* Excluding the Parlakimodi Light railway.

† Transferred partly to the Bengal-Nagpur and partly to the Madras railways.

DIX 25.

to gross earnings of each railway (by systems.)

Appendix 25.
Proportion of expenses to earnings.

38 and 42 of Report.)

the code letters used to denote railway systems.

3' 31"												2' 6"						2' 0"				Gauge.
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	Class No.	
B.D.	D.S.	A.B.	D.	B. & N.W.	R. & K. SYSTEM.	J.B.	U.C.	B.G. J.P.	S.M.	W. I.P.	S.L.	R.	M. R.W.	B.L.	B.P.	B.K. L.	T.B.	D.H.	H.A.	H.S.	J.	Calendar year.
					R. & K. (a) & (b)																	
					P.W. (c)																	

ENGINEERING DEPARTMENT.

13-54	32-87	46-09	14-66	12-18	12-51	...	14-07	19-36	14-64	16-56	24-38	10-56	14-23	10-33	9-16	11-23	...	21-30	10-20	14-76	17-03	24-71	1898
9-87	16-64	26-29	14-89	13-18	13-18	...	11-93	11-18	12-14	15-71	10-19	9-31	14-05	11-63	7-43	13-09	16-96	18-47	14-39	15-94	16-60	31-38	1899
7-06	17-88	25-90	11-89	13-73	11-69	...	10-53	8-29	10-80	15-44	20-09	9-97	13-43	10-02	10-07	11-96	15-23	17-98	8-61	10-97	15-47	56-32	1900
6-78	13-31	25-56	7-78	12-35	10-38	‡	16-61	31-65	13-21	13-04	20-43	8-35	13-03	11-51	6-74	11-30	16-98	17-93	13-51	11-89	13-03	14-09	1901
8-57	13-33	25-63	11-77	12-23	17-6	16-25	13-77	14-19	14-56	13-00	‡	9-53	13-61	10-33	7-68	10-61	14-80	17-52	13-15	12-55	15-19	26-72	1902

LOCOMOTIVE.

9-49	11-25	15-42	29-77	8-98	10-08	...	14-19	17-20	17-23	21-44	37-37	20-12	13-71	19-91	17-84	16-06	...	15-46	13-05	12-17	12-13	17-15	1898
9-39	11-44	16-13	25-18	10-62	10-14	...	14-47	15-49	15-80	21-74	18-04	20-25	20-63	20-84	11-43	20-44	14-97	14-45	19-23	12-26	14-53	19-33	1899
10-72	11-26	14-92	32-55	11-22	9-79	...	20-92	15-54	16-11	21-71	23-09	17-85	20-61	23-44	9-97	19-15	15-21	15-26	13-52	14-46	13-00	19-22	1900
15-22	12-35	14-76	32-56	10-15	11-23	‡	21-03	17-74	16-63	22-07	23-55	18-13	22-24	27-31	10-26	16-57	16-28	17-93	13-46	17-54	16-33	49-29	1901
12-02	14-32	18-43	32-53	11-03	12-23	20-95	20-25	15-68	16-53	22-77	‡	16-24	21-72	25-67	10-95	17-78	16-23	16-35	17-03	12-29	12-40	31-41	1902

CARRIAGE AND WAGON.

1-92	5-57	3-40	3-18	2-25	3-33	...	1-80	2-24	3-23	3-93	7-32	6-02	4-77	4-07	3-33	3-31	...	5-58	5-87	4-72	4-73	3-12	1898
2-45	5-35	3-20	15-34	2-48	3-57	...	1-68	3-03	3-95	6-25	3-35	5-55	4-71	4-07	3-34	5-43	4-23	3-09	7-14	3-84	4-26	22-43	1899
2-02	5-46	3-60	10-61	3-21	3-85	...	3-43	1-32	3-08	6-07	6-39	5-82	4-89	4-03	3-50	4-26	3-65	7-26	3-09	3-34	2-90	7-57	1900
3-56	5-11	4-33	2-10	2-70	4-41	‡	3-35	6-67	3-80	6-97	5-69	5-14	5-13	4-38	1-81	6-25	4-79	5-44	6-95	3-61	3-47	7-30	1901
2-02	5-40	4-86	3-34	2-52	3-94	5-61	3-61	6-77	3-84	6-01	‡	5-13	4-87	4-62	3-25	6-69	3-72	7-08	5-16	3-50	3-90	11-35	1902

TRAFFIC.

11-02	6-13	12-53	17-60	7-59	8-49	...	5-21	8-75	10-77	11-58	23-36	9-44	10-75	11-07	17-64	23-78	...	17-73	7-70	16-40	22-31	19-64	1898
11-19	6-20	12-62	16-31	7-21	7-65	...	4-09	8-48	9-63	11-11	10-07	8-95	10-25	10-02	10-62	24-18	34-63	16-46	9-45	17-89	27-94	19-52	1899
10-11	6-44	13-58	15-96	8-42	7-89	...	5-55	6-76	9-51	10-60	17-24	8-52	9-27	11-16	12-59	20-84	23-22	16-99	8-56	13-34	20-13	21-95	1900
9-15	6-98	13-73	13-25	8-47	8-35	‡	5-69	9-06	9-93	11-03	13-49	7-22	9-35	10-68	10-06	19-29	30-05	19-77	7-70	16-93	25-29	19-10	1901
7-98	7-11	14-24	20-56	8-23	8-43	12-23	6-57	9-23	11-46	9-94	‡	7-26	9-01	10-53	10-80	19-32	23-93	13-40	8-17	15-86	23-40	19-31	1902

GENERAL.

10-78	9-60	17-33	7-34	6-24	9-74	...	3-21	8-79	10-61	12-52	41-29	7-29	7-63	19-00	30-65	17-01	...	14-77	9-89	10-20	13-01	11-30	1898
9-03	6-73	20-43	7-07	5-65	8-67	...	3-74	6-37	9-33	10-74	16-72	7-16	7-77	10-69	24-39	13-13	10-75	12-06	11-47	5-17	7-44	12-54	1899
7-03	6-59	13-14	6-74	6-30	8-76	...	3-26	5-54	8-61	9-20	23-73	7-25	6-22	7-71	29-63	15-66	9-62	13-63	9-04	4-67	7-30	12-35	1900
11-24	8-20	20-22	5-75	5-73	9-51	‡	4-13	7-73	10-73	10-43	26-73	6-45	6-30	9-59	22-74	15-32	9-71	17-53	10-67	5-87	7-10	14-43	1901
15-33	8-39	20-10	9-34	5-63	8-53	14-35	4-57	7-26	11-35	9-71	‡	6-45	6-36	10-63	23-57	15-13	8-31	14-73	10-35	5-45	7-06	13-36	1902

PROPORTION OF TOTAL WORKING EXPENSES TO GROSS EARNINGS.

57-49	63-73	95-33	79-43	43-37	51-58	...	40-35	57-33	53-67	70-17	149-37	54-91	57-87	53-41	61-15	71-64	...	76-40	53-39	53-36	72-12	79-02	1898
56-63	48-86	30-03	79-36	46-67	50-09	...	38-29	50-21	51-93	67-73	71-24	52-68	53-45	39-56	53-63	31-57	31-84	72-51	64-08	55-02	79-77	106-16	1899
44-42	49-98	73-69	73-86	49-21	47-97	...	44-39	41-59	50-26	64-73	120-04	50-49	55-62	62-49	65-89	72-63	71-95	73-12	55-23	51-99	64-71	113-07	1900
49-65	51-50	73-60	61-45	44-59	44-90	70-0	55-59	57-64	57-26	70-45	113-20	46-40	58-02	65-00	52-69	70-23	73-03	79-84	60-13	56-21	70-52	105-01	1901
51-09	54-77	37-86	79-75	46-34	47-00	70-24	52-13	55-3	59-49	63-09	‡	45-82	57-83	62-85	94-81	70-52	71-97	74-53	53-54	49-86	61-33	104-22	1902

‡ Information not available.

§ Including special and miscellaneous and steam-boat expenses.

‡ Included with the Southern Mahratta railway.

Appendix 26.
 Mileage expenses.

APPEN

Working expenses in rupees per mean mile

(Referred to in paragraphs

Note.—A reference to Appendix 2 will furnish the key

GAUGE.	5' 6"													12	13							
	Class: No.	E. B. system.		B. C.	B. N. (a) & (b)	E. C.	O. & R.	N. W. system.			G. I. P. system.		B., B. & C. I. system.			N. G. S. system.		Madras system.		B. D.	D. S.	
		1	2					3	4	5	6	7	8			9	10	11	12			13
Calendar year.	I.	5' 6" gauge.	Other gauges				Com. sec.	Mily. sec.	Total.	G. I. P. (a) to (c)	I. M. (d) to (h)	B., B. & C. I. (i) to (m)	R. M. (n) to (p)	N. G. S. (q) to (r)	H. G. V. (s)	M. (t) to (u)	S. C. & N. (v) to (w)					
ENGINEERING DEPARTMENT.																						
1898	2,293	3,210	1,320	1,318	1,031	935	1,256	1,806	1,347	1,681	2,668	778	3,075	1,092	1,308	...	1,491	...	989	3,216		
1899	2,798	5,134	1,154	1,293	1,088	886	1,281	1,488	1,689	1,546	2,724	879	3,184	1,480	1,330	...	1,403	2,501	742	1,806		
1900	3,017	4,953	1,155	1,365	1,013	1,134	1,514	1,330	1,208	1,495	1,977	849	3,365	1,733	2,252	711	1,637	...	406	2,033		
1901	3,122	3,873	1,133	1,311	1,106	†	1,500	1,500	1,305	1,449	2,204	673	1,836	1,611	926	869	1,173	896	304	2,066		
1902	3,307	4,100	1,365	1,104	1,048	†	1,545	2,009	1,416	1,833	2,237	721	2,498	1,431	1,286	1,115	1,376	999	396	1,673		
LOCOMOTIVE DEPARTMENT.																						
1898	2,054	2,121	1,042	962	1,096	1,231	1,307	2,671	1,067	2,233	5,009	1,390	4,386	1,853	1,415	...	2,405	...	714	1,108		
1899	3,193	3,405	1,008	1,083	1,040	1,143	1,232	2,792	1,117	2,309	5,248	1,513	4,431	2,162	1,532	543	2,808	3,213	714	1,241		
1900	3,471	3,864	1,063	1,057	1,378	1,470	1,832	2,697	1,183	2,264	5,268	1,646	4,521	2,651	1,649	756	2,632	3,231	616	1,279		
1901	3,602	4,947	1,243	1,163	1,199	†	1,753	3,043	1,275	2,533	5,590	1,681	3,738	2,624	1,448	802	2,605	3,915	690	1,305		
1902	3,625	5,283	1,177	1,043	1,382	†	1,761	3,023	1,307	2,520	5,941	1,870	3,998	2,328	1,892	904	2,667	2,274	555	1,597		
CARRIAGE AND WAGON DEPARTMENT.																						
1898	946	1,244	322	394	278	245	478	592	150	472	2,476	334	1,598	487	364	...	556	...	137	549		
1899	984	1,699	304	332	243	226	790	613	161	483	1,590	397	2,043	504	323	29	525	235	192	581		
1900	1,012	1,733	395	205	297	250	638	548	171	441	1,192	327	1,970	763	375	51	571	207	118	621		
1901	1,057	2,296	470	245	341	†	411	816	209	642	1,308	388	1,264	891	372	87	516	195	160	577		
1902	827	1,395	454	345	320	†	905	1,358	355	1,065	1,450	497	1,875	893	404	96	614	302	137	594		
TRAFFIC DEPARTMENT.																						
1898	2,028	4,043	933	1,032	637	672	827	1,035	451	873	2,006	*544	1,720	867	747	...	1,016	...	824	609		
1899	2,108	4,056	940	942	631	670	886	1,059	451	883	2,063	548	1,579	876	774	297	1,012	476	852	673		
1900	2,155	4,150	940	1,084	742	737	948	1,028	456	858	2,128	555	1,568	953	791	376	1,038	572	581	733		
1901	2,363	4,336	960	1,011	763	†	1,040	1,124	479	938	1,998	604	1,436	1,011	761	472	982	632	412	787		
1902	2,366	4,674	889	1,992	809	†	1,084	1,196	471	985	2,146	692	1,571	914	754	536	936	603	368	781		
GENERAL CHARGES.																						
1898	1,002	1,434	462	1,062	631	582	438	466	360	410	899	520	921	720	753	...	668	...	797	945		
1899	1,044	1,448	446	1,039	618	505	457	480	258	416	878	503	814	622	761	174	690	166	687	946		
1900	1,049	1,450	455	1,068	668	533	472	479	279	422	942	470	747	570	728	294	724	226	466	977		
1901	1,120	1,547	465	1,129	608	†	476	490	270	427	1,097	329	868	610	714	507	622	225	506	926		
1902	1,125	1,626	464	1,173	654	†	513	493	284	433	1,080	347	1,000	579	643	636	668	355	731	1,022		
TOTAL WORKING EXPENSES.*																						
1898	10,243	14,087	4,215	5,253	3,800	3,719	4,566	6,725	3,316	5,795	13,626	3,847	12,239	5,000	4,813	...	6,256	...	4,176	6,476		
1899	11,032	16,790	4,015	5,025	3,781	3,516	4,913	6,632	3,722	5,795	13,102	4,102	12,470	5,785	5,417	1,044	6,591	6,937	3,324	5,393		
1900	11,511	17,008	4,197	5,631	4,370	4,291	5,599	6,279	3,385	5,452	12,218	4,246	12,193	6,853	6,167	2,209	6,907	4,461	2,178	5,720		
1901	12,165	17,933	5,060	5,489	4,309	†	5,418	7,136	3,591	6,149	12,820	3,885	9,604	6,993	4,370	2,792	6,169	6,121	2,234	5,813		
1902	11,940	18,284	4,569	5,352	4,493	†	6,079	8,346	3,898	7,046	13,591	4,360	11,313	6,400	5,281	3,373	6,565	4,727	2,359	5,686		

* Includes special and miscellaneous expenditure, direct charges.

† Transferred partly

‡ Information

§ Included with the N.B.—Excludes Cherra-Companyganj railway which

DIX 26.

worked of each railway (by systems).

Appendix 26.
Mileage expenses.

38 and 42 of Report.)

to the code letters used to denote railway systems.

3' 3 1/2"										2' 6"							2' 0"				Gauge.
14	15	16	17		18	19	20	21		22	23	24	25	26	27	28	29	30	31	32	Class No.
A. B. (a)	D.	B. & N. W.	R. & K. SYSTEM.		J. B.	U. C.	B. G. J. P.	S. M.		S. I.	B.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	O. H.	H. A.	H. S.	J.	Calendar year.
			R. & K. (a) & (b)	P. L. (c)				S. M. (d) to (g)	W. I. P. (h)												
ENGINEERING DEPARTMENT.																					
2,070	956	888	673	...	493	471	657	763	1,034	831	1,371	414	553	267	...	917	1,509	1,158	624	897	1898
1,030	1,034	967	812	...	554	373	598	764	1,142	744	1,314	519	541	278	521	879	1,017	1,388	561	1,013	1899
1,016	867	972	707	...	406	392	560	841	1,315	837	1,264	449	602	289	543	850	1,373	978	608	1,157	1900
942	784	946	651	‡	505	441	579	919	1,475	792	1,340	438	325	302	580	753	1,057	1,080	719	412	1901
912	745	966	844	311	451	458	539	849	§	908	1,439	336	533	290	517	745	1,026	1,162	630	798	1902
LOCOMOTIVE DEPARTMENT.																					
693	1,995	655	543	...	497	431	773	988	1,624	1,580	1,797	790	1,077	382	...	663	1,671	563	444	622	1898
632	1,748	781	627	...	672	517	779	1,058	2,021	1,618	1,929	929	831	435	460	687	1,717	1,075	490	719	1899
585	2,372	794	592	...	773	734	836	1,183	1,838	1,481	2,096	1,276	856	482	494	750	1,941	1,293	403	612	1900
544	3,283	783	705	‡	681	572	695	1,123	1,939	1,719	2,187	1,057	801	443	556	753	1,853	1,593	650	1,141	1901
657	2,123	875	819	384	686	507	612	1,288	§	1,539	2,298	830	762	482	611	718	1,838	1,135	513	935	1902
CARRIAGE AND WAGON DEPARTMENT.																					
153	548	164	179	...	63	53	147	275	316	474	458	163	200	79	...	239	863	371	172	181	1898
185	1,065	182	221	...	78	169	146	309	375	444	440	182	242	116	139	381	1,001	370	144	834	1899
141	774	227	233	...	96	62	160	331	418	466	498	180	139	96	247	350	1,275	314	101	237	1900
159	212	209	277	‡	76	216	158	355	411	487	528	172	143	167	163	228	1,064	331	138	214	1901
173	211	200	264	107	118	219	105	340	§	486	515	149	157	181	140	299	861	304	121	354	1902
TRAFFIC DEPARTMENT.																					
563	1,179	553	452	...	182	207	483	534	966	743	1,032	441	1,065	566	...	760	1,003	1,287	851	712	1898
502	1,133	532	474	...	195	283	474	546	1,128	714	969	447	768	514	1,064	783	1,325	1,567	942	725	1899
533	1,164	596	477	...	214	319	494	577	1,127	707	942	501	695	514	988	800	1,353	1,642	1,013	718	1900
506	1,336	653	524	‡	184	293	413	561	1,118	684	962	405	784	518	1,025	828	1,190	1,538	1,006	559	1901
506	1,302	679	565	235	215	298	424	562	§	688	960	342	758	524	1,088	782	1,363	1,468	972	592	1902
GENERAL CHARGES.																					
781	526	455	525	...	112	207	476	570	1,784	574	733	399	1,814	403	...	638	1,463	801	540	417	1898
802	491	430	537	...	127	212	460	523	1,872	572	727	473	1,778	387	330	660	1,608	454	251	460	1899
712	491	446	529	...	127	262	447	501	1,879	601	632	346	1,714	385	346	650	1,431	415	253	416	1900
641	579	442	597	‡	134	252	447	530	1,929	612	648	361	1,772	423	331	733	1,679	533	283	423	1901
715	668	447	571	273	150	235	438	550	§	611	673	344	1,988	411	331	623	1,726	501	293	414	1902
TOTAL WORKING EXPENSES.*																					
4,305	5,323	2,878	2,790	...	1,549	1,380	2,633	3,233	5,824	4,321	5,497	2,249	4,892	1,705	...	3,279	8,107	4,530	2,649	2,867	1898
5,135	5,550	3,201	3,100	...	1,810	1,675	2,358	3,297	6,753	4,209	5,480	2,654	4,240	1,734	2,514	3,450	9,485	4,921	2,388	3,047	1899
3,060	5,746	3,234	2,900	...	1,715	1,965	2,609	3,530	6,715	4,189	5,566	2,803	3,798	1,799	2,460	3,500	8,804	4,647	2,181	3,855	1900
2,870	6,196	3,196	2,817	1,185	1,635	1,364	2,352	3,583	7,028	4,399	5,895	2,670	4,106	1,877	2,663	3,247	9,300	5,104	2,806	3,067	1901
3,102	5,050	3,410	3,148	1,346	1,710	1,787	2,172	3,684	§	4,341	6,112	2,037	4,511	1,910	2,708	3,160	9,112	4,614	2,546	3,114	1902

rest of leased lines and contribution to Provident Fund.
to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.
not available.
Southern Mahratta railway.
was closed from 25th March 1900 and subsequently abandoned.

Appendix 27.
Train-mile expenses.

Working expenses per train-mile

(Referred to in paragraphs

N.B.—A reference to Appendix 2 will furnish the key

GAUGE.	5'6"																									
	Class No.	1		2		3		4		5		6			7 G. I. P. SYSTEM.		8 B. B. & C. I. SYSTEM.		9 N. G. S. SYSTEM.		10 MADRAS SYSTEM.		11		12	
		Calendar year.	E. I.	E. B. SYSTEM.		B. C.	B. N. (a) & (b).	E. C.	O. & R.	N. W. SYSTEM.			G. I. P. (a) to (c).	I. M. (d) to (h).	B. B. & C. I. (i) to (m).	R. M. (j) to (k).	N. G. S. (a) & (b).	H. G. V. (c).	M. (a) to (c).	S. C. & N. (d) & (e).	B. D.	D. S.				
ENGINEERING DEPARTMENT.																										
1898	0'32	0'48	0'43	0'44	0'49	0'53	0'44	0'49	1'04	0'56	0'42	0'40	0'72	0'35	0'49	...	0'49	...	0'78	1'10						
1899	0'37	0'68	0'37	0'44	0'54	0'47	0'41	0'42	1'32	0'53	0'43	0'42	0'73	0'43	0'49	...	0'45	0'90	0'69	0'55						
1900	0'39	0'64	0'36	0'45	0'37	0'47	0'47	0'41	0'92	0'48	0'31	0'36	0'77	0'44	0'62	0'45	0'49	...	0'48	0'71						
1901	0'39	0'51	0'36	0'49	0'48	†	0'47	0'38	0'85	0'45	0'35	0'39	0'52	0'42	0'33	0'45	0'34	0'36	0'26	0'72						
1902	0'42	0'52	0'44	0'42	0'39	†	0'41	0'49	0'81	0'53	0'32	0'25	0'68	0'42	0'40	0'54	0'42	0'55	0'32	0'64						
LOCOMOTIVE DEPARTMENT.																										
1898	0'42	0'41	0'34	0'32	0'53	0'72	0'49	0'73	0'83	0'74	0'79	0'72	1'62	0'60	0'53	...	0'80	...	0'53	0'40						
1899	0'43	0'45	0'32	0'37	0'52	0'60	0'41	0'78	0'87	0'79	0'83	0'74	1'01	0'63	0'57	0'62	0'89	1'16	0'65	0'42						
1900	0'45	0'51	0'33	0'35	0'50	0'61	0'37	0'84	0'90	0'85	0'84	0'72	0'95	0'68	0'49	0'48	0'62	1'42	0'60	0'45						
1901	0'45	0'65	0'39	0'43	0'52	†	0'49	0'77	0'84	0'78	0'88	0'72	1'06	0'69	0'52	0'43	0'75	1'57	0'64	0'48						
1902	0'46	0'67	0'38	0'39	0'50	†	0'47	0'73	0'75	0'73	0'86	0'66	1'09	0'69	0'61	0'44	0'80	1'26	0'46	0'62						
CARRIAGE AND WAGON DEPARTMENT.																										
1898	0'13	0'17	0'10	0'13	0'13	0'14	0'18	0'16	0'12	0'16	0'39	0'17	0'38	0'16	0'13	...	0'19	...	0'11	0'20						
1899	0'13	0'23	0'10	0'11	0'12	0'12	0'27	0'17	0'13	0'17	0'25	0'19	0'47	0'15	0'12	0'03	0'17	0'08	0'17	0'19						
1900	0'13	0'22	0'12	0'07	0'11	0'10	0'20	0'17	0'13	0'16	0'19	0'14	0'43	0'20	0'09	0'03	0'17	0'09	0'12	0'22						
1901	0'13	0'30	0'13	0'09	0'15	†	0'11	0'21	0'14	0'20	0'21	0'17	0'36	0'23	0'13	0'04	0'15	0'08	0'14	0'20						
1902	0'11	0'18	0'14	0'13	0'12	†	0'24	0'33	0'21	0'31	0'21	0'17	0'51	0'26	0'20	0'04	0'19	0'17	0'11	0'23						
TRAFFIC DEPARTMENT.																										
1898	0'28	0'33	0'30	0'24	0'30	0'39	0'29	0'28	0'35	0'29	0'32	0'28	0'40	0'28	0'28	...	0'33	...	0'64	0'22						
1899	0'28	0'34	0'30	0'32	0'31	0'35	0'29	0'30	0'35	0'30	0'30	0'26	0'36	0'25	0'29	0'34	0'32	0'37	0'78	0'23						
1900	0'28	0'35	0'29	0'35	0'27	0'30	0'30	0'32	0'35	0'32	0'34	0'24	0'34	0'24	0'24	0'24	0'31	0'25	0'60	0'26						
1901	0'29	0'37	0'30	0'37	0'33	†	0'29	0'29	0'31	0'29	0'31	0'26	0'41	0'27	0'27	0'24	0'29	0'23	0'36	0'27						
1902	0'30	0'39	0'28	0'41	0'30	†	0'29	0'29	0'27	0'29	0'31	0'24	0'43	0'27	0'21	0'26	0'28	0'33	0'30	0'30						
GENERAL CHARGES.																										
1898	0'14	0'19	0'15	0'15	0'10	0'14	0'15	0'13	0'20	0'14	0'16	0'26	0'22	0'20	0'28	...	0'22	...	0'62	0'35						
1899	0'14	0'19	0'14	0'15	0'11	0'26	0'15	0'13	0'20	0'14	0'14	0'24	0'19	0'18	0'28	0'20	0'22	0'06	0'63	0'33						
1900	0'14	0'19	0'14	0'14	0'24	0'22	0'15	0'15	0'21	0'16	0'15	0'21	0'16	0'14	0'21	0'19	0'22	0'10	0'42	0'24						
1901	0'14	0'20	0'15	0'42	0'26	†	0'13	0'12	0'18	0'13	0'17	0'14	0'25	0'16	0'25	0'26	0'18	0'09	0'44	0'33						
1902	0'14	0'20	0'15	0'44	0'25	†	0'14	0'12	0'16	0'13	0'16	0'13	0'27	0'17	0'20	0'31	0'20	0'19	0'60	0'29						
TOTAL WORKING EXPENSES.*																										
1898	1'42	1'84	1'38	1'74	1'80	2'17	1'65	1'83	2'57	1'91	2'20	1'97	2'88	1'62	1'90	...	2'06	...	1'38	2'28						
1899	1'46	2'20	1'88	1'70	1'87	1'85	1'61	1'85	2'92	1'98	2'21	1'98	2'86	1'68	2'01	1'19	2'09	2'32	2'99	1'74						
1900	1'50	2'20	1'31	1'84	1'38	1'77	1'75	1'05	2'57	2'04	1'95	1'86	2'85	1'74	1'74	1'41	2'10	1'96	2'23	1'99						
1901	1'52	2'33	1'59	2'03	1'86	†	1'51	1'82	2'35	1'89	2'01	1'65	2'73	1'84	1'56	1'44	1'80	2'48	1'94	2'01						
1902	1'52	2'30	1'46	2'02	1'68	†	1'61	2'01	2'25	2'05	1'97	1'53	2'09	1'89	1'86	1'64	1'98	2'61	1'94	2'19						

* Includes special and miscellaneous expenditure, direct
 † Transferred partly
 ‡ Information
 § Included with
 N.B.—Excludes Chera-Company's

DIX 27.

Appendix 27.
Train-mile expenses.

of each railway (by systems).

38 and 42 of Report.)

to the code letters used to denote railway systems.

3' 31"										3' 6"					3' 0"				GAUGE.		
14	15	16	17		18	19	20	21		22	23	24	25	26	27	28	29	30	31	32	CLASS No.
A. B.	D.	B. & N. W.	R. & K. SYSTEM.		J. B.	U. C.	B. G. J. P.	S. M.		S. I.	B.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	D. H.	H. A.	H. S.	J.	Calendar year.
			R. & K. (a) & (b).	P. L. (c).			S. M. (a) to (g).	W. I. P. (A).													
ENGINEERING DEPARTMENT.																					
1'30	0'31	0'34	0'37	...	0'47	0'62	0'50	0'44	0'98	0'27	0'43	0'23	0'09	0'11	...	0'58	0'48	0'55	0'36	0'86	1898
0'70	0'34	0'36	0'39	...	0'43	0'46	0'44	0'41	0'50	0'24	0'42	0'27	0'67	0'12	0'38	0'55	0'63	0'56	0'34	1'00	1899
0'74	0'27	0'36	0'34	...	0'31	0'40	0'37	0'39	0'80	0'28	0'40	0'19	1'06	0'12	0'37	0'52	0'37	0'37	0'35	1'81	1900
0'83	0'26	0'35	0'30	↓	0'45	0'58	0'51	0'45	0'83	0'26	0'43	0'25	0'64	0'11	0'39	0'46	0'66	0'38	0'42	0'31	1901
0'71	0'24	0'31	0'37	0'20	0'36	0'58	0'50	0'38	§	0'30	0'45	0'21	0'63	0'10	0'35	0'45	0'55	0'45	0'36	0'48	1902
LOCOMOTIVE DEPARTMENT.																					
0'44	0'62	0'26	0'30	...	0'47	0'57	0'58	0'57	1'51	0'51	0'57	0'44	0'18	0'16	...	0'42	0'86	0'45	0'25	0'57	1898
0'43	0'57	0'29	0'30	...	0'55	0'64	0'58	0'57	0'89	0'52	0'62	0'48	1'00	0'90	0'33	0'42	0'84	0'44	0'31	0'63	1899
0'43	0'74	0'29	0'29	...	0'56	0'75	0'55	0'54	1'12	0'51	0'67	0'53	1'29	0'19	0'33	0'45	0'79	0'49	0'24	0'63	1900
0'46	1'04	0'29	0'33	↓	0'61	0'76	0'61	0'55	1'09	0'57	0'74	0'60	0'98	0'16	0'38	0'46	0'83	0'57	0'37	1'19	1901
0'51	0'68	0'28	0'36	0'25	0'55	0'65	0'57	0'58	§	0'50	0'72	0'52	0'89	0'17	0'40	0'43	0'77	0'44	0'30	0'56	1902
CARRIAGE AND WAGON DEPARTMENT.																					
0'09	0'17	0'06	0'09	...	0'06	0'07	0'11	0'16	0'29	0'15	0'14	0'09	0'03	0'03	...	0'16	0'28	0'18	0'11	0'18	1898
0'08	0'35	0'07	0'11	...	0'06	0'21	0'11	0'17	0'17	0'14	0'14	0'09	0'28	0'06	0'10	0'21	0'31	0'14	0'08	0'73	1899
0'10	0'24	0'08	0'11	...	0'07	0'06	0'11	0'15	0'25	0'16	0'16	0'08	0'35	0'04	0'17	0'21	0'35	0'12	0'06	0'22	1900
0'14	0'07	0'03	0'13	↓	0'07	0'28	0'14	0'18	0'23	0'16	0'17	0'10	0'17	0'06	0'11	0'12	0'31	0'12	0'08	0'18	1901
0'13	0'07	0'06	0'12	0'07	0'10	0'28	0'10	0'15	§	0'16	0'16	0'09	0'18	0'06	0'09	0'18	0'23	0'13	0'07	0'21	1902
TRAFFIC DEPARTMENT.																					
0'35	0'36	0'22	0'25	...	0'18	0'27	0'37	0'31	0'90	0'24	0'33	0'25	0'18	0'24	...	0'48	0'37	0'61	0'50	0'68	1898
0'34	0'37	0'20	0'23	...	0'15	0'35	0'35	0'29	0'49	0'23	0'31	0'23	0'94	0'22	0'76	0'48	0'41	0'63	0'56	0'63	1899
0'39	0'36	0'22	0'23	...	0'16	0'33	0'33	0'26	0'69	0'24	0'30	0'21	1'35	0'21	0'67	0'48	0'30	0'63	0'59	0'70	1900
0'45	0'42	0'24	0'24	↓	0'16	0'39	0'36	0'28	0'63	0'23	0'31	0'23	0'96	0'19	0'70	0'50	0'35	0'55	0'58	0'46	1901
0'39	0'42	0'22	0'25	0'15	0'18	0'38	0'40	0'25	§	0'23	0'30	0'21	0'89	0'18	0'72	0'47	0'37	0'57	0'56	0'36	1902
GENERAL CHARGES.																					
0'49	0'16	0'18	0'29	...	0'10	0'28	0'36	0'33	1'66	0'18	0'23	0'22	0'31	0'18	...	0'42	0'47	0'37	0'31	0'39	1898
0'54	0'16	0'16	0'26	...	0'10	0'26	0'34	0'28	0'82	0'19	0'23	0'25	2'11	0'17	0'24	0'39	0'50	0'18	0'14	0'40	1899
0'52	0'17	0'17	0'26	...	0'09	0'27	0'30	0'23	1'14	0'20	0'20	0'15	3'18	0'15	0'23	0'39	0'31	0'16	0'15	0'41	1900
0'57	0'18	0'16	0'27	↓	0'12	0'34	0'39	0'26	1'09	0'20	0'21	0'20	2'16	0'15	0'22	0'45	0'40	0'19	0'16	0'35	1901
0'56	0'22	0'14	0'25	0'18	0'12	0'30	0'41	0'25	§	0'20	0'21	0'22	2'33	0'14	0'22	0'37	0'47	0'20	0'17	0'25	1902
TOTAL WORKING EXPENSES.*																					
2'70	1'64	1'12	1'53	...	1'27	1'82	1'99	1'86	5'41	1'38	1'74	1'25	0'83	0'72	...	2'13	2'56	2'18	1'53	2'71	1898
2'12	1'82	1'19	1'50	...	1'41	2'07	1'90	1'78	2'96	1'36	1'76	1'37	5'11	0'75	1'81	2'09	2'78	1'94	1'44	3'40	1899
2'23	1'79	1'20	1'40	...	1'29	2'01	1'73	1'61	4'08	1'43	1'77	1'17	7'41	0'72	1'67	2'12	2'58	1'77	1'44	3'78	1900
2'54	1'96	1'18	1'31	0'81	1'46	2'48	2'06	1'77	3'95	1'46	1'90	1'40	5'01	0'68	1'80	2'05	2'69	1'82	1'61	2'55	1901
2'41	1'63	1'10	1'38	0'87	1'38	2'31	2'03	1'67	§	1'42	1'89	1'27	5'29	0'68	1'79	1'90	2'51	1'86	1'47	1'87	1902

charges, rent of leased lines and contribution to Provident Fund, to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901. not available. the Southern Mahratta railway. railway which has been closed for traffic from 25th March 1900 and subsequently abandoned.

Appendix 28.
Fuel consumption.

APPENDIX 28.

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the Calendar years 1898 to 1902.

(Referred to in paragraphs 29 and 40 of Report.)

N.B.—A reference to Appendix 2 will furnish the key to the code letters used to denote railway systems.

Class No.	Railway.	Calendar year.	SOURCES OF SUPPLY.			DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON.									CONSUMPTION IN R.S.						
			Name.†	AVERAGE DISTANCE CARRIED IN MILES.‡		FOREIGN COAL.			INDIAN COAL.			WOOD.			Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 ton miles.			
				Coal.	Wood.	Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.								
							Including freight.	Excluding freight.		Including freight.	Excluding freight.		Including freight.	Excluding freight.							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19			
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.							
1	E. I.	1898 1899 1900 1901 1902	Bengal and Umaria.	240	...	...	...	...	...	379,716	4'12	2'08	...	...	...	60'93	50'03	468'53	164'	
				243	...	...	...	...	...	...	412,376	4'15	2'08	...	...	...	62'37	50'82	475'67	167'
				255	...	...	...	...	...	...	461,061	4'19	2'03	...	...	...	63'80	51'61	491'00	173'
				245	...	...	...	...	...	...	474,034	4'00	1'91	...	...	...	63'05	50'47	470'61	164'
				260	...	...	...	...	...	...	481,247	4'18	1'96	...	...	...	63'92	50'76	503'10	161'
2	E. B. S.	1898 1899 1900 1901 1902	Bengal.	...	...	...	...	...	...	59,420	4'79	...	...	...	...	59'01	41'62	822'06	185'	
				...	...	...	...	...	...	...	56,305	5'01	...	...	...	...	62'83	44'37	844'02	194'
				177	...	...	...	...	...	...	62,485	5'09	2'00	...	...	...	68'39	48'47	881'82	201'
				186	...	...	...	...	...	...	65,477	5'93	2'20	...	...	...	71'66	51'09	1008'11	226'
				167	...	...	...	...	...	...	67,891	6'10	3'48	...	...	...	69'80	49'57	889'42	202'
3	B. C.	1898 1899 1900 1901 1902	Bengal.	162	...	...	...	...	...	9,822	6'04	3'00	...	...	...	58'31	50'18	3079'34	265'	
				162	...	...	...	...	...	...	9,264	6'24	3'25	...	...	...	50'59	45'79	1662'07	126'
				162	...	...	...	...	...	...	9,385	6'35	3'00	...	...	...	48'02	40'92	1106'46	122'
				162	...	...	...	...	...	...	8,710	6'20	3'00	...	...	...	52'05	41'75	1283'43	123'
				162	...	...	...	...	...	...	8,466	6'27	3'00	...	...	...	51'47	41'24	1,368'09	202'
4	B. N.	1898 1899 1900 1901 1902	Bengal and Umaria.	266	...	...	...	...	...	46,571	6'40	2'99	...	...	...	53'47	48'47	671'57	123'	
				269	...	...	...	...	...	...	60,955	6'82	3'39	...	...	...	58'64	52'91	567'92	121'
				242	...	...	...	...	...	...	101,215	5'99	2'99	...	...	...	68'30	61'62	508'83	124'
				331	...	...	...	...	...	...	95,211	6'26	2'50	...	...	...	57'99	51'92	826'90	128'
				321	...	...	...	...	...	...	113,180	4'29	2'48	103	5'60	5'60	59'84	55'37	759'43	175'
5	R. D.	1898 1899 1900 1901 1902	Bengal.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				482	...	...	...	...	...	...	369	8'12	2'44	...	...	...	...	...	...
				481	...	...	...	...	...	...	...	599	8'06	2'38	...	...	...	...	...	...
				480	...	...	...	...	...	...	...	334	6'41	2'37	...	...	...	...	...	...
			
6	P. L. L.	1898 1899 1900 1901 1902	Bengal.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				
			
			
				603	...	...	...	...	...	...	...	350	7'96	2'37	...	...	...	...	...	...
7	E. C.	1898 1899 1900 1901 1902	Bengal and Singareni.	284	...	...	...	...	...	21,979	7'42	...	...	...	...	52'21	44'61	855'63	170'47	
				220	...	...	...	...	...	...	37,247	7'32	...	...	...	...	55'99	50'47	812'89	180'45
				249	53,479	7'47	60'38	56'00	689'85	178'11
			
			
8	O. & R.	1898 1899 1900 1901 1902	Bengal.	507	...	...	...	...	...	48,136	10'53	3'87	...	...	...	40'70	34'55	587'03	132'09	
				537	...	...	...	...	...	...	56,878	10'33	3'37	...	...	...	41'56	35'57	573'19	135'81
				528	...	...	...	...	...	...	76,503	10'18	3'18	...	...	...	49'85	42'05	811'20	177'86
				528	...	...	...	...	...	...	92,868	10'36	2'97	...	...	...	51'04	43'60	784'05	172'47
				674	...	...	...	...	...	...	98,775	9'38	2'53	...	...	...	51'66	44'36	819'01	171'31
9	N. W.	1898 1899 1900 1901 1902	England, Bengal, Dandot, Bhagan-wala and Khosr.	5838	...	24,385	...	17'68	139,039	14'23	11'24	171,097	5'07	...	49'20	45'55	507'51	141'39			
				5838	...	29,768	...	19'20	144,878	15'63	7'56	145,808	5'27	...	50'54	44'61	353'11	141'39			
				5838	...	24,035	...	26'80	158,458	17'25	7'44	123,828	5'36	...	53'25	46'59	680'47	171'20			
				5838	...	11,074	...	22'27	194,134	16'81	5'38	180,521	5'21	...	51'21	44'93	500'93	146'71			
				5838	...	7,206	...	20'61	243,379	11'1	5	122,323	...	...	52'84	46'30	593'84	166'46		
10	K. K. T. & N. D.	1898 1899 1900 1901 1902	Bengal and Dandot.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
					
				
				
				

* Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.
 † The name of the sources of supply is for coal only. Wood was supplied from various sources.
 ‡ The distance is reckoned either from the sources of supply or from the places of delivery to several storages.
 § Of Bengal coal only.
 ¶ Excluding Bengal coal.
 †† Includes Nowshera-Durgal during the 1st-half of 1901.
 ‡‡ The figures against 1901 are for second-half only, those for the 1st-half are included with North-Western railway.
 §§ Bengal coal via Kiamari Rs. 13'62 and via Ghaziabad Rs. 15'44.
 ¶¶ Bengal coal from Rs. 2'37 to Rs. 3'00 and Khosr and Dandot coal between Rs. 7 and Rs. 13 and Khosr patent fuel at Rs. 20.

APPENDIX 28—contd.

Appendix 28.
Fuel consumption.

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the Calendar years 1898 to 1902—contd.

(Referred to in paragraphs 29 and 40 of Report.)

N.B.—A reference to Appendix 2 will furnish the key to the code letters used to denote railway systems.

Serial No.	Railway.	Calendar year.	SOURCES OF SUPPLY.			DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON.									CONSUMPTION IN LB.*			
			Name. †	AVERAGE DISTANCE CARRIED IN MILES. ‡		FOREIGN COAL.			INDIAN COAL.			WOOD.			Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.
				Coal.	Wood.	Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.					
							Including freight.	Excluding freight.		Including freight.	Excluding freight.		Including freight.	Excluding freight.				
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19			
7 (a)	G. I. P.	1898 1899 1900 1901 1902	England, Bengal, Singareni, Umari, Nerbuda and Warora.	350 350 371 318 294	...	1,216 197 ...	Ra. 19'50	Ra. 19'30	298,631 337,716 376,243 381,380 425,936	8'52 8'31 7'86 8'57 8'38	5'16 5'48 5'24 6'18 5'98	3,018 3,511 3,383 4,349 4,313	Ra. 3'97 3'36 3'03 3'62 3'81	59'42 64'77 64'79 66'00 66'79	51'47 56'73 59'91 57'26 58'11	779'11 702'36 819'32 704'21 719'09	102'17 200'41 200'94 198'21 193'03	
7 (b)	G. L.	1898 1899 1900 1901 1902	Bengal and Mohpani.	...	...	...	...	...	962 886 1,400	...	...	47 16 ...	...	29'06 37'71 35'03	...	...	...
8 (a)	B. B. & C. I.	1898 1899 1900 1901 1902	England, Bengal and Singareni.	168 164 164 138 128	...	8,283 26,212 16,136 5 7,477	17'66 19'68 22'73 27'00 20'00	...	67,128 53,048 74,587 77,916 65,559	13'52 13'16 15'84 16'13 15'98	...	3,540 1,825 2,175 2,019 2,063	5'42 4'05 3'88 3'30 3'27	61'93 56'02 58'81 60'26 58'11	52'52 46'97 50'17 51'16 48'99	489'95 492'76 510'34 524'84 543'66	160'07 147'24 146'31 155'17 154'30	
9 (a)	G. D. & R.	1898 1899 1900 1901 1902	England and Bengal.	...	...	153 184 148 ...	...	...	927 950 1,045 1,245 1,039	...	...	68 91 59 54 24	...	23'93 24'24 24'25 25'68 24'18	23'77 23'78 24'14 25'48 24'02	...	...
9 (b)	N. G. S.	1898 1899 1900 1901 1902	Singareni.	105 105 101 102 103	...	...	...	...	29,897 27,675 36,025 29,307 30,213	...	4'61 4'60 4'36 4'60 4'66	...	...	70'61 65'02 69'00 63'54 67'00	62'49 56'97 60'79 54'15 56'75	550'83 493'99 541'05 581'37 567'37	160'13 163'48 172'81 174'91 173'81
9 (c)	H. G. V.	1898 1899 1900 1901 1902	Singareni.	...	...	493 321 341	...	...	8,069 13,851 14,442	10'77 7'19 6'98	4'30 4'50 4'66	...	...	44'00 41'00 40'12	40'39 37'71 36'11	1,107'34 1,180'82 1,026'21	264'19 231'24 219'62
10 (a)	M.	1898 1899 1900 1901 1902	England, Bengal and Singareni.	...	14 17 294 434 313	25 37 229 125 ...	24'59 26'00 32'00 32'90 ...	8'14 8'18 12'50 12'50 ...	37,092 43,555 44,900 94,484 97,546	13'06 12'64 12'67 13'32 10'32	...	86,721 86,212 87,615 94,593 102,529	5'20 5'14 4'93 5'74 4'97	4'00 4'70 4'60 5'42 4'68	61'50 64'87 63'40 63'96 68'64	51'41 53'70 52'81 54'19 57'05	918'14 1,003'94 997'90 832'19 974'72	210'28 225'28 226'96 212'76 227'03
10 (b)	S. C. & N.	1898 1899 1900 1901 1902	England, Bengal and Singareni.	328 328 328 241	...	1,004 1,229 1,810 1,875	31'12 38'03 38'03 31'67	8'18 12'50 12'50 27'57	11 8 9 ...	17'77 16'79 18'45 ...	4'75 4'75 4'04 ...	157 300 385 3,315	3'94 3'87 4'00 4'43	94'41 79'14 88'82 72'38	91'15 75'52 85'85 66'69	1,110'33 1,288'00 4,390'75	654'46	
10 (c)	E. B. S.	1898 1899 1900 1901 1902	Bengal Assam. and	...	...	...	...	...	28,078 31,544 35,904 40,271 42,838	5'75 5'97 5'30 8'71 9'82	...	...	...	35'85 35'67 38'32 39'75 42'62	28'64 29'53 30'77 32'18 34'31	801'85 800'28 783'05 920'93 898'88	200'00 203'07 215'42 224'57 235'43
10 (d)	C. B.	1898 1899 1900 1901 1902	Bengal Assam. and
12	B. D.	1898 1899 1900 1901 1902	Bengal	...	...	...	...	...	927 1,020 1,378 2,730 2,496	12'95 10'27 13'11 15'84 12'33	...	...	...	44'01 61'75 53'61 49'97 40'16	33'06 47'52 37'01 41'10 23'92	...	...

* Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.
 † The name of the sources of supply is for coal only. Wood was supplied from various sources.
 ‡ The distance is reckoned either from the sources of supply or from the places of delivery to several storages.
 § Prices are given at the place of delivery which is the place of storage.
 ¶ Including sea freight from England.

Appendix 28.
Fuel consumption.

APPENDIX 28—contd.

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the Calendar years 1898 to 1902—contd.

(Referred to in paragraphs 29 and 40 of Report.)

N.B.—A reference to Appendix 2 will furnish the key to the code letters used to denote railway systems.

Class No.	Railway.	Calendar year.	SOURCES OF SUPPLY.			DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON.									CONSUMPTION IN R.				
			Name.†	AVERAGE DISTANCE CARRIED IN MILES.‡		FOREIGN COAL.			INDIAN COAL.			WOOD.			Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	
				Coal.	Wood.	Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.						
							Including freight.	Excluding freight.		Including freight.	Excluding freight.		Including freight.	Excluding freight.					
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19				
							Rs.	Rs.					Rs.	Rs.					
13	D. S.	1898 1899 1900 1901 1902	Assam	...	...	...	...	...	3,730	8'50	...	22	2'23	...	38'30	28'00	...	...
14	A. B.	1898 1899 1900 1901 1902	Bengal and Assam.	89 80 86 106 103	...	...	...	...	8,469	7'17	...	...	...	...	40'94	33'92	733'44	173'71
15	D.	1898 1899 1900 1901 1902	Bengal	46 118 118 118 ...	...	...	...	...	993	5'00	...	...	...	...	42'73	42'73	...	656'21
16 & 5 (c)	B. & N.W.	1898 1899 1900 1901 1902	Bengal	274 294 301 228 252	90 90 83 27 25	...	...	...	24,668	5'40	2'70	13,260	3'50	3'50	29'46	24'63	532'64	153'72
17 (d) & (h)	R. & K.	1898 1899 1900 1901 1902	Bengal	669 669 669 677 677	...	...	...	...	269	14'50	4'31	12,967	3'42	...	24'11	20'03	538'53	134'63
17 (c)	P. W. L.	1898 1899 1900 1901 1902
18 (g) to (h)	R. M.	1898 1899 1900 1901 1902	England, Bengal and Singapore.	687 733 719 720 722	...	95 20,548 11,703 260 ...	17'50 24'74 26'43 ...	17'50 19'65 20'30 ...	84,698 82,081 112,653 118,778 113,360	14'49 18'82 18'20 18'24 16'57	5'62 5'11 9'41 6'84 5'74	4,338 2,054 2,121 2,900 2,183	5'00 5'00 5'00 5'00 5'00	...	32'44 35'41 37'76 39'17 39'84	28'36 31'15 33'60 34'49 34'02	414'14 419'71 411'38 415'75 447'79	146'95 151'71 155'29 160'57 164'30	
18	J. B.	1898 1899 1900 1901 1902	Bengal and Palana.	1,009 908 913 665 467	...	...	...	...	5,352	20'24	3'37	...	...	...	30'24	27'66	627'75	158'24
19	U. C.	1898 1899 1900 1901 1902	Bengal, Warora and Mohpani.	705 1,000 1,032 826 875	...	...	...	...	641	26'27	4'50	6	12'44	...	31'14	27'37	1,451'60	190'04
20	B. G. J. P.	1898 1899 1900 1901 1902	England, Bengal and Palana.	60 68 59 61 52	...	3,288 4,006 1,725 254 1,494	26'00 25'00 ...	...	4,572	18'25	...	61	3'75	...	29'91	27'36	885'75	183'86

* Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.
† The name of the sources of supply is for coal only. Wood was supplied from various sources.
‡ The distance is reckoned either from the sources of supply or from the places of delivery to several storages.
§ Prices are given at the place of delivery which is the place of storage.

APPENDIX 28—concl'd.

Appendix 28.
Fuel consumption.

Coal and wood fuel consumed by each railway (by systems) and price paid per ton, etc.—concl'd.

(Referred to in paragraphs 29 and 40 of Report).

N.B.—A reference to Appendix 2 will furnish the key to the code letters used to denote railway systems.

Class No.	Railway.	Calendar year.	SOURCES OF SUPPLY.			DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON.									CONSUMPTION IN B. *							
			Name. †	AVERAGE DISTANCE CARRIED IN MILES. ‡		FOREIGN COAL.			INDIAN COAL.			WOOD.			Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.				
				Coal.	Wood.	Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.									
							Including freight.	Excluding freight.		Including freight.	Excluding freight.		Including freight.	Excluding freight.								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19				
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.								
31	S. M.	{ 1898 1899 1900 1901 1902	Singareni.	{ 480 469 468 481 402	{ 73 68 68 92 96	...	...	...	34,882	13'34	4'50	31,170	6'25	4'08	39'16	35'34	679'14	211'8	
				{ 469 468 481 402	{ 68 68 92 96	...	...	...	35,842	13'13	5'00	34,978	5'54	4'08	30'43	35'04	643'38	205'61	
				{ 468 481 402	{ 68 92 96	...	...	...	45,107	13'46	5'00	43,823	5'23	4'08	40'09	35'77	754'50	218'3	
				{ 481 402	{ 92 96	...	...	...	35,582	13'38	5'00	49,588	5'20	4'08	38'41	37'01	818'19	217'31	
32	W. I. P.	{ 1898 1899 1900 1901 1902	England.	{ ...	{ ...	{ 32 65 14 18	3,052	40'42	47'35	...	137'3			
				{ ...	{ ...	{ 65 14 18	5,919	46'78	44'36	...	202'8	
				{ ...	{ ...	{ 14 18	4,239	45'58	44'33	...	301'7
				{ ...	{ ...	{ 18	4,698	4'62	4'50	40'42	45'48	1,160'83	290'8
22	S. I.	{ 1898 1899 1900 1901 1902	Bengal and Singareni.	{ 61 51 57 60 63	...	...	...	...	41,884	12'86	...	36,431	4'79	...	36'24	30'74	1,196'74	231'75
				{ 51 57 60 63	...	...	...	...	49,566	12'95	...	13,402	4'75	...	35'06	31'21	1,048'01	227'5
				{ 57 60 63	...	...	...	...	51,082	13'13	...	1,858	4'54	...	35'08	32'04	1,003'16	218'74
				{ 60 63	...	...	...	...	55,120	13'25	...	1,343	4'50	...	34'59	31'66	823'48	201'3
33	B.	{ 1898 1899 1900 1901 1902	England, Bengal and Burma.	{ 105 105 128 131 120	...	290 694	43'48	...	43,803	14'04	...	26,738	3'51	...	41'53	35'04	875'03	216'8				
				{ 105 128 131 120	...	...	...	46,595	15'39	...	30,105	3'64	...	45'12	37'21	929'54	231'6		
				{ 128 131 120	...	...	...	58,020	15'62	...	44,826	3'70	...	49'80	41'12	950'88	273'7		
				{ 131 120	...	5,062	26'75	...	70,406	14'88	...	43,301	3'53	...	54'67	44'74	1,013'12	280'0				
34	M. R. W.	{ 1898 1899 1900 1901 1902	England and Bengal.	{ 386 336 386 386 386	...	1,268 1,224 1,373 2	28'31 30'50 27'74 34'80	21'00 19'00 20'00 26'80	298 416 1,286 2,125 1,623	25'79 27'32 28'10 25'67 23'74	17'00 17'00 19'00 17'00 15'74			
				{ 336 386 386 386	
				{ 386 386 386	
				{ 386	
25	R. L.	{ 1898 1899 1900 1901 1902	...	{ ... ... ... ... ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{			
				{		
				{		
26	B. P.	{ 1898 1899 1900 1901 1902	Bengal.	{ 126	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 126			
				{ 126		
				{		
28	T. B.	{ 1898 1899 1900 1901 1902	Assam.	{ ... ... ... ... ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{			
				{		
				{		
29	D. H.	{ 1898 1899 1900 1901 1902	Bengal.	{ 404 404 404 404	...	...	...	...	3,352 3,067 3,385 3,052 3,422	...	...	...	...	...	...	...	...	...
				{ 404 404 404			
				{ 404			
				{			
TOTAL		{ 1898 1899 1900 1901 1902		{ ... ... ... ... ...	...	39,055 83,039 56,581 13,248 23,417	...	...	1,418,241 1,460,771 1,858,031 1,936,631 2,096,095	...	...	...	386,419 347,729 340,830 409,149 444,716	...	...	...	...	...
				{				
				{			
				{				

* Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.
 † The name of the sources of supply is for coal only. Wood was supplied from various sources.
 ‡ The distance is reckoned either from the sources of supply or from the places of delivery to several storages.
 § Prices are given at the place of delivery which is the place of storage.
 ¶ This distance is by rail; the distance by sea is 637 miles.
 †† This is the freight up to Siliguri.
 N.B.—Information is not available for railways not mentioned in this statement.

Appendix 29.
Coal production.

APPENDIX 29.

Coal produced in India during the Calendar years 1885 to 1902.
(Referred to in paragraphs 29 and 40 of Report.)

YEARS.	QUANTITY PRODUCED IN EACH PROVINCE.												Quantity of Indian coal consumed by railways in India.	QUANTITY OF INDIAN COAL EXPORTED BY SEA.		QUANTITY OF FOREIGN COAL IMPORTED INTO INDIA.	
	Beagal.	Central Provinces.	Assam.	Central India.	Nizam's territory.	Punjab.	Kashmir.	Balu-chistan.	Rajputana (Bikaner).	Madras.	Burma.	Total.		To Indian ports excluding Burma.	To ports outside India including Burma.	From United Kingdom.	From other countries.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.		Tons.	Tons.	Tons.	Tons.
1885.	1,123,700	119,116	43,707	7,698	...	...	...	...	...	...	...	1,294,221	486,716	500	778,643	40,659	
1886.	1,186,802	117,287	70,859	13,539	...	...	...	...	...	...	...	1,388,487	470,075	199	608,482	44,652	
1887.	1,319,090	128,981	89,302	15,497	3,259	7,523	...	411	...	...	...	1,564,063	488,774	315	786,149	43,010	
1888.	1,380,594	157,768	101,528	41,520	13,382	11,249	...	2,802	...	...	...	1,708,903	551,770	15,796	785,776	20,163	
1889.	1,541,356	144,465	116,676	52,956	59,646	22,835	...	8,218	...	...	...	1,946,172	715,240	39,978	717,024	52,120	
1890.	1,826,245	137,023	145,708	77,842	125,486	40,677	...	15,541	...	...	...	2,168,521	654,829	26,336	631,725	21,857	
1891.	1,747,122	141,736	154,208	69,741	144,668	60,714	...	10,368	...	20	...	2,328,577	797,148	4,515	726,069	17,344	
1892.	1,920,050	132,005	164,050	88,623	149,601	66,352	...	12,284	...	61	3,670	2,537,606	885,492	15,725	628,374	23,123	
1893.	1,902,866	135,118	164,420	94,348	157,471	77,294	...	20,094	...	502	9,938	2,562,001	924,000	52,302	616,319	18,066	
1894.	2,035,934	140,495	169,448	132,837	240,525	66,467	...	24,753	...	1,337	12,111	2,823,907	1,062,748	143,813	154,282	675,043	57,112
1895.	2,716,155	122,776	172,717	118,479	292,915	72,493	...	25,458	...	1,737	17,289	3,540,019	1,119,621	162,276	211,407	773,675	15,458
1896.	3,037,920	141,185	177,259	115,386	262,681	79,017	...	26,257	...	...	22,993	3,863,698†	1,182,051	389,842	191,030	524,420	93,212
1897.	3,142,497	131,629	185,533	124,778	365,550	92,792	...	12,043	...	...	11,472	4,066,294	1,328,120	731,742	300,979	210,257	47,016
1898.	3,622,090	149,709	200,329	131,726	394,622	85,862	...	13,372	511	...	6,975	4,608,196	1,418,241	737,689	490,290	297,076	34,209
1899.	4,035,265	156,576	225,693	164,569	401,216	81,835	...	15,822	4,249	...	8,105	5,093,260	1,560,771	672,311	467,306	406,451	112,064
1900.	4,978,492	172,842	216,736	164,489	469,291	74,083	...	23,281	9,250	...	10,228	6,118,692	1,858,061	1,010,709	711,874	91,710	43,939
1901.	5,487,585	191,516	254,100	164,362	421,218	67,730	...	24,656	12,094	...	12,466	6,635,727	1,956,631	1,157,892	845,953	112,519	79,108
1902.	6,196,216	196,981	221,096	171,538	455,424	55,373	1,058	37,914	16,503	...	13,302	7,360,405	2,096,095	974,602	728,316	198,574	20,773

* Up to 1893 figures in this column relate to official years and exclude exports to Burma ports.
† Including 1,000 tons, produced in the United Provinces of Agra and Oudh in 1896.

APPENDIX 30.

Collieries owned and worked by Railways or the State.

(Referred to in paragraph 41 of Report.)

PARTICULARS.	KURHURBAREE AND SERAMPORE.		WARORA.		DANDOT.		KHOSI.		REMARKS.
	1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.	
Name of owner	East Indian Railway.		State		North State	Western Railway.	North State	Western Railway.	
Capital outlay . . . Rs.	15,00,157 ^a	16,35,576 ^a	16,23,122	15,25,388	1,25,536	1,85,460	2,05,626	2,65,746	^a This outlay is made up of the purchase money, Rs. 3,05,154, which represents half the original cost of buildings, plant, etc., paid to the East Indian Railway Company on valuation, and the capital expenditure incurred from 1st January 1880. † Approximate.
Output	Large Coal Tons.	473,078	5,18,778	117,487	1,20,397	43,282	37,402	12,172	16,288
	Small Coal Tons.	24,927	38,513	30,983	32,939	4,845	3,431	1,203	1,470
	Slack Coal Tons.	63,165	56,498	—	—	19,604	14,532	5,096	2,184
	Total Tons.	561,170	613,789	148,470	153,336	67,731	55,385	18,471	25,942
Quantity issued . . Tons.	596,265	5,76,882	148,470	153,336	67,721	55,384	18,431	25,982	
Earnings Rs.	11,21,339	11,99,981	6,91,280	7,00,028	5,53,604	3,62,161	2,17,503	2,77,631	
Working expenses . . Rs.	11,21,359	11,99,981	4,33,127	4,38,998	4,02,662	3,64,221	1,70,691	2,58,983	
Net earnings . . . Rs.	—	—	2,58,153	2,61,030	1,50,942	—2,160	46,812	—18,648	
Percentage on Capital .	—	—	15'30	17'11	120'24	—	22'77	7'01	
Average No. of persons employed daily . . .	7,659	8,500	1,265	1,287	1,536	1,569	458	639	
Number of tons raised per person employed . .	.74	.72	117	119	44	36	41	41	
Number of persons killed	3	2	2	1	—	1	6	4	
Number of persons injured	25	42	4	5	3	12	2	5	

Appendix 3I.
Loads—Coaching.

Average load and weight of Coaching

N.B.—A reference to Appendix 2 will furnish the key

GAUGE.	5' 6"																	
	CLASS No.	E.B.S. system.			B. N. system.				N.-W. system.			G. I. P. system.		B., B. & C. I. system.		N. G. S. system.		
		E. I.	5' 6" gauge.	Other gauges.	B. C.	B. N. (a)	R. D. (b)	E. C. †	O. & R.	Mily. Sec.	Comm. Sec.	Total. (a) to (e)	G. I. P. (a) to (c)	I. M. (d) to (g)	B., B. & C. I. (a) to (f)	R. M. (g) to (k)	N. G. S. (a) & (b)	H. G. V. (c)	M. (a) to (e)
AVERAGE NUMBER OF PASSENGERS IN A COACHING TRAIN.																		
1ST CLASS.																		
1898	1'65	1'44	1'16	0'51	0'78	...	0'71	1'52	1'08	1'99	1'89	2'23	2'73	2'34	0'84	3'09	...	2'74
1899	1'54	1'66	0'93	0'47	0'90	...	1'00	1'37	1'05	1'62	1'55	2'34	2'37	2'13	0'87	3'17	...	2'88
1900	1'44	1'50	0'94	0'45	1'07	...	1'33	1'44	1'16	1'46	1'43	2'24	1'90	1'94	0'79	2'35	1'12	2'59
1901	1'35	1'35	0'84	0'41	0'87	0'11	...	1'20	1'07	1'39	1'35	2'08	...	1'95	0'85	1'16	0'68	1'90
1902	1'62	1'48	0'85	0'48	1'09	0'12	...	1'32	0'93	1'31	1'27	2'31	...	1'97	1'06	2'49	1'46	2'28
2ND CLASS.																		
1898	4'78	3'59	3'40	4'45	1'84	...	1'38	5'03	3'42	7'89	7'36	9'64	9'43	14'04	3'28	13'62	...	8'12
1899	4'46	3'50	3'28	3'07	2'46	...	2'59	4'00	2'99	4'91	4'68	9'50	6'95	14'44	3'20	15'31	...	9'40
1900	4'39	3'25	3'01	2'70	2'26	...	2'98	4'45	2'55	4'15	3'96	8'01	5'16	13'14	2'73	12'01	5'86	8'85
1901	4'43	3'44	3'01	2'07	3'09	0'19	...	4'10	2'59	4'00	4'36	8'88	...	12'66	3'58	6'93	4'10	6'68
1902	4'61	3'57	2'70	2'74	2'94	0'31	...	4'64	2'78	4'48	4'22	10'77	...	12'07	3'34	12'80	1'14	7'60
INTERMEDIATE CLASS.																		
1898	14'49	18'58	12'42	8'05	2'37	...	0'87	12'30	5'77	12'05	11'31	8'49	...	26'74	7'10	...	...	...
1899	13'98	18'72	10'62	7'48	3'16	...	1'37	10'33	6'04	12'82	12'01	10'05	...	28'24	8'29	...	...	...
1900	14'20	17'07	11'34	8'99	3'09	...	2'08	9'99	6'06	13'99	13'05	11'91	...	27'31	8'50	...	...	...
1901	14'69	18'47	11'87	12'10	6'40	1'73	...	10'50	5'71	15'44	14'27	14'90	...	27'55	9'38	...	...	0'85
1902	14'86	19'37	11'05	12'02	5'85	1'31	...	11'94	6'14	14'08	12'91	14'60	...	26'53	8'58	...	...	0'98
3RD CLASS.																		
1898	202'06	148'55	166'17	149'01	132'02	...	220'61	178'31	165'06	185'88	183'07	86'44	151'20	150'12	223'98	243'54	...	220'09
1899	200'83	157'70	164'49	144'43	208'47	...	231'89	169'93	163'24	190'63	187'42	103'89	135'95	168'45	242'12	253'94	...	185'94
1900	198'35	157'07	193'04	172'49	275'02	...	247'95	155'85	159'10	190'68	186'86	112'94	122'39	187'25	223'96	228'72	208'54	210'04
1901	207'03	160'26	170'23	210'03	233'33	101'50	...	157'05	149'07	181'04	177'19	128'55	...	185'58	266'02	118'12	108'55	192'94
1902	189'81	162'76	169'77	201'52	211'45	102'01	...	142'40	128'86	170'34	164'44	113'12	...	184'51	239'55	214'56	195'70	211'03
TOTAL NUMBER OF PASSENGERS IN A COACHING TRAIN.																		
1898	222'99	172'17	183'17	162'98	137'91	...	223'57	197'17	175'33	207'82	203'63	106'81	163'37	193'25	235'21	260'26	...	230'95
1899	220'81	181'58	179'32	155'45	215'00	...	236'85	185'64	173'33	210'00	205'67	125'78	145'28	213'27	254'59	272'63	...	198'22
1900	218'38	178'90	200'34	184'63	282'04	...	254'35	173'74	168'87	210'29	205'31	135'11	129'44	229'65	235'99	243'09	215'52	221'49
1901	228'40	192'52	185'05	224'61	242'69	103'58	...	172'85	158'44	202'47	197'17	154'41	...	227'74	279'83	126'21	113'33	202'31
1902	210'90	187'18	184'37	216'76	221'33	103'75	...	160'30	138'71	170'21	182'84	140'80	...	225'08	252'53	229'85	205'30	221'89
PERCENTAGE OF FREIGHT ON CAPACITY HAULED.																		
1ST CLASS.																		
1898	7'43	6'81	6'55	2'69	4'84	...	5'23	5'19	5'29	9'76	9'22	10'02	8'60	8'64	5'09	9'37	...	17'02
1899	6'63	6'01	5'72	2'68	5'22	...	6'18	4'86	5'15	8'27	7'88	10'40	7'94	8'00	5'06	9'56	...	17'35
1900	6'73	5'67	5'25	2'44	5'30	...	6'47	4'72	5'56	7'71	7'42	10'12	6'53	7'58	4'75	7'37	3'66	16'44
1901	6'29	5'81	5'63	2'19	5'12	3'53	...	4'54	5'91	7'33	7'17	9'97	...	7'88	5'17	6'48	3'14	12'07
1902	7'36	6'18	6'16	2'99	6'69	3'04	...	4'58	5'44	7'28	7'09	11'43	...	8'08	6'23	7'74	3'77	18'96
2ND CLASS.																		
1898	13'63	16'90	18'97	16'10	7'38	...	6'63	14'00	14'80	28'76	27'37	17'53	21'23	16'04	17'97	32'10	...	23'49
1899	13'15	16'64	19'02	11'38	9'09	...	10'53	11'07	13'30	17'95	17'53	17'13	16'67	16'24	16'38	34'32	...	27'18
1900	14'51	10'50	17'92	9'55	7'14	...	10'08	13'72	11'61	14'72	15'31	14'49	12'30	15'10	14'31	28'43	13'02	29'35
1901	13'99	11'89	21'41	10'17	12'03	6'50	...	13'28	13'38	17'79	17'38	16'68	...	14'94	19'77	28'75	16'24	24'59
1902	14'06	12'75	19'14	10'88	12'15	8'10	...	16'51	15'07	18'42	18'10	22'82	...	14'34	17'67	26'01	18'27	31'65
INTERMEDIATE CLASS.																		
1898	19'38	16'49	23'38	9'67	5'10	...	6'76	15'47	14'83	26'30	25'29	19'18	28'72	39'16	31'64	...	...	...
1899	19'10	16'11	23'64	11'12	7'64	...	13'42	14'85	16'03	26'80	25'74	22'04	30'66	44'15	31'52	...	...	...
1900	21'80	14'42	23'63	11'71	10'79	...	12'33	16'84	17'88	29'65	28'59	26'03	30'51	44'47	34'16	...	...	...
1901	21'87	15'50	28'54	12'70	17'21	...	...	20'16	16'02	31'16	29'80	27'66	...	43'27	47'46	...	...	5'05
1902	20'35	16'13	129'21	14'62	15'59	...	...	21'33	16'05	28'90	27'56	31'88	...	41'12	39'25	...	...	11'96
3RD CLASS.																		
1898	34'65	36'12	43'98	35'18	28'23	...	39'80	39'04	31'72	39'53	38'66	33'50	36'01	39'34	51'32	33'24	...	44'85
1899	34'53	38'00	44'87	29'02	37'11	...	37'62	39'66	30'98	38'06	38'10	40'19	30'08	41'55	50'05	34'87	...	42'67
1900	36'76	36'26	51'35	37'37	45'64	...	39'28	37'57	30'69	41'11	39'88	40'41	29'84	41'25	44'70	37'14	48'90	45'27
1901	37'16	38'67	51'37	41'35	39'52	24'89	...	36'90	31'64	38'51	37'68	42'171	...	41'86	50'18	35'91	43'18	44'06
1902	34'80	38'81	137'20	42'47	34'26	47'86	...	38'39	30'59	37'00	36'34	39'23	...	41'67	46'64	34'40	43'93	40'63

* Excluding the Cooch Behar Railway. † Excluding Native State section of the Cooch Behar railway. ‡ Transferred partly to Bengal

DIX 31.

Appendix 3I.
Loads—Coaching.

trains on each railway (by systems.)

to the code letters used to denote railway systems.

5 th .																	GAUGE.	
1	2 nd E. B. S. system.		3	4 th B. N. System.		5	6 th N. W. system.			7 th G. I. P. system.		8 th B. B. & C. I. system.		9 th N. G. S. system.		10	CLASS: No.	
E. I.	5 th gauge.	Other gauges.	B. C.	B. N. (a)	R. D. (b)	E. C. I.	O. & R.	Mily. sec.	Comml. sec.	Total (a) to (e)	G. I. P. (a) to (c)	L. M. (d) to (g)	B. B. & C. I. (a) to (f)	R. M. (g) to (h)	N. G. S. (a) & (b)	H. G. V. (c)	M. (a) to (e)	Calendar year.
AVERAGE NUMBER OF VEHICLES IN A COACHING TRAIN.																		
1ST CLASS.																		
1'58	1'23	1'54	1'04	1'17	...	1'39	1'45	1'00	1'43	1'38	1'55	2'08	1'24	1'50	2'55	...	1'48	1898
1'59	1'27	1'49	0'99	1'26	...	1'60	1'36	0'96	1'43	1'38	1'56	2'01	1'18	1'63	2'59	...	1'45	1899
1'44	1'24	1'58	1'07	1'37	...	1'75	1'44	0'97	1'39	1'34	1'57	1'99	1'14	1'52	2'50	2'09	1'33	1900
1'46	1'13	*1'22	1'06	1'35	0'24	...	1'29	0'90	1'38	1'32	1'60	...	1'07	1'57	1'57	1'06	1'27	1901
1'55	1'14	†1'29	0'83	1'33	0'32	...	1'33	0'85	1'07	1'21	1'54	...	1'04	1'65	1'13	1'11	1'31	1902
2ND CLASS.																		
1'50	1'21	1'50	1'15	1'48	...	1'40	1'38	1'02	1'43	1'37	2'03	2'11	1'98	1'46	2'49	...	1'71	1898
1'53	1'24	1'46	1'19	1'60	...	1'62	1'36	0'96	1'43	1'37	2'04	1'98	2'03	1'53	2'65	...	1'75	1899
1'37	1'18	1'42	1'28	1'77	...	1'81	1'17	0'93	1'37	1'32	2'05	1'96	1'98	1'46	2'48	2'03	1'57	1900
1'42	1'12	*1'18	1'29	1'44	0'24	...	1'15	0'90	1'34	1'28	2'01	...	1'93	1'50	1'22	1'08	1'43	1901
1'47	1'09	†1'21	1'20	1'36	0'32	...	1'12	0'85	1'22	1'16	1'85	...	1'95	1'57	1'03	1'06	1'50	1902
INTERMEDIATE CLASS.																		
1'40	2'13	2'76	1'67	1'23	...	0'73	2'28	1'03	1'33	1'29	0'58	...	1'04	0'89	...	...	...	1898
1'40	2'21	2'58	1'24	1'09	...	0'58	1'98	0'95	1'24	1'36	0'90	...	0'96	1'02	...	...	...	1899
1'29	2'26	2'75	1'40	0'89	...	0'94	1'66	0'88	1'43	1'36	0'89	...	1'01	0'93	...	...	...	1900
1'33	2'23	*2'26	1'74	1'02	...	...	1'49	0'94	1'47	1'41	0'99	...	1'13	0'79	...	...	0'33	1901
1'51	2'21	†2'13	1'50	1'02	...	...	1'60	1'05	1'44	1'37	1'03	...	1'22	0'87	...	...	0'26	1902
3RD CLASS.																		
10'07	6'95	12'08	7'67	9'69	...	10'07	8'45	9'63	8'84	8'93	5'16	7'70	6'69	13'71	12'16	...	9'58	1898
10'03	7'09	11'84	7'91	11'50	...	10'93	7'91	9'75	9'13	9'20	5'13	7'85	7'12	15'00	12'10	...	8'53	1899
9'43	7'42	12'08	8'51	12'27	...	11'50	7'59	9'82	8'82	8'94	5'54	7'27	8'04	15'14	10'50	9'22	8'93	1900
9'52	7'53	*10'61	9'21	11'01	8'40	...	7'49	9'10	8'98	9'00	6'01	...	7'95	16'34	5'62	5'35	8'24	1901
9'24	7'27	†9'52	8'55	11'48	7'08	...	8'96	8'20	8'80	8'73	5'54	...	7'82	15'77	5'12	5'48	9'01	1902
TOTAL NUMBER OF VEHICLES IN A COACHING TRAIN.																		
17'92	14'27	21'05	14'73	16'32	...	17'74	16'34	15'83	16'73	16'61	12'76	15'94	14'41	21'82	22'02	...	14'13	1898
17'80	14'30	20'49	14'33	18'24	...	19'25	15'22	15'80	17'16	17'00	12'72	15'38	14'38	23'51	21'63	...	13'26	1899
16'78	14'99	20'76	16'31	19'56	...	19'20	14'46	15'61	16'43	16'33	13'53	14'13	15'30	23'15	19'47	16'62	13'28	1900
16'90	14'86	*17'82	17'16	18'09	21'20	...	11'42	14'66	16'15	15'97	13'97	...	15'17	24'26	10'19	9'10	12'55	1901
17'05	14'61	†16'56	15'82	18'44	10'02	...	13'66	13'72	15'58	15'31	13'48	...	15'35	23'97	9'31	9'39	15'44	1902
AVERAGE WEIGHT OF FREIGHT IN TONS IN A COACHING TRAIN.																		
16'33	11'54	12'24	11'20	9'29	...	14'46	13'37	12'83	15'53	15'19	8'70	12'73	15'36	16'62	18'54	...	16'81	1898
16'29	12'30	12'06	10'64	14'17	...	15'22	12'64	12'69	14'93	14'66	10'28	11'64	16'04	17'75	19'89	...	14'71	1899
16'58	12'23	13'26	12'48	18'93	...	16'64	11'86	12'76	15'04	14'77	11'05	10'32	16'97	16'52	17'66	13'69	16'52	1900
17'17	13'05	*12'35	15'09	16'98	6'61	...	11'79	12'10	14'24	13'98	11'93	...	16'86	19'22	8'93	7'30	14'20	1901
15'84	12'74	†12'25	14'40	14'63	6'56	...	11'13	10'56	13'52	13'07	11'46	...	16'98	17'84	7'97	7'91	15'86	1902
AVERAGE DEAD WEIGHT IN TONS IN A COACHING TRAIN.																		
236'12	209'04	132'93	196'04	246'42	...	270'90	230'97	227'74	234'49	233'60	207'03	230'53	217'62	139'96	281'48	...	188'07	1898
236'69	212'98	131'99	200'54	263'29	...	279'97	225'63	229'43	240'40	239'17	208'46	232'81	222'86	145'81	281'41	...	180'24	1899
226'52	219'31	148'66	212'56	246'50	...	284'60	219'33	226'54	231'73	231'10	218'90	226'53	232'05	145'30	264'43	186'00	181'42	1900
243'16	212'36	*131'75	230'82	245'91	47'74	...	214'82	216'10	219'29	227'70	227'16	...	232'95	150'18	191'22	117'59	184'02	1901
254'62	221'80	†118'73	225'45	255'71	44'74	...	117'65	206'42	224'35	220'38	226'42	...	237'48	159'88	127'78	102'91	224'74	1902
TOTAL AVERAGE WEIGHT IN TONS IN A COACHING TRAIN.																		
252'45	225'58	145'17	207'24	254'72	...	285'36	244'34	240'58	250'02	248'80	215'74	243'26	233'19	156'58	300'02	...	204'80	1898
252'98	225'28	144'05	211'18	277'47	...	295'19	238'28	242'12	255'33	253'77	218'74	244'46	238'90	163'57	301'30	...	194'95	1899
243'10	231'55	161'92	225'05	265'43	...	301'25	231'19	239'31	246'78	245'87	229'95	236'85	249'02	161'82	283'10	199'69	197'94	1900
260'27	232'47	*144'10	254'91	261'80	54'35	...	226'61	228'20	243'53	241'68	239'09	...	249'81	169'40	200'15	124'89	198'22	1901
270'46	234'54	†130'98	219'85	210'35	51'30	...	228'78	216'98	237'87	233'45	237'88	...	254'46	177'22	135'75	110'82	240'50	1902

Nagpur railway and partly to the Madras railway from the 1st January 1901.

Appendix 31.
Loads—Coaching.

APPE

Average load and weight of Coaching

N.B.—A reference to Appendix 2 will furnish the ke

GAUGE.	3' 3 1/2"									
	14	16	17	18	19	20	21	22	23	23
CLASS : No.	14	16	17	18	19	20	21	22	23	23
Calendar year.	A. B.	B. & N. W.	R. & K. (a) & (b)	J. B.	U. C.	B. G. J. P.	S. M. (a) to (g)	W. I. P. (h) a	S. I.	B.
AVERAGE NUMBER OF PASSENGERS IN A COACHING TRAIN.										
1ST CLASS.										
1898	1'43	0'43	1'46	1'31	0'78	1'26	1'90	...	0'70	1'06
1899	1'37	0'44	1'46	0'93	1'05	1'13	1'73	...	0'75	1'13
1900	1'33	0'46	1'28	0'78	1'37	0'91	1'40	...	0'76	1'14
1901	0'88	0'45	1'02	0'70	0'98	1'02	1'14	0'88	0'85	1'20
1902	0'89	0'76	0'97	0'69	1'03	0'85	1'30	...	0'95	1'06
2ND CLASS.										
1898	2'39	0'72	7'14	4'58	2'31	7'32	5'08	...	2'78	4'62
1899	2'39	0'78	6'13	4'23	2'39	7'78	6'59	...	2'94	4'72
1900	2'43	0'87	6'19	4'06	2'62	6'20	4'81	...	3'89	4'99
1901	1'94	0'96	5'77	3'64	2'70	6'47	3'78	4'43	3'51	5'71
1902	1'81	0'84	6'42	3'26	2'87	6'10	4'49	...	3'57	3'88
INTERMEDIATE CLASS										
1898	...	1'49	8'51	...	3'34	...	...	...	...	5'63
1899	...	1'66	2'78	...	3'48	0'25	...	...	...	7'15
1900	0'22	2'24	2'60	...	5'18	4'83	...	...	...	3'98
1901	0'81	2'87	8'02	...	4'67	6'70	...	...	...	...
1902	0'88	2'47	2'06	...	4'95	7'55	...	...	...	...
3RD CLASS.										
1898	272'58	192'70	213'48	389'40	213'14	163'66	177'79	...	203'21	200'98
1899	280'55	177'48	231'66	410'06	284'45	186'83	171'77	...	222'91	203'55
1900	275'49	176'91	226'23	357'68	305'05	169'60	190'42	...	239'03	215'09
1901	219'78	202'02	186'92	196'96	302'96	192'23	172'63	85'74	262'93	219'49
1902	181'88	165'39	170'63	171'98	286'32	177'30	171'26	...	273'05	206'39
TOTAL NUMBER OF PASSENGERS IN A COACHING TRAIN.										
1898	276'41	194'85	224'39	395'30	219'59	172'24	184'77	...	206'69	213'82
1899	284'41	180'37	244'06	415'23	291'38	196'00	180'10	...	226'60	213'39
1900	279'39	190'49	236'30	362'54	314'15	181'55	196'63	...	242'98	221'23
1901	223'41	206'30	189'73	201'30	311'31	206'42	177'55	91'05	267'29	226'49
1902	185'46	169'05	180'08	175'93	295'18	191'81	177'05	...	277'57	211'33
PERCENTAGE OF FREIGHT ON CAPACITY HAULED.										
1ST CLASS.										
1898	6'07	2'02	5'88	10'77	7'19	5'96	15'34	...	7'27	6'69
1899	7'43	2'70	5'05	8'72	7'06	5'56	13'76	...	7'90	7'47
1900	7'02	2'98	4'98	6'43	7'15	4'76	13'72	...	8'33	7'59
1901	5'51	2'81	5'69	4'60	6'50	5'28	11'77	0'65	8'72	8'97
1902	3'34	2'40	5'64	5'31	6'73	4'43	10'09	...	9'34	9'90
2ND CLASS.										
1898	7'71	3'38	34'13	36'19	23'23	21'97	25'22	...	13'77	12'99
1899	9'02	3'87	24'82	32'94	18'57	22'88	30'04	...	16'70	12'88
1900	8'95	4'06	28'24	32'77	18'72	19'06	25'04	...	19'03	14'61
1901	7'73	4'10	41'36	20'99	17'33	18'78	23'01	3'29	20'47	21'30
1902	4'57	3'83	40'64	17'52	18'03	17'15	22'11	...	24'01	18'20
INTERMEDIATE CLASS										
1898	...	7'81	10'57	...	25'92	...	...	...	...	18'77
1899	...	8'91	11'27	...	8'11	9'33	...	...	...	23'85
1900	3'02	9'66	9'28	...	9'98	17'68	...	...	...	15'51
1901	3'33	8'36	11'98	...	10'26	30'25	...	...	...	...
1902	2'35	7'28	12'81	...	11'01	29'50	...	...	...	...
3RD CLASS.										
1898	37'96	42'73	37'97	98'02	58'53	47'88	24'02	...	47'23	49'41
1899	41'48	43'57	38'44	100'06	62'04	48'56	41'85	...	51'38	49'02
1900	43'93	42'07	69'01	91'13	52'96	48'91	44'32	...	54'93	48'88
1901	44'18	47'65	46'17	46'20	62'26	58'34	43'33	63'62	58'84	46'79
1902	39'95	44'31	43'15	40'95	65'25	47'75	43'08	...	62'09	38'92

• Included with the Southern Mahratta railway from 1902.

DIX 31—concl.

Appendix 31.
Loads—Coaching.

trains on each railway (by systems).

to the code letters used to denote railway systems.

3'31"										GAUGE.
14	16	17	18	19	20	21		22	23	CLASS: No.
A. B.	B. & N. W.	R. & K. (a) & (b)	J. B.	U. C.	B. G. J. P.	S. M. (c) to (g)	W. I. P. (h)	S. I.	B.	Calendar year.
AVERAGE NUMBER OF VEHICLES IN A COACHING TRAIN										
1ST CLASS.										
2'03	1'81	2'07	2'13	0'88	1'97	1'51	...	1'10	1'84	1898
1'88	1'63	2'44	1'89	1'23	1'90	1'56	...	1'10	1'82	1899
1'74	1'59	2'14	2'07	1'45	1'82	1'26	...	1'06	1'86	1900
1'68	1'68	1'51	1'23	1'81	1'97	1'21	1'19	1'11	1'79	1901
1'77	1'55	1'44	1'44	1'95	1'97	1'57	...	1'10	1'60	1902
2ND CLASS.										
1'94	1'43	1'75	2'09	0'82	2'53	1'63	...	1'67	2'53	1898
1'84	1'37	2'07	2'16	1'07	2'53	1'76	...	1'45	2'67	1899
1'73	1'37	1'83	2'20	1'23	2'44	1'51	...	1'32	2'58	1900
1'61	1'54	1'35	1'37	1'29	2'70	1'32	1'01	1'36	2'35	1901
1'65	1'40	0'82	1'48	1'32	2'84	1'63	...	1'32	2'05	1902
INTERMEDIATE CLASS.										
...	0'86	1'34	...	0'89	...	...	...	...	0'52	1898
...	0'85	1'42	...	1'79	0'07	...	...	...	1'32	1899
0'43	1'04	1'31	...	2'21	1'06	...	...	...	1'12	1900
1'06	1'57	0'74	...	1'90	1'59	...	...	...	...	1901
1'42	1'51	0'74	...	1'90	1'89	...	...	...	...	1902
3RD CLASS.										
19'67	15'76	18'17	24'77	12'60	11'46	12'55	...	14'22	14'18	1898
18'99	13'82	19'67	24'89	16'01	12'68	12'87	...	13'94	14'31	1899
17'37	14'00	17'38	24'06	19'92	11'56	13'43	...	13'99	15'07	1900
13'84	14'55	11'53	12'55	16'77	11'93	12'30	7'18	14'37	15'68	1901
12'77	12'88	11'81	12'45	15'17	12'08	12'32	...	14'03	14'68	1902
TOTAL NUMBER OF VEHICLES IN A COACHING TRAIN.										
28'67	22'22	26'48	35'50	18'15	19'55	18'84	...	18'69	22'72	1898
22'40	19'90	28'86	35'44	23'77	20'63	19'53	...	19'01	22'87	1899
26'11	20'10	25'68	34'73	29'36	20'91	19'11	...	18'75	22'45	1900
21'44	21'50	17'73	19'12	21'17	21'57	17'63	9'38	19'38	22'53	1901
20'79	19'56	17'86	20'18	23'37	22'31	15'52	...	18'96	20'76	1902
AVERAGE WEIGHT OF FREIGHT IN TONS IN A COACHING TRAIN.										
18'21	12'38	15'10	27'16	14'08	11'53	12'92	...	12'95	13'64	1898
12'25	21'45	16'28	28'13	19'79	12'94	12'77	...	14'21	13'64	1899
18'36	11'42	15'75	23'72	20'36	12'11	13'43	...	15'31	16'19	1900
14'53	13'02	12'53	13'52	20'22	13'54	12'01	6'44	16'21	16'83	1901
12'28	16'72	11'29	15'24	19'68	12'72	12'24	...	17'47	13'83	1902
AVERAGE DEAD WEIGHT IN TONS IN A COACHING TRAIN.										
249'40	144'50	166'52	274'50	150'09	133'60	145'52	...	137'18	154'19	1898
239'72	137'75	183'30	287'22	187'76	139'23	149'74	...	137'43	159'19	1899
217'38	139'47	171'81	277'72	222'78	136'02	146'64	...	141'72	149'03	1900
188'70	147'31	122'95	162'45	196'67	140'56	141'42	141'21	145'77	162'78	1901
188'45	139'19	120'91	159'57	187'67	143'72	146'61	...	143'14	175'93	1902
TOTAL AVERAGE WEIGHT IN TONS IN A COACHING TRAIN.										
267'61	156'88	181'62	311'66	164'17	145'14	158'44	...	150'13	167'83	1898
258'58	149'22	199'58	315'45	207'55	152'17	162'52	...	151'64	172'83	1899
235'75	150'89	183'06	301'44	243'14	148'13	160'03	...	157'03	165'22	1900
203'23	160'33	133'48	175'07	216'90	154'10	153'43	147'65	162'58	179'61	1901
200'73	149'91	132'80	171'82	207'35	156'44	158'85	...	160'61	189'77	1902

N.B.—A reference to Appendix 2 will furnish the key to

GAUGE.		5' 6"													
CLASS: No.	1	2		3	4		5	6			7		8		
Calendar year.	E. I.	E. B. S. SYSTEM.		B. C.	B. N. SYSTEM.		E. C.	O. & R.	N. W. SYSTEM (a) to (h)			G. I. R. SYSTEM.		B., H. & C. I. SYSTEM.	
		5' 6" gauge.	Other gauges.		B. N. (a)	R. D. (b)			Mily. sec.	Comm. sec.	Entire line.	G. I. P. (a) to (c)	I. M. (d) to (g).	B., H. & C. I. (a) to (e)	R. M. (f) to (h).
AVERAGE LOAD IN A LOADED GOODS VEHICLE PER MILE.															
1898	9'94	6'69	3'32	5'76	8'77	...	9'94	6'35	7'01	8'18	8'11	8'79	7'47	7'74	5'11
1899	10'38	6'59	3'37	5'84	9'11	...	10'16	6'68	6'79	7'08	7'89	8'33	7'50	7'73	4'97
1900	10'72	6'57	4'14	6'04	9'82	...	10'38	6'54	6'18	7'83	7'66	7'68	8'51	7'56	5'31
1901	10'95	6'74	3'87	5'30	6'68	4'41	•	6'65	6'04	8'01	8'75	7'66	7'98	8'24	5'66
1902	9'87	6'71	3'51	5'51	7'79	4'86	•	6'57	6'68	8'37	8'21	•	•	8'19	5'32
AVERAGE LOAD IN A GOODS VEHICLE PER MILE. (Including both loaded and empty.)															
1898	7'12	4'37	2'56	3'68	5'81	...	6'75	4'48	5'06	5'69	5'64	6'03	4'73	5'78	3'90
1899	7'14	4'79	3'65	3'52	5'96	...	6'63	4'79	4'90	5'73	5'63	5'93	4'67	5'33	3'81
1900	7'18	4'70	3'18	3'07	6'14	...	6'65	4'79	4'82	6'10	5'94	5'38	5'48	4'98	3'81
1901	7'45	4'79	3'09	3'24	4'67	3'08	•	4'97	4'92	6'49	6'37	5'52	5'80	6'31	4'11
1902	6'68	4'91	2'80	3'47	5'26	3'28	•	4'90	4'70	6'12	5'99	•	•	6'45	4'02
AVERAGE NUMBER OF FREIGHT VEHICLES IN A GOODS TRAIN.															
1898	27'07	29'63	27'33	15'37	21'64	...	15'76	24'38	15'23	27'73	26'35	23'46	23'69	26'68	29'08
1899	27'81	29'74	27'13	18'21	25'70	...	16'31	25'20	14'98	27'49	25'91	23'63	25'81	38'92	30'63
1900	27'51	32'40	22'81	21'24	25'48	...	18'93	23'65	14'48	24'57	23'06	24'85	27'50	40'15	32'38
1901	27'26	28'47	21'55	21'06	25'77	8'18	•	25'30	15'12	27'34	25'65	26'05	26'45	39'75	31'23
1902	29'32	29'78	27'62	19'17	24'98	9'24	•	25'26	14'59	27'13	25'20	•	•	38'12	31'49
TOTAL NUMBER OF VEHICLES IN A GOODS TRAIN, INCLUDING BRAKEVANS.															
1898	28'99	30'68	28'62	17'03	23'47	...	17'24	25'78	16'22	28'96	27'62	25'33	27'48	37'55	29'89
1899	28'72	30'75	28'21	19'85	27'60	...	17'73	26'46	16'58	28'71	27'19	25'44	27'61	30'72	31'47
1900	28'42	33'41	23'97	22'15	27'24	...	20'20	24'98	15'94	25'83	24'36	26'67	29'39	41'07	33'25
1901	28'15	29'50	22'64	21'86	27'75	9'28	•	26'53	16'46	28'47	26'81	27'96	27'96	40'60	32'11
1902	30'28	30'80	28'63	20'10	26'92	10'75	•	26'39	15'97	28'21	26'35	28'38	•	38'86	32'39
AVERAGE WEIGHT OF FREIGHT IN A GOODS TRAIN.															
1898	199'20	143'31	70'34	56'66	125'97	...	107'49	110'19	75'94	157'94	148'84	141'53	121'89	212'34	113'58
1899	198'67	141'52	72'02	64'16	152'99	...	108'27	110'42	72'75	157'46	146'57	140'41	120'59	207'59	116'62
1900	196'11	140'41	72'14	77'95	156'93	...	116'02	113'56	68'48	150'07	137'15	133'78	150'60	199'55	123'20
1901	203'12	136'56	66'60	68'24	120'35	25'18	•	125'62	74'44	177'54	163'29	148'72	•	250'75	128'42
1902	195'95	146'24	77'43	66'59	131'41	30'32	•	123'63	68'50	166'01	159'95	152'30	•	245'05	126'64
AVERAGE DEAD WEIGHT IN A GOODS TRAIN.															
1898	192'13	281'27	135'97	185'21	265'22	...	220'04	216'45	186'31	270'84	261'46	235'58	268'16	293'43	143'71
1899	244'29	280'78	140'81	207'52	293'73	...	212'81	224'45	186'07	272'12	261'39	240'01	273'70	310'58	150'18
1900	244'60	301'15	117'97	233'55	254'14	...	233'46	218'00	180'79	249'96	239'57	251'22	292'18	330'87	154'02
1901	239'18	275'75	128'63	230'41	261'41	41'67	•	249'21	183'92	268'66	256'04	265'42	•	327'45	149'55
1902	277'88	288'90	146'31	209'70	256'78	41'71	•	259'19	182'13	268'12	254'41	271'26	•	319'67	148'85
TOTAL AVERAGE WEIGHT OF FREIGHT AND DEAD WEIGHT, OF GOODS TRAINS.															
1898	441'34	424'59	206'51	241'87	391'19	...	327'53	326'64	262'26	428'78	410'31	377'11	390'06	505'77	257'29
1899	442'94	422'30	212'83	271'68	446'72	...	321'08	343'87	250'72	429'59	407'96	380'42	394'19	518'17	266'80
1900	440'72	450'56	190'11	311'50	411'07	...	359'49	311'56	249'27	400'04	376'72	395'01	442'78	530'42	277'28
1901	455'30	412'31	195'25	298'65	381'76	66'85	•	374'83	258'36	446'20	420'23	408'94	•	578'20	277'97
1902	473'83	435'14	223'74	276'29	388'19	73'03	•	328'82	250'63	434'13	405'37	424'56	•	565'72	275'49
PERCENTAGE OF FREIGHT UPON CAPACITY HAULED.															
1898	51'48	43'21	42'79	24'76	41'78	...	43'76	42'19	40'81	45'15	44'81	50'04	39'55	48'12	54'19
1899	51'06	41'83	41'38	23'64	43'61	...	43'32	43'24	30'37	44'90	44'40	45'76	37'31	44'09	52'70
1900	50'18	40'67	52'99	24'16	43'93	...	43'44	43'05	38'62	47'76	46'60	39'34	42'31	40'78	52'05
1901	51'69	40'92	46'61	22'17	32'12	58'78	•	44'13	30'12	50'70	49'77	40'87	•	50'70	48'08
1902	46'33	41'49	40'16	24'84	35'24	60'22	•	46'45	36'12	45'72	44'92	41'70	•	49'73	47'53

* Transferred partly to the Bengal-Nagpur railway and partly to the Madras railway from the 1st January 1901.

trains on each railway (by systems).

the code letters used to denote railway systems.

3' 3 1/2"													GAUGE.	
9		10		14	16	17	18	19	20	21		22	23	CLASS: No.
N. G. S. SYSTEM.		MADRAS SYSTEM.		A. B.	B. & N. W.	R. & K. (a) & (b).	J. B.	U. C.	B. G. J. P.	S. MAHRATTA.		S. I.	B.	Calendar year.
N. G. S. (a) & (b).	H. G. V. (c).	M. (a) to (c).	S. C. & (d) & (e).							S. M. (a) to (g).	W. I. P. (h).			
AVERAGE LOAD IN A LOADED GOODS VEHICLE PER MILE.														
11'15	...	6'20	...	5'41	5'36	4'37	4'93	2'85	3'37	4'55	...	3'97	3'89	1898
11'17	...	6'15	...	3'46	5'89	5'05	5'45	3'79	3'54	4'84	...	3'92	4'03	1899
10'44	4'31	6'20	...	4'54	5'12	5'12	6'70	4'80	3'73	4'54	...	4'20	4'21	1900
10'38	3'75	7'20	9'23	5'74	5'40	4'96	5'05	4'75	3'54	4'33	5'87	4'71	4'45	1901
10'78	4'62	6'93	5'84	5'16	5'04	5'37	4'94	4'85	3'40	4'38	†	4'94	4'79	1902
AVERAGE LOAD IN A GOODS VEHICLE, PER MILE. (Including both loaded and empty.)														
6'60	...	4'70	...	3'31	3'95	2'79	2'94	1'88	2'40	3'63	...	2'99	2'70	1898
6'72	...	4'59	...	3'58	4'16	3'23	3'22	2'19	2'48	3'55	...	2'90	2'84	1899
5'91	2'76	4'57	...	3'03	3'52	3'39	3'88	2'57	2'38	3'26	...	3'23	2'99	1900
6'21	2'59	5'02	7'26	3'80	3'86	3'28	3'32	2'69	2'55	3'28	4'35	3'59	3'07	1901
6'40	3'20	5'12	4'24	3'35	3'61	3'59	3'28	2'78	2'27	3'32	†	3'73	3'34	1902
AVERAGE NUMBER OF FREIGHT VEHICLES IN A GOODS TRAIN.														
24'70	...	24'21	...	23'68	23'81	21'23	20'65	23'02	24'77	21'59	...	18'78	27'45	1898
24'77	...	23'74	...	30'90	23'94	19'20	21'56	25'42	25'35	22'64	...	18'38	26'21	1899
27'19	17'29	23'24	...	25'81	24'57	17'91	18'11	26'65	25'67	22'25	...	18'97	25'07	1900
20'15	10'69	23'80	2'02	22'66	25'08	22'71	20'68	25'37	26'44	22'01	14'75	19'47	24'88	1901
19'50	10'52	22'16	5'07	20'61	24'64	23'48	21'87	24'13	27'44	21'97	†	19'70	24'33	1902
TOTAL NUMBER OF VEHICLES IN A GOODS TRAIN INCLUDING BRAKEVANS.														
26'69	...	28'26	...	25'38	25'17	22'88	20'88	23'02	25'25	22'86	...	19'41	28'95	1898
26'75	...	27'55	...	32'53	25'13	20'72	21'50	25'52	25'90	23'96	...	19'49	28'42	1899
29'16	19'00	27'09	...	27'41	25'21	19'39	18'56	26'90	26'31	23'62	...	19'52	26'35	1900
21'80	11'81	27'06	3'49	24'13	26'37	24'07	21'00	25'37	26'07	23'31	15'25	20'06	26'16	1901
20'88	11'62	23'76	6'12	21'76	25'95	24'82	22'13	24'13	27'98	23'32	†	20'34	25'44	1902
AVERAGE WEIGHT OF FREIGHT IN A GOODS TRAIN.														
162'33	...	113'94	...	77'15	94'29	59'39	60'99	42'42	59'67	78'44	...	56'24	74'34	1898
165'96	...	108'91	...	79'06	99'70	61'89	70'04	55'56	61'49	80'41	...	54'70	76'20	1899
160'92	47'34	106'33	...	77'80	86'98	60'93	69'38	68'71	59'66	72'52	...	61'33	75'01	1900
124'23	39'06	119'42	14'62	86'02	97'42	74'39	68'59	68'53	67'48	72'21	1'49	69'93	76'39	1901
124'71	33'68	113'42	21'49	69'09	89'21	84'49	71'64	67'53	62'18	73'02	†	73'46	81'31	1902
AVERAGE DEAD WEIGHT IN A GOODS TRAIN.														
218'13	...	260'41	...	145'14	124'19	117'79	114'40	121'34	122'89	118'52	...	110'71	135'46	1898
258'96	...	254'61	...	173'06	175'71	89'95	115'65	128'15	124'51	122'89	...	110'31	135'88	1899
279'15	109'87	250'82	...	139'50	129'65	93'22	101'73	131'55	123'25	122'58	...	109'59	117'84	1900
222'28	82'26	260'99	60'51	132'40	129'63	112'54	120'89	129'26	126'00	121'36	167'39	112'34	118'47	1901
207'07	69'83	235'49	81'92	120'17	129'63	117'13	119'70	124'70	129'16	124'23	†	114'11	133'50	1902
TOTAL AVERAGE WEIGHT OF FREIGHT AND DEAD WEIGHT, OF GOODS TRAINS.														
420'47	...	374'35	...	222'29	218'48	177'19	175'40	163'76	182'06	196'06	...	166'95	200'80	1898
424'92	...	363'52	...	253'02	225'42	151'85	185'69	183'72	186'00	203'30	...	165'01	212'18	1899
440'07	157'21	357'15	...	217'30	216'64	154'15	171'11	200'27	182'91	195'11	...	170'92	192'85	1900
356'51	111'32	380'41	75'13	218'42	227'05	186'93	189'48	197'09	193'48	193'57	168'88	182'27	194'86	1901
321'78	103'51	348'91	103'41	189'26	218'24	201'54	191'34	192'23	191'34	197'25	†	187'57	215'21	1902
PERCENTAGE OF FREIGHT UPON CAPACITY HAULED.														
53'76	...	39'71	...	30'97	49'17	33'85	44'09	26'62	42'69	54'29	...	50'18	44'10	1898
53'90	...	38'74	...	37'11	50'87	39'86	45'79	30'53	41'11	53'06	...	46'35	41'53	1899
46'86	28'08	38'35	...	39'50	43'38	41'13	51'84	35'58	39'38	48'42	...	50'12	43'03	1900
49'41	29'35	38'47	32'09	40'05	47'52	38'58	40'11	37'08	42'48	47'80	45'52	55'72	43'47	1901
48'18	34'90	38'79	21'70	36'06	43'83	40'14	36'04	34'32	37'78	47'86	†	56'35	45'55	1902

† Included with the Southern Mahratta railway.

Appendix 33.
Rolling-stock statistics.

APPE

Number of, outlay on, at
(Referred to in paragraph
N.B. - A reference to Appendix 3 will furnish the

Progressive No.	GAUGE.		3' 6"						
	CLASSIFICATION NUMBER.		1	2 (a)	3	4 (a)	5 (a) & (b)	6 (a) to (c)	7 (a) to (c)
	Particulars.		E. I.	E. B. S.	B. C.	B. N.	O. & R.	N. W.	G. I. P.
ENGINES.									
1	Passenger engines.	Number at close of 1901	133	46	•	42	42	•	170
2		Number added in 1902	7	48	•	40	42	•	170
3		Number at close of 1902	140	94	•	82	84	•	170
4	Goods and mixed engines.	Number at close of 1901	681	72	271	135	133	676†	582
5		Number added in 1902	33	11	•	14	6	18	25
6		Number at close of 1902	714	83	271	153	139	694†	607
7	Number per mile of line open of all classes		0'39	0'47	0'19	0'12	0'17	0'18	0'28
8	Average mileage run by each per annum.	Passenger	16,101	27,085	•	35,963	29,374	•	28,931
9		Goods	21,663	21,953	•	21,391	27,006	•	19,237
10		All classes	34,866	23,783	17,034	24,620	27,555	21,192	21,372
11	Average mileage run by each.	Passenger	99	74	•	101	80	•	79
12		Goods	62	60	•	59	74	•	53
13		All classes	68	65	47	67	75	58	59
14	Average under repairs or renewals at any one time		113	15	4	28	25	•	176
15	Total value in thousands of rupees		1,8,88	•	3,64	•	50,14	2,42,47	2,52,11
16	Total value per mile of line open		6,800	•	6,912	•	4,422	6,541	9,178
COACHING STOCK.									
17	Number at close of 1901		2,145	524	117	793	804	2,331	2,247
18	Number added in 1902		171	21	•	95	41	10	14
19	Number at close of 1902		2,316	545	117	888	845	2,341	2,261
20	Number per mile of line open.	1st class	0'08	0'19	0'09	0'05	0'08	0'05	0'06
21		2nd class	0'06	0'13	0'07	0'03	0'06	0'02	0'08
22		Intermediate class	0'06	0'24	0'05	0'02	0'05	0'03	•
23	Number per mile of line open.	3rd class	0'44	0'85	0'32	0'28	0'33	0'23	0'31
24		All other classes	0'41	0'57	0'37	0'19	0'23	0'30	0'36
25		Total of all classes	1'05	1'98	0'90	0'57	0'75	0'63	0'81
26	Average mileage run by each per annum.	1st class	59,308	24,478	14,109	41,427	4,575	•	•
27		2nd class	15,130	32,916	27,270	50,155	3,178	•	•
28		Intermediate class	76,166	36,392	41,703	38,737	2,048	•	•
29	Average mileage run by each per annum.	3rd class	61,268	34,219	41,662	69,152	17,061	•	•
30		All other classes	34,061	27,720	19,391	30,349	12,327	•	•
31		Total of all classes	95,329	61,939	61,053	99,494	29,388	•	•
32	Average mileage run by each per annum		143	87	79	119	111	116	119
33	Average under repairs or renewals at any one time		181	70	49	60	108	357	264
34	Total value in thousands of rupees		•	•	•	•	•	1,40,29	1,03,03
35	Total value per mile of line open		•	•	•	•	•	3,788	3,751
GOODS STOCK.									
36	Number at close of 1901.	Covered wagons	7,813	2,013	491	3,524	3,855	7,894	6,001
37		Open	7,502	241	12	1,320	•	2,013	2,845
38		Timber trucks, including bolster trucks	23	68	57	50	516	324	241
39	All other classes		78	63	4	56	45	223	227
40	Total of all classes		15,416	2,395	494	4,950	4,416	11,354	10,314
41	Number added in 1902.	Covered wagons	500	•	1	218	228	110	318
42		Open	524	15	•	909	•	4	10
43		Timber trucks, including bolster trucks	23	•	•	3	94	3	•
44	All other classes		8	•	2	1	•	12	67
45	Total of all classes		1,064	15	1	1,161	322	123	241
46	Number at close of 1902.	Covered wagons	8,318	2,018	420	3,772	4,083	8,004	6,319
47		Open	8,026	226	12	2,229	•	2,017	3,865
48		Timber trucks, including bolster trucks	•	68	67	63	610	321	241
49	All other classes		81	68	6	57	45	285	180
50	Total of all classes		16,420	2,860	495	6,111	4,738	11,477	10,556
51	Number of all classes per mile of line open		7'35	8'59	3'95	3'95	4'18	3'10	3'84
52	Average mileage run by each per annum		117,471	13,497	5,969	13,353	17,341	16,002	16,268
53	Average mileage run by each per annum		48	38	16	37	48	44	45
54	Average tare in tons.	Covered wagons	6'94	7'22	7'85	7'93	8'40	7'54	7'41
55		Open	6'40	6'57	7'65	7'31	•	7'02	6'54
56	Average carrying capacity in tons.	Covered wagons	14'82	11'46	12'36	14'82	11'79	14'48	13'83
57		Open	14'76	14'12	17'00	15'75	•	12'44	14'21
58	Average load of a goods vehicle, loaded and empty, per mile		6'68	4'91	3'47	5'26	4'90	6'10	5'80
59	Average under repairs or renewals at any one time		361	148	188	97	138	645	619
60	Total value in thousands of rupees		•	•	19,661	•	1,44,10	2,04,49	2,22,62
61	Total value per mile of line open		•	•	15,723	•	12,708	7,651	8,104
62	Grand total value of rolling-stock in thousands of rupees		11,17,39	1,33,78	28,30	3,08,00	1,94,24	6,77,95	5,77,76
63	Grand total value of rolling-stock per mile of line open		51,102	48,293	22,640	19,935	17,130	18,280	21,033
ROLLING STOCK UNDER SUPPLY.									
64	Engines		148	5	•	44	31	62	32
65	Coaching vehicles		199	33	•	23	30	•	25
66	Goods vehicles		1,009	752	•	1,256	497	2,741	2,890

* Information not available. † Including passenger engines. ‡ Calculated on total goods stock excluding 81 vehicles intended for railway purposes only.

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Appendix 33.
Rolling-stock statistics.

work done by Rolling-stock.

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to the code letters used to denote railway systems.

3' 6"			3' 3 1/2"											Progressive No.
(a) to (f)	(a) & (b)	(a) to (c)	(b) to (e)	(g) to (h)	9 (c)	(d) & (e)	12	13	14	15	16	(a) and (b)	18	
B. B. & C. L.	N. G. S.	M.	E. B. S.	R. M.	H. G. V.	S. C. & N.	B. D.	D. S.	A. B.	D.	B. & N. W.	R. & K.	J. R.	
ENGINES.														
66	•	61	58	145	•	2	•	•	•	•	•	•	•	1
83	•	42	58	145	•	4	•	•	•	•	•	•	•	2
122	54†	171	66	283	35†	2	10†	22	53†	3†	175†	31†	40†	4
120	58†	207	65	298	54†	5	10†	22	58†	4†	183†	31†	44†	5
0'23	0'15	0'18	0'16	0'24	0'14	0'11	0'09	0'08	0'09	0'83	0'14	0'11	0'01	7
25,870	•	34,567	25,199	20,341	•	5,621	•	•	•	•	•	•	•	8
14,561	•	19,441	21,057	15,155	•	17,005	•	•	•	•	•	•	•	9
18,454	20,563	21,992	23,480	15,872	18,664	11,916	16,470	12,818	16,748	4,800	25,246	26,059	22,618	10
71	•	97	60	56	•	19	•	•	•	•	•	•	•	11
40	•	58	60	42	•	65	•	•	•	•	•	•	•	12
51	56	65	64	46	51	44	45	35	46	40	69	71	62	13
33	•	54	19	69	2	2	•	•	14	•	18	5	8	14
66,49	23,37	92,13	27,64	78,71	16,58	4,51	2,63	•	11,40	•	59,06	7,11	12,99	15
8,438	6,664	6,603	3,603	4,284	4,235	5,526	2,301	•	1,935	•	3,958	2,494	1,576	16
COACHING STOCK.														
579	182	1,159	641	1,657	128	12	71	80	182	12	795	158	145	17
39	7	22	15	10	3	30	1	•	24	•	43	•	35	18
618	189	1,181	658	1,676	131	42	72	80	206	12	898	158	188	19
0'03	0'09	0'07	0'09	0'07	0'05	0'04	0'05	0'05	0'04	0'42	0'05	0'07	0'03	20
0'05	0'03	0'08	0'06	0'05	0'03	0'02	0'02	0'04	0'02	•	0'04	0'03	0'02	21
0'03	•	•	0'10	0'03	•	•	•	•	0'01	•	0'03	0'03	•	22
0'56	0'19	0'42	0'30	0'44	0'13	0'21	0'30	0'46	0'14	2'09	0'34	0'28	0'11	23
0'12	0'22	0'28	0'21	0'31	0'12	0'24	0'26	0'47	0'14	•	0'15	0'14	0'06	24
0'79	0'53	0'85	0'85	0'90	0'33	0'51	0'63	1'03	0'35	2'51	0'61	0'55	0'22	25
•	•	34,385	•	•	31,592	648	•	•	49,666	•	47,407	•	26,031	26
•	•	28,299	•	•	61,008	9,235	•	•	46,411	•	64,060	•	36,126	27
•	•	69,199	•	•	•	•	•	•	82,791	•	80,375	•	•	28
•	•	32,948	•	•	66,150	10,570	•	•	52,994	•	64,281	•	60,752	29
•	•	30,889	•	•	32,605	6,583	•	•	20,148	•	35,146	•	39,122	30
44,856	39,073	32,096	•	34,127	48,048	8,291	•	•	49,319	•	55,120	36,203	48,258	31
123	107	88	•	93	132	23	•	•	110	•	151	99	132	32
•	25	302	87	•	8	•	•	•	33	•	49	•	11	33
35,71	•	42,10	•	•	•	•	•	•	14,07	•	•	•	•	34
4,532	•	3,022	•	•	•	•	•	•	2,490	•	•	•	•	35
GOODS STOCK.														
2,463	171	2,314	2,394	4,254	300	•	233	133	624	4	5,553	689	280	36
1,738	657	1,739	367	2,677	231	16	67	714	468	4	382	82	295	37
90	99	185	86	79	20	•	12	50	76	•	•	76	•	38
555	11	41	210	92	7	•	4	2	78	•	32	13	•	39
4,846	938	4,276	2,057	7,102	358	16	316	899	1,246	8	5,869	860	575	40
124	—9	82	152	•	100	75	1	•	235	•	—47	209	258	41
—68	76	53	21	—2	155	40	•	•	•	•	47	•	•	42
•	•	•	•	•	•	8	•	•	•	•	•	•	•	43
3	3	11	—20	•	3	•	•	•	—1	•	—1	2	•	44
59	70	126	153	—2	258	123	1	•	234	•	—1	211	258	45
2,587	162	2,898	2,546	4,254	400	75	294	133	859	4	5,508	898	588	46
1,070	733	1,789	888	2,675	386	56	67	714	468	4	382	82	295	47
90	99	185	86	79	20	•	12	50	76	•	•	76	•	48
568	14	52	190	92	10	•	4	2	77	•	81	15	•	49
4,905	1,008	4,422	3,210	7,100	816	139	317	899	1,480	8	5,868	1,071	833	50
6'25	2'84	3'17	4'18	3'77	2'08	1'70	2'78	11'60	2'51	1'67	4'30	3'75	1'01	51
9,196	17,791	13,004	•	17,702	10,516	1,946	•	•	5,715	•	9,288	9,880	11,255	52
25	49	36	•	48	29	•	•	•	16	•	25	25	31	53
•	7'10	7'23	3'07	3'90	4'30	8'10	•	•	4'30	3'00	•	4'90	3'85	54
•	6'76	6'42	2'80	4'15	4'01	7'96	•	•	3'24	3'00	3'64	2'70	4'73	55
•	11'86	13'08	6'58	9'38	10'00	12'75	•	•	9'71	5'00	8'69	9'84	9'24	56
•	14'87	12'85	6'16	12'15	10'04	19'97	•	•	6'34	5'00	•	6'00	12'77	57
•	6'40	5'12	2'80	4'02	3'20	4'24	•	•	3'35	•	3'61	3'59	3'28	58
•	•	•	•	•	16	•	•	•	125	2	•	•	19	59
1,03,03	20,08	1,20,48	71,28	1,48,24	19,01	10,84	9,10	•	21,05	•	1,24,20	26,05	21,78	60
13,129	8,292	8,036	9,290	8,069	5,087	13,274	7,972	•	3,573	•	9,821	9,130	2,643	61
2,06,13	52,45	2,34,77	98,92	2,26,95	36,49	15,35	11,73	19,19	47,12	3,01	1,74,26	33,16	34,77	62
26,159	14,956	18,261	12,893	12,553	9,322	18,800	10,273	24,757	7,998	•	13,779	11,630	4,219	63
ROLLING-STOCK UNDER SUPPLY.														
46	•	12	15	•	•	•	•	•	24	•	43	10	4	64
220	•	31	6	66	•	•	•	•	62	•	104	15	22	65
176	•	464	532	1,107	•	•	•	•	436	•	200	91	100	66

§ Including lay on rolling-stock on lines under construction.

|| Including value of coaching stock.

Appendix 33.
Rolling-stock statistics.

APPEN

Number of, outlay on, and
(Referred to in paragraph
N. B.—A reference to Appendix a will furnish the key

Progressive No.	GAUGE.		3' 3 1/2"					2' 6"		
	CLASSIFICATION NUMBER.		19	20	21	22	23	4 (b)	6 (g)	9 (h) & (m)
	Particulars.		U. C.	B. G. J. F.	S. M.	S. L.	B.	R. D.	N. D.	G. D. & R.
ENGINES.										
1	Passenger engines.	Number at close of 1901	1	•	26	69	28	•	•	•
2		Number added in 1902	•	•	4	•	•	•	•	•
3		Number at close of 1902	1	•	30	69	28	•	•	•
4	Goods and mixed engines.	Number at close of 1901	2	†37	193	139	178	4†	10†	11†
5		Number added in 1902	•	•	8	6	3	•	1	•
6		Number at close of 1902	2	†37	201	145	181	4†	11†	11†
7	Number per mile of line open of all classes		0'04	0'08	0'14	0'17	0'17	0'07	0'24	0'09
8	Average mileage run by each per annum.	Passenger	•	•	22,738	25,421	23,048	•	•	•
9		Goods	•	•	16,959	14,691	21,870	•	•	•
10		All classes	18,533	14,109	17,718	18,151	22,028	13,639	11,849	8,882
11	Average mileage run by each per diem.	Passenger	•	•	62	70	63	•	•	•
12		Goods	•	•	46	40	60	•	•	•
13		All classes	51	39	49	50	60	37	33	24
14	Average under repairs or renewals at any one time		1	•	39	49	29	•	•	•
15	Total value in thousands of rupees		25	7,56	49,17	46,09	56,63	•	3,50	1,44
16	Total value per mile of line open		1,324	1,061	2,987	2,729	2,492	•	8,701	1,242
COACHING STOCK.										
17	Number at close of 1901		26	263	1,006	983	837	22	21	54
18	Number added in 1902		•	1	47	7	23	•	•	•
19	Number at close of 1902		26	264	1,053	990	860	22	21	54
20	Number per mile of line open.	1st class	0'03	0'08	0'06	0'06	0'07	0'02	0'07	0'07
21		2nd class	0'03	0'04	0'05	0'06	0'06	0'03	•	•
22		Intermediate class	0'03	0'02	•	•	•	•	•	•
23	Number per mile of line open.	3rd class	0'22	0'31	0'33	0'31	0'37	0'29	0'25	0'28
24		All other classes	0'06	0'12	0'20	0'17	0'18	0'06	0'20	0'12
25		Total of all classes	0'17	0'38	0'64	0'80	0'68	0'39	0'52	0'47
26	Average mileage run by each per annum.	1st class	14,614	16,426	23,647	30,408	27,272	8,662	•	•
27		2nd class	15,610	43,643	31,157	31,393	38,977	8,664	•	•
28		Intermediate class	27,392	55,158	•	•	•	•	•	•
29	Average mileage run by each per annum.	3rd class	29,305	24,852	32,916	41,553	34,614	11,776	•	•
30		All other classes	28,426	19,609	21,302	26,812	32,076	27,137	•	•
31		Total of all classes	26,392	25,084	28,205	36,710	33,573	14,136	•	•
32	Average mileage run by each per diem		72	69	77	101	92	39	•	•
33	Average under repairs or renewals at any one time		1	13	53	68	122	•	•	•
34	Total value in thousands of rupees		1,19	8,90	•	36,91	45,87	•	44	1,29
35	Total value per mile of line open		1,734	1,954	•	2,987	3,639	•	1,085	1,107
GOODS STOCK.										
36	Number at close of 1901.	Covered wagons	25	298	3,179	1,021	2,375	20	51	38
37		Open	10	662	1,136	1,322	884	55	33	179
38		Timber trucks including bolster trucks	•	22	188	51	307	•	6	•
39	Number added in 1902.	All other classes	•	23	211	6	243	•	•	•
40		Total of all classes	35	1,005	4,714	3,300	3,809	75	92	221
41		Covered wagons	•	•	98	23	411	•	23	•
42	Number at close of 1902.	Open	•	•	16	•	22	•	•	•
43		Timber trucks including bolster trucks	•	•	49	•	43	•	1	•
44		All other classes	•	•	6	•	16	•	•	•
45	Number at close of 1902.	Total of all classes	•	147	•	23	16	•	•	•
46		Covered wagons	25	298	3,277	1,944	2,789	20	74	38
47		Open	10	662	1,180	1,322	808	55	33	178
48	Number at close of 1902.	Timber trucks including bolster trucks	•	22	237	51	350	•	7	•
49		All other classes	•	23	217	6	259	•	•	•
50		Total of all classes	35	1,005	4,801	3,323	4,301	75	115	215
51	Number of all classes per mile of line open		0'50	2'21	2'95	2'69	3'41	1'33	2'26	1'24
52	Average mileage run by each per annum		5,627	5,357	2,343	9,989	10,510	3,231	•	•
53	Average mileage run by each per diem		16	15	27	27	29	9	•	•
54	Average tare in tons.	Covered wagons	4'02	3'72	3'81	4'17	4'81	3'10	4'49	•
55		Open	3'22	3'11	3'25	3'52	3'76	3'50	3'20	•
56	Average carrying capacity in tons.	Covered wagons	7'40	5'68	7'50	7'03	9'20	5'00	8'64	•
57		Open	6'19	6'12	6'90	6'77	8'04	8'11	7'98	•
58	Average load of a goods vehicle, loaded and empty, per mile.		2'78	2'47	3'32	3'73	3'34	3'28	1'77	•
59	Average under repairs or renewals at any one time		•	15	157	276	332	•	•	•
60	Total value in thousands of rupees		58	11,08	98,861	47,84	77,12	•	2,76	1,45
61	Total value per mile of line open		845	2,631	6,005	3,871	6,118	•	6,349	1,249
62	Grand total value of rolling-stock in thousands of rupees		2,72	28,44	1,48,03	1,30,84	1,79,62	3,25	6,70	4,18
63	Grand total value of rolling-stock per mile of line open		3,953	6,246	8,992	10,587	14,249	57,28	16,635	3,508
ROLLING-STOCK UNDER SUPPLY.										
64	Engines		•	•	7	4	27	•	•	•
65	Coaching vehicles		•	•	•	115	29	•	8	•
66	Goods vehicles		•	•	•	327	200	•	16	•

* Information not available.

† Including passenger engines.

‡ Including value of coaching stock.

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Appendix 33.
Rolling-stock statistics.

work done by Rolling-stock.
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to the code letters used to denote railway systems.

2' 6"						2' 0"						Progressive No.
1 (c)	24	25	26	27	28	6 (h)	7 (h)	29	30	31	32	
P. W. L.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	D. L.	G. L.	D. H.	H. A.	H. S.	J.	
ENGINES.												
•	5	•	•	•	•	•	•	•	•	•	•	1
•	5	•	•	•	•	•	•	•	•	•	•	2
4†	3	4†	4†	2†	3†	7	8†	14†	5†	4†	7†	4
5†	8	4†	4†	2†	3†	7	11†	14†	7†	4†	7†	5
0'13	0'08	0'19	0'12	0'10	0'15	0'12	0'09	0'27	0'24	0'20	0'23	7
•	22,015	•	•	•	•	•	•	•	•	•	•	8
•	13,341	•	•	•	•	•	•	•	•	•	•	9
12,958	19,375	18,846	22,912	15,290	•	•	2,139	13,416	10,534	8,578	•	10
•	63	•	•	•	•	•	•	•	•	•	•	11
•	37	•	•	•	•	•	•	•	•	•	•	12
35	53	44	63	42	•	•	22	26	29	23	•	13
•	2	1	1	•	1	•	2	1	•	•	•	14
•	1,29	•	68	•	60	•	1,43	2,44	1,65	•	•	15
•	1,366	•	2,198	•	2,988	•	1,132	4,788	5,764	3,280	•	16
COACHING STOCK.												
18	54	7	25	14	12	•	25	76	56	19	10	17
•	54	•	•	•	18	•	16	12	•	•	•	18
0'05	0'07	•	0'08	•	0'20	•	41	88	56	19	10	19
0'05	0'06	•	0'01	•	•	•	0'06	0'42	•	•	0'07	20
•	•	•	0'09	•	•	•	•	0'56	•	•	•	21
•	•	•	•	•	•	•	•	•	•	•	•	22
0'33	0'35	0'09	0'57	0'44	0'30	•	0'14	0'68	1'39	0'66	0'27	23
0'03	0'09	0'23	0'10	0'25	0'15	•	0'12	0'06	0'56	0'30	•	24
0'46	0'57	0'32	0'80	0'69	0'65	•	0'32	1'73	1'95	0'96	0'34	25
•	•	•	•	•	•	•	•	2,262	•	•	•	26
•	•	•	•	•	•	•	•	1,707	•	•	•	27
•	•	•	•	•	•	•	•	•	•	•	•	28
•	•	•	•	•	•	•	•	1,390	•	•	•	29
•	•	•	•	•	•	•	•	16,213	•	•	•	30
•	•	•	•	•	•	•	•	1,552	•	•	•	31
•	•	•	•	•	•	•	•	5	•	•	•	32
•	6	•	•	•	•	•	•	•	•	•	•	33
•	1,25	•	67	•	•	•	1,04	•	•	•	•	34
•	1,330	•	2,187	•	•	•	823	•	•	•	•	35
GOODS STOCK.												
58	20	7	20	4	30	•	30	37	14	4	4†	36
•	96	15	15	•	18	•	53	152	•	4	25	37
•	•	39	•	•	2	•	•	17	•	•	•	38
12	1	1	•	4	•	326	100	6	•	•	9	39
70	117	62	35	8	50	326	183	212	23	8	75	40
•	•	•	•	•	•	•	•	•	•	•	•	41
•	•	•	•	•	•	•	•	•	•	•	•	42
•	•	•	•	•	•	•	•	•	•	•	•	43
•	•	•	•	•	•	•	•	•	•	•	•	44
•	•	•	•	•	•	•	•	•	•	•	•	45
•	•	•	•	•	•	•	•	•	•	•	•	46
•	•	•	•	•	•	•	•	•	•	•	•	47
•	•	•	•	•	•	•	•	•	•	•	•	48
•	•	•	•	•	•	•	•	•	•	•	•	49
•	•	•	•	•	•	•	•	•	•	•	•	50
•	•	•	•	•	•	•	•	•	•	•	•	51
•	•	•	•	•	•	•	•	•	•	•	•	52
•	•	•	•	•	•	•	•	•	•	•	•	53
•	•	•	•	•	•	•	•	•	•	•	•	54
•	•	•	•	•	•	•	•	•	•	•	•	55
•	•	•	•	•	•	•	•	•	•	•	•	56
•	•	•	•	•	•	•	•	•	•	•	•	57
•	•	•	•	•	•	•	•	•	•	•	•	58
•	•	•	•	•	•	•	•	•	•	•	•	59
•	•	•	•	•	•	•	•	•	•	•	•	60
•	•	•	•	•	•	•	•	•	•	•	•	61
1,41	4,07	4,15	7,88	1,45	1,61	§	3,47	5,60	4,62	1,65	1,89	62
3,567	4,322	19,230	6,036	7,155	2,020	§	2,753	10,091	16,087	8,345	6,286	63
ROLLING-STOCK UNDER SUPPLY.												
•	•	4	3	•	•	•	•	•	•	•	•	64
•	•	7	•	•	•	•	•	•	•	•	•	65
•	•	51	•	•	•	•	•	•	•	•	•	66

§ Included with the North Western railway.

|| Including outlay on rolling-stock on lines under construction.

Appendix 33-A.
Rolling-stock and work done.

APPE

Statement showing Rolling-stock on some of the railways

(Referred to in paragraph
N.B. - A reference to Appendix 2 will furnish the key to

GAUGE.	5' 6"											
	1				2				4			
	EAST INDIAN.				EASTERN BENGAL STATE (a).				BENGAL-NAGPUR (a).			
CLASSIFICATION No.												
Particulars.												
	1901.	1902.	Increase.	Per-centage of increase.	1901.	1902.	Increase.	Per-centage of increase.	1901.	1902.	Increase.	Per-centage of increase.
LOCOMOTIVES.												
Number of Locomotives on the 31st December No.	814	854	40	4'91	118	129	11	9'32	177	193	16	9'0
Capital expenditure on Locomotives up to the 31st December in thousands of Rs.	10,63.09	11,17.39	54.30	5'11	1,24.54	1,33.78	9.24	7'42	78.00	3,08.00	144.45	16'8
Total engine miles run Miles.	21,038	21,235	197	0'54	2,870	3,065	198	6'90	4,108	4,732	644	15'6
Engine mileage run per engine "	25,845	24,366	-979	-3'79	24,320	23,783	-537	-2'23	23,213	24,620	1,407	6'0
Gross ton-miles hauled, in millions of tons "	6,446	6,679	233	3'61	640	726	77	11'87	1,192	1,420	228	19'1
Ton-mileage hauled per engine in thousands of tons "	7,920	7,821	-99	-1'25	5,498	5,626	128	2'33	6,735	7,359	623	9'2
Length of system on the 31st December "	2,101'27	2,186'58	85'31	4'06	268'04	277'02	8'98	3'35	1,552'98	1,546'00	-6'98	-0'45
Number of passengers carried in thousands No.	23,875	23,256	-619	-2'59	7,905	8,225	320	4'05	6,021	6,383	362	6'01
Tonnage of goods carried, in thousands of tons.	10,418	10,484	66	0'63	1,616	1,800	184	11'36	2,185	2,870	685	31'35
COACHING VEHICLES.												
Number of vehicles on the 31st December No.	2,145	2,316	171	7'56	524	548	24	4'58	793	888	95	11'98
Capital expenditure on vehicles up to the 31st December in thousands of Rs.	10,63.09	11,17.39	54.30	5'11	1,24.54	1,33.78	9.24	7'42	1,85.55	3,08.00	144.45	16'87
Total vehicle mileage run Miles.	116,448	120,705	4,257	3'66	17,228	17,341	113	0'66	32,369	38,594	6,225	19'23
Vehicle mileage run per vehicle "	54,288	52,118	-2,170	-4'00	32,878	31,645	-1,233	-3'75	40,818	43,574	2,756	6'75
Coaching freight ton-mileage in thousands of tons "	107,060	102,226	-4,834	-4'52	14,162	14,064	-98	-0'69	28,293	27,936	-357	-1'26
Freight ton-mileage per vehicle "	49	44	-5	-10'20	27	26	-1	-3'70	35	31	-4	-11'4
Length of system on the 31st December "	2,101'27	2,186'58	85'31	4'06	268'04	277'02	8'98	3'35	1,552'98	1,546'00	-6'98	-0'45
Number of passengers carried in thousands No.	23,875	23,256	-619	-2'59	7,905	8,225	320	4'05	6,021	6,383	362	6'01
GOODS VEHICLES.												
Number of vehicles on the 31st December No.	15,416	116,339	923	5'99	2,395	2,380	-15	-0'63	4,950	6,111	1,161	23'45
Capital expenditure on vehicles up to the 31st December in thousands of Rs.	10,63.09	11,17.39	54.30	5'11	1,24.54	1,33.78	9.24	7'42	1,85.55	3,08.00	144.45	16'87
Total vehicle mileage run Miles.	239,325	285,867	26,542	10'24	27,271	31,908	4,637	17'00	69,721	81,601	11,880	17'04
Vehicle mileage run per vehicle "	16,822	17,471	649	3'86	11,387	13,407	2,020	17'74	14,085	13,353	-732	-5'2
Goods freight ton-mileage in millions of tons "	2,149	2,040	-109	-5'07	131	157	26	19'85	229	306	77	33'63
Freight ton-mileage per vehicle in thousands of tons "	139	125	-14	-10'07	55	66	11	20'00	46	50	4	8'70
Length of system on the 31st December "	2,101'27	2,186'58	85'31	4'06	268'04	277'02	8'98	3'35	1,552'98	1,546'00	-6'98	-0'45
Number of tons carried in thousands of tons "	10,418	10,484	66	0'63	1,616	1,800	184	11'39	2,185	2,870	685	31'35

* The expenditure on locomotives and coaching and goods vehicles has not been kept separate in the accounts.
† The expenditure on coaching and goods vehicles has not been kept separate in the accounts.

‡ Increase and percentage of increase have been are not credited. The extent to which this was the case may be judged from Appendix

§ The quantity of goods carried over the several railways is given to show the volume of traffic dealt with by each. In the case of many railways, a large

¶ Excluding 81 vehicles intended for railway purposes only.

‡ Including 2' 6" gauge lines, as the figures cannot be separated.

DIX 33-A.

Appendix 33-A.
Rolling-stock and work done.

in 1901 and 1902, and the work done by it.

50 of Report).
code letters used to denote railway systems.

5 6											
5				6				7			
ODDH AND ROHILKHAND.				NORTH WESTERN (a) TO (d).				GREAT INDIAN PENINSULA SYSTEM (a) TO (g).			
1901.	1902.	Increase.	Percent- age of increase.	1901.	1902.	Increase.	Percent- age of increase.	1901.	1902.	Increase.	Percent- age of increase.
LOCOMOTIVES.											
175	181	6	3'43	676	694	18	2'66	752	777	25	3'32
47,58	50,14	2,56	5'38	2,33,14	2,42,47	9,33	4'00	25,66,00	2,52,11	11,76	2'08
4,771	4,987	216	4'53	13,736	14,707	971	7'07	14,231	16,499	1,668	11'25
27,265	27,555	290	1'06	20,330	21,192	862	4'29	19,722	21,372	1,650	8'37
1,206	1,284	78	6'47	4,134	4,250	116	2'81	4,329	4,952	623	14'39
6,892	7,094	202	2'93	6,115	6,124	9	0'15	5,758	6,373	615	10'68
1,151'28	1,151'28	...	...	3,702'68	3,703'85	1'17	0'03	2,674'38	2,674'45	0'07	...
8,764	8,332	-432	-4'93	120,293	120,822	529	2'61	22,534	20,771	-1,763	-7'82
1,899	2,302	403	21'22	155,603	155,934	331	5'91	4,510	4,611	101	2'24
COACHING VEHICLES.											
804	845	41	5'10	2,331	2,350	19	0'82	2,247	2,233	-14	-0'61
11,28,76	11,44,10	15,34	11'91	14,24,55	1,40,29	110,23	12'41	25,66,00	1,03,03	11,76	12'03
32,432	34,382	1,950	6'01	82,629	90,223	16,599	20'09	76,413	97,040	20,627	26'95
40,338	40,689	351	0'87	35,448	42,225	6,777	19'22	34,007	43,457	9,450	27'71
25,579	25,654	75	0'29	72,762	76,748	3,986	5'48	65,934	70,127	4,193	6'31
32	30	-2	-6'25	31	33	2	6'45	29	31	2	6'91
1,151'28	1,151'28	...	...	3,702'68	3,703'85	1'17	0'03	2,674'38	2,674'45	0'07	...
8,764	8,332	-432	-4'93	120,293	120,822	529	2'61	22,534	20,771	-1,763	-7'82
GOODS VEHICLES.											
4,416	4,738	322	7'29	11,354	11,477	123	1'08	10,242	10,555	313	3'01
11,28,76	11,44,10	15,34	11'91	14,24,55	2,24,49	110,23	12'41	25,66,00	2,22,62	11,76	12'03
73,448	82,162	8,714	11'86	191,207	183,654	-7,553	-3'95	177,742	171,306	-6,036	-3'4
16,632	17,341	709	4'26	16,960	16,002	-958	-5'65	17,354	16,268	-1,086	-6'21
239	244	5	2'09	1,117	1,072	-45	-4'03	1,057	1,262	205	19'3
54	52	-2	-3'70	99	93	-6	-6'06	103	120	17	16'9
1,151'28	1,151'28	...	...	3,702'68	3,703'85	1'17	0'03	2,674'38	2,674'45	0'07	...
1,899	2,302	403	21'22	155,603	155,934	331	5'91	4,510	4,611	101	2'24

It has not, therefore, been possible to show it separately.
It has not, therefore, been possible to show it separately.
calculated on the total value of rolling-stock.
part of the traffic was carried in foreign railway wagons. In the case of some, the home vehicles carried traffic on foreign lines with the quantity of which the
No. 21. The vehicle mileage figures, however, represent all the work done by each railway's own vehicles.

Appendix 33-A.
Rolling-stock and work done.

Statement showing Rolling-stock on some of the railway

(Referred to in paragraph N.B.—A reference to Appendix 2 will furnish the key to it)

GAUGE.	5' 6"											
	8				9				10			
	B. B. & C. L. (a) to (f).				N. G. S. (a) & (b).				M. (a) to (c).			
CLASSIFICATION No.												
Particulars.												
	1901.	1902.	Increase.	Percent- age of increase.	1901.	1902.	Increase.	Percent- age of increase.	1901.	1902.	Increase.	Percent- age of increase.
LOCOMOTIVES.												
Number of Locomotives on the 31st December No.	188	183	-5	-2'66	54	58	4	7'41	232	249	17	7'33
Capital expenditure on Locomotives up to the 31st December in thousands of Rs.	2,21,24	2,25,11	3,87	1'75	47,82	23,37	14,63	19'68	82,20	92,13	9,93	12'08
Total Engine miles run in thousands of miles	3,447	3,377	-70	-2'03	1,163	1,193	30	2'58	5,472	5,476	4	0'07
Engine mileage run per engine "	18,338	18,454	116	0'63	21,551	20,563	-988	-4'53	23,590	21,992	-1,598	-6'77
Gross ton-miles hauled in millions of tons "	1,134	1,072	-62	-5'47	372	389	17	4'57	1,394	1,391	-3	-0'22
Ton-mileage hauled per engine in thousands of tons "	6,031	5,858	-173	-2'87	6,904	6,714	-190	-2'75	6,008	5,585	-423	-7'04
Length of system on the 31st December "	1683'12	1643'67	-39'45	-5'77	350'71	350'71	...	...	1,377'30	1,394'86	17'56	1'28
Number of passengers carried in thousands No.	117,623	118,435	812	4'61	1,409	1,750	341	24'20	12,277	13,005	728	5'93
Tonnage of goods carried in thousands of tons.	1,901	1,857	-44	-2'32	920	935	15	1'63	2,412	2,319	-93	-3'86
COACHING VEHICLES.												
Number of vehicles on the 31st December No.	579	618	39	6'73	182	189	7	3'85	1,159	1,181	22	1'90
Capital expenditure on vehicles up to the 31st December in thousands of Rs.	2,21,24	2,25,11	3,87	1'75	47,82	29,08	14,63	19'68	1,56,67	42,16	15,97	13'81
Total vehicle-mileage run in thousands of miles.	28,064	28,549	485	1'73	7,332	7,385	53	0'72	32,753	37,905	5,152	15'73
Vehicle-mileage run per vehicle "	48,479	46,196	-2,274	-4'69	40,264	39,073	-1,211	-3'01	28,260	32,096	3,836	13'37
Coaching freight ton-mileage in thousands of tons "	28,675	29,326	651	2'30	4,754	5,010	256	5'39	30,001	32,427	2,426	8'08
Freight ton-mileage per vehicle in thousands of tons "	49	47	-2	-4'08	26	27	1	3'85	25	27	2	8'00
Length of system on the 31st December "	1683'12	1643'67	-39'45	-5'77	350'71	350'71	...	...	1,377'30	1,394'86	17'56	1'28
Number of passengers carried in thousands No.	117,623	118,435	812	4'61	1,409	1,750	341	24'20	12,277	13,005	728	5'93
GOODS VEHICLES.												
Number of vehicles on the 31st December No.	4,846	4,905	59	1'22	938	1,008	70	7'46	4,276	4,422	146	3'41
Capital expenditure on vehicles up to the 31st December in thousands of Rs.	2,21,24	2,25,11	3,87	1'75	47,82	29,08	14,63	19'68	1,56,67	1,20,48	19,97	13'81
Total vehicle-mileage run in thousands of miles.	51,602	44,280	-7,322	-14'19	20,099	17,685	-2,414	-12'01	47,164	57,504	10,340	21'92
Vehicle-mileage run per vehicle "	10,648	9,028	-1,620	-15'21	20,148	17,791	-2,357	-11'70	11,030	13,004	1,974	17'90
Goods freight ton-mileage in millions of tons "	307	275	-32	-10'42	107	114	7	6'54	306	291	-15	-4'90
Freight ton-mileage per vehicle in thousands of tons "	64	56	-8	-12'50	114	113	-1	-0'88	72	66	-6	-8'33
Length of system on the 31st December "	1683'12	1643'67	-39'45	-5'77	350'71	350'71	...	...	1,377'30	1,394'86	17'56	1'28
Number of tons carried in thousands of tons.	1,901	1,857	-44	-2'32	920	935	15	1'63	2,412	2,319	-93	-3'86

* The expenditure on locomotives and coaching and goods vehicles has not been

† The expenditure on coaching and goods vehicles has not been kept separately

‡ Increase and percentage of increase have been

§ The quantity of goods carried over the several railways is given to show the volume of traffic dealt with by each. In the case of many railways they are not credited. The extent to which this was the case may be judged from Appendix No. 21.

|| Excluding the Godhra-Rutlam-Nagda railway.

¶ Including the Godhra-Rutlam-Nagda railway.

DIX 33-A—concluded.

Appendix 33-A.
Rolling-stock and work done.

in 1901 and 1902, and the work done by it.

50 of Report.)

code letters used to denote railway systems.

3' 31"															
2				8				16				17			
EASTERN BENGAL STATE. (b) to (d).				RAJPUTANA-MALWA. (g) to (i).				BENGAL AND NORTH-WESTERN.				ROHILKUND AND KUMAON. (m) and (n).			
1901.	1902.	Increase.	Percentage of increase.	1901.	1902.	Increase.	Percentage of increase.	1901.	1902.	Increase.	Percentage of increase.	1901.	1902.	Increase.	Percentage of increase.
LOCOMOTIVES.															
121	120	-1	0'83	428	438	10	2'34	173	182	7	4'00	31	31	...	...
92,35	25,93	14,69	15'08	77,60	78,71	1,11	1'44	41,15	50,06	8,91	21'65	6,73	7,11	38	5'68
2,802	2,797	-5	-0'18	7,815	7,390	-425	-5'44	3,981	4,595	6,14	15'42	745	782	37	4'97
23,163	23,307	144	0'62	18,260	16,872	-1,388	-7'60	22,749	25,246	2,497	10'98	24,037	26,059	2,022	8'41
392	408	16	4'08	1,676	1,553	-123	-7'34	658	771	113	17'18	98	108	10	10'20
3,247	3,396	149	4'59	3,917	3,545	-372	-9'50	3,761	4,236	475	12'63	3,188	3,470	282	8'85
698'91	733'67	34'76	4'98	1,048'94	1,022'78	73'84	3'79	1,280'19	1,282'73	2'54	0'20	285'09	285'09	...	...
5,252	5,576	324	6'17	12,873	12,091	-782	-6'08	9,684	10,126	442	4'56	1,539	1,592	53	3'44
5883	5971	88	9'97	12,392	12,230	-162	-6'77	11,345	11,460	115	8'55	372	432	60	16'13
COACHING VEHICLES															
625	640	15	2'40	1,657	1,676	19	1'15	795	838	43	5'41	158	158	...	...
92,35	171,11	14,69	15'08	1,40,88	1,48,24	7,36	5'22	1,20,61	1,24,20	3,59	2'98	19,80	126,05	6,25	31'52
19,297	18,850	-447	-2'32	56,168	57,197	9,29	1'65	35,074	46,190	11,116	31'69	5,352	5,720	368	6'88
30,873	29,453	-1,422	-4'61	33,958	30,513	-3,445	-10'14	44,118	55,120	11,002	24'94	33,873	36,203	2,330	6'88
12,106	12,706	600	4'96	41,359	39,757	-1,602	-3'87	22,358	25,192	2,834	12'67	3,487	3,519	32	0'92
19	20	1	5'26	25	24	-1	-4'00	28	30	2	7'14	22	22	...	...
698'91	733'67	34'76	4'98	1,048'94	1,022'78	73'84	3'79	1,280'19	1,282'73	2'54	0'20	285'09	285'09	...	...
5,252	5,576	324	6'17	12,873	12,091	-782	-6'08	9,684	10,126	442	4'56	1,539	1,592	53	3'44
GOODS VEHICLES.															
2,990	3,145	155	5'18	7,102	7,100	-2	-0'03	5,869	5,868	-1	-0'02	860	1,071	211	24'54
92,35	171,11	14,69	15'08	1,40,88	1,48,24	7,36	5'22	1,20,61	1,24,20	3,59	2'98	19,80	126,05	6,25	31'52
27,304	32,289	4,988	18'27	146,773	125,682	-21,091	-14'31	49,254	54,504	5,250	10'66	9,112	9,831	719	7'89
9,131	16,267	1,136	12'44	20,666	14,362	-6,304	-30'50	8,392	9,238	806	10'68	10,595	9,120	-1,475	-15'36
85	94	9	10'59	605	532	-74	-12'12	165	172	7	4'24	24	29	5	20'83
28	30	2	7'14	85	76	-9	-10'59	28	29	1	3'57	28	27	-1	-3'57
698'91	733'67	34'76	4'98	1,048'94	1,022'78	73'84	3'79	1,280'19	1,282'73	2'54	0'20	285'09	285'09	...	...
5883	5971	88	9'97	12,392	12,230	-162	-6'77	11,345	11,460	115	8'55	372	432	60	16'13

kept separate in the accounts. It has not, therefore, been possible to show it separately.
 in the accounts. It has not, therefore, been possible to show it separately.
 calculated on the total value of rolling-stock.
 a large part of the traffic was carried in foreign railway wagons. In the case of some, the home vehicles carried traffic on foreign lines with the quantity of which
 The vehicle mileage figures, however, represent all the work done by each railway's own vehicles.
 including outlay on machinery.

Appendix 34.
Rolling-stock.

Rolling-stock under different heads on each

(Referred to in paragraph 30
N. B.—A reference to Appendix 3 will furnish the key to the

Items.	GAUGE.		5' 6"										5' 3 3/8"								
	CLASS No.		1	2 (a)	3	4 (a)	5 (a) & (b)	6 (a) & (b)	7 (a) to (c)	7 (d) to (g)	8 (a) to (f)	9 (a) & (b)	10 (a) to (c)	2 (b) to (d)	8 (g) to (h)	9 (c)	10 (d) & (e)	11 (a) & (b)	12 (d)	13	14
	Particulars.		E. I.	E. B.	B. C.	B. N.	O. & R.	N. W.	G. I. P.	I. M.	B. B. & C. I.	N. G. S.	M.	E. B. S.	R. M.	H. G. V.	N. & S. C.	B. D.	D. S.	A. R.	
Engines.																					
1	Passenger engines		140	46	(d)	40	43	...	160	10	63	(d)	42	...	145	(d)	4	(d)	(d)	(d)	
2	Goods and mixed engines		714	83	27	153	139	...	450	157	120	58	207	...	293	54	5	10	21	53	
3	TOTAL ENGINES		854	129	27	193	181	(4) 694	610	167	(c) 183	58	249	110	438	54	9	20	22	53	
Coaching vehicles.																					
4	Saloons, Royal and State		4	1	...	...	...	11	...	...	14	3	2	5	...	...	...	...	...	2
5	Saloons, ordinary		2	13	4	1	10	63	...	5	8	5	...	...	7	...	...	...	...	...
6	Reserved carriages		39	3	...	11	10	...	...	...	...	...	...	...	11	...	...	...	...	...
7	Inspection carriages		...	...	1	4	...	...	...	...	...	3	...	...	...	...	...	...	...	...
8	Family carriages		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	First class carriages { 4-wheeled Bogie		97	11	4	26	40	96	71	22	4	10	52	14	108	7	...	3	...	4	
10	Composite, first and second class { 4-wheeled Bogie		64	42	8	49	56	91	60	34	12	12	65	2	46	8	...	7	...	4	
11	Composite, first and second and third class { 4-wheeled Bogie		11	7	...	5	4	...	...	2	...	...	...	...	...	...	...	...	...	...
12	Other composite carriages { Bogie		...	...	...	...	10	10	5	...	...	8	...	...	...	...	...	...	...	8
13	Second class { Ordinary		10	14	...	...	...	...	...	...	6	...	...	2	...	...	...	...	...	...
14	Second class with postal accommodation		87	12	4	28	33	98	135	22	33	10	79	16	91	6	...	2	...	...
15	Intermediate class { 4-wheeled Ambulance Bogie		93	24	4	26	29	120	...	...	13	...	4	44	49	...	...	...	...	...
16	Composite, intermediate, and third class		62	33	6	15	31	81	...	...	...	...	40	25	...	...	...	...	...	(b) 35
17	Intermediate and postal carriages		...	4	2	3	...	18	...	...	5	...	3	8	...	...	...	...	...	...
18	Intermediate third and postal carriages		...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	Lower class		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	Third class carriages { 4-wheeled without brakes Bogie		723	165	34	206	72	81	458	192	173	64	506	237	559	45	...	34	35	...	
21	Third class and postal vans with brakes { Ambulance		57	31	...	50	...	198	23	...	15	...	51	8	5	...	...	...	...	...
22	Third class carriages { 4-wheeled and Bogie with brakes		48	...	12	59	76	376	119	27	30	...	8	7	113	...	...	...	...	22
23	Brakevans		687	73	10	207	139	452	537	73	152	49	258	80	307	40	14	15	20	12	
24	Brakevans with third class		...	13	...	19	...	101	...	21	...	...	...	...	...	...	...	...	...	6
25	Brakevans fitted with postal compartment		...	...	...	...	...	12	...	11	...	...	...	...	...	...	...	...	...	...
26	Postal vans		22	3	...	...	...	10	7	...	...	9	3	...	...	...	...	...	...	...
27	Composite, postal and other carriages		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Private vans		...	6	...	...	...	42	5	4	...	2	27	5	38	3	...	...	...	...
29	Carriage trucks		39	17	1	16	41	142	93	15	18	10	56	10	82	3	...	3	...	13	
30	H. use boxes		41	23	4	31	43	61	90	25	26	6	30	14	24	...	...	...	...	12
31	Luggage vans		...	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Produce Vendors' vans		...	15	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	Milk vans		...	20	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	Fish vans		1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35	Store, ice and stationery vans		10	4	8	...	3	1	...	...	...	...	...	12	2	...	...	...	...	1
36	Miscellaneous		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37	TOTAL COACHING VEHICLES		2,316	548	117	888	845	2,450	1,724	509	618	189	1,181	607	1,676	131	42	72	80	206	
Goods vehicles.																					
38	Covered goods wagons, { Ordinary bogies		...	256	...	...	...	...	...	...	...	...	...	471	...	75	...	...	...	...
39	Covered goods wagons, { Ordinary 4-wheeled Military		3,395	685	430	2,455	2,100	3,365	4,439	1,880	1,404	46	293	1,174	3,418	300	...	234	133	849	
40	High-sided wagons, bogie		4,041	1,077	...	1,278	1,893	5,227	...	...	...	116	2,021	1,261	365	100	...	...	...	...
41	High-sided wagons, 4-wheeled		...	23	...	...	...	933	2,798	591	1,003	504	1,191	...	134	300	...	644	125	
42	Medium-sided wagons, bogie		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
43	Medium-sided wagons, 4-wheeled		...	...	...	870	...	...	...	410	290	...	...	150	84	6	...	...	...
44	Low-sided wagons, { Ordinary Bogie Military		...	...	...	...	...	102	...	102	...	80	54	217	...	...	...	...	...
45	Low-sided wagons, { Ordinary 4-wheeled Military		4,371	167	42	100	188	543	280	25	85	...	150	217	31	...	67	70	300		
46	Coal or coke wagons		2,502	167	8	153	328	1,199	...	...	...	...	230	101	1,192	...	...	...	...
47	Cattle wagons		861	...	...	890	94	...	...	...	...	...	130	...	...	...	...	...	...
48	Accident vans		7	5	...	...	...	24	...	...	...	...	42	...	...	...	...	...	...
49	Platform wagons		25	10	2	8	...	...	27	10	...	...	15	7	15	8	...	...	...
50	Powder vans		41	...	...	89	...	...	...	...	...	...	3	3	...	...	...	...	...
51	Timber trucks		31	1	2	6	8	47	18	4	...	...	9	2	35	...	...	...	...
52	Bolster trucks { Double Single		...	22	7	36	...	49	191	...	90	28	185	84	79	20	8	12	50		
53	Ballast wagons		...	58	...	17	...	...	...	50	...	...	(j) 25	...	...	...	...	...	...
54	Travelling oil tanks		248	37	...	76	...	...	91	480	...	...	...	...	...	...	...	...	...
55	Travelling water tanks		29	11	...	16	...	41	23	...	15	...	31	...	12	...	...	...	...
56	Travelling gas holder		...	3	...	8	5	15	8	3	8	...	4	2	...	...	...	...	...
57	Travelling cranes		29	5	2	11	17	31	47	9	4	...	15	11	29	8	...	3	1		
58	Miscellaneous		27	8	...	8	7	16	...	...	...	...	...	6	1	...	...	...	...
59	TOTAL GOODS VEHICLES		16,420	2,380	493	6,111	4,738	11,477	7,881	2,674	4,905	1,008	4,422	2,049	7,100	316	139	217	899	1,480	
LOWER CLASS CARRIAGES FITTED WITH RETIRING																					
60	Intermediate class		(a) 81	14	4	35	19	(h) 120	...	...	12	...	26	79	...	...	(i) 3	...	...	...
61	Third class		(a & (b)) 94	15	5	40	56	180	113	35	18	...	62	29	109	...	...	...	...	16
62	TOTAL		177	29	9	75	75	300	113	35	30	...	62	35	188	...	...	3	...	16

(a) Nine bogie composites intermediate and third taken as 9 each.
 (b) Includes 2 composites, intermediate and third.
 (c) Excludes 3 Passenger and 4 Goods engines condemned during the year.
 (d) Included with goods engines as no distinction is made in the line returns between Passenger and Goods and mixed engines.
 (e) Intermediate and brakevans.

DIX 34.

Appendix 34.
Rolling-stock.

railway at close of the Calendar year 1902.

of Report.)

code letters used to denote railway systems.

3' 3 1/2"										2' 6"										2' 0"						Total
15	16	17 (a) & (b)	18	19	20	21	22	23	24	1 (b)	2 (c)	4 (b)	6 (e)	8 (j) & (m)	17 (c)	24	25	26	27	28	6 (k)	7 (k)	29	30	31		32
D.	B. & N. W.	R. & K.	J. B.	U. C.	H. G. J. P.	S. M.	S. I.	B.	E. B. S.	C. B.	R. D.	N. D.	G. D. & R.	P. W. L.	M. R. W.	B. L.	B. P.	R. K. L.	T. B.	D. L.	G. L.	D. H.	H. A.	H. S.	J.	
4	(d) 182	(d) 31	(d) 44	1 3	(d) 37	50 201	69 145	28 181	...	...	(d) 4	(d) 11	(d) 11	(d) 5	5 3	(d) 4	(d) 2	(d) 3	...	...	(d) 11	...	(d) 7	(d) 4	...
4	182	31	44	3	37	231	214	209	10	3	4	11	11	5	8	4	4	2	3	7	11	14	7	4	7	
...	3	...	3	...	8	8	1	1	...	...	...	...	2	...	...	...	...	...	...	...	2	...	...	...	...
...	13	...	...	...	2	7	...	3	1	1	...	...	...	...	3	1	...	...	...	...	2	2	...	...	...
...	4	4	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...
...	...	...	5	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
...	9	...	6	...	5	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2	...	...	...	...
...	26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	1	...	24	16	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...
...	...	...	2	...	2	...	9	5	5	2	...	...	...	...	...	4	...	2	4	...	...	20	4	3	...
...	33	6	6	...	10	43	44	31	...	...	...	...	6	...	4	...	...	...	...	...	6	...	...	...	...
...	24	...	...	2	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	46	10	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...	...	...	32	...	15	2	...	...	...	...	...	34	...	13	8
...	815	49	66	11	127	198	511	262	...	...	14	4	...	10	13	...	16	9	...	...	13	...	10	13	...
...	6	10	17	...	12	53	15	59	...	...	6	6	...	...	...	...	...	...	...	...	...	...	...	...	...
...	203	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	16	...	8	1	4	37	74	10	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	15	3	3	...	256	78	45	...	...	3	...	...	...	...	...	...	...	...	...	5	...	...	...	...
...	167	6	10	3	41	45	52	132	7	2	3	5	11	...	7	...	...	3	...	...	2	...	7	1	...
...	...	21	...	...	...	180	28	23	...	...	...	3	...	...	...	...	...	...	...	...	4	...	2	1	...
...	...	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...
...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	5	...	...	...	6	14	5	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	30	5	12	1	5	47	30	36	...	...	...	...	2	...	2	...	...	...	...	...	5	...	...	...	...
...	1	5	...	...	1	21	21	31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	
...	...	2	4	...	...	13	5	15	1	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...
19	838	158	183	26	264	1,053	990	860	33	16	22	21	54	18	54	7	25	14	13	...	41	88	56	19	10	
...	209	109	6	25	...	85	20	524	55	56	...	49	...	1	10	...	...	...	...	...	...	...	...	...	...
...	4,786	787	496	...	133	2,941	1,613	1,801	...	...	20	25	38	57	10	7	20	4	30	...	30	37	14	4	41
...	...	...	...	...	145	193	267	335	...	...	...	...	...	...	4	...	...	...	...	...	2	...	...	...	22
...	...	...	...	...	...	57	813	60	...	...	...	19	83	...	31	5	...	12	...	...	41	156	4	4	41
...	...	...	...	...	...	140	...	310	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	42
...	28	...	150	10	20	...	20	95	18	...	25	...	50	...	48	...	...	...	...	...	...	...	10	...	43
...	494	82	145	...	566	325	...	886	...	...	30	...	...	2	...	39	15	4	6	...	10	7	5	3	45
...	...	...	35	...	6	350	...	151	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	46
...	...	6	...	...	...	13	...	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	47
...	...	...	...	...	...	45	...	...	...	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	48
...	...	...	...	...	...	73	...	12	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	49
...	329	76	...	...	22	127	51	43	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	50
...	...	...	...	...	...	65	...	157	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	51
...	...	...	...	...	...	74	...	103	...	...	...	...	...	...	...	...	...	...	...	...	100	...	...	...	52
...	...	...	...	...	...	2	...	17	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	53
...	...	...	...	...	...	7	...	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	54
...	...	...	...	...	...	25	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	55
...	...	...	...	...	...	21	...	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	56
...	...	...	...	...	...	12	30	128	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	57
8	5,868	1,071	833	35	1,005	4,861	3,323	4,301	196	65	75	115	215	70	104	62	35	8	50	326	183	212	33	8	75	

ACCOMMODATION FOR FEMALES.

...	...	10	...	2	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	2	14	15	14	63	44	38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	12	14	17	24	82	44	38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

(j) Includes 150 salt wagons.
 (k) These are wooden trucks for carrying stone.
 (l) Includes 13 bogie and 41 composites intermediate and third class.
 (m) Rail trucks.
 (n) Trucks for carrying coal.
 (o) Excluding 4 engines on 3' 3 1/2" gauge.
 (p) These are intermediate and third class composites.

Appendix 35.
Automatic brakes.

APPENDIX 35.

Rolling-stock fitted with automatic brakes at close of 1902.

(Referred to in paragraph 51 of Report).

CLASS: No.		Gauge.	Railway.	LOCOMOTIVES.			COACHING VEHICLES.				GOODS VEHICLES, EXCLUDING CRANES.			
Main.	Sub.			Fitted.	Not fitted.	Proportion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proportion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proportion per cent. of fitted to total.
1	...	3' 6"	East Indian	332	522	38'88	1,438	94	294	65'72	15	108	16,268	0'71
2	(a)		Eastern Bengal	94	35	72'87	401	46	101	81'57	25	15	2,335	1'68
3	...		Bengal Central	5	22	18'52	...	1	116	0'85	...	...	493	...
4	(a)		Bengal-Nagpur	81	112	41'97	557	51	280	68'47	2	10	6,088	0'20
5	(a) & (b)		Oudh and Rohilkhand	74	107	40'88	595	52	198	70'41	25	10	4,686	0'74
6	(a) to (e)		North Western	548	146	84'44	1,773	103	474	79'83	453	102	10,871	4'86
7	(e) to (c)		Great Indian Peninsula	279	331	45'74	1,254	...	470	77'74	...	93	7,741	1'19
7	(d) to (g)		Indian Midland	104	63	62'28	160	50	299	41'26	...	25	2,640	0'94
8	(a) to (f)		Bombay, Baroda and Central India	129	54	70'49	491	11	116	81'23	1	58	4,842	1'20
9	(a) & (b)		Nizam's Guaranteed State . . . . .	...	58	...	53	6	130	31'22	...	...	1,006	...
10	(a) to (c)		Madras	116	133	46'59	645	42	494	58'17	105	8	4,294	2'36
2	(b) to (d)		Eastern Bengal ^a	59	51	53'64	329	47	231	61'94	27	2	2,909	0'99
8	(g) to (k)		Rajputana-Malwa . . . . .	...	438	...	...	...	1,676	...	...	...	7,071	...
9	(e)		Hyderabad-Godavari Valley . . . . .	...	54	...	...	...	131	...	...	...	814	...
10	(d) & (e)		Nilgiri and Shoranur Cochin	4	5	44'44	8	...	34	19'05	20	...	119	14'39
12	...		Bengal Doars . . . . .	...	10	...	...	...	72	...	...	...	314	...
13	...		Dibru-Sadiya . . . . .	...	22	...	...	...	80	...	...	...	898	...
14	...		Assam Bengal	44	9	83'02	193	...	13	93'69	2	...	1,465	0'14
15	...		Deoghur . . . . .	...	4	...	...	...	12	...	...	...	8	...
16	...		Bengal and North-Western	7	175	3'85	...	...	838	...	...	...	5,849	...
17	(a) & (b)		Rohilkund and Kumaon . . . . .	...	31	...	...	...	158	...	...	...	1,063	...
18	...		Jodhpur-Bikaner . . . . .	...	44	...	...	...	183	...	...	...	833	...
19	...		Udaipur-Chitor . . . . .	...	3	...	...	...	26	...	...	...	35	...
20	...		Bhavnagar-Gondal-Junagad- Porbandar . . . . .	...	37	...	...	...	264	...	...	...	1,003	...
21	...		Southern-Mahratta . . . . .	...	231	...	...	...	1,953	...	...	...	4,840	...
22	...		South Indian	25	189	11'68	143	25	822	16'97	...	...	3,317	...
23	...		Burma	104	105	49'76	255	46	559	35'00	94	5	4,175	2'28
2	(e)		Cooch Behar ^b . . . . .	...	13	...	...	...	49	...	...	...	261	...
4	(b)		Raipur-Dhamtari . . . . .	...	4	...	...	...	22	...	...	...	75	...
4	(c)		Parlakimedi . . . . .	...	3	...	...	...	8	...	...	...	16	...
6	(f) & (g)		Khushalgarh-Kohat-Thal and Nowshera-Durgai ^c . . . . .	...	11	...	...	...	21	...	...	...	115	...
8	(i) & (m)		Gaekwar's Dabhol and Raj- pipra . . . . .	...	11	...	...	...	54	...	...	...	215	...
17	(e)		Powayan . . . . .	...	5	...	...	...	18	...	...	...	70	...
24	...	Mervi . . . . .	...	8	...	...	...	54	...	...	...	104	...	
25	...	Barsi . . . . .	...	4	...	...	...	7	...	...	...	61	...	
26	...	Tarakeshwar-Magra . . . . .	...	4	...	...	...	25	...	...	...	35	...	
27	...	Ranaghat-Krishnagar . . . . .	...	2	...	...	...	14	...	...	...	8	...	
28	...	Tezpur Balipara . . . . .	...	3	...	...	...	13	...	...	...	50	...	
6	(h)	Dandot . . . . .	...	7	...	...	...	...	...	...	...	326	...	
7	(h)	Gwalior . . . . .	...	11	...	...	...	41	...	...	...	183	...	
29	...	Darjeeling-Himalayan . . . . .	...	14	...	...	...	88	...	...	...	212	...	
30	...	Howrah-Amra . . . . .	...	7	...	...	...	56	...	...	...	33	...	
31	...	Howrah-Sheakhala . . . . .	...	4	...	...	...	19	...	...	...	8	...	
32	...	Jorhat . . . . .	...	7	...	...	...	10	...	...	...	75	...	
33	...	Thaton-Duyinraik ^d . . . . .	...	...	...	...	...	...	...	...	...	...	...
Total				2,005	3,109	39'21	8,285	574	10,123	49'27	769	436	97,824	1'28

^a Excludes the Kania-Dharila and the British section of the Cooch Behar-Santabrari extension, 2' 6" gauge line particulars of which are included with the Cooch Behar railway.
^b Information for the Khushalgarh-Kohat-Thal railway is not available.
^c Information not available.

APPENDIX 36.
Rolling-stock lighted by gas.

Appendix 36.
Lighting of stock.

(Referred to in paragraph 52 of Report.)

CLASS - No.		Gauge.	RAILWAYS.	Number of coaching vehicles fitted.	Number of coaching vehicles not fitted.	Proportion per cent. of fitted to total.	REMARKS.	
Main.	Sub.							
1	...	5' 6"	East Indian	1,198 ^a	467	71.95	* Includes 3 carriages fitted with electricity.	
2	(a)		Eastern Bengal	407	46	89.85		
3	...		Bengal Central . . . . .	...	117	...	
4	(a)		Bengal-Nagpur	485†	180	72.93		† Includes 1 carriage fitted with electricity.
5	(a) & (b)		Oudh and Rohilkhand	598	204	74.56		
6	(a to (c)		North Western	1,108	982	53.01		...
7	(a) to (c)		Great Indian Peninsula	981	71	93.25		
7	(d) to (g)		Indian Midland	259	133	66.07		
8	(a) to (f)		Bombay, Baroda and Central India	404	14	96.65		
9	(a) & (b)		Nizam's Guaranteed State	131	61	68.48		
10	(a) to (c)	Madras	751	317	70.32			
2	(b) to (d)	Eastern Bengal	402	11	97.34			
8	(g) to (h)	Rajputana-Malwa	76	1,603	4.53			
9	(c)	Hyderabad-Godavari Valley	81	50	61.83			
10	(d) & (e)	Nilgiri and Skorapur-Cochin . . . . .	...	41	...		
12	...	Bengal Doon . . . . .	...	71	...		
13	...	Dibru-Sadiya . . . . .	...	80	...		
14	...	Assam-Bengal	171	7	96.07			
15	...	Deoghur . . . . .	...	12	...		
16	...	3' 3 3/4"	Bengal and North-Western . . . . .	...	838	...	
17	(a) & (b)		Rohilkund and Kumaon . . . . .	...	158	...	
18	...		Jodhpur-Bikaner . . . . .	...	183	...	
19	...		Udaipur-Chitor . . . . .	...	26	...	
20	...		Bhavnagar-Goodal-Junagad-Porbandar . . . . .	...	264	...	
21	...		Southern Mahratta	934	32	96.68		
22	...		South Indian	91	808	10.12		
23	...		Burma	13	647	1.97		
2	(a)		2' 6"	Cooch Behar‡	49	...	‡ Includes the Kaunia-Dharla and Cooch Behar-Santrahar extension, British section, 2' 6" gauge, lines. § Information for the Khushalgarh-Kohat-Thal railway is not available.
4	(b)			Raipur-Dhamtari	31	...	
4	(c)	Parlakimedi . . . . .		...	8	...
6	(f) & (g)	Khushalgarh-Kohat-Thal and Nowshera-Durgai . . . . .		...	521	...
8	(i) & (m)	Gaekwar's Dabhol and Rajpipla . . . . .		...	54	...
17	(c)	Powayan . . . . .		...	18	...
24	...	Morvi . . . . .		...	54	...
25	...	Barvi . . . . .		...	7	...
26	...	Tarakeswar-Magra . . . . .		...	25	...
27	...	Raughat-Krishnagar . . . . .		...	14	...
28	...	Tezpur-Balipara . . . . .	...	13	...		
7	(h)	2' 0"	Gwalior . . . . .	...	41	...	
29	...		Darjeeling-Himalayan . . . . .	...	88	...	
30	...		Howrah-Amta . . . . .	...	56	...	
31	...		Howrah-Sheakhala . . . . .	...	19	...	
32	...		Jorhat . . . . .	...	10	...	
33	...		Thator-Duyinsalk 	Information not available.	

Appendix 37.
Interlocking and train signalling.

APPENDIX 37.

Railways on which points and signals are interlocked and on which block instruments are used for train signalling at close of 1902.

(Referred to in paragraph 53 of Report)

Class No.		Gauge.	RAILWAY.	Total number of stations on railway.	STATIONS AT WHICH POINTS AND SIGNALS ARE INTERLOCKED.		STATIONS AT WHICH BLOCK INSTRUMENTS ARE USED FOR TRAIN SIGNALLING.	
Main.	Sub.				No.	Name of system of interlocking.	No.	Name of block instrument.
1	..	3' 6"	East Indian	380	94	55 English system 32 Saxby and Farmer's	76	43 Pryce and Ferreira. 33 Tyer's Tablet.
2	(a)		Eastern Bengal	83	15	7 Experimental 9 Mackenzie and Holland's 6 Experimental	..	.....
3	..		Bengal Central	27	..	..	..	.....
4	(a)		Bengal-Nagpur	218	87	86 List and Morse's 1 Experimental 68 List and Morse's	112	7 Webb and Thomson's 5 Experimental.
5	(a) & (b)		Oudh and Rohilkhand	156	74	16 Experimental 180 List and Morse's	..	.....
6	(a) to (c)		North Westera	500	324	22 Tappet 19 Key locking 3 Experimental 26 Saxby and Farmer's	..	.....
7	(a) to (c)		Great Indian Peninsula	432	28	2 Tappet 21 Wessachs	237	Freece's single wire semaphore. §
7	(d) to (g)		Indian Midland	145	13	2 Experimental 16 Mackenzie and Holland's 9 Experimental	14	Freece's §
8	(a) to (f)		Bombay, Baroda and Central India	129	25	1 Dutton's 37 List and Morse's	76	68 Freece's single wire semaphore § 8 Syke's.
9	(a) & (b)		Nizam's Guaranteed State	39	1	Dutton's	..	.....
10	(a) to (c)		Madras	264	51	14 Experimental 17 List and Morse's	136	103 Winter's Block with starting semaphore. § 20 Winter's Block without starting semaphore § 13 Theobald's Train Key
11	(b) to (c)		Eastern Bengal	122	18	1 Tappet 2 Dutton's	2	Tyer's Tablet.
12	(g) to (h)		Rajputana-Malwa	256	8	4 Mackenzie and Holland's. 5 Country made 36 List and Morse's	3	Syke's.
13	(c)		Hyderabad-Godavari Valley	47	37	1 Experimental	..	.....
14	(d) & (e)		Shoranur-Cochin and Nilgiri	20	..	.....	12	6 Winter's Block with starting semaphore. § 6 Theobald's Train Key.
15	..		Bengal-Doars	28	..	.....	..	.....
16	..		Dibru-Sadiya	17	..	.....	..	.....
17	..		Assam-Bengal	83	..	.....	..	.....
18	..		Deoghur	1	..	.....	..	.....
19	(a) & (b)		Bengal and North-Western Rohilkhand and Kumaon	203	..	.....	..	.....
20	..		Jodhpur-Bikaner	46	..	.....	..	.....
21	..		Udaipur-Chitor	81	..	.....	..	.....
22	..		Bhavnagar-Gondal-Junagad-Porbandar	7	..	.....	..	.....
23	..		Blhavnagar-Gondal-Junagad-Forbandar	64	1	Experimental	..	.....
24	..		Southern Mahratta	225	..	.....	104	96 Winter's § 4 Theobald's Train Key. 4 Webb and Thomson's.
25	..		South Indian	209	7	6 Dutton's 1 Saxby and Farmer's 1 Dutton's	21	Winter's Ticket issuing.
26	..		Burma	186	2	1 Saxby and Farmer's	..	.....
27	(b)		Rajpur-Dhantari	8	..	.....	..	.....
28	(c)		Parlakimedi	6	..	.....	..	.....
29	(f) & (g)		Khushalgarh-Kohat-Thal and Nowshera-Dargai	22	..	.....	..	.....
30	(h) & (m)		Gaekwar's Dabhoi and Rajpura	25	1	Country made	..	.....
31	(a)		Powayan	8	..	.....	..	.....
32	..		Morvi	12	..	.....	..	.....
33	..	Barvi	4	..	.....	..	.....
34	..	Tarakeshwar-Magra	13	..	.....	..	.....
35	..	Ranaghat-Krishnagar	8	..	.....	..	.....
36	..	Tespur-Balipara	8	..	.....	..	.....
37	(h)	Gwalior	10	..	.....	..	.....
38	..	Darjeeling-Himalayan	11	..	.....	..	.....
39	..	Howrah-Amta	14	..	.....	..	.....
40	..	Howrah-Sheakhala	10	..	.....	..	.....
41	..	Jorhat	7	..	.....	..	.....
42	..	Thaton-Duyinraik	2	..	.....	..	.....
Total				3,943	686	.....	688	

• At Khargpur station 3 different kinds of instruments are used.
† At 21 stations 2 kinds of instruments are in use.
§ These systems do not give out a token or tablet.

APPENDIX 38.

Appendix 38.
Accidents.

Accidents and casualties to trains on railways treated as one System during the Calendar years 1901 and 1902.

(Referred to in paragraph 54 of Report.)

DESCRIPTION.	Accidents reported to Local Governments under section 33 of the Indian Railways Act, IX of 1890, i.e., serious accidents.		Other accidents.		Total number of accidents.		NUMBER OF PASSENGERS AND OTHERS.				NUMBER OF SERVANTS.				TOTAL OF ALL CLASSES.			
	1901.	1902.	1901.	1902.	1901.	1902.	Killed.		Injured.		Killed.		Injured.		Killed.		Injured.	
							1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.
1. Collisions between passenger trains or parts of passenger trains	6	4	2	3	8	7	...	...	5	32	...	...	...	1	...	...	5	33
2. Collisions between passenger trains and goods or mineral trains, engines and vehicles standing foul of the line	31	39	22	34	53	73	1	2	29	53	2	7	22	30	3	9	51	83
3. Collisions between goods trains or parts of goods trains	14	11	66	33	80	44	...	...	...	...	...	11	6	29	...	11	7	29
4. Collisions between light engines	1	1	18	13	19	14	...	...	...	...	...	...	5	1	...	...	5	1
5. Passenger trains or parts of passenger trains leaving the rails	67	72	47	62	114	134	...	31	...	37	...	...	...	5	...	31	...	42
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	4	7	202	231	206	238	...	...	...	...	1	1	6	5	1	1	6	5
7. Trains or engines travelling in the wrong direction through points	10	11	124	95	134	106	...	...	...	†7	1	1	9	3	1	1	9	10
8. Trains running into stations or sidings at too high a speed.	1	3	34	27	35	30	...	...	2	10	...	...	...	1	...	...	2	11
9. Trains running over cattle on the line	9	14	2,437	2,469	2,446	2,483	*1	*3	*2	*5	1	...	...	1	2	3	2	6
10. Trains running over obstructions on the line	11	19	162	121	173	140	†3	*2	†7	*4	...	...	2	2	3	2	9	6
11. Trains running through gates at level-crossings	...	3	49	32	49	35	...	*1	...	...	...	...	...	1	...	1	...	1
12. The bursting of boilers of engines	...	...	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...
12. (a) The bursting of tubes, etc., of engines	...	...	263	313	263	313	...	...	...	...	1	...	1	...	1	...	1	...
13. The failure of machinery, springs, etc., of engines	5	3	701	752	706	755	...	...	...	...	1	...	...	1	1	...	...	1
14. The failure of tyres	...	1	23	4	23	5	...	...	...	...	...	...	...	...	...	...	...	...
15. Ditto of wheels	...	...	4	5	4	5	...	...	...	...	...	...	...	...	...	...	...	...
16. Ditto of axles	17	18	67	53	74	71	...	...	...	...	...	...	1	...	...	...	1	...
17. Ditto of brake apparatus	1	...	7	6	8	6	...	...	...	...	...	...	...	...	...	...	...	...
18. Ditto of couplings	3	4	352	340	355	344	...	6	54	15	1	4	9	4	1	10	13	19
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	1	2	2	2	3	...	...	...	...	...	...	...	...	...	...	...	...
20. Broken rails	3	1	172	207	175	208	...	...	...	...	...	...	1	...	...	...	1	...
21. The flooding of portions of permanent-way	29	29	65	91	94	120	...	75	...	6	...	4	...	...	...	79	...	6
22. Slips in cuttings or embankments	7	10	33	52	40	62	...	...	...	...	...	...	...	...	...	...	...	...
23. Fire in trains	4	4	215	215	219	219	1	...	6	...	3	...	16	...	4	...	22	...
24. Fire at stations, or involving injury to bridges or viaducts.	3	8	62	73	65	81	*5	†7	...	†2	...	4	...	...	3	11	...	1
25. Other accidents	23	23	633	632	656	655	*5	13	*5	‡27	3	5	6	11	8	18	10	38
TOTAL	249	286	5,753	5,866	6,002	6,152	‡16	‡140	‡61	‡197	14	37	83	95	30	177	144	292

* Not passengers.
† Of these, two were not passengers.
‡ Of these, five were not passengers.

§ Of these, one was not a passenger.
|| Of these, thirteen were not passengers.
¶ Of these, fourteen were not passengers.

Appendix 39.
Railway Servants and Provident Fund.

Numerical Return of Servants of all races employed on each railway (open lines only) and
(Referred to in paragraphs

Class: No.		RAILWAY.	NUMBER OF SERVANTS EMPLOYED.							
			European.		Eurasian.		Natives.		Total.	
			1901.	1902.	1901.	1902.	1901.	1902.	1901.	1902.
Main.	Sub.									
1	---	East Indian	1,468	1,512	954	956	66,960	74,554	69,382	77,022
2	---	Eastern Bengal State	283	284	361	410	19,634	21,460	20,278	22,154
3	---	Bengal Central	10	8	15	14	1,551	1,461	1,576	1,483
4	---	Bengal-Nagpur	292	313	649	587	16,072	16,783	17,013	17,683
5	---	Oudh and Rohilkhand State	226	266	237	208	113,696	16,717	16,159	17,191
6	---	North Western State	769	810	633	647	51,584	52,437	52,086	53,894
7	---	Great Indian Peninsula	862	969	886	950	47,736	53,295	49,504	55,624
8	(a) to (r) and (l) and (m)	Bombay, Baroda and Central India	218	209	230	254	12,834	13,616	13,302	14,079
8	(j) to (k)	Rajputana-Malwa	445	451	537	549	24,039	24,216	25,021	25,216
9	---	Nizam's Guaranteed State	179	88	5362	391	57,671	7,505	58,112	7,984
10	---	Madras	215	243	1,381	1,472	19,930	20,880	21,526	22,595
12	---	Bengal Doours	4	4	4	5	752	808	760	817
13	---	Dibru-Sadiya	10	9	---	---	925	895	935	904
14	---	Assam-Bengal	56	53	103	121	4,941	5,127	5,105	5,301
15	---	Deoghar	---	---	1	1	558	59	559	60
16	---	Bengal and North-Western	133	155	174	188	14,284	18,028	14,591	18,371
17	---	Rohilkhand and Kumaon	26	26	18	16	3,481	3,326	3,525	3,368
18	---	Jodhpur-Bikaner	11	13	3	3	2,938	3,108	2,952	3,124
19	---	Udaipur-Chitor	2	2	---	---	387	358	389	360
20	---	Bhavnagar-Gondal-Junagad-Porbandar	19	14	25	24	2,530	2,588	2,574	2,626
21	---	Southern Mahratta	178	175	395	396	13,179	13,414	13,752	13,985
22	---	South Indian	96	104	604	578	21,834	12,565	12,534	13,247
23	---	Burma	60	115	580	484	11,404	12,038	12,044	12,657
24	---	Morvi	1	1	1	2	579	503	581	505
25	---	Barvi	1	1	2	2	186	185	189	188
26	---	Tarakeshwar-Magra	---	---	1	1	199	201	200	202
27	---	Ranaghat-Krishnagar	1	2	1	---	115	104	117	106
28	---	Tezpur-Balipara	2	2	2	2	178	176	182	180
29	---	Darjeeling-Himalayan	20	20	10	8	802	936	832	964
30	---	Howrah-Amta	3	3	1	1	386	317	350	321
31	---	Howrah-Sheakhala	1	1	---	---	190	110	191	111
32	---	Jorhat	2	2	---	---	183	193	185	195
TOTAL			5,493	5,875	8,175	8,269	353,278	378,373	366,946	392,517

* The number under " Voluntary " represents subscribers over 5 per cent.

† Approx

‡ Information

§ Revised

¶ Excludes bonuses for the

DIX 39.

Appendix 39.
Railway Servants and Provident Fund.

the amounts deposited by them in the Provident Fund at the close of the Calendar year 1902.
(57 and 60 of Report.)

AMOUNTS DEPOSITED IN PROVIDENT FUND.						RAILWAY.	Class: No.		
Number of depositors.		Amount at their credit on 31st December 1902, in rupees.					Main.	Sub.	
Voluntary.	Compulsory.	Voluntary.	Compulsory.	Bonus given by Railway.	Total to depositors' credit.				
6,455	9,062	‡	‡	‡	†	1,12,78,547	East Indian	1	...
109	4,202	20,694	9,47,554	8,35,246	†	12,03,494	Eastern Bengal State	2	...
...	337	...	69,357	27,339	†	96,696	Bengal Central	3	...
119	2,801	26,455	6,13,129	14,23,863	†	10,63,452	Bengal-Nagpur	4	...
99	2,248	25,088	6,31,090	5,14,776	†	11,70,954	Oudh and Rohilkhand	5	...
323	6,893	80,749	25,39,579	22,54,898	†	48,75,226	North Western State	6	...
44	7,000	6,140	69,96,243	...	†	70,02,383	Great Indian Peninsula	7	...
...	2,759	...	16,39,473	12,66,983	†	29,06,456	Bombay, Baroda and Central India	8	(a) to (e) and (f) and (m).
283	3,488	63,093	13,72,312	12,61,563	†	26,96,668	Rajputana-Malwa	8	(j) to (k).
...	1,160	...	3,59,131	2,97,551	†	6,56,682	Nizam's Guaranteed State	9	...
74	5,180	81,026	11,61,271	8,99,466	†	21,41,763	Madras	10	...
...	99	...	13,527	9,232	†	22,759	Bengal Dooms	12	...
...	...	...	...	...	†	...	Dibra-Sadiya	13	...
...	844	...	1,08,065	64,067	†	1,72,132	Assam-Bengal	14	...
...	...	...	...	...	†	...	Deoghur	15	...
† 6	† 1,935	† 1,285	† 5,65,530	† 5,11,860	†	† 10,78,695	Bengal and North-Western	16	...
3	432	192	1,15,055	97,729	†	2,12,976	Rohilkund and Kumaon	17	...
30	335	3,589	45,420	39,208	†	88,217	Jodhpur-Bikaner	18	...
...	35	...	3,604	1,927	†	5,531	Udaipur-Chitor	19	...
150	461	36,886	1,88,828	1,32,923	†	3,58,637	Bhavanagar-Gondal-Jouagad-Po bandar	20	...
...	3,749	...	8,73,389	4,02,598	†	12,75,987	Southern Mahratta	21	...
11	2,240	6,640	7,56,112	4,57,042	†	12,19,794	South Indian	22	...
...	2,207	...	5,58,126	4,37,570	†	9,95,696	Burma	23	...
...	...	...	...	...	†	...	Morvi	24	...
...	...	...	...	...	†	...	Baral	25	...
...	...	...	...	...	†	...	Tarakeswar-Magra	26	...
...	24	...	637	261	†	898	Ranaghat Krishnagar	27	...
...	...	...	...	...	†	...	Tezpur-Balipara	28	...
...	128	...	1,17,706	65,037	†	1,82,743	Darjeeling-Himalayan	29	...
...	97	...	4,686	1,444	†	6,130	Howrah-Amra	30	...
...	19	...	704	383	†	1,087	Howrah-Sheakhala	31	...
4	22	402	3,871	1,904	†	6,177	Jorhat	32	...
7,710	57,157	3,52,239	1,96,84,419	1,00,04,875	†	4,13,20,080	TOTAL.		

and that under "Compulsory" subscribers of 5 per cent. only.
imate.
not furnished,
figures.
second-half of the year.

Appendix 40.
Volunteers.

APPENDIX 40.

Number of men enrolled in Railway Volunteer Corps on the 31st December 1902.

(Referred to in paragraph 58 of Report).

Classification Number.		Corps.	ENROLLED STRENGTH.				Total number of European and Eurasian employes on railway.	Sergeant Instructors furnished by the Army.	REMARKS.	
			EFFICIENTS.			Non-efficient.				Total number of volunteers in Corps.
			Officers.	Non-Commissioned officers.	Volunteers.					
Main.	Sub.									
1	...	East Indian	63	164	1,823	46	2,096	2,468	17	
2	...	Eastern Bengal State	10	40	400	207	657	694	4	
4	...	Bengal-Nagpur	32	126	891	10	1,061	900	8	* Includes Portuguese, Armenians, etc., and men on construction works.
5	...	Oudh and Robilkhand State— <i>Oudh Volunteer Rifles</i>	10	64	337	...	411	474	5	
6	...	North Western State— <i>Third Punjab (North Western State railway) Volunteer Rifles</i>	59	126	1,020	8	1,213	1,457	12	
7	(a) to (c)	Great Indian Peninsula— <i>First Battalion, Great Indian Peninsula Railway Volunteer Rifles</i>	27	131	804	2	964	1,919	10	
7	(d) to (h)	Indian Midland— <i>Second Battalion, Great Indian Peninsula Railway Volunteer Rifles</i>	11	46	386	17	460		3	
8	(a) to (c) and (f) and (m).	Bombay, Baroda and Central India— <i>First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles</i>	16	94	507	5	762	463	5	† Includes 272 Goanese and 30 Jews.
8	(f) to (k)	Rajputana-Malwa— <i>Second Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles</i>	33	94	681	5	813	1,000	10	
9	...	Nizam's Guaranteed State— <i>Hyderabad Volunteer Rifles</i>	9	32	213	2	256	479	3	
10	...	Madras	35	105	807	79	1,026	1,715	11	
14	(a)	Assam-Bengal	11	17	153	...	183	174	2	‡ Includes 12 employes on construction works not included with European and Eurasian employes.
16	...	Bengal and North-Western— <i>Gorakhpur Volunteer Rifles</i>	16	37	280	10	343	343	6	
17	...	Rohilkund and Kunzon— <i>Rohilkund Volunteer Rifles</i>	1	1	14	...	16	42	...	
19	...	Udaipur-Chitor— <i>First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company</i> . . . . .	...	1	...	...	1	2	...	
20	...	Bhavnagar-Gondal-Junagad-Porbandar— <i>First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company</i>	2	9	19	...	30	38	1	
21	...	Southern Mahratta	18	103	515	...	636	571	7	§ Includes 142 Goanese.
22	...	South Indian	6	62	283	202	553	682	8	
23	...	Burma	22	53	585	10	1,070	619	9	|| Includes 51 Karens.
24	...	Morvi— <i>First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company</i> . . . . .	...	...	2	...	2	2	...	
26	...	Tarakshwar-Magra . . . . .	...	...	1	...	1	1	...	
29	...	Darjeeling-Himalayan— <i>Northern Bengal Mounted Rifles, "A" and "B" Troops</i> . . . . .	...	...	7	1	8	28	...	
			380	1,395	9,733	604	12,022	14,071	121	

N.B.—European and Eurasian employes on railways which have no volunteer corps are excluded from this statement

APPENDIX 41.

Appendix 41.
Police.

Strength and cost of the Police force on each Railway (open lines), and the amount of compensation payments on account of claims for goods traffic for the Calendar year 1902.

(Referred to in paragraph 59 of Report.)

Class: No.		Railway.	Subordinate officers.	Constables and men.	PORTION OF THE TOTAL ANNUAL COST BORNE BY THE RAILWAY.				Cost of force to the railway per mile open.	Compensation payments on account of claims for goods traffic.	REMARKS.
Main.	Sub.				Supervision.	Constables and men.	Contingencies.	Total cost of force to the railway.			
			Average No.	Average No.	Rs.	Rs.	Rs.	Rs.	Rs.		
1	...	East Indian	64	1,988	57,667	1,18,769	38,292	2,14,728	98'08	1,58,474	
2	...	Eastern Bengal State	77	720	635	44,907	106	45,648	44'80	8,386	
3	...	Bengal Central	3	24	4,392	5,062	350	9,804	78'43	963	
4	...	Bengal-Nagpur	10	478	13,927	38,848	4,538	57,313	35'78	8,120	
5	...	Oudh and Rohilkhand State	3	490	5,680	33,738	2,926	42,364	37'37	85,677	
6	...	North Western State . . . . .	...	1,357	...	1,23,614	1,951	1,24,665	33'08	29,669	
7	...	Great Indian Peninsula	36	1,285	57,077	1,16,640	16,737	1,90,454	68'16	81,662	
8	(a) to (e) & (h) & (i).	Bombay, Baroda and Central India.	65	499	22,618	56,849	9,024	88,491	110'74	36,323	
9	(f) to (g).	Rajputana-Malwa	139	682	35,068	84,364	13,663	1,33,095	67'27	56,973	
10	...	Nizam's Guaranteed State	3	391	8,381	32,894	1,051	32,326	43'32	...	
11	...	Madras	31	518	14,687	51,297	7,162	73,146	49'53	9,813	
12	...	Bengal Doonars . . . . .	...	3	...	1,173	...	1,173	10'28	1,302	
13	...	Assam-Bengal	3	174	3,063	13,404	1,096	17,563	29'80	653	
14	...	Bengal and North-Western	8	536	2,719	48,192	3,043	54,839	43'38	15,212	
15	(a) & (b).	Rohilkund and Kumaon	11	139	1,624	10,936	1,482	14,092	49'43	4,477	
16	...	Jodhpur-Bikaner	1	38	1,663	3,350	213	5,226	6'34	5,171	
17	...	Bhavnagar-Gondal-Jungad-Porbandar.	25	136	16,787	12,026	6,390	35,203	77'29	861	
18	...	Southern Mahratta	13	668	15,876	69,572	5,744	91,149	57'14	1,661	* Excludes the West of India Portuguese railway, where the Company does not pay for the police.
19	(a) (b) & (c).	South Indian . . . . .	...	214	...	59,946	...	59,946	48'50	1,606	
20	...	Burma	84	282	13,793	72,371	8,629	94,793	75'20	2,996	† Including cost of Government supervision, Rs. 46,471.
21	...	Morvi	3	12	772	1,232	596	2,600	27'55	174	
22	...	Barisi	1	4	...	716	24	740	34'27	5,120	

Appendix 42.
Fine Funds.

APPENDIX 42.

Transactions of the Fine Funds for the Calendar year 1902.

(Referred to in paragraph 61 of Report.)

CLASS: No.		Railway.	ASSETS.				DISBURSEMENTS.						Balance in hand on 31st December 1902.
Main.	Sub.		Balance on 31st December 1901.	Fines and bonus forfeited during 1902.	Interest on balance.	Total.	Hospitals for sick employes.	Compassionate allowances.	Schools.	Recreation clubs.	Miscellaneous.	Total.	
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	...	East India . . .	61,679	18,129	2,465	84,273	...	30	2,685	3,200	500	6,415	77,838
2	...	Eastern Bengal . . .	4,607	12,534	184	17,325	...	809	2,279	3,680	2,003	8,771	9,534
3	...	Bengal Central . . .	4,543	1,248	132	5,916	...	486	...	...	1,607	2,093	3,823
4	...	Bengal-Nagpur . . .	11,060	10,528	...	21,588	...	...	310	2,084	4,473	6,817	14,771
5	...	Oudh and Rohilkhand	29,810	5,206	910	35,926	...	173	4,102	†-189	6,334	10,420	25,506
6	...	North Western . . .	2,077	15,866	8,290	26,233	100	695	5,000	4,665	1,825	12,285	13,948
7	...	Great Indian Peninsula	15,524	18,220	791	34,535	...	5,504	2,156	4,304	15,253	27,217	7,316
8	(a) to (e) & (i) & (m)	Bombay, Baroda and Central India . . .	13,861	2,658	467	16,986	100	632	795	997	2,412	4,936	12,050
9	...	Nizam's Guaranteed State . . .	2,921	3,436	125	6,482	330	60	840	...	353	1,583	4,899
10	...	Madras . . .	1,00,937	5,532	3,187	1,09,656	30	1,355	31	315	2,103	3,834	1,05,822
12	...	Bengal Doorgs . . .	1,104	467	29	1,600	...	...	...	50	3	53	1,447
14	...	Assam-Bengal . . .	6,475	3,613	...	10,088	...	148	300	71	80	599	9,439
16	...	Bengal and North Western . . .	35,252	23,449	...	58,701	...	78	...	2,837	1,112	4,027	54,674
17	...	Rohilkund and Kumaon	1,534	-1,493	25	66	...	...	...	...	...	...	66
18	(f) to (h)	Rajputana-Malwa . . .	57,499	9,067	1,813	68,379	...	1,635	2,697	...	2,910	7,242	61,137
19	...	Jodhpur-Bikaner . . .	405	1,597	...	2,002	...	...	...	...	39	39	1,965
19	...	Udaipur-Chitor . . .	252	78	...	430	...	...	...	...	...	...	430
20	...	Bhavnagar-Gondal-Junagad- Porbandar . . .	5,376	1,163	155	6,694	...	...	554	88	3	645	6,449
21	...	Southern Mahratta . . .	206	3,550	...	3,756	130	...	991	180	1,542	2,843	913
22	...	South Indian . . .	1,58,303	7,806	5,155	1,71,264	...	662	...	29,681	1,022	31,365	1,39,899
23	...	Burma . . .	3,128	17,966	...	21,094	...	...	2,286	6,000	1,652	10,838	10,136
24	...	Morvi . . .	930	172	...	1,111	...	200	...	...	...	200	911
26	...	Tarakeswar-Magra . . .	9	58	...	67	67	...	...	...	...	67	...
29	...	Darjeeling-Himalayan	155	17	...	172	...	...	...	...	...	...	172
32	...	Jorhat . . .	134	72	3	209	...	...	...	...	...	...	209

* Revised figures.

† Due to the value of stores returned to stock.

APPENDIX 43.

Appendix 43.
Schools.

Railway and Railway aided Schools at the close of the Calendar year 1902.

(Referred to in paragraph 62 of Report.)

N.B.—A reference to appendix 2 will furnish the key to the code letters used to denote railway systems.

Main	Sub.	CLASS NO.	RAILWAY.	RAILWAY SCHOOLS.										LOCAL AND DISTRICT SCHOOLS.						
				Number of Schools.	ATTENDANCE.				ANNUAL CONTRIBUTIONS.						Annual expenditure	Number of Schools.	AVERAGE DAILY ATTENDANCE.		ANNUAL RAILWAY GRANT.	
					Children.		Apprentices and workmen.		By Government.	By Railway.		By School fees.	Total.	Children.			Apprentices and workmen.	From Revenue.	From Fine Fund.	
					Number on the rolls.	Average daily attendance.	Number on the rolls.	Average daily attendance.		From Revenue.	From Fine Fund.									
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.							
1	...	E. I.	{ European	16	774	687	55	43	11,487	132,173	...	77,656	1,21,316	98,148	2	146	...	1,896	...	
			{ Native	29	1,654	1,015	1,791	972	3,264	13,302	2,685	19,483	28,734	27,767	...	...	...	...	...
3	...	E. B. S.	{ European	...	...	...	...	...	...	...	...	...	...	...	3	77	8	1,334	1,534
			{ Native	4	96	78	223	60	...	932	...	...	932	932	10	450	...	725	725
4	...	B. N.	{ European	5	159	124	...	...	940	3,350	...	2,362	6,652	6,298	4	104	...	900	...
			{ Native	3	186	157	...	...	99	1,104	310	837	2,350	2,449	...	...	...	...	...
5	...	O. and R.	{ European	5	54	49	35	26	435	1,386	1,803	1,002	4,626	3,624	17	32	...	5,337	1,758	
			{ Native	3	...	...	194	85	...	319	71	...	390	390	2	85	...	...	450
6	...	N. W.	{ European	3	46	32	24	12	1,438	1,502	1,283	625	3,848	3,593	16	270	...	11,443	12,157	
			{ Native	23	111	96	1,267	38	...	5,832	...	238	6,070	5,023	2	76	...	1,376	1,259	
7	(a) to (e).	G. I. P.	{ European	6	242	185	...	...	3,005	11,451	1,041	2,251	17,748	17,748	15	7	7	6,033	190
			{ Native	...	...	...	...	...	...	...	...	...	...	...	1	7	7	240	...
7	(f) to (j).	I. M.	{ European	2	78	50	...	...	...	3,259	925	682	4,866	4,866	...	...	...	...	...
			{ Native	...	...	...	...	...	...	...	...	...	...	...	1	7	7	190	...
8	(a) to (e) and (i) and (j).	B., B. & C. I. European.		104	108	82	21	18	879	4,680	795	1,638	7,992	9,083	18	49	...	3,379	...	
8	(f) to (j).	R. M.	{ European	11	470	246	88	75	2,478	17,063	1,401	12,848	33,290	33,105	1	38	...	180	...	
			{ Native	2	...	...	51	44	...	300	140	...	440	440	5	388	...	924	1,136
9	...	N. G. S.	{ European	1	39	27	...	...	...	1,261	...	409	1,670	1,153	3	137	...	240	594
			{ Native	1	36	29	9	5	...	1,164	...	26	1,190	756	3	171	...	...	336
10	...	M.,	European	8	338	274	...	...	2,212	13,083	18	3,330	18,643	19,727	5	7	7	703	13
12	...	D. S.,	Native	1	159	105	...	...	...	300	...	1,052	1,352	1,734	...	...	...	...	...
15	...	B. & N. W.,	European.	2	44	37	...	...	730	1,604	...	508	2,842	2,909	2	56	...	314	...
19	...	B. G. J. P.	{ European	1	16	7	...	...	86	996	218	131	1,431	809	...	...	...	...	...
			{ Native	1	45	33	...	...	...	350	336	78	764	506	...	...	...	...	...
20	...	S. M.	{ European	8	257	183	...	...	751	4,978	...	1,682	7,411	7,833	7	7	7	...	730
			{ Native	8	39	29	189	96	...	973	180	90	1,243	1,239	1	7	7	...	810	
22	...	S. I.	{ European	4	165	135	...	...	681	4,114	...	954	5,749	4,329	...	...	...	...	...
			{ Native	1	40	45	...	...	...	325	...	148	473	327	...	...	...	...	...
23	...	B.	{ European	3	61	53	6	4	1,873	414	685	1,332	4,304	3,528	12	37	...	324	324	
			{ Native	2	180	132	30	23	1,009	870	906	1,153	4,178	3,560	13	36	...	281	281	
		TOTAL		156	5,397	3,890	3,923	1,593	31,367	1,17,035	11,897	1,30,215	2,90,504	1,62,446	144	2,172	8	35,089	10,538	

* Includes the joint railway schools at Aligarh, Moghal Sarai and Ghaziabad.
 † Includes Rs. 380 received from the North Western State railway for the joint railway school at Ghaziabad, Rs. 275 and Rs. 183 received from the Oudh and Rohilkhand State railway for the joint railway schools at Aligarh and Moghal Sarai and Rs. 13,585 received from the North Western State railway for Oakgrove School, Musssoorie.
 ‡ Includes Rs. 74 received from the Oudh and Rohilkhand State railway for the joint railway school at Moghal Sarai.
 § In addition to these grants from the Fine Fund, the North Western State railway also subscribed Rs. 2,301 from the Fine Fund for the Oakgrove and Ghaziabad schools, particulars of which are included with the East Indian railway schools.
 ¶ Includes 10 schools for Europeans and Natives.
 †† Information not furnished.
 ††† Includes an apprentice class for Europeans and Natives.

Appendix 44.
Earnings under different heads.

Gross earnings under different heads of each

Serial No.	GAUGE.		5' 6"					
	CLASS: No.		1		2		3	
	Railway.		East Indian.		Eastern Bengal State.		Bengal Central.	
	Particulars.		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
COACHING.								
1	1st class	Number	33,397	39,576	20,254	19,487	958	1,159
2		Earnings Rs.	3,36,078	4,59,679	97,755	78,393	3,502	3,575
3	2nd class	Number	100,408	114,694	59,681	57,438	8,638	9,695
4		Earnings Rs.	4,13,447	5,10,220	1,15,267	1,11,524	3,819	11,108
5	3rd or Intermediate class	Number	819,304	801,191	521,285	529,007	30,915	32,977
6		Earnings Rs.	7,72,818	8,35,357	2,47,462	2,68,917	20,983	23,020
7	4th or Lowest class	Number	10,452,145	9,332,040	5,683,150	5,518,724	820,871	793,790
8		Earnings Rs.	78,45,802	75,94,287	23,23,950	21,96,773	3,20,900	3,05,827
9	Season tickets of all classes	Number	753,865	809,250	620,173	614,639	102,320	109,980
10		Earnings Rs.	81,365	77,974	82,442	78,827	90,58	9,418
11	Total passengers	Number	12,159,119	11,096,751	6,904,543	6,739,295	963,608	947,601
12		Earnings Rs.	94,49,510	94,77,517	28,66,876	27,34,434	3,64,262	3,52,388
13	Parcels	Earnings Rs.	5,74,028	5,98,978	1,79,716	2,51,237	13,078	16,715
14	Luggage	Earnings Rs.	3,99,316	3,37,800	75,033	1,08,842	12,606	12,526
15	Other coaching traffic	Earnings Rs.	4,82,248	7,14,196	55,920	57,972	3,431	3,539
16	Total Coaching traffic	Earnings Rs.	1,08,05,102	1,11,28,491	31,77,545	31,52,485	3,93,377	3,85,168
GOODS.								
17	General merchandise	Tons	2,109,116	1,700,738	759,084	885,166	33,187	78,693
18		Earnings Rs.	1,50,99,544	1,23,84,673	39,23,739	60,28,211	98,708	2,86,993
19		Average rate per ton per mile, pies	5'75	5'81	8'99	10'06	8'19	8'31
20	Military stores	Tons	3,252	2,016	201	100	583	1,247
21		Earnings Rs.	1,75,455	1,70,437	617	453	831	2,446
22		Average rate per ton per mile, pies	21'32	20'17	19'36	26'91	136'88	134'73
23	Coal for the public and for foreign railways.	Tons	2,674,280	2,367,865	152,837	142,404	15,195	9,402
24		Earnings Rs.	93,38,566	78,34,030	1,30,552	1,27,486	14,750	11,333
25		Average rate per ton per mile, pies	3'59	3'69	4'85	4'87	3'99	3'91
26	Revenue stores, including coal and materials for construction.	Tons	750,080	865,082	283,443	209,259	10,546	10,341
27		Earnings Rs.	10,57,964	10,17,403	3,20,622	2,45,284	4,587	4,853
28		Average rate per ton per mile, pies	1'87	1'90	2'50	2'45	2'45	2'45
29	Total goods	Tons †	5,536,728	4,941,701	1,195,565	1,236,929	59,511	99,683
30		Earnings † Rs.	2,58,34,083	2,15,41,190	43,96,959	64,55,474	1,19,522	3,05,831
31		Average rate per ton per mile, pies	4'45	4'47	7'39	8'83	6'74	7'76
SUNDRIES.								
32	Electric telegraph	Earnings Rs.	42,882	47,628	15,519	15,891	943	903
33	Sundries	Earnings Rs.	3,97,148	4,07,208	3,48,703	2,97,405	1,03,911	7,559
34	Total	Earnings Rs.	4,40,030	4,54,836	3,64,222	3,13,296	1,04,854	8,462
35	Steam-boat	Earnings Rs.	1,19,440	1,10,553	2,78,648	3,24,885	...	...
TOTAL.								
36	Grand total earnings . . . . .	. . . . . Rs.	3,71,98,637	3,32,35,070	82,17,374	1,02,46,140	6,17,753	6,99,461
37	Total working expenses ‡ . . . . .	. . . . . Rs.	1,32,42,328	1,26,37,859	46,53,945	43,41,656	3,58,616	3,84,680
38	Net earnings . . . . .	. . . . . Rs.	2,39,56,309	2,05,97,211	35,63,429	59,04,484	2,59,137	3,14,781

† Including revenue stores, but excluding live-stock.

‡ Including all other items not detailed above.

‡ Including special contribution to Provident Fund.

DIX 44.

railway (by systems) during each half-year of 1902.

Appendix 44.
Earnings under different heads.

4		5		6		7				Serial No.
Bengal-Nagpur.		Oudh and Rohilkhand State.		North Western State. (a) to (k)		GREAT INDIAN PENINSULA SYSTEM.				
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	Great Indian Peninsula. (a) to (c)		Indian Midland. (d) to (h)		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
6,500	6,825	16,142	16,387	28,879	28,103	33,987	37,276	6,027	7,638	1
87,521	69,655	87,441	95,080	2,00,592	2,20,446	2,69,783	3,49,076	68,013	1,06,757	2
19,306	19,137	53,186	60,990	95,752	108,639	225,821	207,413	26,234	25,263	3
85,307	86,799	1,28,133	1,54,102	2,58,633	3,02,895	5,06,611	5,28,603	1,00,992	1,26,967	4
79,056	70,039	290,781	315,120	646,058	661,438	288,888	274,119	160,046	111,102	5
92,967	91,197	2,06,753	2,27,078	5,64,748	6,34,405	4,70,617	5,05,987	2,16,729	1,97,235	6
3,204,399	2,902,779	4,022,493	3,537,338	9,558,566	9,640,573	6,054,745	5,317,279	1,809,143	1,003,047	7
24,90,311	23,89,748	22,01,692	19,44,166	57,10,391	57,72,115	30,04,236	27,08,854	10,35,762	8,17,049	8
79,220	84,500	...	...	...	...	2,080,140	2,129,320	240	...	9
6,231	7,007	...	...	...	...	1,09,693	98,139	200	...	10
3,388,481	3,083,280	4,322,604	3,949,836	10,329,255	10,492,763	10,183,581	8,165,408	1,401,690	1,147,050	11
27,62,337	26,44,406	26,24,019	24,20,426	67,34,364	69,29,861	43,60,940	41,90,659	14,21,696	12,48,008	12
90,776	1,03,562	1,08,880	1,12,311	3,36,557	5,01,804	6,15,006	5,54,842	1,01,566	89,913	13
70,187	73,360	86,024	85,606	2,37,003	2,53,575	2,32,719	2,67,885	72,109	93,890	14
78,352	91,319	1,41,839	1,45,921	3,09,022	3,88,365	2,67,540	4,26,217	91,474	2,20,127	15
30,01,652	29,12,647	29,60,762	27,64,264	76,16,946	80,73,605	54,76,205	54,39,603	16,87,845	16,51,938	16
611,569	381,172	800,378	547,520	1,694,173	1,463,315	1,638,779	938,064	572,856	299,241	17
31,83,524	20,34,806	31,77,110	23,06,984	1,37,32,615	1,17,01,103	1,86,81,833	1,04,00,236	42,90,117	23,21,173	18
6'95	6'87	5'98	5'28	5'68	5'20	5'66	7'25	5'07	5'86	19
162	172	4,583	3,064	18,489	17,342	5,208	5,680	4,557	8,182	20
1,664	2,992	35,936	33,727	4,30,701	4,72,150	2,13,889	1,49,549	89,775	87,093	21
20'03	17'89	15'64	15'71	17'66	15'95	22'09	23'37	15'74	14'40	22
444,412	461,797	21,303	26,323	25,992	16,368	82,219	65,690	7,673	7,808	23
5,07,245	5,48,282	62,926	1,28,547	91,534	61,576	2,05,101	1,48,893	47,427	50,477	24
3'24	3'09	3'81	3'14	4'98	3'80	3'49	3'54	3'04	3'12	25
203,135	472,255	422,806	474,787	1,355,740	1,336,957	271,526	259,119	124,945	323,132	26
6,21,579	5,45,749	3,02,864	3,79,668	11,60,827	9,91,631	4,94,027	4,61,448	2,62,821	2,89,747	27
2'44	2'47	2'64	2'95	2'43	2'61	2'39	2'39	2'46	2'47	28
1,559,278	1,315,396	1,249,070	1,051,694	3,094,394	2,833,982	1,997,732	1,202,553	710,029	638,366	29
45,55,664	31,71,042	35,99,721	28,75,467	1,56,37,427	1,36,07,850	1,97,36,700	1,13,86,091	47,04,151	28,19,179	30
5'06	4'54	5'41	4'73	5'32	5'12	5'46	6'66	5'85	5'86	31
14,189	13,006	17,448	16,065	55,916	49,903	35,885	35,485	9,597	9,619	32
2,70,854	2,67,311	6,04,024	4,90,326	2,86,432	2,60,575	1,66,278	1,48,370	3,717	4,188	33
2,85,043	2,80,317	7,11,472	5,06,591	3,42,348	3,19,478	2,02,163	1,84,455	48,314	51,807	34
1,711	10,151	...	...	1,700	3,513	...	...	...	...	35
78,44,070	63,74,157	72,71,955	61,46,322	2,35,98,421	2,19,04,446	2,54,15,068	1,70,10,149	64,40,310	45,22,924	36
33,94,486	36,85,999	36,69,241	32,11,457	1,36,22,321	1,29,73,835	1,08,77,236	1,04,09,268	27,81,301	27,86,252	37
42,49,584	26,88,158	36,02,714	29,34,865	99,76,100	89,30,611	1,45,37,832	66,00,881	36,59,009	17,36,672	38

* Excluding the Parlakimedi Light railway.

† Excluding the Gwalior Light railway.

Appendix 44.
Earnings under different heads.

Gross earnings under different heads of acc.

Serial No.	GAUGE		5' 6" "					
	CLASS No.	Railway.	R				9	
			BOMBAY, BARODA AND CENTRAL INDIA SYSTEM		RAJPUTANA-MAHARASHTRA			
	Particulars.	Bombay, Baroda and Central India, (a) to (c) and (f) and (w).		Rajputana-Maharashtra (f) to (h).		Nizam's Guaranteed State.		
1st half.		2nd half.	1st half.	2nd half.	1st half.	2nd half.		
COACHING.								
1	1st class	Number	38,521	36,715	30,904	23,443	5,946	5,644
2		Earnings Rs.	79,864	76,817	72,089	58,922	27,203	32,983
3	2nd class	Number	301,799	253,159	243,050	45,857	33,146	34,673
4		Earnings Rs.	2,33,358	2,20,107	1,13,924	1,37,289	61,846	68,441
5	3rd or Intermediate class	Number	199,331	178,759	147,875	140,068	137,756	133,994
6		Earnings Rs.	3,61,661	3,48,303	1,45,806	1,56,615	68,102	64,463
7	4th or Lowest class	Number	6,460,231	5,639,544	6,247,325	5,435,018	1,329,970	1,272,334
8		Earnings Rs.	18,86,387	16,19,121	20,91,852	27,07,070	6,55,044	5,58,635
9	Season tickets of all classes	Number	3,076,310	2,725,120	2,280	3,040	8,160	5,640
10		Earnings Rs.	1,29,286	1,47,920	394	805	9,512	6,812
11	Total passengers	Number	10,092,429	8,797,217	6,453,474	5,637,426	1,514,028	1,451,685
12		Earnings Rs.	27,51,196	24,32,307	3,24,125	31,00,821	8,33,207	7,31,336
13	Parcels	Earnings Rs.	2,61,797	2,88,446	2,24,570	2,58,914	65,492	42,583
14	Luggage	Earnings Rs.	68,429	66,713	92,928	92,971	42,318	38,923
15	Other coaching traffic	Earnings Rs.	47,017	72,415	95,955	2,05,559	28,158	41,027
16	Total Coaching traffic	Earnings Rs.	31,28,879	28,60,131	37,37,778	36,58,265	9,69,475	8,54,799
GOODS.								
17	General merchandise	Tons	978,709	526,835	1,150,635	734,115	271,637	198,209
18		Earnings Rs.	59,58,253	38,39,663	1,09,19,636	68,24,451	18,81,078	12,32,570
19	Military stores	Average rate per ton per mile, pica	8'73	8'69	6'79	6'74	9'33	9'20
20		Tons	248	428	2,611	3,420	957	449
21	Coal for the public and for foreign railways	Earnings Rs.	7,024	13,339	36,130	55,422	13,395	10,764
22		Average rate per ton per mile, pica	18'40	20'48	18'34	20'85	25'63	32'00
23	Revenue stores, including coal and materials for construction	Tons	18,008	23,142	10,768	7,023	199,468	195,072
24		Earnings Rs.	65,734	84,853	42,464	23,318	6,25,620	6,21,964
25	Total goods	Average rate per ton per mile, pica	2'89	2'88	4'81	4'77	3'94	4'04
26		Tons	207,234	144,715	172,957	142,841	287,105	367,202
27	Total goods	Earnings † Rs.	2,07,632	1,75,781	3,38,106	2,86,929	1,07,211	1,27,008
28		Average rate per ton per mile, pica	2'43	2'74	2'77	2'73	3'96	3'93
29	Total goods	Tons †	1,215,009	693,140	1,337,001	887,459	759,101	761,622
30		Earnings † Rs.	63,71,817	43,16,525	1,13,68,605	72,62,965	27,07,993	21,03,171
31	Total goods	Average rate per ton per mile, pica	8'01	7'91	6'53	6'44	6'71	6'34
32		Earnings Rs.	24,760	20,013	30,010	28,248	14,233	11,523
33	Sundries	Earnings Rs.	2,30,827	1,61,627	1,77,706	2,45,630	1,27,210	1,05,781
34	Total	Earnings Rs.	2,55,597	1,81,640	2,02,716	2,71,878	1,41,463	1,07,305
35	Steam-boat	Earnings Rs.	...	...	...	...	...	...
TOTAL.								
36	Grand total, earnings . . . . .	. . . . . Rs.	97,62,283	73,57,696	1,33,09,092	1,11,95,108	38,18,913	31,65,246
37	Total working expenses ‡ . . . . .	. . . . . Rs.	41,87,316	41,95,609	64,27,795	61,26,441	16,07,611	15,85,834
38	Net earnings : . . . . .	. . . . . Rs.	55,74,967	31,62,087	68,81,297	50,68,667	22,11,302	15,79,412

‡ Including revenue stores, but excluding live stock.
† Including all other items not detailed above.
‡ Including special contribution to Provident Fund.

DIX 44—continued.

Appendix 44.
Earnings under different heads.

railway (by systems) during each half-year of 1902—contd.

5' 6"		3' 30"								Serial No.
10		12		13		14		15		
Madras.		Bengal Doara.		Dibru-Sadiya.		Assam-Bengal.		Deoghar.†		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
17,733	16,897	330	315	2,153	1,820	2,226	2,305	199	1	
1,79,279	1,53,083	898	797	4,765	4,154	12,053	12,103	100	2	
62,501	68,601	1,181	1,117	1,526	1,458	5,466	5,243	...	3	
8,04,311	2,00,694	1,691	1,588	1,054	1,842	12,338	12,457	...	4	
10,179	10,687	2,124	3,132	137,092	138,268	2,925	2,943	184,816	5	
25,403	22,375	933	1,123	59,499	49,334	3,430	3,774	23,728	6	
6,314,525	6,152,458	175,951	178,095	...	...	947,124	795,165	...	7
26,25,697	25,07,071	44,234	44,459	...	...	545,733	444,675	...	8
317,480	373,360	...	...	...	...	...	...	...	9
10,785	19,216	...	...	...	...	...	...	...	10
6,722,010	6,622,102	179,786	182,660	160,831	141,516	957,841	805,660	185,015	11	
30,36,180	29,04,475	47,757	47,967	66,218	52,330	5,73,534	4,72,959	25,828	12	
2,32,641	2,14,072	3,306	2,164	3,761	4,718	13,333	15,493	172	13	
1,24,675	1,30,814	2,235	1,695	1,549	1,721	7,917	9,222	325	14	
1,01,213	94,513	1,923	1,528	5,749	4,803	15,722	23,681	...	15	
31,98,011	33,43,591	55,215	54,151	76,777	66,582	6,10,026	5,21,265	26,325	16	
812,542	660,994	26,525	42,914	30,344	33,570	62,781	86,326	...	17	
42,26,772	34,70,539	98,953	2,26,723	1,46,465	1,77,028	2,56,591	3,46,909	8,103	18	
680	821	1946	2456	53389	53659	719	637	2,213	19	
3,180	2,388	...	...	...	...	154	53	...	20
77,923	81,223	...	...	...	...	3,450	1,184	...	21
2505	2239	...	...	...	...	2321	2107	...	22
248,093	245,691	9,340	3,481	228,527	212,739	5,037	7,315	...	23	
6,25,442	5,77,511	10,545	6,624	2,11,002	1,46,330	8,174	16,664	2,174	24	
422	409	851	789	5554	5565	367	402	597	25	
179,460	204,409	4,336	2,491	2,644	2,090	32,635	131,268	...	26	
1,96,255	2,38,869	3,123	1,651	646	955	54,006	93,428	...	27	
256	255	320	374	5284	5290	854	290	...	28	
1,243,275	1,114,482	36,201	54,880	261,515	248,401	100,007	224,062	10,277	29	
52,40,487	44,34,827	1,11,091	2,46,854	3,12,439	3,74,652	3,27,591	4,68,254	2,907	30	
608	671	1538	2230	5859	5969	552	538	...	31	
10,167	10,657	709	1,023	4,727	4,313	7,786	7,174	...	32	
2,91,386	2,18,723	22,466	17,263	13,076	11,573	56,073	80,507	526	33	
2,01,553	2,20,380	23,115	18,285	17,803	15,886	63,859	87,081	526	34	
...	...	2,728	6,511	...	...	8,918	8,163	...	35
90,40,051	80,09,111	2,01,137	3,25,825	4,53,019	4,57,120	10,10,394	10,85,663	29,758	36	
44,64,467	40,02,874	1,37,157	1,37,091	2,53,107	2,45,408	8,04,312	9,47,299	23,733	37	
45,75,594	31,05,237	68,982	1,88,740	1,99,912	2,11,712	1,16,052	1,38,364	6,025	38	

§ Excluding Ledo and Likiep-Margherita colliery.
|| Accounts prepared yearly.

Appendix 44.
Earnings under different heads.

Gross earnings under different heads of each

Serial No.	GAUGE.		3' 3 1/2"					
	CLASS: No.		16		17		18	
	Railway.		Bengal and North-Western.		Rohilkhand and Kumaon.		Jodhpur and Bikaner.	
	Particulars.		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
COACHING.								
1	1st class	Number	9,074	15,412	2,971	2,737	1,390	1,789
2		Earnings Rs.	26,129	31,170	20,121	19,817	9,122	12,760
3	2nd class	Number	15,895	17,314	10,777	11,410	9,218	7,631
4		Earnings Rs.	26,886	29,711	35,419	38,071	21,279	22,328
5	3rd or Intermediate class	Number	66,389	64,319	8,155	6,954	...	...
6		Earnings Rs.	45,667	46,817	6,819	5,938	...	...
7	4th or Lowest class	Number	5,016,547	4,919,276	974,441	832,873	679,275	678,822
8		Earnings Rs.	20,30,808	20,15,146	3,37,687	2,78,463	3,97,151	3,92,701
9	Season tickets of all classes	Number	858	794	...	...	...	...
10		Earnings Rs.	594	823	...	...	...	...
11	Total passengers	Number	5,108,763	5,017,115	996,344	854,004	689,783	688,242
12		Earnings Rs.	21,30,684	21,23,667	4,00,046	3,42,291	4,27,532	4,27,789
13	Parcels	Earnings Rs.	47,119	38,523	14,334	14,441	20,615	22,080
14	Luggage	Earnings Rs.	39,940	43,671	13,015	15,536	16,066	19,255
15	Other coaching traffic	Earnings Rs.	46,832	56,878	16,975	19,160	17,102	30,923
16	Total Coaching traffic	Earnings Rs.	§ 21,90,803	§ 21,40,985	4,44,370	3,91,448	4,82,254	5,00,047
GOODS.								
17	General merchandise	Tons	669,969	410,927	230,034	162,106	179,722	107,773
18		Earnings Rs.	30,72,040	16,99,847	5,97,242	3,64,086	8,26,429	4,79,629
19		Average rate per ton per mile, pies	6'76	6'43	|| 7'18	|| 6'51	8'97	7'83
20	Military Stores	Tons	22	9	629	383	262	251
21		Earnings Rs.	2	15	5,103	2,106	4,251	4,131
22		Average rate per ton per mile, pies	2'18	7'10	|| 21'75	|| 17'54	17'95	17'92
23	Coal for the public and for foreign railways.	Tons	44,041	13,612	178	224	7,443	3,453
24		Earnings Rs.	76,633	25,038	236	248	11,553	4,470
25		Average rate per ton per mile, pies	4'28	4'08	|| 4'71	|| 3'11	4'38	5'30
26	Revenue stores, including coal and materials for construction.	Tons	149,473	171,581	24,534	37,857	79,594	77,525
27		Earnings Rs.	1,99,233	25,003	16,746	18,511	58,828	37,068
28		Average rate per ton per mile, pies	2'45	2'45	|| 2'45	|| 2'45	3'29	3'08
29		Tons*	853,505	596,129	235,375	200,570	267,021	189,002
30	Total goods	Earnings † Rs.	§ 30,41,699	§ 16,67,167	6,24,003	3,85,433	9,03,163	5,49,632
31		Average rate per ton per mile, pies	5'49	4'87	|| 6'91	|| 6'03	8'00	6'80
SUNDRIES.								
32	Electric telegraph	Earnings Rs.	18,890	14,330	4,168	2,980	16,999	15,364
33	Sundries	Earnings Rs.	2,16,604	1,92,797	31,076	50,152	17,717	17,070
34	Total	Earnings Rs.	2,35,494	2,07,127	41,244	53,132	34,716	32,434
35	Steam-boat	Earnings Rs.	3,88,741	2,78,148	...	...	...	...
TOTAL.								
36	Grand total, earnings	. . . . . Rs.	58,56,737	42,93,428	11,09,617	8,30,013	14,20,133	10,82,112
37	Total working expenses ‡	. . . . . Rs.	24,42,713	22,61,431	4,65,782	4,63,441	6,22,637	6,83,013
38	Net earnings	. . . . . Rs.	34,14,024	20,31,997	6,43,835	3,66,572	7,97,496	3,99,100

* Including revenue stores, but excluding live stock.
† Including all other items not detailed above.
‡ Including special contribution to Provident Fund.

DIX 44—continued.

Appendix 44.
Earnings under different heads.

railway (by systems) during each half-year of 1902—contd.

3' 31"										Serial No.
19		20		21		22		23		
Udaipur-Chitor.		Bhavnagar-Gondal-Junagad-Forbandar.		Southern Mahratta.		South Indian.		Burma.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
230	281	2,808	2,371	9,216	9,387	10,257	10,138	12,474	13,127	1
1,152	1,696	7,526	7,291	52,735	63,196	53,589	50,590	69,897	66,112	2
525	975	21,353	19,414	39,754	37,820	54,588	59,594	74,161	72,430	3
1,374	2,638	27,072	24,683	80,276	92,752	88,653	95,794	1,28,436	1,17,013	4
1,244	1,622	25,629	23,373	...	...	...	...	6,231,951	5,650,905	5
1,011	1,249	23,327	22,621	...	...	...	...	27,19,289	21,96,735	6
91,554	81,790	787,380	606,559	3,306,157	2,975,885	7,194,776	7,716,910	...	...	7
43,707	41,647	4,04,746	3,36,365	14,22,335	13,01,882	25,92,405	27,30,610	...	...	8
240	280	9,040	8,080	10,040	8,780	179,960	161,030	55,140	55,280	9
90	105	408	392	1,023	760	9,438	5,978	5,799	5,212	10
93,793	84,948	846,210	659,797	3,365,167	3,031,872	7,439,581	7,947,722	6,373,726	5,791,742	11
47,334	47,335	4,63,139	3,91,352	15,56,369	14,58,590	27,44,085	28,91,972	29,23,442	23,85,072	12
1,527	1,477	14,156	10,379	1,20,589	1,04,153	81,889	86,066	51,774	70,536	13
1,061	697	8,083	7,310	55,723	56,015	31,907	29,720	35,225	29,358	14
955	2,974	12,493	24,405	69,471	1,00,535	50,563	53,212	55,980	49,224	15
50,877	52,483	4,97,871	4,33,446	18,02,152	17,19,293	29,08,444	30,60,970	30,66,471	25,34,190	16
15,905	9,387	140,045	92,216	484,911	375,480	594,538	499,483	682,796	483,173	17
68,868	39,902	4,51,604	2,45,223	28,84,669	22,40,314	24,44,504	22,06,547	36,00,913	24,82,201	18
14'55	13'98	11'77	12'14	7'67	7'73	8'10	8'08	8'36	7'60	19
2	29	1	3	1,915	936	289	217	1,034	687	20
23	364	11	34	22,226	19,686	5,007	4,872	13,894	12,592	21
31'66	35'15	24'85	22'99	7'21	15'33	28'41	24'77	15'89	16'54	22
360	421	154	3	1,573	2,448	6,121	8,710	4	1	23
347	418	378	11	8,961	12,024	8,503	10,927	52	4	24
2'72	2'72	4'57	9'78	3'62	3'57	6'77	5'04	7'26	6'98	25
640	13	7,764	4,647	63,632	83,611	278,461	518,175	218,436	210,970	26
1,210	13	5,102	4,098	1,55,834	2,39,827	70,416	97,837	1,74,332	2,08,060	27
5'42	2'72	2'06	1'77	2'55	2'66	2'48	2'48	2'09	2'33	28
16,907	9,850	147,064	96,869	552,031	462,469	879,509	1,026,585	902,270	694,831	29
71,151	41,121	4,58,379	2,50,248	30,93,249	25,32,931	25,44,809	23,39,104	38,85,051	27,97,711	30
13'86	13'46	11'20	11'11	6'94	6'53	7'67	7'38	7'50	6'66	31
351	375	6,704	6,914	15,025	14,325	13,209	12,245	12,985	11,552	32
573	456	16,999	14,428	86,723	53,538	11,059	1,20,535	86,472	76,032	33
924	831	23,703	21,342	1,01,742	67,863	24,268	1,32,760	99,457	87,584	34
...	...	...	...	...	...	...	...	16,665	15,592	35
1,22,952	94,435	9,79,953	7,05,036	49,97,149	43,20,087	54,77,521	55,32,854	70,67,594	54,35,077	36
60,511	59,745	5,30,799	4,71,536	30,49,949	30,14,970	26,04,611	24,92,872	36,92,517	35,37,472	37
62,441	34,690	4,49,154	2,33,500	19,47,200	13,05,117	28,72,910	30,39,982	33,75,077	18,97,605	38

§ Excluding the earnings of the Cawnpore-Burhwal, metre gauge link which have under the terms of the running powers agreement with the Oudh and Rohilkhand railway been credited under Sundries, and in the earnings shown against the Oudh and Rohilkhand railway.

|| Excluding the Poyayan Light railway.

Appendix 44.
Earnings under different heads.

Gross earnings under different heads of each

Serial No.	GAUGE.		2' 6"					
	CLASS: No.		24		25		26	
	Railway.		Morvi.		Barsi.		Tarakeswar-Magra.	
	Particulars.		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
COACHING.								
1	1st class	Number	732	748	325	345	175	203
2		Earnings Rs.	8,928	2,888	828	846	66	79
3	2nd class	Number	4,858	4,156	...	...	457	418
4		Earnings Rs.	8,994	7,570	...	...	183	178
5	3rd or intermediate class	Number	132,794	99,988	...	...	5,872	5,208
6		Earnings Rs.	99,761	75,720	...	...	999	973
7	4th or Lowest class	Number . . . . .	...	...	41,626	29,480	212,960	1,90,687
8		Earnings Rs.	...	...	13,272	9,077	34,923	30,711
9	Season tickets of all classes	Number . . . . .	...	...	...	...	6,440	6,111
10		Earnings Rs.	...	...	...	...	1,089	894
11	Total passengers	Number	138,384	104,892	41,951	29,825	223,904	202,627
12		Earnings Rs.	1,11,683	86,178	14,100	9,924	37,260	32,835
13	Parcels	Earnings Rs.	4,651	3,020	756	470	232	441
14	Luggage	Earnings Rs.	3,019	2,415	422	305	565	644
15	Other coaching traffic	Earnings Rs.	5,791	6,056	68	32	26	12
16	Total coaching traffic	Earnings Rs.	1,25,104	97,669	15,346	10,731	38,081	33,532
GOODS.								
17	General merchandise	Tons	12,604	6,110	39,435	10,312	9,673	
18		Earnings Rs.	45,604	23,810	95,479	24,899	8,034	
19		Average rate per ton per mile, pies	10'69	12'41	21'14	21'08	...	
20	Military stores	Tons	14	11	6	3	...	
21		Earnings Rs.	156	104	20	22	...	
22		Average rate per ton per mile, pies	27'80	24'98	29'81	64'35	...	
23	Coal for the public and for foreign railways	Tons	16	27	65	1	58	
24		Earnings Rs.	51	121	77	2	50	
25		Average rate per ton per mile, pies	14'41	13'04	10'35	19'09	...	
26	Revenue stores, including coal and materials for construction	Tons	127	139	...	...	1,305	
27		Earnings Rs.	156	197	...	...	2,144	
28		Average rate per ton per mile, pies	7'28	7'84	...	...	...
29		Tons [†]	12,761	6,287	39,506	10,316	4,220	6,810
30	Total goods	Earnings † Rs.	46,159	24,542	95,798	25,022	5,053	6,202
31		Average rate per ton per mile, pies	10'70	12'38	21'17	21'22	...	...
SUNDRIES.								
32	Electric Telegraph	Earnings Rs.	2,035	2,177	174	79	174	203
33	Sundries	Earnings Rs.	4,548	2,764	1,459	1,606	331	294
34	Total	Earnings Rs.	6,583	4,941	1,633	1,685	505	497
35	Steam-boat	Earnings Rs.	...	...	...	...	...	...
TOTAL.								
36	Grand total, earnings	Rs.	1,77,906	1,27,152	1,12,777	37,498	43,641	40,631
37	Total working expenses ‡	Rs.	1,01,279	90,480	60,342	37,054	29,712	29,718
38	Net earnings	Rs.	76,627	36,672	52,435	444	13,929	10,913

† Including revenue stores, but excluding live stock.

‡ Including all other items not detailed above.

‡ Including special contribution to Provident Fund.

DIX 44—concluded.

Appendix 44.
Earnings under different heads.

railway (by systems) during each half-year of 1902—concl'd.

2' 6"				2' 0"								Serial No.
27		28		29		30		31		32		
Ranaghat-Krishnagar.		Tezpur-Balipara.		Darjeeling-Himalayan.		Howrah-Amta.		Howrah-Sheakhala.		Jorhat.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
...	...	...	...	3,059	2,126	...	...	...	...	...	...	1
...	...	...	...	36,698	28,570	...	...	...	...	...	...	2
...	...	...	...	7,098	6,648	...	...	...	...	...	...	3
...	...	...	...	41,449	39,804	...	...	...	...	...	...	4
...	...	...	...	29,063	32,107	...	...	...	...	...	...	5
...	...	...	...	63,939	62,709	...	...	...	...	...	...	6
190,966	119,701	61,585	63,776	...	...	398,133	384,451	157,092	156,624	65,120	65,209	7
35,687	34,160	14,438	15,029	...	...	1,23,526	1,17,253	37,047	36,681	11,419	10,639	8
...	...	...	...	...	...	...	...	...	...	...	...	9
...	...	...	...	...	...	...	...	...	...	...	...	10
190,966	119,701	61,585	63,776	39,220	40,881	398,133	384,451	157,092	156,624	65,120	65,209	11
35,687	34,160	14,438	15,029	1,42,086	1,31,082	1,23,526	1,17,253	37,047	36,681	11,419	10,639	12
1,324	1,257	155	195	19,298	16,758	140	140	60	39	...	...	13
...	...	...	...	24,226	27,109	380	447	171	228	...	...	14
...	...	2,221	2,101	7,300	7,596	309	320	123	144	...	...	15
37,014	35,417	16,814	17,325	1,92,910	1,82,545	1,24,355	1,18,160	37,401	37,112	11,419	10,639	16
812	614	446	5,790	12,971	13,734	6,770	7,123	2,191	3,872	4,664	7,090	17
1,473	1,309	12,461	27,728	1,92,177	2,18,093	10,556	11,705	2,837	4,503	24,194	38,376	18
...	...	...	...	64,32	69,12	...	...	...	...	...	...	19
...	...	...	...	43	64	...	...	...	...	...	...	20
...	...	...	...	1,872	1,900	...	...	...	...	...	...	21
...	...	...	...	185,28	117,48	...	...	...	...	...	...	22
...	...	314	1,317	1,026	580	...	...	...	...	...	...	23
...	...	813	3,405	9,405	5,785	...	...	...	...	...	...	24
...	...	...	...	38,76	42,84	...	...	...	...	...	...	25
...	...	...	...	2,537	1,967	...	...	...	...	...	...	26
...	...	...	...	12,629	10,413	...	...	...	...	...	...	27
...	...	...	...	85,92	89,64	...	...	...	...	...	...	28
812	614	760	7,107	16,577	16,345	6,770	7,123	2,191	3,872	4,664	7,090	29
1,473	1,309	13,274	31,133	2,21,031	2,40,479	10,556	11,705	2,837	4,503	24,194	38,376	30
...	...	...	...	68,16	48,60	...	...	...	...	...	...	31
...	...	777	794	1,656	1,853	...	...	...	...	505	471	32
458	512	3,013	1,932	4,464	5,341	368	353	86	80	589	448	33
458	512	3,740	2,726	6,120	7,194	368	353	86	80	1,094	919	34
...	...	...	...	...	...	...	...	...	...	...	...	35
38,942	37,238	33,828	51,184	4,20,061	4,30,218	1,35,279	1,30,218	49,324	41,695	36,707	49,934	36
28,248	26,579	29,859	33,502	2,36,582	2,35,694	66,612	65,765	24,939	25,341	51,205	39,091	37
10,694	10,659	3,969	17,682	1,83,479	1,94,524	68,667	64,453	15,385	16,354	—14,498	10,843	38

Appendix 45.
Expenses under different heads.

Working expenses under different heads of each railway

No.	GAUGE.		5' 6"						
	CLASSIFICATION NUMBER.		1		2		3		
	Railway.		East Indian.		Eastern Bengal State.		Bengal Central.		
	Particulars.		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
Engineering.	1	General Superintendence Rs.	4,43,773	4,52,603	1,45,533	1,43,335	12,971	12,877	
	2	Maintenance of permanent-way {	Wages	5,01,474	5,32,628	2,17,154	2,16,812	21,385	20,406
			Materials	14,73,116	10,02,357	4,16,686	2,40,183	41,600	16,027
	3	Repairs of bridges, etc.	1,08,238	3,35,335	1,07,135	1,14,618	4,106	1,786	
	4	Conservancy of rivers	"	"	5,077	331	96	451	
	5	Repairs of stations and buildings	7,65,652	8,70,571	1,56,261	1,71,758	10,292	8,217	
6	TOTAL ^a	36,44,777	34,72,789	11,44,728	10,15,433	92,834	60,579		
Locomotive.	7	General Superintendence	2,97,341	3,13,770	76,770	80,437	7,177	7,268	
	8	Wages of drivers and firemen, fuelling, cleaning engines, etc.	11,29,209	10,95,111	2,00,847	2,14,474	12,824	14,570	
	9	Fuel	4,90,932	4,54,839	2,88,182	3,57,079	22,033	31,059	
	10	Water	56,043	51,731	19,960	20,530	1,848	1,915	
	11	Oil, tallow and other stores	1,83,875	1,99,339	34,625	35,217	1,616	3,933	
	12	Maintenance and renewal of {	11,94,992	11,25,042	4,93,299	1,86,591	19,806	12,217	
		Machinery	44,656	81,180	53,481	52,094	695	1,885	
13	TOTAL ^a	39,57,002	38,46,564	12,88,133	10,36,495	68,683	76,171		
Carriage and Wagon.	14	General Superintendence	77,191	80,604	41,179	40,804	3,564	3,603	
	15	Repairs and renewal of {	Coaching vehicles	1,70,057	1,29,478	1,12,647	1,52,252	7,828	7,987
			Goods	7,16,350	2,93,931	1,56,943	90,188	5,165	10,283
			Machinery	31,336	26,698	7,076	8,503	300	1,549
	16	Cleaning and oiling	1,25,470	1,19,846	46,369	45,305	3,287	3,973	
	17	TOTAL ^a	11,26,773	6,52,971	3,70,740	3,50,069	20,379	27,493	
Traffic.	18	General Superintendence	3,17,750	3,11,625	1,47,224	1,53,122	12,076	12,390	
	19	Station staff	12,74,192	12,01,138	5,18,348	5,57,377	33,180	46,336	
	20	Train staff	5,55,522	5,50,295	1,03,353	1,10,410	6,448	6,315	
	21	Fuel, lighting and general stores	2,47,613	3,52,431	96,377	1,04,325	7,099	7,370	
	22	Clothing	24,368	19,328	7,943	10,696	514	442	
	23	Printing, stationery and tickets	1,06,150	1,12,566	42,265	45,293	7,582	5,524	
	24	Charges for delivery and collection of goods	6,027	4,812	1,023	1,232	"	"	
	25	TOTAL ^a	25,77,811	25,14,265	9,40,530	10,02,749	69,712	81,912	
	General.	26	Home expenditure or General administration	1,77,557	1,86,146	36,467	"	19,431	19,392
		27	Agent's Office	61,890	69,479	41,669	43,317	13,895	14,071
28		Audit, accounts and pay office	2,41,602	2,37,149	1,05,876	1,08,324	17,646	18,103	
29		Stores Department	73,082	76,597	14,050	16,932	2,219	1,906	
30		Medical Department	68,983	76,776	26,231	25,799	2,029	2,132	
31		Rents and Miscellaneous	1,01,872	93,746	34,161	28,322	9,843	8,058	
32		Police	1,09,482	1,05,246	22,064	23,584	4,925	4,879	
33		Advertising	4,533	8,963	1,430	3,047	506	804	
34		Electric telegraph	3,26,418	3,96,068	1,32,160	1,20,663	10,337	12,205	
35		TOTAL ^a	11,67,831	12,52,538	4,18,162	3,73,058	80,832	82,154	
Miscellaneous.	36	Law charges	7,187	11,659	1,357	4,228	943	821	
	37	Compensation	61,327	97,198	30,160	27,852	910	201	
	38	Rates and taxes	50,813	50,174	17,539	17,463	2,218	1,972	
	39	Payments to other lines	2,61,620	3,57,334	53,239	1,14,359	19,164	42,159	
	40	TOTAL ^a	4,64,215	6,03,541	2,33,363	2,51,523	26,176	56,371	
41	TOTAL WORKING EXPENSES EXCLUDING STEAM-BOAT†	1,31,56,911	1,25,43,392	43,75,670	40,29,327	3,58,616	3,84,680		
42	Steam-boat service	85,417	94,467	2,78,275	3,12,329	"	"		
	GRAND TOTAL WORKING EXPENSES†	1,32,42,328	1,26,37,859	46,53,945	43,41,656	3,58,616	3,84,680		

* Includes all other items of expenditure not enumerated.
† Includes special contribution to Provident Fund.

DIX 45.

Appendix 45.
Expenses under different heads.

(by systems) during each half-year of 1902.

5' 6"								No.
4		5		6		7		
Bengal-Nagpur. †		Oudh and Rohilkhand State.		North-Western State.		Great Indian Peninsula (a) to (h).		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
1,77,329	1,69,932	1,56,080	1,67,899	4,74,266	4,87,863	3,49,614	3,40,426	1
2,59,745	2,84,559	1,56,836	1,62,520	8,18,833	8,21,998	5,00,751	5,09,991	2
89,424	1,50,269	1,63,725	2,87,435	14,93,162	4,41,427	6,29,017	5,42,855	3
1,30,737	1,41,781	1,29,497	1,28,377	2,93,845	3,04,778	2,53,156	3,43,266	4
...	...	3,562	7,515	38,214	78,579	...	...	5
74,564	86,410	1,46,260	70,211	4,59,086	3,04,032	2,58,926	3,27,340	6
7,67,384	9,14,439	8,41,396	9,09,961	40,15,048	28,96,371	§ 21,53,199	§ 22,71,793	7
1,70,685	1,12,331	71,952	68,380	2,36,871	2,28,142	2,60,142	2,67,922	8
2,85,070	2,74,726	1,30,940	1,37,621	6,86,839	6,81,639	13,01,877	11,57,671	9
1,97,033	1,80,016	4,63,173	4,16,098	21,25,429	20,59,144	19,76,075	16,15,274	10
28,182	25,929	15,083	14,468	87,471	89,729	1,55,848	1,39,337	11
40,236	33,264	33,821	32,925	1,10,706	97,348	1,91,782	1,66,458	12
2,12,702	2,46,067	1,38,743	1,23,840	6,76,773	11,95,240	15,94,323	15,63,865	13
24,162	9,189	13,947	16,606	95,798	94,140	80,123	80,953	14
11,08,542	11,09,329	10,24,591	9,71,344	46,22,886	48,79,778	§ 62,09,524	§ 55,33,436	15
22,204	22,978	16,237	15,231	93,342	99,151	81,326	79,198	16
63,401	68,534	1,03,547	1,49,785	5,51,073	3,37,649	4,50,540	5,60,713	17
88,084	64,755	5,30,602	1,12,206	11,01,432	14,97,154	5,94,229	6,36,499	18
1,864	2,890	6,176	4,003	21,020	9,257	35,433	36,192	19
86,878	78,221	41,667	42,386	1,31,613	1,34,637	1,84,054	1,85,242	20
2,72,851	2,41,034	7,01,106	3,25,110	19,18,364	20,96,609	13,53,088	15,02,134	21
1,04,009	1,19,563	87,413	81,311	2,31,497	2,34,938	2,08,112	2,16,663	22
2,57,320	2,38,527	3,06,289	2,87,373	9,30,050	9,42,606	9,04,067	8,63,962	23
82,802	78,833	97,340	91,404	3,30,377	3,28,450	4,87,125	5,10,181	24
67,201	63,887	83,860	60,409	2,14,806	2,08,831	2,53,058	2,78,442	25
941	2,406	14,632	6,211	18,936	43,027	46,642	15,145	26
44,592	46,308	34,012	38,664	79,508	96,979	1,21,903	1,84,430	27
992	1,173	1,761	1,592	606	290	5,056	4,115	28
6,53,617	6,44,885	6,45,597	5,83,404	18,34,553	18,81,329	§ 21,02,246	§ 21,42,707	29
1,27,325	1,34,638	20,595	...	40,079	...	1,71,259	1,80,884	30
39,878	39,810	26,733	28,584	67,260	66,263	78,784	66,929	31
96,920	1,03,429	81,797	89,909	1,96,068	2,07,707	2,44,090	2,48,010	32
22,531	21,591	18,833	20,565	54,503	50,346	70,536	76,251	33
25,880	30,049	13,269	13,660	52,768	51,940	44,875	47,083	34
44,390	39,947	1,990	1,800	78,114	51,537	81,957	63,250	35
23,667	33,846	20,248	22,115	64,396	60,270	88,651	99,826	36
4,307	4,445	869	2,289	2,665	2,771	2,951	3,630	37
1,26,767	1,29,668	78,382	82,638	2,86,841	2,94,131	2,75,393	2,75,269	38
5,11,629	5,37,503	2,03,916	2,87,264	8,43,873	7,89,668	§ 10,66,217	§ 10,68,401	39
997	696	17	85	144	345	3,654	1,342	40
5,813	2,616	10,240	15,437	22,394	1,08,872	53,040	28,707	41
7,512	4,387	666	4,222	28,260	26,893	32,154	31,696	42
1,26,737	1,05,046	1,00,313	56,233	58,519	34,436	4,33,409	2,99,668	43
2,47,777	1,99,278	1,62,635	1,34,374	3,72,637	4,17,983	§ 7,74,268	§ 6,77,119	44
35,61,800	36,46,523	36,69,241	32,11,457	1,36,07,361	1,29,61,738	§ 1,36,58,537	1,31,05,520	45
32,686	39,476	...	...	14,960	12,097	...	...	46
35,94,486	36,85,999	36,69,241	32,11,457	1,36,22,321	1,29,73,835	§ 1,36,58,537	§ 1,31,05,520	47

† Excluding Parlakimedi Light railway.

§ Including the Gwalior Light railway, details for which are not given.

|| Including the carriage and wagon expenses of the Gwalior Light railway as the figures cannot be separated.

Appendix 45.
Expenses under different heads.

Working expenses under different heads of each rail

No.	GAUGE. CLASSIFICATION NUMBER. Railway. Particulars.	5' 6"							
		8 BOMBAY, BARODA AND CENTRAL INDIA SYSTEM.				9			
		Bombay, Baroda and Central India, (m) to (e) and (f) and (n.)		Rajputana-Malwa. (f) to (k).		Nizam's Guaranteed St.			
		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.		
Engineering.	1 General Superintendence Rs.	1,26,428	1,27,860	1,96,290	1,92,549	96,574	90,		
	2 Maintenance of permanent-way {	Wages	1,95,817	2,03,954	2,94,513	2,95,905	1,32,366	1,30,	
		Materials	3,84,626	3,32,478	5,99,976	5,01,993	84,358	76,	
	3 Repairs of bridges, etc.	79,525	73,048	1,21,034	1,05,343	43,899	65,		
	4 Conservancy of rivers . . . . .	...	...	...	...	66	
	5 Repairs of stations and buildings	1,21,242	97,658	1,89,539	1,46,688	29,647	44,		
6 TOTAL*	9,63,105	8,88,173	14,87,955	13,23,942	4,07,776	4,84,1			
Locomotive.	7 General Superintendence	1,00,189	95,466	1,58,699	1,46,589	55,009	55,1		
	8 Wages of drivers and firemen, fuelling, cleaning engines, etc.	2,71,866	2,34,568	4,28,632	3,88,290	99,816	93,1		
	9 Fuel	6,47,165	5,72,777	10,14,296	8,56,722	1,25,982	1,15,7		
	10 Water	54,411	38,983	82,407	56,253	17,605	17,7		
	11 Oil, tallow and other stores	47,611	37,827	73,968	56,621	16,995	13,2		
	12 Maintenance and renewal of {	Locomotive engines	3,20,391	2,86,585	4,97,759	4,38,940	2,03,287	98,4	
		Machinery	31,057	33,284	49,527	51,353	6,402	7,5	
	13 TOTAL*	15,69,744	13,92,563	24,59,858	21,16,512	5,68,564	4,56,3		
	Carriage and Wagon.	14 General Superintendence	33,878	34,959	53,668	53,703	7,859	7,4	
		15 Repairs and renewal of {	Coaching vehicles	1,47,737	2,45,539	2,33,279	3,74,294	32,353	30,6
			Goods	2,11,850	3,26,759	3,28,283	4,88,250	45,828	21,6
			Machinery	12,529	18,013	19,980	27,792	710	26
		16 Cleaning and oiling	55,410	54,521	84,148	80,215	16,730	17,22	
17 TOTAL*		5,84,219	8,05,316	7,23,847	10,31,659	1,03,699	77,74		
Traffic.	18 General Superintendence	77,893	76,541	1,22,787	1,17,155	30,095	31,10		
	19 Station staff	2,91,450	2,89,353	4,53,337	4,37,808	96,139	99,20		
	20 Train staff	77,278	74,854	1,21,847	1,14,122	38,727	37,391		
	21 Fuel, lighting and General stores	77,749	82,890	1,22,962	1,27,068	31,164	35,482		
	22 Clothing	10,592	7,100	16,891	10,716	195	1,230		
	23 Printing, stationery and tickets	41,195	38,362	64,393	58,026	14,699	13,895		
	24 Charges for delivery and collection of goods. . . . .	...	...	...	...	...	...
	25 TOTAL*	5,85,411	5,78,998	9,12,060	8,85,231	2,31,926	2,45,117		
	General.	26 Home expenditure or General administration	26,127	27,690	41,665	42,722	38,012	45,900	
		27 Agent's Office	22,935	23,453	35,146	35,247	16,881	16,967	
28 Audit, accounts and pay office		86,331	88,035	1,34,648	1,33,346	64,397	66,507		
29 Stores Department		32,215	34,070	51,016	52,326	9,197	14,294		
30 Medical Department		18,928	20,065	29,706	30,496	11,779	13,320		
31 Rents and Miscellaneous		34,693	29,553	54,288	44,604	18,014	21,904		
32 Police		44,228	44,862	67,644	65,451	31,062	32,326		
33 Advertising		789	774	1,257	1,195	513	1,398		
34 Electric telegraphs		1,02,385	1,04,033	1,59,447	1,57,645	34,698	35,336		
35 TOTAL*		3,68,542	3,72,445	5,74,673	5,63,523	2,24,591	2,52,314		
Miscellaneous.	36 Law charges	443	888	706	1,370	7,494	503		
	37 Compensation	19,186	17,287	30,571	26,671	1,229	495		
	38 Rates and taxes	16,410	16,206	16,600	15,746	343	281		
	39 Payments to other lines	24,278	14,887	38,716	22,968	28,661	12,850		
	40 TOTAL*	85,792	81,687	1,53,472	1,25,883	71,055	70,103		
	41 Total working expenses excluding steam-boat†	41,87,346	41,95,609	64,22,795	61,56,441	16,07,611	15,85,834		
	42 Steam-boat service . . . . .	...	...	...	...	...	...
GRAND TOTAL WORKING EXPENSES†	41,87,346	41,95,609	64,22,795	61,56,441	16,07,611	15,85,834			

* Includes all other items of expenditure.

DIX 45—continued.

Appendix 45.
Expenses under different heads.

(by systems) during each half-year of 1902—contd.

5' 6".		3' 3 1/2".								No.
10		12		13		14		15		
Madras.		Bengal Doars.		Dibru-Sadiya.		Assam-Bengal.		Deoghar.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
1,93,137	1,89,640	3,427	4,511	8,150	8,162	75,555	74,378	...	...	1
2,35,641	2,62,014	13,243	12,268	18,693	19,203	1,19,290	1,13,500	...	...	2
1,70,603	2,40,466	1,407	2,492	22,286	26,633	10,894	4,122	...	...	3
30,167	2,50,228	1,343	2,466	7,228	2,593	37,112	27,066	...	...	4
...	...	...	...	...	...	...	...	...	...	5
99,019	89,008	1,479	1,249	6,376	6,703	29,526	20,001	...	...	6
8,14,157	11,50,161	21,521	23,666	82,498	84,352	2,85,138	2,52,153	3,502		7
90,324	86,732	2,414	2,499	5,278	5,368	28,215	27,470	...	...	8
2,86,603	3,00,200	4,668	4,516	8,313	7,703	30,929	37,838	...	...	9
7,15,232	7,00,191	17,382	13,436	21,121	18,201	53,893	76,821	...	...	10
38,086	39,156	999	1,250	2,379	1,770	7,258	6,828	...	...	11
50,977	52,059	1,304	1,256	2,301	2,159	6,164	4,876	...	...	12
4,57,701	4,86,755	5,833	5,287	28,612	23,464	36,993	43,741	...	...	13
12,585	13,926	1,169	1,159	2,668	2,607	874	1,563	...	...	14
18,90,927	19,32,975	33,801	29,528	70,876	61,362	1,72,585	2,14,760	9,977		15
22,632	21,683	1,205	1,250	3,083	3,175	9,405	9,156	...	...	16
1,37,779	1,55,567	1,915	3,016	4,448	3,990	17,748	18,400	...	...	17
1,89,191	1,56,514	1,409	1,064	14,464	12,620	17,055	16,657	...	...	18
7,842	9,419	33	61	1,223	1,162	344	340	...	...	19
32,397	50,363	2,422	2,398	8,393	2,613	5,254	6,792	...	...	20
4,38,876	4,29,004	6,990	8,696	23,611	23,560	50,107	51,773	993		21
99,230	1,04,241	4,203	4,509	6,457	6,325	29,075	29,497	...	...	22
3,06,165	3,19,669	10,954	11,928	13,647	13,569	72,587	78,206	...	...	23
94,362	96,808	1,635	1,874	3,492	3,350	15,923	16,944	...	...	24
82,205	60,939	1,261	1,178	1,029	962	19,787	18,773	...	...	25
8,413	10,196	116	108	1	...	668	1,455	...	...	26
65,234	63,431	2,286	1,496	2,149	2,248	7,344	7,336	...	...	27
2,250	2,098	...	...	4,565	6,828	...	...	...	...	28
651,855	6,80,304	20,704	21,344	31,378	33,319	1,45,856	1,52,563	6,118		29
49,653	54,840	12,025	12,538	12,921	12,921	49,897	54,254	...	...	30
36,274	42,001	13,914	13,415	6,220	6,152	21,483	23,027	...	...	31
1,00,458	1,00,458	5,174	6,096	6,979	7,134	49,143	48,784	...	...	32
15,610	15,498	848	868	2,893	2,918	20,853	16,297	...	...	33
17,832	18,981	932	948	2,048	2,051	14,178	12,153	...	...	34
22,111	21,218	1,051	1,010	2,698	2,687	6,697	6,758	...	...	35
35,887	37,259	784	389	...	...	8,715	8,849	...	...	36
2,952	3,122	7	8	14	10	228	135	...	...	37
1,16,998	1,20,012	5,862	6,643	6,630	6,682	38,174	40,618	...	...	38
4,26,803	5,19,960	140,607	42,823	40,403	40,556	2,10,410	2,10,924	2,779		39
1,644	1,421	138	60	622	726	1,562	565	...	...	40
3,714	2,085	846	456	202	25	637	90	...	...	41
8,659	23,237	108	249	22	75	2,259	1,990	...	...	42
...	5	370	3,046	...	...	...	...	...	...	43
2,41,262	1,90,470	2,535	6,029	2,341	2,259	24,054	57,259	364		44
44,63,880	49,02,874	1,26,158	1,32,086	2,53,107	2,45,408	8,88,150	9,39,432	23,733		45
587	...	5,999	5,009	...	...	6,192	7,867	...	...	46
44,64,457	49,02,874	1,32,157	1,37,095	2,53,107	2,45,408	8,94,342	9,47,299	23,733		47

§ Details not furnished.

Appendix. 45.
Expenses under different heads.

Working expenses under different heads of each railway

No.	GAUGE.		3' 3"						
	CLASSIFICATION NUMBER.		16		17		18		
	Railway.		Bengal and North Western.		Rohilkund and Kumaon.		Johdhpur-Bikaner.		
	Particulars.		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
Engineering.	1	General Superintendence Rs.	1,09,744	1,10,715	17,253	18,524	15,063	16,055	
	2	Maintenance of permanent-way {	Wages	1,16,896	1,15,346	25,099	23,596	77,036	84,629
			Materials	1,67,125	1,64,739	28,183	32,562	4,361	84,186
	3	Repairs of bridges, etc.	59,561	82,989	23,415	20,818	16,965	10,011	
	4	Conservancy of rivers	15,103	7,229	4,735	1,226	...	...
	5	Repairs of stations and buildings	53,405	56,049	10,303	9,838	12,846	14,034	
6	TOTAL*	\$6,48,367	\$5,93,390	1,15,459	1,19,485	1,25,236	2,10,337		
Locomotive.	7	General Superintendence	48,102	51,197	13,265	15,105	15,060	14,720	
	8	Wages of drivers and firemen, fuelling, cleaning engines, etc.	1,05,723	1,02,035	15,721	15,571	23,739	23,611	
	9	Fuel	2,20,680	2,08,174	46,233	37,379	1,28,093	1,04,482	
	10	Water	20,136	20,689	2,592	2,381	10,900	9,776	
	11	Oil, tallow and other stores	28,778	23,806	4,586	3,895	16,874	13,528	
	12	Maintenance and renewal of {	1,16,128	1,08,961	21,743	23,544	47,433	45,740	
13	Locomotive engines	2,253	3,249	3,791	2,922	4,595	5,624		
13	Machinery	2,253	3,249	3,791	2,922	4,595	5,624		
13	TOTAL*	\$5,77,434	\$5,42,710	1,18,250	1,09,683	2,77,939	2,46,184		
Carriage and Wagon.	14	General Superintendence	17,300	18,079	4,680	5,079	3,410	3,619	
	15	Repairs and renewal of {	Coaching vehicles	47,435	36,346	12,715	7,700	18,957	15,496
			Goods	48,602	40,236	16,180	12,160	10,113	15,406
	16	Machinery	1,891	1,720	439	572	1,486	664	
			Cleaning and oiling	33,010	35,105	4,876	4,625	8,747	12,923
	17	TOTAL*	\$1,33,857	\$1,22,467	42,856	30,524	41,932	48,283	
Traffic.	18	General Superintendence	78,366	80,909	14,744	17,585	18,713	16,552	
	19	Station staff	2,91,234	1,95,451	30,541	29,689	33,406	29,700	
	20	Train staff	57,543	58,418	7,284	7,941	6,319	6,789	
	21	Fuel, lighting and general stores	55,338	48,425	12,196	9,660	14,377	11,996	
	22	Clothing	4,443	8,508	65	1,584	1,711	538	
	23	Printing, stationery and tickets	21,899	22,704	3,597	3,125	11,044	9,335	
	24	Charges for delivery and collection of goods	15,146	9,935	...	...	...	...
	25	TOTAL*	\$4,29,216	\$4,40,095	75,134	82,002	86,355	78,067	
General.	26	Home expenditure and General administration	56,883	56,588	15,807	20,187	...	...
	27	Agent's Office	22,020	15,325	7,785	8,309	4,346	3,613	
	28	Audit, accounts and pay office	93,919	82,684	17,885	19,675	15,812	19,158	
	29	Stores Department	9,987	10,396	4,925	5,188	3,292	3,325	
	30	Medical Department	10,702	10,788	1,860	1,942	2,233	3,144	
	31	Rents and Miscellaneous	15,306	16,379	5,411	6,299	10,111	28	
	32	Police	26,192	28,667	6,780	7,312	2,480	2,746	
	33	Advertising	830	755	275	444	13	203	
	34	Electric telegraph	72,584	76,623	14,192	14,634	22,419	25,102	
	35	TOTAL*	\$2,87,343	\$2,81,363	74,932	83,960	53,803	60,535	
Miscellaneous.	36	Law charges	2,762	2,502	1,770	1,156	30	...	
	37	Compensation	11,372	4,384	1,580	897	907	5,386	
	38	Rates and taxes	2,127	1,623	7	103	...	...
	39	Payments to other lines	90,401	14,207	215	1,404	32,676	16,195	
	40	TOTAL*	1,80,693	\$1,24,552	7,942	8,265	37,372	30,557	
	41	Total working expenses excluding steam-boat †	22,77,682	21,25,829	14,65,782	14,63,441	6,22,637	6,83,013	
42	Steam-boat service	1,65,031	1,35,602	...	...	...	...
	GRAND TOTAL WORKING EXPENSES †	24,42,713	22,61,431	14,65,782	14,63,441	6,22,637	6,83,013		

* Includes all other items
† Includes special contri-
‡ Including the Sagauli

§ Including-Powayan Light railway, detailed

DIX 45—continued.

Appendix 45
Expenses under different heads.

(by systems) during each half-year of 1902—contd.

3' 38"										No.
19		20		21		22		23		
Udaipur-Chitor.		Bhavnagar-Gondal-Jonagad-Porbandar.		Southern Mabratta.		South Indian.		Burma.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
3,305	3,277	29,477	28,181	1,35,455	1,38,347	1,40,633	1,26,132	1,36,476	1,29,848	1
8,632	8,264	58,425	57,493	2,01,645	2,17,079	1,11,776	1,26,243	2,97,053	3,05,611	2
428	2,505	26,863	12,522	1,98,680	2,22,433	2,85,858	1,05,272	1,83,150	95,877	3
127	356	2,476	2,264	42,054	44,471	14,734	17,191	1,20,052	88,973	4
...	...	...	...	...	...	...	...	5,147	4,111	5
1,051	837	4,364	8,500	50,843	57,874	63,105	73,225	85,747	1,23,135	6
15,241	15,515	1,28,119	1,17,204	6,75,743	7,22,690	5,98,276	4,56,780	8,95,192	8,16,009	7
3,291	3,142	17,498	10,640	1,01,627	1,00,404	74,497	73,509	1,04,361	1,01,871	8
1,333	1,485	22,668	21,058	795,313	1,87,337	1,60,351	1,64,409	3,15,135	3,07,831	9
8,350	7,925	69,700	56,205	2,95,208	2,93,547	3,80,772	3,72,385	5,45,936	4,86,512	10
933	808	3,608	3,317	25,842	25,452	14,050	14,122	40,433	36,795	11
525	446	5,002	5,320	17,749	17,025	26,363	26,168	42,421	41,200	12
2,773	2,007	28,929	24,645	2,46,195	2,25,167	2,04,621	1,91,175	2,45,212	2,56,777	13
629	421	1,224	2,073	32,136	27,368	15,005	14,417	25,404	25,017	14
17,869	16,235	1,51,704	1,26,836	10,53,109	10,67,546	8,86,527	9,01,887	13,86,571	13,29,434	15
380	402	5,254	4,956	29,688	20,513	24,741	24,440	29,771	29,492	16
3,663	6,030	11,063	6,444	1,22,323	96,038	89,422	1,25,096	90,370	1,00,550	17
1,324	1,510	8,156	2,821	1,34,737	1,18,356	1,55,552	93,427	1,26,700	1,38,727	18
21	28	912	1,039	5,423	3,555	5,006	4,837	5,928	5,719	19
621	628	3,558	3,592	20,442	20,880	27,689	27,941	37,318	35,937	20
6,062	8,660	29,069	18,866	2,91,456	2,68,717	2,92,511	2,72,187	2,94,884	3,13,963	21
3,520	3,603	18,779	20,533	85,666	81,280	66,815	60,095	85,395	82,828	22
3,928	3,376	48,863	42,893	1,95,614	1,90,732	1,87,511	1,96,238	2,83,754	2,71,918	23
464	403	7,368	7,373	72,192	66,439	43,703	45,852	73,082	73,770	24
825	812	9,452	11,650	45,949	37,654	44,163	30,309	68,559	64,645	25
99	168	1,007	393	8,595	13,143	3,918	6,992	7,691	16,451	26
1,140	749	7,728	7,639	30,210	29,913	28,674	36,536	36,603	50,991	27
...	...	...	...	...	...	49	29	...	...	28
10,421	9,662	98,146	94,894	4,73,859	4,51,658	3,84,143	4,15,044	5,62,561	5,67,669	29
...	...	2,384	2,365	1,20,676	90,896	43,730	43,412	94,128	89,931	30
3,036	2,836	12,673	12,492	40,071	34,424	25,213	25,311	31,042	32,593	31
2,036	1,818	27,277	25,359	92,744	88,388	82,158	83,531	75,884	80,606	32
226	257	6,006	5,952	23,888	23,705	21,258	22,373	23,294	23,972	33
465	427	7,169	7,518	20,111	20,754	18,804	20,598	16,640	17,789	34
895	504	5,798	6,961	19,570	19,775	15,729	17,133	6,418	6,893	35
...	...	17,820	17,382	46,330	44,812	34,076	25,871	51,702	43,091	36
...	...	150	100	2,466	2,004	396	1,251	1,841	2,261	37
1,699	1,596	21,010	21,259	1,00,180	1,03,400	72,176	60,886	88,689	87,637	38
8,357	7,438	1,00,311	99,392	4,75,664	4,29,190	3,55,381	3,54,837	3,99,558	3,05,421	39
...	...	172	216	615	1,557	164	132	772	625	40
51	1	643	218	980	1,597	1,607	1,355	143	3,043	41
...	...	10	...	7,059	1,448	9,412	12,181	17,029	4,990	42
2,125	1,738	3,824	2,042	7,540	4,107	6,263	6,612	...	...	43
2,358	2,165	23,450	14,344	80,318	75,169	49,316	53,873	83,770	71,343	44
60,511	59,745	5,30,790	4,71,536	30,49,940	30,14,970	26,04,611	24,92,872	36,12,536	34,93,839	45
...	...	...	...	...	...	...	...	70,981	43,633	46
60,511	59,745	5,30,799	4,71,536	30,49,949	30,14,970	26,04,611	24,92,872	36,92,517	35,37,472	47

of expenditure not enumerated.
 buton to Provident Fund.
 Razaul railway, details for which are not given.
 information for which is not available.

Appendix 45.
Expenses under different heads.

Working expenses under different heads of each railway

No.	GAUGE.		2' 6"							
	CLASSIFICATION NUMBER.		24		25		26			
	Railway.		Morvi.		Barai.		Tarakeshwar-Magra.			
	Particulars.		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.		
Engineering.	1	General Superintendence Re.	2,574	2,371	2,158	2,134	1,352	1,375		
	2	Maintenance of permanent-way {	Wages	11,227	10,879	2,605	2,600	2,713	2,525	
			Material	746	1,099	55	55	29	90	
	3	Repairs of bridges, etc.	412	375	184	192	183	82		
	4	Conservancy of rivers	---	---	---	---	---	---		
	5	Repairs of stations and buildings	848	403	905	539	292	194		
6	TOTAL*	16,201	15,493	5,997	5,520	4,629	4,364			
Locomotive.	7	General Superintendence	3,184	2,228	832	800	585	589		
	8	Wages of drivers and firemen, fuelling, cleaning engines, etc.	2,640	2,603	1,788	1,600	1,262	1,238		
	9	Fuel	20,351	18,316	2,288	1,619	2,539	2,740		
	10	Water	689	571	963	783	225	242		
	11	Oil, tallow and other stores	1,115	974	540	534	738	629		
	12	Maintenance and renewal of. {	Locomotive engines	3,116	2,464	2,871	1,881	1,325	1,649	
			Machinery	11,548	4,732	211	48			
	13	TOTAL*	43,545	34,758	9,501	6,951	7,253	7,721		
	Carriage and Wagon.	14	General Superintendence	1,681	1,581	407	400	585	592	
		15	Repairs and renewal of {	Coaching vehicles	1,072	973	493	616	1,042	1,599
				Goods	608	401	362	268	138	162
				Machinery	2,363	3,544	21	31	---	---
		16	Cleaning and oiling	1,074	635	404	384	270	311	
17		TOTAL*	6,726	7,356	1,697	1,699	2,052	2,664		
Traffic.	18	General Superintendence	2,990	2,481	563	630	516	515		
	19	Station staff	7,241	7,179	4,013	2,914	3,955	4,040		
	20	Train staff	1,392	1,319	354	325	761	846		
	21	Fuel, lighting and general stores	2,465	2,270	2,180	291	520	581		
	22	Clothing	258	129	102	76	---	-18		
	23	Printing, stationery and tickets	1,410	1,609	449	465	1,140	986		
	24	Charges for delivery and collection of goods	195	435	---	---	---	---		
	25	TOTAL*	16,762	15,528	9,876	6,500	8,099	8,200		
	General.	26	Home expenditure or General administration	---	---	15,082	2,771	1,486	802	
		27	Agent's Office	2,535	2,632	2,617	2,483	1,815	1,863	
28		Audit, accounts and pay office	5,868	6,702	600	600	1,973	1,982		
29		Stores Department	1,919	1,580	674	632	186	185		
30		Medical Department	308	314	776	772	156	155		
31		Rents and Miscellaneous	412	550	747	695	338	325		
32		Police	1,300	---	140	585	---	---		
33		Advertising	97	---	---	---	---	104		
34		Electric telegraph	3,256	2,957	857	899	737	710		
35		TOTAL*	16,791	15,647	27,493	15,416	6,652	6,106		
Miscellaneous.	36	Law charges	---	21	62	19	14	550		
	37	Compensation	150	31	4,597	523	-19	8		
	38	Rates and taxes	---	---	587	-30	---	---		
	39	Payments to other lines	---	---	541	436	18	18		
	40	TOTAL*	1,253	1,608	5,788	948	67	643		
41	TOTAL WORKING EXPENSES EXCLUDING STEAM-BOAT†	1,01,279	90,480	60,342	37,054	29,712	29,718			
42	Steam-boat service	---	---	---	---	---	---			
43	GRAND TOTAL WORKING EXPENSES†	1,01,279	90,480	60,342	37,054	29,712	29,718			

* Includes all other items of expenditure not enumerated.
† Includes special contribution to President's Fund.

DIX 45—concluded.

(by systems) during each half-year of 1902—concl'd.

Appendix 45.
Expenses under different heads.

27		28		29		30		31		32		No.
Raaghat-Krishnagar.		Tezpur-Balipara.		Darjeeling-Himalayan.		Howrah-Amta.		Howrah-Sheakhala.		Jorhat.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
...	...	1,615	2,046	14,164	12,841	...	...	...	...	...	...	1
...	...	1,918	1,976	10,241	10,593	...	...	...	...	...	...	2
...	...	1,623	2,690	12,292	9,440	...	...	...	...	...	...	3
...	...	135	603	12,782	12,588	...	...	...	...	...	...	4
...	5
...	...	1,546	745	10,686	10,686	...	...	...	...	...	...	6
5,527	5,141	6,837	8,061	48,690	54,646	17,622	15,708	6,221	6,231	13,526	9,620	7
...	...	850	1,075	3,466	3,476	...	...	...	...	...	...	8
...	...	868	866	14,249	13,912	...	...	...	...	...	...	9
...	...	2,607	2,766	28,964	25,566	...	...	...	...	...	...	10
...	...	21	25	470	654	...	...	...	...	...	...	11
...	...	355	455	3,550	4,120	...	...	...	...	...	...	12
...	...	2,434	2,008	15,004	14,312	...	...	...	...	...	...	13
...	9,694	8,524	...	...	...	...	...	...	14
6,645	5,722	7,135	7,195	74,193	70,525	15,083	17,568	4,678	5,486	13,815	13,396	15
...	...	625	825	3,021	3,023	...	...	...	...	...	...	16
...	...	1,482	1,325	5,364	6,235	...	...	...	...	...	...	17
...	...	541	563	14,090	9,869	...	...	...	...	...	...	18
...	79	50	...	...	...	...	...	...	19
...	...	317	304	1,760	1,461	...	...	...	...	...	...	20
1,601	1,229	2,965	3,017	23,937	19,985	5,148	3,584	1,329	1,052	9,423	845	21
...	...	1,310	1,710	2,405	2,788	...	...	...	...	...	...	22
...	...	2,176	2,404	14,644	15,947	...	...	...	...	...	...	23
...	...	562	564	6,596	6,593	...	...	...	...	...	...	24
...	...	154	223	4,911	4,931	...	...	...	...	...	...	25
...	3	196	97	...	...	...	...	...	...	26
...	...	320	394	854	869	...	...	...	...	...	...	27
...	...	1,994	2,101	4,234	4,444	...	...	...	...	...	...	28
10,975	11,065	7,371	8,273	33,840	35,669	20,866	21,241	9,576	9,612	8,207	8,957	29
...	...	264	1,360	21,535	20,093	...	...	...	...	...	...	30
...	...	1,180	1,530	4,604	4,556	...	...	...	...	...	...	31
...	...	2,367	2,346	8,844	9,159	...	...	...	...	...	...	32
...	...	101	126	...	...	...	...	...	...	...	...	33
...	...	339	482	2,822	2,784	...	...	...	...	...	...	34
...	...	401	390	2,295	2,878	...	...	...	...	...	...	35
...	36
...	211	141	...	...	...	...	...	...	37
...	...	498	498	4,417	4,410	...	...	...	...	...	...	38
3,393	3,314	5,300	6,732	44,379	43,645	7,341	7,151	2,976	2,809	6,037	5,977	39
...	...	28	30	32	424	...	...	...	...	...	...	40
...	289	138	...	...	...	...	...	...	41
...	...	151	103	4,438	4,024	...	...	...	...	...	...	42
...	2,967	2,891	...	...	...	...	...	...	43
...	...	251	224	7,726	7,477	...	...	...	...	197	206	44
28,248	26,579	29,859	33,502	2,36,582	2,35,694	66,612	65,765	24,939	25,341	51,205	39,091	45
...	46
28,248	26,579	29,859	33,502	2,36,582	2,35,694	66,612	65,765	24,939	25,341	51,205	39,091	47

§ Details not furnished.

NOTE.—These statistics are not

Serial number.	PARTICULARS.	5' 6"										
		GA. GE.										
		Class No.	1	2 (a)	3	4 (a)	4 (b)	5 (a) & (b)	6 (a) to (c)	7 (a) to (c)	8 (a) to (f)	9 (a) & (b)
Calendar year 1902.	East Indian.	Eastern Bengal.	Bengal Central	Bengal-Nagpur.	Raipur-Dham-tari (2' 0").	Oudh and R. hil-khand.	North-Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.		
DESCRIPTION OF RAILWAY WORKED.												
1	Gauge of railway	5' 6"	5' 6"	5' 6"	5' 6"	2' 0"	5' 6"	5' 6"	5' 6"	5' 6"	5' 6"
2	Mileage worked Miles	...	2,187'81	274'16	138'89	1,548'19	36'24	1,069'62	3,770'59	2,716'94	765'96	354'70
3	Number of stations . . . No.	...	351	82	27	204	8	158	494	379	131	45
4	Total length of the following gra- dients:—											
	(a) $\frac{1}{2}$ and less . . . Miles	...	5'9	71'12	19'31
	(b) $\frac{1}{4}$ to $\frac{1}{2}$ "	...	16'78	0'91	...	9'30	84'97	9'11	1'38	...
	(c) $\frac{1}{8}$ to $\frac{1}{4}$ "	...	38'33	30'11	...	6'41	134'21	73'29	0'50	79'19
	(d) $\frac{1}{16}$ to $\frac{1}{8}$ "	...	142'52	460'19	18'60	19'13	108'69	277'71	167'86	110'99
	(e) $\frac{1}{32}$ to $\frac{1}{16}$ "	...	131'65	2'45	...	136'97	1'95	22'56	122'40	308'88	47'97	18'22
5	Steepest gradient worked—											
	(a) Inclination	$\frac{7}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$
	(b) Length Miles	...	3'98	2'00	...	0'40	2'41	2'23	6'52	5'85	1'32	2'52
FINANCIAL RESULTS.												
6	Percentage of net earnings (including steam-boat traffic) for each half- year on capital outlay . Per cent.	Calendar year 1902 by half- years.	1st half 4'82	2'35	1'99	1'99	1'12	2'71	1'81	0'73	3'75	5'27
			2nd "	4'96	2'40	1'23	—0'08	2'16	1'62	0'24	2'10	5'99
7	Percentage of net earnings for each half-year on paid up capi- tal Per cent.	1st half	1'99	1'83	1'12	1'28	3'23	5'77
		2nd "	2'44	1'14	—0'08	1'30	1'89	5'53
OUTLAY EARNINGS AND EX- PENSES. (Exclusive of Steam-boat Service.)												
8	Capital outlay per mile open . R.	1st half 2,34,140	2,63,473	1,01,507	1,31,707	24,199	1,14,632	1,43,470	1,91,578	1,83,110	1,26,860	
		2nd "	2,23,543	2,60,616	1,02,109	1,33,918	24,644	1,16,572	1,44,726	1,93,468	1,27,784	
9	Total earnings per mile open per week	1st half 660	628	171	194	26	247	244	453	477	263	
		2nd "	576	827	194	157	17	208	302	358	246	
10	Total working expenses per mile open per week	1st half 234	385	99	88	16	124	140	194	204	105	
		2nd "	218	318	107	90	17	109	123	185	98	
11	Total earnings per train-mile . "	1st half 4'31	4'28	3'06	3'53	1'47	3'29	3'56	4'12	6'28	4'73	
		2nd "	4'01	5'21	3'30	3'10	0'89	2'97	3'47	5'71	4'57	
12	Total working expenses per train-mile	1st half 1'53	2'62	2'30	1'61	0'88	1'66	2'05	1'76	2'89	1'88	
		2nd "	1'52	2'00	1'82	1'77	0'93	1'55	2'04	1'98	1'83	
13	Net earnings per train-mile . "	1st half 2'78	1'66	1'66	1'94	0'59	1'63	1'51	2'36	3'39	2'85	
		2nd "	2'49	3'21	1'48	1'33	—0'04	1'42	1'48	2'47	2'74	
14	Cost per 1,000 gross ton miles moved (freight and dead- weight)	1st half 3'64	7'59	6'79	4'42	12'12	4'62	6'02	4'60	7'00	4'71	
		2nd "	3'79	4'92	6'75	5'21	17'11	4'58	6'10	6'31	4'04	
15	Percentage of total working ex- penses on total earnings . Per cent.	1st half 34'29	61'26	58'05	45'35	60'02	50'46	57'50	42'80	42'64	39'82	
		2nd "	37'87	38'41	55'00	57'12	104'53	52'25	58'91	61'19	56'67	
16	Percentage of total working ex- penses on total earnings, excluding from both sides of the account the charges for carriage of revenue stores Per cent.	1st half 33'33	61'90	57'84	43'60	37'29	48'86	55'72	41'45	41'67	38'85	
		2nd "	36'22	38'30	54'76	55'01	103'35	50'41	57'33	59'78	55'90	
17	(Inclusive of Steam-boat Service.) Percentage of total working ex- penses on total earnings (for details, see items 123—29 . Per cent.	1st half 35'40	61'26	58'05	45'75	60'02	50'46	57'52	42'80	42'64	39'82	
		2nd "	38'02	38'41	55'00	57'65	104'53	52'25	58'98	61'19	56'67	

* Great Indian Peninsula railway only
† Indian Midland railway only.
‡ Great Indian Peninsula railway
§ Nizam's railway only.
|| Calculated on the mileage, excluding
¶ including the Cawnpore-Burhal

DIX 46.

Appendix 46.
Analysis.

(by systems) during each half-year of 1902.

prepared by the railways not shown.

3' 3 1/2"													GAUGE.	
10 (a) to (c)	11 (b) to (d)	14	16	17 (a) & (b)	18 (g) to (h)	18	19	20	9 (c)	21	22	23	Class No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western.	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Porbandar.	Hyderabad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902.	
5' 0"	3' 3 1/2"	3' 3 1/2"	3' 3 1/2"	3' 3 1/2"	3' 3 1/2"	3' 3 1/2"	3' 3 1/2"	3' 3 1/2"	3' 3 1/2"	3' 3 1/2"	3' 3 1/2"	3' 3 1/2"	...	1
1,387'36	710'98	589'21	1,343'88	278'30	1,824'33	763'75	68'72	455'45	391'42	1,646'20	1,162'31	1,182'08	...	2
284	116	86	239	46	258	83	7	64	46	229	209	197	...	3
...	0'37	...	...	...	3'40	...	...	...	...	15'40	...	51'79	...	4
22'84	0'64	1'26	...	6'41	0'23	...	...	0'07	...	48'92	...	27'23	...	5
49'43	2'05	7'06	...	7'29	18'75	...	1'10	0'34	...	537'07	119'83	43'30	...	6
270'68	20'81	80'61	5'26	4'40	307'80	165'92	30'75	121'23	221'73	250'35	222'74	147'83	...	7
153'53	14'65	28'03	3'66	5'81	153'63	59'59	6'98	63'90	13'95	95'69	96'53	101'41	...	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	9
0'80	0'37	0'57	3'48	3'00	3'40	2'31	0'46	0'07	3'41	15'40	3'56	9'81	...	10
2'26	2'05	0'16	3'44	5'05	5'90	4'17	3'02	1'09	3'00	1'51	3'59	3'03	Calendar year 1902 by half-years.	11
1'50	3'23	0'19	12'08	2'65	3'35	1'89	1'68	1'03	0'85	0'92	3'51	1'68	1st half	12
2'28	...	...	...	...	...	...	...	...	2'77	...	...	2'62	2nd "	13
1'52	...	...	...	...	...	...	...	...	0'81	...	...	1'48	1st half	14
1,35,191	85,241	1,18,662	75,165	42,820	75,930	25,174	30,693	149,831	62,456	79,511	69,444	90,858	1st half	15
1,37,054	90,912	1,20,704	76,613	44,443	76,647	24,870	30,693	149,869	65,205	85,454	68,345	85,589	2nd "	16
247	188	65	171	142	312	74	70	82	137	115	189	230	1st half	17
214	209	70	123	114	226	53	54	59	88	101	176	176	2nd "	18
121	89	57	71	58	131	32	35	44	63	68	89	118	1st half	19
130	92	61	64	63	124	33	34	39	67	70	78	113	2nd "	20
3'85	3'12	3'06	2'75	3'27	4'16	2'92	4'81	3'74	3'29	2'67	3'00	3'74	1st half	21
3'37	3'41	2'49	2'12	2'58	3'73	2'34	3'56	3'06	2'34	2'41	3'03	2'92	2nd "	22
1'90	1'48	2'72	1'14	1'34	1'75	1'28	2'37	2'01	1'51	1'59	1'31	1'92	1st half	23
2'05	1'50	2'17	1'11	1'43	2'05	1'47	2'25	2'04	1'77	1'68	1'35	1'88	2nd "	24
1'95	1'64	0'35	1'61	1'93	2'41	1'64	2'44	1'73	1'78	1'08	1'69	1'82	1st half	25
1'32	1'91	0'32	1'01	1'16	1'68	0'86	1'31	1'02	0'57	0'73	1'68	1'04	2nd "	26
5'67	8'29	12'65	5'42	7'37	6'74	6'37	11'11	11'02	6'87	8'44	8'44	8'73	1st half	27
6'92	7'76	10'32	5'86	8'27	8'65	8'36	11'84	12'09	9'16	9'15	7'60	9'35	2nd "	28
49'24	47'43	88'68	41'28	40'95	41'95	43'84	49'21	53'80	46'06	59'42	47'07	51'23	1st half	29
60'96	43'97	87'19	52'47	55'16	54'91	63'12	63'27	66'64	75'70	69'79	44'59	64'47	2nd "	30
48'15	44'45	88'55	39'98	40'28	41'10	42'54	48'71	53'63	45'50	58'13	46'55	50'45	1st half	31
50'87	41'45	86'90	51'44	54'31	53'99	61'93	63'26	66'73	74'09	68'11	43'79	63'53	2nd "	32
49'24	51'36	88'51	41'35	40'58	41'95	43'84	49'21	53'80	46'06	59'42	47'07	52'25	1st half	33
60'96	47'97	87'26	52'25	54'71	54'91	63'12	63'27	66'64	75'70	69'79	44'59	65'09	2nd "	34

Indian Midland railway for 1st and 2nd halves 2'89 and 1'34, respectively.

only. Indian Midland railway for 1st and 2nd halves 1,31,692 and 1,32,743, respectively.

the dock estates and quarry lines constructed and maintained by the Native states as separate undertakings, (metre gauge link) in items 1, 2 and 9 to 17.

DIX 46—continued.

Appendix 46.
Analysis.

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

3' 3 1/2"													GAUGE.	
10 (a) to (c)	11 (b) to (d)	14	16	17 (a) & (b)	18 (g) to (h)	18	19	20	9 (c)	21	22	23	Class No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western.	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Porbandar.	Hyderabad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
41,33 45,79	15,94 16,72	8,24 8,51	22,68 20,76	4,27 4,10	59,77 57,64	5,93 6,65	60 59	5,07 4,50	5,40 6,29	27,73 29,47	25,60 23,62	35,13 34,06	1st half 2nd "	18
13,95 17,16	5,37 5,52	4,41 3,62	9,22 10,63	1,43 1,67	12,26 18,54	2,22 3,24	31 38	2,49 2,79	2,16 3,03	9,37 10,79	11,09 11,70	12,65 13,54	1st half 2nd "	19
27,38 28,63	10,57 11,20	3,83 4,89	13,46 10,08	2,85 2,43	47,51 39,10	3,71 3,41	29 21	2,58 1,71	3,24 3,26	18,36 18,68	13,61 11,92	22,48 20,52	1st half 2nd "	20
34,14 31,89	14,89 14,66	6,10 5,21	22,64 22,63	4,23 3,71	36,35 35,75	4,82 5,00	51 52	4,98 4,33	4,71 3,91	17,67 17,19	19,08 30,61	30,66 25,34	1st half 2nd "	21
1,007 1,023	511 526	176 173	1,142 1,211	141 157	1,056 1,173	190 239	13 17	141 151	259 166	705 736	874 969	728 789	1st half 2nd "	22
3'39 3'12	2'01 2'79	3'47 3'02	1'98 1'87	3'09 2'35	3'44 3'03	2'54 2'09	3'09 3'16	3'53 2'37	2'07 2'35	2'51 2'34	2'33 3'16	4'21 3'21	1st half 2nd "	23
2,457 2,201	459 423	154 157	399 438	150 138	1,002 1,354	1,31 1,64	12 18	128 125	266 207	283 999	291 248	291 732	1st half 2nd "	24
7,085 8,437	1,368 1,439	309 321	875 1,091	376 1,042	3,453 3,931	6,81 7,15	30 57	829 852	1,307 1,339	2,909 3,531	3,479 3,161	3,278 2,648	1st half 2nd "	25
1,076 955	5,387 6,068	148 159	2,833 2,931	327 285	9,263 9,863	... ...	65 80	1,190 1,086	... ...	... ...	... ...	... ...	1st half 2nd "	26
221,669 209,238	90,805 85,228	34,927 28,459	195,059 193,651	27,007 22,507	270,338 254,493	37,120 36,629	42,12 40,17	28,279 23,506	35,277 28,315	128,551 119,106	246,589 256,668	173,361 141,712	1st half 2nd "	27
232,287 220,831	98,017 93,158	35,538 29,016	199,216 1198,111	29,260 23,972	293,056 269,693	37,932 37,508	43,19 41,72	30,456 25,569	36,850 21,871	132,341 123,636	250,890 260,677	177,530 145,093	1st half 2nd "	28
2,661 2,081	473 712	166 212	593 689	133 142	2,493 3,256	2,92 3,01	20 35	140 169	225 350	1,032 1,119	651 657	714 872	1st half 2nd "	29
12'08 12'34	13'88 13'78	15'06 14'82	12'57 13'05	25'34 27'38	13'49 13'73	13'32 14'06	17'70 17'89	11'29 11'22	10'06 10'35	11'26 12'16	11'69 11'62	15'35 17'50	1st half 2nd "	30
5'15 4'33	6'58 6'03	7'68 7'45	5'90 5'23	7'68 6'94	6'10 6'45	6'00 6'00	8'87 8'89	5'63 5'58	4'42 4'32	5'10 5'05	5'06 5'86	7'76 8'76	1st half 2nd "	31
4'53 4'50	3'14 3'07	4'44 4'49	3'04 3'07	4'00 4'01	2'98 2'99	... ...	3'00 3'00	4'00 4'00	... ...	... ...	... ...	... ...	1st half 2nd "	32
2'26 2'22	2'50 2'50	3'00 3'00	2'00 2'00	2'18 2'21	2'00 2'00	2'05 2'06	1'99 1'99	2'75 2'75	2'00 2'00	2'09 2'10	2'02 2'05	3'01 2'98	1st half 2nd "	33
2'46 2'41	2'65 2'64	3'10 3'12	2'05 2'06	2'49 2'58	2'12 2'16	2'16 2'19	2'10 2'17	2'92 2'94	2'14 2'16	2'22 2'27	2'10 2'13	3'16 3'16	1st half 2nd "	34
31'71 38'33	56'32 49'61	42'14 43'73	43'46 33'78	63'18 65'65	30'84 31'71	35'96 35'50	27'58 24'50	47'73 47'86	50'71 30'04	44'68 44'72	48'45 49'41	38'45 32'83	1st half 2nd "	35

and sundry receipts, and leaving only the balance of payments to other lines for mileage, etc.
converted into tons at the following rates, viz, 1—

- 0'10 ton.
- 0'08 "
- 0'06 "
- other coaching trains.
- mail trains.
- Cawnpore-Burhwal link.
- other than mail trains.

Appendix 46.
Analysis.

Analysis of working of each railway

NOTE.—These statistics are :

Serial number.	PARTICULARS.	GAUGE. Class No. Calendar year 1902 by half-years.	5' 6"										
			1	2 (a)	3	4 (a)	4 (b)	5 (a) & (b)	6 (a) to (e)	7 (a) to (g)	8 (a) to (f)	9 (a) & (i)	
			East Indian.	Eastern Bengal.	Bengal Central.	Bengal Nagpur.	Raipur-Dhamtari (2' 6").	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State	
COACHING TRAFFIC—contd.													
UNITS AND UNIT-MILEAGE—contd.													
Average number of units in a train—													
36	1st class	No.	1st half	1'28	1'71	0'52	1'23	0'13	1'31	1'27	2'18	2'08	2'47
			2nd "	1'75	1'27	0'42	0'97	0'11	1'34	1'27	2'42	1'86	2'53
37	2nd "	"	1st half	4'45	3'69	2'82	2'97	0'40	4'21	4'06	11'76	13'33	11'68
			2nd "	4'76	3'46	2'69	2'91	0'24	5'05	4'44	9'92	10'82	14'06
38	3rd or intermediate class	"	1st half	15'11	19'02	12'72	6'18	1'61	11'63	12'64	15'65	27'22	210'09 219'37
			2nd "	14'62	19'69	11'47	5'35	1'08	12'23	13'45	13'70	25'86	
39	4th or lowest	"	1st half	200'40	171'87	231'77	226'26	129'12	135'71	163'60	132'00	201'40	210'09 219'37
			2nd "	180'01	154'19	177'28	197'33	80'50	129'65	161'52	97'00	167'92	
40	Total passenger units	"	1st half	221'44	196'29	247'83	236'64	131'26	172'86	186'57	161'59	244'03	224'24
			2nd "	201'14	178'61	191'86	207'26	81'93	148'27	180'68	123'04	206'46	236'16
41	Other coaching traffic	Tons	1st half	2'86	1'19	1'50	1'21	0'40	1'34	1'76	2'78	2'85	2'70
			2nd "	3'19	1'56	1'19	1'39	0'27	1'41	2'20	2'63	3'46	2'87
VEHICLES AND VEHICLE-MILEAGE—													
Number of coaching vehicles (in thousands) hauled one mile—													
42	1st class	Vehicle-miles	1st half	4,886	618	76	1,270	4	1,471	3,556	4,469	901	363
			2nd "	5,124	641	93	1,272	4	1,602	3,516	4,039	901	345
43	2nd "	"	1st half	4,688	595	112	1,322	4	1,285	3,463	5,652	1,703	307
			2nd "	4,801	610	134	1,275	4	1,296	3,400	5,680	1,676	330
44	3rd or intermediate class	"	1st half	4,630	1,204	141	905	107'85	1,722	4,026	2,952	1,107	1,561
			2nd "	5,116	1,238	166	1,036		2,966	4,080	3,359	994	
45	4th or lowest	"	1st half	29,077	3,975	828	11,134	85	8,179	24,820	16,400	7,076	1,631
			2nd "	30,567	4,047	920	10,778		7,851	26,140	17,508	6,549	
46	Other vehicles	"	1st half	4,614	1,004	226	1,219	6	947	2,700	4,785	1,637	307
			2nd "	5,209	1,089	223	1,186	4	860	3,000	5,628	1,759	246
47	Brake-vans	"	1st half	5,479	536	155	1,857	24	2,086	5,298	5,172	1,104	350
			2nd "	5,802	569	161	1,947	29	2,193	5,599	6,013	1,135	360
48	Total	"	1st half	53,374	7,932	1,538	17,707	145	15,690	43,863	39,430	13,528	2,888
			2nd "	56,619	8,194	1,697	17,493	126	15,768	45,735	43,127	13,014	2,912
Average number of vehicles in a coaching train—													
49	1st class	No.	1st half	1'57	1'15	0'84	1'39	0'34	1'30	1'25	1'59	1'05	1'17
			2nd "	1'53	1'12	0'82	1'28	0'30	1'36	1'17	1'50	1'03	1'10
50	2nd "	"	1st half	1'51	1'11	1'23	1'44	0'35	1'14	1'22	0'00	1'99	1'00
			2nd "	1'43	1'07	1'18	1'28	0'30	1'10	1'14	1'72	1'92	1'05
51	3rd or intermediate class	"	1st half	1'49	2'25	1'55	0'99	2'93	1'53	1'41	0'05	1'29	5'05
			2nd "	1'53	2'18	1'46	1'04		1'07	1'36	0'02	1'14	
52	4th or lowest	"	1st half	9'38	7'43	0'10	12'18	5'62	7'26	8'72	7'81	8'25	5'20
			2nd "	9'12	7'12	8'10	10'83		6'67	8'73	7'30	7'51	
53	Other vehicles	"	1st half	1'49	1'88	2'40	1'33	0'47	0'84	0'93	1'70	1'91	0'99
			2nd "	1'55	1'92	1'96	1'19	0'26	0'73	1'00	1'70	2'02	0'78
54	Brake-vans	"	1st half	1'77	1'00	1'70	2'03	1'99	1'85	1'86	1'83	1'29	1'13
			2nd "	1'73	1'00	1'42	1'96	1'90	1'87	1'86	1'82	1'30	1'15
55	Total	"	1st half	17'21	14'82	16'91	19'36	12'08	13'92	15'41	13'98	15'78	9'34
			2nd "	16'89	14'41	14'94	17'58	8'38	13'40	13'86	13'06	14'92	9'28
Average earnings per coaching vehicle per mile—													
56	1st class	Pies	1st half	13'24	20'85	8'89	13'25	6'19	11'42	10'72	14'61	19'79	15'77
			2nd "	17'26	15'33	7'23	10'54	5'48	11'39	11'90	17'79	18'70	13'10
57	2nd "	"	1st half	17'07	22'46	17'00	12'40	7'86	19'15	14'33	21'33	31'66	26'06
			2nd "	20'54	21'26	16'03	13'08	5'23	22'83	17'05	22'60	28'72	25'19
58	3rd or intermediate class	"	1st half	32'66	25'86	28'93	19'90	29'47	23'05	26'93	44'70	63'10	43'55 38'63
			2nd "	31'89	27'01	26'96	17'07		22'18	29'86	40'19	67'91	
59	4th or lowest	"	1st half	52'22	57'60	76'89	42'75	29'24	51'68	43'89	47'91	55'22	43'55 38'63
			2nd "	48'07	53'90	65'62	42'44		47'55	43'01	39'25	51'27	
60	Other vehicles	"	1st half	56'41	32'43	24'73	41'27	34'52	68'30	62'54	55'43	45'73	48'11
			2nd "	60'85	40'89	28'23	41'17	42'77	76'80	72'91	56'39	48'57	53'69

* Third class by
† Third class by
‡ Including Cawn

DIX 46—contd.

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

3' 3 1/2"														GAUGE.
10 (a) to (c)	11 (b) to (d)	14	16	17 (a) & (b)	18 (g) to (h)	18	19	20	9 (c)	21	22	23	Class: No.	
Madras.	Eastern Bengal.	Assam- Bengal.	Bengal and North- Western †	Robil- kund and Kumaon.	Raj- putana- Malwa.	Jodh- pur- Bikaner.	Udaipur- Chitor.	Bhav- nagar- Gondal- Junagad- Porbandar.	Hyder- abad- Godavari Valley.	Southern Maharatta.	South India.	Burma.	Calendar year 1902 by half- years.	
2'44 2'15	0'90 0'80	0'87 0'91	0'35 0'36	1'07 0'88	0'95 0'15	0'69 0'68	0'98 1'09	0'91 0'83	1'67 1'24	1'25 1'36	1'02 0'87	1'22 0'93	1st half 2nd "	
7'03 8'25	2'67 2'74	1'75 1'86	0'77 0'90	6'22 6'62	3'27 3'40	3'59 2'99	2'33 3'42	6'59 5'64	8'24 8'05	4'13 4'80	3'91 3'26	4'50 3'35	1st half 2nd "	
1'07 0'93	10'54 11'54	0'84 0'92	2'52 2'42	2'32 1'81	8'77 8'41	..	5'09 4'81	7'95 7'18	..	..	..	..	1st half 2nd "
220'16 204'58	177'69 162'08	108'52 164'92	170'86 159'92	108'27 142'98	264'56 217'03	195'71 153'17	330'84 241'81	200'67 155'50	222'40 170'24	182'29 161'85	282'23 264'79	238'10 179'50	1st half 2nd "	
230'70 215'29	191'80 177'16	201'93 168'01	174'50 163'60	207'88 152'29	277'55 229'99	199'99 156'84	339'24 251'13	216'12 169'15	232'31 179'54	187'67 168'01	287'16 265'92	243'82 183'78	1st half 2nd "	
2'64 2'03	0'93 1'35	0'94 1'20	0'52 0'57	0'04 0'90	2'36 2'78	1'53 1'63	1'60 2'13	0'99 1'12	1'42 2'10	1'46 1'52	0'75 0'68	0'98 1'10	1st half 2nd "	
1,358 1,339	701 634	310 307	1,763 1,883	217 209	1,711 1,953	2,91 325	17 20	204 281	317 330	1,026 1,233	975 1,045	1,235 1,212	1st half 2nd "	
1,544 1,558	658 588	280 296	1,606 1,682	193 200	1,656 1,849	3,08 3,28	17 22	429 400	314 306	1,078 1,258	1,172 1,257	1,579 1,563	1st half 2nd "	
250 280	1,059 1,148	251 242	1,689 1,864	108 114	915 1,029	..	27 27	261 290	..	..	..	..	1st half 2nd "
9,047 9,463	4,616 5,254	2,276 2,174	14,516 15,781	1,687 1,831	17,295 17,852	25,68 27,71	2,12 2,27	1,783 1,746	1,519 1,674	8,667 9,146	12,426 13,439	11,443 10,979	1st half 2nd "	
1,396 1,210	690 843	264 398	319 366	88 107	1,010 1,567	3,39 3,86	4 7	112 120	351 209	924 990	1,110 1,294	911 585	1st half 2nd "	
2,154 2,147	478 491	233 215	2,056 2,494	264 302	3,228 3,350	6,61 7,79	50 53	398 403	354 297	1,031 1,142	1,065 1,166	1,026 1,154	1st half 2nd "	
15,749 15,997	8,213 8,958	3,614 3,632	21,949 24,975	2,537 2,793	25,790 27,630	41,67 44,89	3,27 3,56	3,277 3,240	2,655 2,816	12,725 13,769	16,748 18,201	16,204 15,493	1st half 2nd "	
1'35 1'31	1'37 1'21	1'76 1'78	1'54 1'56	1'55 1'33	1'62 1'66	1'53 1'36	1'31 1'19	2'09 1'86	1'11 1'11	1'46 0'68	1'12 1'08	1'70 1'53	1st half 2nd "	
1'51 1'52	1'31 1'12	1'59 1'71	1'41 1'39	1'37 1'27	1'57 1'58	1'63 1'37	1'31 1'34	3'04 2'66	1'09 1'04	1'53 1'71	1'34 1'30	2'17 1'98	1st half 2nd "	
0'45 0'28	2'07 2'18	1'43 1'40	1'48 1'54	0'77 0'72	0'87 0'68	..	2'16 1'64	1'85 1'92	..	..	..	..	1st half 2nd "
8'98 9'25	9'63 9'99	12'04 12'60	12'72 13'03	11'08 11'63	16'38 15'22	13'54 11'58	16'66 13'09	12'66 11'54	5'28 5'67	12'29 12'43	14'22 13'86	15'72 13'91	1st half 2nd "	
1'30 1'18	1'35 1'60	1'50 2'31	0'28 0'30	0'62 0'68	0'96 1'34	1'79 1'20	0'29 0'41	0'80 0'79	0'53 0'71	1'31 1'34	1'27 1'34	1'25 0'74	1st half 2nd "	
2'14 2'10	0'94 0'94	1'32 1'25	1'80 2'06	1'88 1'92	3'03 2'88	3'48 3'26	3'95 3'19	2'82 2'66	1'23 1'01	1'46 1'55	1'22 1'20	1'42 1'46	1st half 2nd "	
15'64 15'64	16'07 17'04	20'54 21'05	19'23 19'88	18'17 17'55	24'43 23'56	21'97 18'77	25'68 21'46	23'26 21'43	9'24 9'54	18'05 18'71	19'17 18'78	22'26 19'62	1st half 2nd "	
21'84 20'28	9'09 9'18	7'48 7'57	2'85 3'17	17'57 18'08	7'90 9'52	6'02 7'54	13'19 16'47	4'91 4'99	8'42 6'50	9'69 9'85	10'69 9'43	11'00 10'58	1st half 2nd "	
23'64 23'44	13'46 14'76	8'45 8'08	3'21 3'39	34'79 36'25	12'71 13'88	13'28 13'08	15'72 22'76	12'20 11'87	18'42 18'86	13'76 14'17	14'76 14'74	16'11 14'83	1st half 2nd "	
19'48 15'34	15'06 16'22	2'62 2'96	5'19 4'82	12'16 9'97	30'22 28'64	..	7'06 8'79	17'15 14'95	..	..	..	..	1st half 2nd "
55'28 49'09	49'18 40'55	46'03 39'27	26'87 24'33	36'10 27'14	32'31 28'53	29'68 27'21	39'55 35'15	43'61 37'03	46'45 33'83	30'97 27'34	40'17 39'21	45'64 38'43	1st half 2nd "	
60'45 65'92	38'63 41'92	26'55 23'29	80'53 72'89	95'72 87'23	76'11 65'91	30'97 48'44	150'28 128'25	59'51 67'40	75'32 50'23	49'91 30'57	28'44 25'06	30'12 48'93	1st half 2nd "	

mail trains.
other than mail trains.
pore-Burhwal link.

Serial number.	PARTICULARS.	GAUGE. Class No. Calendar year 1902 by half-years.	5' 6"									
			1	2(a)	3	4(a)	4(b)	5 & (b)	6 (a) to (e)	7 (a) to (g)	8 (a) to (f)	9 (a) & (b)
			East Indian.	Eastern Bengal.	Bengal Central.	Bengal-Nagpur.	Raipur-Dhamtari (2' 6").	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
COACHING TRAFFIC—contd.												
VEHICLES AND VEHICLE-MILEAGE—contd.												
Carrying capacity hauled one mile (excluding brakes) (in thousands)—												
61	1st class Seats	1st half	70,261	12,721	1,445	16,085	49	31,345	51,776	58,701	21,638	4,846
		2nd "	71,735	13,824	1,750	15,203	54	35,212	53,101	64,943	20,543	4,703
62	2nd " "	1st half	104,578	15,244	2,338	23,485	49	35,351	75,373	146,845	74,275	6,878
		2nd "	107,003	15,668	2,824	22,699	54	29,388	68,647	141,952	71,196	7,356
63	3rd or intermediate class "	1st half	226,167	69,444	7,703	32,667	3,243	60,464	137,783	*226,611	60,666	
		2nd "	244,828	63,089	9,119	39,395	2,590	68,487	138,973	*181,977	51,531	
64	4th or lowest class "	1st half	1,717,607	228,848	45,886	603,000	3,243	423,361	1,795,470	†880,811	395,947	91,139
		2nd "	1,801,972	233,999	51,143	575,237	2,590	431,076	1,364,477	†884,524	369,894	93,419
65	Other vehicles Tons	1st half	44,099	9,224	3,845	9,084	3	28,127	34,305	26,310	8,147	5,544
		2nd "	48,409	10,043	3,568	9,560	2	18,046	38,459	28,870	9,290	4,766
Percentage of freight upon capacity hauled—												
66	1st class Per cent.	1st half	6'54	7'21	3'30	7'04	3'10	4'70	6'06	10'48	8'25	7'97
		2nd "	8'16	5'22	2'74	6'32	2'99	4'47	7'16	12'28	7'90	7'50
67	2nd " "	1st half	13'81	12'06	10'97	11'55	9'76	13'43	15'34	22'59	15'39	26'62
		2nd "	14'90	12'55	10'81	12'77	6'60	20'21	19'39	23'06	13'25	25'63
68	3rd or intermediate class "	1st half	20'71	14'66	15'03	17'28	4'87	21'68	26'11	*19'48	38'85	
		2nd "	20'62	17'75	14'23	14'03	4'77	21'02	28'99	*24'86	43'76	
69	4th or lowest class "	1st half	36'18	40'20	45'66	34'31	47'47	41'45	37'01	†12'27	43'60	35'14
		2nd "	33'48	37'46	39'34	34'22	47'47	35'38	35'47	†36'21	39'59	32'70
70	Other vehicles "	1st half	20'12	6'88	3'54	11'07	177'60	5'36	14'61	29'75	29'07	7'65
		2nd "	22'03	8'84	3'78	13'86	317'62	9'18	17'18	30'11	32'46	8'38
WEIGHT OF TRAIN AND TON-MILEAGE.												
Gross ton-mileage of all coaching trains (in thousands)—												
71	Freight	1st half	50,519	7,015	1,497	14,087	99	13,350	37,242	36,087	15,293	2,586
		2nd "	51,688	7,049	1,449	13,469	78	12,303	39,505	34,040	14,073	2,424
72	Dead weight	1st half	795,158	119,034	21,606	244,112	605	245,300	614,802	672,620	207,731	40,759
		2nd "	846,835	125,782	24,500	244,125	604	256,035	662,683	713,618	202,951	39,590
73	Total	1st half	846,677	126,049	23,103	258,199	704	258,650	671,744	708,707	223,024	43,345
		2nd "	898,523	132,831	25,949	257,975	682	268,338	702,188	747,658	217,024	42,014
Average weight of a coaching train—												
74	Freight Tons	1st half	16'29	13'11	16'45	15'40	8'29	11'85	13'09	12'79	17'84	8'26
		2nd "	15'42	12'40	12'77	13'92	5'19	10'46	13'18	10'31	16'14	7'68
75	Dead weight "	1st half	256'71	222'40	237'43	266'96	50'64	217'64	222'06	238'46	242'32	120'18
		2nd "	252'69	221'23	215'83	245'37	40'16	217'65	221'15	210'14	232'71	125'40
76	Total	1st half	273'00	235'51	253'28	281'36	58'93	229'49	236'05	251'25	260'16	138'44
		2nd "	268'11	213'63	228'60	259'29	45'25	223'11	234'31	220'45	248'85	133'08
COST OF WORKING AND PROFIT—												
Average cost of hauling a coaching train one mile R												
77	1st class	1st half	0'99	1'79	1'72	1'24	0'71	1'06	1'42	1'16	1'82	1'30
		2nd "	1'02	1'15	1'51	1'35	0'77	1'04	1'43	1'43	2'18	1'22
78	Average cost of hauling a coaching vehicle with its load one mile Pies	1st half	12'37	24'85	21'77	13'21	13'59	16'87	20'14	18'26	24'14	15'46
		2nd "	12'87	16'45	21'42	16'60	22'93	17'39	20'51	24'40	30'75	12'54
Average cost of hauling a coaching unit one mile—												
79	Per passenger unit Pies	1st half	0'78	1'51	1'29	0'94	0'99	1'10	1'36	1'20	1'27	0'99
		2nd "	0'87	1'04	1'45	1'17	1'74	1'28	1'40	1'90	1'77	0'90
80	Other traffic per ton "	1st half	6'35	40'21	23'85	13'78	15'83	9'66	10'75	10'23	13'78	10'10
		2nd "	6'26	21'92	27'37	12'82	22'93	8'16	9'50	15'14	15'68	7'56
81	Average profit on working a coaching train one mile R	1st half	2'49	1'31	2'60	2'02	0'77	1'57	1'24	1'37	1'87	1'88
		2nd "	2'30	1'77	1'88	1'56	0'16	1'31	1'24	0'71	1'13	2'11
82	1st class Pies	1st half	0'87	—4'00	—12'88	0'04	—7'40	—5'45	—9'42	—3'65	—4'35	—1'60
		2nd "	4'39	—1'12	—14'19	—6'06	—17'45	—6'00	—5'61	—6'61	—12'05	0'56
83	2nd " "	1st half	4'70	—2'39	—4'77	—0'81	—5'73	2'28	—5'81	3'07	7'52	20'60
		2nd "	7'67	4'81	—5'34	—3'52	—17'70	5'44	—3'46	—1'80	—2'03	12'65
84	3rd or intermediate class "	1st half	20'29	1'01	7'16	6'69	15'88	6'18	6'79	*26'44	38'96	
		2nd "	19'02	10'56	5'54	0'47	0'31	4'79	9'35	*15'79	37'16	
85	4th or lowest class "	1st half	30'85	32'75	55'12	29'54	15'88	34'81	23'75	†9'65	31'08	28'02
		2nd "	35'20	37'45	44'20	25'84	0'31	30'16	21'50	†14'85	20'52	26'09
86	Other vehicles "	1st half	44'04	7'58	2'96	28'05	20'03	51'43	42'40	37'17	21'59	25'53
		2nd "	47'98	24'44	6'82	24'57	19'84	59'41	57'40	31'99	17'82	41'15

* Third class by
† Third class by
‡ Including Cawn

DIX 46—contd.

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

3' 31"														GAUGE.	
10(a) to (c)	12 (b) to (d)	14	16	17 (a) & (b)	18 (g) to (h)	18	19	20	9 (c)	21	22	23	Class No.	Serial number.	
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western.	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Perbandar.	Hyderabad Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.		
12,224	7,336	4,862	17,031	2,607	17,781	25,75	203	2,752	6,125	8,303	8,661	9,104	1st half	61	
12,262	6,905	4,444	17,826	2,510	20,055	29,90	249	2,919	6,396	10,073	9,964	7,272	2nd "		
26,157	7,509	7,291	24,993	2,319	19,870	38,32	201	5,091	7,311	13,429	13,878	16,829	1st half	62	
26,556	7,063	6,498	26,194	2,395	23,193	40,91	267	5,301	7,145	15,066	13,523	15,732	2nd "		
8,015	18,671	6,751	37,122	2,360	22,930	...	659	3,553	...	...	...	...	1st half	63
8,904	20,538	6,355	43,163	2,420	25,796	...	654	3,923	...	...	...	...	2nd "	
521,055	143,326	80,762	427,326	56,292	561,904	8,95,20	6,093	51,741	68,409	279,724	386,667	329,536	1st half	64	
545,194	164,425	77,859	450,722	60,642	532,718	9,05,75	65,43	54,713	75,027	295,219	423,908	481,553	2nd "		
6,788	3,573	882	865	463	5,675	13,37	15	434	3,449	2,720	3,106	3,724	1st half	65	
5,601	3,087	1,249	1,031	568	8,225	36,27	27	464	3,760	2,882	3,149	2,189	2nd "		
20'09	6'25	3'16	2'34	5'78	5'64	5'12	6'16	4'65	4'34	10'63	10'29	9'78	1st half	66	
17'95	6'07	3'53	2'46	5'50	6'75	5'48	7'31	4'23	3'23	9'91	8'51	10'07	2nd "		
27'09	18'00	4'23	3'50	37'76	17'38	17'77	14'75	18'25	17'81	21'66	21'64	19'48	1st half	67	
31'77	20'38	4'94	4'16	43'53	17'94	17'46	21'31	16'08	15'74	22'54	23'37	16'83	2nd "		
13'43	28'85	2'19	7'77	13'86	40'40	...	0'81	31'52	...	...	...	...	1st half	68
10'05	29'55	2'50	6'79	11'75	38'24	...	12'21	27'68	...	...	...	...	2nd "	
42'55	63'36	43'25	43'65	49'58	49'71	41'47	69'13	52'62	51'57	45'06	63'77	52'77	1st half	69	
38'38	51'83	36'54	43'96	37'11	43'67	40'44	61'38	42'96	37'75	40'35	60'55	29'46	2nd "		
39'20	13'25	18'83	68'36	28'72	43'02	21'84	136'21	32'21	6'51	37'04	20'97	19'17	1st half	70	
37'16	19'31	16'98	60'79	25'03	36'90	10'78	130'87	36'39	9'31	38'84	20'86	39'84	2nd "		
16,828	6,359	2,311	12,578	1,012	20,185	2,587	221	1,991	2,448	9,066	15,809	11,467	1st half	71	
15,588	6,347	1,971	12,014	1,607	19,572	26,62	288	1,725	2,159	8,628	16,394	9,660	2nd "		
229,121	58,409	32,556	156,780	17,388	161,585	32,204	2,553	20,605	29,025	101,966	126,278	133,470	1st half	72	
232,406	64,700	33,120	169,661	11,619	194,728	36,131	2,904	21,373	30,934	109,401	137,542	135,110	2nd "		
245,959	64,708	34,807	169,358	19,300	181,770	34,881	28'34	22,596	31,473	111,032	142,087	144,937	1st half	73	
247,934	71,047	35,091	182,275	20,226	214,285	38,793	3,192	23,098	33,093	118,029	153,936	144,770	2nd "		
16'72	12'44	13'13	11'02	13'58	19'12	13'64	22'05	14'13	8'52	12'86	18'09	15'75	1st half	74	
15'24	12'07	11'42	10'42	10'21	16'69	11'13	17'32	11'41	7'31	11'72	16'91	12'24	2nd "		
227'56	114'30	185'04	138'26	123'54	153'03	170'27	200'54	146'21	100'98	144'59	144'53	183'31	1st half	75	
227'21	123'04	191'93	140'11	118'28	166'05	151'08	174'80	141'39	104'79	148'67	141'89	171'13	2nd "		
244'28	126'74	198'17	149'28	137'12	172'15	183'01	222'59	160'34	106'50	157'45	162'62	199'06	1st half	76	
242'45	135'11	203'35	150'53	128'49	182'74	162'21	192'12	152'80	112'10	160'39	158'80	183'37	2nd "		
1'38	1'05	2'51	0'81	1'01	1'16	1'18	2'43	1'77	1'36	1'33	1'37	1'74	1st half	77	
1'68	1'05	2'10	0'88	1'06	1'58	1'36	2'28	1'85	1'82	1'47	1'21	1'71	2nd "		
17'00	13'33	23'44	8'00	11'91	10'42	12'16	21'50	16'61	18'04	15'39	14'68	16'01	1st half	78	
23'79	12'51	19'14	9'50	13'06	14'08	16'78	23'91	16'91	23'11	10'41	13'19	18'13	2nd "		
1'05	0'93	2'22	0'87	0'89	0'70	1'05	1'34	1'10	1'06	1'24	0'85	1'29	1st half	79	
1'38	0'39	2'14	1'01	1'28	1'22	1'42	1'67	2'00	1'82	1'54	0'80	1'72	2nd "		
8'74	24'24	35'00	5'34	8'03	11'66	9'28	6'45	13'23	11'42	14'73	24'37	19'22	1st half	80	
11'91	19'06	34'52	5'78	10'85	8'41	23'38	7'35	15'19	10'58	15'59	25'43	15'55	2nd "		
2'01	1'86	0'96	1'17	1'99	2'28	1'36	1'56	1'76	1'61	1'18	1'96	2'47	1st half	81	
1'44	1'74	0'92	0'99	1'29	1'47	0'73	0'88	1'02	0'53	0'87	1'95	1'50	2nd "		
4'84	4'24	15'96	6'05	5'66	2'52	6'14	8'31	11'70	9'62	5'70	3'99	5'01	1st half	82	
3'51	3'33	11'57	6'33	5'02	5'16	9'24	7'44	13'92	16'61	6'46	3'76	7'55	2nd "		
6'64	0'13	14'99	5'69	22'88	2'29	1'12	3'78	4'41	0'38	1'63	0'08	0'10	1st half	83	
0'35	2'25	11'06	6'11	23'19	0'80	3'70	1'15	7'04	4'25	2'24	1'55	3'30	2nd "		
2'48	2'62	20'82	3'71	0'25	19'80	...	14'44	0'54	...	...	...	...	1st half	84
8'45	3'71	16'18	4'68	3'09	13'96	...	15'12	3'96	...	...	...	...	2nd "	
38'28	35'85	22'59	17'95	24'10	21'89	17'52	18'05	27'00	28'41	15'58	25'49	29'63	1st half	85	
25'30	28'04	20'13	15'03	14'08	13'85	10'43	11'24	18'12	10'72	10'93	26'02	20'30	2nd "		
45'45	25'30	3'11	71'63	23'81	65'69	18'81	128'78	42'90	57'28	34'52	13'76	14'11	1st half	86	
42'14	29'41	4'15	63'39	74'9	51'23	31'66	104'34	46'49	27'12	34'16	11'87	30'50	2nd "		

mail trains.
other than mail trains.
p.e. Burhwal link.

NOTE.—These statistics are

Serial number.	PARTICULARS.	GAUGE. Class: No.	5' 6"									
			1	2 (a)	3	4 (a)	4 (b)	(a) & (b)	(a) to (e)	(a) to (g)	(a) to (f)	(a) to (i)
			Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central.	Bengal Nagpur.	Rajpur-Dham-tari (2' 6").	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Haroda and Central India.	The Nizam Guaranteed Sta.
COACHING TRAFFIC—concl'd.												
COST OF WORKING AND PROFIT—concl'd.												
Average profit on working a coaching unit one mile—												
87	Per passenger-unit . . . Pies.	1st half 2nd "	1'86 1'83	1'22 1'66	1'91 1'66	1'50 1'28	1'05 0'30	1'49 1'38	1'06 1'04	1'22 0'66	1'27 0'83	1'3 1'4
88	Other traffic per ton . . . "	1st half 2nd "	22'98 21'39	11'06 28'23	17'05 19'33	27'61 22'53	24'66 18'01	33'25 31'70	31'95 23'02	33'65 21'37	16'88 12'65	24'6 21'4
GOODS TRAFFIC.												
GROSS RECEIPTS AND TRAIN MILEAGE—(In thousands.)												
89	Receipts from goods traffic . . . R.	1st half 2nd "	2,58,34 2,15,41	24,51 40,20	1,20 3,06	45,36 3,162	120 9	26,00 28,75	1,56,21 1,34,91	2,44,20 1,41,22	268,14 4,573	118,0 16,4
90	Goods train miles run . . . No.	1st half 2nd "	5,511 4,902	502 571	65 99	1,282 1,047	14 12	10,83 8,94	3,764 3,296	4,908 3,332	651 466	35 35
91	Average goods receipts per train-mile . . . R.	1st half 2nd "	4.69 4.39	4.88 7.94	1.83 3.10	3.54 3.02	1.39 0.76	3.32 3.22	4.15 4.09	4.98 4.26	10.46 9.81	5.2 4.0
UNITS AND UNIT-MILEAGE—(In thousands)												
92	Tons of goods carried one mile . . .	1st half 2nd "	1,114,592 92,880	66,905 90,914	3,385 7,531	172,309 133,709	508 287	127,712 116,786	564,515 506,994	846,785 415,343	163,279 111,674	61,021 53,231
93	Average sum received for carrying a ton one mile . . . Pies.	1st half 2nd "	4.45 4.47	7.03 8.57	6.78 7.80	5.05 4.54	7.44 6.20	5.41 4.73	5.31 5.11	5.54 6.59	8.01 7.86	5.94 5.92
94	Average number of tons in a train . . . Tons.	1st half 2nd "	202.24 188.89	133.33 157.60	51.92 76.27	134.41 127.75	25.88 23.80	117.89 130.58	149.95 153.80	172.76 124.67	250.69 239.55	130.83 118.31
VEHICLES AND VEHICLE-MILEAGE—(In thousands)												
Number of goods vehicles hauled one mile—												
95	Loaded . . . Vehicle-miles	1st half 2nd "	109,558 98,268	8,693 14,707	624 1,347	22,305 19,954	106 58	20,175 17,061	69,745 60,445	94,309 63,767	19,733 13,836	5,354 3,041
96	Empty . . . "	1st half 2nd "	52,211 46,315	3,134 5,122	214 957	9,923 8,990	49 29	6,793 5,917	24,615 23,097	39,416 29,279	4,985 4,041	3,782 3,448
97	Brake vans . . . "	1st half 2nd "	5,035 4,863	515 579	54 98	2,413 2,114	23 17	2,413 989	4,237 3,835	9,438 6,446	495 334	658 605
98	Total . . . "	1st half 2nd "	165,804 149,446	12,342 20,108	892 2,402	34,641 23,058	178 104	28,217 23,067	98,597 87,977	143,163 90,492	25,213 18,216	9,994 9,101
Average number of vehicles in a goods train—												
99	Freight vehicles . . . No.	1st half 2nd "	29.17 29.50	23.57 35.24	12.86 23.33	25.14 24.79	10.95 7.22	24.90 23.69	25.07 25.33	27.28 25.23	37.95 38.36	20.01 18.88
100	Brake-vans . . . "	1st half 2nd "	0.91 0.99	1.02 1.01	0.82 1.00	1.88 2.02	1.60 1.43	1.15 1.16	1.13 1.16	1.91 1.93	0.76 0.71	1.48 1.35
101	Total . . . "	1st half 2nd "	30.08 30.49	24.59 36.25	13.68 24.33	27.02 26.81	12.55 8.65	26.05 26.80	26.20 26.69	29.21 27.16	38.71 39.07	21.49 20.23
102	Average earnings per goods vehicle per mile (excluding brakes) . . . Pies.	1st half 2nd "	30.85 28.61	39.79 38.34	27.37 25.49	27.02 23.31	24.38 20.45	25.63 24.03	31.79 30.78	35.06 32.40	52.92 49.10	38.85 37.20
103	Carrying capacity hauled one mile (excluding brakes) . . . Tons	1st half 2nd "	2,304,726 2,099,713	140,402 237,786	12,177 31,769	479,603 388,340	1,827 493	315,939 288,511	1,240,011 1,144,613	1,874,582 1,151,823	320,751 232,171	123,109 114,107
104	Percentage of freight upon capacity hauled . . . Per cent.	1st half 2nd "	48.16 44.10	47.65 37.86	27.80 23.71	35.92 34.39	61.38 58.25	40.42 40.48	45.53 44.21	45.17 36.06	50.91 48.10	49.37 46.67
105	Average load of a goods vehicle (including both loaded and empty) . . . Tons.	1st half 2nd "	6.93 6.40	5.66 4.47	4.04 3.26	5.35 5.15	3.27 3.30	4.74 5.08	5.98 6.03	6.33 4.94	6.61 6.24	6.54 6.27
106	Average load of a loaded goods vehicle . . . "	1st half 2nd "	10.27 9.42	7.70 6.12	5.43 5.59	7.71 7.89	4.79 4.97	6.33 6.85	8.09 8.39	8.98 6.51	8.27 8.07	10.99 10.55
WEIGHT OF TRAIN AND TON-MILEAGE—(In thousands.)												
Gross ton-mileage of all goods trains—												
107	Freight . . . Tons	1st half 2nd "	1,114,592 925,880	66,905 90,914	3,385 7,531	172,309 133,706	508 287	127,712 116,786	564,515 506,994	846,785 415,343	163,280 111,674	61,028 53,252
108	Dead weight . . . "	1st half 2nd "	1,529,210 1,304,291	122,080 187,902	10,879 23,493	329,776 263,173	1,604 490	279,164 233,438	954,299 850,669	1,349,830 883,529	207,888 149,345	97,996 91,953
109	Total . . . "	1st half 2nd "	2,643,802 2,290,174	188,985 277,916	14,264 31,029	502,085 401,882	1,112 777	406,876 350,224	1,518,814 1,357,663	2,196,615 1,298,872	371,168 261,019	159,024 145,205

DIX 46—contd.

Appendix 46.
Analysis.

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

5' 31"													GAUGE.	
10 (a) to (c)	11 (b) to (d)	14	15	17 (n) & (b)	18 (g) to (k)	18	19	20	19 (c)	21	22	23	Class: No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western.	Rohilkund and Kumaon	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad- Porbandar.	Hyderabad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
1'41 1'03 22'57 26'42	1'72 1'05 32'08 39'55	0'88 0'98 7'14 9'21	1'18 1'05 38'12 33'00	1'60 1'20 54'25 54'80	1'42 0'94 19'18 23'30	1'11 0'77 26'08 12'12	0'76 0'50 21'13 17'15	1'42 0'91 32'50 32'07	1'08 0'34 39'31 19'46	0'98 0'73 29'95 29'13	1'25 1'33 21'88 23'98	1'87 1'44 18'93 20'28	1st half 2nd "	87 88
51,48 43,29 1,293 1,277 3'98 3'39	19,11 23,99 591 644 3'23 3'85	3,28 4,68 151 259 2'17 1'80	34,02 18,82 1,064 839 3'20 2'24	6,07 3,69 187 150 3'24 2'47	1,08,44 69,68 2,474 1,724 4'38 4'04	9,03 5,70 296 224 3'05 2'45	71 41 13 10 5'54 4'17	4,58 2,50 119 77 3'85 3'24	8,19 4,57 204 217 3'10 2'11	29,22 25,33 1,083 1,056 2'70 2'40	25,41 23,79 1,083 856 3'03 2'73	38,85 27,98 1,157 1,050 3'36 2'64	1st half 2nd " 1st half 2nd "	89 90 91
165,209 126,275 5'95 6'58 127'73 98'92	46,017 48,030 7'68 9'59 77'81 77'02	11,401 16,957 5'52 5'31 75'50 65'36	106,414 63,705 6'14 5'50 100'05 75'37	16,872 11,757 0'91 6'03 90'17 78'63	322,822 208,855 6'45 6'41 130'49 121'12	2,16,83 1,55,71 7'39 6'77 73'21 69'53	9'6 581 14'00 15'59 76'11 58'94	7,872 4,317 11'18 11'10 66'13 50'09	16,495 10,421 9'53 8'42 39'24 27'67	81,031 73,032 6'24 6'58 75'77 77'01	63,809 60,168 7'06 7'39 77'01 70'96	99,561 80,692 7'50 6'66 86'02 76'16	1st half 2nd " 1st half 2nd " 1st half 2nd "	92 93 94
22,412 19,663 8,102 6,751 2,097 2,024	12,724 14,061 2,468 4,299 604 615	2,252 3,210 1,016 1,951 219 254	19,020 13,854 7,292 6,011 1,259 1,207	2,025 2,101 1,565 1,245 257 195	57,072 39,183 23,029 19,929 2,336 1,418	4,598 2,954 2,403 1,421 98 37	181 132 143 92	2,196 1,386 1,113 1,839 69 36	3,269 2,561 1,388 1,191 450 418	18,728 17,092 5,379 5,991 1,457 1,405	12,051 12,249 4,120 4,082 528 556	20,457 17,118 8,755 7,607 1,297 1,103	1st half 2nd " 1st half 2nd " 1st half 2nd "	95 96 97
32,611 28,445	15,796 18,975	3,487 5,445	28,471 21,072	4,747 3,631	82,437 53,530	7,101 4,412	327 224	3,378 2,111	5,116 4,172	25,564 21,518	17,601 16,896	30,509 25,888	1st half 2nd "	98
23'59 20'70 1'62 1'58	25'76 29'44 1'02 0'99	21'64 27'01 1'45 0'98	25'52 23'69 1'18 1'44	24'00 22'97 1'37 1'31	32'38 30'22 0'94 0'82	23'65 19'52 0'33 0'27	25'50 22'77	27'80 26'90 0'58 0'47	11'08 9'56 1'09 1'11	22'27 21'86 1'34 1'39	20'33 19'07 0'93 0'65	25'25 23'34 1'12 1'10	1st half 2nd " 1st half 2nd "	99 100
25'21 22'28	26'72 30'43	23'09 20'99	26'76 25'13	25'37 24'28	33'32 31'04	23'98 19'69	25'50 22'77	28'18 27'37	12'17 11'07	23'61 23'25	20'96 19'72	26'37 24'44	1st half 2nd "	101
32'39 31'46	24'16 25'09	19'24 17'32	24'00 18'19	25'95 20'64	25'00 25'67	24'76 24'12	41'78 35'19	26'60 23'15	33'76 23'37	23'27 21'07	28'62 27'30	25'53 21'63	1st half 2nd "	102
403,814 347,631	105,141 129,047	30,982 47,664	223,063 163,523	38,132 32,027	676,297 442,317	64,857 38,508	2,667 1,811	19,873 12,427	21,417 34,713	166,958 161,429	109,952 111,108	209,141 126,619	1st half 2nd "	103
40'01 36'32	43'77 37'22	36'81 35'58	47'51 40'18	44'25 36'04	47'73 47'22	33'43 40'42	36'58 32'06	39'63 34'82	38'83 30'02	49'16 45'80	58'02 54'69	47'60 43'24	1st half 2nd "	104
5'41 4'78	3'03 2'62	3'49 3'27	3'91 3'31	3'76 3'42	4'03 4'01	3'10 3'36	2'98 2'59	2'38 2'09	3'54 2'78	3'40 3'20	3'74 3'72	3'41 3'26	1st half 2nd "	105
7'37 6'42	3'62 3'48	5'06 5'23	5'34 4'74	5'77 5'37	5'56 5'33	4'72 5'28	5'30 4'40	3'58 3'12	5'05 4'07	4'38 4'33	4'93 4'96	4'87 4'71	1st half 2nd "	106
165,209 126,275 312,786 287,411	46,016 48,030 81,462 96,256	11,404 16,957 18,876 30,455	106,414 63,705 140,797 106,373	16,872 11,757 21,793 17,616	322,822 208,855 381,742 243,160	21,683 15,588 36,571 25,190	976 581 1,635 1,201	7,872 4,317 15,839 9,799	16,495 10,421 30,703 25,211	82,032 73,032 135,388 130,283	63,809 60,168 97,131 95,989	99,561 80,692 158,016 138,798	1st half 2nd " 1st half 2nd "	107 108
452,995 413,686	127,478 144,286	30,280 47,412	247,211 172,078	38,665 29,373	704,561 452,015	58,254 40,778	2,611 1,782	23,111 14,126	47,093 35,632	217,420 204,215	162,140 156,757	257,577 219,490	1st half 2nd "	109

Burhwal link.

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE. CLASS No.	5' 6"									
			1	2 (a)	3	4 (a)	4 (b)	5 & (b)	6	7	8	9
			East Indian.	Eastern Bengal.	Bengal Central.	Bengal-Nagpur.	Raipur Dhamtari (a' 6").	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Haroda and Central India.	The Nizam's Guaranteed State
GOODS TRAFFIC—concl'd.												
WEIGHT OF TRAIN AND TON-MILEAGE—concl'd.												
Average weight of a goods train—												
110	Freight Tons	1st half	202'24	133'33	51'92	134'41	35'88	117'90	140'98	172'76	250'69	130'83
		2nd "	188'89	157'00	76'27	127'75	23'80	130'58	153'30	124'67	239'55	118'37
111	Dead-weight	1st half	277'48	243'27	166'88	237'24	42'65	257'70	243'53	275'39	319'19	209'64
		2nd "	273'32	326'97	237'98	256'22	40'60	261'00	257'87	265'19	320'36	204'40
112	Total	1st half	479'72	376'60	218'80	391'65	78'53	375'60	403'51	448'15	569'88	340'47
		2nd "	467'21	486'57	314'25	383'97	64'40	391'53	411'67	389'86	559'91	322'77
COST OF WORKING AND PROFIT.												
113	Average cost of hauling a goods train one mile Rs	1st half	1'75	2'86	1'49	1'73	0'95	1'74	2'43	2'06	3'99	2'10
		2nd "	1'77	2'39	2'07	2'00	1'10	1'79	2'51	2'46	4'91	1'64
114	Average cost of hauling a goods vehicle with its load one mile Pies	1st half	11'50	23'30	22'18	13'24	16'68	13'38	18'61	14'50	20'10	15'40
		2nd "	11'53	13'04	17'07	15'50	29'28	13'41	18'90	18'72	24'57	13'26
115	Average cost of hauling a goods unit (viz., one ton) one mile "	1st half	1'66	4'12	5'49	2'48	5'09	2'83	3'11	2'29	3'06	2'36
		2nd "	1'80	2'92	5'22	3'01	8'88	2'64	3'14	3'79	3'93	2'18
115 A	Average cost of hauling a goods unit one mile, including interest on capital expended on open line at the rate of 5 per cent. per annum. "	1st half	3'28	7'20	11'01	6'36	13'07	5'88	6'32	4'17	5'93	5'07
		2nd "	3'60	5'52	8'78	7'68	21'22	5'80	6'57	7'01	7'03	5'19
116	Average profit on working a goods train one mile Rs	1st half	2'94	2'02	0'34	1'81	0'44	1'58	1'72	9'92	6'47	3'19
		2nd "	2'62	4'65	1'01	1'02	-0'34	1'43	1'50	1'80	4'90	2'97
117	Average profit on working a goods vehicle with its load one mile Pies	1st half	19'35	16'49	5'19	13'78	7'70	12'25	13'18	20'56	32'73	23'45
		2nd "	17'08	25'30	8'42	7'81	-8'83	10'62	11'88	13'68	24'53	23'94
118	Average profit on working a goods unit (viz., one ton) one mile "	1st half	2'79	2'01	1'29	2'57	2'35	2'58	2'20	3'25	4'95	3'58
		2nd "	2'67	5'65	2'58	1'53	-2'68	2'09	1'97	2'77	3'93	3'81
DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE.												
Percentage on Total Earnings—												
119	Coaching traffic Per cent	1st half	39'05	37'41	63'68	38'23	46'02	40'72	32'18	22'42	30'89	20'33
		2nd "	33'48	27'95	55'07	45'65	57'67	44'93	36'71	32'88	37'75	20'45
120	Goods traffic "	1st half	69'43	55'21	19'35	58'11	51'21	49'50	66'36	76'79	66'62	77'77
		2nd "	64'82	67'63	43'72	49'79	38'16	46'78	61'81	66'02	59'87	72'62
121	Sundries, including telegraph "	1st half	1'18	7'38	16'97	3'64	2'77	0'78	1'45	0'79	2'49	1'70
		2nd "	1'37	4'42	1'21	4'40	4'17	8'24	1'46	1'10	2'28	6'93
122	Steam-boat earnings "	1st half	0'32	...	...	0'02	...	...	0'01	...	...	...
		2nd "	0'33	...	...	0'16	...	...	0'02	...	...	...
Total		1st half	100'00	100'00	100'00	100'00	100'00	100'00	100'00	100'00	100'00	
2nd "		100'00	100'00	100'00	100'00	100'00	100'00	100'00	100'00	100'00	100'00	
Percentage of Working Expenses on Total Earnings—												
123	Maintenance Per cent	1st half	9'80	14'58	15'03	9'71	25'28	11'57	16'93	6'74	9'72	7'83
		2nd "	10'45	8'02	8'66	14'22	47'02	14'81	13'09	10'53	11'85	11'73
124	Locomotive expenses "	1st half	10'63	19'11	11'12	14'12	16'67	14'09	19'53	19'46	16'07	16'27
		2nd "	11'57	10'09	10'89	17'37	26'44	15'80	22'24	25'63	18'94	12'16
125	Carriage and wagon expenses "	1st half	3'03	4'83	3'30	3'48	3'26	9'64	8'13	4'26	5'90	3'44
		2nd "	1'96	2'83	3'93	3'77	6'47	5'29	9'69	6'99	10'81	2'63
126	Traffic expenses "	1st half	6'93	13'72	11'28	8'34	6'22	8'88	7'75	6'57	5'96	5'44
		2nd "	7'57	11'31	11'71	10'12	9'57	9'49	8'56	9'93	7'85	5'96
127	General charges "	1st half	3'14	5'33	13'08	6'51	7'86	4'04	3'55	3'34	3'75	4'48
		2nd "	3'77	3'52	11'75	8'41	13'93	4'67	3'56	4'96	5'04	5'26
128	Miscellaneous expenses "	1st half	1'84	3'69	4'24	3'17	0'73	2'24	1'58	2'43	1'24	2'36
		2nd "	2'42	2'64	8'06	3'14	1'10	2'19	1'90	3'15	2'18	2'22
129	Steam-boat expenses "	1st half	0'23	...	...	0'42	...	...	0'03	...	...	...
		2nd "	0'28	...	...	0'62	...	...	0'04	...	...	...
TOTAL WORKING EXPENSES		1st half	35'60	61'26	58'05	45'75	60'02	50'46	57'52	42'80	42'64	39'82
2nd "		38'02	38'41	55'00	57'65	104'53	52'25	53'98	61'19	56'67	39'96	

* Including Cawnpore.

DIX 46—contd.

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

3' 31"													GAUGE.		Serial number.
11 (a) to (c)	12 (b) to (d)	14	16	17 (a) & (b)	18 (g) to (k)	18	19	20	9 (c)	21	22	23	Class: No.	Calendar year 1902 by half years.	
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western.	Rohilkhand and Kumaon	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar Gondal Junagadh Forbandar.	Hyderabad Godavari Valley.	Southern Mahratta.	South Indian.	Burma.			
127'73 98'92	77'86 77'02	75'50 65'36	100'05 78'37	90'17 78'63	130'49 121'12	73'21 69'55	76'12 58'95	66'14 56'09	39'24 27'67	75'77 70'01	76'01 70'96	86'04 76'16	1st half 2nd "	} 110	
245'70 225'15	137'82 154'36	124'96 117'38	132'37 126'88	116'46 117'81	154'30 141'02	123'48 112'39	127'49 121'91	130'53 127'02	72'80 66'93	125'06 123'38	116'17 112'10	136'55 131'00	1st half 2nd "		} 111
373'43 324'07	215'68 231'38	200'46 182'74	232'42 205'25	206'63 196'44	284'79 262'14	196'69 181'94	203'61 186'86	196'67 183'11	112'04 94'60	200'83 193'39	192'18 183'06	222'59 207'16	1st half 2nd "	} 112	
2'12 2'24	1'79 1'30	8'54 1'39	1'27 1'20	1'52 1'63	1'02 2'27	1'75 1'52	2'22 2'14	2'17 2'21	1'22 1'50	1'70 1'77	1'62 1'39	1'04 1'94	1st half 2nd "		} 113
17'23 20'81	13'35 11'71	22'51 18'09	9'50 9'75	12'18 13'58	11'39 14'41	10'17 14'96	16'77 18'06	14'07 15'81	13'34 16'76	14'62 15'54	15'31 14'01	14'78 15'94	1st half 2nd "	} 114	
3'18 4'35	4'41 4'48	6'45 5'54	2'43 2'95	3'24 3'97	2'83 3'59	3'28 4'20	5'62 6'97	6'29 7'58	3'77 6'01	4'30 4'85	4'10 3'77	4'34 4'88	1st half 2nd "		} 115
8'89 9'01	8'55 8'94	14'91 12'66	5'05 6'51	5'63 7'20	4'53 5'86	5'93 7'54	15'78 21'05	13'30 17'10	8'13 12'37	9'27 10'70	7'32 7'25	7'75 8'91	1st half 2nd "	} 115 A	
1'86 1'15	1'44 2'05	—0'37 —0'09	1'93 1'04	1'72 0'84	2'46 1'77	1'80 0'93	3'33 2'03	1'68 1'03	1'88 0'61	1'00 0'63	1'41 1'34	1'42 0'70	1st half 2nd "		} 116
15'16 10'65	10'80 13'38	—3'27 —0'77	14'50 8'44	13'77 7'06	14'60 11'26	13'59 9'16	25'01 17'13	11'63 7'34	20'42 6'67	8'65 5'53	13'31 13'49	10'75 5'74	1st half 2nd "	} 117	
2'80 2'23	3'57 5'11	—0'93 —0'24	3'71 2'55	3'67 2'06	3'62 2'82	4'71 2'57	8'38 6'62	4'89 3'52	5'76 2'41	2'54 1'73	3'56 3'62	3'16 1'78	1st half 2nd "		} 118
38'54 41'17	40'08 34'57	60'38 48'02	37'41 49'87	39'48 46'73	24'76 33'05	33'96 46'21	41'09 55'57	51'21 61'93	33'88 43'54	36'98 39'20	53'10 55'32	43'19 46'63	1st half 2nd "	} 119	
58'10 55'68	51'45 56'58	32'42 43'13	51'03 38'83	56'67 46'57	73'86 64'44	63'60 50'79	58'15 43'55	47'15 35'75	58'01 50'86	61'14 58'63	46'46 42'28	54'97 51'47	1st half 2nd "		} 120
3'36 2'95	0'07 1'19	6'32 8'10	4'02 4'82	3'85 6'70	1'38 2'51	2'44 3'00	0'76 0'88	1'64 2'32	7'21 5'60	1'88 1'57	0'44 2'40	1'41 1'61	1st half 2nd "	} 121	
...	7'50 7'66	0'58 0'75	6'64 6'48	0'23 0'29	1st half 2nd "		} 122
100'00 100'00	100'00 100'00	100'00 100'00	100'00 100'00	100'00 100'00	100'00 100'00	100'00 100'00	100'00 100'00	100'00 100'00	100'00 100'00	100'00 100'00	100'00 100'00	100'00 100'00	1st half 2nd "	} 123	
8'09 14'37	12'64 12'43	28'22 23'23	11'07 13'82	10'78 15'06	9'72 11'81	8'82 20'28	18'40 16'50	15'18 16'74	15'65 24'37	13'14 16'73	10'92 8'26	12'53 15'01	1st half 2nd "		} 123
20'76 24'01	11'63 10'17	17'08 19'78	9'86 12'64	11'04 12'83	16'07 18'88	16'57 22'75	14'53 17'19	15'60 18'13	12'48 20'10	20'71 24'71	16'19 16'30	19'62 24'46	1st half 2nd "	} 124	
4'92 5'36	4'13 4'22	4'96 4'77	2'28 2'86	4'00 3'85	4'73 9'20	2'95 4'46	4'92 9'17	2'99 2'69	1'45 1'96	5'82 6'22	5'34 4'92	4'17 5'78	1st half 2nd "		} 125
7'29 8'43	8'78 7'73	14'44 14'05	7'33 10'25	7'02 10'34	5'96 7'89	6'08 7'22	8'48 10'23	10'10 13'26	7'17 12'25	9'29 10'46	7'01 7'50	7'06 10'44	1st half 2nd "	} 126	
4'69 6'44	4'32 3'83	20'82 19'43	4'99 6'62	7'00 10'59	3'75 5'03	3'79 5'59	6'80 7'68	10'32 14'20	8'13 14'81	8'91 9'93	6'49 6'41	5'65 7'28	1st half 2nd "		} 127
2'59 2'35	1'87 2'22	2'38 5'27	3'09 2'90	0'74 1'04	1'72 2'10	2'63 2'82	2'08 2'30	1'61 1'32	0'98 2'21	1'55 1'74	1'12 1'20	1'19 1'31	1st half 2nd "	} 128	
...	7'49 7'37	0'61 0'73	2'81 3'16	1'13 0'81	1st half 2nd "		} 129
49'24 60'96	51'36 47'97	88'51 87'26	41'35 52'15	40'53 34'71	41'95 34'91	43'84 63'12	49'21 63'27	53'80 66'64	46'06 75'70	50'42 69'79	47'07 44'59	52'23 65'09	1st half 2nd "	} 130	

Barkwal link.

Appendix 46.
Analysis.

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE. Class: No.	5' 6"									
			1	2 (a)	3	4 (a)	4 (b)	(a) & (b)	(a) to (e)	7 (a) to (g)	8 (a) to (f)	9 (a) & (b)
			Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central.	Bengal-Nagpur.	Rajpur-Dhamtari (5' 6").	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
PER MILE OF LINE MAINTAINED.			TABLE A.—MAINTENANCE OF									
131 a	General superintendence (including office expenses) Rs.	1st half 2nd "	208'99 207'98	272'47 245'60	203'77 103'01	113'00 108'39	13'60 9'59	137'69 148'10	126'60 129'74	130'79 127'49	159'10 160'13	126'35 127'59
132 a	Maintenance and renewal of permanent-way	1st half 2nd "	908'38 705'37	1,319'97 808'70	503'84 291'44	220'98 274'23	117'35 111'49	282'78 306'89	625'10 335'37	422'64 394'28	724'15 663'56	358'41 346'92
133 a	Repairs of bridges, &c.	1st half 2nd "	93'36 154'10	290'29 178'71	32'84 14'28	84'12 89'88	5'96 83'61	114'23 113'24	75'02 81'76	94'71 128'55	98'10 87'61	45'74 120'14
134 a	Conservancy of rivers	1st half 2nd "	... ...	18'38 0'70	0'77 3'61	... ...	... ...	3'14 6'63	8'71 21'25	... ...	... ...	0'19 0'11
135 a	Repairs of stations and buildings	1st half 2nd "	360'58 460'06	373'25 357'60	82'33 65'73	47'79 54'76	8'45 14'95	129'20 61'93	123'15 81'34	96'86 122'59	153'63 121'99	48'81 53'17
136 a	Other charges (net)	1st half 2nd "	147'18 128'35	76'83 143'73	19'06 6'52	21'96 59'57	27'42 43'56	75'19 75'86	119'52 122'93	56'52 74'15	71'04 67'77	-37'21 110'03
137 a	Total maintenance, &c.	1st half 2nd "	1,716'49 1,595'86	2,351'19 1,725'04	742'61 484'59	488'75 577'83	172'79 203'20	742'23 302'65	1,078'10 772'59	801'52 847'06	1,206'02 1,101'06	544'32 757'96
PER MILE OF TRACK, INCLUDING SIDINGS.												
131 b	General superintendence (including office expenses) Rs.	1st half 2nd "	137'05 136'04	143'70 125'50	86'10 85'48	100'66 95'89	12'79 9'01	120'49 129'32	100'44 102'80	97'59 95'03	109'34 107'84	112'08 113'68
132 b	Maintenance and renewal of permanent-way	1st half 2nd "	594'36 461'39	711'97 430'79	418'09 241'84	195'30 242'60	110'33 104'81	247'46 346'56	495'97 265'71	315'36 293'90	497'69 446'88	320'48 309'18
133 b	Repairs of bridges, &c.	1st half 2nd "	61'22 100'80	153'10 95'20	27'25 11'06	74'34 29'51	5'60 22'20	99'96 98'85	59'53 64'78	70'66 95'82	67'42 59'00	40'90 107'08
134 b	Conservancy of rivers	1st half 2nd "	... ...	9'70 0'37	0'64 2'99	... ...	... ...	2'75 5'79	6'91 16'34	... ...	... ...	0'17 0'10
135 b	Repairs of stations and buildings	1st half 2nd "	216'45 261'63	196'85 190'50	68'32 54'54	42'24 48'44	7'94 14'06	113'06 54'07	97'71 64'60	72'28 91'38	105'59 82'15	43'66 47'39
136 b	Other charges (net)	1st half 2nd "	96'51 83'95	40'51 70'57	15'82 5'41	19'41 44'74	25'78 40'95	65'80 66'24	94'83 97'40	42'17 55'28	48'83 45'63	-33'26 98'07
137 b	Total maintenance, &c.	1st half 2nd "	1,125'59 1,043'86	1,255'83 918'93	616'22 402'12	431'95 511'18	162'44 191'03	649'52 700'86	855'39 612'13	598'06 631'41	828'87 741'50	484'03 675'50
PER TOTAL TRAIN-MILE.												
131 c	General superintendence (including office expenses) As.	1st half 2nd "	0'82 0'88	1'14 0'91	1'33 0'97	1'29 1'33	0'47 0'32	1'13 1'30	1'13 1'22	0'72 0'82	1'39 1'57	1'38 1'44
132 c	Maintenance and renewal of permanent-way	1st half 2nd "	3'58 2'97	5'66 3'14	6'45 2'75	2'49 3'36	4'05 3'70	2'32 3'47	5'60 3'15	2'34 2'54	6'33 6'51	3'91 3'92
133 c	Repairs of bridges, &c.	1st half 2nd "	0'37 0'65	1'22 0'69	0'42 0'14	0'95 1'10	0'21 0'78	0'94 0'99	0'67 0'77	0'53 0'83	0'86 0'86	0'50 1'36
134 c	Conservancy of rivers	1st half 2nd "	... ...	0'08 ...	0'01 0'03	... ...	... ...	0'02 0'07	0'08 0'20	......	......	......
135 c	Repairs of stations and buildings	1st half 2nd "	1'42 1'69	1'57 1'39	1'05 0'62	0'54 0'67	0'29 0'49	1'06 0'54	1'10 0'76	0'54 0'79	1'34 1'20	0'53 0'60
136 c	Other charges (net)	1st half 2nd "	0'58 0'54	0'32 0'56	0'25 0'06	... 0'62	0'94 1'45	0'62 0'66	1'07 1'16	0'31 0'48	0'62 0'66	-0'40 1'25
137 c	Total maintenance, &c.	1st half 2nd "	6'77 6'73	9'99 6'69	9'51 4'57	5'52 7'08	5'06 6'74	6'09 7'03	9'65 7'26	4'44 5'46	10'54 10'80	5'92 8'57
PER 1,000 GROSS TON-MILES.												
131 d	General superintendence (including office expenses) Rs.	1st half 2nd "	0'13 0'14	0'24 0'16	0'35 0'23	0'24 0'26	0'42 0'37	0'23 0'27	0'21 0'23	0'12 0'17	0'22 0'27	0'22 0'25
132 d	Maintenance and renewal of permanent-way	1st half 2nd "	0'55 0'48	1'16 0'54	1'69 0'64	0'45 0'65	3'63 4'30	0'48 0'73	1'05 0'60	0'39 0'51	1'00 1'14	0'62 0'65
133 d	Repairs of bridges, &c.	1st half 2nd "	0'06 0'10	0'25 0'12	0'11 0'03	0'17 0'21	0'18 0'91	0'19 0'20	0'13 0'15	0'09 0'17	0'14 0'15	0'08 0'22
134 d	Conservancy of rivers	1st half 2nd "	... ...	0'02 ...	... 0'01	... ...	... ...	0'01 0'01	0'02 0'04	......	......	......
135 d	Repairs of stations and buildings	1st half 2nd "	0'22 0'27	0'32 0'24	0'27 0'14	0'10 0'13	0'26 0'57	0'22 0'12	0'21 0'15	0'00 0'16	0'21 0'21	0'09 0'10
136 d	Other charges (net)	1st half 2nd "	0'08 0'09	0'06 0'10	0'06 0'01	... 0'12	0'85 1'61	0'13 0'14	0'20 0'22	0'05 0'10	0'10 0'12	-0'07 0'20
137 d	Total maintenance, &c.	1st half 2nd "	1'04 1'08	2'05 1'16	2'48 1'16	1'00 1'37	5'34 7'83	1'26 1'47	1'82 1'39	0'74 1'11	1'67 1'89	0'94 1'42

* Excluding Cawnpore-Burhwal link

DIX 46—contd.

Appendix 46.
Analysis.

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

3' 31"														GAUGE.	
10 (a) to (c)	11 (b) to (d)	14	16	17 (a) & (b)	18 (g) to (k)	18	19	20	9 (c)	21	22	23	Class: No.	Serial number.	
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western.	Robil-kund and Kumaon.	Raj-putana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhar-nagar-Gondal-Junagad-Forbandar.	Hydera-bad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.		
140'72 137'28	401'75 108'71	128'23 126'23	87'05 87'54	62'08 72'69	103'93 100'88	20'46 20'30	49'10 48'66	66'04 63'15	133'50 116'90	78'83 84'19	124'33 102'07	115'88 109'50	1st half 2nd "	131a	
295'39 361'36	386'86 338'12	220'95 199'63	225'30 221'47	191'80 220'38	473'06 417'98	98'74 213'48	134'63 160'01	191'09 157'78	232'54 219'75	236'70 264'43	352'11 187'34	407'75 338'58	1st half 2nd "		132a
—85'77 156'23	40'26 90'65	62'09 45'94	47'98 65'62	84'30 81'70	64'08 55'19	23'04 12'66	1'88 5'43	5'55 5'08	71'16 59'46	23'39 27'06	13'05 13'91	101'94 75'03	1st half 2nd "	133a	
...	0'11 0'19	...	11'98 5'72	15'25 4'81	...	...	...	...	...	...	...	4'37 3'47	1st half 2nd "		134a
72'32 64'64	78'02 101'33	150'10 33'94	41'36 44'32	37'09 38'57	100'35 76'84	17'44 17'75	25'61 12'43	9'78 19'04	32'00 65'90	28'42 35'22	56'06 59'25	72'81 103'84	1st half 2nd "	135a	
107'87 104'21	61'55 93'56	121'66 22'21	98'82 42'78	25'10 50'75	46'41 42'69	19'42 13'24	25'27 4'98	14'59 17'57	86'66 97'21	27'18 28'90	—15'96 7'06	48'88 57'71	1st half 2nd "		136a
500'53 323'72	668'55 732'56	483'93 427'05	512'10 467'45	415'62 468'90	787'83 693'56	170'10 277'43	226'49 231'51	287'05 262'62	555'86 559'28	394'52 439'80	529'79 369'63	75'63 688'13	1st half 2nd "	137a	
116'47 113'85	87'18 93'06	112'43 110'87	75'79 76'01	55'22 64'76	89'68 86'93	19'66 19'49	46'06 45'64	59'91 57'49	122'54 105'30	71'30 75'85	110'89 91'27	100'16 94'57	1st half 2nd "		131b
244'49 299'67	331'47 289'44	193'71 175'34	196'15 192'28	170'55 196'35	408'15 300'17	94'88 204'97	126'27 150'08	173'35 145'05	213'45 197'96	214'07 238'23	313'56 167'53	352'44 292'41	1st half 2nd "	132b	
—27'33 129'57	34'50 77'00	55'23 40'34	41'13 56'98	74'95 72'79	55'29 47'50	22'14 12'15	1'77 5'10	5'03 4'02	65'33 53'56	21'15 24'38	11'62 12'44	88'11 64'80	1st half 2nd "		133b
...	0'09 0'16	...	10'43 4'90	13'56 4'39	...	...	...	...	...	...	...	3'78 2'99	1st half 2nd "	134b	
59'86 53'61	66'85 86'74	43'94 29'82	36'88 38'45	32'97 34'36	86'58 66'21	16'76 17'04	14'65 11'66	8'87 17'34	29'37 59'41	25'70 31'73	49'92 32'99	62'94 89'08	1st half 2nd "		135b
89'28 86'43	52'74 80'09	18'68 19'50	85'50 37'14	22'31 45'22	40'04 36'78	10'01 12'72	23'70 4'66	13'24 16'00	79'52 87'58	24'58 26'03	—14'21 6'31	42'25 49'84	1st half 2nd "	136b	
488'77 683'13	572'83 627'09	424'29 375'87	445'88 405'85	369'56 417'76	679'74 597'65	163'45 266'37	212'45 217'14	260'40 239'10	510'21 303'81	356'80 396'22	471'78 330'54	649'68 594'29	1st half 2nd "		137b
1'34 1'31	1'04 1'09	3'69 2'76	0'87 0'93	0'84 0'97	0'86 1'03	0'50 0'55	2'07 2'00	1'82 1'98	1'98 1'91	1'12 1'24	1'31 1'11	1'16 1'11	1st half 2nd "	131c	
2'81 3'44	3'94 3'39	6'37 4'35	2'24 2'34	2'59 2'93	3'89 4'24	2'40 5'83	5'67 6'50	5'77 4'90	3'44 3'59	3'37 3'88	3'71 3'03	4'07 3'46	1st half 2nd "		132c
—0'24 1'40	0'41 0'91	1'82 1'00	0'47 0'69	1'14 1'08	0'52 0'56	0'56 0'35	0'08 0'21	0'15 0'16	1'06 0'97	0'33 0'39	0'14 0'15	1'02 0'77	1st half 2nd "	133c	
...	...	...	0'12 0'06	0'21 0'06	...	...	...	...	...	...	...	0'04 0'04	1st half 2nd "		134c
0'69 0'62	0'80 1'01	1'44 0'74	0'43 0'47	0'51 0'52	0'82 0'78	0'42 0'49	0'65 0'50	0'27 0'60	0'48 1'08	0'41 0'52	0'59 0'04	0'73 1'06	1st half 2nd "	135c	
1'02 0'99	0'63 0'94	0'63 0'49	0'97 0'44	0'34 0'67	0'38 0'44	0'24 0'36	1'06 0'19	0'41 0'55	1'27 1'59	0'39 0'42	—0'16 0'07	0'40 0'59	1st half 2nd "		136c
5'62 7'85	6'82 7'34	13'95 9'34	5'10 4'93	5'63 6'23	6'47 7'05	4'12 7'58	9'53 9'40	7'92 8'25	8'23 9'14	5'62 6'45	5'59 4'00	7'51 7'03	1st half 2nd "	137c	
0'26 0'28	0'37 0'37	1'16 0'90	0'28 0'33	0'30 0'38	0'21 0'23	0'16 0'20	0'60 0'65	0'64 0'76	0'66 0'67	0'38 0'43	0'46 0'40	0'34 0'36	1st half 2nd "		131d
0'55 0'74	1'41 1'13	2'00 1'43	0'72 0'83	0'92 1'14	0'97 1'16	0'78 2'12	1'66 2'16	1'86 1'90	1'16 1'25	1'15 1'35	1'31 0'74	1'20 1'10	1st half 2nd "	132d	
—0'05 0'32	0'15 0'30	0'57 0'33	0'15 0'24	0'30 0'41	0'13 0'15	0'18 0'13	0'02 0'07	0'05 0'06	0'36 0'34	0'11 0'14	0'05 0'06	0'30 0'24	1st half 2nd "		133d
...	...	...	0'04 0'02	0'07 0'02	...	...	...	...	...	...	...	0'01 0'01	1st half 2nd "	134d	
0'13 0'15	0'29 0'34	0'45 0'24	0'14 0'17	0'17 0'20	0'20 0'21	0'14 0'18	0'19 0'16	0'10 0'23	0'16 0'28	0'14 0'18	0'21 0'24	0'21 0'34	1st half 2nd "		135d
0'20 0'21	0'22 0'31	0'20 0'16	0'31 0'16	0'14 0'25	0'09 0'12	0'08 0'13	0'30 0'06	0'15 0'21	0'43 0'55	0'13 0'14	—0'06 0'03	0'14 0'19	1st half 2nd "	136d	
1'00 1'68	2'44 2'45	4'38 3'06	1'64 1'75	1'99 2'41	1'60 1'92	1'34 2'76	1'77 3'10	2'80 3'16	2'77 3'19	1'91 2'24	1'97 1'47	2'20 2'24	1st half 2nd "		137d

and Sagauli Raxaul railway,

Serial number.	PARTICULARS.	GAUGE. Class : No.	5' 6"									
			1	2 (a)	3	4 (a)	4 (b)	5 & (b)	6 (a) to (e)	7 (a) to (g)	8 (a) to (f)	9 (a) & (b)
			East Indian.	Eastern Bengal.	Bengal Central.	Bengal-Nagpur.	Raipur-Dham-tari (2' 6").	Oudh and Rohil-khand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
TABLE B.—LOCOMOTIVE												
	Average price of fuel per ton in terms of		1st half	2nd "	1st half	2nd "	1st half	2nd "	1st half	2nd "	1st half	2nd "
	{ coal		2'00	1'93	6'74	6'90	6'30	6'25	3'70	3'70	3'62	3'58
	{ wood		...	...	...	...	...	...	...	...	...	...
	PER TOTAL TRAIN-MILE.		1st half	2nd "	1st half	2nd "	1st half	2nd "	1st half	2nd "	1st half	2nd "
1382	General superintendence (including office expenses) Annas		0'55	0'61	0'60	0'54	0'74	0'55	0'78	0'70	0'52	0'53
1392	Running expenses		2'10	2'12	1'93	2'01	1'31	1'10	2'06	2'06	0'95	0'83
1402	Fuel		0'91	0'88	2'66	2'97	2'26	2'34	1'42	1'40	0'52	0'56
1412	Water		0'11	0'10	0'18	0'16	0'19	0'14	0'20	0'20	0'35	0'41
1422	Oil, tallow and other stores		0'34	0'39	0'30	0'29	0'17	0'30	0'29	0'35	0'25	0'16
1432	Maintenance and renewal of locomotives		2'22	2'18	6'52	1'69	2'03	1'55	1'35	0'39	1'00	0'96
143A (a)	Maintenance and renewal of machinery, tools and plant		0'08	0'16	0'59	0'53	0'07	0'14	0'07	...	0'10	0'13
1442	Other charges (net)		1'04	1'02	0'26	0'23	0'27	0'25	1'55	1'78	0'61	0'79
1452	Total locomotive expenses		7'35	7'45	13'09	8'42	7'04	5'74	8'02	8'64	3'92	3'79
	Fuel consumed in terms of		1st half	2nd "	1st half	2nd "	1st half	2nd "	1st half	2nd "	1st half	2nd "
	{ coal lbs.		63'03	63'90	55'26	60'19	40'16	41'93	54'05	53'09	20'19	21'72
	{ wood		...	...	...	...	...	...	...	...	...	...
	PER ENGINE-MILE.		1st half	2nd "	1st half	2nd "	1st half	2nd "	1st half	2nd "	1st half	2nd "
1385	General superintendence (including office expenses) Annas		0'44	0'48	0'43	0'39	0'38	0'44	0'70	0'77	0'68	0'62
1395	Running expenses		1'67	1'68	1'43	1'40	1'05	0'88	1'85	1'90	0'93	0'81
1405	Fuel		0'72	0'70	1'92	2'07	1'80	1'88	1'28	1'24	0'51	0'55
1415	Water		0'08	0'08	0'14	0'11	0'16	0'12	0'18	0'18	0'34	0'40
1425	Oil, tallow and other stores		0'27	0'31	0'21	0'20	0'13	0'24	0'26	0'22	0'35	0'16
1435	Maintenance and renewal of locomotives		1'76	1'73	4'70	1'19	1'62	0'74	1'39	1'70	0'38	0'40
143A (b)	Maintenance and renewal of machinery, tools and plant		0'07	0'13	0'43	0'38	0'05	0'12	0'15	0'03	0'03	0'03
1445	Other charges (net)		0'83	0'81	0'19	0'16	0'22	0'20	1'39	1'38	0'58	0'77
1455	Total locomotive expenses		5'84	5'92	9'45	5'89	5'61	4'62	7'20	7'66	3'80	3'71
	Fuel consumed in terms of		1st half	2nd "	1st half	2nd "	1st half	2nd "	1st half	2nd "	1st half	2nd "
	{ coal lbs.		50'89	50'73	39'88	42'06	32'01	33'71	48'49	47'06	19'61	21'29
	{ wood		...	...	...	...	...	...	...	...	...	...

* The standard used is Kurhurbaree coal, except in the case of the Nizam's Guaranteed State railway, which uses Singareni coal.

DIX 46—contd.

Appendix 46.
Analysis.

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

3' 38"														GAUGE.	
10(a) to (c)	2 (b) to (d)	14	16	17 (a) & (b)	8 (g) to (h)	18	19	20	9 (c)	21	22	23	Class: No.	Serial number.	
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western. †	Kohil-kund and Kumaon.	Raj-putana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavanagar-Gondal-Junagadh-Porbandar.	Hyderabad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.		
EXPENSES.															
12'33 11'57	7'05 7'68	7'70 8'63	6'29 6'70	...	17'06 18'68	...	18'50 17'97	19'08 19'53	6'03 7'04	10'31 10'41	15'70 14'23	15'16 14'75	1st half 2nd "	}	
...	...	...	...	4'52 4'01	...	...	...	...	...	...	...	...	1st half 2nd "	
0'62 0'58	0'55 0'58	1'37 1'01	0'35 0'40	0'65 0'79	0'69 0'78	0'49 0'50	2'06 1'89	1'08 1'17	1'15 1'24	0'84 0'80	0'70 0'64	0'89 0'87	1st half 2nd "	} 138a	
1'95 2'00	1'05 1'00	1'52 1'41	0'77 0'80	0'82 0'82	1'86 2'07	0'79 0'81	0'83 0'88	1'40 1'48	1'46 1'49	1'67 1'67	1'50 1'44	2'69 2'65	1st half 2nd "		} 139a
4'78 4'60	2'68 2'03	2'64 2'84	1'60 1'62	2'26 1'98	4'41 4'61	4'42 3'61	5'24 4'79	4'29 3'91	1'99 2'01	2'30 2'62	3'55 3'26	4'63 4'19	1st half 2nd "	} 140a	
0'26 0'26	0'12 0'13	0'36 0'25	0'15 0'16	0'12 0'12	0'36 0'30	0'35 0'34	0'58 0'48	0'22 0'23	0'30 0'33	0'23 0'23	0'13 0'12	0'34 0'32	1st half 2nd "		} 141a
0'35 0'35	0'22 0'20	0'30 0'12	0'21 0'19	0'22 0'20	0'32 0'30	0'59 0'47	0'32 0'26	0'31 0'37	0'24 0'22	0'14 0'15	0'25 0'23	0'35 0'35	1st half 2nd "	} 142a	
3'17 2'96	1'10 0'98	1'81 1'62	0'84 0'85	1'06 1'23	2'16 2'34	1'56 1'58	1'73 1'20	1'78 1'73	0'69 0'86	2'00 2'01	1'91 1'68	2'08 2'21	1st half 2nd "		} 143a
0'09 0'10	0'22 0'19	0'04 0'06	0'02 0'03	0'18 0'15	0'22 0'27	0'15 0'19	0'39 0'24	0'11 0'15	0'15 0'15	0'29 0'24	0'14 0'13	0'22 0'22	1st half 2nd "	} 143 A (a)	
1'57 1'73	1'33 0'89	0'40 0'58	0'73 0'52	0'46 0'46	0'67 0'59	1'00 1'00	...	0'15 -0'17	0'58 1'23	1'19 1'71	0'16 0'40	0'57 0'64	1st half 2nd "		} 144a
12'79 12'94	6'27 6'00	8'44 7'95	4'67 4'57	5'77 5'72	10'69 11'27	9'15 8'50	11'15 9'74	9'34 8'89	6'56 7'53	8'86 9'53	8'28 7'90	11'77 11'45	1st half 2nd "	} 145a	
34'33 35'72	33'33 36'99	37'74 40'09	35'61 33'99	...	36'18 34'61	38'18 36'30	34'13 31'68	30'06 28'24	40'28 39'95	33'93 35'24	31'64 31'88	42'70 39'76	1st half 2nd "		}
...	...	...	...	83'35 70'21	...	...	...	...	...	...	...	...	1st half 2nd "	
0'52 0'49	0'44 0'47	1'16 0'88	0'31 0'35	0'52 0'65	0'61 0'68	0'48 0'48	1'22 1'76	0'98 1'08	1'04 1'11	0'73 0'80	0'63 0'59	0'72 0'71	1st half 2nd "	} 138b	
1'64 1'68	0'85 0'80	1'28 1'21	0'67 0'70	0'66 0'66	1'64 1'77	0'74 0'77	0'78 0'82	1'28 1'37	1'33 1'32	1'48 1'48	1'36 1'31	2'18 2'15	1st half 2nd "		} 139b
4'02 3'86	1'36 1'63	2'22 2'46	1'40 1'41	1'82 1'59	3'87 3'97	4'02 3'44	4'91 4'48	3'93 3'66	1'81 1'79	2'23 2'33	3'23 2'97	3'78 3'39	1st half 2nd "	} 140b	
0'22 0'22	0'10 0'10	0'30 0'22	0'13 0'14	0'10 0'10	0'31 0'26	0'34 0'32	0'54 0'45	0'20 0'22	0'27 0'29	0'20 0'20	0'12 0'11	0'28 0'26	1st half 2nd "		} 141b
0'30 0'29	0'18 0'16	0'26 0'16	0'18 0'16	0'18 0'17	0'28 0'26	0'56 0'45	0'30 0'25	0'29 0'35	0'22 0'20	0'13 0'14	0'23 0'21	0'30 0'28	1st half 2nd "	} 142b	
2'66 2'79	0'89 0'78	1'53 1'40	0'73 0'74	0'85 1'00	1'90 2'01	1'50 1'51	1'62 1'13	1'63 1'60	0'62 0'77	1'77 1'78	1'74 1'53	1'70 1'79	1st half 2nd "		} 143b
0'67 0'08	0'18 0'16	0'03 0'05	0'01 0'02	0'15 0'13	0'19 0'23	0'14 0'19	0'36 0'23	0'10 0'14	0'13 0'14	0'26 0'22	0'13 0'12	0'18 0'18	1st half 2nd "	} 143 A (b)	
1'32 1'45	1'07 0'72	0'34 0'59	0'64 0'45	0'37 0'38	0'59 0'31	0'95 0'95	...	0'14 -0'16	0'53 1'10	1'05 1'52	0'70 0'36	0'46 0'52	1st half 2nd "		} 144b
10'75 10'86	5'07 4'82	7'12 6'88	4'07 3'97	4'65 4'68	9'39 9'69	8'73 8'11	10'43 9'12	8'55 8'26	5'95 6'72	7'87 8'47	7'54 7'20	9'60 9'28	1st half 2nd "	} 145b	
45'68 46'76	26'94 29'67	31'80 34'67	31'09 29'50	...	31'76 29'75	36'39 34'64	31'93 29'64	27'53 26'25	34'56 35'61	30'13 31'30	28'83 29'04	34'91 32'22	1st half 2nd "		}
...	...	...	...	67'40 62'33	...	...	...	...	...	...	...	...	1st half 2nd "	

† Including the Cawnpore-Burhwal link.

Analysis of working of each railway

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE. Class- No.	5' 6"									
			1	2 (a)	3	4 (a)	4 (b)	5 (a) & (b)	6 (a) & (b)	7 (a) to (g)	8 (a) to (f)	9 (a) & (b)
			Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal-Central.	Bengal Nagpur.	Rampur-Dhamtari (2' 6")	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
PER 1,000 GROSS TON-MILES.			TABLE B.—LOCOMOTIVE									
138c	General superintendence (including office expenses) . . . Rs.	1st half 2nd "	0'09 0'10	0'12 0'09	0'19 0'13	0'14 0'17	0'63 0'74	0'11 0'12	0'11 0'11	0'09 0'13	0'18 0'21	0'12 0'14
139c	Running expenses . . . "	1st half 2nd "	0'32 0'35	0'41 0'35	0'34 0'26	0'37 0'41	0'86 0'96	0'20 0'22	0'31 0'33	0'45 0'56	0'48 0'55	0'30 0'30
140c	Fuel . . . "	1st half 2nd "	0'14 0'14	0'55 0'52	0'59 0'55	0'25 0'28	0'47 0'65	0'70 0'67	0'67 0'69	0'68 0'79	1'14 1'24	0'36 0'36
141c	Water . . . "	1st half 2nd "	0'02 0'02	0'04 0'03	0'05 0'03	0'04 0'04	0'32 0'48	0'02 0'02	0'04 0'04	0'05 0'07	0'09 0'08	0'05 0'05
142c	Oil, tallow and other stores . . . "	1st half 2nd "	0'05 0'06	0'06 0'05	0'05 0'07	0'05 0'05	0'33 0'19	0'05 0'05	0'05 0'05	0'06 0'08	0'08 0'08	0'05 0'04
143c	Maintenance and renewal of locomotives . . . "	1st half 2nd "	0'34 0'35	1'34 0'29	0'53 0'21	0'28 0'37	0'35 0'47	0'21 0'20	0'31 0'58	0'55 0'77	0'56 0'63	0'92 0'48
143 A (c)	Maintenance and renewal of machinery, tools and plant . . . "	1st half 2nd "	0'01 0'03	0'12 0'09	0'02 0'03	0'03 0'01	0'03 ...	0'02 0'03	0'04 0'05	0'03 0'04	0'06 0'07	0'01 0'02
144c	Other charges (net) . . . "	1st half 2nd "	0'16 0'16	0'05 0'04	0'07 0'06	0'28 0'34	0'54 0'92	0'23 0'26	0'27 0'21	0'22 0'25	0'17 0'16	0'14 0'14
145c	Total locomotive expenses . . . "	1st half 2nd "	1'13 1'21	2'69 1'46	1'84 1'34	1'44 1'67	3'53 4'41	1'54 1'57	2'10 2'36	2'13 2'69	2'76 3'02	1'95 1'47
	Fuel consumed in terms of	1st half 2nd "	157'75 165'40	181'90 167'01	167'84 156'20	156'16 164'26	290'28 403'91	155'36 155'81	145'27 145'40	141'59 165'87	142'99 147'04	173'54 174'11
	coal ^a . lbs.	1st half 2nd "	...	...	...	...	...	...	...	...	...	...
	wood . . . "	1st half 2nd "	...	...	...	...	...	...	...	...	...	...
PER TOTAL TRAIN-MILE.			TABLE C.—CARRIAGE									
146a	General superintendence (including office expenses) . . . Annas	1st half 2nd "	0'14 0'16	0'32 0'27	0'37 0'27	0'15 0'18	0'18 0'16	0'12 0'11	0'23 0'25	0'17 0'19	0'38 0'44	0'13 0'15
147a	Repairs and renewals of coaching vehicles . . . "	1st half 2nd "	0'32 0'25	0'97 0'82	1'38 1'13	0'46 0'53	0'26 0'41	0'75 1'16	1'33 0'84	0'93 1'35	1'65 3'05	0'80 0'82
148a	Repairs and renewals of goods vehicles . . . "	1st half 2nd "	1'33 0'57	1'53 0'75	1'27 1'67	0'64 0'51	0'03 0'10	3'84 0'87	2'67 3'81	1'23 1'53	2'33 3'98	1'36 0'64
148 A (a)	Repairs and renewals of machinery, tools and plant . . . "	1st half 2nd "	0'06 0'05	0'06 0'07	0'03 0'12	0'01 0'02	0'01 ...	0'05 0'03	0'05 0'02	0'07 0'09	0'14 0'23	0'07 0'03
149a	Cleaning and oiling . . . "	1st half 2nd "	0'23 0'23	0'45 0'42	0'14 0'30	0'34 0'61	0'34 0'26	0'30 0'33	0'31 0'34	0'38 0'45	0'60 0'65	0'31 0'34
150a	Other charges (net) . . . "	1st half 2nd "	0'01 ...	0'02 0'03	0'02 0'01	0'08 0'03	0'01 ...	0'02 0'01	0'04 0'06	0'02 0'01	1'30 1'50	0'01 ...
151a	Total carriage and wagon expenses . . . "	1st half 2nd "	2'09 1'26	3'31 2'36	2'09 2'07	1'97 1'88	0'77 0'93	5'08 2'51	4'63 5'32	2'80 3'62	6'40 9'85	2'60 1'92
PER 1,000 VEHICLE-MILE RUN BY HOME VEHICLES.												
146b	General superintendence (including office expenses) . . . Rs.	1st half 2nd "	0'37 0'41	1'02 0'67	1'29 0'90	0'34 0'40	0'88 1'16	0'24 0'31	0'64 0'72	0'53 0'68	0'89 1'13	0'39 0'35
147b	Repairs and renewals of coaching vehicles† . . . "	1st half 2nd "	3'14 2'28	7'74 7'02	5'03 4'67	3'49 2'66	3'57 7'08	5'97 8'79	11'24 6'58	11'45 13'41	11'02 18'80	8'60 8'13
148b	Repairs and renewals of goods vehicles† . . . "	1st half 2nd "	4'63 2'09	8'12 2'62	6'19 4'52	1'04 1'69	0'25 1'22	10'59 3'50	11'44 17'14	5'22 8'62	8'33 17'75	5'08 1'91
148 A (b)	Repairs and renewals of machinery, tools and plant . . . "	1st half 2nd "	0'15 0'14	0'20 0'16	0'13 0'39	0'03 0'05	0'06 ...	0'09 0'08	0'14 0'07	0'23 0'31	0'33 0'59	0'03 0'05
149b	Cleaning and oiling . . . "	1st half 2nd "	0'60 0'61	1'42 1'03	1'38 1'00	1'36 1'37	1'74 1'94	0'62 0'86	0'90 0'97	1'20 1'60	1'39 1'69	0'87 0'76
150b	Other charges (net) . . . "	1st half 2nd "	0'02 0'01	0'06 0'07	0'10 0'02	0'16 0'07	0'06 ...	0'04 0'03	0'14 0'17	0'05 0'04	3'03 3'89	0'02 ...
	Total carriage and wagon expenses . . . "	1st half 2nd "	5'30 3'30	10'55 5'81	8'53 6'90	4'28 4'23	3'89 6'81	10'39 6'63	13'19 15'20	8'84 12'99	14'91 25'49	7'84 4'41

^a The standard used is Kurhbaroo coal, except in the case of the Cawnpore-Burhwal link.

DIX 46—continued.

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

10 (a) to (c)	11 (b) to (d)	14	16	17 a) & (b)	18 (c) to (k)	18	19	20	9 (c)	21	22	23	GAUGE.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western.	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagadh-Porbander.	Hyderabad-Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Class No.	
EXPENSES—Contd.														
0'12	0'20	0'44	0'12	0'23	0'18	0'17	0'60	0'38	0'38	0'29	0'25	0'25	1st half	138c
0'13	0'19	0'34	0'14	0'30	0'21	0'18	0'62	0'45	0'43	0'31	0'24	0'28	2nd "	
0'39	0'38	0'47	0'25	0'30	0'47	0'25	0'24	0'49	0'50	0'57	0'33	0'78	1st half	139c
0'43	0'33	0'45	0'29	0'32	0'36	0'30	0'29	0'57	0'52	0'58	0'33	0'85	2nd "	
0'94	0'60	0'83	0'33	0'79	1'10	1'37	1'54	1'51	0'67	0'85	1'35	1'36	1st half	140c
0'99	0'68	0'93	0'59	0'75	1'20	0'31	1'53	1'49	0'70	0'91	1'20	1'34	2nd "	
0'05	0'04	0'11	0'05	0'04	0'09	0'12	0'17	0'08	0'10	0'07	0'05	0'10	1st half	141c
0'06	0'04	0'08	0'06	0'05	0'08	0'12	0'16	0'09	0'11	0'08	0'05	0'10	2nd "	
0'07	0'08	0'09	0'06	0'08	0'08	0'19	0'09	0'11	0'08	0'05	0'09	0'11	1st half	142c
0'08	0'07	0'06	0'07	0'08	0'08	0'19	0'08	0'14	0'08	0'05	0'08	0'11	2nd "	
0'63	0'30	0'57	0'28	0'37	0'63	0'51	0'51	0'63	0'23	0'68	0'67	0'61	1st half	143c
0'72	0'33	0'53	0'31	0'48	0'64	0'58	0'39	0'66	0'30	0'70	0'61	0'70	2nd "	
0'02	0'08	0'01	...	0'07	0'05	0'05	0'11	0'04	0'05	0'10	0'05	0'06	1st half	143 A(c)
0'02	0'06	0'02	0'01	0'05	0'07	0'07	0'07	0'06	0'05	0'09	0'04	0'07	2nd "	
0'31	0'48	0'13	0'24	0'16	0'16	0'32	...	0'05	0'20	0'40	0'63	0'17	1st half	144c
0'38	0'30	0'19	0'18	0'18	0'16	0'35	...	0'06	0'43	0'59	0'15	0'20	2nd "	
2'53	2'25	2'65	1'54	2'04	2'66	2'08	3'26	3'29	2'21	3'02	2'92	3'44	1st half	145c
2'81	2'00	2'60	1'65	2'21	3'06	3'09	3'20	3'40	2'62	3'31	2'90	3'65	2nd "	
171'43	191'07	189'43	188'51	...	144'07	199'14	160'18	169'84	216'82	184'70	178'67	200'43	1st half	145c
193'63	197'44	209'91	196'55	...	150'47	211'27	168'59	173'20	222'83	195'95	187'31	202'80	2nd "	
...	...	...	...	472'58	...	...	...	...	...	...	...	...	1st half	145c
...	...	...	...	471'63	...	...	...	...	...	...	...	...	2nd "	
AND WAGON EXPENSES.														
0'16	0'30	0'45	0'13	0'23	0'24	0'11	0'23	0'32	0'12	0'25	0'23	0'25	1st half	146a
0'15	0'30	0'34	0'14	0'27	0'29	0'13	0'24	0'35	0'12	0'27	0'21	0'25	2nd "	
0'06	0'73	0'87	0'34	0'62	1'01	0'62	2'29	0'68	0'26	0'88	0'84	0'77	1st half	147a
1'05	1'30	0'68	0'29	0'40	2'00	0'53	3'05	0'45	0'21	0'86	1'10	0'87	2nd "	
1'31	0'86	0'84	0'35	0'79	1'43	0'34	0'82	0'50	0'09	1'15	1'45	1'07	1st half	148a
1'05	0'51	0'62	0'31	0'63	2'60	0'53	0'90	0'20	0'07	1'06	0'82	1'19	2nd "	
0'05	0'04	0'02	0'01	0'02	0'09	0'02	0'01	0'06	0'04	0'05	0'05	0'05	1st half	148 A(a)
0'07	0'03	0'01	0'01	0'03	0'15	0'02	0'01	0'07	0'05	0'03	0'04	0'05	2nd "	
0'35	0'25	0'26	0'24	0'24	0'37	0'29	0'39	0'23	0'25	0'17	0'26	0'32	1st half	149a
0'33	0'25	0'25	0'28	0'24	0'43	0'45	0'37	0'25	0'28	0'19	0'24	0'31	2nd "	
0'20	0'05	0'01	0'01	0'19	0'01	...	0'03	...	...	0'01	0'10	0'04	1st half	150a
0'24	0'08	0'01	...	0'02	0'03	0'01	0'03	...	...	0'01	0'08	0'03	2nd "	
3'04	2'23	2'45	1'08	2'09	3'15	1'38	3'77	1'79	0'76	2'49	2'73	2'50	1st half	151a
2'89	2'49	1'91	1'03	1'59	5'30	1'67	5'70	1'32	0'73	2'40	2'39	2'70	2nd "	
0'45	0'86	1'28	0'30	0'57	0'50	0'37	0'89	0'20	0'44	0'72	0'71	0'63	1st half	146b
0'45	0'79	0'98	0'39	0'73	0'64	0'41	0'78	0'93	0'40	0'19	0'70	0'71	2nd "	
2'77	5'75	4'38	2'41	4'93	8'63	2'02	10'95	1'68	2'50	7'66	5'24	5'10	1st half	147b
8'89	0'01	4'39	1'74	2'79	13'11	1'75	14'93	1'21	1'86	6'89	6'77	5'97	2nd "	
3'81	6'81	5'14	1'30	2'68	4'10	1'08	14'52	1'24	0'45	4'97	8'87	4'31	1st half	148b
5'22	2'04	3'19	1'60	2'86	8'94	1'73	14'28	0'53	0'04	4'75	3'68	5'57	2nd "	
0'15	0'12	0'04	0'03	0'06	0'20	0'05	0'05	0'14	0'14	0'14	0'14	0'13	1st half	148 A(b)
0'20	0'14	0'04	0'04	0'08	0'34	0'08	0'05	0'20	0'14	0'09	0'14	0'14	2nd "	
1'04	0'73	0'71	0'58	0'56	0'79	0'93	1'46	0'55	0'86	0'49	0'80	0'79	1st half	149b
1'06	0'66	0'72	0'76	0'66	0'97	1'47	1'21	0'68	0'97	0'54	0'80	0'86	2nd "	
0'58	0'14	0'04	0'01	0'44	0'03	0'03	0'11	...	...	0'04	0'28	0'10	1st half	150b
0'76	0'21	0'04	0'01	0'06	0'09	0'02	0'09	...	...	0'02	0'09	0'08	2nd "	
8'60	6'41	11'59	2'62	4'97	6'76	4'48	27'08	4'41	2'59	7'18	8'45	6'27	1st half	151b
9'05	6'39	9'36	2'87	4'35	12'40	5'46	31'34	5'53	2'51	6'92	7'80	7'52	2nd "	

of the Nizam's Guaranteed State railway, which uses Singareni coal.
all other items in the table being calculated upon the aggregate of both coaching and goods vehicle-mileages.

Appendix 46.
Analysis.

Analysis of working of each rail

NOTE.—These statistics are

Serial number.	PARTICULARS.	Class No.	5' 6'										
			1	2 (a)	3	4 (a)	4 (b)	5 (a) & (b)	5 (a) to (c)	7 (a) to (g)	8 (a) to (f)	9 (a) and (d)	
			East Indian.	Eastern Bengal.	Bengal Central.	Bengal-Nagpur.	Raipur-Dhamtari (a' 6').	Oudh and Rohilkhand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam Guaranteed Sta.	
TABLE D.—TRAFFIC													
PER TOTAL TRAIN-MILE.													
152 a	General superintendence (including office expenses) Annas	1st half 2nd "	0'39 0'60	1'31 1'26	1'24 0'93	0'76 0'94	0'01 0'01	0'63 0'63	0'56 0'59	0'43 0'52	0'87 0'96	0' 0'	
153 a	Station staff "	1st half 2nd "	2'37 2'33	5'50 5'72	3'40 3'49	1'86 1'86	1'22 1'10	2'22 2'22	2'24 2'38	1'87 2'08	3'21 3'57	1' 1'	
154 a	Train staff "	1st half 2nd "	1'03 1'07	0'97 0'95	0'66 0'48	0'60 0'61	0'22 0'26	0'70 0'71	0'70 0'83	1'01 1'23	0'86 0'93	0' 0'	
155 a	Fuel, lighting, water and general stores "	1st half 2nd "	0'46 0'49	1'01 0'92	0'73 0'56	0'49 0'50	..	0'47 0'47	0'53 0'53	0'67 0'67	1'04 1'04	0' 0'	
156 a	Clothing "	1st half 2nd "	0'05 0'04	0'08 0'10	0'05 0'03	0'01 0'02	..	0'05 0'05	0'11 0'11	0'04 0'04	0'09 0'09	0' 0'	
157 a	Printing, stationery and tickets "	1st half 2nd "	0'20 0'22	0'37 0'39	0'78 0'41	0'32 0'36	..	0'25 0'30	0'25 0'25	0'44 0'44	0'47 0'47	0'2 0'2	
158 a	Charges for delivery and collection of goods, etc. "	1st half 2nd "	0'01 0'01	0'01 0'02	..	0'01 0'01	..	0'01 0'01	..	0'01 0'01	..	..
159 a	Miscellaneous expenses "	1st half 2nd "	0'03 0'03	0'10 0'09	0'02 0'02	..	..	..	..	0'02 0'02	0'03 0'03	0'0 0'0
160 a	Payments to other lines "	1st half 2nd "	0'04 0'07	0'04 ..	0'26 0'25	0'66 0'69	..	0'13 0'11	0'03 0'03	0'11 0'11	0'04 0'05	0'4 0'4	
161 a	Other charges (net) "	1st half 2nd "	0'01 0'01	0'01 0'01	..	0'03 0'04	..	0'01 0'01	0'04 0'03	0'01 0'01	0'01 0'01	..	
162 a	Total traffic expenses "	1st half 2nd "	4'79 4'87	9'40 9'46	7'14 6'17	4'74 5'04	1'46 1'37	4'67 4'51	4'42 4'75	4'33 5'15	6'46 7'15	4'11 4'23	
PER CENT. ON TRAFFIC EARNINGS. (Abstracts H and I of Revenue Accounts.)													
152 b	General superintendence (including office expenses) Per cent.	1st half 2nd "	10'86 10'95	2'06 1'57	2'35 1'78	1'38 1'97	0'06 0'09	1'33 1'44	0'99 1'08	0'66 1'02	0'82 1'07	0'60 0'69	
153 b	Station staff "	1st half 2nd "	3'28 3'68	8'67 7'18	6'47 6'71	3'40 3'91	5'35 5'06	4'67 5'09	3'99 4'35	2'86 4'07	3'04 4'01	2'33 2'70	
154 b	Train staff "	1st half 2nd "	1'52 1'68	1'53 1'19	1'26 0'91	1'10 1'29	0'96 1'88	1'48 1'62	1'41 1'52	1'54 2'40	0'82 1'05	0'90 0'98	
155 b	Fuel, lighting, water and general stores "	1st half 2nd "	0'68 0'77	1'59 1'15	1'38 1'06	0'89 1'06	..	1'28 1'07	0'92 0'96	0'80 1'31	0'83 1'16	0'77 0'90	
156 b	Clothing "	1st half 2nd "	0'07 0'06	0'13 0'12	0'10 0'06	0'01 0'04	0'02 ..	0'22 0'11	0'08 0'20	0'15 0'07	0'11 0'10	..	
157 b	Printing, stationery and tickets "	1st half 2nd "	0'29 0'35	0'58 0'48	1'49 0'80	0'59 0'76	..	0'52 0'69	0'34 0'45	0'39 0'87	0'43 0'53	0'38 0'38	
158 b	Charges for delivery and collection of goods, etc. "	1st half 2nd "	0'02 0'01	0'02 0'02	..	0'01 0'02	..	0'03 0'03	..	0'02 0'02	..	..
159 b	Miscellaneous expenses "	1st half 2nd "	0'04 0'05	0'16 0'11	0'05 0'04	0'01 0'02	..	..	0'01 0'01	0'02 0'04	0'02 0'03	0'01 0'01
160 b	Payments to other lines "	1st half 2nd "	0'06 0'12	0'06 ..	0'48 0'49	1'21 1'45	..	0'28 0'26	0'05 0'05	0'18 0'22	0'04 0'06	0'54 0'70	
161 b	Other charges (net) "	1st half 2nd "	0'02 0'02	0'02 0'01	0'01 ..	0'06 0'09	..	0'03 0'03	0'06 0'06	0'01 0'02	0'01 0'01	..	
162 b	Total traffic expenses "	1st half 2nd "	7'04 7'69	14'82 11'83	13'50 11'85	8'64 10'61	6'39 9'98	9'84 10'34	7'86 8'68	6'63 10'04	6'11 8'02	5'53 6'40	
General superintendence per cent. on traffic earnings (including steam-boat) Per cent.													
		1st half 2nd "	0'86 0'95	2'06 1'57	2'35 1'78	1'38 1'97	0'06 0'09	1'33 1'44	0'99 1'09	0'66 1'02	0'82 1'07	0'60 0'69	

DIX 46—continued.

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

3' 31"													GAUGE.	
10 (a) to (c)	11 (b) to (d)	14	16	17 (a) & (b)	18 (g) to (h)	18	19	20	9 (c)	21	22	23	Class: No.	Serial number.
Madras.	Eastern Bengal.	Assam- Bengal.	Bengal and North- Western.	Rohil- kund and Ku- maon.	Raj- putana- Malwa.	Jodh- pur- Bikaner.	Udaipur- Chitor.	Bhav- nagar- Gondal- Junagadh- Porbandar.	Hydera- bad- Godavari Valley.	Southern Mahratta.	South India.	Burma.	Calendar year 1902 by half- years.	
EXPENSES.														
0'69 0'70	0'91 0'89	1'43 1'09	0'62 0'67	0'72 0'91	0'54 0'62	0'63 0'58	2'20 2'21	1'15 1'44	0'60 0'68	0'70 0'73	0'62 0'61	0'72 0'71	1st half 2nd "	152a
2'10 2'14	2'40 2'12	3'55 2'89	1'50 1'62	1'49 1'55	1'97 2'38	1'10 1'02	2'46 2'04	3'01 3'01	1'53 1'76	1'67 1'70	1'75 1'72	2'41 2'34	1st half 2nd "	153a
0'65 0'65	0'59 0'59	0'78 0'63	0'45 0'49	0'36 0'41	0'53 0'61	0'21 0'22	0'20 0'24	0'45 0'52	0'66 0'71	0'61 0'59	0'41 0'40	0'62 0'64	1st half 2nd "	154a
0'36 0'41	0'45 0'54	0'97 0'70	0'43 0'40	0'60 0'50	0'53 0'68	0'48 0'41	0'51 0'49	0'58 0'82	0'48 0'70	0'41 0'34	0'41 0'27	0'58 0'56	1st half 2nd "	155a
0'06 0'07	0'04 0'05	0'03 0'05	0'04 0'07	... 0'08	0'07 0'06	0'03 0'02	0'06 0'10	0'06 0'03	... 0'01	0'07 0'12	0'04 0'06	0'07 0'14	1st half 2nd "	156a
0'45 0'42	0'26 0'25	0'36 0'27	0'17 0'19	0'27 0'43	0'28 0'31	0'38 0'32	0'71 0'45	0'48 0'53	0'22 0'25	0'26 0'26	0'27 0'50	0'31 0'44	1st half 2nd "	157a
0'01 0'42	... ...	... ...	0'12 0'08	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	1st half 2nd "	158a
0'05 0'01	0'01 0'01	0'01 0'01	0'03 0'06	0'04 0'03	0'02 0'02	0'03 0'01	... 0'01	0'03 0'06	0'01 0'02	0'02 0'02	0'01 0'01	0'03 0'03	1st half 2nd "	159a
0'07 0'05	... ...	... ...	0'08 0'09	0'19 0'36	0'02 0'04	0'03 0'12	0'27 0'27	0'25 0'25	0'27 0'46	0'20 0'22	0'09 0'07	... ...	1st half 2nd "	160a
0'05 0'05	0'08 0'11	0'03 0'01	0'11 0'12	... ...	... ...	... ...	... ...	0'02 0'02	... ...	0'03 0'05	... ...	0'03 0'03	1st half 2nd "	161a
4'49 4'54	4'74 4'56	7'14 5'05	3'55 3'79	3'67 4'27	3'06 4'72	2'89 2'70	6'50 5'81	6'04 6'65	3'77 4'59	3'97 4'03	3'59 3'64	4'77 4'89	1st half 2nd "	162a
1'26 1'33	1'84 1'65	3'11 2'98	1'49 2'13	1'43 2'38	0'81 1'08	1'35 1'58	2'90 3'90	1'96 3'00	1'23 1'94	1'66 1'91	1'23 1'28	1'23 1'56	1st half 2nd "	152b
3'53 4'09	4'85 3'94	7'74 7'90	3'66 5'13	2'97 4'01	3'00 4'09	2'41 2'83	3'24 3'60	5'11 6'28	3'14 4'99	3'09 4'48	3'44 3'63	4'08 5'10	1st half 2nd "	153b
1'09 1'24	1'19 1'13	1'70 1'71	1'10 1'53	0'71 1'07	0'81 1'04	0'46 0'60	0'38 0'43	0'76 1'18	1'34 1'99	1'46 1'56	0'80 0'85	1'05 1'38	1st half 2nd "	154b
0'61 0'78	0'92 1'01	2'11 1'90	1'06 1'27	1'18 1'31	0'81 1'16	1'04 1'14	0'68 0'86	0'99 1'70	0'99 1'27	0'97 0'89	0'81 0'56	0'99 1'21	1st half 2nd "	155b
0'09 0'13	0'08 0'09	0'07 0'15	0'08 0'22	0'01 0'21	0'11 0'10	0'05 0'05	0'08 0'17	0'11 0'06	... 0'03	0'18 0'31	0'07 0'13	0'11 0'31	1st half 2nd "	156b
0'76 0'57	0'54 0'46	0'78 0'74	0'42 0'60	0'54 1'10	0'43 0'53	0'81 0'89	0'93 0'80	0'81 1'12	0'44 0'70	0'62 0'70	0'53 1'03	0'53 0'96	1st half 2nd "	157b
0'02 0'03	... ...	... ...	0'29 ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	1st half 2nd "	158b
0'08 0'09	0'02 0'02	0'02 0'02	0'08 0'19	0'08 0'08	0'01 0'03	0'03 0'02	... 0'03	0'05 0'07	0'03 0'04	0'05 0'06	0'02 0'03	0'05 0'06	1st half 2nd "	159b
0'12 0'25	... ...	... ...	0'20 0'30	0'37 0'93	0'04 0'06	0'06 0'33	0'36 0'49	0'44 0'52	0'56 1'31	0'48 0'57	0'17 0'16	... ...	1st half 2nd "	160b
0'08 0'11	0'16 0'20	0'03 0'02	0'27 0'44	0'01 -0'01	0'01 0'01	... ...	... ...	0'03 0'05	... ...	0'06 0'14	0'03 ...	0'05 0'07	1st half 2nd "	161b
7'54 8'69	9'60 8'48	15'56 15'42	8'65 11'50	7'30 11'08	6'04 8'10	6'23 7'44	8'57 10'28	10'26 13'88	7'73 12'97	9'47 10'62	7'04 7'69	8'09 10'05	1st half 2nd "	162b
1'16 1'33	1'70 1'52	3'11 2'98	1'39 1'98	1'43 2'38	0'81 1'08	1'35 1'58	2'90 3'90	1'06 3'00	1'28 1'94	4'66 1'91	1'23 1'28	1'23 1'55	1st half 2nd "	152c

* Including the Cawnpore-Burhwal link.

NOTE.—These statistics are not

Serial number.	PARTICULARS.	GAUGE. Class: No. Calendar year 1902 by half- years.	5' 6"									
			1	2 (1)	3 (2)	4 (a)	4 (b)	5 (a) to (b)	6 (a) to (e)	7 (a) to (g)	8 (a) to (f)	9 (a) and (b)
			East Indian.	Eastern Bengal.	Bengal Central.	Bengal- Nagpur.	Raipur- Dham- tari (2' 6").	Oudh and Rohil- khand.	North Western.	Great Indian Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaran- teed State.
TABLE E.—GENERAL												
PER TOTAL TRAIN-MILE.												
163a	Home expenditure . . . Annas	1st half 2nd "	0'33 0'36	0'28 —	1'99 1'46	0'91 1'04	1'15 1'33	0'15 —	0'09 —	0'35 0'44	0'30 0'35	0'56 0'70
164a	Agent's office—salaries and expenses . . . "	1st half 2nd "	0'11 0'14	0'31 0'31	1'42 1'06	0'30 0'31	— —	0'19 0'22	0'16 0'17	0'16 0'16	0'25 0'29	0'25 0'26
165a	Audit, accounts and pay office . . . "	1st half 2nd "	0'45 0'46	0'79 0'76	1'81 1'37	0'70 0'81	— —	0'59 0'09	0'47 0'52	0'51 0'60	0'95 1'09	0'96 1'01
166a	Stores Department . . . "	1st half 2nd "	0'14 0'15	0'11 0'12	0'23 0'14	0'17 0'17	— —	0'14 0'16	0'13 0'12	0'15 0'18	0'36 0'43	0'14 0'22
167a	Medical "	1st half 2nd "	0'13 0'15	0'20 0'18	0'22 0'16	0'19 0'24	— —	0'09 0'11	0'13 0'13	0'09 0'11	0'21 0'25	0'14 0'16
168a	Rents and miscellaneous . . . "	1st half 2nd "	0'19 0'18	0'26 0'20	1'00 0'65	0'32 0'31	— —	0'24 0'21	0'19 0'14	0'17 0'15	0'38 0'36	0'27 0'33
169a	Police "	1st half 2nd "	0'20 0'20	0'12 0'16	0'50 0'37	0'16 0'27	0'08 0'06	0'15 0'17	0'15 0'15	0'18 0'24	0'48 0'53	0'53 0'57
170a	Advertising "	1st half 2nd "	0'01 0'01	0'01 0'02	0'05 0'06	0'03 0'03	— —	0'01 0'02	0'01 0'01	0'01 0'01	0'01 0'01	0'01 0'02
171a	Electric telegraph "	1st half 2nd "	0'61 0'77	0'99 0'85	1'06 0'92	0'92 1'01	0'62 0'61	0'57 0'64	0'69 0'74	0'57 0'66	1'13 1'28	0'53 0'56
172a	Other charges (net) "	1st half 2nd "	— —	— —	— —	— —	— —	— —	— —	0'01 0'01	— —	— 0'01
173a	Total general charges "	1st half 2nd "	2'17 2'42	3'07 2'60	8'28 6'19	3'70 4'19	1'85 2'00	2'13 2'22	2'02 1'98	2'20 2'57	4'07 4'59	3'32 3'84
PER CENT. ON TOTAL EARNINGS.												
163b	Home expenditure Per cent.	1st half 2nd "	0'48 0'56	0'46 —	3'15 2'77	1'61 2'08	4'88 9'26	0'28 —	0'17 —	0'54 0'84	0'57 0'38	0'74 0'96
164b	Agent's office—salaries and expenses "	1st half 2nd "	0'17 0'21	0'51 0'44	2'25 2'01	0'51 0'63	— —	0'37 0'47	0'28 0'30	0'25 0'31	0'23 0'31	0'33 0'36
165b	Audit, accounts and pay office "	1st half 2nd "	0'65 0'71	1'30 1'06	2'83 2'59	1'24 1'63	— —	1'13 1'46	0'83 0'94	0'77 1'15	0'88 1'19	1'26 1'40
166b	Stores Department "	1st half 2nd "	0'20 0'23	0'17 0'17	0'36 0'27	0'29 0'34	— —	0'26 0'34	0'23 0'23	0'22 0'36	0'33 0'47	0'18 0'30
167b	Medical "	1st half 2nd "	0'18 0'23	0'32 0'25	0'33 0'31	0'33 0'47	— —	0'18 0'22	0'18 0'23	0'14 0'22	0'20 0'27	0'19 0'22
168b	Rents and miscellaneous "	1st half 2nd "	0'27 0'28	0'42 0'28	1'59 1'24	0'57 0'63	— —	0'45 0'44	0'33 0'25	0'26 0'29	0'35 0'40	0'36 0'45
169b	Police "	1st half 2nd "	0'29 0'32	0'27 0'23	0'80 0'70	0'30 0'53	0'35 0'40	0'28 0'36	0'26 0'27	0'28 0'47	0'44 0'59	0'70 0'78
170b	Advertising "	1st half 2nd "	0'01 0'03	0'02 0'03	0'08 0'11	0'01 0'07	— —	0'01 0'04	0'01 0'01	0'01 0'02	0'01 0'01	0'01 0'02
171b	Electric telegraph "	1st half 2nd "	0'88 1'19	1'62 1'19	1'67 1'75	1'61 2'03	2'64 4'27	1'08 1'34	1'21 1'32	0'86 1'28	1'04 1'41	0'71 0'76
172b	Other charges (net) "	1st half 2nd "	0'01 —	0'01 —	— —	— —	— —	— —	0'01 0'01	0'01 0'02	— —	— 0'01
173b	Total general charges "	1st half 2nd "	3'14 3'76	5'10 3'65	13'08 11'75	6'51 8'41	7'87 13'93	4'04 4'67	3'55 3'56	3'34 4'96	3'75 5'03	4'48 5'26
TABLE G.—SPECIAL AND												
PER CENT. ON GROSS EARNINGS.												
174	Law charges Per cent.	1st half 2nd "	0'02 0'04	0'02 0'04	0'15 0'12	0'01 0'01	— —	— —	— —	0'01 0'01	— 0'01	0'16 0'01
175	Compensation "	1st half 2nd "	0'16 0'29	0'37 0'27	0'15 0'03	0'08 0'04	0'01 —	0'14 0'25	0'10 0'50	0'17 0'13	0'20 0'24	0'02 0'01
176	Rates and taxes "	1st half 2nd "	0'14 0'15	0'21 0'18	0'36 0'28	0'10 0'07	— —	0'01 0'07	0'12 0'12	0'10 0'15	0'11 0'14	— 0'01
177	Payments to other lines "	1st half 2nd "	0'70 1'08	1'06 1'12	3'10 6'03	1'62 1'66	— —	1'38 0'92	0'25 0'22	1'16 1'39	0'25 0'20	1'11 0'46
178	Other charges (net) "	1st half 2nd "	0'22 0'25	1'20 0'86	0'48 1'60	1'36 1'35	0'72 1'10	0'71 0'95	1'11 1'07	0'79 1'47	0'34 0'53	1'07 1'73
179	Total special and miscellaneous expenses "	1st half 2nd "	1'24 1'82	2'86 2'47	4'24 8'06	3'17 3'13	0'71 1'10	2'24 2'19	1'58 1'91	2'43 3'15	0'90 0'12	2'36 2'22

* Including cost of Government controlling establishment.

DIX 46—continued.

Appendix 46.
Analysis.

(by systems) during each half-year of 1902—contd.

prepared by the railways not shown.

3' 3 1/2"													GAUGE.	
10 (a) to (c)	11 (b) to (d)	14	16	17 (a) & (b)	18 (g) to (h)	18	19	20	20 (c)	21	22	23	Class No.	Serial number.
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western.	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Junagad-Forbandar.	Hyderabad Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
CHARGES.														
0'35		2'44	0'45	0'77	0'18	...	...	0'15	0'76	0'85	0'80	0'80	1st half	1630
0'37		2'01	0'47	1'05	0'23	...	...	0'17	1'01	0'81	0'78	0'73	2nd "	
0'25		1'10	0'17	0'38	0'15	0'14	1'90	0'78	0'34	0'31	0'24	0'26	1st half	1640
0'24		0'85	0'13	0'43	0'19	0'13	1'71	0'87	0'38	0'31	0'22	0'28	2nd "	
0'69		2'41	0'72	0'87	0'59	0'52	1'27	1'68	1'27	0'75	0'77	0'65	1st half	1650
0'67		1'81	0'68	1'02	0'71	0'66	1'09	1'78	1'45	0'79	0'73	0'69	2nd "	
0'11		1'02	0'08	0'24	0'22	0'11	0'14	0'37	0'18	0'19	0'20	0'20	1st half	1660
0'10		0'60	0'08	0'27	0'28	0'11	0'15	0'42	0'31	0'21	0'20	0'21	2nd "	
0'12		0'60	0'08	0'09	0'13	0'07	0'29	0'44	0'87	0'15	0'18	0'14	1st half	1670
0'13		0'45	0'09	0'10	0'16	0'11	0'25	0'52	0'35	0'18	0'18	0'15	2nd "	
0'15		0'33	0'12	0'27	0'23	0'11	0'56	0'35	0'35	0'16	0'14	0'13	1st half	1680
0'14		0'25	0'14	0'35	0'23	0'10	0'30	0'49	0'48	0'18	0'15	0'15	2nd "	
0'25		0'43	0'21	0'33	0'29	0'08	...	1'10	0'53	0'42	0'32	0'44	1st half	1690
0'25		0'33	0'24	0'38	0'35	0'10	...	1'22	0'61	0'40	0'23	0'37	2nd "	
0'02		0'01	0'01	0'01	0'01	...	...	0'01	0'01	0'02	...	0'02	1st half	1700
0'02		...	0'01	0'02	0'01	...	...	0'01	0'04	0'02	0'01	0'02	2nd "	
0'81		1'87	0'56	0'70	0'70	0'74	1'06	1'29	0'67	0'95	0'67	0'76	1st half	1710
0'50		1'51	0'63	0'76	0'84	0'87	0'95	1'49	0'76	0'92	0'61	0'75	2nd "	
0'14		0'16	0'01	...	...	1st half	1720
0'15		0'01	...	...	2nd "	
2'89		10'30	2'42	3'66	2'50	1'77	5'22	6'17	4'38	3'81	3'32	3'40	1st half	1730
3'47		7'81	2'47	4'38	3'00	2'09	4'45	6'97	5'55	3'83	3'11	3'40	2nd "	
0'56		4'94	0'97	1'45	0'27	...	...	0'25	1'44	1'99	1'56	1'33	1st half	1634
0'68		5'00	1'32	2'55	0'38	...	...	0'34	2'69	2'10	1'60	1'66	2nd "	
0'41		2'23	0'38	0'73	0'23	0'31	2'48	1'30	0'64	0'73	0'46	0'44	1st half	1644
1'53		2'12	0'36	1'05	0'32	0'33	3'00	1'78	1'00	0'20	0'46	0'60	2nd "	
1'12		4'87	1'60	1'67	0'88	1'11	1'65	2'80	2'43	1'75	1'50	1'07	1st half	1654
1'25		4'49	1'92	2'48	1'19	1'77	1'92	3'62	3'88	2'05	1'51	1'48	2nd "	
0'18		2'06	0'17	0'46	0'33	0'23	0'18	0'62	0'35	0'44	0'39	0'33	1st half	1664
0'19		1'50	0'24	0'65	0'47	0'31	0'27	0'85	0'84	0'55	0'40	0'44	2nd "	
0'20		1'40	0'18	0'17	0'19	0'14	0'38	0'74	0'52	0'36	0'34	0'24	1st half	1674
0'24		1'12	0'25	0'24	0'27	0'29	0'45	1'07	0'92	0'48	0'37	0'33	2nd "	
0'25		0'67	0'27	0'50	0'35	0'24	0'73	0'60	0'67	0'38	0'28	0'23	1st half	1684
0'26		0'62	0'39	0'79	0'40	0'27	0'53	1'00	1'29	0'46	0'31	0'32	2nd "	
0'40		0'86	0'45	0'63	0'44	0'17	...	1'82	1'02	0'97	0'62	0'73	1st half	1694
0'47		0'82	0'67	0'92	0'58	0'25	...	2'48	1'62	1'04	0'47	0'79	2nd "	
0'03		0'02	0'01	0'03	0'01	...	...	0'02	0'01	0'05	0'01	0'03	1st half	1704
0'04		0'01	0'02	0'06	0'01	0'02	...	0'02	0'10	0'04	0'02	0'04	2nd "	
1'31		3'77	1'24	1'33	1'05	1'58	1'38	2'16	1'46	2'23	1'32	1'25	1st half	1714
1'49		3'75	1'78	1'85	1'40	2'35	1'67	3'04	2'02	2'39	1'26	1'61	2nd "	
0'23		0'01	1'15	...	...	0'45	0'01	...	0'01	1st half	1724
0'27		0'01	...	...	...	...	0'02	0'01	0'01	2nd "	
4'69		20'82	3'27	7'00	3'75	3'78	6'20	10'32	8'33	8'91	6'49	5'66	1st half	1734
6'44		19'43	6'95	10'59	5'03	5'59	7'84	14'20	14'81	9'93	6'41	7'28	2nd "	
MISCELLANEOUS EXPENSES.														
0'02		0'15	0'05	0'16	...	...	...	0'02	0'26	0'01	...	0'01	1st half	174
0'02		0'05	0'06	0'15	0'01	...	...	0'03	0'03	0'03	...	0'01	2nd "	
0'04		0'06	0'20	0'15	0'20	0'06	0'04	0'06	0'05	0'02	0'03	...	1st half	175
0'02		0'01	0'10	0'11	0'24	0'32	...	0'03	0'02	0'04	0'02	0'06	2nd "	
0'10		0'22	0'04	...	0'11	...	...	...	0'01	0'15	0'17	0'24	1st half	176
0'29		0'18	0'04	0'01	0'14	...	...	...	0'01	0'03	0'22	0'09	2nd "	
0'20		...	1'54	0'02	0'25	2'20	1'73	0'18	0'12	0'09	0'12	...	1st half	177
0'20		...	0'33	0'18	0'20	1'49	1'81	0'14	0'28	0'10	0'12	...	2nd "	
1'17		1'95	1'32	0'41	0'44	0'27	0'31	1'35	0'54	1'28	0'58	0'93	1st half	178
1'22		5'03	2'41	0'59	0'53	0'81	0'47	1'12	1'87	1'54	0'61	1'15	2nd "	
1'33		2'38	3'15	0'74	1'00	2'62	2'08	1'61	0'98	1'55	0'90	1'18	1st half	179
1'78		5'27	2'94	1'04	1'12	2'82	2'28	1'32	2'21	1'74	0'97	1'31	2nd "	

Analysis of working of each railway

EXTRACT FROM TABLES PRINTED
NOTE.—These statistics are no

Serial number.	PARTICULARS.	GAUGE. Class: No.	5' 6"									
			1	2 (a)	3	4 (a)	4 (b)	5(a) & (b)	6(a) to (c)	7(a) to (g)	8 (a) to (f)	9 (a) & (b)
			Calendar year 1902 by half-years.	East Indian.	Eastern Bengal.	Bengal Central.	Bengal Nagpur.	Rajpur Dharm-tari. (2' 6")	Oudh and Rohil-khand.	North Western.	Great Indian-Peninsula.	Bombay, Baroda and Central India.	The Nizam's Guaranteed State.
FROM APPENDIX I.												
180	Average number of locomotives on the line. <i>No.</i>	1st half	834	123	21	174	3	175	643	772	187	52
		2nd "	853	128	27	189	4	177	635	772	183	56
181	Average miles run per locomotive per diem. <i>Miles</i>	1st half	71'80	64'22	51'54	77'75	49'51	80'88	64'82	63'73	53'13	64'56
		2nd "	66'24	69'15	53'14	66'22	37'60	74'38	61'39	53'46	46'89	56'78
lbs. coal per engine-mile (coal burning engines)—												
182	Coaching <i>lbs.</i>	1st half									46'24	44'45
		2nd "									44'56	46'01
183	Goods <i>lbs.</i>	1st half	50'80	48'68	40'02	48'49	19'51	40'34	42'22	46'00	48'10	60'09
		2nd "	50'73	50'32	42'13	47'06	21'29	39'76	41'76	54'00	44'47	56'53
184	Mixed <i>lbs.</i>	1st half									49'47	57'66
		2nd "									44'98	56'34
lbs. wood per engine-mile (wood burning engines)—												
185	Coaching <i>lbs.</i>	1st half	...	...	...	...	...	...	...	...	...	...
		2nd "	...	...	...	...	...	...	...	...	...	...
186	Goods <i>lbs.</i>	1st half	...	...	...	...	...	...	...	...	...	...
		2nd "	...	...	...	...	...	...	...	...	...	...
187	Mixed <i>lbs.</i>	1st half	...	...	...	...	...	...	...	...	...	...
		2nd "	...	...	...	...	...	...	...	...	...	...
Average gross weight of trains—												
188	Coaching <i>Tons</i>	1st half	178'90	166'52	216'72	238'60	63'68	165'06	209'49	182'14	163'59	125'07
		2nd "	170'09	163'76	186'80	213'80	21'96	171'76	205'08	156'90	152'96	131'07
189	Goods <i>Tons</i>	1st half	428'54	317'16	173'36	353'34	72'04	316'72	313'40	382'00	513'86	450'77
		2nd "	415'79	480'38	297'27	370'80	55'79	414'85	317'02	322'71	518'62	345'31
190	Mixed <i>Tons</i>	1st half	222'87	234'80	150'24	339'85	68'95	214'33	239'28	...	284'28	264'32
		2nd "	223'13	247'73	174'45	315'55	43'07	193'38	236'84	...	259'74	308'89
Average through speed of trains—												
191	Coaching <i>Miles per hour</i>	1st half	20'40	19'07	16'00	25'69	...	28'73	22'37	25'41	20'37	22'86
		2nd "	20'30	19'07	20'00	25'69	...	28'22	22'38	25'81	20'41	22'86
192	Goods <i>Miles per hour</i>	1st half	12'70	15'00	12'00	10'87	...	9'57	11'78	9'75	10'16	10'81
		2nd "	12'00	15'00	14'00	10'87	...	12'40	11'76	10'13	10'23	10'81
193	Mixed <i>Miles per hour</i>	1st half	18'00	14'39	14'00	17'31	12'08	17'11	15'75	15'89	14'76	13'85
		2nd "	17'40	14'30	15'00	17'31	12'50	19'12	16'04	16'43	14'54	13'85
FROM APPENDIX II.												
194	Average mileage per diem of coaching vehicles, including brakes. <i>Miles</i>	1st half	264,104	44,636	8,584	103,944	667	95,557	268,060	221,425	78,164	15,953
		2nd "	275,421	45,209	9,304	101,399	532	92,475	271,645	235,371	73,800	15,664
195	Goods ditto ditto <i>Miles</i>	1st half	948,962	67,660	4,928	184,592	1,114	149,395	521,328	790,960	136,250	53,243
		2nd "	846,777	1,12,155	13,055	147,027	723	125,442	457,293	491,805	96,480	49,626
FROM APPENDIX V.												
Average age of sleepers—												
196	Wood <i>Years</i>	1st half	11'38	8'50	12'49	7'96	2'50	10'06	8'06	17'00	8'24	15'00
		2nd "	10'94	8'50	12'87	8'31	6'00	10'37	8'32	17'00	8'44	...
197	Iron <i>Years</i>	1st half	10'20	8'50	...	18'17	...	16'38	13'90	12'25	12'43	19'00
		2nd "	19'89	9'00	...	18'66	...	13'88	13'92	12'75	12'88	...
Percentage of removals—												
198	Wood <i>Per cent.</i>	1st half	4'64	7'57	3'06	2'64	...	0'16	1'58	5'17	4'35	11'16
		2nd "	3'94	2'57	0'93	0'69	...	0'16	3'38	5'76	3'95	...
199	Iron <i>Per cent.</i>	1st half	1'50	2'26	...	1'43	...	4'22	5'48	0'10	0'59	1'51
		2nd "	1'95	0'49	...	0'26	...	5'84	4'61	0'17	11'03	...

* The through speed of express goods trains is 17'10 miles per hour.

† Denham Olpherts' sleepers only.

‡ Total iron and steel sleepers.

§ Bombay, Baroda and Central India railway only.

|| Indian Midland railway only.

DIX 46—concluded.

Appendix 46.
Analysis.

(by systems) during each half-year of 1902—concl'd.

AS APPENDICES TO THE ANALYSIS,
prepared by the railways not shown.

3' 3 1/2"													GAUGE.	Serial number.
10 (a) to (c)	11 (b) to (d)	14	16	17 (e) & (h)	18 (g) to (k)	18	19	20	9 (c)	21	22	23	Class. No.	
Madras.	Eastern Bengal.	Assam-Bengal.	Bengal and North-Western.	Rohilkund and Kumaon.	Rajputana-Malwa.	Jodhpur-Bikaner.	Udaipur-Chitor.	Bhavnagar-Gondal-Jamtgad-Porbandar.	Hyderabad Godavari Valley.	Southern Mahratta.	South Indian.	Burma.	Calendar year 1902 by half-years.	
232	114	37	169	30	433	40	3	29	35	215	203	202	1st half	180
249	115	41	175	30	438	44	3	28	43	230	199	205	2nd "	
65'13	66'21	57'94	82'37	74'85	51'29	70'39	50'29	54'86	73'55	51'72	51'18	63'20	1st half	181
66'79	67'44	66'22	73'11	67'99	41'32	59'96	52'10	46'37	54'94	47'67	54'72	60'79	2nd "	
													1st half	182
													2nd "	
45'68	31'58	31'80	31'09	...	35'66	36'39	31'91	29'52	36'56	31'01	28'83	34'91	1st half	183
46'76	35'96	34'67	29'50	...	33'29	34'64	29'64	25'07	35'61	32'43	29'64	32'22	2nd "	
													1st half	184
													2nd "	
...	1st half	185
...	...	...	...	...	...	...	...	...	...	...	...	...	2nd "
...	67'40	74'48	1st half	186
...	...	...	...	68'33	...	...	...	...	...	75'14	...	...	2nd "
...	1st half	187
...	...	...	...	...	...	...	...	...	...	...	...	...	2nd "
149'75	113'84	153'20	142'35	§	107'64	136'16	...	76'64	104'55	88'40	80'45	122'35	1st half	188
149'07	88'45	123'51	133'22	§	103'70	81'81	...	73'42	116'58	95'81	79'42	132'56	2nd "	
350'13	227'47	91'10	164'46	§	251'85	173'09	...	173'19	166'30	280'22	156'81	178'30	1st half	189
320'79	247'88	105'46	147'78	§	242'04	150'81	...	173'54	161'31	273'18	134'46	175'56	2nd "	
312'11	132'82	170'39	156'02	§	142'28	122'65	172'68	146'91	147'16	204'86	156'01	166'74	1st half	190
254'61	129'46	188'92	136'15	§	137'07	107'69	148'55	137'89	136'76	206'60	154'63	174'40	2nd "	
21'25	19'28	...	17'00	...	19'24	20'51	...	16'41	18'00	18'24	1st half	191
21'25	19'28	...	17'00	...	19'35	...	...	20'53	...	16'41	18'00	18'24	2nd "
10'23	11'16	...	9'50	9'98	9'31	10'52	...	10'89	9'80	7'32	9'50	11'05	1st half	192
9'09	11'16	...	9'50	9'98	9'22	10'38	...	10'96	9'80	7'32	9'80	11'05	2nd "	
10'27	12'50	11'62	12'70	12'96	14'33	12'84	14'76	11'82	12'42	11'63	12'00	12'71	1st half	193
10'27	12'50	11'62	12'10	13'10	14'40	12'67	14'76	11'64	14'07	11'63	12'00	12'71	2nd "	
87,218	46,909	22,562	109,565	14,353	142,541	23,133	1,913	18,107	14,685	71,215	94,269	97,942	1st half	194
87,134	50,223	22,795	107,672	15,211	149,805	24,574	1,951	17,608	20,434	73,804	100,491	91,502	2nd "	
180,195	83,455	18,150	170,801	26,239	455,517	39,423	1,806	18,662	28,263	141,357	96,375	162,094	1st half	195
154,597	101,989	28,354	123,762	19,749	291,343	24,081	1,219	11,473	23,026	133,576	91,100	135,353	2nd "	
...	†	††	...	1st half	196
3'57	12'00	...	9'68	10'72	9'30	9'50	5'99	11'49	...	12'50	12'37	11'28	2nd "	
4'00	11'50	...	1'03	10'78	9'50	9'00	...	11'92	...	12'50	12'51	11'61	1st half	197
29'70	†15'00	...	...	...	†15'50	...	...	29'12'21	...	29'14'50	15'81	6'36	2nd "
20'06	†15'00	†16'00	1'00	29'15'00	14'17	6'26	1st half	198
1'23	2'57	0'46	1'60	1'83	4'62	9'19	0'23	1'94	0'11	1'81	7'28	1'37	2nd "	
1'36	3'96	0'62	1'14	3'99	5'30	9'52	0'12	0'61	0'13	2'12	1'63	1'38	1st half	199
0'22	†26'50	...	...	...	†1'09	...	...	0'02	9'10	29'0'48	0'24	...	2nd "
0'18	†3'80	...	...	...	†0'20	...	...	...	...	28'1'73	0'19	...	...

* Excludes North East line.

† Total iron and steel.

‡ Bengal and North-Western (Company's section) only.

§ Information not furnished.

¶ Jodhpur railway only.

‡ Total wood and steel sleepers.

** Steel sleepers.

†† South Indian railway only.

HISTORY

OF

OPEN LINES OF RAILWAYS AND OF LINES UNDER CONSTRUCTION OR SANCTIONED FOR COMMENCEMENT ON THE 31ST DECEMBER 1902, ALPHABETICALLY ARRANGED.

NOTE.—*For particulars relating to railways under survey or projected, see the "Histories of Railway Projects corrected up to the 30th June" each year, which is issued as a separate publication by the Government of India.*

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main	Sub.				Miles.	Miles.
II	(a)	AGRA-DELHI CHORD— (5' 6" gauge.)				
		Agra to Delhi	15-9-98	*1-4-04	121'16	
		TOTAL, AGRA-DELHI CHORD .	...	...	...	121'16
8	(a)	AHMEDABAD-DHOLKA— (See Bombay, Baroda and Central India system, page 288).				
8	(i)	AHMEDABAD-PARANTIJ— (See Bombay, Baroda and Central India system, page 286.)				
7	(c)	AMRAOTI— (See Great Indian Peninsula system, page 330.)				

* Probable date of opening.

DIX 47.

Appendix 47.
History of railways.

on the 31st December 1902, alphabetically arranged.

REMARKS.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
14	(a)	ASSAM-BENGAL SYSTEM— (3' 3½" gauge.)				
		<i>Main line—</i>				
		Chittagong Port to Chittagong	28-5-91	3-11-95	1'73	425'59
		Chittagong to Feni		1-7-95	56'90	
		Feni to Comilla		1-7-95	39'10	
		Comilla to Akhaura		1-1-96	29'41	
		Akhaura to Karimganj*		*4-12-96	115'00	
		Karimganj to Badarpur*		*4-12-96	12'00	
		Badarpur to Damchara		23-4-99	18'50	
		Lumding to Nazira		1-1-01	142'20	
		Nazira to Lakwa		15-11-01	10'75	
		Total Main line	
		<i>Branches—</i>				
		Laksam to Chandpur	28-5-91	1-7-95	31'62	163'62
		Badarpur to Katta Khal		13-6-98	6'27	
		Katta Khal to Silchar		8-11-98	12'35	
		Gauhati to Gauhati Ghât*		*1-1-00	1'22	
		Gauhati to Jamuna Mukh*		*1-1-97	74'50	
		Jamuna Mukh to Lanka‡		‡2-1-99	19'35	
		Lanka to Lumding (temporary station)		1-3-99	15'21	
		Lumding (temporary station) to Lumding		20-2-00	3'10	
		Total Branches	
		TOTAL OPEN MILEAGE, ASSAM-BENGAL	589'21
		<i>Lines under construction or sanctioned for construction—</i>				
		ASSAM-BENGAL—				
		Damchara to Lumding	28-5-91	†1-10-03	§100'74	
		Lakwa to Bhojo	28-5-91	1-2-03	12'75	
		Bhojo to Tinsukia		1-3-03	41'75	
14	(b)	NOAKHALI (BENGAL)—				
		Laksam to Noakhali	6-4-01	15-5-03	30'00	190'19
		Noakhali to Ichakhali		†30-6-04	4'95	
		Total Lines under construction	
		GRAND TOTAL, ASSAM-BENGAL SYSTEM	779'40

* Closed for repairs after the earthquake of 12th June 1897 and

Akhaura to Srimangal
Srimangal to Kalaura
Kalaura to Karimganj
Karimganj to Badarpur
Gauhati to Gauhati Ghat
Gauhati to Jamuna Mukh

† Probable dates of opening.

‡ Owing to the bad state of the road due to excessive rains, this length was closed for public traffic on

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Assam-Bengal railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(a) Assam-Bengal railway (3' 3½" gauge)	589·21	155·24	744·45
(b) Noakhali (Bengal) railway (3' 3½" gauge)	...	34·95	34·95
Total	589·21	190·19	779·40

2. Assam-Bengal railway—

(a) The Assam-Bengal railway is worked under the following contract:—

Contract of—26th April 1892 (between the Secretary of State and the Assam-Bengal Railway Company) for construction and working.

(b) The general conditions of the contract are as follows:—

(i) *Government aid.*—Government guarantee interest in sterling at 3 per cent. on the Company's share capital of £ 1,500,000. Land was provided free of charge.

(ii) *Terms of contract.*—The contract provides that the Company raise £1,500,000, and that any further money required, be either supplied by the Government or raised by the Company under guarantee. Subject to the provisions of the contract, all land and everything constructed or to be constructed thereon, and generally all property, whether real or personal, (with the exception of moneys paid against interest on the Company's share capital and sums applied from net earnings), are the property of Government, but are subject to use and enjoyment by the Company during the continuance of the contract.

(iii) *Currency of contract.*—Government may determine the contract, by giving 12 months' previous notice, on the 31st December 1921 or at the end of any succeeding 10th year. Government may also determine the contract at any time, on six months' notice, if the Company fail to fulfil their obligations or the line is worked at a loss. On the determination of the contract, the Company are to hand over to Government the railway and all its belongings of every description, on repayment of the amount of the par value of the share capital paid by the Company to Government.

(iv) *Power of Company to surrender contract.*—Nil.

(v) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net earnings to be applied in payment of—
the equivalent in rupees of interest paid on debenture capital; provided that if the Company's share capital is not less than $\frac{3}{4}$ ths of the total capital expenditure, the rate of interest recovered under this sub-head (on debentures issued previous to the 30th June 1898) shall not exceed the rate for the time being applicable to the Company's share capital;
the equivalent in rupees of guaranteed interest paid to the Company in respect of share capital; interest on the capital contributed or deemed to be contributed by Government, at the same rate as the guarantee for the time being on the Company's capital. But if the Government capital exceed $\frac{1}{4}$ ths of the total capital expenditure for the time being, the rate of interest on the amount of the excess to be subject to agreement; and
the residue to Government and the Company in the ratio of their respective capital expenditure.

(vi) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

(vii) *General remarks.*—As it was considered that railway communication with Bengal and Assam was a matter of urgency, the construction of the Assam-Bengal railway as a State line was sanctioned in May 1891. The Assam-Bengal Railway Company was subsequently formed in England in April 1892 and absorbed the Assam-Bengal State railway.

3. Noakhali (Bengal) railway—

(a) The Noakhali (Bengal) railway is worked under the following contracts:—

Contract of—27th March 1901 [between the Secretary of State and the Noakhali (Bengal) Railway Company] for construction of the line.

27th March 1901 [between the Assam-Bengal Railway Company, and the Noakhali (Bengal) Railway Company] for working the line.

reopened as follows:—

.	.	.	.	.	.	20-7-97
.	.	.	.	.	.	24-7-97
.	.	.	.	.	.	8-8-97
.	.	.	.	.	.	18-10-97
.	.	.	.	.	.	9-1-99
.	.	.	.	.	.	9-1-99

and from 2nd October 1899 and re-opened on and from 1st January 1900.

§ Of this, 343 miles will be laid with double track.

Appendix 47.
History of railways.

History of railways constructed and in progress.

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		ASSAM-BENGAL SYSTEM—concluded.				
10	(f)	AZHIKAL-MANGALORE— (See Madras system, page 350.)				

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

3. Noakhali (Bengal) railway—concluded.

(b) The general conditions of the contracts are as follows:—

- (i) *Government aid.*—If the net earnings in any half-year are less than Rs. 30,000, Government allow as rebate a sum not exceeding one-half of the gross earnings of such half-year of the Assam-Bengal railway from interchanged traffic (except stores) as will, together with the net earnings of the Company, make up an amount equal to Rs. 30,000. Land also has been provided free of charge.
- (ii) *Terms of contract.*—The Company's share or stock capital is limited to £130,000, which cannot be increased without the sanction of the Secretary of State and of the working agency; but the Company can raise money at a reasonable rate of interest for *bond-fide* temporary purposes.
- (iii) *Currency of contract.*—The Secretary of State may, by giving notice and by paying to the Company in India the value of the railway, works, plant, machinery and stores, determine the contract, if the Company fail to comply with their obligations under the contract. The Secretary of State may, by giving twelve months' notice, determine the contract, either on the 31st December 1902 or on the 31st December in the last year of any subsequent period of ten years, on paying to the Company in India a sum equal to twenty-five times the average yearly net earnings during the three years immediately preceding, provided that the amount so payable shall not exceed by more than 20 per cent. the balance on the Capital Account of the Company, or be less than such balance.
- (iv) *Terms of working.*—The gross earnings are to be applied in payment—
- (1) to the credit of the Provident Institution of the Assam-Bengal railway of a sum equal to one-half of 1 per cent. of the total gross earnings;
 - (2) of Rs. 25 per mile open per week of the new railway maintainable by the Company; and of Rs. 35 per mile open per week of the new railway not maintainable by the Company, which includes any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; and
 - (3) of all moneys paid or payable to the Secretary of State for the supervision of such mileage during such half-year;
- the residue to be paid over to the Company as the net earnings of the new railway.
- (v) *Rates and fares.*—The rates and fares to be fixed from time to time by the Secretary of State after consultation with the working agency, within the maxima and minima for the time being in force on the Assam-Bengal railway.

4. Details of construction—

- (a) *Permanent-way.*—The line is laid with 50lb. flat-footed steel rails on sal and pyinkado and partly on bastard sal, Uageshur and Jara wood sleepers.
- (b) *Ballast.*—The ballast consists of broken brick, stone and laterite.
- (c) *Tunnels.*—The following are the tunnels of 500 feet length and over:—tunnel between Bihera and Damchara, 671 feet; tunnel between Harangajao and Jatinga, 596 feet; tunnel between Harangajao and Jatinga, 815 feet; tunnel between Harangajao and Jatinga, 843 feet; tunnel between Hasanghaju and Nerebangala, 1,907 feet; tunnel between Hasanghaju and Nerebangala, 500 feet; tunnel between Hasanghaju and Nerebangala, 880 feet; and tunnel between Mupa and Langting, 760 feet. There are 14 other tunnels, varying from 156 feet to 487 feet in length, aggregating 4,583 feet. There are 36 tunnels in all including cut and covers on the railway.
- (d) *Bridges.*—The following are the important bridges of 1,000 feet length and over:—Barak (between Badarpur and Bihera), 8 spans of 60 feet; 1 span of 276 feet; 1 span of 250 feet and 1 span of 224 feet (1,368 feet); Kopili (between Jagiroad and Dharamtul), 1,380 feet; and Dihing (between Naharkatiya and Bordubi), 1,050 feet. Besides these there are many high viaducts on the Hill section.
- (e) *Fencing.*—The line is fenced between Chittagong Port and Silchar, Laksam and Chandpur, Gauhati Ghât and Gauhati and half a mile from Gauhati towards Lunding.
- (f) *Curves.*—On the Hill section the curves vary from 477 feet to 955 feet in radius. On the rest of the line, there are no curves under a radius of 1,000 feet.
- (g) *Gradients.*—Of a total open mileage on the system of 589.23 miles, 0.57 mile is on the ruling gradient of 1 in 65.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway:	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
25	(a)	BARSI LIGHT— (2' 6" gauge.)				
		Barsi Junction to the town of Barsi	1-8-95	1-3-97	21.59	
		TOTAL, OPEN MILEAGE				21.59
		<i>Lines under construction or sanctioned for construction—</i>				
		Barsi Junction to Pandharpur	6-1-98	} ... }	30.67	
		Barsi town to Tadwala	29-11-00		26.70	
		Total, Lines under construction				57.37
		TOTAL, BARSI LIGHT				78.96
1	(i)	BELLARY-RAYADRUG— (See Southern Mahratta system, page 396.)				

as the 31st December 1902, alphabetically arranged.

REMARKS.

1. Barsi Light railway—

(a) The Barsi Light railway is worked under the following contracts:—

Contract of—1st August 1895 (between the Secretary of State and the Barsi Light Railway Company) for construction, maintenance and working the line from Barsi Junction to Barsi town.

26th August 1902 (between the Secretary of State and the Barsi Light Railway Company) for construction and working of the extensions.

(b) The general conditions of the contracts are as follows:—

(i) *Government aid.*—The Company is allowed the use of part of the road between Barsi Town and Barsi Junction station only. Land is provided free for the extensions.(ii) *Currency of contracts.*—Government may determine the contract on the 1st January 1924, or at the expiration of any subsequent period of 10 years, by giving 12 months' notice. If the contract is so determined, Government are to pay the Company in England in sterling an amount equal to the total paid-up capital, so far as such capital was expended with the authority of the Secretary of State.(iii) *Power of Company to surrender contracts.*—Nil.(iv) *Terms of working.*—The line is worked by the owning Company.(v) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.(vi) *General remarks.*—The extensions from Barsi Junction to Paudharpur and Barsi Town to Tadwala were sanctioned by the Secretary of State on the 6th January 1898 and 29th November 1900, respectively. Only the earthwork has been thrown up, as a famine work.

2. Details of construction—

(a) *Permanent-way.*—Steel flat-footed rails, 35 lb. to the yard, on steel sleepers.(b) *Ballast.*—Partly of broken stone and partly of hard moorum.(c) *Fencing.*—An efficient fencing is provided for a short distance on either side of level crossings, at bridges and round Barsi Junction and Barsi Town stations.(d) *Curves.*—There are four curves of less than 1,000 feet radius.(e) *Gradients.*—Of a total open mileage of 21.59 miles, 0.61 mile is on the ruling gradient of 1 in 90.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	
Main.	Sub.				Miles.	Miles.	
		BENGAL AND NORTH-WESTERN SYSTEM— (3' 3½" gauge.)					
16	(a)	COMPANY'S SECTION—					
		<i>Main line—</i>					
		Sonepur to Mankapur	18-5-82	15-1-85	218'50	238'60	
		Mankapur to Nawabganj		2-4-84	14'00		
		Nawabganj to Ajodhya		1-12-84	6'10		
		<i>Loop line—</i>					
		Sonepur to Bunwarchak	18-5-82	15-1-85	9'34		
		Total Main and Loop lines . . . . .				...	247'94
		<i>Branches—</i>					
		<i>Uska Bazar branch—</i>					
		Gorakhpur to Uska Bazar	3-8-85	15-12-86	39'58		
		<i>Naipalganj Road branch—</i>					
		Mankapur to Bahraich	18-5-82	2-4-84	55'00	88'98	
		Bahraich to Naipalganj Road		15-12-86	33'98		
		<i>Revelganj branch*—</i>					
		Chupra to Revelganj	Nov. 1889	15-4-91	7'34	11'05	
		Revelganj to Manjhi Ghat . . . . .	...	1-4-99	3'71		
		<i>Bahramghat branch*—</i>					
		Gonda to Colonelganj	Nov. 1889	29-10-91	17'75	28'05	
		Colonelganj to Jarwal Road		1-2-92	10'30		
		<i>Burhwal branch*—</i>					
		Jarwal Road to the west bank of the Gogra river	10-1-95	18-12-96	2'63	10'02	
		Gograghat to Ganeshpur		24-12-98	3'27		
		Chawkaghat to Burhwal		24-11-96	4'12		
		<i>Tulsipur branch*—</i>					
		Gonda to Balrampur	10-1-95	15-12-96	22'00	41'00	
		Balrampur to Tulsipur		1-6-98	19'00		
		<i>Katarnian ghat branch*—</i>					
		Nanpara to Mohinpurwa	10-1-95	15-12-96	15'00	42'08	
		Mohinpurwa to Katarnian ghat		25-3-98	27'08		
		<i>Turtipur branch*—</i>					
		Bhatni to Turtipur	10-1-95	15-12-96	17'14	29'91	
		Salimpur to Barbaj		1-12-97	12'77		
		<i>Ganges-Gogra Doab lines†—</i>					
		Turtipur to Mau . . . . .	...	8-6-98	28'95	209'14	
		Mau to Benares . . . . .	...	15-3-99	58'06		
		Mau to Azamgarh . . . . .	...	8-6-98	27'15		
		Kopaganj Road to Ballia . . . . .	...	15-3-99	37'61		
		Ballia to Chand-Deera Ghat . . . . .	...	12-5-99	29'00		
		Aunrihar to Ghazipur . . . . .	...	15-3-99	28'37		
		Total Branches . . . . .					...	499'81
		TOTAL OPEN MILEAGE, COMPANY'S SECTION . . . . .				...	747'75
		Carried over . . . . .				...	747'75

* † Refer to passages under "Remarks," see opposite page.

REMARKS.

1. Lines comprising system.—The Bengal and North-Western railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(a) Bengal and North-Western railway (3' 3½" gauge)	538·61	...	538·61
(b) Ganges-Gogra Doab extensions (3' 3½" gauge)	209·14	102·11	311·25
(c) Tirhoot State railway (3' 3½" gauge)	516·89	30·47	547·36
(d) Sagauli-Raxaul railway (3' 3½" gauge)	18·09	...	18·09
Total	1,282·73	132·58	1,415·31

2. Bengal and North-Western and Tirhoot State railways—

(a) The Bengal and North-Western and Tirhoot State railways are worked under the following contracts :—
*Contracts of—*12th December 1882.—Bengal and North-Western Railway Company's principal contract.

22nd February 1886.—Contract modifying that of 1882.

18th July 1890.—Contract for the taking over and working of the Tirhoot State railway.

19th December 1894.—Contract supplemental to those of 1882, 1886 and 1890, providing for the extensions marked* (on the opposite page) of the Company's railway and for the exercise of running powers over the metre gauge (3' 3½") link from Burhwal to Cawnpore.

12th December 1895.—Contract modifying that of 1890.

23rd July 1896.—Contract supplemental to those of 1882, 1886, 1890, 1894 and 1895, known as the Ganges-Gogra Doab contract, for the extensions marked† (on the opposite page) of the Company's railway.

(b) The general conditions of the contracts are as follows :—

(i) *Government aid.*—Land alone was provided free of charge.

(ii) *Currency of contracts.*—

Bengal and North-Western railway contract.—The contracts of 1882, 1886 and 1894, *vis.*, those for the working of the Bengal and North-Western railway proper are current for a period of 99 years and terminate by effluxion of time on the 31st December 1981, when the line and all its appurtenances become the property of Government by payment to the Company of the value of the rolling-stock, moveable machinery, stores, etc. Government may, however, determine the contract after 30 years (*i.e.*, on the 31st December 1912) or 50 years (*i.e.*, on the 31st December 1932) on one year's previous notice of intention to purchase, paying 25 times the average net earnings (after deducting from such net earnings the share of surplus profits over 6 per cent. to which Government *would have been* entitled under the contract of 12th December 1882) for the five years preceding the purchase. Government may also determine the contract at any time, at six months' notice, if the Company fail to observe their obligations, on paying the value of rolling-stock, stores, etc., and fair value of line, less value of same treated as a reversionary sum absolutely payable on the 31st December 1981.

Ganges-Gogra Doab contract.—The contract of 1896, *vis.*, that covering the Ganges-Gogra Doab lines (marked †) runs concurrently with those of 1882, 1886 and 1894, but in the event of Government exercising the right of purchase in 1912 or 1932, the amount to be paid is the actual outlay on the line as shown in sterling only, without any premium.

Tirhoot State railway contract.—The contract of 1890, *vis.*, that for working the Tirhoot State railway, terminates on the 31st December 1904. If the original contract with the Company, dated the 12th December 1882, terminates for any reason prior to the expiry of the term of the Tirhoot contract, the latter also, *ipso facto*, terminates at the same time. Government may also terminate the contract at any time after six months' notice, if the Company fail to observe their obligations. On the determination of the contract, Government resumes possession of the State railway. Any capital sums which may have been raised by Government, and expended on the Company's lines, or which may have been raised and expended by the Company on the State railway, shall be considered as debt due from the Company and Government, respectively.

(iii) *Power of Company to surrender contracts.*—Nil.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		BENGAL AND NORTH-WESTERN SYSTEM—contd.				
		Brought forward	...	...	...	747'75
16	(a)	<i>Lines under construction or sanctioned for construction—</i>				
		<i>Ganges-Gogra Doab lines—</i>				
		Azamgarh to Shahganj†	18-5-97	14-2-03	34'81	
		Phepna to Ghazipur†	23-12-01	10-3-03	31'16	
		Aunrihar-Jaunpur†	1-11-02	...	36'14	
		Total Lines under construction, Company's section.	...	...	...	102'11
		GRAND TOTAL, COMPANY'S SECTION	...	...	...	849'86
16	(b)	TIRHOOT STATE RAILWAY SECTION—				
		<i>Main line—</i>				
		Semaria ghât to Dalsinghsarai	3-2-82	1-5-83	22'55	
		Dalsinghsarai to Samastipur	Feb. '74	1-11-75	14'75	
		Samastipur to Mozufferpur	6-1-76	24-2-77	29'79	
		Mozufferpur to Motiharee	8-7-80	1-2-83	49'57	
		Motiharee to Bettiah		20-12-83	27'00	
		Samastipur to Durbhanga	Feb. '74	1-11-75	23'00	
		Durbhanga to Jhanjharpur	8-7-80	1-2-83	24'00	
		Jhanjharpur to Ghoghardiha	19-10-83	8-4-86	13'00	
		Ghoghardiha to Nirmala	16-2-85	8-4-86	6'92	
		Nirmala to Bhaptiahi		15-11-87	10'00	
		Bhaptiahi to Pratapganj		1-10-88	14'00	
		Pratapganj to Khandwa ghât	...	14-11-90	8'00	
		Total Main line	...	...	...	242'58
		<i>Branches—</i>				
		<i>Bairagnia branch—</i>				
		Durbhunga to Sitamarhi	...	1-7-90	42'00	
		Sitamarhi to Riga	...	1-1-91	6'00	
		Riga to Dheng	...	1-7-91	9'00	
		Dheng to Bairagnia (fair weather line)	23-10-91	1-3-92	3'51	
		<i>Sonepore branch—</i>				
		Mozufferpore to Hajeeepore	6-2-83	26-10-84	31'25	
		Hajeeepore to Sonepore	19-10-83	1-8-87	3'36	
		<i>Hajeeepore branch—</i>				
		Hajeeepore to Hajeeepore ghât	...	26-10-84	1'89	
		Hajeeepore branch loop line	...	2-11-00	3'31	
		<i>Hajeeepore-Katihar extension—</i>				
		Hajeeepore to Bachhwara	...	1-4-00	44'46	
		Barauni Junction to Thana Bihpur	...	1-3-00	66'17	
		Thana Bihpur to Katareah	...	7-3-01	17'50	
		Katareah to Kursela (Kosi bridge and approaches)	...	10-7-02	3'75	
		Kursela to Katihar	...	7-3-01	23'75	
		<i>Bhagalpur branch—</i>				
		Thana Bihpur to Barari Ghât	...	16-12-01	11'36	
		<i>Monghyr branch—</i>				
		Sahebpoore Kamal to Monghyr Ghât	...	7-3-00	7'00	
		Total Branches	...	...	...	274'31
		TOTAL OPEN MILEAGE, TIRHOOT STATE RAILWAY SECTION	...	...	...	516'89
		<i>Line under construction or sanctioned for construction—</i>				
		<i>Jainagar branch—</i>				
		Sakri to Jainagar.	1-6-99	*	30'47	
		Total Line under construction, Tirhoot section	...	...	...	30'47
		GRAND TOTAL, TIRHOOT STATE RAILWAY SECTION.	...	...	...	547'36
6	(c)	SAGAUJI-RAXAUL—				
		Sagauli to Raxaul.	...	1-3-99	18'09	18'09
		GRAND TOTAL, BENGAL AND NORTH-WESTERN SYSTEM	...	...	...	1,415'31

* Commencement of work not yet authorised.

† Refers to passage under "Remarks" on preceding page.

REMARKS.

2. Bengal and North-Western and Tirhoot State railways—continued.

(b) General conditions—concluded.

(iv) *Terms of working.*—The Company's railway and the Tirhoot State railway are worked as one concern, a joint account of working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of the open system in each half-year, and payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision) and net earnings being kept, the latter being applied in the order stated—

In payment of any further contribution (beyond that chargeable to working expenses) to the Company's Provident Institution;

In payment of interest at 4 per cent. on Rs. 5,17,12,781, being the capital raised and expended by the Company;

In payment of interest at 4 per cent. on Rs. 4,58,49,640, being the capital supplied by Government; and

In payment of the residue to Government and the Company in the ratio of their respective shares of capital, subject to the further payment to the Company of 5 per cent. of the Government's share of the residue as compensation for working the Tirhoot State railway for Government.

(v) *Rates and fares.*—On the Company's section, the Company may, with the approval of Government, fix rates and fares. On the Tirhoot section, certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

(vi) *General remarks.*—The Bengal and North-Western railway has direct communication with the railway system of India at only three points on its system, *vis.*, at Burhwal, Benares and Katihar. At all other points, communication is interrupted by rivers. Communication across the Ganges is maintained with the East Indian railway at the following ferries: between Ghazipur and Tarighât (ordinary steam ferry); between Palezaghât and Digha Ghât (ordinary steam ferry); between Semaria Ghât and Mokameh Ghât (wagon ferry); and between Barari Ghât and Bhagalpur Ghât (wagon ferry). Eventually a branch between Bhagalpur Ghât and the East Indian railway at Bhagalpur will connect the Bengal and North-Western and East Indian railways *via* the Bhagalpur ferry. Between Khanwa Ghât on the Kosi extension of the Tirhoot State railway and Anchara Ghât on the Kosi branch of the Eastern Bengal State railway, there is a country boat ferry worked by the Eastern Bengal State railway. There is a bridge-of-boats between Ajodhya and Ajodhya Ghât during the dry weather months, but during the rains this bridge is removed and replaced by a steam ferry. The Tirhoot State railway was worked by State agency until 1890, when it was leased to the Bengal and North-Western Railway Company.

3. Sagauli-Raxaul railway—

(a) The Sagauli-Raxaul railway is worked under the following contracts:—

Contracts of—31st October 1896 (between the Secretary of State and the Sagauli-Raxaul Railway Company) for construction and working.

5th June 1899 (between the Secretary of State and the Bengal and North-Western Railway Company) for working and maintenance of the Sagauli-Raxaul railway.

(b) The general conditions of the contracts are as follows:—

(i) *Government aid.*—Land alone was provided free of charge.

(ii) *Currency of contract.*—Government may determine the contract either on the 31st December 1917 or on the 31st December in the last year of any subsequent period of 10 years, paying 25 times the average net earnings for the three years preceding the purchase.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—Forty per cent. of the gross earnings to be retained by the Bengal and North-Western Railway Company for working and maintenance (which include any single item of capital expenditure not exceeding Rs. 200 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) and 10 per cent. for supervision on the cost of Government works at Sagauli. The balance is payable to the Branch Company.

(v) *Rates and fares.*—To be arranged between Government and the Company within the maxima and minima in force on the Tirhoot section.

4. *General Remarks.*—The Bengal and North-Western railway has running powers over the following sections of foreign lines:—

Cawnpore-Burhwal, 3' 3½" gauge link, 79.60 miles; 1.81 miles of 3' 3½" gauge track of the Oudh and Rohilkhand railway from Benares Cantonment to Benares City, and 3.66 miles of the Lucknow-Bareilly State railway between Daliganj and Aishbagh.

on the 31st December 1902, alphabetically arranged.

REMARKS.

5. Details of construction—

(a) Permanent-way—

Company's section.—The main line between Sonapur and Burhwal is laid with 50 lb. steel rails on sâl sleepers. The rest of the line north of the Gogra is laid with 41½ lb. steel rails and mostly sâl sleepers. The Ganges-Gogra Doab lines, with the exception of the Aunrihar-Ghazipur branch, which is laid with 50 lb. steel rails, is laid with 41½ lb. steel rails on sâl sleepers.

Tirhoot section.—Between Barauni and Mozufferpur, the line was originally laid with 41½ lb. steel rails on sâl sleepers; it has been relaid with 50 lb. rails. The section between Sonapur and Mozufferpur which was also originally laid with 41½ lb. steel rails is being renewed with steel rails of 50 lb. section. The section between Samastipur and Durbhanga originally laid with 41½ lb. steel rails, has partly been relaid with 50 lb. steel rails. There are still about 15 miles of 41½ lb. rails on this section. The remainder of the line is laid partly with 41½ lb. steel rails, partly with 50 lb. iron rails, the latter being entirely on the Bairagnia branch. The 50 lb. iron rails are laid on sâl sleepers, and the remainder partly on sâl and pyinkado and partly on Denham Olphert's iron sleepers. The Hajipur-Katihar extension is laid with 50 lb. steel rails on sâl and pyinkado sleepers.

Sagauli-Raxaul branch.—The permanent-way consists of 41½ lb. steel rails on sâl sleepers.

(b) *Ballast.*—The system is ballasted throughout.

(c) *Bridges.*—The important bridges of 1,000 feet length and over are as follows: Rapti (between Jagat Bela and Sahjanwa), 9 spans of 150 feet (1,445 feet); Elgin (between Gograhat and Ganeshpur), 17 spans of 200 feet (3,695 feet including abutments); Turtipur* (between Mathuri and Bilthara Road), 18 spans of 200 feet; Gunduck (between Hajeeopore and Sonapore), 8 spans of 250 feet (2,176 feet); and Kosi (between Katareah and Kursela), 15 spans of 200 feet (3,172.60 feet).

(d) *Fencing.*—The Company's section was originally unfenced except in front of villages and at level crossings and near stations, but the main line is in course of being fenced, and about 150 miles have been done. The Tirhoot section, excluding the Hajipur-Katihar extension, is fenced throughout. On the Hajipur-Katihar extension, the section between Hajipur and Khagaria is being fenced, but between Khagaria and Kursela it is unfenced. The Sagauli-Raxaul branch is unfenced.

(e) *Curves.*—On the Company's section, there is only one curve under a radius of 1,000 feet, *vis.*, at Paleza Ghat on the loop line, the length of which is 2,000 feet and radius 900 feet. There are no curves under a radius of 1,000 feet on the Tirhoot section and on the Sagauli-Raxaul branch.

(f) *Gradients.*—Of a total open mileage of 1,282.73 miles on the system, 3.42 miles are on the ruling gradient of 1 in 200.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
3	(a)	BENGAL CENTRAL— (5' 6" gauge.)				
		<i>Main line—</i>				
		Dum-Dum Junction to Dattapukur	} Mar. 1881	2-4-83	14'25	
		Dattapukur to Gobardanga		7-12-83	17'00	
		Gobardanga to Bongong		22-4-84	12'00	
		Bongong to Khoolna		16-2-84	61'26	
		Total Main line . . . . .	...	...	...	104'51
		<i>Branch—</i>				
		Ranaghat to Bongong	March 1881	16-10-82	20'50	
		Total Branch . . . . .	...	...	...	20'50
		TOTAL, BENGAL CENTRAL . . . . .	...	...	...	125'01

REMARKS.

1. Bengal Central railway—

(a) The Bengal Central railway is worked under the following contracts:—

Contracts of—26th July 1881.—Bengal Central railway's principal contract with the Secretary of State.

5th January 1887.—Contract with the Secretary of State for the construction and working of the Bengal Central railway and for future extensions.

(b) The general conditions of the contracts are as follows:—

(i) *Government aid*.—Government guarantee interest at 3½ per cent. in sterling on the Company's share capital for term of contract. Land also was provided free of charge.

Under the original contract (1881), the Company was to receive no financial assistance from the Government beyond the payment of interest on capital during construction (the amount so paid, however, being repayable by the Company, with interest, out of surplus profits after the line had been opened). This contract was superseded by that of 1887.

(ii) *Currency of contract*.—The contract will remain in force until the 31st December 1980. Government may, however, determine it on the 30th June 1905 or any succeeding 10th year on twelve months' notice, or on six months' notice at any time if the Company fail to observe their obligations or the line is worked at a loss. On the determination of the contract by efflux of time or by notice, the Government are to pay the Company the amount of the par value of the share capital paid to Government.

(iii) *Power of Company to surrender contract*.—Nil.

(iv) *Terms of working*.—After deducting working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net earnings, after providing for repayment to Government of interest (if any) on moneys that may be raised by debentures in excess of the original capital of £ 1,000,000, are divided in proportion of three-fourths to the Secretary of State and one-fourth to the Company.

(v) *Rates and fares*.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

(vi) *General remarks*.—The line was worked for the Company by the Eastern Bengal Railway Company from the 16th October 1882 to the 30th June 1884 and then by the Eastern Bengal State Railway Administration until the 1st January 1897, on which latter date the Company itself took over the working.

2. *General remarks*.—The Bengal Central railway has running powers over the following portions of the Eastern Bengal State railway: Dum-Dum Junction to Canal Junction, 1·61 miles; Canal Junction to Calcutta, 2·96 miles; Canal Junction to Chitpore, 2·00 miles; and Calcutta to Kidderpore Docks, 7·31 miles.

3. Details of construction—

(a) *Permanent-way*.—The permanent-way consists of flat-footed steel rails of the Vignole section, 62 lb. to the yard, laid on sleepers of creosoted pine. S&L sleepers are now being used for renewals instead of creosoted pine, and in all curves s&L sleepers have been put in at the joints in place of creosoted pine sleepers, and they have also been put in at the middle of pairs of rails in some of the curves.

(b) *Ballast*.—At first the line was sand-ballasted, brick ballast, however, being used at bridges and level-crossings and in a few short lengths where the soil was bad; but it was subsequently decided to ballast the portion of the line between Dum-Dum Junction and Singhia, including sidings, with brick and this work is completed; also over curves and between Singhia and Khoolna where the earth, of which the embankment is composed, is not very good.

(c) *Fencing*.—The line is fenced throughout; iron gates are provided at level-crossings.

(d) *Curves*.—There are no curves under a radius of 1,000 feet.

(e) *Gradients*.—Of a total length of 125·01 miles, 4·33 miles are on the ruling gradient of 1 in 400.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
12	(a)	BENGAL DOOARS— (3' 3½" gauge.)				
		<i>Main line—</i>				
		East Bank of the Teesta to Dam Dim	May 1891	15-1-93	31'00	
		Total Main line . . . . .	...	...	...	31'00
		<i>Branch—</i>				
		Lataguri to Ramshaihat	May 1891	11-6-93	5'40	
		Total Branch . . . . .	...	...	...	5'40
		TOTAL OPEN MILEAGE, BENGAL DOOARS . . . . .	...	...	...	36'40
12	(b)	BENGAL DOOARS EXTENSIONS.				
		<i>Main line—</i>				
		Mal to Chalsa		1-4-01	5'20	
		Barnes Junction to Baura		20-4-00	28'30	
		Baura to Bhotemari	2-3-98	21-10-00	16'70	
		Bhotemari to Lalmonir Hât		20-11-00	20'80	
		Dam Dim to Oodlabari		1-5-01	3'30	
		Oodlabari to Bagrakote	2-3-98	1-1-02	3'46	
		TOTAL OPEN MILEAGE, BENGAL DOOARS EXTENSIONS . . . . .	...	...	...	77'76
		GRAND TOTAL, OPEN MILEAGE, BENGAL DOOARS . . . . .	...	...	...	114'16
		<i>Lines under construction or sanctioned for construction—</i>				
		<i>Bengal Dooars extensions—</i>				
		Chalsa to Chengmari	2-3-98	1-1-03	15'00	
		Chengmari to Dalgaon	2-3-98	23-3-03	14'00	
		Dalgaon to Madari Hât	2-3-98	*1-4-03	9'80	
		Total Lines under construction . . . . .	...	...	...	38'80
		GRAND TOTAL, BENGAL DOOARS . . . . .	...	...	...	152'96

* Probable date of opening.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Bengal Dooars railway—

(a) The Bengal Dooars railway is worked under the following contracts:—

Contracts of—27th April 1891.—Bengal Dooars railway principal contract.

and March 1898.—Contract supplemental to that of 1891 (for extensions).

27th September 1900.—Supplemental to that of 1898 (extending period of completion of Dam Dim-Bagrakote extension).

7th November 1901.—Supplemental to those of 1898 and 1900 (extending period for completion of Malbazar-Hantupara extension).

(b) The general conditions of the contracts are as follows:—

(i) *Government aid.*—Land only was provided free of cost.

(ii) *Currency of contracts.*—On the 31st December 1919, and thereafter at intervals of seven years Government have power, by giving twelve months' previous notice, to terminate the contract and take over the line on payment to the Company, in the case of the main line, of one and two-fifths of the invested capital and capital liabilities, and, in the case of the extensions, of a sum equal to .25 times the average net earnings during the last preceding five years, but not exceeding by more than 20 per cent. the capital expenditure and capital liabilities of the Company and not less than the capital expended and the capital liabilities. If at any period the main line or extensions should not be worked for six consecutive months, the company can also be called upon to surrender the line and extensions on payment of the actual sum expended up to the date of notice.

(iii) *Terms of working.*—If worked by the Company, the whole of the profits go to the Company. If worked by the Eastern Bengal State railway, the Secretary of State retains each half-year 40 per cent. of the gross earnings, the remaining 60 per cent. being paid to the Company after deduction of income tax payable to Government.

(iv) *Rates and fares*—

Main line and extensions, Malbazar to Hantupara and Dam Dim to Bagrakote—

Certain maxima and minima have been fixed subject to alteration from time to time. If gross receipts reach 12 per cent. on capital, Government may reduce maxima to the extent of 25 per cent., except certain special rates.

Extension from Barnes Junction to Lalmonir Hat—

Certain maxima and minima have been fixed within which charges can be made.

(v) *General remarks.*—The line was constructed for opening out the Western Dooars and for the development of the tea industry.

2. Details of construction.—

(a) *Permanent-way.*—The line has been laid with 41½ lb. flat-footed steel rails on s&l sleepers.

(b) *Ballast.*—The line is ballasted throughout with stone.

(c) *Fencing.*—The line is unfenced.

(d) *Curves.*—There are two curves with a radius of 955 feet, the lengths being 0.03 and 0.25 mile.

(e) *Gradients.*—Of a total open mileage of 114.16 miles, 1.59 miles are on the ruling gradient of 1 in 100.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	
Main. (Sub.)				Miles.	Miles.	
4 (a)	BENGAL-NAGPUR SYSTEM— (5' 8" gauge.)					
	COMPANY'S SECTION—					
		<i>Main line—</i>				
		Asansol to Damoodur	*12-9-84	12-6-89	5'10	
		Damoodur to Purulia		14-12-89	41'72	
		Purulia to Chakardharpore		22-1-90	72'25	
		Chakardharpore to Goikera		15-5-90	21'06	
		Goikera to Jharsuguda		1-2-91	105'09	
		Jharsuguda to Raigarh		20-4-90	44'35	
		Raigarh to Bilaspur		10-2-90	81'90	
		Bilaspur to Raipur		10-1-89	68'35	
		Raipur to Raj-Nandgaon		4-12-88	41'99	
		Raj-Nandgaon to Nagpur		27-11-88	144'88	
		Total Main line . . . . .	...	...	...	626'69
		<i>Branches—</i>				
		<i>Sanctoria coal branch—</i>				
		Damoodur to the Sanctoria collieries	12-9-84	12-6-89	7'03	
		<i>Sambalpur branch—</i>				
		Jharsuguda to Sambalpur	July 1891	1-2-93	30'23	
		<i>Katni branch—</i>				
		Bilaspur to Birsinghpur	12-9-84	1-2-91	142'60	
		Birsinghpur to Umaria		11-5-90	18'48	
		Umaria to Katni		2-11-86	35'88	
		Katni-Murwara junction line . . . . .		...	1'98	
					198'94	
		Sini to Khargpur		1-6-98	99'56	
		Khargpur to Khal Bridge		17-12-98	34'53	
	Khal Bridge to Rajapur Khal	24-5-00		18'80		
	Rajapur Khal to Howrah	14-12-00		17'50		
					170'33	
	Santragachi to Shalimar	August 1895	15-3-01	3'00		
	Hooghly foreshore to Kidderpore Docks		10-4-01	0'60		
				3'60		
	Khargpur to Balasore		17-12-98	71'75		
	Balasore to Barang (Cuttack)		10-1-99	116'75		
				188'50		
	<i>Kola riverside branch—</i>					
	Rajapur Khal to Kola Riverside Station		17-12-98	1'00		
	Khargpur to Cossye river	January 1899	20-12-99	4'75		
	Right bank of the Cossye river to Midnapore		8-6-01	3'00		
				7'75		
	Total Branches . . . . .	...	...	...	607'38	
	TOTAL, COMPANY'S SECTION . . . . .	...	...	...	1,234'07	
	<i>Double line—</i>					
	Howrah to Santragachi . . . . .	...	14-12-00	3'42		
	Santragachi to Bauria . . . . .	...	17-6-02	9'69		
				13'11		
	Carried over . . . . .	...	...	...	1,234'07	

* Dates of sanction of original metre gauge lines : Nagpur to Dongargarh, 9th May 1878 and Dongargarh to Raj-Nandgaon, 15th March 1881.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Bengal-Nagpur railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(a) Bengal-Nagpur railway . . . (5' 6" gauge)	1,234·07	176·90	1,410·97
(b) East Coast railway, Northern section (5' 6" gauge)	311·93	...	311·93
(c) Raipur-Dhamtari railway . . . (2' 6" gauge)	56·24	...	56·24
(d) Jubbulpore-Gondia extension . . . (2' 6" gauge)	...	252·67	252·67
(e) Parlakimedi Light railway . . . (5' 6" gauge)	24·68	...	24·68
(f) Moharbhajj* (2' 6" gauge)	...	28·50	28·50
Total	1,626·92	458·07	2,084·99

2. Bengal-Nagpur railway—

(a) The Bengal-Nagpur railway system (excluding Parlakimedi Light railway) is worked under the following contracts:—

Contracts of—9th March 1887, Bengal-Nagpur Railway Company's principal contract.

31st December 1891.—Contract for the construction and working of a branch line from Sambalpur Road station on the main line to Sambalpur.

27th June 1901.—As to the raising of debenture capital for the construction of the Sini-Midnapore-Howrah and Midnapore-Cuttack extensions.

23rd January 1902.—Contract for the construction and working of the Raipur-Dhamtari (2' 6" gauge) feeder line with a branch to Rajim; an extension (5' 6" gauge) from Sini *via* Midnapore to Howrah, with branches from Midnapore to Cuttack and the Jherriah coal fields; a line (2' 6" gauge) from Gondia to Jubbulpore with branches from Nainpur to Mandla, Nainpur to Seoni, Seoni to Chindwara; and for the working of the Northern section of the East Coast State railway as part of the undertaking.

(b) The general conditions of the contracts are as follows:—

(i) *Government aid.*—Government guarantee interest in sterling at 4 per cent. per annum on £3,000,000 share capital; on any further capital that may be required, the guarantee to be 4 per cent. or such other rate as may be agreed upon.

(ii) *Terms of contract.*—The contract provides for the Company raising £3,000,000, any further money required being either provided by the Secretary of State upon such terms as may from time to time be mutually agreed upon, or by the Company within such period and in such instalments as the Secretary of State may prescribe. Subject to the provisions of the contract, all moneys raised by the Company become the absolute property of the Secretary of State.

(iii) *Currency of contract*—

Principal contract.—Government may determine the contract, by giving twelve months' previous notice, on the 31st December 1913, or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fail to fulfil their obligations, or the line be worked at a loss. On the termination of the contract, the Company are to hand over to Government the railway and all its belongings of every description, and Government are to repay the amount at par of the share capital which has been paid in by the Company.

Sambalpur branch contract.—The contract for this branch brings it within the provisions of the original contract of 9th March 1887, but provides that the Government may purchase the branch at any time after 1st January 1895, on giving twelve months' notice.

Contract of 23rd January 1902: Northern section, East Coast State railway.—Government may at any time, by giving six months' previous notice, require the Company to retransfer the whole or any part of the section of railway between Vizianagram and Waltair Junction with all appurtenances and without compensation in respect of such retransfer.

(iv) *Power of Company to surrender contract.*—Nil.

* Question of working agency not yet finally settled.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
4	(a)	BENGAL-NAGPUR SYSTEM—continued.			Miles.	Miles.
		Brought forward	...	...	...	1,234'07
		EAST COAST RAILWAY, NORTHERN SECTION—				
		<i>Main line—</i>				
		Cuttack Road (Barang) to Bhubaneshwar	} July 1890 {	1-2-97	10'32	
		Bhubaneshwar to Khurda Road		20-7-96	11'76	
		Khurda Road to Rambha		1-3-96	61'54	
		Rambha to Berhampur-Ganjam		1-9-95	29'56	
		Berhampur-Ganjam to Palasa		1-4-95	45'76	
		Palasa to Parlakimedi Road (Naupada)		17-12-94	33'11	
		Parlakimedi Road (Naupada) to Vizianagram		20-7-94	55'20	
		Vizianagram to Waltair	15-7-93	37'50		
		Total Main line	...	...	...	284'75
		<i>Branches—</i>				
		<i>Puri branch—</i>				
		Khurda Road to Puri	} July 1895 {	1-2-97	25'34	
		Temporary Puri station to new Puri station		1-6-98	1'84	
		Total Branches	...	...	27'18	27'18
		<i>Double line—</i>				
		Simachellam Junction to Waltair station	20-12-02	12-12-02	4'24	
		TOTAL, EAST COAST RAILWAY, NORTHERN SECTION	...	...	...	311'93
4	(b)	RAIPUR-DHAMTARI— (2' 6" gauge.)				
		<i>Main line—</i>				
		Raipur to Kurud	} 3-5-97 {	10-9-00	31'50	
		Kurud to Dhamtari		17-12-00	14'24	
		Total Main line	...	...	...	45'74
		<i>Branch—</i>				
		Abhanpur to Rajim	...	15-10-00	10'50	
		Total Branch	...	...	...	10'50
		TOTAL, RAIPUR-DHAMTARI	...	...	...	56'24
4	(c)	PARLAKIMEDI LIGHT— (2' 6" gauge.)				
		Naupada to Parlakimedi	14-3-98	1-4-00	24'68	24'68
		TOTAL, OPEN MILEAGE, BENGAL-NAGPUR SYSTEM	...	...	...	1,626'92
		<i>Lines under construction or sanctioned for construction—</i>				
		COMPANY'S SECTION—				
		Midnapore to Bujudih	1-6-01	1-2-03	114'50	
		Bujudih to Hariharpur	9-12-01	...	27'90	
		Ramkanali to Chaurashi (Parbatpur)	17-7-01	1-2-03	4'67	
		Chaurashi to Noddecha	17-7-01	* June 1903	4'81	
		<i>Colliery lines—</i>				
		Bhujudih to Parthadihi	} 9-12-01 {	...	1'45	
		Bhaga to Mhoda including the Bhaga connection		...	14'36	
		Bhujudih to Bhaga		20-4-03	7'00	
		Bhowra siding		...	1'50	
		Southern half of the Mulkeera-Katrasgarh cross connection.		...	0'71	
		Total Lines under construction, Company's section	...	...	...	176'90
		Carried over	...	...	...	176'90
						1,626'92

on the 31st December 1902, alphabetically arranged.

REMARKS.

2. Bengal-Nagpur railway—continued.

- (v) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure up to Rs. 1,000 and not exceeding Rs. 2,000 at the discretion of the Consulting Engineer, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of the open system in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) three parts of the surplus profits for any complete calendar year, after providing for payment to Government of interest on advances of capital made by them to the Company and for repayment of the interest paid by them to the Company for that year, to be retained by Government, and the remaining fourth part to be divided between Government and the Company in the proportion which the gross earnings of the Company's undertaking, exclusive of the Northern section of the East Coast railway, bear to the gross earnings of the latter section.
- (vi) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates. The Madras railway have the power to quote through rates in the direction of Madras from Bengal-Nagpur stations between Cuttack and Waltair. The Bengal-Nagpur railway have similarly power to quote rates from Madras railway stations, Tadepalli and Cuttack, in the direction of Calcutta.
- (vii) *General remarks.*—The Northern section of the East Coast State railway (an aggregate length of 311.93 miles) was transferred to the Bengal-Nagpur Railway Company on the 1st January 1901, to be incorporated in their undertaking as an integral part of it.

3. Parlakimedi Light railway—

(a) The Parlakimedi Light railway is worked under—

Agreement of—14th April 1902 (between the Rajah of Parlakimedi and Bengal-Nagpur Railway Company) for working.

(b) The general conditions of the agreement are as follows:—

- (i) *Government aid.*—The line is the property of the Rajah of Parlakimedi.
- (ii) *Currency of Agreement.*—The Agreement is current for one year from the 1st January 1902 and subject to revision thereafter.
- (iii) *Terms of working.*—The Company work the railway at actual cost, the net receipts or deficiency being payable to or by the Rajah as the case may be.
- (iv) *Rates and fares.*—To be fixed by the Company.
- (v) *General remarks.*—On the 20th May 1901 the Indian Railways Act, IX of 1890, except section 135, was applied to the line. The working of this railway was taken over by the Bengal-Nagpur railway from the 1st January 1902.

4. *General remarks*—A length of 1.98 miles of this railway at Katni is worked over by the Great Indian Peninsula railway. The Bengal-Nagpur railway works over 0.30 mile of the East Indian railway at Katni, 0.50 mile at Asansol, 1.00 mile at Howrah and 0.65 mile of the Great Indian Peninsula railway at Nagpur; and has also running powers over the Waltair-Vizagapatam section (including the wharf and swamp lines) of the North-East line of the Madras railway.

5. Details of construction—

(a) *Permanent-way.*—On the main line the rails are 75 lb. steel, flat-footed, 30 feet long, laid on 10 transverse steel sleepers and two wooden sleepers per rail, except between Nagpur and Kamptee, where 12 steel sleepers per rail are used. On the Bilaspur-Umaria section, 75 lb. flat-footed steel rails are laid on 10 transverse steel sleepers and 2 s&l sleepers at the joints, except between Khongsara and Khodri, where steel sleepers 10 to the rail, are used. The Sambalpur branch is laid with the same type of permanent-way as on the main line, but no s&l sleepers have been added at rail joints. The Umaria-Katni section was originally laid with second-hand East Indian railway permanent-way on timber sleepers (82 lb. rails on three-fourths of the distance and 74 lb. rails on the remainder), but is now relaid with 75 lb. flat-footed rails on transverse steel sleepers. The Sini-Calcutta-Cuttack section is laid with 85 lb. steel rails on cast iron pot sleepers. The Cuttack-Waltair section is laid with 75 lb. flat-footed steel rails with 5-holed fish-plates on wooden and steel pea-pod sleepers.

Raipur-Dhamtari railway.—Laid with 31 lb. flat-footed steel rails on s&l sleepers.

Parlakimedi Light railway.—Laid with 30 lb. flat-footed steel rails and transverse wooden sleepers.

(b) *Ballast*—

Bengal-Nagpur railway.—Ballasted throughout with good stone, except for a few miles on the Chakardharpore district, where laterite is used.

Raipur-Dhamtari railway.—Moorum or sand and stone in a few cuttings.

Parlakimedi Light railway.—The line is ballasted throughout.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		Brought forward	...	...	...	1,626.92
						176.90
		BENGAL-NAGPUR SYSTEM—concluded.				
4	(d)	JUBBULPORE-GONDIA EXTENSION— (2' 6" gauge.)				
		<i>Main line—</i>				
		Jubbulpore to Nainpur	29-1-01	...	69.43	
		Nainpur to Gondia	29-1-01	18-4-03	74.00	143.43
		<i>Branches—</i>				
		Nainpur to Mandla	29-1-01	*April 1903	21.75	
		Nainpur to Seoni			47.13	
		Seoni to Chindwara			40.36	
		Total Branches . . . . .	...	...	...	109.24
		Total Jubbulpore-Gondia extension . . . . .	...	...	...	252.67
4	(e)	MOHARBHANJ— (2' 6" gauge.)				
		Baripada to Baripada Road station	18-7-02	...	28.50	
		Total Moharbhaj . . . . .	...	...	...	28.50
		Grand total, Lines under construction . . . . .	...	...	...	458.07
		GRAND TOTAL, BENGAL-NAGPUR SYSTEM . . . . .	...	...	...	2,084.99
9	(b)	BEZWADA EXTENSION— (See Nizam's Guaranteed State system, page 358.)				

* Probable date of opening.

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

5. Details of construction.—contd.

(c) *Tunnels.*—The following are the tunnels of 500 feet length and over:—Suranda (between Manharpur and Goilkera), 1,641 feet; Bhortonk (between Khongsara and Khodri), 1,000 feet; and Darekasa (between Salekasa and Darekasa), 735 feet.

(d) *Bridges.*—The following are the important bridges of 1,000 feet length and over:—Kanhani (between Kamptee and Salwa), 6 spans of 170 feet and 2 spans of 60 feet (1,237 feet); Weinganga (between Tumsar Road and Tirora), 9 spans of 150 feet (1,450 feet); Sheonath No. I (between Muripar and Drug), 7 spans of 150 feet; Sheonath No. II (between Nipania and Bilha), 14 spans of 150 feet (2,250 feet); Hasdo (between Naila and Champa), 5 spans of 200 feet and 2 spans of 40 feet; Mand (between Kharsia and Naharpali), 9 spans of 100 feet and 2 spans of 30 feet; Eeb (between Belpahar and Jharsuguda), 9 spans of 150 feet (1,461 feet); Brahmini (between Kulunga and Rourkela), 9 spans of 150 feet and 1 span of 60 feet; Damoodur (between Ramkanali and Damoodur), 10 spans of 200 feet and 2 spans of 100 feet (2,364 feet); Subanrikha (between Asanboni and Moholia), 10 spans of 100 feet; Koakhaye (between Barang and Cuttack), 19 spans of 150 feet (3,212 feet); Kathjori (between Barang and Cuttack), 18 spans of 150 feet (2,890 feet); Mahanuddi (between Cuttack and Kapilas Road), 64 spans of 100 feet (6,912 feet); Beroopa (between Cuttack and Kapilas Road), 16 spans of 100 feet (1,728 feet); Brahmini (between Jenapur and Vyas Sorojar), 29 spans of 150 feet (4,640 feet); Byturnee (between Jajpur Road and Kenduapada), 15 spans of 150 feet (2,400 feet); Subanrikha (between Mohurbhanj and Jellasore), 11 spans of 150 feet and 2 spans of 60 feet (1,908 feet); Roopnarain (at mile 667), 7 spans of 300 feet and 4 spans of 100 feet (2,632 feet); and Midnapore (Cossye river, between Khargpur and Midnapore), 16 spans of 100 feet.

(e) *Fencing.*—The line is unfenced except between Nagpur and Kamptee and at the more important stations and at some of the stationyards and first class level-crossings on the Barang-Waltair section.

Parlakimedi Light railway.—The line is fenced where it runs along the public road.

(f) *Curves.*—On the Bengal-Nagpur railway there is only one curve under a radius of 1,000 feet on the Sanctoria Coal branch, the length of which is 0.28 mile and radius 300 feet. On the Raipur-Dhamtari branch there are five curves of less than 1,000 feet aggregating 12 miles in length.

(g) *Gradients.*—Of a total open mileage of 1,626.92 miles, 0.40 mile is on the ruling gradient of 1 in 84 on the 5' 6" gauge and 2.41 miles on 1 in 143 on the 2' 6" gauge, Raipur-Dhamtari railway.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub				Miles.	Miles.
20	(a)	BHAVNAGAR-GONDAL-JUNAGAD-POR-BANDAR SYSTEM— (3' 3½" gauge.) BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR—				
		Bhavnagar to Wadhwan	19-3-79	20-12-80	*105'03	
		Dhola to Dhoraji	19-3-79	19-1-81	88'89	
		Dhoraji to Porbandar	24-1-88	17-12-89	69'07	
		Porbandar to Porbandar Bandar		15-3-90	†1'55	
		Jetalsar to Junagad	24-12-86	1-9-88	16'00	
		Junagad to Veraval (including Junagad quarry line)		1-2-89	‡53'35	
		Veraval to Veraval Bandar		1-12-90	‡0'30	
		TOTAL, BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR PROPER.	...	...	...	334'19
20	(b)	JAMNAGAR— (3' 3½" gauge.)				
		Rajkot Junction to Bedi Bandar	Oct. 1893	8-4-97	§54'22	
		TOTAL, JAMNAGAR	...	...	...	54'22
20	(c)	JETALSAR-RAJKOT— (3' 3½" gauge.)				
		Jetalsar Junction to Rajkot	Feb. 1892	12-4-93	46'21	
		TOTAL, JETALSAR-RAJKOT	...	...	...	46'21
		Carried over . . . . .	...	...	...	434'62

* Of this, the Bhavnagar Dock estate line, 1'03 miles,
† The Porbandar Dock estate line, 1'55 miles,
‡ Of this, the Junagad quarry line, 2'35 miles, and
§ Of this, the Bedi Bandar Dock estate line, 3'93

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Bhavnagar-Gondal-Junagad-Porbandar railway system is made up of—

	Open line. Miles.
(a) Bhavnagar-Gondal-Junagad-Porbandar railway (3' 3½" gauge)	334.19
(b) Jamnagar railway (3' 3½" gauge)	54.22
(c) Jetalsar-Rajkot railway (3' 3½" gauge)	46.21
(d) Dhrangadra railway (3' 3½" gauge)	20.83
Total	455.45

2. Bhavnagar-Gondal-Junagad-Porbandar railway system—

(a) The Bhavnagar-Gondal-Junagad-Porbandar railway system is worked under the following agreements:—

Agreements of—1st January 1897.—For the management and working of the "Integral Railways" as one system by a Board of Control.

8th April 1897.—Jamnagar railway	} For management and working by the Bhavnagar-Gondal-Junagad-Por- bandar Railway Administration.
12th April 1893.—Jetalsar-Rajkot railway	
1st June 1898.—Dhrangadra railway	

(b) The general conditions of the agreements are as follows:—

(i) *Government aid.*—Nil.(ii) *Terms of agreement.*—The whole system is worked by a Board of Control, consisting of one nominee of Government to be President and one nominee from each of the proprietary states of Bhavnagar, Gondal, Junagad and Porbandar. The existing lines owned by those states are separately and entirely described as the "Integral railways" and their combination is termed the "Open system." The decisions of the Board of Control are based on the majority of votes recorded ("Members' single votes" and "Proprietary votes"). "Members' single votes" prevail at special meetings where each member has one vote, while "Proprietary votes," *i.e.*, votes revised annually on varying capital outlay, prevail at ordinary and extraordinary meetings.(iii) *Currency of agreement.*—Bhavnagar-Gondal-Junagad-Porbandar railway system.—The term of the principal agreement for the working of the Bhavnagar-Gondal-Junagad-Porbandar railway proper is from the 1st January 1897 to the 31st December 1900. Until a new agreement has been adopted, the terms of this agreement remain in force.(iv) *Power of Board to determine agreement.*—By unanimous vote, the Board of Control can cancel or modify any of the clauses of the agreement, and can also rescind or alter any resolution; no changes can otherwise be made until expiry of three months from date of passing such resolution. Any proprietary state can terminate the agreement after the 31st December 1900, subject to 12 months' notice at the beginning of the year.(v) *Terms of working.*—Bhavnagar-Gondal-Junagad-Porbandar railway.—The earnings of the several integral railways belong wholly and exclusively to each integral railway, and, similarly, the Capital and Revenue expenditure is wholly borne by the same. All expenditure on the open system and on the integral railways, as may require apportionment, is divisible as prescribed in Appendix A to the agreement. The Bhavnagar state provides funds for working the whole system as well as for ordinary capital on the integral railways, all receipts of the entire open system being paid into the Bhavnagar State Treasury. All funds for major capital works are provided by the integral railway concerned or by special arrangement with the Bhavnagar State Treasury. Each integral railway is the sole proprietor of all works, buildings, etc., on its own length of line and is entitled to 7½ per cent. interest on the paid-up value of all property in occupancy for open system purposes; to compensation for losses for works and buildings falling into disuse; and to 7½ per cent. per annum for any additional accommodation required by the open system.

Jamnagar railway.—
Jetalsar-Rajkot railway.—
Dhrangadra railway.—

{ The Board of Control work the railways at 40 per cent. of gross earnings of each railway, plus actual expenditure incurred on the maintenance of way, works and stations; and supply rolling-stock at 5 per cent. of gross earnings to the Jetalsar-Rajkot and Dhrangadra railways.

(vi) *Rates and fares.*—Bhavnagar-Gondal-Junagad-Porbandar railway system.—The maximum scale of rates and fares sanctioned by Government is applicable to the whole system, but rates and fares may be altered within this scale so as to accommodate them to the circumstances of traffic on any integral railway: provided that such alteration be not prejudicial to the interests of any other integral railway.

worked for goods traffic only.

worked for goods traffic only.

agad Dock estate line, 0.70 mile, are worked for goods traffic only.

es, is worked for goods traffic only.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		BHAVNAGAR-GONDAL-JUNAGAD-POR-BANDAR SYSTEM—concluded.			Miles.	Miles.
		Brought forward	...	...	...	434'6a
20	(d)	DHRANGADRA— (3' 3½" gauge.)				
		Wadhwan Junction to Dhrangadra—	23-12-97	1-6-98	20'83	
		TOTAL, DHRANGADRA	...	...	...	20'83
		GRAND TOTAL, BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR SYSTEM.	...	...	...	455'45
7	(g)	BHOPAL-ITARSI— (See Great Indian Peninsula system, page 332.)				
7	(f)	BHOPAL-UJJAIN— (See Great Indian Peninsula system, page 332.)				
7	(e)	BINA-GOONA-BARAN— (See Great Indian Peninsula system, page 332.)				
21	(e)	BIRUR-SHIMOGA— (See Southern Mahratta system, page 396.)				

REMARKS.

3. Details of construction—

- (a) *Permanent-way*.—The permanent-way consists of $41\frac{1}{2}$ lb. steel flat-footed rails, laid mostly on creosoted pine and deodar sleepers.
- (b) *Ballast*.—With the exception of one or two short lengths ballasted with kunkur, the line is laid with a good quality of broken stone ballast.
- (c) *Bridges*.—The only important bridge is the Oojat (between Shahpur and Lushala), 7 spans of 100 feet and 3 spans of 133 feet.
- (d) *Fencing*.—The line is practically unfenced throughout its length.
- (e) *Curves*.—There are no curves under a radius of 1,000 feet.
- (f) *Gradients*.—Of a total open mileage of 455.45 miles on the system, 0.07 mile is on the ruling gradient of 1 in 67.

Appendix 47.
History of railways.

History of railways constructed and in progr

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Tota
Main.	Sub.				Miles.	Miles
8	(a)	BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—				
		COMPANY'S SECTION— (5' 6" gauge.)				
		<i>Main line—</i>				
		Colaba to Marine lines	May 1856	18-1-70	2'00	
		Marine lines to Charni Road	1868	19-6-69	0'75	
		Charni Road to Bellasis Road		13-9-68	0'75	
		Bellasis Road to Bulsar		28-11-64	121'00	
		Bulsar to Navsari		2-9-61	24'25	
		Navsari to Sachin		20-5-61	9'25	
		Sachin to Surat		18-3-61	9'00	
		Surat to Amroli		19-11-60	2'25	
		Amroli to Anklesvar		10-2-60	28'75	
		Anklesvar to the Nerbudda		5-12-60	5'50	
		Nerbudda to Broach	1857	22-6-60		
		Broach to Baroda	and	9-1-61	43'75	
		Baroda to Dholia	1859	22-4-61	11'25	
		Dholia to Mehmadaad		3-9-62	33'25	
		Mehmadaad to Ahmedabad		21-1-63	17'89	
		Ahmedabad to Sabarmati		1-1-70	3'75	
		Sabarmati to Sanand	Octo-ber	24-5-71	13'75	
		Sanand to Viramgam	1870	30-11-71	22'98	
		Viramgam to Wadhwan (3' 3 1/2" gauge).	*21-4-02	*14-12-02	39'23	
		Total Main line . . . . .	...	...	...	389'35
		<i>Branches—</i>				
		<i>Godhra branch—</i>				
		Anand to Dakor	5-11-73	8-4-74	16'75	
		Dakor to Rukhyal . . . . .	...	6-1-75	1'75	
		Rukhyal to Hungari . . . . .	...	6-12-76	9'00	
		Hungari to Pali . . . . .	...	29-1-77	4'71	
		Pali to Godhra . . . . .	...	26-2-82	17'00	
		<i>Patri branch—</i>				
		Kharaghoda to Viramgam	13-6-71	12-5-73	22'12	
		Total Branches . . . . .	...	...	...	71'33
		TOTAL OPEN MILEAGE, COMPANY'S SECTION . . . . .	...	...	...	460'68
		DOUBLE LINE, COMPANY'S SECTION—				
		Colaba to Marine lines . . . . .	...	18-1-70	1'91	
		Marine lines to Charni Road . . . . .	...	19-6-69	0'71	
		Charni Road to Bellasis Road . . . . .	...	13-9-68	1'29	
		Bellasis Road to Mahim . . . . .	...	20-7-65	5'44	
		Mahim to Bandra . . . . .	...	23-2-66	1'07	
		Bandra to Santa Cruz . . . . .	...	23-5-66	1'83	
		Santa Cruz to Andheri . . . . .	...	29-8-67	2'71	
		Andheri to Bhayndar . . . . .	...	27-4-85	13'33	
		Bhayndar to Virar . . . . .	...	1-10-85	10'34	
		Virar to Palghar . . . . .	...	1-12-97	19'28	
		Palghar to Dahanu Road . . . . .	...	17-1-98	20'37	
		Dahanu Road to Gholvad . . . . .	...	20-4-00	6'68	
		Gholvad to Daman Road . . . . .	...	18-10-00	23'19	
		Daman Road to Bulsar . . . . .	...	29-1-02	16'44	
		Bulsar to Sachin . . . . .	...	21-4-02	32'90	
		Sachin to Kankra Khari . . . . .	...	4-7-87	6'36	
		Kankra Khari to Surat . . . . .	...	5-6-68	2'72	
		Carried over . . . . .	...	...	166'57	460'68.

* Dates of sanction and opening of original 5' 6" gauge track : 24th October 1870 and 25th May 1873, respectively.

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Bombay, Baroda and Central India railway system is made up of—

		Open line.	Under construction.	Total.
		Miles.	Miles.	Miles.
(a) Bombay, Baroda and Central India railway	(5' 6" gauge)	460·68	44·00	504·68
(b) Tapti Valley railway	(5' 6" gauge)	155·48	...	155·48
(c) Petlad-Cambay railway (Anand-Tarapur section)	(5' 6" gauge)	21·50	...	21·50
(d) Petlad-Cambay railway (Tarapur-Cambay section)	(5' 6" gauge)	10·92	...	10·92
(e) Nagda-Ujjain railway	(5' 6" gauge)	34·32	...	34·32
(f) Godhra-Rutlam-Nagda railway	(5' 6" gauge)	141·14	...	141·14
(g) Rajputana-Malwa railway	(3' 3½" gauge)	1,648·36	133·32	1,781·68
(h) Ahmedabad-Parantij railway	(3' 3½" gauge)	54·70	...	54·70
(i) Palanpur-Deesa railway	(3' 3½" gauge)	17·28	...	17·28
(j) Gaekwar's Mehsana railway	(3' 3½" gauge)	92·63	...	92·63
(k) Gaekwar's Dabhoi railway	(2' 6" gauge)	78·80	9·20	88·00
(l) Rajpipla railway	(2' 6" gauge)	37·37	...	37·37
(m) Jaipur (Sawai Madhopur) railway	(3' 3½" gauge)	...	72·85	72·85
(n) Vijapur-Kalol-Kadi railway	(3' 3½" gauge)	29·44	12·20	41·64
(o) Ahmedabad-Dholka railway	(3' 3½" gauge)	...	33·54	33·50
Total		2,782·62	305·11	3,087·73

2. Bombay, Baroda and Central India railway—

(a) The Bombay, Baroda and Central India railway, Company's section, is worked under the following contracts :—

Contracts of—21st November 1855—for the construction and working of a line from Surat to Baroda and thence to Ahmedabad.

2nd February 1859—for the construction and working of a line from Bombay to Surat.

17th November 1871—for the construction and working of a line from Viramgam to Wadhwan.

1st February 1901—as to share of working expenses debitable to branch lines worked.

(b) The general conditions of the contracts are as follows :—

(i) *Government aid.*—Guarantee of interest in sterling at 5 per cent. for the term of the contract. On some portion of the share capital and on debentures lower rates of interest also are guaranteed.(ii) *Currency of contracts.*—The contracts are current for a period of 99 years from 1855 when the line becomes the property of Government on payment of the actual capital outlay in sterling. The Government may, however, determine the contract by 'purchase' after the expiration of 25 or 50 years of the term, namely in 1880 or 1905, at the mean market value of the shares during the three preceding years, possession being taken of the railway at the half-yearly day next but one following the notice. The Government may also determine the contract at any time, on giving three months' notice, if the Company fail to observe obligations. In such case, Government repay the capital expended.**NOTE.**—The Government relinquished their right to determine the contract at the end of the 25th year, and the only remaining opportunity of giving notice of purchase will be in 1905 (within six months of the 1st of May).(iii) *Power of Company to surrender contract.*—The Company may surrender, on six months' notice, at any time, receiving back the capital expended.(iv) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 to be classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 5,000 in each half-year) surplus profits, after repayment of the guaranteed interest of each half-year, are divided equally between Government and the Company, the interest payments being calculated for the purpose of this division at 1s. 10d. to the rupee.

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
8	(a)	BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—contd.			Miles.	Miles.
		Brought forward	...	...	166'57	460'68
		DOUBLE LINE—concluded.				
		Surat to Amroli	...	9-10-67	2'19	
		Amroli to Sayan	...	25-5-98	6'43	
		Sayan to Kim	...	1-10-98	6'33	
		Kim to Anklesvar	...	11-12-99	16'16	
		Broach to Miyagam	...	15-10-99	25'42	
		Miyagam to Itola	...	15-9-97	7'82	
		Itola to Baroda	...	7-6-95	10'77	
		Barejadi to Ahmedabad	...	2-6-87	10'21	
		TOTAL DOUBLE LINE, COMPANY'S SECTION	...	...	*251'90	
8	(b)	TAPTI VALLEY— (5' 6" gauge.)				
		Kankra Khari to Vyara	...	1-12-98	35'59	
		Vyara to Chinchpada	...	10-7-99	36'35	
		Chinchpada to Nandarbar	...	8-10-99	25'20	
		Nandarbar to Dondajche	...	11-11-99	21'44	
		Dondajche to Nardana	...	25-11-99	19'78	
		Nardana to Amalner	...	15-3-00	16'92	
		TOTAL, TAPTI VALLEY	...	...	...	155'48
8	(d)	PETLAD-CAMBAY (ANAND-TARAPUR SECTION)— (5' 6" gauge.)				
		Anand to Petlad	Dec. 1888	5-5-90	13'17	
		Petlad to Tarapur	4-7-99	20-6-01	8'33	
		TOTAL, PETLAD-CAMBAY (ANAND-TARAPUR SECTION)	...	...	...	21'50
8	(e)	PETLAD-CAMBAY (TARAPUR-CAMBAY SECTION)— (5' 6" gauge.)				
		Tarapur to Cambay	4-7-99	20-6-01	10'92	
		TOTAL, PETLAD-CAMBAY (TARAPUR-CAMBAY SECTION)	...	...	...	10'92
		GRAND TOTAL, PETLAD-CAMBAY	...	...	...	32'42
8	(c)	NAGDA-UJJAIN— (5' 6" gauge.)				
		Nagda to Ujjain	17-12-94	15-7-96	34'32	
		TOTAL, NAGDA-UJJAIN	...	...	...	34'32
8	(f)	GODHRA-RUTLAM-NAGDA— (5' 6" gauge.)				
		Godhra to Limkhera	} 29-10-90 { Dec. 1894	16-1-93	25'09	
		Limkhera to Dohad		7-3-94	19'55	
		Dohad to Rutlam		22-10-94	70'46	
		Rutlam to Nagda		11-5-96	26'04	
		TOTAL, GODHRA-RUTLAM-NAGDA	...	...	...	141'14
		Carried over	...	...	...	824'04

* Excluding 4'17 miles from Anklesvar to Nerbudda Block station constructed but not opened for traffic.

DIX 47—continued.
on the 31st December 1902, alphabetically arranged.

REMARKS.

2. Bombay, Baroda and Central India railway—concluded.

(b) General conditions—concluded.

(v) *Rates and fares.*—Under the contract, Government fix a maxima which cannot be altered by Government until the net receipts exceed 10 per cent. on the capital outlay, and which cannot be altered by the Company without Government sanction. Authority, however, has been given to the Company, by an executive order, to vary their rates within the prescribed maxima without reference to Government.

3. Tapti Valley railway—

(a) The Tapti Valley railway is worked under the following contracts:—

Contracts of—28th August 1896 (between the Secretary of State and the Tapti Valley Railway Company) for construction.

30th October 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintenance and working.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

(b) The general conditions of the contracts are as follows:—

(i) *Government aid.*—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Tapti Valley railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, plus a sum of Rs. 6,000 per annum towards the Company's office expenses and expenses of management. Land in British territory is also provided free.

(ii) *Currency of contract.*—Government may, by giving 12 months' notice, determine the contract on the 31st December 1921, or at the end of any subsequent period of 10 years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, provided that such sum shall not exceed by more than 20 per cent. the total capital expenditure of the Company or be less than such capital expenditure; or Government may determine it on the 31st December 1950, paying the Company in rupees an amount equal to the total capital expenditure.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—Government undertake to construct (from funds supplied by the Company) work and maintain the line through State or other agency, the necessary rolling-stock being supplied by the working agency. The general working expenses of the system, excluding the 2' and 2' 6" gauge lines, are divided in proportion to the gross earnings of the component parts, the Tapti Valley railway being debited with the share thus arrived at (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), subject to a maximum charge of 44 per cent. of its gross earnings for the year. The residue of the gross earnings is payable to the Tapti Valley Railway Company.

(v) *Rates and fares.*—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway.

4. Petlad-Cambay railway (Anand-Tarapur section)—

(a) The Petlad-Cambay railway (Anand-Tarapur section) is worked under the following—

Agreement of—5th May 1890 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—continued.				
		Brought forward	...	...	...	824'04
8	(g)	RAJPUTANA-MALWA— (3' 3½" gauge.)				
		RAJPUTANA SECTION—				
		<i>Main line—</i>				
		Delhi to Rewari	1-3-70	14-2-73	51'25	
		Rewari to Alwar	14-8-72	15-9-74	46'25	
		Alwar to Bandikui		7-12-74	37'75	
		Bandikui to Dausa	20-10-71	20-4-74	17'75	
		Dausa to Jaipur		12-10-74	38'00	
		Jaipur to Phulera		1-3-75	34'25	
		Phulera to Ajmer	9-4-73	1-1-75	49'75	
		Ajmer to Beawar	4-9-76	15-5-78	32'25	
		Beawar to Haripur		12-8-79	21'00	
		Haripur to Sojat Road		20-10-80	20'50	
		Sojat Road to Palanpur		1-1-81	148'00	
		Palanpur to Ahmedabad		15-11-79	83'00	
		Total Main line . . . . .	...	...	...	579'75
		<i>Branches on Rajputana section—</i>				
		<i>Farukhnagar Salt branch</i>	1-3-70	14-2-73	7'73	
		<i>Agra branch—</i>				
		Bandikui to Bhurtpore	20-10-71	24-4-74	60'50	
		Bhurtpore to Agra Fort		11-8-73	34'14	
		Agra Fort to Jumna East bank		1-1-76	1'50	
		(5' 6" gauge.)				
		Jumna East bank to Agra Cantonment . . . . .	...	1-1-76	3'07*	
					99'21	
		<i>Sambhar Lake Salt branch</i>	8-4-73	1-3-75	4'50	
		<i>Fapog extension</i>	14-7-75	Oct. 76	4'50	
		<i>Extension of Sambhar branch to Fhowra</i>	15-5-78	20-12-79	17'00	
		<i>Kankaroola siding</i> . . . . .	...	15-2-81	1'25	
		<i>Additional salt sidings in the Sambhar lake</i> . . . . .	...	1-9-91	5'02	
		Total Branches . . . . .	...	...	...	139'23
		TOTAL, RAJPUTANA SECTION . . . . .	...	...	...	718'98
		Total, Rajputana-Malwa, carried over . . . . .	...	...	...	718'98
		Total, Bombay, Baroda and Central India Railway system carried over . . . . .	...	...	...	824'04

* Of this, the length on the Jumna bridge is mixed (5' 6" and 3' 3½") gauges.

on the 31st December 1902, alphabetically arranged.

REMARKS.

4. Petlad-Cambay railway (Anand-Tarapur section)—concl'd.

(b) The general conditions are as follows :—

- (i) *Government aid.*—The line is the property of the Baroda State.
- (ii) *Currency of agreement.*—The agreement is current for a period of three years.
- (iii) *Power to determine agreement.*—Either party may terminate the agreement at any time on giving one year's notice.
- (iv) *Terms of working.*—The railway is debited with a share of the working expenses of the system (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway excluding 2' and 2' 6" gauge lines in proportion to the total earnings of the Petlad-Cambay and Gaekwar's Mehsana railways.
- (v) *Rates and fares.*—To be fixed from time to time by the Company with the approval of His Highness' Government, and as far as possible to conform to those generally in force on the Bombay, Baroda and Central India railway.

5. Petlad-Cambay railway (Tarapur-Cambay section)—

(a) The Petlad-Cambay railway (Tarapur-Cambay section) is worked under—

† *Agreement of*—17th May 1902 (between the Cambay State and the Bombay, Baroda and Central India Railway Company) for working.

(b) The general conditions of the agreement are as follows :—

- (i) *Government aid.*—The line is the property of the Cambay State.
 - (ii) *Currency of agreement.*—
 - (iii) *Power to determine agreement.*—
- } The agreement may be terminated at any time on one year's notice from either party expiring on the 30th June or 31st December in any year.
- (iv) *Terms of working.*—The railway is debited with a share of the working expenses of the system (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2' and 2' 6" gauge lines in proportion to the total earnings of the Tarapur-Cambay railway.
 - (v) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Cambay State and as far as possible to conform to those generally in force on the Bombay, Baroda and Central India railway.

6. Nagda-Ujjain railway—

(a) The Nagda-Ujjain railway is worked under the following :—

Agreement of—15th July 1896 (between His Highness the Maharaja of Scindia and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

(b) The general conditions are as follows :—

- (i) *Government aid.*—The line is the property of the Scindia State.
 - (ii) *Currency of agreement.*—
 - (iii) *Power to determine agreement.*—
- } The agreement may be terminated at any time after 15th July 1896 on one year's notice from either party expiring on the 30th June or 31st December in any year.
- (iv) *Terms of working.*—The railway is debited with a share of the working expenses of the system (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway excluding 2' and 2' 6" gauge lines, in proportion to the total earnings of the Nagda-Ujjain railway.
 - (v) *Rates and fares.*—To conform to those generally in force on the Godhra-Rutlam-Nagda railway.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—contd.				
		Total Bombay, Baroda and Central India Railway system, Brought forward	...	...	...	824'04
		Total Rajputana-Malwa, Brought forward	...	...	...	718'98
8	(g)	Rajputana-Malwa—contd. (3' 3½" gauge.)				
		MALWA SECTION—				
		<i>Main line—</i>				
		Khandwa to Sanawad	8-1-72	1-2-74	34'25	
		Sanawad to Mortakka		1-4-74	3'50	
		Mortakka to Choral		20-1-75	20'50	
		Choral to Mhow		1-1-78	15'69	
		Mhow to Indore		3-8-76	13'00	
		Nerbudda bridge		5-10-76	...	
		Indore to Fatehabad	29-10-73	3-8-76	25'23	
		Fatehabad Junction to Rutlam		11-7-78	48'75	
		Rutlam to Jaora		25-2-80	20'50	
		Jaora to Mandsaur	5-10-77	8-4-80	31'75	
		Mandsaur to Neemuch		2-7-80	30'25	
		Neemuch to Nimbahera		10-3-81	16'40	
		Nimbahera to Chitorgarh	30-4-79	19-3-81	17'65	
		Chitorgarh to Nasirabad		1-12-81	100'65	
		Nasirabad to Ajmere	14-4-74	14-2-76	14'15	
		Total Main line	...	...	...	392'27
		<i>Branch on Malwa section—</i>				
		<i>Ujjain branch—</i>				
		Fatehabad to Ujjain	29-10-73	3-8-76	12'00	
		Ujjain branch extension across the Sipra river to Ujjain city	6-12-82	1-3-84	2'88*	
		Total Branch	...	...	...	14'88
		TOTAL MALWA SECTION	...	...	...	407'15
		CAWNPORE-ACHNERA SECTION—				
		<i>Main line—</i>				
		Cawnpore to Kanauj	13-10-78	15-12-80	49'51	
		Kanauj to Farukhabad		1-2-81	36'50	
		Farukhabad to Kasganj	13-7-82	14-4-84	67'00	
		Kasganj to Hathras		1-7-84	34'00	
		Hathras to Muttra	April 1874	19-10-75	29'00	
		Jumna bridge	July 1882	1-7-84	1'00	
		Muttra to Achnera	Feb. 1880	7-11-81	22'33	
		Total Main line	...	...	...	239'34
		<i>Branches on Cawnpore-Achnera section—</i>				
		<i>Brahmavart branch</i>	18-3-84	10-11-85	5'00	
		<i>Soron branch</i>	16-3-83	4-1-85	9'00	
		<i>Brindaban branch</i>	4-5-88	26-8-89	7'32	
		Total Branches	...	...	...	21'32
		TOTAL CAWNPORE-ACHNERA SECTION	...	...	...	260'66
		REWARI-BHATINDA-FAZILKA SECTION—				
		<i>Main line—</i>				
		Rewari to Hissar	13-9-81	20-3-83	89'00	
		Hissar to Sirsa	8-10-82	1-4-84	50'50	
		Sirsa to Kot Kapura		1-10-84	72'07	
		Kot Kapura to Fazilka		1-1-85	50'00	
		TOTAL, REWARI-BHATINDA-FAZILKA SECTION	...	...	...	†261'57
		GRAND TOTAL, RAJPUTANA-MALWA	...	...	...	1,648'36
		Carried over	...	...	...	2,472'40

* Includes 2'10 miles, 5' 6" gauge, from Sipra Junction to station opened in 1899.

† Includes 26'28 miles of mixed (5' 6" and 3' 3½") gauge between Kot Kapura and Bhatinda.

on the 31st December 1902, alphabetically arranged.

REMARKS.

7. Godhra-Rutlam-Nagda railway—

(a) The Godhra-Rutlam-Nagda railway is worked under the following contracts :—

Contracts of—5th October 1893 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working the Godhra-Rutlam railway.

1st October 1897 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working the Rutlam-Nagda railway.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

(For terms of contracts—see Rajputana-Malwa railway, paragraph 8 *et seq.*)

8. Rajputana-Malwa railway—

(a) The Rajputana-Malwa railway is worked under the following contracts :—

Contracts of—24th September 1884 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintaining and working the Rajputana-Malwa railway.

16th March 1888.—Contract supplemental to that of 1884 for maintaining and working the Cawnpore-Achnera railway.

8th November 1889.—Contract supplemental to that of 1884 for maintaining and working the Brindaban branch.

1st February 1901.—Contract modifying that of 1884.

(b) The general conditions of the contracts are as follows :—

(i) *Government aid.*—The line is the property of the State.

(ii) *Currency of contract.*—The duration of the contract is up to the 31st December 1905.

(iii) *Power of company to surrender contract.*—Nil.

(iv) *Terms of working.*—The working expenses of the system (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) excluding 2' and 2' 6" gauge lines, are pooled, and divided between the component parts of the system in proportion to the gross earnings of each. The net earnings thus arrived at of the Rajputana-Malwa, 3' 3½" gauge, and Godhra-Rutlam-Nagda, 5' 6" gauge, railways, are paid in full to Government.

(v) *Rates and fares.*—Maximum and minimum rates and fares have been fixed within which the Company are authorised to vary the rates.

(vi) *General remarks.*—The Maharaja Holkar lent the British Government one hundred lakhs of rupees at 4½ per cent. per annum for the construction of the Khandwa-Indore section, and is entitled to a moiety of surplus profits.

The Maharaja Scindia lent the British Government seventy-five lakhs of rupees at 4 per cent. per annum for the construction of the Indore-Neemuch section and the branch to Ujjain.

The Cawnpore-Achnera line was leased to the Bombay, Baroda and Central India Railway Company on the 1st October 1886, and is now treated as an integral part of the Rajputana-Malwa railway; but Government reserve the right to take back the line at any time.

The Rajputana-Malwa railway system has been worked by the Bombay, Baroda and Central India Railway Company from the 1st January 1885.

9. Ahmedabad-Parantij railway—

(a) The Ahmedabad-Parantij railway is worked under the following contracts :—

Contracts of—13th March 1896 (between the Secretary of State and the Ahmedabad-Parantij Railway Company) for construction.

4th June 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—contd.				
		Brought forward	...	...	...	2,472.40
8	(g)	RAJPUTANA-MALWA—concl'd.				
		DOUBLE LINE, RAJPUTANA SECTION.				
		Agra Fort to Agra Cantonment	...	11-8-73	1.14	
		Second track at Delhi	...	25-12-02	1.78	
		Total Double line	...	...	2.92	
8	(i)	AHMEDABAD-PARANTIJ— (3' 3½" gauge.)				
		Ahmedabad to Talod	January 1896.	1-5-97	32.82	
		Talod to Parantij		2-7-97	7.83	
		Parantij to Idar-Ahmednagar		23-10-97	14.05	
		TOTAL, AHMEDABAD-PARANTIJ	...	...	...	54.70
8	(k)	PALANPUR-DEESA— (3' 3½" gauge.)				
		Palanpur to Deesa	20-3-92	8-11-93	17.28	
		TOTAL, PALANPUR-DEESA	...	...	...	17.28
8	(h)	GAEKWAR'S MEHSANA— (3' 3½" gauge.)				
		Mehsana to Vadnagar	...	21-3-87	20.73	
		Vadnagar to Kheralu	...	12-12-88	7.00	
		Viramgam to Mehsana	...	1-2-91	40.21	
		Mehsana to Patan	...	20-7-91	24.69	
		TOTAL, GAEKWAR'S MEHSANA	...	...	...	92.63
8	(l)	GAEKWAR'S DABHOI— (2' 6" gauge.)				
		Miyagam to Dabhoi	21-3-72	8-4-73	20.00	
		Dabhoi to Chandod	27-11-77	15-4-79	10.62	
		Dabhoi to Bahadarpur		17-9-79	9.64	
		Dabhoi to Goya Gate	29-1-79	1-7-80	17.00	
		Goya Gate to Vishvamitri		24-1-81	1.63	
		Bahadarpur to Bodeli	Sept. 1888	16-6-90	12.77	
		Vishvamitri to Padra	28-8-95	1-7-97	7.14	
		TOTAL, GAEKWAR'S DABHOI	...	...	...	78.80
		Carried over	...	...	...	2,715.81

on the 31st December 1902, alphabetically arranged.

REMARKS.

9. Ahmedabad-Parantij railway—concl'd.

(b) The general conditions of the contracts are as follows :—

- (i) *Government aid.*—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Parantij railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, plus Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land has also been provided free.
- (ii) *Currency of contract.*—Government may, by giving 12 months' notice, determine the contract on the 31st December 1917 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure, or on the 31st December 1946 paying the Company in rupees an amount equal to the total capital expenditure.
- (iii) *Power of Company to surrender contract.*—Nil.
- (iv) *Terms of working.*—The railway is debited with a share of the working expenses of the system (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2' and 2' 6" gauge lines, proportionate to its total earnings but not exceeding 44 per cent. of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Parantij Railway Company.
- (v) *Rates and fares.*—To be arranged from time to time between the Government and the working agency within the maximum and minimum rates and fares in force on the Rajputana-Malwa railway.

10. Palanpur-Deesa railway—

(a) The Palanpur-Deesa railway is worked under—

Terms contained in letter No. 44 Ry., dated the 30th March 1892, from the Government of India to the Secretary of State, and letter No. 62 Ry., dated 23rd June 1892, from the Secretary of State to the Government of India.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

(b) The general conditions of the terms are as follows :—

- (i) *Government aid.*—The line is owned jointly by Government and the Palanpur Durbar.
- (ii) *Currency of contract.*—The contract is coterminous with the Company's contract for working the Rajputana-Malwa railway. In the event of the line being extended, Government can terminate the contract on giving the Company six months' notice.
- (iii) *Power of Company to surrender contract.*—Nil.
- (iv) *Terms of working.*—The railway is debited with a share of the working expenses of the system, excluding the 2' and 2' 6" gauge lines, in proportion to the total earnings of the Palanpur-Deesa railway, the net earnings thus arrived at in any half-year being divided between Government and the Palanpur Durbar in proportion to the capital provided by each, after excluding from the Government capital the sum of Rs. 25,117 for extra expenditure in providing a 5' 6" gauge substructure.
- (v) *Rates and fares.*—Same as on the Rajputana-Malwa railway.

11. Gaekwar's Mehsana railway—

(a) The Gaekwar's Mehsana railway is the property of the Baroda State and is worked under the following :—

Agreement of—1st July 1891 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

NOTE.—See Petlad-Cambay railway (Anand-Tarapur section), paragraph 4 *ante*. The terms of working are the same for both railways.

12. Gaekwar's Dabhoi railway—

(a) The Gaekwar's Dabhoi railway is worked under—

Agreement of—1st January 1897 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total
Main.	Sub.				Miles.	Miles.
		BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—continued.				
		Brought forward	....	...	...	2,715'81
8	(m)	RAJPIPLA— (2' 6" gauge.)				
		Anklesvar to Raj-Pardi	Oct. 1894	1-7-97	19'03	
		Raj-Pardi to Umalla	Feb. 1898	19-1-99	4'95	
		Umalla to Amletha		1-6-99	7'85	
		Amletha to Nandod		20-7-99	5'54	
		TOTAL, RAJPIPLA	...	...	...	37'37
8	(j)	VIJAPUR-KALOL-KADI— (3' 3½" gauge.)				
		Vijapur to Kalol	23-5-99	10-6-02	29'44	
		TOTAL VIJAPUR-KALOL-KADI	...	...	...	29'44
		TOTAL, OPEN MILEAGE, BOMBAY, BARODA AND CENTRAL INDIA SYSTEM	...	...	...	2,782'62
		<i>Lines under construction or sanctioned for construction—</i>				
8	(a)	BOMBAY, BARODA AND CENTRAL INDIA— (5' 6" gauge.)				
		Baroda to Godhra	6-6-02	*July 1903	44'00	
		TOTAL, BOMBAY, BARODA AND CENTRAL INDIA	...	...	...	44'00
8	(g)	RAJPUTANA-MALWA— (3' 3½" gauge.)				
		Rewari to Phulera	20-12-01	†	133'32	
		TOTAL, RAJPUTANA-MALWA	...	...	...	133'32
8	(l)	GAEKWAR'S DABHOI— (2' 6" gauge.)				
		Padra to Ranu	18-1-02	*31-3-03	4'18	
		Ranu to Mobha			5'02	
		TOTAL, GAEKWAR'S DABHOI	...	...	...	9'20
8	(n)	JAIPUR (SIWAI-MADHOPUR)— (3' 3½" gauge.)				
		Sanganer to Siwai-Madhoper in the Jaipur State	2-12-97	‡	72'85	
		TOTAL, JAIPUR	...	...	...	72'85
8	(j)	VIJAPUR-KALOL-KADI— (3' 3½" gauge.)				
		Kalol to Kadi	29-3-01	*1-6-03	12'20	
		TOTAL, VIJAPUR-KALOL-KADI	...	...	...	12'20
8	(o)	AHMEDABAD-DHOLKA— (3' 3½" gauge.)				
		Sabarmati to Bavla	2-10-01	{ 23-2-03 1-4-03	25'00	
		Bavla to Dholka			8'54	
		TOTAL, AHMEDABAD-DHOLKA	...	...	...	33'54
		Total Lines under construction	...	...	...	305'11
		GRAND TOTAL, BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM	...	...	...	3,087'73

* Probable date of opening.

† Commencement of work not yet authorised.

‡ Completion stopped for want of funds.

DIX 47—continued.
on the 31st December 1902, alphabetically arranged.

REMARKS.

12. Gaekwar's Dabhoi railway—concl'd.
- (b) The general conditions of the agreement are as follows:—
- (i) *Government aid.*—The line is the property of the Baroda State.
 - (ii) *Currency of agreement.*—The agreement may be terminated at any time on one year's notice from either side to expire on the 30th of June or 31st of December.
 - (iii) *Terms of working.*—The Company work the railway at actual cost, plus 12½ per cent. on total working expenses (but not less than Rs. 500 per mensem or more than Rs. 800 per mensem, in a half-year) for superintendence.
 - (iv) *Rates and fares.*—The rates and fares are fixed from time to time by the Company with the approval of His Highness' Government; and as far as possible must conform generally to those in force on the Bombay, Baroda and Central India railway.
13. Rajpipla railway—
- (a) The Rajpipla railway is worked under—
Agreement of—19th March 1900 between the Rajpipla State and the Bombay, Baroda and Central India Railway Company.
- (b) The general conditions of the agreement are as follows:—
- (i) *Government aid.*—The line is the property of the Rajpipla State.
 - (ii) *Currency of agreement.*—The agreement may be terminated by either party on the expiration of three years or at the end of any calendar half-year thereafter, on one year's notice from either side.
 - (iii) *Terms of working.*—The Rajpipla State is debited with the actual cost of working; and in addition one per cent. on the net earnings of the Rajpipla railway as contribution to the Provident Fund; and 12½ per cent. on total working expenses (but not less than Rs. 300 per mensem or more than Rs. 800 per mensem) for superintendence.
 - (iv) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Rajpipla State; and to conform to those generally in force on the Bombay, Baroda and Central India railway.
14. Jaipur (Siwai-Madhupur) railway— } The agreements for working these lines have not as yet been
15. Vijapur-Kalol-Kadi railway— } executed.
16. Ahmedabad-Dholka railway—
- (a) The Ahmedabad-Dholka railway is worked under the following contracts:—
Contracts of—25th March 1902 (between the Secretary of State and the Ahmedabad-Dholka Railway Company) for construction.
18th July 1902 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.
- (b) The general conditions of the contracts are as follows:—
- (i) *Government aid.*—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Dholka railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, plus Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land has also been provided free.
 - (ii) *Currency of contract.*—Government may, by giving 12 months' notice, determine the contract on the 30th June 1922 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure.
 - (iii) *Power of Company to surrender contract.*—Nil.
 - (iv) *Terms of working.*—The railway is debited with a share of the working expenses of the system (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2' and 2' 6" gauge lines proportionate to its total earnings, but not exceeding 44 per cent. of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Dholka Railway Company.
 - (v) *Rates and fares.*—To be arranged from time to time between the Government and the working agency within the maximum and minimum rates and fares in force on the undertaking.
17. General remarks.—The following sections of the Bombay, Baroda and Central India railway are worked over by other lines:—0.24 mile at Ujjain by the Indian Midland railway, and 7.25 miles from Dadar Junction to Colaba by the Great Indian Peninsula railway. The length from Dadar Junction to Carnac bridge, 4.39 miles of the Great Indian Peninsula railway is worked over by the Bombay, Baroda and Central India railway.
- The following sections of the Rajputana-Malwa railway are worked over by foreign lines—1.00 mile from Agra East Bank to Agra Fort by the East Indian railway; and 2.89 miles at Agra by the Indian Midland railway.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—continued.				

on the 31st December 1902, alphabetically arranged.

REMARKS.

18. Details of construction—

(a) Permanent-way.—

Bombay, Baroda and Central India railway.—The main line is chiefly laid with double-headed steel rails, weighing 69lb. to the yard, with the exception of the length from Colaba to Dadar which is laid with 82lb. rails. On the southern part of the line (Bombay to Broach) the rails are laid on creosoted pine sleepers. On the double line from Colaba to Dadar, Virar to Dahanu, Amroli to Anklesvar and Chamargam to Miyagam, 82lb. bull-headed steel rails are laid on creosoted pine sleepers and four-holed chairs. On the double line from Dahanu to Sachin, Broach to Chamargam and from Miyagam to Itola 82lb. bull-headed steel rails are laid on cast-iron pot sleepers. On the double line, Itola to Baroda, 69lb. double-headed steel rails are laid on cast-iron pot sleepers. The rails on the Patri branch are flat-footed, weighing 48lb. and 50lb. to the yard, and are laid on creosoted pine sleepers. The rails on the Godhra branch are 61lb. and 69lb. steel, laid, with a few trifling exceptions, on iron pot sleepers. The Viramgam-Wadhwan section was originally laid with 60lb. iron rails on cast iron pot sleepers; on the conversion of the line to metre gauge these were removed and 41½lb. steel rails and deodar sleepers substituted.

Tapti Valley railway.—The permanent-way consists of 70 lb. flat-footed rails laid on creosoted pine and teak sleepers.

Petlad-Cambay railway.—The permanent-way consists of 66½lb. flat-footed steel rails and creosoted pine sleepers.

Nagda-Ujjain railway.—The permanent-way consists of 75lb. flat-footed steel rails, with 5 bolt hole fish-plates, laid on cast-iron oval pot sleepers, Indian Midland railway pattern.

Godhra-Rutlam-Nagda railway.—The rails are flat-footed, steel, 75lb. to the yard, laid on transverse steel, deodar and creosoted pine sleepers.

Rajputana-Malwa railway.—The rails originally used were 36lb. and 40lb. to the yard laid on transverse deodar and creosoted pine sleepers. The 36lb. iron rails have nearly all been replaced by 41½lb. steel rails which in future renewals will be replaced by 50lb. rails. The creosoted half-round pine sleepers with which the road was first laid are being replaced by deodar sleepers. The Cawnpore-Farukhabad section is laid with iron rails 40lb. to the yard. The line from Farukhabad to Achnera is laid with steel rails, 41½lb. to the yard, on transverse sleepers of deodar. On the Rewari-Bhatinda-Fazilka line, the rails are mainly of steel, 41½lb. to the yard, laid on deodar and Denham-Olpherts' pot sleepers.

Ahmedabad-Parantij railway.—The line is laid with 41½lb. flat-footed steel rails on transverse deodar and creosoted pine sleepers.

Palanpur-Deesa railway.—The rails are iron, 40lb. to the yard, laid on Denham-Olpherts' cast-iron sleepers or on steel dish cover sleepers taken from the main line.

Gaekwar's Mehsana railway.—The length from Mehsana to Kheralu is laid with steel rails, 41½ lb. to the yard, on transverse steel trough sleepers. The remainder of the line is laid with iron and steel rails, 40lb. and 41½lb. to the yard, on deodar sleepers, except a mile on the Mehsana-Viramgam section, which is laid with steel trough sleepers.

Gaekwar's Dabhoi railway.—The line was originally laid with iron rails weighing 30lb. to the yard for 20 miles, and with steel rails weighing 30lb. and 31lb. to the yard for 39.25 miles and 12.50 miles, respectively, on wooden sleepers. The renewals are being made with 31lb. steel rails. The Vishvamitri-Padra section is laid with 31lb. steel rails and wooden sleepers.

Rajpipla railway.—The line is laid with 41½lb. iron rails on half round jungle teak sleepers.

(b) **Ballast.**—The whole system is ballasted throughout with stone, gravel or sand.

(c) **Tunnels.**—The following are the tunnels of 500 feet length and over:—Panchpipla between Bagrangarh and Amargar, 765 feet; and Mhowghat No. 4, between Patalpani and Kalakand, 622.75 feet. There are three other tunnels varying from 279.25 feet to 365.50 feet in length, aggregating 994 feet on the Sone ghats.

(d) **Bridges.**—The following are the important bridges of 1,000 feet and over:—South and North Bassein (between Bhayndra and Umeyla), 69 spans of 60 feet, and 25 spans of 60 feet, respectively; South and North Viturna (between Virar and Sophala), 20 spans of 60 feet and 23 spans of 60 feet, respectively; Tapti (between Surat and Amroli), 30 spans of 60 feet (1,875 feet); Nerbudda (between Anklesvar and Broach), 25 spans of 183.50 feet (4,687.50 feet); Mbye (between Bajuva and Vasad), 27 spans of 60 feet. Sabarmati (between Ahmedabad and Sabarmati), 1 span of 67 feet, 20 spans of 60 feet and 1 span of 52.41 feet; and Mbye (between Sevalia and Timba Road), 64 spans of 30 feet; Mahi (between Bhaironghar and Raoti), 6 spans of 150 feet and 2 spans of 100 feet; Chambal, near Nagda, 10 spans of 100 feet; Jumna (between Agra Fort and Agra Junction), 16 spans of 133 feet and 6 spans of 23 feet (2,272 feet); Jumna (between Muttra Cantonment and Raya), 7 spans of 150 feet (1,146 feet); Nerbudda (between Mortakka and Barwaha), 14 spans of 183 feet (2,836 feet); and Siew (between Mandsaur and Dalauda), 11 spans of 30 feet.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		BOMBAY, BARODA AND CENTRAL INDIA SYSTEM—concluded.				
2	(c)	BRAHMAPUTRA-SULTANPUR— (See Eastern Bengal system, page 314.)				

DEX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

18. Details of construction—concluded.

(e) Fencing.—

Bombay, Baroda and Central India railway.—The main line is wholly fenced. As far as Ahmedabad it is all wire fence, except some 2 miles of cactus. From Ahmedabad to Wadhwan there are 32½ miles of cactus and 47½ miles of wire. The Godhra branch is fenced partly with cactus (2½ miles) and partly with wire (46½ miles). The Patri branch is unfenced.

Tapti Valley railway.—The line is not fenced, except round station yards.

Petlad-Cambay railway (Anand-Tarapur section).—The whole of the Anand-Petlad section is fenced with cactus.

Petlad-Cambay railway (Tarapur-Cambay section).—The line has not been fenced, except round station yards.

Nagda-Ujjain railway.—The line has not been fenced, except round station yards.

Godhra-Rutlam-Nagda railway.—The line is fenced with wire from mile 0 to mile 35 and then in different sections, making an aggregate of 76½ miles. The rest of the line is unfenced.

Rajputana-Malwa railway.—The total length of line fenced on the Rajputana section is 658 miles; or three-fourths of the whole section. The Malwa section is generally unfenced, except on the ghats between Mhow and Kalakund and at stations. The Cawnpore-Achnera section is partially fenced, and the fencing is chiefly confined to one side of the line between Cawnpore and Farukhabad and between Hathras City and Muttra Cantonment. There are a few miles of double fencing at stations. The Rewari-Bhatinda-Fazilka section is fenced for about 110 miles of the main line and at stations.

Ahmedabad-Parantij railway.—Fenced only in station yards.

Palanpur-Deesa railway.—The entire length, with the exception of a little wire fencing at mile 2, is fenced with cactus.

Gaekwar's Mehsana railway.—The whole line was originally fenced with cactus; but this has in several places been entirely destroyed by floods and locusts, and what remains is much broken up.

Gaekwar's Dabhoi railway.—There is no fencing, except what has been put up by the villagers themselves.

Rajpipla railway.—There is no fencing, except in the station yards.

(f) Curves—

5' 6" gauge sections.—There are no curves under a radius of 1,000 feet.

3' 3½" and narrower gauge sections, excluding Gaekwar's Dabhoi railway.—There are no curves under a radius of 1,000 feet.

Gaekwar's Dabhoi railway.—There are no curves under a radius of 500 feet.

(g) Gradients.—Of a total open mileage of 2,782.62 miles on the system, 1.32 miles are on the ruling gradient of 1 in 80, on the 5' 6" gauge; 3.40 miles on 1 in 40 on the 3' 3½" gauge and 5.34 miles on 1 in 150 on the 2' 6" gauge railway.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles
36	(a)	BUKHTIARPORE-BEHAR LIGHT— (2' 6" gauge.)				
		Bukhtiarpore on the East Indian railway to Behar . . .	30-5-01	* May or June 1903.	18.75	
		TOTAL, BUKHTIARPORE-BEHAR . . .	...	...	...	18.75

* Probable date of opening.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Bukhtiarpore-Bihar Light railway.—

(a) The Bukhtiarpore-Bihar Light railway is being constructed and will be worked on the terms in Bengal Government Notification No. 100 R., dated the 25th June 1901, under the following agreement:—

Agreement.—(Between the District Board of Patna and the Bukhtiarpore-Bihar Light Railway Company).

(b) The general conditions are as follows:—

(i) *Government aid.*—In addition to land, which has been provided free of charge, except for station sites and diversions from the district road, the District Board supplements the net earnings, subject to a maximum limit of Rs. 32,000 per annum, to allow of the Company paying a dividend of 4 per cent. per annum on the Company's share capital of Rs. 8,00,000.

(ii) *Currency of contract.*—In the event of the District Board exercising the right of purchase under section 41 of the Bengal Act, III of 1883, *vis.*, upon the expiration of twenty-one years from the date of the order of the Local Government authorising the construction of the line by giving six months' notice, or at intervals of seven years thereafter, the value to be calculated at twenty years' purchase of the average net profits to the Company during the four years preceding the transactions, together with a bonus of 20 per cent. thereon.

(iii) *Terms of working.*—Any surplus profits in excess of four per cent. on share capital, *plus* not more than 4 per cent. on debenture capital, will be equally divided between the District Board and the Company.

(iv) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.

(v) *General remarks.*—The line is to be laid as far as possible on the District road.

2. Details of construction—

(a) *Permanent-way.*—30 lb. steel rails, Vignole's pattern, on cross sleepers of pyinkado.

(b) *Ballast.*—The line will be ballasted throughout.

(c) *Fencing.*—The line will not be fenced.

Appendix 47.
History of railways.

History of railways constructed and in progress.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
23	(a)	BURMA— (3' 3½" gauge.)				
		IRRAWADDY SECTION— Rangoon to Prome	25-2-74	2-5-77	161'00	
		TOTAL, IRRAWADDY SECTION . . . . .	...	...	...	161'00
		SITTANG SECTION—				
		<i>Main line—</i>				
		Rangoon to Pegu	23-5-81	4-2-84	46'25	
		Pegu to Pyuntaza		4-2-84	41'75	
		Pyuntaza to Nyaunglebin		4-2-84	5'00	
		Nyaunglebin to Toungoo		1-7-85	73'00	
		Total Main line . . . . .	...	...	...	166'00
		<i>Branches—</i>				
		Suburban lines	25-9-74	1-3-80 15-7-90	6'00 3'00	
		Total Branches . . . . .	...	...	...	9'00
		TOTAL, SITTANG SECTION . . . . .	...	...	...	175'00
		MANDALAY SECTION—				
		<i>Main line—</i>				
		Toungoo to Thawutti	October 1886	1-5-88	44'00	
		Thawutti to Pyinmana		1-5-88	15'00	
		Pyinmana to Yamethin		15-11-88	49'00	
		Yamethin to Mandalay		1-3-89	112'00	
		Total Main line . . . . .	...	...	...	220'00
		<i>Branches—</i>				
		<i>Meiktila branch—</i>				
		Thazi to Meiktila Cantonment	1-1-92	10-5-93	12'89	
		Meiktila to Myingyan	Sept. 1898	15-11-99	57'21	
		<i>Mandalay Shore Branch—</i>				
		Mandalay to Mandalay shore . . . . .	...	April 1889	2'50	70'10
		Total Branches . . . . .	...	...	...	72'60
		TOTAL, MANDALAY SECTION . . . . .	...	...	...	292'60
		MU VALLEY SECTION—				
		<i>Main line—</i>				
		Sagaing to Shwebo	Sagaing to Kawiia 17-10-89 Kawiia to Nankan in Feb. and March 1891.	1-7-91	53'05	
		Shwebo to Wuntho		4-4-92	99'46	
		Wuntho to Nankan		1-11-94	15'46	
		Nankan to Mohnyin	Sept. 1892 Dec. 1895	21-10-95	74'35	
		Mohnyin to Mogaung		1-3-96	52'34	
		Mogaung to Myitkyina		1-1-98	36'63	
		Total Main line . . . . .	...	...	...	331'29
		Carried over . . . . .	...	...	...	331'29
			...	...	...	628'60

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Burma railways—

(a) The Burma railways are worked under the following contract—

Contract of—9th March 1897 (between the Secretary of State and the Burma Railways Company) for transfer and management.

(b) The general conditions of the contract are as follows:—

(i) *Government aid.*—Interest is guaranteed at 2½ per cent. on the Company's share capital. Land was also provided free of charge.

(ii) *Currency of contract.*—Government may determine the contract, after giving six months' notice, if the Company fail to perform their obligations, or if the undertaking be, in the opinion of the Secretary of State, in course of gross mismanagement by the Company, or if it be worked at a loss for three consecutive half-years. Government may also determine the contract, on the 31st December 1921, or at the end of any succeeding tenth year, by giving twelve months' previous notice. On the determination of the contract from any cause, the Secretary of State is to repay to the Company in sterling at par the capital raised by the latter.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts in each half-year are to be applied in payment to Government of—

The equivalent of the interest paid for the half-year on any debentures issued by the Company;

The equivalent of the guaranteed interest at 2½ per cent. per annum on the Company's capital of £2,000,000, and of the interest payable on any additional share capital raised by the Company;

The equivalent of interest at 2½ per cent. per annum on the sterling equivalent of the capital expenditure by Government on the railways up to the date of the transfer, and of interest on any additional moneys supplied by Government;

After payment of any interest above-mentioned which may remain unpaid any surplus, in a year ending on the 30th June, to be divided between Government and the Company, in the proportion of four-fifths to the former and one-fifth to the latter.

(v) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

(vi) *General remarks.*—The Burma Railway Company was formed in 1896 for the purpose of taking over the working of the then existing system of State railways (3' 3⅜" gauge) in Burma and extending it by the construction of other lines, particularly one from Mandalay to Kunlong. The railways taken over by the Company from the Government on the 1st September 1896 comprised the following lines:—Rangoon to Prome on the Irrawaddy river; Rangoon to Mandalay, and thence to the bank of the Irrawaddy, opposite Sagaing; and Sagaing to Mogaung, with an extension to Myitkyina, and a branch to Katha, whence there is communication by river with Bhamo.

2. Details of construction—

(a) *Permanent-way.*—The Irrawaddy line is laid with steel rails, 50 lb. to the yard, for a double track from Rangoon to Insein (9 miles), the remaining 152 miles being laid for a single track with 50 lb. steel rails for 103 miles, 41½ lb. steel for 29 miles, and 40 lb. iron for 20 miles. The Sittang line is laid with steel rails, 50 lb. to the yard, from Pazundaung to Deiku (81 miles), the remaining 85 miles being laid with rails, 41½ lb. to the yard. The Mandalay line consists of 50 lb. flat-footed steel rails, with deep web fish-plates of Bessemer steel. The Thazi-Myingyan branch consists of steel rails, 41½ and 50 lb. to the yard. The Mu Valley line consists of 41½ lb. flat-footed steel rails, with the exception of the Alon branch, where the rails are mostly 50 lb. The Mandalay-Kunlong line is laid with 50 lb. steel rails. The Bassein-Henzada-Letpadan branch will be laid with steel rails, 50 lb. to the yard. The sleepers throughout are generally of teak, pyinma and pyinkado.

(b) *Ballast.*—The ballast is either shingle or broken stone.

(c) *Tunnels.*—On the Mandalay-Kunlong section, there are two tunnels at the Gokteik Gorge, *vis.*, No. 1 tunnel, 345 feet, and coverings in the approach 60 and No. 2 tunnel, 490 feet.

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
23	(a)	BURMA—concl'd.— (3' 3½" gauge.)				628'60
		Brought forward.	...	...	...	331'29
		MU VALLEY SECTION—concl'd.				
		<i>Branches—</i>				
		Sagaing to Alon	Sept. 1898	15-4-00	70'46	
		<i>Myohaung branch—</i>				
		Myohaung to Amarapura shore	17-10-89	22-11-91	6'00	
		<i>Katha branch—</i>				
		Naba to Katha . . . . .	...	2-10-95	15'00	
		Total Branches . . . . .	...	...	...	91'46
		TOTAL, MU VALLEY SECTION	...	...	...	422'75
		MANDALAY-KUNLONG SECTION—				
		Myohaung to Sedaw	Oct. 1895	1-1-98	13'45	
		Sedaw to Maymyo		1-4-00	26'10	
		Maymyo to Nawngkhio		20-5-00	34'10	
		Nawngkhio to Hsipaw		1-6-01	53'25	
		TOTAL MANDALAY-KUNLONG SECTION	...	...	...	126'90
		LETPADAN-BASSEIN SECTION—				
		Bassein to Henzada	7-9-99	15-12-02	82'25	
		TOTAL, BASSEIN-HENZADA-LETPADAN	...	...	...	82'25
		TOTAL OPEN MILEAGE, BURMA	...	...	...	1,260'50
		<i>Lines under construction or sanctioned for construction—</i>				
		MANDALAY-KUNLONG SECTION—				
		Hsipaw to Lashio	16-10-95	1-3-03	50'94	
		BASSEIN-HENZADA-LETPADAN—				
		Letpadan (on Irrawaddy line) to Tharrawa on the east bank of the Irrawaddy river	7-9-99	17-4-03	23'00	
		Henzada to Henzada shore			3'00	
		Total Lines under construction	...	...	...	76'94
		DOUBLE LINE—MAIN LINE AND BRANCHES—				
		Rangoon to Kemmendine . . . . .	...	30-10-89	4'20	
		Kemmendine to Insein . . . . .	...	10-1-90	5'50	
		Myohaung to Mandalay . . . . .	...	3-10-99	2'45	
		Total Double line	...	...	...	12'15
		GRAND TOTAL, BURMA	...	...	...	1,337'44

DIX 47—continued.

Appendix 47.
History of railways.

on the 31st December 1902, alphabetically arranged.

REMARKS.

2. Details of construction—concluded.

- (d) *Bridges.*—On the Mandalay-Kunlong section, there is a long high viaduct at the Gokteik Gorge which consists of 10 spans of 120 feet, 7 spans of 60 feet, and 16 spans of 40 feet (2,260 feet), supported on piers formed of steel trestles in pairs 40 feet apart. The total length of the viaduct is 2,260 feet and the greatest height of rail level above ground 325 feet.
- (e) *Fencing.*—The line from Prome to Mandalay is fenced. The Mu Valley line is generally unfenced, except at a few stations. On the Mandalay-Kunlong section the line is not fenced.
- (f) *Curves.*—On the Mu Valley line there are in all 13 curves of a radius of 573 feet, the sharpest on the line; four on the Katha branch between miles 212 and 213·8, the total length being 1,568 feet, and 9 on the main line between miles 171 to 235 on the Nankhan-Mohyin section, 3,790 feet long.
- (g) *Gradients.*—Of a total open mileage of 1,260·50 miles, 9·81 miles are on the ruling gradient of 1 in 25.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
5	(c)	CAWNPORE-BURHWAL— (See Oudh and Rohilkhand system, page 372.)				
2	(e)	COOCH-BEHAR— (See Eastern Bengal system, page 314.)				
6	(h)	DANDOT LIGHT— (See North Western system, page 368.)				
29	(a)	DARJEELING-HIMALAYAN— (2' 0" gauge.)				
		Siliguri to Kurseong	1879	23-8-80	31'75	
		Kurseong to Sonada		1-2-81	9'50	
		Sonada to Ghum		5-4-81	5'87	
		Ghum to Darjeeling		4-7-81	3'63	
		Darjeeling to the Darjeeling bazar		16-6-86	0'25	
		TOTAL, DARJEELING-HIMALAYAN . . . . .	...	...	...	51'00
1	(b)	DELHI-UMBALLA-KALKA— (See East Indian system, page 322.)				

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Darjeeling-Himalayan railway—

(a) The Darjeeling-Himalayan railway is worked under the following contract:—

Contract of—8th April 1879 (between the Secretary of State and Franklin Prestage, Esq.), for construction, maintenance and working.

(b) The general conditions of the contract are as follows:—

(i) *Government aid*.—Government undertake to pay the Company such sum as will make up its gross receipts to two lakhs of rupees annually. Government land and the use of the existing cart road are also granted free of cost.(ii) *Currency of contract*.—If at any period the railway should not be worked for six consecutive months, the Company is to surrender the road and land acquired from Government, receiving any sums due to them for permanent improvements to the road or works connected with it. After the railway has been opened for 25 years (reckoning from the 4th May 1884) and thereafter at intervals of 10 years, Government have the power, by giving 12 months' previous notice, to terminate the contract and take over the line on payment to the Company of its value as a dividend earning investment with an additional bonus of 20 per cent. over and above such value.(iii) *Power of Company to surrender contract*.—Nil.(iv) *Terms of working*.—After the first five years, and subject to subsequent modifications of clause 16, half the net profits of any year in excess of 5 per cent. on the paid up capital to be applied in repayment to Government of the amount expended on the maintenance of the cart road during the same year or in making good a deficiency in gross receipts. Government are under obligation to uphold and maintain this road at their own expense, subject to their right to be repaid the charges incurred in any year out of one moiety of the surplus profits earned in that year.(v) *Rates and fares*.—Certain maxima have been fixed within which the Company is permitted to vary its rates.(vi) *General remarks*.—The line is laid for a great part of its length along the cart road. The road has almost continuous curves and windings as it passes across the mountains.

2. Details of construction—

(a) *Permanent-way*.—The line, which was originally laid with iron rails, 30 lb. to the yard, on the plains has been relaid with iron rails, 40 lb. to the yard. Steel rails, 41½ lb. to the yard, are laid on the hill portion. Of the Terai, 2·70 miles have been renewed with 41½ lb. steel rails. SāI, oak and chestnut sleepers are in use, sāI only being used under the 41½ lb. rails.(b) *Ballast*.—The line is now ballasted up to the 9th mile, a portion of this length near Siliguri being laid with sand. Elsewhere the ballast is of gravel.(c) *Curves*.—Of curves with radii varying from 60 feet (the sharpest) to 1,000 feet, there is a total length of 35·55 miles distributed over the line.(d) *Gradients*.—Of a total open mileage of 51·00 miles, 3·63 miles are on the ruling gradient of 1 in 23.

Appendix 47.
History of railways.

History of railways constructed and in progr

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total
Main.	Sub.				Miles.	Miles.
15	(a)	DEOGHUR— (3 3 ¹ / ₂ gauge.)				
		Baidyanath to Deoghur	October 1881	23-12-82	4'79	
		TOTAL, DEOGHUR . . . . .	...	...	...	4'79
20	(a)	DHRANGADRA— (See Bhavnagar-Gondal-Junagad-Porbandar system, page 276.)				

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Deoghur railway—

(a) The Deoghur railway is worked under the following contract :—

Contract of—12th July 1883 (between the Secretary of State and the Deoghur Railway Company) for construction, maintenance and working.

(b) The general conditions of the contract are as follows :—

(i) *Government aid.*—Land alone was provided free of charge.

(ii) *Terms of contract.*—Messrs. Burn & Co. constructed the railway with capital raised locally and without any guarantee.

(iii) *Currency of contract.*—Government may determine the contract, after giving six months' notice, if the Company fail to perform their obligations, and take over the railway at a valuation based on the earnings for the two years immediately previous to such resumption. Government may also determine the contract after the railway has been opened for traffic for 30 years, and thereafter at terms of 10 years, by giving 12 months' notice, and take over the railway at a valuation calculated at the average market rate of the shares during the previous three years, together with an additional bonus not exceeding 20 per cent. of such value.

(iv) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.

2. Details of construction.—

(a) *Permanent-way.*—The permanent-way is laid with 36 lb. steel rails on wooden sleepers.

(b) *Ballast.*—The line is ballasted throughout.

(c) *Fencing.*—The line is unfenced.

(d) *Curves.*—The sharpest curve has a radius of 2,640 feet and extends over a length of 3,000 feet.

(e) *Gradients.*—Of a total open mileage of 4.79 miles, 3.50 miles are on the ruling gradient of 1 in 80.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		DIBRU-SADIYA SYSTEM— (3' 3½" gauge.)				
13	(a)	DIBRU-SADIYA—				
		<i>Main line—</i>				
		Lower steamer ghat on the left bank of the Brahmaputra river, near Dibrugarh, eastward, as far as the Dinjan stream	1881	Aug. 1882 16-7-83 2-5-84	15'00	
		Dinjan stream to Makum junction			23'50	
		Makum Junction to Dihing bridge			23'00	
		Total Main line	...	...	...	61'50
		<i>Branch—</i>				
		<i>Talap branch—</i>				
		Makum Junction to Dum-Duma	1881	2-5-84 5-2-85	10'00	
		Dum-Duma to Talap			6'00	
		Total Branch	...	...	...	16'00
		TOTAL, DIBRU-SADIYA	...	...	...	77'50
13	(b)	LEDO AND TIKAK-MARGHERITA— (3' 3½" gauge.)				
		<i>Main line—</i>				
		Dihing bridge to Ledo	...	17-2-84	7'50	
		<i>Namdang branch—</i>				
		Margherita to Namdang	...	1-1-01	3'50	
		TOTAL, LEDO AND TIKAK-MARGHERITA	...	...	...	11'00
		GRAND TOTAL, DIBRU-SADIYA SYSTEM	...	...	...	88'50

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Dibru-Sadiya railway system is made up of—		Open line. Miles.
(a) Dibru-Sadiya railway (3' 3½" gauge)	. . . . .	77.50
(b) Ledo and Tikak-Margherita railway (3' 3½" gauge)	. . . . .	11.00
TOTAL		88.50

2. Dibru-Sadiya railway—

(a) The Dibru-Sadiya railway is worked under the following contracts :—

Contracts of—26th May 1880 (between the Secretary of State and the Assam Railway Company) for maintenance and working.

25th July 1881.—Contract modifying that of 1880.

(b) The general conditions of the contracts are as follows :—

(i) *Government aid.*—Government guarantee payment of a subsidy, twelve months after opening of main line throughout or after each succeeding twelve months until the end of twenty years after opening, equal, together with the net earnings of the main line, to 5 per cent. of the paid up capital of the main line, not exceeding in any year Rs. 80,000. Similarly, Government guarantee a subsidy for the Makum branch, not exceeding Rs. 20,000 in any year. The free use of public roads is also provided for.

(ii) *Currency of contract.*—If the Company fail to fulfil their obligations, within thirty days after notice, Government can take possession and execute all repairs and works for the efficient working of the railway. If the Company do not maintain or work the railway for any time over fourteen days in any year, Government can deduct from the subsidy Rs. 210 in the case of the main line and Rs. 262 in the case of both main line and Makum branch each day, and in default Government will be discharged from all liabilities or obligations under this contract and can call on the Company to remove all rails, etc., and give possession of the lands, roads, etc., the Company bearing all expense in restoring the same to their original condition. Government may also determine* contract, on giving 12 months' notice (clause 19 of contract dated 26th May 1880), at the expiry of the first five years after date of opening, and at subsequent intervals of five years, by paying twenty per cent. in excess of the value of the Company's property.

* *NOTE.*—The Company having waived all their rights under clause 7 of contract dated 25th July 1881 to construct railways within the Lakhimpur District, Government have waived their right to purchase the railway before 1921, or at intervals of 10 years thereafter (Secretary of State's letter No. P. W. 2731, dated the 23rd December 1901).

(iii) *Power of Company to surrender contract.*—Nil.(iv) *Terms of working.*—The Company to maintain the railway and the road on which the rails are laid and the rolling-stock and other equipments to the satisfaction of the Secretary of State and to carry on the work of common carriers.(v) *Rates and fares.*—To be approved by Government from time to time while subsidy is payable. If the net profits exceed 12 per cent. of paid up capital, Government may order such reduction of tariff and rates as may be considered necessary, such reduction not lessening the net profits below 12 per cent.

3. Ledo and Tikak-Margherita railway—

(a) The Ledo and Tikak-Margherita railway is worked under the following :—

Contract of—30th July 1881, between the Secretary of State and the Assam Railways and Trading Company, for coal and iron mining in the Makum coal fields and for the construction of a railway or tramway to effect a junction with the railways which may be constructed to the bank of the Dihing river.*Terms*—contained in Government of India, Public Works Department, No. 623 R. T., dated the 6th August 1896.

(b) The general conditions are as follows :—

(i) *Government aid.*—Nil.(ii) *Currency of contract.*—The coal concession is for a term of 30 years from 30th July 1881 within an area of 30 square miles and for a further term of 30 years within an area of at least 4 square miles.(iii) *Power of Company to surrender contract.*— Nil.(iv) *Terms of working.*—The colliery to be charged with the cost of maintenance of the branch and sidings owned by it, all other charges for working the open line to be divided between the railway and colliery in proportion to their respective gross earnings, plus 5 per cent. on the gross earnings of the colliery for rolling-stock.(v) *Rates and fares.*—Certain rates have been sanctioned by Government for the carriage of goods.(vi) *General remarks.*—The working of the branch was taken over by the Dibru-Sadiya railway from the 1st January 1897.

Appendix 47:
History of railways.

History of railways constructed and in progre.

Class: No.		Name and sections of railways.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		DIBRU-SADIYA SYSTEM—concl'd.				

on the 31st December 1902, alphabetically arranged.

REMARKS.

4. Details of construction—

(a) *Permanent-way*—

Dibru-Sadiya railway.—The line throughout was originally laid with steel rails, 41½ lb. to the yard, but these are now gradually being replaced by 50 lb. steel rails. The sleepers are chiefly uriam; but about 30,000 cast iron plate sleepers of the Denham and Olpherts type are distributed throughout the main line, three being put in to each rail length.

Ledo and Tikak-Margherita railway.—The line is laid with 50 lb. steel rails on uriam sleepers.

(b) *Ballast*—*Dibru-Sadiya railway.*—The line is unballasted for one mile from Lower Ghât, and for 16 miles between Makum junction and Talap. On the rest of the line, broken stone ballast has been used.

Ledo and Tikak-Margherita railway.—The main line is three-fourths ballasted, but the Namdang branch is unballasted.

(c) *Fencing.*—The system is unfenced, with the exception of a short length at Dibrugarh.

(d) *Curves.*—There are no curves under a radius of 600 feet.

(e) *Gradients.*—Of a total open mileage of 88.50 miles, 0.53 mile is on the ruling gradient of 1 in 117.

Appendix 47.
History of railways.

History of railways constructed and in progress.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
38	(a)	DWARA-THERRIA LIGHT— (2' 6" gauge.)				
		Dwara to Maolong	15.5.02	..	*19.50	
		Maolong to Thertia				
		Total, Dwara-Thertia Light . . . . .	...	...	...	19.50

* Commencement of work on the Maolong-Thertia section not yet authorised.

DIX 47—continued.
on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Dwara-Therria Light railway—

(a) The Dwara-Therria Light railway is being constructed by the promoter, Mr. G. L. Garth, and will be worked by the promoter or any Company which may be formed by him under—

Terms—Contained in Notification issued by the Chief Commissioner of Assam under No. 44 of 14th August 1902.

(b) The general conditions are as follows :—

(i) *Government aid*.—Land to be provided free of cost.

(ii) The Secretary of State may, after the Dwara-Maolong section has been opened for twenty-one years and thereafter at intervals of ten years, terminate the contract, and take over the railway, with all its equipments, buildings and property, upon giving two years' previous notice, and on paying twenty-five times the average yearly net earnings of the last three years with a minimum of 100 per cent. of the cost price of the light railway.

(iii) *Rates and fares*.—Certain maxima have been fixed. Full control over charges of all kinds for the use of the railway is reserved by the Chief Commissioner.

2. Details of construction—

(a) *Permanent-way*.—The rails on the Dwara-Maolong section will be $41\frac{1}{2}$ lb., and on the Maolong-Therria section 30 lb., to the yard.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total
Main.	Sub.						Miles.	Miles
2	(a)	EASTERN BENGAL SYSTEM— EASTERN SECTION— (5' 6" gauge.)				
		<i>Main line—</i>				
		Calcutta to Ranaghat	16-4-59	29-9-62	45'25	145'0
		Ranaghat to Jagati Junction		15-11-62	62'00	
		Jagati Junction to 145th mile		1-1-71	37'82	
		Total Main line	16-4-59	...	...
		<i>Branches—</i>				
		Jagati Junction to river Ganges (<i>Kooshtea branch.</i>)	...	16-2-64	3'77	
		Kooshtea loop line . . . . .	...	1-8-81	1'17	
		Canal Junction to Chitpore (<i>Chitpore branch</i>)	12-4-73	25-8-73	1'88	
		Portion in Chitpore yard for goods traffic	...	13-4-88	0'12	
		Panchooria Junction to new Goalundo	...	22-10-98	5'46	
		Mile 145 to Panchooria Junction . . . . .	...	1-4-90	3'16	
		Panchooria Junction to Shivarampore	Feb'y. '97	20-10-98	8'77	
		Shivarampore to Faridpore		9-4-99	7'43	
		Belgachhi to the Ganges	Feb'y. '96	27-10-98	2'30	
		Bhydea Junction to Borat . . . . .	...	7-6-97	3'17	
		Churni Extension . . . . .	...	1-1-02	1'50	
		<i>Poradaha branch—</i>				
		Poradaha to Bhairamara	4-4-76	19-1-78	11'79	
		Bhairamara to Golabnuggur (<i>Damukdia</i>)	22-9-83	8-12-83	8'33	
		Goalbathan Extension . . . . .	...	1-1-02	2'28	
		Total Branches . . . . .	...	...	...	61'11
		TOTAL, EASTERN SECTION . . . . .	...	...	...	206'20
		SOUTHERN SECTION— (5' 6" gauge.)				
		<i>Main line—</i>				
		Calcutta to Champahati . . . . .	...	2-1-62	15'00	
		Champahati to Port Canning . . . . .	...	15-5-63	12'79	
		Junction with Eastern section . . . . .	...	15-8-85	0'41	
		Bansra diversion	Jany. 1900	5-3-00	0'25	
		Bansra diversion extension . . . . .	...	17-11-02	0'75	
		Total Main line . . . . .	...	...	...	29'20
		<i>Branches—</i>				
		<i>Diamond Harbour branch—</i>				
		Sonarpur to Baruipur	9-9-80	10-6-82	5'30	41'62
		Baruipur to Magra Hat		18-12-82	9'55	
		Magra Hat to Diamond Harbour		25-4-83	12'69	
		Diamond Harbour towards Hara fort		25-4-83	0'42	
		<i>Budge Budge branch—</i>				
		Ballygunge to Budge Budge	Nov. '88	1-5-90	13'66	
		Total Branches . . . . .	...	...	...	41'62
		TOTAL, SOUTHERN SECTION . . . . .	...	...	...	70'82
2	(b)	NORTHERN SECTION— (3' 3 1/2" gauge.)				
		<i>Main line—</i>				
		Sara to Atrai	12-2-74	19-1-78	38'75	196'85
		Atrai to Jalpaiguri		28-8-77	134'25	
		Jalpaiguri to Siliguri		10-6-78	23'85	
		Total Main line . . . . .	...	...	...	196'85
		<i>Branches—</i>				
		<i>Rungpore branch—</i>				
		Parbatipur Junction to Shampur . . . . .	...	19-5-78	15'25	
		Shampur to Rungpore	12-2-74	2-7-78	7'50	
		Rungpore to Kaunia . . . . .	...	1-6-79	11'25	
		Total Branches . . . . .	...	...	34'00	
		TOTAL, NORTHERN SECTION . . . . .	...	...	...	277'02
		Carried over . . . . .	...	...	34'00	196'85

IX 47—continued.

the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Eastern Bengal railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(a) Eastern Bengal railway, 5' 6" gauge section	27'702	84'91	361'93
(b) Eastern Bengal railway, 3' 3½" gauge section	586'38	151'62	738'00
(c) Eastern Bengal railway, 2' 6" gauge section	34'78	...	34'78
(d) Brahmaputra-Sultanpur railway (3' 3½" gauge)	59'37	...	59'37
(e) Mymensingh-Jamalpur-Jagannathganj railway (3' 3½" gauge)	53'14	...	53'14
(f) Cooch Behar railway (2' 6" gauge)	33'60	...	33'60
	1,044'29	236'53	1,280'82

2. Eastern Bengal State railway—

(a) The Eastern Bengal railway is owned and worked by the State.

(i) *General remarks.*—The line from Calcutta to Port Canning was constructed under guarantee. The Company surrendered it to Government on the 1st April 1868.

The Eastern Bengal railway was acquired by the State on the 1st July 1884, and on the same date the Poradaha branch of the Northern Bengal State railway was permanently amalgamated with the Eastern Bengal State railway.

On the 1st April 1887, the Eastern Bengal and the Calcutta and South-Eastern railways were amalgamated with the Northern-Bengal, the Kaunia-Dharlla, the Dacca and the Assam-Bihar railways, and these lines are now worked as one combined system, the railway being re-transferred from Provincial to Imperial control with effect from the 1st April 1892.

The Kaunia-Dharlla branch was constructed by the Bengal Government out of Provincial revenues. At Dhubri a connection is made with the Assam steamer services run by the India General and River Steam Navigation Company. The Dacca section is connected with the Eastern section by a ferry worked by the India General Steam Navigation Company between Goalundo and Narayan-ganj ghat.

The Northern and Eastern sections are connected by a steam ferry worked by the railway between Sara ghat and Damukdia ghat.

The East Indian railway is connected with the Bengal system of railways by a ferry worked by the East Indian railway across the Ganges between Manihari and Sahebgunge. A branch line runs northwards from Katihar Junction through Purnea and Kasba to Anchara ghat on the Kosi, opposite Khanwa ghat on the Kosi extension of the Tirhoot railway, where it is connected with the Tirhoot railway by a ferry worked by the Eastern Bengal State railway across the Kosi river.

3. Brahmaputra-Sultanpur railway—

(a) The Brahmaputra-Sultanpur railway is worked under the following contracts:—

Contracts of—3rd December 1896 (between the Secretary of State and the Brahmaputra-Sultanpur Branch Railway Syndicate) for the formation of a Company for the construction of the line.

8th January 1897 (between the Secretary of State and the Brahmaputra-Sultanpur Branch railway Syndicate) for the subscription of capital for the construction of the line.

22nd February 1897 (between the Secretary of State and the Brahmaputra-Sultanpur Branch railway Company) for the construction and working of the line.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		EASTERN BENGAL SYSTEM—contd.				
		Brought forward . . . . .	...	...	34'00	277'02
2	(b)	NORTHERN SECTION—concl'd. (3' 3½" gauge)—contd.				196'85
		<i>Branches—concl'd.</i>				
		<i>Dinagepore branch—</i>				
		Parbatipur to Chirir bandar	} 28-11-81 {	1-7-83	9'92	18'67
		Chirir bandar to Dinagepore		16-5-84	8'75	
		Teesta bridge at Kaunia and approaches ..	6-3-97	1-4-01	4'42	
		Total, Branches . . . . .	...	...	...	57'09
		Total, Northern section . . . . .	...	...	...	253'94
		BEHAR SECTION—				
		<i>Main line—</i>				
		Manihari to Katihar . . . . .	...	1-4-87	16'00	
		Katihar to Rayganj . . . . .	...	1-7-89	37'49	
		Rayganj to Dinagepore . . . . .	...	15-2-88	32'68	
		Junction with the Bengal and North-Western railway at Katihar . . . . .	...	8-3-01	0'69	
		Total Main line . . . . .	...	...	...	86'86
		<i>Branches—</i>				
		<i>Kosi branch—</i>				
		Katihar to Kasba . . . . .	...	1-4-87	22'10	
		Kasba to Forbesganj . . . . .	...	1-7-89	36'81	
		Forbesganj to Ancharaghat. . . . .	...	1-1-91	14'99	
					73'90	
		<i>Barsoi-Kissenganj branch—</i>				
		Barsoi to Kissenganj	June '91	15-12-92	35'11	
		Total Branches . . . . .	...	...	...	109'01
		TOTAL, BEHAR SECTION . . . . .	...	...	...	195'87
		DACCA SECTION—				
		(3' 3½" gauge.)				
		Narayanganj ghat to Dacca	} 11-8-82 {	4-1-85	10'25	23'52
		Dacca to Jaydebpur		1-8-85	19'65	
		Jaydebpur to Gafargaon		1-8-85	32'50	
		Gafargaon to Mymensingh		1-8-85	23'52	
		TOTAL, DACCA SECTION . . . . .	...	...	...	85'92
		KAUNIA-DHUBRI SECTION—				
		(3' 3½" gauge).				
		Teesta Junction to Mogalhat*	Sept. '99	1-4-01	12'04	
		Mogalhat to Gitaldaha Junction . . . . .	...	2-1-02	1'86	
		Gitaldaha Junction to Dhubri . . . . .	...	23-9-02	36'75	
		TOTAL, KAUNIA-DHUBRI SECTION . . . . .	...	...	...	50'65
		KAUNIA-DHARLLA SECTION—				
		(2' 6" gauge)†				
		Teesta Junction to Kurigram† . . . . .	...	18-7-81	14'99	
		TOTAL, KAUNIA-DHARLLA SECTION . . . . .	...	...	...	14'99
		Cooch Behar-Santrabari extension (British section)—				
		2' 6" (gauge).				
		South Bank of Kaljani river to Alipur Duar ..	} Dec. '97 {	18-1-00	0'64	9'18
		Alipur Duar to Raja Bhat Khawa		5-4-00	9'97	
		Raja Bhat Khawa to Jhainti		1-2-01	9'18	
		TOTAL, COOCH BEHAR-SANTRABARI EXTENSION (BRITISH SECTION) . . . . .	...	...	...	19'79
		TOTAL OPEN MILEAGE, EASTERN BENGAL PROPER . . . . .	...	...	...	898'18
		Carried over . . . . .	...	...	...	898'18

* Converted from 2' 6" gauge. Original dates of sanctions and opening: 20th November 1873, and 6th February 1882, respectively.
† Consequent on the opening of the Kaunia-Dhubri extension, the section from Kurigram to Jatrapur was abandoned.

on the 31st December 1902, alphabetically arranged.

REMARKS.

3. Brahmaputra-Sultanpur railway—concluded.

(b) The general conditions of the contracts are as follows :—

(i) *Government aid.*—Interest is guaranteed at 3 per cent. on the Company's capital. Land was also provided free of charge.(ii) *Currency of contract.*—Government may determine contract on 12 months' notice, either on the 31st December 1919, or at the end of a subsequent period of 10 years, or on the 31st December 1948, the Government paying, if contract is determined on the 31st December 1919, or at the expiration of any subsequent period of 10 years, a sum equal to 25 times the average yearly net earnings during the five years prior to determination, not exceeding by more than 20 per cent., or not being less than, the total capital expenditure; and if determined on the 31st December 1948 (50 years), paying the total amount of such capital expenditure.(iii) *Power of Company to surrender contract.*—Nil.(iv) *Terms of working.*—Government charge for working 45 per cent. of the gross receipts of the Company's line. After providing from the net earnings for repayment to Government of interest at the rate of 3 per cent. per annum on the actual expenditure, the balance is divided in equal proportions between Government and the Company.

The Company were also allowed, until the minimum dividend of 3 per cent. was earned by the branch line, Rs. 5,000 for each year for or towards the office expenses and the expenses of management; and also all such legal expenses as are properly debitable to revenue.

Note.—The working expenses include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work" subject to a maximum charge on such account of Rs. 20 per mile in each half-year.(v) *Rates and fares.*—To be arranged between Government and the working agency within the maximum and minimum rates in force on the Eastern Bengal State railway.

4. Mymensingh-Jamalpur-Jagannathganj railway—

(a) The Mymensingh-Jamalpur-Jagannathganj railway is worked under the following contracts :—

Contracts of—6th January 1897 (between the Secretary of State and the India General Steam Navigation Company) for the construction and working of the Mymensingh-Jamalpur-Jagannathganj railway.

3rd October 1899 (between the India General Steam Navigation Company, the India General Navigation and Railway Company and the Secretary of State) for the transfer of the domicile of the Mymensingh-Jamalpur-Jagannathganj railway office from Calcutta to London.

(b) The general condition of the contracts are as follows :—

(i) *Government aid.*—Government will in respect of each year allow to the Mymensingh-Jamalpur-Jagannathganj Railway Company, by way of rebate on the share attributable to the Eastern Bengal railway of the receipt from traffic interchanged between the two railways, such a sum not exceeding in any year the net earnings from traffic, except railway stores interchanged between the Eastern Bengal State railway system and the railway, as will, together with the net earnings of the Company for the year, make up an amount equal to interest for the year at a rate of 3½ per cent. per annum on the actual capital expenditure. Land also was provided free of charge.(ii) *Currency of contract.*—Government may determine contract on 12 months' notice either on the 31st December 1919, or at the end of a subsequent period of 10 years or on the 31st December 1948, the Government paying, if contract is determined on the 31st December 1919, or at the expiration of any subsequent period of 10 years, a sum equal to 25 times the average yearly net earnings, not including rebate payments, during the three years prior to determination, not exceeding by more than 20 per cent. or not being less than, the total capital expenditure; and if determined on the 31st December 1948 (50 years), the total amount of such capital expenditure.(iii) *Power of Company to surrender contract.*—Nil.(iv) *Terms of working.*—After deduction of 45 per cent. of the gross earnings for working expenses, (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'minor work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) in which is included all such legal expenses of the Company as are properly debitable to revenue, the balance is payable to the Company.(v) *Rates and fares.*—To be arranged between Government and the working agency within the maximum and minimum rates in force on the Eastern Bengal State railway.

5. Cooch Behar railway—

(a) The Cooch Behar railway is worked under the following contract.

Contract—Approved in Government of India letter No. 106 R. T., dated 29th January 1897, and having effect from the 1st January 1896, between the Secretary of State and the Cooch Behar Durbar for working.

(b) The general conditions of the contract are as follows :—

(i) *Government aid.*—The line is the property of the Cooch Behar State.(ii) *Currency of contract.*—The Eastern Bengal State railway to maintain and work the Cooch Behar State railway for a period of five years from 1st January 1896.(iii) *Power of company to surrender contract.*—Nil.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		EASTERN BENGAL SYSTEM—concluded.			Miles.	Miles.
		Brought forward . . . . .	...	...	...	898'18
		<i>Lines under construction or sanctioned for construction—</i>				
		EASTERN SECTION—				
		(5' 6" gauge.)				
		Pachooria Junction to river Ganges	Dec. '95	...	16'00	
		Extensions to Chitpore Terminus (Belgachi to Cossipore).	Mar. '01	* 31-3-03	1'65	
		Kancoorgachi Chord (Kancoorgachi to Gobra)	6-11-02	*30-6-05	2'25	
		Ranaghat to Murshidabad	20-6-02	*Dec. 1904	75'00	
					84'91	
		NORTHERN SECTION—				
		(3' 3½" gauge.)				
		Golakganj to Gowhati	9-12-02	...	151'62	
		Total lines under construction . . . . .	...	...	...	236'53
		TOTAL EASTERN BENGAL PROPER				
		DOUBLE LINE EASTERN AND SOUTHERN SECTIONS—				1,134'71
		Calcutta to Naihati	July '84	1-8-86	23'23	
		Naihati to Kanchrapara	May '91	21-3-87	0'26	
		Kanchrapara to Ranaghat	Oct. '91	20-4-92	4'69	
				12-11-92	17'56	
		Ranaghat to Aranghata		7-8-97	5'50	
		Aranghata to Bogoola		17-9-97	6'75	
		Bogoola to Shibnibash.	Dec. '95	3-11-97	6'65	
		Shibnibash to Ramnagar		17-11-98	0'75	
		Ramnagar to Poradaha		17-9-97	9'50	
		Canal Junction to Chitpore		7-8-97	27'58	
		Sealdah to Ballygunge	July '86	13-4-88	1'88	
		Ballygunge to Dock Junction	Novr. '89	20-10-88	3'50	
				19-9-90	0'36	
				20-11-93	4'00	
		Total double line, Eastern and Southern sections . . . . .	...	...	112'21	
2	(c)	BRAHMAPUTRA-SULTANPUR—				
		(3' 3½" gauge.)				
		Santabar to Bogra		1-4-99	24'50	
		Bogra to Dewantola	Oct. '96	5-4-00	22'02	
		Dewantola to Bonarpara		1-8-00	4'60	
		Bonarpara to Fulchhari		1-9-00	8'25	
		TOTAL, BRAHMAPUTRA-SULTANPUR .				59'37
2	(d)	MYMENSINGH-JAMALPUR-JAGANNATHGANJ—				
		(3' 3½" gauge.)				
		Mymensingh to Singhjani	Novr. '96	15-10-98	33'07	
		Singhjani to Jagannathganj		15-10-99	20'07	
		TOTAL, MYMENSINGH-JAMALPUR-JAGANNATHGANJ .				53'14
2	(e)	COOCH BEHAR—				
		(2' 6" gauge.)				
		<i>Main line—</i>				
		Gitaldaha to Mansahi Junction	28-9-91	15-9-93	18'82	
		Mansahi Junction to the town of Cooch Behar	30-8-95	15-12-98	3'22	
		Torsa bridge . . . . .	...	16-5-00	0'11	
		Total Main line . . . . .	...	...	...	22'15
		<i>Branch—</i>				
		<i>Cooch Behar-Santrabari extension (Native State section)</i>				
		Cooch Behar to temporary Alipur Duar (Kholta)	20-12-97	15-4-99	10'96	
		Temporary Alipur Duar (Kholta) to the south bank of the Kaljani river.		18-1-00	0'49	
		Total Branch . . . . .	...	...	...	11'45
		TOTAL, COOCH BEHAR				33'60
		GRAND TOTAL, EASTERN BENGAL SYSTEM				1,280'82
		EAST COAST—				
		(See Bengal-Nagpur and Madras systems, pages 270 and 348)				

* Probable date of opening.

‡ Constructed but not opened.

on the 31st December 1902, alphabetically arranged.

REMARKS.

5. Cooch Behar railway—concluded.

(iv) *Terms of working.*—The Eastern Bengal State railway, for maintenance and working, to receive 45 per cent. of the gross earnings from stone traffic (the wagons for which are not provided by the Cooch Behar line) and 40 per cent. of other gross earnings in accordance with the arrangement approved in Government of India, letter No. 981 R. C., dated 29th July 1901, the balance being made over to the Cooch Behar State. All earnings beyond Mògal Hat to be credited to the Cooch Behar State railway.

Notes.—A revised agreement is under consideration. The percentage of working charges includes any single item of capital expenditure classed as a 'minor work' subject to a maximum charge on such account of Rs. 30 per mile of line open in each half-year.

(v) *Rates and fares.*—The Eastern Bengal State railway administration have full control over rates and fares.

6. *General remarks.*—The following sections of the Eastern Bengal State railway are worked over by foreign lines:—Kidderpore Docks to Naihati, 34.50 miles, by the East Indian railway; Dum Dum Junction to Canal Junction, 1.61 miles; Canal Junction to Calcutta, 2.96 miles; Canal Junction to Chitpore, 2.00 miles; and Calcutta to Kidderpore Docks, 7.31 miles, by the Bengal Central railway.

7. Details of construction.—

(a) *Permanent-way.*—

On the Eastern section (5' 6") gauge, the rails are double-headed steel, 73 lb. and 75 lb. to the yard on cast iron plate and sal sleepers. The Faridpur branch is laid with second hand iron rails, 72 lb. and 68 lb. to the yard, on timber sleepers.

On the Damukdia branch the old iron rails are being replaced by 73 lb. steel rails removed from the main line. The sleepers are mostly cast iron bows. The Diamond Harbour and Budge Budge branches are laid with steel rails, 64 lb. and 73 lb. to the yard, on cast iron sleepers, and the Canning branch with iron rails on cast iron and wooden sleepers.

On the 3' 3½" gauge portion the rails are flat-footed steel, 41½ lb. and 50 lb. and iron 40 lb. to the yard, laid chiefly on sal, creosoted pine, asna, ironwood, steel, teak, and cast iron sleepers.

On the 2' 6" gauge section, the rails are flat-footed. The Teesta-Kurigram branch is laid with steel rails, 25 lb. and iron rails 30 lb. per yard on sal sleepers; and the British section of the Santrabari extension is laid partly with iron rails, 40 lb. per yard, and partly with steel rails, 41½ lb. per yard, on sal sleepers. The Cooch Behar State railway is laid for 18.82 miles with steel rails, 25 lb. to the yard; for 1.83 miles with steel rails, 41½ lb. to the yard, on pyinkado sleepers, and 12.95 miles with 40 lb. iron rails on sal sleepers.

(b) *Ballast.*—

The 5' 6" gauge section is ballasted throughout with the exception of the Faridpur branch. The 3' 3½" gauge section is, with some few exceptions, ballasted throughout. The 2' 6" gauge section is laid without ballast.

(c) *Bridges.*—The following are the important bridges of 1,000 feet length and over:—Mahanaddy (between Barsoi and Lalmoni) 10 spans of 150 feet; Gorai (between Kaligunga and Kumarkali), 7 spans of 174.71 feet, 9 spans of 43.69 feet; and 2 spans of 18 feet (1,759 feet), Teesta (between Kaunia and Teesta, 13 spans of 150 feet (2,116.40 feet); Dharlla (between Mogalhat and Gitaldaha junction) 10 spans of 150 feet (1,620 feet) and Sankos, 9 spans of 150 feet (1,458 feet).

(d) *Fencing.*—

Eastern Bengal State railway.—The Eastern section is fenced throughout; and the total length of fencing provided on the Southern section, including the Budge Budge extension, is 52.07 miles. The Canning branch is unfenced. The whole of the Northern section is fenced, except the Kaunia-Dharlla section. The Cooch Behar-Santrabari extension (British section) is unfenced; and the Dacca section is unfenced except at stations and for 13½ miles from Narayanganj. The Behar section is fenced throughout, with the exception of the Barsoi-Kissenganj branch. The Brahmaputra-Sultanpur, Mymensingh-Jamalpur-Jagannathganj and the Cooch Behar State railways are unfenced, except at stations and through the towns of Bogra and Mymensingh.

(e) *Curves.*—Several curves under a radius of 1,000 feet occur on the Kaunia-Dharlla section, their radii varying from 425 to 955 feet with an aggregate length of 6,580 feet or 1.25 miles. On the Kaunia-Dhubri section the sharpest curve has a radius of 716 feet and is 0.11 mile in length. On the British section of the Santrabari extension, there is a curve of 637 feet radius.

(f) *Gradients.*—Of a total open mileage on the system, of 1,044.29 miles 2.45 miles are on the ruling gradient of 1 in 300, on the 5' 6" gauge; 1.20 miles on the ruling gradient of 1 in 162 on the 3' 3½" gauge, and 0.37 mile on the ruling gradient of 1 in 50 on the 2' 6" gauge Cooch Behar State railway.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.		
Main.	Sub.				Miles.	Miles.		
I	(a)	EAST INDIAN SYSTEM— (5' 6" gauge.)						
		EAST INDIAN—						
		<i>Main line—</i>						
				Howrah to Hooghly	} Jany. '51	15-8-54	23'23	
				Hooghly to Pundooah		1-9-54	14'31	
				Pundooah to Khana junction		3-2-55	36'94	
				Khana junction to Raneegunge		3-2-55	45'71	
				Raneegunge to Siarsol		21-7-63	1'70	
				Siarsol to Sitarampur . . . . .	... 1-1-65	15'15	
				Sitarampur to Luckeeserai junction	Feb'y. '66	1-1-71	124'64	
				Luckeeserai to Dinapore	17-11-62	82'42		
				Dinapore to Moghal Sarai	22-12-62	125'92		
				Moghal Sarai to Mirzapur . . . . .	... 1-1-64	39'28	
				Mirzapur to south bank, Jumna	4-4-64	52'64		
				Jumna bridge to Allahabad	15-8-65	2'75		
				Allahabad to Cawnpore	3-3-59	119'47		
				Cawnpore to Etawah	1-7-61	86'46		
				Etawah to Shikohabad	13-11-61	34'39		
				Shikohabad to Tundla junction	1-4-62	22'92		
				Tundla junction to Aligarh . . . . .	... 1-3-63	48'56	
				Aligarh to Chola (Bulandshahr Road)	1-4-64	35'54		
				Chola to Delhi (south bank, Jumna)	1-8-64	41'27		
				Delhi terminus	1-1-67	1'78		
				<i>Loop line—</i>			955'08	
				Khana junction to river Adjai	} ...	3-10-58	19'00	
				River Adjai to Sainthia		3-9-59	25'12	
				Sainthia to Tinpahar		15-10-60	76'12	
				Tinpahar to Bhagalpur		1-11-61	69'12	
				Bhagalpur to Jamalpur		10-2-62	32'62	
				Jamalpur to Luckeeserai		17-11-62	28'41	
							250'39	
				Total Main and Loop lines			...	...	1,205'47
		<i>Branches on main line—</i>						
		<i>Bhadreswar branch—</i>						
		Bhadreswar junction to the river bank . . . . .	...	6-12 -82	2'60		
		<i>Hooghly bridge branch—</i>						
		Hooghly junction to Naihati	14-1-84	15-3-87	4'22			
		<i>Ondal loop—</i>						
		Ondal to Babasole	} July '82	1-5-64	2'03			
		Babasole to Mangalpur		1-1-63	2'74			
		Mangalpur to Toposi		2-2-63	2'65			
		Toposi to Ikrah junction		15-4-94	2'42			
		Ikrah junction to Gourangdi		1-6-95	14'16			
		Gourangdi to Alipur		29-3-91	30-3-95	7'54		
					31'54			
		<i>Ikrah branch—</i>						
		Ikrah junction to the Ondal loop	July '82	15-4-94	8'92			
		<i>Jherriah branch—</i>						
		Sitarampur to Barakar	9-3-92	1-1-65	5'43			
		Barakar to Katrasgarh . . . . .	...	*20-5-94	33'80		
					39'23			
		<i>Sitarampur-Damohani extension—</i>						
		Mile 132 from Howrah to Sitarampore	13-7-99	15-4-02	6'99			
		<i>Salanpur branch—</i>						
		Salanpur to Shamdi	9-3-92	7-9-94	4'29			
				1-1-97	1'24			
					5'53			
		Carried over	...	...	99'03	1,205'47	

* The first 7 miles of this extension were worked for coal traffic from the 1st August 1893.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The East Indian railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(a) East Indian railway (5' 6" gauge)	1,923·35	179·62	2,102·97
(b) Delhi-Umballa-Kalka railway (5' 6" gauge)	162·24	...	162·24
(c) South Behar railway (5' 6" gauge)	78·76	...	78·76
(d) Tarkessur railway (5' 6" gauge)	22·23	...	22·23
(e) Rewah State railway (2' 6" gauge) . . . . .	...	31·81	31·81
Total	<u>2,186·58</u>	<u>211·43</u>	<u>2,398·01</u>

2. East Indian railway—

(a) The East Indian railway is worked under the following contracts:—

*Contracts of—*22nd December 1879—East Indian Railway Company's principal contract.

10th November 1893.—Contract for the incorporation of the following State branches in the undertaking:—Ghazipur (Dildarnagar to Tarighat); Bhadreswar (Bhadreswar junction to the right bank of the Hugli); Mokameh (Mokameh junction to the Ganges); Digha Ghat (Bankipur junction to the right bank of the Ganges at Digha Ghat); Jherriah (Barakar to the Jherriah coal-fields); Toposi colliery (Toposi to Kharabad, Nundi to Panuria and Salanpur to Shamdi; Gya (Bankipur to Gya); and Azimganj (Nalhati to Azimganj.)

26th February 1896.—As to debenture capital.

22nd November 1897.—Contract for the construction and working of the Moghal Sarai-Gya railway.

14th November 1899.—Contract modifying that of 1879.

(b) The general conditions of the contracts are as follows:—

(i) *Government aid.*—Government guarantee interest at 4 per cent. in sterling on £6,550,000 (being capital sum representing deferred portion, *i.e.*, one-fifth of the annuity payable under the terms of purchase). All capital is provided either by Government or by the Company by the issue of debentures or debenture stock, in such manner or on such terms as to interest or otherwise as the Secretary of State determines.

(ii) *Terms of contract.*—The lines were purchased from the East Indian Guaranteed railway Company by the State in 1879, and all the contracts then subsisting between the Secretary of State and that Company (except those relating to debentures or debenture stock) were determined. The purchase price was £32,750,000,* and it was provided by the Purchase Act that this should be paid in the form of a terminable annuity of the amount of

* Company's stock at date of purchase	...	£ 26,200,000
Premium of 25 per cent.	...	6,550,000
		<u>32,750,000</u>

£1,473,750, payable from the 1st January 1880 to the 14th February 1953. One-fifth of the annuity was deferred, and the holders of this portion (representing a capital sum of £6,550,000), constitute the present East Indian railway Company, which, since the purchase, has worked the railway for the Government under the contract of 1879 as modified by the contract of 1899. The deferred annuity holders receive, in lieu of the annuity, interest at 4 per cent. per annum on £6,550,000 and a share of the surplus profits of the railway. On the determination of the contract, the portion of the annuity that has been deferred will become payable for the period remaining up to the 14th February 1953.

(iii) *Currency of contract.*—The contract of 1879 terminates on the 31st December 1929, but either party may determine the contract at the end of the 20th or at the end of any succeeding 5th year (computed from the 1st of January 1880) on giving two clear years' notice in writing to the other party of this intention.

NOTE.—Government relinquished their right to determine the contract at the end of the 20th year, and by mutual agreement the principal contract will not be determined before the 31st December 1919.

(iv) *Power of Company to surrender contract.*—See 2 b (iii) above.

Appendix 47.
History of railways.

History of railways constructed and in progr

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total
Main.	Sub.				Miles.	Mile
EAST INDIAN SYSTEM—continued.						
I	(a)	<i>Branches on main line—concluded.</i>				
		Brought forward	...	...	99'03	1,205'4
		<i>Chanck branch—</i>				
		From mile 144½ to Chanck	{ 9-3-92 11-2-96	{ 1-2-93 5-8-96	2'88 1'00	
					3'88	
		<i>Pandra branch—</i>				
		From mile 148½ on Jherriah branch to Pandra.	4-8-99	26-11-00	3'23	
		<i>Damoodur branch—</i>				
		Dheria Joba to the Damoodur river	15-1-94	{ 30-6-95 15-7-96	8'00 1'77	
					9'77	
		<i>Kurhurbaree branch—</i>				
		Madhopur junction to Giridih.	...	1-1-71	26'70	
		<i>Mokameh Ghat branch—</i>				
		Mokameh junction to Mokameh Ghat	...	1-5-83	3'70	
		<i>Patna-Gya branch—</i>				
		Bankipore junction to Bankipore	} 13-2-78	{ 2-6-79 21-4-79 2-6-79	0'25	
		Bankipore to Jehanabad			28'95	
		Jehanabad to Gya			29'22	
					58'42	
		<i>Baran-Daltonganj branch—</i>				
		Sone East Bank (Baran) to Rajhara	} 16-5-97	{ 3-5-02 15-12-02	67'30	
		Rajhara to Daltonganj			10'65	
					77'95	
		<i>Dighaghat branch—</i>				
		Bankipore junction to Dighaghat	30-7-84	2-4-85	5'53	
		<i>Tarighat branch—</i>				
		Dildarnagar junction to Tarighat	11-7-78	5-10-80	12'00	
		<i>Moghal Sarai-Gya branch—</i>				
		Moghal Sarai to Gya	...	{ 1-3-00 1-5-02	125'48 0'94	
					126'42	
		<i>Jubbulpore branch—</i>				
		Naini junction to Jubbulpore	Feby. '63	1-8-67	223'58	
		<i>Allahabad fort branch</i>				
			...	3-3-59	2'34	
		<i>Cawnpore city branch</i>				
			...	15-2-79	0'88	
		<i>Agra branch—</i>				
		Tundla junction to Agra East Bank	...	1-4-62	13'35	
		<i>Hathras' city branch</i>				
			...	1-11-98	5'58	
		<i>Branches on loop line—</i>				
		<i>Asimganj branch—</i>				
		Nalhati to Asimganj	...	15-7-92	27'23	
		<i>Rajmehal branch—</i>				
		Tinpahar junction to Rajmehal	...	15-10-60	7'00	
		<i>Sakrighat branch—</i>				
		Sakrigali junction to the river Ganges	...	1-1-94	1'99	
		<i>Maharajpur branch</i>				
			...	30-11-98	2'48	
		<i>Sultangunge branch</i>				
			22-3-93	6-5-95	1'14	
		<i>Monghyr branch—</i>				
		Jamalpore to Monghyr	...	10-4-62	5'68	
		Total Branches	...	...	...	717'88
		TOTAL OPEN MILEAGE, EAST INDIAN PROPER	...	...	...	1,923'35

on the 31st December 1902, alphabetically arranged.

REMARKS.

2. East Indian railway—concluded.

(a) General conditions—concluded.

(v) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 25,000 in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the surplus profits (after payment of interest on debentures, annuity, interest on deferred portion of annuity, interest due to Government on capital advances, etc., and contribution to Provident Fund) up to a sum of 25 lakhs of rupees to be divided in proportion of four-fifths to Government and one-fifth to Company. Any excess over 25 lakhs of rupees to be divided in proportion of fourteen-fifteenths to Government and one-fifteenth to Company.

(vi) *Rates and fares.*—Certain maximum and minimum rates and fares have been fixed within which the Company is permitted to vary its rates.

3. Delhi-Umballa-Kalka railway.—

(a) Delhi-Umballa-Kalka railway is worked under the following contracts:—

Contracts of—24th January 1889 (between the Secretary of State and the East Indian Railway Company) for working.

12th February 1889 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction.

19th March 1890 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for raising of additional capital by the issue of debentures.

19th December 1895 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) conceding to the Company from the 1st January 1893 the 2 per cent. of gross earnings hitherto retained by Government.

24th July 1896, between Secretary of State and the Delhi-Umballa-Kalka Railway Company whereby the Secretary of State agreed to advance funds for capital expenditure up to Rs. 2,00,000 at 3½ per cent. per annum: the Company agreed to an allowance of Rs. 10,000 each half-year for capital works without requiring the sanction of the Delhi-Umballa-Kalka railway. Works costing Rs. 1,000 and under to be classed as 'Minor Works' and to be payable by the working agency: refunding the cost of certain works at Umballa station carried out by the Delhi-Umballa-Kalka railway the Company agreeing to pay interest on the expenditure at 3½ per cent. per annum.

9th June 1897 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) guaranteeing interest at the rate of 3½ per cent. on its share capital.

(b) The general conditions of the contracts are as follows:—

(i) *Government aid.*—By the contract of 9th June 1897, Government supplement the net earnings of the Company for the year 1896 and each succeeding year by such an annual subsidy as will enable the Company, after payment of debenture interest, to pay a dividend of 3½ per cent. per annum on their share capital. Land was also provided free of cost.

(ii) *Currency of contract.*—The contract determines by the effluxion of time on the 31st December 1916, unless some arrangement is effected for continuing the working. Should such arrangements be made, Government may determine the contract on the 31st December 1926 or on the 31st December of any subsequent tenth year. On determination, Government are to receive possession of the railway, and to pay the Company a sum equal to 25 times the average yearly profits of the Company during the preceding five years. Subsidy payments by Government are to be excluded from the profits of the Company in calculating the price to be paid on purchase by Government.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—Government undertake (through the agency in the first instance of the East Indian Railway Company) to supply the necessary rolling-stock and to work and maintain the line until the 31st December 1916, taking 48 per cent. of the gross receipts of the railway for the working agency (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) and paying over 52 per cent. to the Company. Surplus profits in excess of 3½ per cent. per annum are divided equally between Government and the Company until Government have been repaid advances of subsidy, with interest. Thereafter, all surplus profits belong to the Company.

(v) *Rates and fares.*—To be agreed upon from time to time between the Secretary of State and the working agency; but in the case of that portion of the line between Delhi and Umballa to be not more than the maximum, nor less than the minimum, rates and fares in force on the East Indian railway, and in the case of that portion between Umballa and Kalka to be not more than three times such maximum nor less than such minimum

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		EAST INDIAN SYSTEM—continued.				
		Brought forward . . . . .	...	...	...	1,923'35
		<i>Lines under construction or sanctioned for construction—</i>				
		Gya-Katrasgarh railway—				
		Manpur to 0·87 mile beyond Gurpa (Plains section)	20-6-02	} March 1906, *	25'25	
		Mile 0·87 beyond Gurpa to Kodarma (Hill section)	15-10-02		18'19	
		Kodarma to Hariharpur (Plateau section)	31-7-02		56'35	
					99'79	
		Shikohabad to Farukhabad	7-11-02	...	65'82	
		Colliery lines—				
		Katrasgarh to Kanoodih	} 9-12-01	7-3-03	7'80	
		Jherriah to Dhanbaid		1-5-03	3'75	
		Tesra siding		*1-4-03	1'75	
		Northern half of the Mulkura-Katrasgarh cross connection		*1-5-03	0'71	
		Total lines under construction . . . . .	...	...	...	179'62
		GRAND TOTAL, EAST INDIAN PROPER . . . . .	...	...	...	2,102'97
		DOUBLE LINE—MAIN LINE AND BRANCHES—				
		Howrah to Serampore . . . . .	...	10-3-57	11'74	
		Serampore to Chandernagore . . . . .	...	1-2-58	8'38	
		Chandernagore to Hooghly . . . . .	...	1-5-58	3'11	
		Hooghly to Magra . . . . .	...	1-10-58	5'49	
		Magra to Pundooah . . . . .	...	25-2-59	8'82	
		Pundooah to Burdwan . . . . .	...	1-10-59	† 28'72	
		Burdwan to Khana . . . . .	...	1-1-59	8'22	
		Khana to Durgapur . . . . .	...	1-6-70	31'35	
		Durgapur to Raneegunge . . . . .	...	2-9-70	14'36	
		Raneegunge to Sitarampur . . . . .	...	19-12-70	† 16'85	
		Sitarampur to Luckeeserai . . . . .	...	1-1-71	124'64	
		Luckeeserai to Burhee . . . . .	...	22-6-60	9'82	
		Burhee to Barh . . . . .	...	22-2-68	27'10	
		Barh to Futwah . . . . .	...	11-1-68	25'87	
		Futwah to Dinapore . . . . .	...	20-3-67	19'63	
		Dinapore to Bihta . . . . .	...	13-8-68	10'93	
		Bihta to Arrah . . . . .	...	28-3-70	13'50	
		Arrah to Buxar . . . . .	...	13-8-68	42'67	
		Buxar to Dildarnagar . . . . .	...	15-4-82	22'46	
		Dildarnagar to Zamania . . . . .	...	20-5-82	8'59	
		Zamania to Sakaldiha . . . . .	...	20-9-82	16'28	
		Sakaldiha to Moghal Sarai . . . . .	...	10-8-82	11'49	
		Hooghly bridge branch . . . . .	...	15-3-87	4'22	
		Sitarampur to Barakar . . . . .	...	6-3-01	9'76	
		Ghaziabad to Shahadara	} 20-10-99	20-2-02	8'13	
		Shahadara to east side of Jumna bridge near Delhi		1-7-02	2'57	
		TOTAL DOUBLE LINE . . . . .	...	...	494'70	
		Carried over . . . . .	...	...	...	2,102'97

* Probable date of opening.
† Of this, 2·20 miles (Boinchee to ...)
‡ Of this, 0·55 mile (Kalipahari to ...)

DIX 47—continued.
on the 31st December 1902, alphabetically arranged.

REMARKS.

4. South Behar railway—

(a) The South Behar railway is worked under the following contracts:—

Contracts of—7th August 1895 (between the Secretary of State and the South Behar Railway Company) for construction.

22nd August 1895 (between the Secretary of State and the East Indian Railway Company) for working.

(b) The general conditions of the contracts are as follows:—

- (i) *Government aid*.—Government, in respect of each half-year, allow to the South Behar Railway Company, by way of rebate on the share attributable to the East Indian railway of the receipts from traffic interchanged between the two railways, a sum not exceeding 30 per cent. of such share as will, together with the net earnings of the South Behar Company, make up an amount equal to interest for the half-year at the rate of 4 per cent. per annum on the actual capital expenditure on the South Behar railway. For the purpose of calculating this rebate, the capital expenditure is to be regarded as not exceeding Rs. 120 lakhs, and the amount towards making up which the rebate is to be allowed is to be limited to Rs. 2,40,000 in any half-year. Land also was given free of cost.
- (ii) *Currency of contract*.—Government have power to determine the contract on the 31st June 1919, or at the end of any subsequent period of ten years from that date, by giving twelve months' notice. In case of such determination, the Government will pay to the Company in England an amount equal to the total paid up capital in sterling, so far as such capital has been expended on the undertaking with the authorisation of the Secretary of State.
- (iii) *Power of Company to surrender contract*.—Nil.
- (iv) *Terms of working*.—For the first two years after the opening of any section, the cost of maintenance is to be a charge against capital, Government retaining only 35 per cent. of the gross earnings for providing rolling-stock and working the line, the remaining 65 per cent. going to the Company. Thereafter, Government retain 45 per cent. of the gross earnings (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work') to meet the cost of maintaining, stocking and working the line, the Company taking the remaining 55 per cent.
- (v) *Rates and fares*.—To be agreed upon from time to time between the Government and the working agency within the maximum and minimum rates and fares in force on the East Indian railway.

5. Tarkessur railway—

(a) The Tarkessur railway is worked under the following contracts:—

Contracts of—8th September 1883 (between the Secretary of State and the Tarkessur Railway Company) for construction.

15th September 1887 (between the Secretary of State and the East Indian Railway Company) for working.

1st March 1888 (between the Secretary of State and the Tarkessur Railway Company) for working.

(b) The general conditions of the contract are as follows:—

- (i) *Government aid*.—Land was provided free of cost.

Debipur) are laid with a third track.
Noonia) is laid with a third track.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		EAST INDIAN SYSTEM—continued.				
		Brought forward . . . . .	...	...	...	2,102'97
I	(b)	DELHI-UMBALLA-KALKA— (5' 6" gauge.)				
		Delhi to Kalka . . . . .	...	1-3-91	162'24	
		TOTAL, DELHI-UMBALLA-KALKA . . . . .	...	...	...	162'24
I	(c)	SOUTH BEHAR— (5' 6" gauge.)				
		Luckeeserai to Gya . . . . .	...	5-7-99	78'76	
		TOTAL, SOUTH BEHAR . . . . .	...	...	...	78'76
I	(d)	TARKESSUR— (5' 6" gauge.)				
		Seoraphuli to Tarkessur	20-2-83	1-1-85	22'23	
		TOTAL, TARKESSUR . . . . .	...	...	...	22'23
		<i>Lines under construction or sanctioned for construction—</i>				
I	(e)	REWAH— (2' 6" gauge.)				
		Rewah to Sutna	18-5-97	*	31'81	
		TOTAL, REWAH . . . . .	...	...	...	31'81
		GRAND TOTAL, EAST INDIAN SYSTEM . . . . .	...	...	...	2,398'01

* Commencement of work not yet authorized.

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

5. Tarkessur railway—concluded.

(b) General conditions—concl'd.

(ii) *Currency of contract.*—The contract of 1883 terminates on the 7th September 1932, but the Secretary of State, by giving twelve months' previous notice, has the power to determine the contract after the railway has been opened for thirty years, and thereafter at intervals of ten years. In the event of such determination, Government are to pay the Company a sum equal to the aggregate net profits during the twenty years preceding.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—The East Indian Railway Company supply the necessary rolling-stock and work the line in consideration of the following half-yearly payments:—

Working expenses (which include any single item of capital expenditure subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year) calculated at the same percentage of the gross earnings as obtains on the East Indian railway system as a whole, five per cent. of the gross earnings as hire of rolling-stock, a contribution to the East Indian railway Provident Fund in accordance with the rules of the fund, and one-fifth of the balance of the gross earnings above charges.

The remaining four-fifths of the balance are paid to the Tarkessur Railway Company.

(v) *Rates and fares.*—Certain maxima have been fixed, and the Company are authorized to charge within those maxima such rates and fares as may from time to time be mutually agreed upon.

6. Rewah.—The actual construction of the line has not yet been commenced by the Rewah Durbar.

7. General remarks.—The East Indian railway works over the following lengths of foreign lines:—Agra East Bank to Agra Fort (1 mile) of the Rajputana-Malwa railway; and Kidderpore Docks to Naihati (34.50 miles) of the Eastern Bengal State railway. The following portions of the East Indian railway are worked over by other lines:—at Katni (0.55 mile) by the Bengal-Nagpur railway; Agra to Tundla (12.75 miles), at Cawnpore (1.92 miles), at Manikpur (0.63 mile), and at Katni (0.42 mile) by the Indian Midland railway; and Ghaziabad to Delhi (13 miles) by the North Western and Oudh and Rohilkhand State railways. A length of this railway from Delhi to the junction with the Southern Punjab railway, 1.33 miles, is worked over by the North Western State railway.

8. Details of construction—

(a) Permanent-way.—

East Indian railway.—The main line is laid with wooden and cast iron plate sleepers. The rails vary in weight from 74 lb. to 85 lb. to the yard. On the Ondal loop, the rails are laid on timber sleepers and cast iron bowl and plate sleepers. On the Jherriah branch, the rails are iron and steel and are laid on timber and cast iron plate sleepers. On the Giridih branch, the rails are laid on timber sleepers and cast iron bowl and plate sleepers. On the Patna-Gya branch, the first 29 miles are laid with 64 lb. rails. On the Moghal Sarai-Gya extension, double headed 75 lb. rails are laid with cast iron chairs and timber sleepers. The Jubbulpore branch is laid with 75 lb. steel rails on timber and cast iron plate sleepers. The Azimganj branch is laid with 82 lb. rails on cast iron plate sleepers.

Delhi-Umballa-Kalka railway.—The permanent-way consists of double-headed steel rails, 75 lb. to the yard, laid on cast iron plate and wooden sleepers.

South Behar railway.—The permanent-way is of the East Indian railway standard design with double-headed rails, 75 lb. to the yard, laid half with cast iron chairs and timber sleepers and half with cast iron plate sleepers.

Tarkessur railway.—The permanent-way consists of 75 lb. rails and fastenings of wrought iron purchased from the East Indian railway laid on cast iron plate sleepers.

(b) *Ballast.*—The line is ballasted throughout with stone.

(c) *Tunnels.*—

East Indian railway.—The only important tunnel is the "Monghyr," 900 feet in length, at mile 295½ on the loop line, between Bariarpur and Jamalpur.

Appendix 47.
History of railways.

History of railways constructed and in progress.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		EAST INDIAN SYSTEM—concluded.				
8	(i)	GAEKWAR'S DABHOI— (See Bombay, Baroda and Central India system, page 286.)				
8	(h)	GAEKWAR'S MEHSANA— (See Bombay, Baroda and Central India system, page 286.)				
8	(f)	GODHRA-RUTLAM-NAGDA— (See Bombay, Baroda and Central India system, page 280.)				

DIX 47—continued.
on the 31st December 1902, alphabetically arranged.

REMARKS.

8. Details of construction—concl'd.

- (d) *Bridges.*—The following are the important bridges of 1,000 feet length and over:—Sone (between Bihta and Koilwar), 28 spans of 150 feet (4,726 feet); Jumna (Allahabad), 14 spans of 200 feet, 2 spans of 30 feet (3,150 feet); Jumna (Delhi), 12 spans of 211½ feet and 2 spans of 30 feet (2,697 feet); Jubilee (between Hooghly and Naihati), 2 spans of 523·67 feet and 1 span of 106½ feet with approach viaducts of 64 spans of 10·83 feet; 74 spans of 29·17 feet; 1 span of 25·83 feet; 1 span of 43 feet and 1 span of 48 feet (4,932·25 feet); Tonse (between Meja Road and Karchana), 7 spans of 150 feet and 2 spans of 32 feet (1,194 feet); Kuel (Luckeeserai), 9 spans of 150 feet; Barakar, 5 spans of 150 feet, 6 spans of 100 feet; 1 span of 200 feet and 5 spans of 29·25 feet in viaducts (1,850 feet); Sone (Dehri), 93 spans of 100 feet (10,052 feet); Phulgu (between Manpur and Gya); 18 spans of 100 feet and 1 span of 30 feet (2,064 feet); Soma (between Luckeeserai and Gya), 3 spans of 60 feet and 30 spans of 30 feet; and Sukri (between Worsleyganj and Narwadah), 16 spans of 60 feet.
- (e) *Fencing.*—The line is double fenced throughout, excepting the Azimgarh branch and Barakar-Katrasgarh section of the Jherriah branch, which are unfenced, and also the Moghal Sarai-Gya-Luckeeserai section which is fenced near villages, round station yards and for a short distance near each level crossing only.
- (f) *Curves.*—There are no curves of less than 1,000 feet radius.
- (g) *Gradients.*—Of a total open mileage of 2,186·58 miles on the system, 3·98 miles are on the ruling gradient of 1 in 40.

Class : No.	Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main. (Sub.)				Miles.	Miles.
	GREAT INDIAN PENINSULA SYSTEM— (5' 6" gauge.)				
7 (a)	GREAT INDIAN PENINSULA— NORTH-EAST LINE— <i>Main line—</i>				
	Victoria terminus to Bori Bandar	31-10-50	1-1-82	0'19	
	Bori Bandar to Thana		18-4-53	20'54	
	Thana to Kalyan { Thana to Persick	28-3-51 22-5-52	1-5-54	12'65	
	{ Persick to Kalyan				
	Kalyan to Vasind	20-5-53	1-10-55	16'14	
	Vasind to Asangaon	25-3-67	6-2-60	3'75	
	Asangaon to Kasara		1-1-61	21'84	
	Kasara to Igatpuri (Thull Ghat)		1-1-65	9'89	
	Igatpuri to Nasik		28-1-61	31'43	
	Nasik to Chalisgaon		1-10-61	87'24	
	Chalisgaon to Jalgaon		6-10-62	57'48	
	Jalgaon to Bhusaval		20-5-63	15'01	
	Bhusaval to Burhanpur		20-11-65	33'91	
	Burhanpur to Khandwa		3-9-66	42'78	
	Khandwa to Bir		1858	17-2-68	21'15
	Bir to Itarsi		1-1-70	89'27	
	Itarsi to Sohagpur		1-2-70	30'69	
	Sohagpur to Jubbulpore		8-3-70	121'14	
	Total Main line . . . . .	...	...	...	615'10
	<i>Branches—</i>				
	<i>Chalisgaon-Dhulia branch—</i>				
	Chalisgaon to Dhulia	15-7-97	15-10-00	34'95	
	<i>Jalgaon-Amalner branch—</i>				
	Jalgaon to Dharangaon	Jany. '98	20-2-00	18'26	
	Dharangaon to Amalner		4-4-00	16'00	
				34'26	
	<i>Nagpur branch—</i>				
	Bhusaval Junction to Malkapur	27-9-58	20-5-63	30'05	
	Malkapur to Shegaon		24-10-64	32'53	
	Shegaon to Badnera		18-12-65	72'67	
	Badnera to Pulgaon		16-7-66	40'29	
	Pulgaon to Sindi		5-11-66	38'27	
	Sindi to Nagpur		20-2-67	29'44	
				243'25	
	<i>Wardha Coal branch—</i>				
	Wardha to mile 490'20	5-2-72	1-2-79	18'95	
	Mile 490'20 to mile 512'64	1-4-74	*24-12-75	22'44	
	Mile 512'64 to Warora		*26-4-76	4'00	
				45'39	
	<i>Mohpani branch—</i>				
	Gadarvada to Mohpani	13-2-71	†3-9-72	12'47	
	Mohpani to Gotitoria	25-2-96	2-11-96	1'07	
	Mohpani to new coal fields	12-3-96	3-6-00	0'14	
				13'68	
	Total Branches . . . . .	...	...	...	371'53
	TOTAL, NORTH-EAST LINE . . . . .	...	...	...	986'63
	Carried over . . . . .	...	...	...	986'63

* For coal traffic only; subsequently opened for public traffic as follows: mile 489'69 to mile 492'25 on
† For coal traffic only; opened for public traffic on 1st January 1881.

DIX 47—continued.
on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Great Indian Peninsula railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(a) Great Indian Peninsula railway (5' 6" gauge)	1,548·17	...	1,548·17
(b) Khamgaon railway (5' 6" gauge)	7·97	...	7·97
(c) Amraoti railway (5' 6" gauge)	5·49	...	5·49
(d) Indian Midland railway (5' 6" gauge)	796·53	8·85	805·38
(e) Bina-Goonna-Baran railway (5' 6" gauge)	145·63	...	145·63
(f) Bhopal-Ujjain railway (5' 6" gauge)	113·27	...	113·27
(g) Bhopal-Itarsi railway (5' 6" gauge)	57·39	...	57·39
(h) Gwalior Light railway (2' 0" gauge)	126·14	57·86	184·00
Total	2,800·59	57·86	2,867·30

2. Great Indian Peninsula railway—

(a) The Great Indian Peninsula railway is worked under the following contract:—

Contract of—21st December 1900—Contract for working the Great Indian Peninsula railway and Indian Midland railway systems as one undertaking.

(b) The general conditions of the contract are as follows:—

(i) *Government aid.*—Government to pay interest at 3 per cent. per annum on the amount for the time being paid up, or credited as paid up, on the shares or stock in the new capital of the Great Indian Peninsula Railway Company which is at present authorised at £ 2,575,000. All capital will be provided by the Secretary of State bearing interest at the rate of 3½ per cent. per annum or at such other rate as may be agreed upon; or will be raised by the Company by the issue of debentures or debenture stock at such rate of interest as the Secretary of State may determine. Land was also provided free; if acquired after 30th June 1900, is paid for from the capital of the undertaking.

(ii) *Terms of contract.*—The line was purchased from the Great Indian Peninsula Guaranteed Railway Company by the State in 1900, and all the contracts then subsisting between the Secretary of State and that Company were determined. The purchase price was £ 40,781,568, * payable up to the 17th August 1948, in the form of a terminable annuity of £ 1,268,516.

* Company's stock at date of purchase	£ 34,859,218
Debentures and debenture stock	5,922,350
Total	40,781,568

(iii) *Currency of contract.*—The contract is current for a period of 25 years from the 1st July 1900, when it will be determinable by the Secretary of State, paying the amounts paid or credited on all shares and stock and indemnifying the Company for all debts and liabilities incurred under sanction.

(iv) *Power of Company to surrender contract.*—Nil.

(v) *Terms of working.*—From the gross earnings of the undertaking, that is of the Great Indian Peninsula and Indian Midland railways, there will be deducted—

(a) The working expenses, which will include any single item of capital expenditure not exceeding Rs. 2,000 to be classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 25,000 in each half-year, and a payment of Rs. 40 per mean mile worked to be made half-yearly to Government for supervision;

(b) A sum of Rs. 1,00,00,000 which is payable to Government;

(c) Repayment of all interest payable on all moneys other than shares or capital stock raised for the purposes of the undertaking or provided by Government after the 30th June 1900.

If the receipts for any year ending on the 30th day of June exceed the payments as above detailed for the same period, 1/20ths of the surplus are paid to the Secretary of State and 1/10th to the Company. Provided that if the Company increase its new capital and issue further shares or stock as fully paid up in exchange for stock of the Indian Midland Railway Company, the Company's share in such surplus shall be increased by an additional fractional share bearing the same proportion to the original fractional share of 1/10th as the additional capital of the Company so exchanged bears to the new authorised capital of £2,575,000, but the total fractional share of the Company is not to exceed a one-tenth share.

(vi) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

3. Khamgaon and Amraoti railways—

(a) The Khamgaon and Amraoti railways are worked under the following contract:—

Contract of—21st December 1900 (between the Secretary of State and the Great Indian Peninsula Railway Company) for working and maintenance.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub				Miles.	Miles.
		GREAT INDIAN PENINSULA SYSTEM—contd.				
		Brought forward . . . . .	...	...		986.63
7	(a)	SOUTH-EAST LINE—				
		<i>Main line—</i>				
		Kalyan to Palasdhari (Kalyan to Neral	13-5-54	12-5-56	30.61	
		(Karjat) { Neral to Palasdhari	10-1-55		13.20	
		Palasdhari to Khandala (Bhore ghat)	7-7-55	14-5-63	2.35	
		Khandala to Lonavla (Bhore ghat)		14-6-58	39.66	
		Lonavla to Poona	5-10-55	15-12-58	64.25	
		Poona to Diksal		23-10-59	50.60	
		Diksal to Barsi Junction	3-8-65	21-1-60	28.32	
		Barsi Junction to Mohol		6-6-60	20.51	
		Mohol to Sholapur	Dec. '65	1-2-70	70.29	
		Sholapur to Gulbarga		1-12-70	73.75	
		Gulbarga to the Kistna		1-5-71	15.31	
		Kistna to Raichur				
		Total Main line . . . . .	...	...	...	408.86
		<i>Branches—</i>				
		<i>Dhond-Manmad branch—</i>				
		Dhond to Ahmednagar	25-8-77	15-3-78	50.41	
		Ahmednagar to Manmad		17-4-78	95.03	
		<i>Khopoli branch—</i>				
		Palasdhari to Khopoli	30-1-55	12-5-56	7.24	
		Total Branches . . . . .	...	...	...	152.68
		TOTAL, SOUTH-EAST LINE . . . . .	...	...	...	561.54
		GRAND TOTAL, GREAT INDIAN PENINSULA PROPER . . . . .	...	...	...	1,548.17
		DOUBLE LINE—NORTH-EAST LINE—				
		Victoria terminus to Bori Bandar . . . . .	...	1-1-82	0.19	
		Bori Bandar to Thana . . . . .	...	18-4-53	20.54	
		Thana to Kalyan . . . . .	...	1-5-54	12.65	
		Kalyan to Vasind . . . . .	...	22-10-66	16.15	
		Vasind to Atgaon . . . . .	...	20-2-67	9.65	
		Atgaon to Kasara . . . . .	...	25-4-67	15.94	
		Kasara to Igatpuri . . . . .	...	1-1-65	9.89	
		Igatpuri to Nasik . . . . .	...	10-1-69	31.43	
		Nasik to Chalisgaon . . . . .	...	10-1-69	87.24	
		Chalisgaon to Kajgaon . . . . .	...	10-1-69	11.86	
		Kajgaon to Pachora . . . . .	...	17-3-69	16.05	
		Pachora to Maheji . . . . .	...	27-5-69	9.14	
		Maheji to Bhadli . . . . .	...	6-3-73	27.59	
		Bhadli to Bhusaval . . . . .	...	6-6-73	7.84	
		Bhusaval to Bhusaval Junction . . . . .	...	1-7-92	1.11	
		Bhusaval Junction to Khandwa (Abna Junction) . . . . .	...	11-1-89	75.12	
		Bagra tunnel to Towa viaduct . . . . .	...	1-2-70	0.74	
		Total Double line, North-East line . . . . .	...	...	353.13	
		DOUBLE LINE—SOUTH-EAST LINE—				
		Kalyan to Palasdhari . . . . .	...	25-7-70	30.61	
		Palasdhari to Khandala } Bhore ghat . . . . .	...	14-5-63	13.20	
		Khandala to Lonavla }		14-6-58	2.61	
		Total Double line, South-East line . . . . .	...	...	46.42	
		Carried over . . . . .	...	...	399.55	1,548.17

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

(b) The general conditions of the contract are as follows:—

- (i) *Government aid.*—These branches were constructed from the surplus revenues of the Berars and have under the agreement dated the 5th November 1902, between the British Government and His Highness the Nizam of Hyderabad, been leased in perpetuity to the former with the Assigned Districts from the 1st October 1902.
- (ii) *Currency of contract.*—The duration of the contract is up to the 30th June 1925.
- (iii) *Power of Company to surrender contract.*—Nil.
- (iv) *Terms of working.*—After deducting, as working expenses, a sum equal to the same percentage of gross receipts of the railway as obtains on the whole of the undertaking including branches, the balance to be paid over to Government.
- (v) *Rates and fares.*—Same rates and fares as are in force on the Great Indian Peninsula railway.

4. Indian Midland railway—

(a) The Indian Midland railway is worked under the following contracts:—

- Contract of*—2nd October 1885—Indian Midland Railway Company's principal contract.
- 18th March 1890—Contract for the acquisition of the Scindia railway.
- 13th June 1896—Contract for the Saugor-Katni railway.
- 21st December 1900—Contract for the transfer of the working of the Indian Midland railway to the Great Indian Peninsula Railway Company.

(b) The general conditions of the contracts are as follows:—

- (i) *Government aid.*—Interest at 4 per cent. per annum in sterling is guaranteed on £ 3,000,000 share capital. On further capital that may be required, the guarantee to be 4 per cent. or such other rate as may be agreed upon. A considerable amount of capital has been advanced by Government for the existing system, and, in the case of the Saugor-Katni extension, it has been agreed that all money required for expenditure in India shall be supplied by the Government, the Company only raising the amount required for expenditure in England. Land was also provided free.
- (ii) *Currency of contract—Indian Midland contract.*—The contract of 1885 may be determined by Government, by giving 12 months' previous notice, on the 31st December 1910, or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fail to fulfil their obligations or if the line be worked at a loss for not less than three half-years continuously. On the termination of the contract, the Company is to hand over to Government the railway and all its belongings of every description and Government is to repay the amount at par of the share capital which has been paid by the Company. The contract of 1900 is current for a period of 25 years from the 1st July 1900. But the Indian Midland Railway Company's right to a 4 per cent. guarantee on share capital and one-fourth share of surplus profits (as stated below) remains in full force till the termination of either the contract of 1885 or that of 1900.
Scindia and Saugor-Katni railways' contracts.—The contracts of 1890 and 1896 run concurrently with that of 1885, to which they are supplemental.
- (iii) *Power of Company to surrender contract.*—Nil.
- (iv) *Terms of working.*—From the gross earnings for any calendar year, will be deducted working expenses and the net earnings applied towards payment to Government of interest on advances of capital made by it to the Company and for repayment of the interest paid by it to the Company for that year, the balance to be divided in proportion of three-fourths to Government and one-fourth to the Company.
- (v) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.
- (vi) *General remarks.*—The Indian Midland and Great Indian Peninsula railways were amalgamated and are being worked as one undertaking on behalf of the State from the 1st July 1900.

5. Bina-Goonā-Baran and Bhopal-Ujjain railways—

(a) The Bina-Goonā-Baran and Bhopal-Ujjain railways are worked under the following agreements:—

- Agreement of*—15th July 1896 } (between the Government of Her Highness the Begum of
- 4th August 1896 } Bhopal and that of His Highness the Maharaja Scindia
- 4th August 1896 } of Gwalior and the Indian Midland Railway Company) for
- 12th May 1899 } working.
- 20th February 1899 (between the Government of His Highness the Maharao of
- Kotah and the Indian Midland Railway Company) for working.
- 27th February 1899 (between the Government of His Highness the Nawab of
- Tonk and the Indian Midland Railway Company) for working.

(b) The general conditions of the agreements are as follows:—

- (i) *Government aid.*—The line from Bina to Baran is owned jointly by the Durbars of the Gwalior, Tonk and Kotah States; and that from Bhopal to Ujjain by the Bhopal and Gwalior States.
- (ii) *Currency of agreement.*—The agreements may be terminated on the expiry of ten years from the dates of the opening of the railways, or on the 30th June or 31st December in any year thereafter, on twelve months' notice in writing being given by either party.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	
Main.	Sub.				Miles.	Miles.	
		GREAT INDIAN PENINSULA SYSTEM—contd.					
		Brought forward . . . . .	...	...	399'55	1,548'17
		DOUBLE LINE—NAGPUR BRANCH—					
		Bhusaval Junction to Nadgaon . . . . .	...	11-1-89	17'72	
		Nadgaon to Shegaon . . . . .	...	1-4-90	44'65	
		Total Double line, Nagpur branch . . . . .	...	...	62'37	
		GRAND TOTAL, DOUBLE LINE . . . . .	...	...	461'92	
7	(b)	KHAMGAON. (5' 6" gauge). Jalamb to Khamgaon	7-6-69	4-3-70	7'97		
		TOTAL, KHAMGAON . . . . .	...	...	...	7'97
7	(c)	AMRAOTI— (5' 6" gauge). Badnera to Amraoti	11-6-70	16-2-71	5'49		
		TOTAL, AMRAOTI . . . . .	...	...	...	5'49
7	(d)	INDIAN MIDLAND SECTION. (5' 6" gauge). <i>Main line—</i> Bhopal to Jhansi Jhansi to Gwalior Gwalior to Hatampur. Hatampur to Dholpur Dholpur to Agra Cantonment	* 11-6-86 24-8-77 15-2-76	1-1-89 1-3-89 20-12-79 15-5-81 10-1-78	180'49 60'39 32'40 8'55 33'69		
		Total, Main line . . . . .	...	...	...	315'52
		<i>Branches—</i> Manikpur branch— Jhansi to Mau Ranipur Mau Ranipur to Banda Banda to Manikpur	23-8-83	5-6-89 1-8-89 15-2-89	39'96 78'96 61'45		
		Cawnpore branch— Jhansi to Chaunrah Chaunrah to Cawnpore	Cawnpore to Kalpi, 12-3-84; Kalpi to Jhansi, 3-3-86	1-2-88 1-4-86	94'99 40'44		
					180'37		
		Bina to point of junction with Bina-Goonna-Baran railway.	...	1-5-95	2'00		
		Bhopal to point of junction with Bhopal-Ujjain railway.	...	11-11-95	0'21		
		Bina-Saugor-Katni branch— Bina to Saugor Saugor to Damoh Damoh to Katni From centre of Katni-Murwara station to junction with Bengal-Nagpur railway Connecting link with East Indian railway at Katni-Murwara from points in Indian Midland railway main line to junction with East Indian railway	Aug. '87 Dec. '95 Jan. '86	5-6-89 26-3-98 1-1-99 1-1-90 1-1-99	46'24 47'83 67'88 0'71 0'34		
					163'00		
		Total Branches . . . . .	...	...	...	481'01
		TOTAL, OPEN MILEAGE, INDIAN MIDLAND PROPER . . . . .	...	...	...	796'53
		Carried over . . . . .	...	...	...	796'53
						1,561'63	

* Sanctioned in sections as follows: Bhopal to Bhilsa, 2nd March 1886; Bhilsa to Basoda, 24th June 1886; Basoda to Lalitpur, 24th December 1886; and Lalitpur to Jhansi, 21st September 1886.

DIX 47—continued.
on the 31st December 1902, alphabetically arranged.

REMARKS.

5. Bina-Goonā-Baran and Bhopal-Ujjain railways—concl'd.

(b) General conditions—concluded.

(iii) *Terms of working.*†—*Bina-Goonā and Bhopal-Ujjain.*—The Company retain 50 per cent. of the gross receipts of the railway of each half-year; and receive rent for works, &c., in sole and joint use at Bina and Ujjain Junctions respectively; and rent for the telegraph lines and instruments when not the property of the railway.

Goonā-Baran.—The Company retain out of the gross receipts a sum (which includes any single item of capital expenditure, not exceeding Rs. 1,000 to be classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile open in each half-year) bearing the same percentage to the entire gross receipts of the railway for each half-year as the aggregate working expenses of the whole system of the Company (including the railway) bear to the gross receipts of that system for the same half-year, but not exceeding 50 per cent. of the entire gross receipts of the railway for that half-year.

(iv) *Rates and fares.*—The same rates and fares as are in force from time to time on the Great Indian Peninsula railway.

6. Bhopal-Itarsi railway—

(a) The Bhopal-Itarsi railway is worked under the following contract:—

Contract of—30th June 1887 (between the Government of India and Her Highness the Begum of Bhopal) for construction.

20th April 1894 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working.

(b) The general conditions of the contracts are as follows:—

(i) *Government aid.*—The British Government has paid for the portion, 13½ miles, in their own territory, and a moiety of the cost of the bridge over the Nerbuddā or in all, about 13 lakhs; the Begum of Bhopal has contributed 50 lakhs for the portion of the line in her dominions.

(ii) *Currency of contract.*—The provisions in the contract between the Secretary of State and the Railway Company itself with reference to the termination of that contract extend and are applicable to the Bhopal-Itarsi railway.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—The Company receive a sum bearing the same percentage to the gross receipts of the Bhopal-Itarsi railway as the aggregate working expenses of the whole open system of the Company (including the Bhopal-Itarsi railway) bear to the aggregate gross receipts of that system. The balance of the gross receipts are divided in perpetuity between the British Government and the Ruler of Bhopal in proportion to the capital contributed by each party. In the event of the railway being worked at a loss, such loss to be borne in the same proportion.

(v) *Rates and fares.*—The same rates and fares as are in force on the Great Indian Peninsula railway.

7. Gwalior Light railway—

(a) The Gwalior Light railway is worked under the following agreement:—

Agreement of—11th October 1900 (between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working.

(b) The general conditions of the agreement are as follows:—

(i) *Government aid.*—The Gwalior Light railway is the property of the Gwalior Durbar.

(ii) *Currency of contract.*—Either party may determine the agreement by giving three months' notice.

(iii) *Terms of working.*—The gross receipts are to be collected and treated as receipts of the Indian Midland Railway Company and from them will be deducted the actual expenditure in the Traffic and audit departments for station and train staff, audit clerks on printing and stationery and stores consumed and all other expenses connected therewith and 5 per cent. per annum for construction and maintenance of accommodation required for the exclusive use of the Light railway; 7½ per cent. for ballast, permanent-way, etc., including maintenance and renewal plus 15 per cent. to cover supervision and general charges other than those rendered in the accounts. The balance will be paid over to the Gwalior Durbar.

(v) *Rates and fares.*—Rates and fares the same as are in force on the Great Indian Peninsula railway.

† These terms are applicable only to those portions of the lines owned by the Gwalior State; the Bhopal, Tonk and Kotah Durbars having accepted the revised method of arriving at the working expenses, the percentage that the working expenses bear to the gross earnings of the Indian Midland railway system is applied in arriving at the expenditure for the Bhopal, Tonk and Kotah States and no additional charge is made for rent of wires, etc., payable to Government.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total
Main.	Sub.				Miles.	Miles
		GREAT INDIAN PENINSULA SYSTEM—contd.				
		Brought forward . . . . .	...	...	...	1,561.6
		<i>Line under construction or sanctioned for construction.</i>				796.5
		Ait to Kunch	23-9-02	...	8.85	
		Total, line under construction . . . . .	...	...	...	8.8
		TOTAL, INDIAN MIDLAND PROPER				805.3
7	(e)	BINA-GOONA-BARAN— (5' 6" gauge).				
		From the joint boundary of the Indian Midland and Bina-Goona-Baran railways, a point 200 miles from the centre of Bina station to Goona.	2-3-92	23-9-95	71.73	
		From centre of Goona station (mile 216—3,402 feet) to end of Baran station (mile 290—2,850 feet):	28-1-97	15-5-99	73.90	
		TOTAL, BINA-GOONA-BARAN . . . . .	...	...	...	145.6
7	(f)	BHOPAL-UJJAIN— (5' 6" gauge).				
		Bhopal to Ujjain	10-11-92	11-11-95	113.27	
		TOTAL, BHOPAL-UJJAIN . . . . .	...	...	...	113.27
7	(g)	BHOPAL-ITARSI— (5' 6" gauge).				
		<i>Main line—</i>				
		Itarsi to Hoshangabad	31-7-80	1-6-82	10.89	
		Hoshangabad to Bhopal		18-11-84	46.22	
		Total, Main line . . . . .	...	...	...	57.11
		<i>Branch—</i>				
		Centre of Bhopal station to the joint boundary of the Bhopal-Itarsi and Indian Midland railways at Bhopal.	July '94	11-11-95	0.28	
		Total Branch . . . . .	...	...	...	0.28
		TOTAL, BHOPAL-ITARSI . . . . .	...	...	...	57.39
		Carried over . . . . .	...	...	...	2,683.30

REMARKS.

8. General Remarks—

4'39 miles of the Great Indian Peninsula railway from Dadar Junction to Carnac bridge are worked over by the Bombay, Baroda and Central India railway.

The Great Indian Peninsula railway has running powers over 7'25 miles of the Bombay, Baroda and Central India railway from Dadar Junction to Colaba.

The Indian Midland railway has running powers over the following lengths of foreign lines:—2'89 miles at Agra belonging to the Rajputana-Malwa railway; 12'75 miles from Agra to Tundla; 1'48 miles at Cawnpore; 0'63 mile at Mafickpur and 0'35 mile at Katni belonging to the East Indian railway; 1'59 miles at Katni, belonging to the Bengal-Nagpur railway; 0'24 mile at Ujjain, belonging to the Bombay, Baroda and Central India railway; 1'00 mile at Cawnpore belonging to the Oudh and Rohilkhand railway, and also 44'63 miles from Cawnpore to Lucknow.

9. Details of construction—

(a) Permanent-way—

Great Indian Peninsula railway.—The rails originally laid were iron, weighing 68 lb. and 84 lb. to the yard. These have now been replaced by steel rails; there were 64'81 miles of 86 lb.; 1,078'95 miles of 82 lb. and 585'38 miles of 69 lb. on the 31st December 1902 on the main line only. The sleepers originally laid were chiefly wooden. These are now mostly replaced by iron pots; there were 1,677'50 miles of bowl sleepers and 51'64 miles of wooden sleepers on the 31st December 1902 on the main line only. The whole of the South East line, excepting the Ghat section, is laid with iron pots. On the Dhond-Manmad line, the rails are chiefly double headed steel, 69 lb. to the yard, laid on iron pot sleepers. On the Wardha Coal railway, there are 18'13 miles of 69 lb. double headed steel rails and 26'27 miles of 68 lb. iron rails. The sleepers are of mixed wood for 40'37 miles and cast iron pot sleepers, 5'02 miles.

Khamgaon railway.—The line was originally laid with 57 lb. flat-footed rails on cast-iron pots, but in 1895 the whole of these were removed and replaced with second-hand Great Indian Peninsula railway 68 lb. iron rails and cast-iron pot sleepers. There is only 0'18 mile of road at Jalamb end which is laid with 82 lb. steel rails.

Amraoti railway.—With the exception of 0'50 mile at Badnera end which is laid with steel rails, the permanent-way is of iron, the rails weighing 68 lb. to the yard; the sleepers are pot.

Indian Midland railway.—The main line, with the branches from Jhansi to Manickpur and Bina to Katni, is laid with 80 lb. flat-footed steel rails on cast-iron oval pot sleepers. From Jhansi (Cawnpore branch) to mile 325'50, 80 lb. flat-footed steel rails and cast-iron oval pot sleepers are also used. Thence to mile 331 (0'75 mile beyond Jumna Bridge) the permanent-way consists of East Indian railway 75 lb. double headed steel rails laid on wooden sleepers, and from there to Cawnpore on Denham and Olpherts' sleepers, a length of about 46 miles. The latter are now being gradually replaced by iron pots of the Great Indian Peninsula pattern, 0'85 mile having been done to 31st December 1902. The East Indian railway type rails and wooden sleepers between miles 325'50 and 331'00 are also being renewed with Indian Midland railway 80 lb. flat-footed steel rails and cast-iron oval pots.

Bina-Goonna-Baran railway.—On the Bina-Goonna section, the permanent-way consists of 75 lb. steel rails laid on steel transverse sleepers. On the Goonna-Baran section, the permanent-way consists of 75 lb. flat-footed steel rails with 4 holed fish-plates laid on deodar sleepers. Some 15 miles of Indian State railway pattern steel trough sleepers surplus from the Bhopal-Ujjain and Bina-Goonna railways have been utilized on the Gwalior section.

Bhopal-Ujjain railway.—The permanent-way consists of 75 lb. flat-footed steel rails laid on transverse steel sleepers.

Bhopal-Itarsi railway.—The line was originally laid with 62 lb. steel rails. Up to the end of December 1902, 49'08 miles of track have been relaid with Indian Midland railway 80 lb. steel rails. The sleepers were partly of steel and partly of creosoted pine and other kinds of wood. The wooden sleepers have been renewed from time to time with Indian Midland railway pot sleepers. A similar operation has now been taken in hand with the steel trough sleepers in the road, of which eleven miles have been renewed with Indian Midland railway pot.

Gwalior Light railway.—The permanent-way consists of 30 lb. steel rails laid on sal and steel trough sleepers, Indian State railway pattern.

(b) *Ballast.*—The line is fully ballasted throughout.

(c) *Tunnels.*—The following are the tunnels of 500 feet length and over—Bhore Ghat No. 7 (near Palasdhari) 837 feet; No. 8 (near Palasdhari) 858 feet; No. 9 (near Thakurvadi) 825 feet; and No. 13 (between Palasdhari and Thakurvadi) 1,305 feet; No. 16, 594 feet; No. 22 (near Reversing station) 828 feet; and No. 23 (between Thakurvadi and Bhore Ghat Reversing) 768 feet; No. 24 (between Bhore Ghat Reversing and Khandala) 1,023 feet; Thull Ghat No. 2 (between Kasara and Thull Ghat Reversing) 1,625 feet; No. 4, (near Kasara) 713 feet; No. 7 (near Iगतपुरी) 1,461 feet; No. 8 (near Iगतपुरी) 1,247 feet; and No. 11 (between Thull Ghat Reversing and Iगतपुरी) 777 feet; and Bagra (between Gurra and Bagra) 910 feet. There are 27 other tunnels varying in length from 132 feet to 500 feet, aggregating 7,834 feet.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		GREAT INDIAN PENINSULA SYSTEM—concl'd.				
		Brought forward	...	...	...	2,683'30
7	(h)	GWALIOR LIGHT— (2' 0" gauge).				
		Gwalior to Sipri . . . . .	...	2-12-99	73'81	
		Gwalior to Bhind .. . . .	...	2-12-99	52'33	
		Total open mileage	...	...	...	126'14
		<i>Line under construction or sanctioned for construction.</i>				
		Gwalior to Subalgarh.	2-10-01	...	57'86	
		Total line under construction	...	...	...	57'86
		TOTAL, GWALIOR	...	...	...	184'00
		GRAND TOTAL, GREAT INDIAN PENINSULA SYSTEM.	...	...	...	2,867'30
21	(c)	GUNTAKAL-MYSORE FRONTIER— (See Southern Mahratta system, page 396.)				
7	(h)	GWALIOR LIGHT— (See Great Indian Peninsula system, page 334.)				
5	(b)	HARDWAR-DEHRA— (See Oudh and Rohilkhand system, page 372.)				
21	(d)	HINDUPUR (YESVANTPUR-MYSORE FRON- TIER). (See Southern Mahratta system, page 396.)				
21	(j)	HOSPET-KOTTUR— (See Southern Mahratta system, page 396.)				

REMARKS.

9. Details of construction—concl'd.

(d) *Bridges.*—The important bridges of 1,000 feet length and over are as follows:—Bhina (between Diksal and Katraj) 28 spans of 40 feet; Cogni (between Shahabad and Wadi) 16 spans of 75 feet, 6 spans of 60 feet, and 12 spans of 30 feet; Kistna (between Krishna and Chicksugur) 36 spans of 100 feet (3,855·09 feet); Tapti (between Bhusaval and Daskheda) 5 spans of 138 feet, and 28 spans of 59 feet (2,556 feet); Mund (between Nagjhari and Paras) 15 spans of 60 feet; Towa (between Gurra and Bagra) 4 spans of 202 feet, and 2 spans of 132 feet; Nerbudda (between Bikrampur and Shahpura) 5 spans of 137 feet, and 6 arches of 40 feet (1,052 feet); Bhima (between Dhond junction and Pimpri) 28 spans of 40 feet; Godavari (between Pugtamba and Samvatsar) 21 spans of 50 feet; Girna (between Jalgaon and Paldhi) 9 spans of 1,66·16 feet (1,572 feet); Girna (between Chalisgaon and Jamdah) 13 spans of 100 feet (1,417 feet); Ken (between Khairada and Banda) 12 spans of 100 feet, and 1 span of 250 feet (1,558 feet); Betwa (between Oorcha and Barwa Sagar) 13 spans of 150 feet, and 1 span of 60 feet (2,166 feet); Dhassan (between Rora and Harpalpur) 13 spans of 100 feet; Jumna (between Chaunrah and Kalpi) 10 spans of 250 feet (2,626 feet); Bearmi (between Damoh and Ghatira) 11 spans of 100 feet; Betwa (between Talbahat and Basai) 9 spans of 150 feet (1,446 feet); Sindh (between Sanagir and Dabra) 9 spans of 100 feet, and 1 span of 60 feet; Chambal (between Hetampur and Dholpur) 12 spans of 186 feet, and 2 spans of 136 feet (2,714 feet); Betwa (between Bina and Mangavali), 16 spans of 100 feet; Parbati (between Dharnaoda and Bhulon) 18 spans of 100 feet; and Nerbudda (between Hoshangabad and Budni) 14 spans of 150 feet, and 1 span of 60 feet (2,306 feet).

(e) *Fencing.*—

Great Indian Peninsula railway.—The line, with the exception of the Mohpani, Chalisgaon-Dhulia and Jalgaon-Amalner branches is well fenced throughout.

Khamgaon railway.—About 1·26 miles of wire fencing have been provided at each end of the line, the remaining portion being unfenced.

Amraoti railway.—The line is fenced only at the Badnera and Amraoti ends.

Indian Midland railway.—The line is fenced throughout, except between Banda and Jhansi on the Jhansi-Manickpur section. On the Saugor-Katni branch, fencing has been erected through Saugor Cantonments and at Damoh and Katni-Murwara stations only.

Bina-Goono-Baran railway.—The line is fenced throughout from Bina to Goona, but the Goona-Baran section is unfenced except at stations.

Bhopal-Ujjain railway.—The line is fenced only at, and in the vicinity of, stations, towns and important level crossings.

Bhopal-Itarsi railway.—The line is wholly fenced.

Gwalior Light railway.—The line is fenced between Gwalior and Morar only.

(f) *Curves.*—On the 5' 6" gauge section the sharpest curve has a radius of 990 feet; it is 0·34 mile long and is situated between mile 75 and 76 from Bombay.

Gwalior Light railway.—The sharpest curve in station yards has a radius of 200 feet. The sharpest curve out of stations has a radius of 955 feet.

(g) *Gradients.*—Of a total open mileage on the system of 2,800·59 miles, 6·77 miles are on the ruling gradient of 1 in 80 on the 5' 6" gauge, (excluding Thul Ghat and Bhore Ghat which are on the ruling gradient of 1 in 37 aggregating 4·37 miles and 1·64 miles, respectively), and 1·17 miles of 1 in 40 on the 2' 6" gauge Gwalior Light railway.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
30	(a)	HOWRAH-AMTA LIGHT— (2' 0" gauge.)				
		<i>Main line—</i>				
		Telkul ghat (Howrah) to Dumjur	} 27-3-95 {	1-7-97	9'20	
		Dumjur to Bargachia		2-10-97	5'87	
		Bargachia to Maju		4-5-98	5'50	
		Maju to Amta		1-6-98	6'62	
		Total Main line . . . . .	...	...	...	27'19
		<i>Branch—</i>				
		Bargachia to Jagatbalabpur	27-3-95	2-10-97	1'50	
		Total Branch . . . . .	...	...	...	1'50
		TOTAL OPEN MILEAGE, HOWRAH-AMTA . . . . .	...	...	...	28'69
		<i>Lines under construction or sanctioned for construction—</i>				
		Jagatbalabpur to Antpur	} 23-3-02 {	†7-4-04	8'50	21'00
		Antpur to Champadanga } . . . . .		...	12'50*	
		Antpur to Rajbulhat } . . . . .		...	...
		TOTAL, HOWRAH-AMTA . . . . .	...	...	...	49'69

* Commencement of work not yet authorized.
† Probable date of opening.

REMARKS.

1. Howrah-Amta Light railway—

(a) The Howrah-Amta Light railway is worked on the terms in Bengal Government, Public Works Department, Notifications No. 111, dated the 26th March 1895, and No. 75-R., dated the 7th April 1902, under the following agreements:—

Agreements of—12th June 1888 (between the District Board of Howrah and the Bengal District Road Tramways Company).

3rd May 1897 (between the District Board of Howrah and the Bengal District Road Tramways Company, Howrah-Amta).

16th August 1900 (between the District Board of Howrah and the Howrah-Amta Light Railway Company).

(b) The general conditions are as follows:—

(i) *Aid by the District Board.*—As subsidy for payment of interest, the District Board has guaranteed a sum sufficient to make the net earnings equivalent to Rs. 1,100 per annum per mile constructed and opened, limited to a maximum annual payment of Rs. 28,000. The free use of the district road, not exceeding 6 feet and on one side only, has been granted to the Company for the purpose of laying the line, a clear width of 14 feet being left for vehicular traffic.

(ii) *Currency of agreement.*—The District Board has the power of determining the agreements after 21 years. In the event of the District Board of Howrah exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act 3 of 1893 (Bengal Code), the value to be placed upon the railway is to be calculated by adding to the value of the whole undertaking with all its equipments, as a dividend earning investment, a bonus of 20 per cent. over and above such value.

(iii) *Terms of working.*—Whenever the net earnings of the Company in respect of the railway are in excess of 4 per cent. upon the capital for the time being of the Company, such surplus profits are divided between the Company and the District Board in equal proportions.

(iv) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.

(v) *General remarks.*—After leaving Howrah, the line generally runs through the town of Howrah and along the district road to Amta. The extension to Champadanga will be constructed on a separate alignment of its own. Diversions have been made to avoid sharp curves in the road. On the 13th January 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the Howrah-Amta line.

2. *General remarks.*—The Howrah-Sheakhala railway works over 2'00 miles of the Howrah-Amta railway from Howrah to Kadamtolla.

3. *Details of construction.*—

(a) *Permanent-way.*—The permanent-way consists of steel rails, Vignole's pattern, 25 lb. to the yard, laid on cross-sleepers of pyinkado. On the extension the rails will be steel, Vignole's pattern, 30 lb. to the yard.

(b) *Ballast.*—The line is ballasted throughout.

(c) *Fencing.*—The line is unfenced.

(d) *Curves.*—The sharpest curve, sanctioned specially for the town of Howrah, is of 144 feet radius.

(e) *Gradients.*—Of a total mileage of 28'69 miles, 1'1 miles are on the ruling gradient of 1 in 100.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total
Main.	Sub.				Miles.	Miles.
31	(a)	HOWRAH-SHEAKHALA LIGHT— (2' 0" gauge.)				
		<i>Main line—</i>				
		Kadamtolla to Chanditala	27-3-95	2-8-97	8'88	
		Chanditala to Kistrampur		10-9-97	3'75	
		Kistrampur to Sheakhala		7-11-97	4'75	
		Total Main line . . . . .	...	...	...	17'
		<i>Branch—</i>				
		Chanditala to Janai	27-3-95	5-5-98	2'37	
		Total Branch . . . . .	...	...	...	2'3
		TOTAL, HOWRAH-SHEAKHALA . . . . .	...	...	...	197
9	(c)	HYDERABAD-GODAVARI VALLEY— (See Nizam's Guaranteed State system, page 358.)				
7	(d)	INDIAN MIDLAND— (See Great Indian Peninsula system, page 330.)				
8	(n)	JAIPUR (Siwai-Madhapur.) (See Bombay, Baroda and Central India system, page 288.)				
6	(d)	JAMMU AND KASHMIR (Native state section)— (See North Western system, page 368.)				
20	(b)	JAMNAGAR— (See Bhavnagar-Gondal-Junagad-Porbandar system, page 274.)				
20	(c)	JETALSAR-RAJKOT— (See Bhavnagar-Gondal-Junagad-Porbandar system, page 274.)				

DIX 47—continued.
on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Howrah-Sheakhala Light railway—

(a) The Howrah-Sheakhala Light railway is worked on the terms stated in Bengal Government, Public Works Department, Notification No. 112, dated the 26th March 1885, under the following agreements :—

Agreements of—12th June 1885 (between the District Board of Howrah and the Bengal District Road Tramways Company).

16th July 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

(b) The general conditions are as follows :—

(i) *Aid by the District Board.*—As a subsidy for payment of interest, the District Board has guaranteed to make up the net earnings to Rs. 950 per mile constructed and opened per annum. Land was also provided free of charge.

(ii) *Currency of agreement.*—The agreement is current for a period of 21 years. In the event of the District Board of Howrah exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act III of 1883 (Bengal Code), the price to be placed upon the tramway is to be calculated by adding to the value of the whole tramway from Howrah to Sheakhala with all its equipment as then constituted, a bonus of 15 per cent. over and above such value.

(iii) *Terms of working.*—Whenever the net earnings of the Company are in excess of 4 per cent. upon the capital of the Company actually paid up and expended for the time being, surplus profits are divided between the Company and the District Board in the proportion of two-thirds to the Company and one-third to the District Board.

(iv) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.

(v) *General remarks.*—On the 13th January 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

2. *General remarks.*—The Howrah-Sheakhala railway works over 2.00 miles of the Howrah-Amta railway from Howrah to Kadamtolla.

3. Details of construction—

(a) *Permanent-way.*—The permanent-way consists of steel rails, Vignole's pattern, 25lb. to the yard, laid on cross sleepers of pyinkado.

(b) *Ballast.*—The line is ballasted throughout.

(c) *Fencing.*—The line is unfenced.

(d) *Curves.*—The sharpest curves, sanctioned specially for Howrah town, are of 144 feet radius.

(e) *Gradients.*—Of a total mileage of 19.75 miles, 0.20 mile is on the ruling gradient of 1 in 100.

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		JODHPUR-BIKANER SYSTEM— (3' 3½" gauge.)				
18	(a)	Jodhpur section—				
		Marwar Junction to Marwar Pali	1883	24-6-82	19'00	
		Marwar Pali to Luni Junction		17-6-84	25'00	
		Luni Junction to Jodhpur	1884	9-3-85	20'00	
		Jodhpur to Merta Road	1890	8-4-91	64'00	
		Merta Road to Kuchaman Road	July 1891	13-3-99	73'00	
		Luni Junction to Pachpadra	31-12-85	22-3-87	60'00	
		Balotra to Barmer	Aug. 1897	15-5-95	60'00	
		Barmer to the Jodhpur Frontier		22-12-00	74'44	
		Merta Road to Nagour	1890	16-10-91	35'00	
		Nagour to Bhagu		9-12-91	24'50	
		TOTAL, JODHPUR SECTION	...	...	...	454'94
18	(b)	Bikaner section—				
		Bhagu to Bikaner	1890	9-12-91	43'50	
		Bikaner to Dulmera	Dec. 1895	2-6-98	42'00	
		Dulmera to Lankaransar	27-1-98	1-1-01	8'32	
		Lankaransar to Suratgarh	9-2-99		63'53	
		Suratgarh to Bhatinda	15-7-99	9-9-02	88'00	
		TOTAL, BIKANER SECTION	...	...	...	245'35
		TOTAL OPEN MILEAGE, JODHPUR-BIKANER PROPER	...	...	...	700'29
18	(c)	JODHPUR-HYDERABAD (BRITISH SECTION)—				
		Hyderabad to Shadipalli	5-3-91	*18-8-92	55'49	
		Shadipalli to the Jodhpur Frontier	Aug. 1897	22-12-00	68'49	
		TOTAL, JODHPUR-HYDERABAD (BRITISH SECTION)	...	...	...	123'98
		GRAND TOTAL, JODHPUR-BIKANER SYSTEM	...	...	...	824'27
18	(c)	JODHPUR-HYDERABAD— (See Jodhpur-Bikaner system, page 340.)				

* Date of opening of standard gauge line; converted and opened on the 3' 3½" gauge on the 20th October 1901.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Jodhpur-Bikaner railway system is made up of—

	Open line, Miles.
(a) Jodhpur section (3' 3½" gauge)	454.94
(b) Bikaner section (3' 3½" gauge)	245.35
(c) Jodhpur-Hyderabad railway (British section) (3' 3½" gauge)	123.98
Total	824.27

2. Jodhpur-Bikaner railway—

(a) The Jodhpur-Bikaner railway is worked under the following contracts:—

Contracts of— 13th July 1889 } (between the Government of India and the Jodhpur and Bikaner
30th July 1889 } Durbars) for constructing and working the line.

(b) The general conditions of the contracts are as follows:—

- (i) *Government aid.*—The line is the exclusive property of the two Durbars.
- (ii) *Currency of contract.*—These contracts may be modified at any time by mutual consent.
- (iii) *Terms of working.*—Each Durbar to receive all the profits of its respective portions.
- (iv) *Rates and fares.*—No provision was made for rates and fares in the contracts but certain rates and fares were approved by executive order.

3. The Jodhpur-Hyderabad railway (British section)—

(a) The Jodhpur-Hyderabad railway (British section) is worked under the following agreement:—

Agreement of— 22nd December 1900 (between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner) for the construction of a railway, on the 3' 3½" gauge, from Balotra to Hyderabad, and for working the section from the Jodhpur Frontier to Hyderabad.

(b) The general conditions of the agreement are as follows:—

- (i) *Currency of agreement.*—As regards the working of the railway, this agreement remains in force until determined by either party, on 12 months' notice, on the 1st day of January or the 1st day of June in any year.
- (ii) *Terms of working.*—Working expenses, excluding maintenance, are divided between the British and Native state sections in the ratio of the gross earnings of each section. Maintenance charges to be actual cost for each section of line.
- (iii) *Rates and fares.*—Maximum and minimum rates and fares and classification in force on the North Western railway from time to time to be in force on the British section.

Note.—Government of India, No. 255 R. T., dated the 6th March 1900, approved of the Rajputana-Malwa railway classification of goods, which is in force on the Native state section, being adopted on the British section, the stipulation in agreement requiring the adoption of the North Western railway classification remaining unaltered in case it may be considered desirable to enforce it hereafter.

4. Details of construction—

(a) *Permanent-way*—

Jodhpur-Bikaner.—Between Kuchaman Road and Jodhpur and between Merta Road and Bhatinda, the permanent-way consists of 36 lb. flat-footed steel rails, laid on steel trough and deodar sleepers. From Jodhpur to Marwar Pali, the line was originally laid with old 36 lb. iron rails on jungle wood sleepers. The latter have all been replaced by deodar sleepers and a few short sections of steel trough sleepers, while the former are now replaced by 41½ lb. and 50 lb. steel rails. Beyond Marwar Pali, 36 lb. second-hand iron rails were originally laid on creosoted pine sleepers, which have for the most part been renewed by deodar, except for the last 3 miles, where a new approach has been lately constructed on steel trough sleepers while the old rails have been mostly replaced by others of 41½ lb. section. The line between Balotra and the Frontier is laid on 50 lb. steel rails and creosoted pine and steel sleepers. The permanent-way between Luni Junction and Balotra has been re-laid with similar rails and pine sleepers. The Balotra-Pachpadra section is laid with 36 lb. steel rails and steel trough sleepers; these are being gradually replaced by deodar sleepers on account of the salt soil.

Jodhpur-Hyderabad (British section).—The Hyderabad-Shadipalli section is laid with 60 lb. iron rails and deodar sleepers, and of the Shadipalli-Jodhpur Frontier section, about 14 miles at the Shadipalli end are laid with 41½ lb. rails and Denham-Olpherts cast iron sleepers, and the remainder with 50 lb. steel rails and deodar sleepers.

(b) *Ballast.*—

Jodhpur-Bikaner.—On the greater portion of the line the ballast consists of coarse sand and small kunkur; but on the Merta Road-Kuchaman Road and the Balotra Frontier sections it is chiefly broken stone, and on the Suratgarh-Bhatinda section, broken brick and kunkur.

Jodhpur-Hyderabad (British section).—The ballast is of kunkur stone and broken brick.

(c) *Fencing.*—With the exception of a few stations, the line is practically unfenced.

(d) *Curves.*—There are no curves under a radius of 1,000 feet.

(e) *Gradients.*—Of a total open mileage of 824.27 miles on the system, 2.31 miles are on the ruling gradient of 1 in 150.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total
Main.	Sub.				Miles.	Miles.
32	(a)	JORHAT STATE LIGHT— (2' 0" gauge.)				
		<i>Main line—</i>				
		Gosaigaon to Jorhat	13-9-83	15-12-84	9'00	
		Jorhat to Dhali river		15-12-84	9'50	
		Dhali river to Titabar		16-7-87	1'75	
		Extension line from Gosaigaon to Borghop (cold weather).	...	22-10-01	2'75	
		Total Main line . . . . .	...	...	...	23'00
		<i>Mariani branch—</i>				
		Chenimara Junction to Mariani	13-9-83	7-1-85	7'00	
		Total Branch . . . . .	...	...	...	7'00
		TOTAL, JORHAT . . . . .	...	...	...	30'00
4	(a)	JUBBULPORE-GONDIA EXTENSION— (See Bengal-Nagpur system, page 272.)				
34	(a)	KALKA-SIMLA— (2' 6" gauge.)				
		Kalka to Simla	29-6-98	Oct. 1903*	60'00	
		TOTAL, KALKA-SIMLA . . . . .	...	...	...	60'00

* Probable date of opening.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Jorhat State Light railway—

(a) The line was constructed out of Provincial revenues by the Government of Assam for the convenience of the numerous tea gardens in the neighbourhood of Jorhat and is owned and worked by the State.

2. Details of construction—

(a) *Permanent-way.*—Excepting 2·51 miles of the line between Jorhat and Gosaigaon, which is laid with steel rails, 30 lb. to the yard, the whole line including the section from Gosaigaon to Borghop is laid with steel rails, 18 lb. to the yard.

(b) *Ballast.*—The line is unballasted.

(c) *Fencing.*—The railway land acquired for stations and buildings at Jorhat only is demarcated by barbed wire fencing.

(d) *Curves.*—The sharpest curve has a radius of 480 feet and is 468 feet in length.

(e) *Gradients.*—Of a total mileage of 30·00 miles, 0·19 mile is on the ruling gradient of 1 in. 100.

1. Kalka-Simla railway—

(a) The Kalka-Simla railway is under construction and will be worked under the following contracts:—

Contracts of—29th June 1898.—(Between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction and working.

15th November 1901.—Contract supplemental to that of 1898.

(b) The conditions of the contracts are as follows:—

(i) *Government aid.*—Land to be provided free of charge.

(ii) *Terms of contract.*—The line is being constructed without a guarantee at the cost of the Delhi-Umballa-Kalka Railway Company, for which purpose the Company is authorised to raise further share capital, in addition to the capital already issued for the existing undertaking, to such an amount as may be mutually agreed upon. The amount agreed upon so far is £600,000.

(iii) *Currency of contract.*—Government may determine the contract, on giving twelve months' notice, either on the expiration of twenty-five years or on the 31st December 1928 or on the expiration of any subsequent period of ten years. Government may also determine, on giving notice, if the Company fail to comply with the obligations of the contract. In the former case, Government will pay a sum equal to twenty-five times the amount of the average yearly net earnings during the five years immediately preceding the time of termination, but not exceeding by more than 50 per cent., or not being less than the total capital in sterling expended. In the latter case, Government will pay the fair value of the railway and works.

(iv) *Power of Company to surrender contract.*—Nil.

(v) *Terms of working.*—From the gross earnings will be deducted all charges properly debitable to revenue as working expenses (including any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year), and the balance will represent net dividends for shareholders.

(vi) *Rates and fares.*—Certain maxima and minima have been fixed, and, subject to certain special conditions regarding charge for tunnels and rack system portions, the Company can vary such rates within the maxima and minima.

2. Details of construction.—

(a) *Permanent-way.*—The permanent-way will be 41 lb. steel flat-bottomed rails on wooden sleepers.

(b) *Tunnels.*—The following are the important tunnels on this line:—Gamma, 510 feet, at mile 5·62; Koti, 2,225 feet in length, mile 10; Kammarhatti I, 552 feet, mile 25; Barogh, 3,752 feet, mile 26½; Solon IV, 1,000 feet, mile 30½; Brewery I, 810 feet, mile 31·75; Muttia II, 760 feet, mile 34·62; Ranoo I, 530 feet, mile 42; Kandaghat I, 1,225 feet, mile 35½; Taradevi I, 1,665 feet, mile 53; and Simla, 1,140 feet, at mile 59½. There are 67 other tunnels, varying from 15 feet to 420 feet in length, aggregating 10,605 feet.

Appendix 47.
History of railways.

History of railways constructed and in progre

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
22	(d)	KARAIKKAL-PERALAM— (See South Indian system, page 388.)				
7	(b)	KHAMGAON— (See Great Indian Peninsula system, page 330.)				
6	(f)	KHUSALGARH-KOHAT-THAL— (See North Western system, page 368.)				
10	(c)	KOLAR GOLD-FIELDS— (See Madras system, page 348.)				
21	(f)	KOLHAPUR— (See Southern Mahratta system, page 396.)				
13	(b)	LEDO AND TIKAK-MARGHERITA COLLIERY— (See Dibru-Sadiya system, page 304.)				
17	(b)	LUCKNOW-BAREILLY— (See Rohilkund and Kumaon system, page 378.)				
6	(e)	LUDHIANA-DHURI-JAKHAL— (See North Western system, page 368.)				

DIX 47—continued.
on the 31st December 1902, alphabetically arranged.

Appendix 47.
History of railways.

REMARKS.

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
10	(a)	MADRAS SYSTEM— (5' 6" gauge.) SOUTH-WEST LINE—			Miles.	Miles.
		<i>Main line—</i>				
		Madras to Veyasarpady	April 1868	7-4-73	2'16	
		Veyasarpady to Arcot	Veyasarpady	1-7-56	63'22	
		Arcot to Katpadi	to Arkonam,	7-5-57	14'96	
		Katpadi to Gudiyattam	between	19-5-58	15'36	
		Gudiyattam to Ambur	July 1853	16-1-60	17'01	
		Ambur to Vaniyambadi	and Febru-	1-2-60	9'98	
		Vaniyambadi to Tirupattur	ary 1854 ;	23-5-60	14'19	
		Tirupattur to Salem	Arkonam to	1-2-61	69'98	
		Salem to Sankaridrug	Kadalundi,	1-12-61	23'68	
		Sankaridrug to Podanur	between	12-5-62	71'18	
		Podanur to Pattambi	February	14-4-62	64'96	
		Pattambi to Kuttippurum	1854 and	23-9-61	11'50	
		Kuttippurum to Tirur	May 1857.	1-5-61	9'39	
		Tirur to Kadalundi	August '84	12-3-61	16'31	
		Kadalundi to Calicut		2-1-88	9'26	
		Calicut to Badagara		1-10-01	28'95	
		Badagara to Tellicherry	6-5-97	1-5-02	14'73	
		Total Main line . . . . .	...	...		456'82
		<i>Branches—</i>				
		<i>Rayapuram branch—</i>				
		Veyasarpady to Rayapuram	9-6-53	1-7-56	2'16	
		Rayapuram to Beach	16-12-99	22-1-00	1'03	
		Walajah Road (Arcot) to Ranipet	9-12-97	17-4-99	4'17	
					7'36	
		<i>Bangalore branch—</i>				
		Jalarpet Junction to Bangalore Cantonment	1862	1-8-64	84'37	
		Bangalore Cantonment to Bangalore City	March 1881	1-7-82	3'05	
					87'42	
		<i>Nilgiri branch—</i>				
		Podanur Junction to Coimbatore		1-2-73	3'78	
		Coimbatore to Mettupalaiyam	17-8-70	31-8-73	21'97	
					25'75	
		<i>Palghat branch—</i>				
		Olavakkot to Palghat	4-1-87	2-1-88	2'47	
		Total Branches . . . . .	...	...		123'00
		TOTAL, SOUTH-WEST LINE . . . . .	...	...		579'82
		NORTH-WEST LINE—				
		<i>Main line—</i>				
		Arkonam to Nagari	23-6-59	4-3-61	17'27	
		Nagari to Puttur	23-6-59	8-12-61	9'59	
		Puttur to Renigunta	& 3-1-69	15-9-62	14'46	
		Renigunta to Reddipalle	31-1-61	1-10-64	38'02	
		Reddipalle to Cuddapah	& 26-5-63	1-9-65	39'59	
		Cuddapah to Muddanuru	26-5-63	1-8-66	34'31	
		Muddanuru to Tadpatri	& 18-11-63	1-9-68	32'07	
		Tadpatri to Gooty	18-11-63,	1-8-69	29'72	
		Gooty to the Tungabhadra river	20-7-63	12-12-70	75'33	
		Tungabhadra to Raichur	& 22-7-65	15-3-71	17'92	
			8-5-65			
			& 22-7-63			
			8-5-65			
			24-5-65			
			& 25-5-66			
			22-6-66			
			& 23-8-69			
			22-9-69			
		TOTAL, NORTH-WEST LINE . . . . .	...	...		308'28
		TOTAL, OPEN MILEAGE, MADRAS PROPER . . . . .	...	...		888'10
		Carried over . . . . .	...	...		888'10

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Madras railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(a) Madras railway (5' 6" gauge)	888.10	17.07	905.17
(b) East Coast State railway (North-East line) (5' 6" gauge)	497.19	0.93	498.12
(c) Kolar Gold-fields railway (5' 6" gauge)	9.88	...	9.88
(d) Nilgiri railway (3' 3½" gauge)	16.90	...	16.90
(e) Shoranur-Cochin railway (3' 3½" gauge)	64.75	...	64.75
(f) Ashikal-Mangalore Extension (5' 6" gauge)	...	77.27	77.27
(g) Morappur-Dharmapuri (2' 6" gauge)	...	18.37	18.37
(h) Tirupattur-Krishnagiri (2' 6" gauge)	...	26.46	26.46
Total	1,476.82	140.10	1,616.92

2. Madras railway—

(a) The Madras railway is worked under the following contracts :—

Contracts of— 22nd December 1852 (South-West line).

19th December 1855 (South-West line).

13th August 1858 (North-West line).

2nd January 1871 (Amalgamation).

18th January 1901 (Calicut-Azhikal extension).

1st November 1901 (Walajah Road (Arcot)-Ranipet branch).

(b) The general conditions of the contracts are as follows :—

(i) *Government aid.*—Guarantee of interest in sterling at 5 per cent, for term of contract. On some portion of the share capital and on debentures lower rates of interest are guaranteed. Land also was provided free of cost.

(ii) *Currency of contracts.*—In ninety-nine years from 1st April 1857, the line reverts to Government who would then pay only for the rolling-stock at its fair value, provided the Company had not previously given notice terminating the contract. Government may determine the contract by purchase within six months after the expiration of 25 or 50 years of the term, at the mean market value of the shares during the three preceding years. Possession to be taken of the railway at the half-yearly day next but one following the notice. Government may also determine the contract at any time, on giving three months' notice, if the Company fail to observe their obligations, Government repaying the capital expended.

NOTE.—Government relinquished their right to determine the contract at the end of the 25th year and the only remaining opportunity of giving notice of purchase will be in 1907 within six months after 1st April.

(iii) *Power of Company to surrender contract.*—The Company may surrender, on six months' notice, at any time, receiving back the capital expended.

(iv) *Terms of working.*—As to the lines covered by the contract of 2nd January 1871. After deducting the working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year) the surplus profits after repayment of the guaranteed interest of each half-year converted at the rate of exchange of 1s. 10d. per rupee are divided equally between Government and the Company. As to the Calicut-Azhikal railway, working expenses are calculated at the average rate prevailing in each half-year over the entire system, and if the net earnings in any half-year exceed the interest charges converted at the prescribed rate of exchange, one-fifth belongs to the Company; but any deficiency in one half-year is a first charge on the net receipts of that and the next succeeding half-year of every line of railway for the time being belonging to the Company. Subject to the provisions in the contract of 18th January 1901, the covenants and provisions of the several principal indentures apply to the Calicut-Azhikal railway.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
10	(a)	MADRAS SYSTEM—contd.				
		Brought forward	...	...	...	888.11
		DOUBLE LINE, SOUTH-WEST LINE—				
		Washermenpet to Veyasarpady	21-3-01	14-9-01	1.02	
		Madras to Veyasarpady Junction	Probably	7-4-73	2.16	
		Veyasarpady Junction to Perambur	71-72	7-2-74	1.30	
		Perambur to Avadi	Probably	1-5-77	9.54	
		Avadi to Tiruvallur	75-76	20-7-77	12.89	
		Tiruvallur to Arkonam		28-8-77	16.52	
		TOTAL DOUBLE LINE, SOUTH-WEST LINE	...	...	43.43	
10	(b)	NORTH-EAST LINE (EAST COAST STATE RAILWAY)—				
		<i>Main line—</i>				
		Washermenpet to Ennur	August '94	22-2-96	8.25	
		Ennur to Gudur	July '95	23-2-99	75.25	
		Gudur to Nellore		*1-11-88	23.75	
		Nellore to Kistna Canal Junction	July '90	20-12-98	155.00	
		Kistna Canal Junction to Bezwada		15-7-97	3.06	
		Bezwada to Kovvur	July '90	20-2-93	88.24	
		Kovvur to Rajahmundry		6-8-00	4.69	
		Rajahmundry to the junction point near Waltair	July '90	15-7-93	119.80	
		Junction point near Waltair station to Waltair		15-7-93	4.25	
		Tadepalli to Bezwada		1-1-94	2.97	
		Total Main line	...	...	...	485.26
		<i>Branches—</i>				
		Samalkot Junction to Cocanada port branch	July '90	15-7-93	9.75	
		Waltair to end of branch near Vizagapatam station		15-7-93	2.18	
		Total Branch	...	...	...	11.93
		<i>Double line—</i>				
		Bengal-Nagpur railway North distant signal to North facing points at Waltair . . . . .	...	...	0.46	
		TOTAL, NORTH-EAST LINE (EAST COAST STATE RAILWAY).	...	...	...	497.19
10	(c)	KOLAR GOLD-FIELDS— (5' 6" gauge.)				
		Bowringpet to Marikuppam	July '92	1-6-94	9.88	
		TOTAL, KOLAR GOLD-FIELDS	...	...	...	9.88
10	(d)	SHORANUR-COCHIN— (3' 3½" gauge.)				
		Shoranur to Ernakulam	28-4-99	16-7-02	64.75	
		TOTAL, SHORANUR-COCHIN	...	...	...	64.75
10	(e)	NILGIRI— (3' 3½" gauge.)				
		Mettupalaiyam to Coonoor	{Probably in 1892}	15-6-99	16.90	
		TOTAL, NILGIRI	...	...	...	16.90
		Carried over	...	...	...	1,476.82

* Date of opening of original 3' 3½" gauge; converted to and opened on the standard gauge on 1st November 1899.

on the 31st December 1902, alphabetically arranged.

REMARKS.

2. Madras railway—concluded.

(v) *Rates and fares.*—*Madras railway system (except North-East line).*—Under the contract, Government fixed a maxima which cannot be altered by Government, and which cannot be altered by the Company without Government sanction. Authority, however, has been given to the Company by an executive order to vary these rates within the prescribed maxima without reference to Government.

(vi) *General remarks.*—The Madras railway runs from Madras to Arkonam, where it divides into two branches, one proceeding in a north-westerly direction to Raichur, the other in a south-westerly direction to Calicut. The latter has branches to Bangalore, Mettupalaiyam and Palghat.

The main line originally commenced at Rayapuram, but on the opening of the length between Veyasarpady Junction and the Central station this became a portion of the main line, and the old line from the junction to Rayapuram was then treated as a branch. The line from Bangalore Cantonment to Bangalore City was constructed as a part of the Mysore State railway, but was subsequently made over to the Madras Railway Company. The portion from Gudur to Nellore, which was originally laid on the 3' 3½" gauge was converted to 5' 6" gauge on the opening of the East Coast State railway. The working of the East Coast State railway (North-East line) was taken over by the Madras Railway Company from the 1st January 1901.

3. North-East line (East Coast State)—

(a) The North-East line (Southern Section of the East Coast State railway) is worked under the following contract :—

Contract of—31st December 1902 (between the Secretary of State and the Madras Railway Company) for maintenance, management and working, with effect from the 1st January 1901.

(b) The general conditions of the agreement are as follows :—

(i) *Currency of contract*—The contract is to continue in force till the 31st December 1907. If the original contract with the Company dated the 2nd January 1871 is terminated for any reason under the provisions thereof prior to the expiry of the term of this contract—the latter also will, *ipso facto*, terminate at the same time. The contract may also be terminated after twelve months' notice on the 1st April 1904 or on the 1st April of any subsequent year.

If the contract is determined by notice at any time previous to the 1st April 1907, and if the ratio of the working expenses to the gross earnings of the Company shall have been raised by reason of the Company having worked the State railway under this contract, so that the total working expenses of the Company's system from the 1st January 1901 to the termination of the contract shall exceed 50 per cent. of the total gross earnings of the Company's system during such period, the Company will be entitled to suitable compensation for such increase.

(ii) *Terms of working.*—The working expenses of the State railway are to include per half-year any single item of capital expenditure, not exceeding Rs. 1,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; a sum not exceeding Rs. 40 for every mile of line open to traffic for Government supervision and control; and the following :—

(a) The actual expenditure incurred under the account heads of "Maintenance and renewal of permanent-way", "Repairs of bridges, etc., wages and materials", "Conservancy of rivers", and "Repairs of staff quarters."

(b) The share of the general working expenses of the system under the remaining heads of account in proportion to the gross earnings of the State railway.

(c) The allowances and interest payable under the contract for the use by the State railway of the Company's terminal station at Madras.

(d) The expenditure incurred by the Company in replacing or repairing the State railway locomotive engines and tenders.

The balance of the gross earnings to belong to Government.

(iii) *Rates and fares.*—Government exercise full control over rates and fares.

(iv) Government have reserved the power to require at six months' notice the retransfer of the Junction station at Waltair and the branch taking off from the Junction to Vizagapatam.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		Brought forward . . . . .	...	...	...	1,476.82
		MADRAS SYSTEM—continued.				
		<i>Lines under construction or sanctioned for construction.</i>				
10	(a)	MADRAS (SOUTH-WEST LINE)—				
		Tellicherry to Azhikal	6-5-97	*31-3-03	17.07	
10	(b)	NORTH-EAST LINE (EAST COAST STATE RAILWAY)—				
		Korukupet to Basin Road Junction . . . . .	...	...	0.93	
		FAMINE LINES (MADRAS PRESIDENCY)— (2' 6" gauge.)				
10	(g)	Morappur to Dharmapuri	24-10-02	...	18.37	
10	(h)	Tirupattur to Krishnagiri	24-10-02	...	26.46	
10	(f)	AZHICAL-MANGALORE EXTENSION—				
		Azhikal to Mangalore	24-10-02	...	77.27	
		Total, Lines under construction . . . . .	...	...	...	140.10
		GRAND TOTAL, MADRAS SYSTEM. . . . .	...	...	...	1,616.92

* Probable dates of opening.

REMARKS.

4. The Kolar Gold-fields railway—

(a) The Kolar Gold-fields railway is worked under the following agreement :—

Agreement of—1st July 1902 (between the Mysore Government and the Madras Railway Company) for working and maintenance, with effect from 1st January 1901.

(b) The general conditions of the agreement are as follows :—

- (i) *Government aid.*—The line is the property of the Mysore State.
- (ii) *Currency of agreement.*—The agreement to remain in force, subject to six months' notice, from either side on the 30th of June or the 31st of December of any year.
- (iii) *Terms of working.*—The Company to charge for working and maintenance the same proportion which the working expenses of the whole system including this line bear to the gross earnings of that system and 5 per cent. of the gross earnings of the railway for rolling-stock.
- (v) *Rates and fares.*—Subject to certain special rates and fares, the same rates, etc., as are in force from time to time upon the Madras railway.
- (vi) *General remarks.*—The line was constructed by the Mysore State in order to provide facilities for the gold-fields.

5. The Nilgiri railway—

(a) The Nilgiri railway is worked under the following agreement :—

Agreement of—26th May 1898 (between the Madras Railway Company and the new Nilgiri Railway Company) for working.

NOTE.—This agreement has been revised provisionally for six months ending June 1903 as regards remuneration to Madras railway for working.

(b) The general conditions of the agreement are as follows :—

- (i) *Government aid.*—Land was provided free.
- (ii) *Terms of working.*—Nilgiri railway to pay actual outlay on Engineering maintenance and for fuel, and repairs and renewals of engines and carriage and wagon stock. For all other expenses of working, the Madras railway to receive 25 per cent. of gross earnings plus 10 per cent. of the net receipts.
- (iii) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.
- (iv) *General remarks.*—The old Nilgiri Railway Company was registered on the 30th September 1885 with a nominal capital of Rs. 25,00,000 and a contract executed between the Secretary of State and that Company on the 26th February 1886. The old Company went into liquidation in April 1894; and in February 1896 a new Company was formed to purchase the line from the old Company and to supply the capital required to complete it and to construct the proposed extension to Ootacamund. The line was purchased by Government with effect from the 1st January 1903.

6. Shoranur-Cochin railway—

(a) The Shoranur-Cochin railway is worked under the following agreement :—

Agreement of—1st January 1901 (between His Highness the Rajah of Cochin and the Madras Railway Company) for construction and working.

(b) The general conditions of the agreement are as follows :—

- (i) *Government aid.*—The line is the property of the Cochin State.
- (ii) *Currency of agreement.*—This agreement is to remain in force until the termination of the present agreement dated the 2nd January 1871, between the Secretary of State and the Madras Railway Company.
- (iii) *Power to determine agreement.*—Nil.
- (iv) *Terms of working.*—The Company charge for working the same proportion of the total revenue expenditure as the gross earnings of the Shoranur-Cochin railway bear to the gross earnings of the Madras railway system including the Shoranur-Cochin railway. After providing from the net earnings, for the second contribution to the Madras Railway Provident Institution and for interest at the rate of 3 per cent. per annum on the booked capital expenditure of the Shoranur-Cochin railway including land, the balance is divisible between the Cochin Darbar and the Madras Railway Company in the proportion of four-fifths to the Darbar and one-fifth to the Company.

Appendix 47.
History of railways.

APPEI

History of railways constructed and in progress.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
10	(a)	MADRAS SYSTEM—concluded:				

on the 31st December 1902, alphabetically arranged.

REMARKS.

6. Shoranur-Cochin railway—concl'd.

(v) *Rates and fares.*—The same as are generally applicable from time to time to the system of railways worked by the Company.

7. *General remarks.*—The following lengths are worked over by foreign lines:—0·89 mile of the North-East line, from the distant signal at Bezwada to Bezwada station, is worked over by the Nizam's Guaranteed State railway; 4·97 miles from Waltair to Vizagapatam (including Wharf and Swamp lines) by the Bengal-Nagpur railway; and 2·99 miles from Tadepalli to Bezwada by the Southern Mahratta railway.

8. Details of construction.—

(a) *Permanent way*—

Madras railway.—The iron rails, which vary in weight from 65 lb. to 84 lb. to the yard, are laid on iron pot-sleepers. The renewals of these up to 189th mile were carried out with double-headed steel rails, 20 feet and 30 feet long, weighing 75 lb. to the yard, but this type has been discontinued, and bull-headed steel rails, 30 feet long and weighing 75 lb., 76 lb. and 80 lb. to the yard, (the last being the present standard) have since been used.

The South-West line was originally laid with sleepers of indigenous woods, but an experiment was made of using stone blocks, 2' x 2' x 1', as sleepers. As the experiment proved unsatisfactory, the blocks were all removed in 1857. Jungle wood sleepers were found to be very short-lived; and in 1861 it was decided to replace them by Greave's patent cast-iron bowl sleepers. Cast-iron bowl sleepers (each 112 lb.) of an improved and stronger design, with steel bull-headed rails, 80 lb. to the yard and 30 feet in length, and a heavier type of plate are now being introduced.

The permanent-way on the length between Calicut and Tellicherry consists of flat-footed 62 lb. steel rails with 4-holed deep fishplates laid on wooden sleepers. The length between Tellicherry and Azhikal is under construction with the same type of permanent-way.

North-East line (East Coast State railway).—The permanent-way consists of flat-footed 75 lb. steel rails laid on wooden and pea-pod sleepers.

Kolar Gold-fields railway.—The line was originally laid with Madras railway second-hand double-headed 75 lb. iron rails on new cast iron pot sleepers, but in consequence of the excessive wear due to the heavy traffic passing over this branch, the alignment has been improved and iron rails have been replaced by 76 lb. steel rails.

Nilgiri railway.—The permanent-way consists of steel rails, 50 lb. to the yard, laid on rails on pyinkado sleepers.

Shoranur-Cochin railway.—The permanent-way consists of 41½ lb. steel flat-footed rails on wooden sleepers.

(b) *Ballast*—

The system is ballasted with stone and sand, chiefly the former.

(c) *Tunnels—Nilgiri railway.*—There are nine tunnels on the line varying in length from 62 feet to 308 feet, aggregating 1,578 feet.

(d) *Bridges.*—The following are the important bridges of 1,000 feet length and over: Poiney (between Ponnai Road and Tiruvallum), 56 spans of 30 feet; Gudiyattam (between Gudiyattam and Valathoor), 33 spans of 30 feet; Cauvery (between Cauvery and Erode), 20 spans of 64 feet and 2 spans of 62 feet; Kadaluindi (between Parpanargadi and Kadaluindi), 20 spans of 64 feet; Cheyair (between Razampeta and Nandalur), 50 spans of 64 feet (3,500 feet); Pennur (between Penneru and Tadpatri), 13 spans of 131 feet (1,830 feet); Tungabhadra (between Tungabhadra and Matmari), 36 spans of 64 feet and 44 spans of 29 feet (4,060 feet); Chitravati (between Kondapuram and Regadipalli), 19 spans of 131 feet (2,670 feet); Papaghni (between Kamalapuram and Gangayapalli), 15 spans of 131 feet (2,100 feet); Ennur Creek (between Ennur and Minjur), 30 spans of 40 feet; Penner (between Nellore and Pudugupadu), 23 spans of 70 feet and 5 spans of 40 feet (1,990 feet); Kistna (between Tadepalli and Bezwada), 12 spans of 292 feet (3,736 feet); Godavari (between Kovvur and Godavari), 56 spans of 150 feet and 1 span of 40 feet (9,096 feet); and Rush Kulya (between Charapur and Ganjam) 10 spans of 150 feet (1,598 feet).

(e) *Fencing.*—The *Madras, Kolar Gold-fields, and Nilgiri railways* are fenced throughout; the *North-East line*—(East Coast State) and the *Shoranur-Cochin railways* are only fenced in the vicinity of towns, stations and level crossings.

(f) *Curves.*—5' 6" gauge sections.—There are no curves under a radius of 1,666 feet on this railway except on the Beach line extension where the minimum radius of curve is 700 feet.

Nilgiri railway.—The curves vary from 318 feet to 716 feet in radius.

Shoranur-Cochin railway.—The sharpest curve is 818·57 feet in radius.

(g) *Gradients.*—Of a total open mileage on the system of 1,476·82 miles, 0·80 mile is on a gradient of 1 in 60 on the 5' 6" gauge, and 6·92 miles on 1 in 12·5 on the 3' 3½" gauge, Nilgiri line.

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
10	(b)	MADRAS (NORTH-EAST LINE)— (See Madras system, page 348.)				
37	(a)	MADURA DISTRICT LIGHT— (2' 6" gauge.)				
		Ammayanakkanur to Kotagudi	1-4-01	...	55'00	
		Periyakulam to Krishnamanaik's tope	1-4-01	...	5'00	
		Theni to Kuruvanath.	1-4-01	...	33'00	
		TOTAL, MADURA DISTRICT . . . . .	...	...	...	93'00
4	(e)	MOHARBHANJ— (See Bengal-Nagpur system page 272.)				

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

Appendix 47.
History of railways.

REMARKS.

Madura District Light railways—Messrs. Wilson and Company of Madras, the Promoters, were originally granted a concession for the construction of these lines under the Indian Tramways Act; but as there is no provision under this Act for payment of interest out of capital during construction, they submitted an amended application for a scheme for Light railways to be constructed under the provisions of the Indian Railways Act. The Promoters were informed that, subject to their acceptance of certain conditions, they might proceed to raise the necessary capital for the line. They accepted the conditions in July 1902 and are now negotiating a contract with the Madura District Board

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles
10	(g)	MORAPUR-DHARMAPURI— (See Madras system, page 350.)				
24	(a)	MORVI LIGHT— (of 6" gauge.) <i>Main line—</i> Wadhwan to Dolia } Dolia to Vankaner } Vankaner to Morvi } Total Main line <i>Rajkot branch—</i> Vankaner to Rajkot } Extension across the Aji river to Rajkot Junction with the Jetalsar-Rajkot railway } Total Branch TOTAL, MORVI	14-12-83	11-3-86 20-11-86 24-3-87	24.00 27.75 16.75 68.50 25.25 0.61 25.86 94.36	
2	(d)	MYMENSINGH-JAMALPUR-JAGANNATHGANJ— (See Eastern Bengal system, page 314.)				
21	(g)	MYSORE-NANJANGUD— (See Southern Mahratta system, page 396.)				
21	(b)	MYSORE SECTION (SOUTHERN MAHRATTA)— (See Southern Mahratta system, page 394.)				
8	(c)	NAGDA-UJJAIN— (See Bombay, Baroda and Central India system, page 280.)				
10	(e)	NILGIRI— (See Madras system, page 348.)				

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Morvi Light railway—

(i) The Morvi Light railway is owned by His Highness the Thakore Sahib of Morvi, and is under his control.

(ii) *General remarks.*—This line is laid on the existing bridged and metalled road for the first 24 miles as far as Dolia and then runs along the line of unbridged and unmetalled road to Vankaner and on to Morvi and Rajkot. The conversion of the line to 3' 3½" gauge is in progress.

2. Details of construction—

(a) *Permanent-way.*—The permanent-way originally consisted of steel rails, weighing 19 lb. to the yard, and pressed steel sleepers weighing 11 lb. These have since been extensively replaced in sections by 29 lb. and 41½ lb. steel rails and creosoted pine sleepers. On the Rajkot branch, from mile 55 to a distance of 21 miles, renewals have been effected by laying 41½ lb., 3' 3½" gauge rails on creosoted pine sleepers of that gauge, with a view to eventual conversion. The extension across the Aji river has been laid with 3' 3½" gauge rails, weighing 41½ lb. to the yard, on creosoted pine sleepers.

(b) *Ballast.*—Moorum (decayed trap) and sand.

(c) *Fencing.*—Line is unfenced.

(d) *Curves.*—There are 3.24 miles of curves under a radius of 1,000 feet.

(e) *Gradients.*—Of a total open mileage of 94.36 miles, 0.60 mile is on the ruling gradient of 1 in 100.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		NIZAM'S GUARANTEED STATE SYSTEM— (5' 6" gauge.)				
9	(a)	NIZAM'S GUARANTEED STATE—				
		<i>Main line—</i>				
		Wadi Junction to Secunderabad and to junction of new line.	25-3-71	9-10-74	115'45	
		Junction of new line to Warangal	Nov. '84	8-4-86	87'47	
		Warangal to Dornakal	May '86	1-1-88	51'91	
		Dornakal to Bona Kalu	} Jany. '87 {	5-8-88	31'72	
		Bona Kalu to British frontier		10-2-89	23'54	
		Total Main line . . . . .	...	...	...	310'09
		<i>Branches—</i>				
		<i>Hyderabad branch—</i>				
		Husain Sagar to Hyderabad	25-3-71	9-10-74	3'54	
		<i>Mineral branch—</i>				
		Dornakal to Singareni Coal-fields	May '86	1-1-88	16'50	
		Total Branches . . . . .	...	...	...	20'04
		TOTAL, NIZAM'S GUARANTEED STATE PROPER . . . . .	...	...	...	330'13
9	(b)	BEZWADA EXTENSION— (5' 6" gauge.)				
		Hyderabad frontier to Bezwada	26-11-86	10-2-89	20'58	
		TOTAL, BEZWADA EXTENSION . . . . .	...	...	...	20'58
9	(c)	HYDERABAD-GODAVARI VALLEY— (3' 3½" gauge.)				
		Manmad to Jalna	} 12-1-97 {	21-10-99	109'36	
		Jalna to Sailu		7-12-99	44'74	
		Sailu to Purbhani		25-4-00	26'43	
		Purbhani to Nanded		9-10-00	36'29	
		Nanded to Sivungaon		23-8-00	16'68	
		Sivungaon to Basar		25-4-00	33'89	
		Basar to Secunderabad		25-4-00	118'21	
		Secunderabad to Hyderabad		16-5-01	5'82	
		TOTAL, HYDERABAD-GODAVARI VALLEY . . . . .	...	...	...	391'42
		GRAND TOTAL, NIZAM'S GUARANTEED STATE SYSTEM . . . . .	...	...	...	742'13

IX 47—continued.

Appendix 47.
History of railways.

the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Nizam's Guaranteed State railway system is made up of—

	Open line. Miles.
(a) Nizam's Guaranteed State railway (5' 6" gauge)	330·13
(b) Bezwada extension (5' 6" gauge)	20·58
(c) Hyderabad-Godavari Valley railway (3' 3½" gauge)	391·42
	<hr/>
TOTAL	742·13
	<hr/>

2. Nizam's Guaranteed State railway—

(a) The Nizam's Guaranteed State railway is worked under the following contract :—

Contract of—27th December 1883 (between the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction, maintenance and working.

(b) The general conditions of the contract are as follows :—

- (i) *Terms of contract.*—The Nizam's Guaranteed State Railways Company was formed in 1883 for the purpose of acquiring and working the then existing railway and of constructing on the same gauge and working certain new lines, with a capital not exceeding £4,500,000 to be raised by the issue of shares and redeemable mortgage debentures (or as may be agreed upon) His Highness the Nizam's Government paying thereon for 20 years an annuity to be applied in payment of interest and towards a sinking fund for the redemption or reduction of capital. Land also was provided free of charge.
- (ii) *Currency of contract.*—The contract is current for a period of 99 years, and on expiry by effluxion of time, the land, buildings and fixed works, etc., revert to the Nizam's Government and all rolling-stock, stores, etc., at a fair valuation. The Nizam's Government has the option of purchasing the line on the 1st January 1914, 1934 or 1954, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon. In case of breach of contract by Company, the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.
- (iii) *Terms of working.*—From gross earnings will be deducted working expenses, and during the guaranteed period, the net earnings applied in the first instance to repayment of the annuity, paid in the same half-year. Of the residue, one moiety will be utilised towards the repayment of previous payments of annuity and sums owing to the Nizam's Government, and the balance paid to the Company. After the expiration of the annuity, a sum sufficient for payment of interest on the capital unredeemed will be retained by the Company, and of the balance, one-half will be paid to the Nizam's Government, the remaining moiety being made over to the Company.
- (iv) *Rates and fares.*—The rates and fares not to be, unless otherwise agreed between His Highness' Government and the Company, in excess of the rates and fares from time to time prevailing on the Great Indian Peninsula railway.
- (v) *General remarks.*—Up to the end of 1878 the line was worked by the Great Indian Peninsula Railway Company with its own rolling-stock. From January 1879 to the 31st December 1884, it was worked by State agency, and from January 1885, by His Highness the Nizam's Guaranteed State Railways Company. The section of the East Coast State railway, which extends from the frontier of His Highness the Nizam's dominions to the north distant signal of the Bezwada station, was worked by this Company as part of its own system up to December 1897, when it was transferred to the East Coast State railway. It was transferred back to the Company for working from the 1st January 1901.

3. Bezwada extension railway.—The revised terms for working this railway are under consideration.

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History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railways.	Date of sanction.	Date of opening.	Mileage.	Tot
Main.	Sub.					
		NIZAM'S GUARANTEED STATE SYSTEM— <i>concl'd.</i>				
14	(b)	NOAKHALI (BENGAL)— <i>(See Assam-Bengal system, page 252.)</i>				

on the 31st December 1902, alphabetically arranged.

REMARKS.

4. Hyderabad-Godavari Valley railway—

(a) The Hyderabad-Godavari Valley railway is worked under the following agreement :—

Agreement of—16th March 1897 (between His Highness the Nizam's Government and the Nizam's State Railways Company) for construction and working.

(b) The general conditions of the agreement are as follows :—

(i) *Terms of contract.*—Capital to the extent of £2,500,000 to be raised by the issue of redeemable mortgage debentures, Government paying thereon an annuity, and, in addition a sum of one per cent. per annum for 20 years towards a sinking fund for the redemption of such debentures which will be a first charge on the Hyderabad-Godavari Valley railway and a second charge on the Nizam's Guaranteed State railway, and after the expiration of the guaranteed period the interest payable thereon a first charge on the net earnings of the former line and a second charge on the surplus net earnings of the latter line after the service of the existing debenture debt has been provided for. The free use of land is also provided for.

(ii) *Currency of contract.*—On expiry of contract by effluxion of time, the land, buildings and fixed works, etc., revert to the Nizam's Government and all rolling-stock, stores, etc., at a fair valuation. The contract runs concurrently with that of the Nizam's Guaranteed State Railways Company, and the Nizam's Government has the option of purchasing the line on the 1st January 1914, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon, or on the 1st January 1934 or 1954 without bonus. In case of breach of contract by Company, the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—From gross earnings will be deducted working expenses and the net earnings applied in the first instance towards replacing the amount paid as interest on capital during construction, and during the guaranteed period, to repayment of the annuity paid in same half-year, and not more than half the residue to repayment of previous payments of annuity, the remaining moiety being added to and dealt with as part of the net earnings of the Company in respect of the Nizam's Guaranteed State railway. After expiration of the annuity a sum sufficient for payment of interest on the capital unredeemed to be retained by the Company, and of the balance one-half to be paid to the Nizam's Government, the remaining moiety being dealt with as above.

(v) *Rates and fares.*—Rates and fares not to be in excess of those prevailing on the Nizam's Guaranteed State line.

5. General remarks.—The Nizam's Guaranteed State railway has running powers over 0·89 mile from the distant signal at Bezwada to Bezwada station of the Madras railway (North-East line).

6. Details of construction.—

(a) *Permanent-way*—

Nizam's Guaranteed State railway.—The first 47 miles from Wadi are laid with bull headed 75lb. steel rails on cast-iron pot sleepers; and the following 9 miles with double-headed 68lb. steel rails on pot sleepers. The remainder of the line is laid with 66½lb. flat-footed steel rails on steel pea-pod sleepers with the exception of the mixed gauge line from Secunderabad to Hyderabad (5·82 miles) which has wooden sleepers under the same section of rail.

Bezwada extension.—Is laid with 66½lb. flat-footed steel rails on pea-pod sleepers.

Hyderabad-Godavari Valley.—The permanent-way consists of 50lb. steel flat-footed rails on steel and wooden sleepers.

(b) *Ballast.*—The line is ballasted throughout.

(c) *Bridges.*—The only important bridge of 1,000 feet in length and over is that on the Hyderabad-Godavari Valley, over the Godavari river, which consists of 21 spans of 60 feet.

(d) *Fencing.*—On the Nizam's Guaranteed State railway, the line is fenced from Wadi to Secunderabad, but from Secunderabad to the frontier only the station yards are fenced. On the Bezwada extension and Hyderabad-Godavari Valley railway, the line is fenced only at stations.

(e) *Curves.*—There are no curves under a radius of 1,000 feet.

(f) *Gradients.*—Of a total open mileage of the system of 742·13 miles, 2·52 miles are on the ruling gradient of 1 in 100 on the 5' 6" gauge, and 5·41 miles on the ruling gradient of 1 in 133 on the 3' 3½" gauge.

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History of railways.

History of railways constructed and in prog

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Totl	
Main.	Sub.				Miles.	Mil	
		NORTH WESTERN SYSTEM— (5' 6" gauge.)					
6	(a)	COMMERCIAL SECTION—					
		<i>Main line—</i>					
		Ghaziabad to Meerut City	1864	18-4-67	27'33		
		Meerut City to Umballa Cantonment		1-1-69	121'02		
		Umballa Cantonment to Ludhiana		12-10-69	70'66		
		Ludhiana to Phillour		15-10-70	8'28		
		Phillour to Jullundur Cantonment		1-4-70	24'12		
		Jullundur Cantonment to Beas		15-11-69	25'53		
		Beas to Amritsar		1-11-67	26'20		
		Amritsar to Lahore		8-2-59	10-4-62	32'30	
		Lahore to Jhelum		22-10-69	6-10-78	103'12	
		Jhelum to Rawalpindi		17-9-77	...	76'38	
		Rawalpindi to Haji Shah	3-10-79	1-1-81	61'62		
		Haji Shah to Attock bridge		1-5-81			
		Attock bridge to Khairabad	8-2-59	31-5-83	2'38		
		Khairabad to Peshawar City		1-5-82	41'25		
		Peshawar City to Peshawar Cantonment	8-2-59	1-1-83	2'65		
		Lahore to Mooltan Cantonment		24-4-65	207'82		
		Mooltan Cantonment to Muzaffarabad	8-11-71	21-8-70	6'89		
		Muzaffarabad to Khanpur		1-7-78	139'14		
		Khanpur to Rohri . . . . .	...	1-7-78	132'05	
		Rohri to Sukkur		27-3-89	2'64		
		Sukkur to Radhan	4-11-72	1-10-78	79'31		
		Radhan to Laki		27-10-78	70'57		
		Laki to Kotri	29-4-58	8-10-78	75'48		
		Kotri to Kurrachee City		13-5-61	104'89		
		Kurrachee City to Kiamari (including Napier Mole line).	...	16-6-89	3'06		
		Total Main line				1,444'61	
		<i>Branches—</i>					
		<i>Sialkot branch—</i>					
		Wazirabad to Sialkot	10-4-83	1-1-84	26'50		
		<i>Wasirabad-Lyallpur branch—</i>					
		Wazirabad to Hafizabad . . . . .	...	15-8-95	37'37	
		Hafizabad to Sangla Hill . . . . .	...	1-1-96	31'45	
		Sangla Hill to Lyallpur . . . . .	...	15-2-96	27'21	
		Lyallpur to Toba Tek Singh . . . . .	...	22-6-99	49'00	
		Toba Tek Singh to Khanewal . . . . .	...	16-4-00	55'53	
					200'56		
		<i>Kashmir branch—</i>					
		Sialkot to the frontier of the Kashmir State . . . . .	...	15-3-90	9'08	
		Phulji to Puranadera . . . . .	...	1-6-82	2'57	
		Phulji branch extension . . . . .	...	31-3-02	0'34	
					2'91		
		Sukkur to Sukkur Bandar . . . . .	...	1-10-78	1'25	
		Kotri to Kotri Bandar . . . . .	...	1-4-89	1'14	
		<i>Meean Meer chord branch*—</i>					
		Meean Meer East to Meean Meer West . . . . .	...	10-12-91	2'13	
		<i>Kotri-Rohri (chord) branch—</i>					
		Kotri to Hyderabad . . . . .	...	25-5-00	4'99	
		Hyderabad to Rahoki . . . . .	...	28-3-01	6'04	
		Rahoki to Shahdadpur . . . . .	...	15-11-96	39'09	
		Shahdadpur to Rohri . . . . .	...	15-11-96	139'84	
					189'96		
		Carried over . . . . .	...	...	433'53	1,444'69

* This is a military line and is not intended to be used for ordinary public traffic.

REMARKS.

1. Lines comprising system.—The North Western railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(a) North Western railway (5' 6" gauge)	3,077'50	82'50	3,160'00
(b) Southern Punjab railway (5' 6" gauge)	424'72	...	424'72
(c) Rajpura-Bhatinda railway (5' 6" gauge)	107'05	...	107'05
(d) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)	78'66	...	78'66
(e) Jammu and Kashmir (Native state section), (5' 6" gauge)	15'92	...	15'92
(f) Dandot Light railway (2' 0" gauge)	6'18	...	6'18
(g) Nowshera-Durgai railway (2' 6" gauge)	40'25	...	40'25
(h) Khushalgarh-Kohat-Thal railway (2' 6" gauge)	29'70	62'03	91'73
(i) Fesh-Doab (5' 6" gauge) . . . . .	...	51'40	51'40
Total	3,779'98	195'93	3,975'91

2. North Western railway—

(a) The North Western railway is owned and worked by the State.

(i) General remarks—

The first period of the contract with the Sind, Punjab and Delhi Railway Company having expired, the State assumed charge of the undertaking on the 1st January 1886 and amalgamated it with the Punjab Northern, the Indus Valley, the Sind-Sagar, and the southern section of the Sind-Pishin State railways to be worked as one Imperial system under the name of the North Western State railway. The completion and opening, on the 24th May 1883, of the Attock bridge supplied the last link in a continuous chain of railway communication from Calcutta to Peshawar, a distance of 1,555 miles.

The Wazirabad-Lyallpur branch was constructed to open up the country now being irrigated by the Chenab canal, and recently brought under cultivation by the colonists and settlers, who are reclaiming the desert land of the Rechna Doab.

The Kotri-Rohri chord was constructed owing to the set of the Indus on the right bank which rendered the line along that bank dangerous, and, owing to the frequent breaches, caused communication with Kurrachee to be intermittent, dislocating the export trade and cutting off communication with the North-Western Frontier. The present line, which follows the left bank of the river, is on high ground and is less liable to inundation. It saves about 36'51 miles on the through distance from the Punjab to Kurrachee, and also gives an alternative route to Quetta.

The line from the Bolan Junction station and from the Sibi station follows the old Quetta loop to Nari bank station, 4'81 miles from Sibi and 456'78 miles from Kurrachee. The old Bolan railway (Quetta loop) from Nari bank *via* Kundalani to Hirok has been dismantled, except the first portion from Nari bank to Rindli. The new line is on a completely new alignment between Nari bank and Kolpur, the actual length of the construction works being 57 miles from Nari bank to the mouth of the Mushkaf gorge (462 miles from Kurrachee.)

The Dandot Light railway has been constructed by the North Western State railway to develop the Dandot colliery, which is worked primarily for the benefit of the railway. The section from Dandot to the mouth of the main mine consists chiefly of two inclines worked by steel wire ropes by combined gravity and steam power. On the second portion (1'29 miles), there is another incline worked by gravity alone.

3. Southern Punjab (Delhi-Samasata) railway.—

(a) The Southern Punjab railway is worked under the following contracts:—

Contract of—13th August 1895 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working.

4th May 1899 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Narwana-Kaithal branch.

(b) The general conditions of the contracts are as follows:—

(i) *Government aid.*—Government allow the Company, in respect of each half-year, by way of rebate on the net earnings of the North Western railway from traffic interchanged with the Southern Punjab railway and from through traffic between stations of the North Western railway sent over the Southern Punjab railway, such a sum (not exceeding the amount of such net earnings of the North Western railway) as, together with the Company's net earnings, make up an amount equal to interest for the year at the rate of 3½ per cent, on the actual rupee expenditure charged in the capital account. Land was also provided free of cost to the Company.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total
Main.	Sub.					
		NORTH WESTERN SYSTEM—contd. (5' 6" gauge.) Brought forward	...	...	Miles. 433'53	Miles. 1,444'6
6	(a)	COMMERCIAL SECTION—concl'd. <i>Branches—concl'd.</i>				
		<i>Ferozepore branch—</i>				
		Raewind to Kasur	9-11-82	{	15-4-83	16'50
		Kasur to Ganda Singhwala			10-6-83	7'00
		Ganda Singhwala to Ganda Singh Bandar	2-10-83	}	15-12-83	5'50
		Ganda Singh Bandar to Hussainiwala . . . . .	...		8-5-87	
		Hussainiwala to Ferozepore City . . . . .	...		1-10-92	2'00
		Ferozepore City to Ferozepore Cantonment	25-10-81		1-10-88	2'00
		Ferozepore Cantonment to Bhatinda . . . . .	...		15-6-99	*54'36
		Hussainiwala to Ferozepore Cantonment . . . . .	...		8-5-87	13'50
					90'86	
		<i>Pathankot branch—</i>				
		Amritsar to Dinanagar	6-12-81	{	1-1-84	51'22
		Dinanagar to Pathankot			8-6-84	15'48
					66'70	
		<i>Peshawar-Jamrud branch—</i>				
		Peshawar to Jamrud . . . . .	...		1-1-01	11'04
		Total Branches . . . . .	...	...	...	602'13
		TOTAL OPEN MILEAGE (COMMERCIAL SECTION)	...	...	...	2,046'82
		FRONTIER SECTION (MILITARY)—				
		<i>Main line—</i>				
		<i>Sind-Sagar—</i>				
		Lala Musa to Baba-ud-din	24-7-77	{	†1-1-80	28'46
		Baba-ud-din to Hariah			†1-2-80	10'52
		Hariah to Malakwal . . . . .	...		†10-4-80	5'99
		Malakwal to Bhakkar . . . . .	...		15-8-87	175'04
		Bhakkar to Chenab west bank . . . . .	...		22-1-87	119'71
		Chenab west bank to Chenab east bank . . . . .	...		1-2-90	2'49
		Chenab east bank to Sher Shah . . . . .	...		1-1-89	2'39
		Total Main line . . . . .	...	...	...	344'60
		<i>Branches—</i>				
		<i>Khushalgarh branch—</i>				
		Golra Junction to Langar	Sep. '79	{	1-4-81	60'50
		Langar to Khushalgarh			16-4-81	9'66
		Khushalgarh, new station			18-7-83	
					70'16	
		<i>Bhera branch—</i>				
		Malakwal to Miani	24-7-77		†10-4-80	8'99
		Miani to Bhera	25-10-81		†2-2-82	9'11
		<i>Bhaganwalah branch—</i>				
		Haranpur to Bhaganwala . . . . .	...		...	18'10
		<i>Khewra branch—</i>				
		Chalisa Junction to Khewra salt mines . . . . .	...	}	†1-1-83	6'36
		Khewra to Dandot . . . . .	...		2'15	
		<i>Mari branch—</i>				
		Kundian to Mari	{Kundian to Mianwali,	}	15-3-92	8'51
		Dera Ghazi Khan branch—			27-2-86	36'32
		Mahmud Kot to Ghazi ghat . . . . .	...		1-4-87	11'27
		<i>Mari-Attock branch—</i>				
		Cambelpore Cantonment (new station) to Basal Junction . . . . .	...		1-4-99	18'45
		Jand Junction to Daud Khel . . . . .	...		1-4-99	53'91
					72'36	
		Total Branches . . . . .	...	...	...	227'56
		TOTAL OPEN MILEAGE, SIND-SAGAR . . . . .	...	...	...	572'16
		Carried over . . . . .	...	...	...	572'16
						2,046'82

* Includes 26'28 miles of mixed gauge between Kotkapura and Bhatinda.

† This is a military line and is not intended to be used for ordinary public traffic.

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

3. Southern Punjab (Delhi-Samasata) railway—concl'd.

(b) General conditions—concl'd.

(ii) *Currency of contract.*—Government may, by giving 12 months' notice, determine the contract on the 31st December 1919, or on the 31st December 1929 or 1939, paying to the Company in sterling a sum equal to 25 times the average of the Company's share of the net earnings of the railway during the last preceding five years, not exceeding by more than 20 per cent., the total capital expenditure of the Company in sterling, nor being less than such capital expenditure. Government may also determine the contract on the 31st December 1948, paying to the Company in sterling a sum equal to the total capital expenditure in sterling.

(iii) *Power of Company to surrender contract.*—Nil.

(iv) *Terms of working.*—Government undertake to work and maintain the line and provide rolling-stock, at 52 per cent. of the gross earnings. Surplus profits in excess of 3½ per cent. per annum on the total capital expenditure in sterling are divisible equally at the close of each year between the Government and the Company. The North Western railway take all receipts from Delhi and Samasata traffic with North Western railway stations, and the Company also receives nothing on any other traffic passed over the Southern Punjab railway from or to North Western railway stations, nor from traffic between foreign lines and the North Western railway, provided that there is any other shorter route.

(v) *Rates and fares.*—Rates and fares to be fixed by Government within the maximum and minimum rates and fares in force on the North Western State railway.

(vi) *General remarks.*—The Southern Punjab railway runs from Delhi *via* Bhatinda to Samasata on the North Western State railway, shortening the distance by railway between Delhi and Kurrachee by 187 miles, as compared with the route *via* Umballa and Lahore.

4. Rajpura-Bhatinda railway—

(a) The Rajpura-Bhatinda railway is owned by the Patiala State and is worked by the North Western railway under the following contract—

Contract of—30th January 1893 (between [the Secretary of State and the Patiala Darbar] for maintenance and working.

(b) The general conditions of the contract are as follows:—

(i) *Government aid.*—The line has been constructed at the cost of the Patiala Darbar.

(ii) *Currency of contract.*—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract, the North Western State railway will give to the Patiala Darbar possession of the railway, works, surveys and stores, and, on this being done, the Patiala Darbar will indemnify the North Western State railway of all debts and liabilities incurred for the Rajpura-Bhatinda railway then subsisting. The working stores provided by the North Western State railway may, if desired by that railway, be taken over at a valuation to be mutually agreed to.

(iii) *Terms of working.*—After deduction of 55 per cent. of the gross receipts of the Rajpura-Bhatinda railway for working expenses, the balance to be paid over to the Patiala Darbar.

(iv) *Rates and fares.*—Rates and fares as in force on the North Western State railway.

5. Ludhiana-Dhuri-Jakhal railway—

(a) The Ludhiana-Dhuri-Jakhal railway is worked under the following contract:—

Contract of—6th September 1899 (between the Secretary of State and the Maler Kotla and Jind Darbars) for construction and working.

(b) The general conditions of the contract are as follows:—

(i) *Government aid.*—The line was constructed at the cost of the Maler Kotla and Jind Darbars.

(ii) *Currency of contract.*—The contract is terminable on the 31st December 1904, or on the 1st January or 1st July in any year thereafter, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract the North Western State railway will give to the Maler Kotla and Jind Darbars possession of the railway, works, surveys and stores, and, on this being done, the Maler Kotla and Jind Darbars will indemnify the North Western State railway of all debts and liabilities incurred for the Ludhiana-Dhuri-Jakhal railway then subsisting. The working stores provided by the North Western State railway may, if desired by that railway, be taken over at a valuation to be mutually agreed to.

(iii) *Terms of working.*—After deduction of 55 per cent. of the gross receipts for working expenses, the balance to be paid to the Maler Kotla and Jind Darbars to be divided between them in the proportion of ¼th and ¾th, respectively.

(iv) *Rates and fares.*—Rates and fares as in force on the North Western State railway.

‡ Dates of opening original 3' 3½" gauge line, subsequently converted to and opened on the 5' 6" gauge line as follows: Lala Musa to Malakwal, 10-2-86; Malakwal to Bhera 15-3-87; Chalisa Junction to Khewra salt mines 15-8-87; Khewra to Dandot, 1-8-89.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage,	Total.
Main.	Sub.				Miles.	Miles.
		NORTH WESTERN SYSTEM—contd. (5' 6" gauge.)				
		Brought forward	...	...	...	2,046'82
6	(a)	FRONTIER SECTION (MILITARY)—concl'd.				572'16
		<i>Sind-Pishin—</i>				
		Rukh to Sibi	Oct. '79	2-5-80	132'26	
		Sibi to Sharigh . . . . .	...	20-3-87	74'80	
		Sharigh to Bostan . . . . .	...	28-8-87	61'13	
		Base of Bostan triangle loop . . . . .	...	...	0'31	
		Bostan to Killa Abdulla . . . . .	...	25-1-88	38'15	
		Killa Abdulla to Chaman . . . . .	...	1-1-92	29'40	
		TOTAL, SIND-PISHIN	...	...	...	336'04
		<i>Mushkaf-Bolan—</i>				
		Sibi (Point No. 51) to Quetta south distant signal.	...	15-4-97	86'74	
		<i>Quetta loop—</i>				
		Quetta south distant signal to Bostan . . . . .	...	28-8-87	20'59	
		Nari bank to Rindli . . . . .	...	...	13'81	
		Mithri chord . . . . .	...	1-1-98	1'34	
		TOTAL, MUSHKAF-BOLAN	...	...	35'74	122'48
		TOTAL OPEN MILEAGE, FRONTIER SECTION (MILITARY)	...	...	...	1,030'68
		DOUBLE LINE (COMMERCIAL AND MILITARY SECTIONS)—				
		Kiamari to Kurrachee City . . . . .	...	30-6-97	3'06	
		Kurrachee City to Kurrachee Cantonment . . . . .	...	13-5-61	2'30	
		Kurrachee Cantonment to Pipri . . . . .	...	20-6-97	20'75	
		Pipri to Kotri . . . . .	...	3-5-98	81'89	
		Meean Meer East to Meean Meer West . . . . .	...	10-12-91	2'13	
		Gulistan to Chaman . . . . .	...	...	36'82	
		A-bi-Gum to Kolpur . . . . .	...	20-9-92	23'54	
		TOTAL DOUBLE LINE	...	...	170'49	
		GRAND TOTAL, NORTH WESTERN (COMMERCIAL AND MILITARY).	...	...	...	3,077'50
6	(b)	SOUTHERN PUNJAB (DELHI-SAMASATA)— (5' 6" gauge.)				
		<i>Main line—</i>				
		Delhi <i>via</i> Bhatinda to Samasata . . . . .	...	10-11-97	400'55	
		Independent entrance from Delhi Brewery to Delhi	...	20-12-02	0'79	
		<i>Branch—</i>				
		Narwana to Kaithal— . . . . .	...	1-2-99	23'38	
		TOTAL, SOUTHERN PUNJAB	...	...	...	424'72
6	(c)	RAJPURA-BHATINDA (PATIALA STATE RAILWAY)— (5' 6" gauge.)				
		Rajpura to Patiala	7-12-83	1-11-84	15'77	
		Patiala to Bhatinda	April '88	13-10-89	91'28	
		TOTAL, RAJPURA-BHATINDA	...	...	...	107'05
		Carried over	...	...	...	3,609'27

on the 31st December 1902, alphabetically arranged.

REMARKS.

6. Jammu and Kashmir railway (Native State section)—

(a) The Jammu and Kashmir railway is worked under the following contracts:—

Contract of—14th July 1888 (between the Government of India and the Kashmir Darbar) for construction and working.

18th November 1890.—Supplementary agreement (between the Government of India and the Kashmir Darbar) relative to the provision of capital.

28th April 1898.—Memorandum of revised terms (between the Government of India and the Kashmir Darbar) for working.

(b) The general conditions of the contracts are as follows:—

(i) *Government aid.*—The line was constructed at the cost of the Kashmir Darbar.(ii) *Currency of contract.*—Either party can revise the contract on giving six months' notice.(iii) *Terms of working.*—The North Western State railway work and maintain the line, including supply of rolling-stock, for 55·5 per cent. of the gross earnings (which include any single item of capital expenditure classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 30 per mile of line open in each half-year.) The balance is paid to the Kashmir Darbar.(iv) *Rates and fares.*—Rates and fares as are from time to time in force on the main line section of the North Western State railway.

7. General remarks—The North Western railway has running powers over the Ghaziabad-Delhi section, 13·00 miles, of the East Indian railway.

8. Details of construction—

(a) *Permanent-way*—*North Western railway.*—The permanent-way is of various types. Of iron rails, there are 105·33 miles, 60lb. flat-footed; 71·45 miles, 68lb. double-headed; 29·40 miles, 60lb. bull-headed; 10·65 miles, 82lb. double-headed and 3·50 miles, 68lb. bull-headed. Of steel rails, there are 3·36 miles, 70lb. flat-footed; 389·39 miles, 62lb. flat-footed; 1,883·40 miles, 75lb. flat-footed; 8·25 miles, 64lb. double-headed; 80·55 miles, 68lb. double-headed; 92·76 miles, 75lb. double-headed; 182·57 miles, 68lb. bull-headed; 42·94 miles, 84lb. bull-headed; 23·55 miles, 100lb. flat-footed; 44·12 miles, 77½lb. bull-headed and 108·89 miles, 73lb. bull-headed. Besides the above there are 171·20 miles of double line, of which 2·13 miles are laid with 68lb. double-headed iron rails. Of steel there are 0·50 mile with 68 lb. double-headed; 141·88 miles with 75lb. flat-footed; 3·15 miles with 77½lb. bull-headed and 23·54 miles with 100lb. flat-footed. The sleepers chiefly used are of wood or cast iron (oval or round) pots and steel transverse.*Southern Punjab, Rajpura-Bhatinda, Jammu and Kashmir and Ludhiana-Dhuri-Jakkhal railways.*—The permanent-way consists of 75lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar. The line from Rajpura to Patiala is laid with steel rails, 68 lb. to the yard, on deodar sleepers.*Dandot Light railway.*—The permanent-way consists of old metre gauge 36 lb. and 40 lb. rails laid on deodar sleepers.*Nowshera-Durgai and Khushalgarh-Kohat-Thal railways.*—The permanent-way consists of flat-footed steel rails, 35 lb. to the yard, laid on wooden and steel sleepers, except on the Kohat-Thal section which will be laid partly with 25lb. and partly with 21lb. rails on steel sleepers.(b) *Ballast.*—The lines are ballasted throughout with sand and broken stone.(c) *Tunnels.*—*North Western railway.*—The following are the tunnels of 500 feet length and over:—Sohawa (between Taraki and Sohawa), 538·25 feet; Margalla (between Sang Jani and Serai Kala), 950 feet; Attock No. 4, near Khairabad, 677·50 feet; Attock No. 5 (between Attock and Khairabad), 722 feet; Mushkaf No. 2, near Mushkaf, 650 feet; Mushkaf No. 4 (between Mushkaf and Ocepur), 529 feet; Ocepur No. 7 (between Ocepur and Panir), 739 feet; Panir No. 9 (between Panir and Peshi), 3,218 feet; Rift No. 11 A, 571 feet; Seetal No. 12 (between Panir and Peshi), 1,035 feet; Cascade No. 14 (between Hirok and Dozan), 542 feet; Mary Jane No. 16 (between Dozan and Kolpur), 681 feet; Khojak No. 18 near Shelabagh, 12,870 feet; tunnel No. 20 near Shelabagh, 756 feet; tunnel No. 23 (between Shelabagh and Sanzal), 800 feet; Gundakinduff No. 3 (between Babar Kachh and Kochali) 569·50 feet; Kuchali Lower No. 4 (between Baberkach and Kuchali), 506 feet; Karez No. 1, near Dirgi, 806 feet; Karez No. 2 (near Dirgi) 2,034 feet; Rift bridge No. 10, 540 feet; Lower Chapper No. 11, (near Mangi) 592 feet; Iron gate No. 13 (between Dirgi and Mangi), 1,227 feet; Mudgorge No. 15 (between Mangi and Mudgorge), 1,087 feet; Mari No. 1 (near Jallar) 1,180 feet; No. 2 (near Jallar) 854 feet; No. 3 (near Jallar) 1,775 feet; No. 4 (near Jallar) 1,130 feet; No. 5 (near Jallar) 1,614 feet; No. 6 (near Jallar) 1,897 feet; No. 9, and Siala (between Chhab and Uchhri) 1,300 feet and 545 feet, respectively.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		NORTH WESTERN SYSTEM—concl'd.				
		Brought forward . . . . .	...	...	...	3,609'27
6	(d)	JAMMU AND KASHMIR (KASHMIR STATE)— (5' 6" gauge.)				
		Frontier of the Kashmir State to the left bank of the Tawi river near Jammu	25-2-88	15-3-90	15'92	
		TOTAL, JAMMU AND KASHMIR . . . . .	...	...	...	15'92
6	(g)	NOWSHERA-DURGAI— (2' 6" gauge.)				
		Nowshera to Durgai	15-5-99	1-1-01	40'25	
		TOTAL, NOWSHERA-DURGAI . . . . .	...	...	...	40'25
6	(e)	LUDHIANA-DHURI-JAKHAL— (5' 6" gauge.)				
		Ludhiana <i>via</i> Dhuri to Jakhal	6-10-99	10-4-01	78'66	
		TOTAL, LUDHIANA-DHURI-JAKHAL . . . . .	...	...	...	78'66
6	(h)	DANDOT LIGHT— (2' 0" gauge.)				
		Dandot station to the mouth of the main mine . . . . .	...	5-7-89	1'89	
		Head of middle incline to shaft No. 10 of outcrop mine . . . . .	...	1-7-93	1'29	
		Head of upper incline to Pidh coal platform . . . . .	...	6-6-95	3'00	
		TOTAL, DANDOT . . . . .	...	...	...	6'18
6	(f)	KHUSHALGARH-KOHAT-THAL— (2' 6" gauge.)				
		Khushalgarh to Kohat	31-10-00	25-5-02	29'70	
		TOTAL, KHUSHALGARH-KOHAT-THAL . . . . .	...	...	...	29'70
		GRAND TOTAL OPEN MILEAGE, NORTH WESTERN SYSTEM	...	...	...	3,779'98
		<i>Lines under construction or sanctioned for construction—</i>				
6	(a)	NORTH WESTERN (JECH-DOAB)— (5' 6" gauge.)				
		Malakwal to Sargodha* . . . . .	...	1-4-03	46'50	
		Sargodha to the Karana Hills . . . . .	...	...	4'90	
		NORTH WESTERN (QUETTA-NUSHKI)— From a point on the main line 12 miles south of Quetta to Nushki	28-8-02	...	82'50	
6	(f)	KHUSHALGARH-KOHAT-THAL— (2' 6" gauge.)				133'90
		Kohat to Thal	31-10-00	1-4-03	62'03	
		TOTAL, KHUSHALGARH-KOHAT-THAL . . . . .	...	...	...	62'03
		Total, Lines under construction . . . . .	...	...	...	195'93
		GRAND TOTAL, NORTH WESTERN SYSTEM . . . . .	...	...	...	3,975'91
6	(g)	NOWSHERA-DURGAI— (See North Western system, page 368.)				

* Sargodha is the terminus of the permanent line; the extension to mile 51'40 will be of a temporary nature to serve the Karana shrine.

on the 31st December 1902, alphabetically arranged.

REMARKS.

8. Details of construction—concl'd.

(d) *Bridges.—North Western railway.*—The following are the important bridges of 1,000' length and over:—Chince creek (between Kiamari and Kurrachee City), 32 spans of 40 feet; Baran viaduct (between Meting and Bholari), 32 spans of 45 feet; Bridge No. 135 (between Chidarzal and Ab-i-Gum), 20 spans of 60 feet; Empress (between Adamwahan and Adamwahan bridge), 16 spans of 250 feet (4,210 feet); Chenab (between Sher Shah and Chenab west bank), 17 spans of 200 feet (3,650 feet) Kaiser-i-Hind (between Ganda Singhwala and Hussainiwala), 27 spans of 144'50 feet (4,293 feet); Beas (between Beas and Beas east bank), 32 spans of 100 feet and 2 spans of 120 feet (3,828 feet); Ravi (between Shahdara and Badami Bag), 15 spans of 90 feet (1,465 feet); Sutlej (between Phillour and Ladhawal), 41 spans of 99 feet, 4 spans of 71 feet, 1 span of 99'67 feet; and 1 span of 95'67 feet (5,131 feet); Markunda (between Kersian and Barara), 9 spans of 99 feet and 2 spans of 100 feet; Jumna (between Jagadhri and Sarsawa), 22 spans of 99 feet and 2 spans of 100 feet (2,674'75 feet); Alexandra (between Wazirabad and Kathala), 28 spans of 133'50 feet (3,976 feet); Victoria (between Malakwal and Haranpur), 17 spans of 135 feet (2,720 feet); Jhelum (between Karyala and Jhelum) 50 spans of 90 feet and 1 span of 18'50 feet (4,899'42 feet); Attock (between Khairabad and Attock), 2 spans of 296'25 feet, 3 spans of 246'25 feet, and 2 spans of 40 feet (1,522 feet); Lansdowne (between Sukkur and Rohri), 1 span of 790 feet, 1 span of 270 feet, 1 span of 230 feet and 1 span of 90 feet (1,520 feet); Indus bridge at Kotri (between Kotri and Hyderabad) 5 spans of 350 feet and 1 span of 100 feet (1,948 feet); and Sohan, 1 span of 119 feet; 4 spans of 200 feet and 2 spans of 100 feet (1,204'50 feet).

Khushalgarh-Kohat-Thal railway.—The Indus at Khushalgarh will, for the present, be crossed by a cable way, the clear cable span from saddle to saddle being 1,100 feet.

(e) *Fencing—*

North Western railway.—The main line, Ferozepore and Pathankot branches and the Ludhiana-Dhuri-Jakkhal railway are, for the most part, fenced on both sides. The section from Lala Musa to Peshawar is, however, only partially fenced. The Wazirabad and Khushalgarh branches are unfenced, except at stations. The Sind-Sagar railway is unfenced, except on the portion from Sher Shah to Chenab west bank. The Kundian-Mianwali branch is unfenced throughout. The Sind-Pishin main line is fenced from Rok Junction to Jhatpat; the remainder of the line is unfenced. The Mushkaf-Bolan line and the Chaman extension are unfenced.

Southern Punjab railway.—The line is fenced near all large towns only.

Rajpura-Bhatinda railway.—The line is fenced from Rajpura to Patiala only. The rest of the system is unfenced.

Ludhiana-Dhuri-Jakkhal railway.—The line is fenced throughout.

(f) *Curves—*

5' 6" gauge.—Of curves under a radius of 1,000 feet, there are 25'73 miles distributed over the line varying from 477 feet to 955 feet in radius.

Dandot Light railway.—One semi-circular curve of a radius of 75 feet is used to enable the line to turn on itself.

Nowshera-Durgai railway.—The sharpest curve is 477 feet radius.

(g) *Gradients.*—Of a total open mileage of 3,779'98 miles on the system, 6'52 miles are on the ruling gradient of 1 in 25 on the 5' 6" gauge and 0'24 mile on 1 in 2'50 on the 2' 0" gauge Dandot Light railway.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Tota		
Main.	Sub.				Miles.	Mile.		
5	(a)	OUDH AND ROHILKHAND SYSTEM— (5' 6" gauge.)						
		Oudh and Rohilkhand—						
		Main line—						
		Moghal Serai to Bechupur			11-5-01	31-10-02	1'41	
		Bechupur to mile 3'25 . . . . .			...	22-12-62	2'14	
		From mile 3'25 south of the Dufferin bridge to the Benares Ganges station . . . . .			...	1-10-87	4'25	
		From the Benares Ganges station to Benares Cantonment . . . . .			...	18-6-83	1'50	
		Benares Cantonment to Rae Bareilly			Oct. 1895	4-4-98	138'36	
		Rae Bareilly to Lucknow			5-8-91	18-10-93	48'56	
		Lucknow to Sandila . . . . .			...	1-2-72	30'00	
		Sandila to Hardoi . . . . .			...	15-7-72	33'00	
		Hardoi to Shahjahanpur . . . . .			...	1-3-73	39'00	
		Shahjahanpur to Faridpur . . . . .			...	8-9-73	32'00	
		Faridpur to Bareilly . . . . .			...	1-11-73	13'00	
		Bareilly to Moradabad (chord line <i>via</i> Rampur)			4-12-91	8-6-94	56'07	
		Moradabad to Nagina			} 29-8-81 {	8-10-84	47'25	
		Nagina to Najibabad				1-4-85	13'70	
		Najibabad to Saharanpur				1-1-86	58'25	
							518'49	
		Loop lines—						
		Bareilly to Ukka . . . . .			...	22-12-73	5'00	
		Ukka to Aonla . . . . .			...	1-11-73	11'00	
		Aonla to Chandausi . . . . .			...	10-6-73	27'00	
		Chandausi to Moradabad . . . . .			...	28-10-72	27'50	
							70'50	
		Benares Cantonment to Shahganj . . . . .			...	5-1-74	56'03	
		Shahganj to Bilwai . . . . .			...	1-5-74	7'00	
		Bilwai to Malipur . . . . .			...	17-4-74	9'00	
		Malipur to Akbarpur . . . . .			...	2-3-74	12'00	
		Akbarpur to Fyzabad . . . . .			...	10-6-73	36'00	
		Fyzabad to Bara Banki . . . . .			...	25-11-72	62'00	
		Bara Banki to Lucknow . . . . .			...	1-1-72	17'00	
		Benares Cantonment (3' 3½" gauge.) (Oudh and Rohilkhand) to Benares City (Bengal and North-Western) . . . . .			...	1-4-99	1'81	
							200'84	
							271'34	
Total Main and Loop lines . . . . .			...	...	...	789'83		
Branches—								
Moradabad to Gajroula			} 8-4-97 {	1-4-00	33'40			
Gajroula to Ghaziabad				25-11-00	53'37			
					86'77			
Ajodhya ghat branch—								
Ranupali to Ajodhya ghat			16-12-84	15-11-86	3'22			
Bahramghat branch—								
Bara Banki to Bahramghat . . . . .			...	20-11-72	*21'52			
Cawnpore branch—								
Lucknow to Cawnpore			Jany. 1864	23-4-67	42'00			
Left bank Ganges to junction with the East Indian railway at Cawnpore . . . . .			...	15-7-75	†3'22			
Passenger approach to the East Indian railway at Cawnpore. . . . .			...	21-2-88	0'23			
					45'45			
Aligarh branch—								
Aligarh to Rajghat . . . . .			...	1-2-72	30'12			
Rajghat to Chandausi . . . . .			...	28-10-72	30'48			
					60'60			
Carried over . . . . .			...	...	217'36	789'83		

* Of this the length from Burhwal to Barabanki, 16'79 miles, is mixed (5' 6" and 3' 3½") gauge.
† Of this 0'59 mile on Cawnpore Bridge is mixed (5' 6" and 3' 3½") gauge.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Oudh and Rohilkhand railway system is made up of:—

	Open line. Miles.	Under construction. Miles.	Total Miles.
(a) Oudh and Rohilkhand State railway (5' 6" gauge)	1,039'64	14'47	1,054'11
(b) Hardwar-Dehra railway (5' 6" gauge)	32'04	...	32'04
(c) Cawnpore-Burhwal (3' 3½" gauge) link	79'60	...	79'60
(d) Allahabad-Fyzabad railway (5' 6" gauge) . . . . .	...	94'67	94'67
Total	1,151'28	109'14	1,260'42

2. Oudh and Rohilkhand State railway—

(a) The Oudh and Rohilkhand railway is owned and worked by the State.

(i) *General remarks.*—The Oudh and Rohilkhand railway was acquired by the State from the late guaranteed Company on the 1st January 1889.

A tramway constructed at the expense of Messrs. Carew & Co. connects the Rosa Sugar factory with Rosa station on the Oudh and Rohilkhand State railway. This tramway is 3.25 miles long and is worked by manual power. It is used for goods traffic only.

The construction of the Cawnpore-Burhwal (3' 3½" gauge) link was sanctioned as a part of the project for linking up the metre gauge systems of Northern India. The mileage shown excludes 3.66 miles of the existing line of the Lucknow-Bareilly railway between Daliganj and Aishbagh, which forms a part of the alignment of this line. Starting from the north of Burhwal station, on the Oudh and Rohilkhand State railway, it runs up to Bara Banki along a third rail laid inside the Oudh and Rohilkhand State railway line, and thence on to Malhaur a separate 3' 3½" track has been laid parallel to, and 14 feet distant from, the Oudh and Rohilkhand railway track. From Malhaur it deviates to the east, over new country and joins the Lucknow-Bareilly railway at the north end of Daliganj station. Passing through Daliganj, the Lucknow-Bareilly railway is utilized to Aishbagh, where it crosses that railway and runs for 2.08 miles over new country; it joins the Cawnpore branch of the Oudh and Rohilkhand State railway at mile 2.80 from Lucknow, then runs parallel to the latter line up to the Cawnpore bridge station, from which point a third rail has been laid across the Ganges bridge. After clearing the bridge, the separate track, parallel to the Oudh and Rohilkhand railway is resumed and followed up to and through the Cawnpore (Oudh and Rohilkhand State railway) station yard, and, passing on, crosses the Grand Trunk Road, Ganges canal, and East Indian railway goods siding on a grade crossing, and joins the Cawnpore-Achnera railway at mile 83.26.

3. Hardwar-Dehra railway—

(a) The Hardwar-Dehra railway is worked under the following contract:—

Contract of—26th March 1897 (between the Secretary of State and the Hardwar-Dehra Railway Company) for construction and working.

(b) The general conditions of the contract are as follows:—

(i) *Terms of contract.*—The Hardwar-Dehra Railway Company is authorised to raise 30 lakhs of rupees as capital; and except for *bonâ fide* temporary purposes, at a reasonable rate of interest, the Company cannot, without the sanction of Government or the working agency, increase its share or stock capital.(ii) *Government aid.*—Interest at 3 per cent. per annum is guaranteed. Government also allow Rs. 3,600 for office and management expenses in any year in which the minimum dividend of 3 per cent. is not received by the Company from the earnings of the line, and pay all legal expenses properly debitable to revenue. Land is also provided free of charge.(iii) *Currency of contract.*—Government may determine the contract, on twelve months' notice either on the 31st December 1919 or at the expiration of any subsequent period of ten years, by paying a sum equal to 25 times the average yearly net earnings during the three years prior to determination, provided the payment does not exceed by more than 20 per cent., or is not less than, the total capital expenditure.(iv) *Power of Company to surrender contract.*—Nil.(v) *Terms of working.*—After deduction of 50 per cent. of the gross earnings for working expenses, (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) and repayment to Government of the interest paid by Government under the contract and attributable to each half-year, the residue, if any, at the end of the year to be divided in equal proportions between the Government and the Company.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		OUDH AND ROHILKHAND SYSTEM—concl'd.				
		Brought forward . . . . .	...	...	217'56	789'83
		<i>Hardwar branch—</i>				
		Lhaksar Junction to the left bank of the Ganges Canal Jawalapur	15-5-83	1-1-86	13'53	
		Left bank of the Ganges Canal near Jawalapur to Hardwar		20-8-86	3'53	
		<i>Kotdwara branch—</i>			17'06	
		Najibabad Junction to the right bank of the Koh river opposite Kotdwara	Oct. 1895	24-12-96	15'19	
		Total Branches . . . . .	...	...	...	249'81
		TOTAL, OPEN MILEAGE, OUDH AND ROHILKHAND PROPER .	...	...	...	1,039'64
5	(b)	HARDWAR-DEHRA— (5' 6" gauge.)				
		Hardwar to Dehra	18-11-96	1-3-00	32'04	
		TOTAL, HARDWAR-DEHRA . . . . .	...	...	...	32'04
5	(c)	CAWNPORE-BURHWAL— (3' 3½" gauge.)				
		Burhwal to Daliganj	Oct. 1894	24-11-96	*34'57	
		Aishbagh to Cawnpore		25-4-97	†45'03	
		TOTAL, CAWNPORE-BURHWAL . . . . .	...	...	...	79'60
		<i>Lines under construction or sanctioned for construction—</i>				
		OUDH AND ROHILKHAND— (5' 6" gauge.)				
		Allahabad to Phaphamau	8-11-01	...	7'62	
		Phaphamau to Siwait		‡31-3-03	3'63	
		Siwait to Partabgarh		20-3-03	24'98	
		Chilbila to Sultanpur †		10-4-03	22'07	
		Sultanpur to Fyzabad		‡31-8-03	36'37	
					94'67	
		Balamau to Madhoganj	17-9-02	...	14'47	
		TOTAL, LINES UNDER CONSTRUCTION . . . . .	...	...	...	109'14
		GRAND TOTAL, OUDH AND ROHILKHAND SYSTEM . . . . .	...	...	...	1,260'42

* Including the length Burhwal to Bara Banki.
† Including the length on the Cawnpore bridge.
‡ Excluding 2'45 miles (Partabgarh to Chilbila).
§ Probable dates of opening.

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

3. Hardwar-Dehra railway—concluded.

(b) General conditions—concluded.

(vi) *Rates and fares.*—Rates and fares to be arranged between Government and the working agency within one-and-a half times the maximum and minimum rates and fares in force on the Oudh and Rohilkhand railway.

4. General remarks.—One mile of the Oudh and Rohilkhand railway at Cawnpore is worked over by the Indian Midland railway.

The Cawnpore-Burhwal, 3' 3½" gauge, link works over 3·66 miles of the Lucknow-Bareilly railway between Daliganj and Aishbagh.

5. Details of construction.—

(a) *Permanent-way.—Oudh and Rohilkhand.*—The permanent-way at first adopted for the 5' 6" gauge portion of the system was a 60 lb. iron rail, laid partly on cast-iron oval bowl, and partly on wrought-iron saddle-back sleepers. Up to 1889, the original iron rails had been replaced by 60 lb. steel rails, and since 1889, all renewals have been made with 75 lb. steel rails of the Indian State railway pattern, laid on metal or wooden sleepers, the former being steel bowls, or cast iron bowls locally made, the latter sal and deodar. All new lines are laid with 75 lb. steel rails and metal or wooden sleepers.

Hardwar-Dehra.—The permanent-way consists of 75 lb. flat-footed steel rails and deodar sleepers.

Cawnpore-Burhwal.—Where the line is not mixed gauge, it is laid with new 50 lb. steel rails.

(b) *Ballast.*—The system is ballasted throughout, either with sand or earth with a covering of broken brick or kunkur, or kunkur stone or shingle.

(c) *Tunnels.—Hardwar-Dehra.*—There are two tunnels of 500 feet length and over, one 650 feet and the other 925 feet in length between Hardwar and Raiwala, at miles 1 and 2.

(d) *Bridges.—Oudh and Rohilkhand and Cawnpore-Burhwal.*—The following are the important bridges of 1,000 feet and over:—Dufferin (between Moghal Serai and Kashi), 7 spans of 331 feet and 9 spans of 103 feet (3,507·41 feet); Sai (between Jalalganj and Zafrabad), 2 spans of 58·8 feet and 16 spans of 57·5 feet; Goomtee (between Zafrabad and Jaunpur City), 16 spans of 82 feet (1,472 feet); Ganges (between Ganges bridge and Cawnpore), 23 spans of 100 feet, spans of 96 feet and spans of 40 feet (2,850 feet); Gurrak (between Shahjahanpur and Banthra), 18 spans of 66 feet; Ramgunga (between Bareilly and Basha:atgunj), 31 spans of 56 feet, 1 span of 72 feet, 1 span of 58 feet and 1 span of 55 feet (2,277 feet); Ganges (between Bahrala and Rajghat), 33 spans of 80 feet (3,040 feet); Kosi (between Rampur and Rajhera), 10 spans of 98·56 feet; Ramgunga (between Rajhera and Moradabad), 10 spans of 200 feet (2,126 feet); Bangunga (between Raisi and Lhaksar), 14 spans of 92·5 feet; Ganges (between Balawali and Raisi), 11 spans of 249·50 feet (7,886 feet); Solani (between Landhaura and Lhaksar), 11 spans of 149·58 feet (1,749·50 feet); Ganges (Garhmuktesar) 11 spans of 200 feet (2,332 feet).

(e) *Fencing.—Oudh and Rohilkhand and Cawnpore-Burhwal.*—The lines are fenced throughout.

Hardwar-Dehra.—The line is only partially fenced.

(f) *Curves.—Oudh and Rohilkhand and Cawnpore-Burhwal.*—There are no curves of a shorter radius than 1,000 feet, except on the Cawnpore-Burhwal railway where the sharpest curve has a radius of 573 feet.

Hardwar-Dehra.—There are no curves under a radius of 1,000 feet.

(g) *Gradients.*—Of a total open mileage on the system of 1,151·28 miles, 8·92 miles are on the ruling gradient of 1 in 75.

6·79 miles, laid on a mixed (5' 6" and 3' 3½") gauge.
1·59 mile, laid on a mixed (5' 6" and 3' 3½") gauge.
of existing line of the Oudh and Rohilkhand railway.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress.

Class : No		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
8	(k)	PALANPUR-DEESA— (See Bombay, Baroda and Central India system, page 286.)				
4	(c)	PARLAKIMEDI LIGHT— (See Bengal-Nagpur system, page 270.)				
8	(d) & (e)	PETLAD-CAMBAY— (See Bombay, Baroda and Central India system, page 280.)				
22	(e)	PONDICHERRY— (See South Indian system, page 388.)				
17	(c)	POWAYAN LIGHT— (See Rohilkund and Kumaon system, page 378.)				
4	(b)	RAIPUR-DHAMTARI— (See Bengal-Nagpur system, page 270.)				
8	(m)	RAJPIPLA— (See Bombay, Baroda and Central India system, page 288.)				
6	(c)	RAJPURA-BHATINDA— (See North Western system, page 365.)				
8	(g)	RAJPUTANA-MALWA— (See Bombay, Baroda and Central India system, page 282.)				

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

Appendix 47.
History of railways.

REMARKS.

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
27	(a)	RANAGHAT-KRISHNAGAR LIGHT— (2' 6" gauge.)				
		Right bank of the Churni river (Aistala Ghat) near Ranaghat to Krishnagar	Decr. 1895	5-4-99	20.25	
		TOTAL, RANAGHAT-KRISHNAGAR LIGHT . . . . .	...	...	...	20.25
8	(e)	REWAH— (See East Indian system, page 322.)				

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Ranaghat-Krishnagar Light railway—

(a) The Ranaghat-Krishnagar Light railway is maintained and worked on the terms in Bengal Government, Public Works Department, Notification No. 334, dated the 16th December 1895, under the following agreement:—

Agreement of—6th September 1895 (between the Ranaghat-Krishnagar Light Railway Company and the District Board of Nadia).

(b) The general conditions are as follows:—

(i) *Aid by the District Board.*—The District Board make up the net earnings of the Company to Rs. 1,473 per mile per annum constructed and declared open, limited to a maximum claim of Rs. 28,000 per annum.

(ii) *Currency of agreement.*—The District Board may determine agreement by purchase, under section 41, Act III of 1883 (Bengal Code), the amount payable being calculated at 20 years' purchase of the average net annual profits to the Company during the four years preceding, together with a bonus of 20 per cent. on the amount so arrived at.

(iii) *Terms of working.*—When the net earnings of the Company, after deducting any commission payable to Agents, exceed 4 per cent. upon the capital, such surplus profits exceeding 4 per cent. and not exceeding 8 per cent. are divided equally between the Company and the District Board; and when the net earnings exceed 8 per cent. upon the capital, the Company receive one-fourth share of the surplus, the remaining three-fourths of such surplus being equally divided between the District Board and Government.

(iv) *Rates and fares.*—The same rates and fares as are in force on the Howrah-Amta railway.

(v) *General remarks.*—The line has been constructed on the old Government embankment made for the abandoned Ranaghat-Bhagwangola railway. On the 23rd February 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the line. A siding, 1.50 miles long, has been constructed by the Eastern Bengal State railway on the 5' 6" gauge, and runs from the Ranaghat station to the left bank of the Churni and connects with the railway by a ferry worked by the Ranaghat-Krishnagar Light railway.

2. Details of construction.—

(a) *Permanent-way.*—The permanent-way consists of 25 lb. steel rails, Vignole's pattern, and cross sleepers of pyinkado, 9 per rail of 24 feet.

(b) *Ballast.*—The line is ballasted throughout with brick.

(c) *Fencing.*—The line is unfenced.

(d) *Curves.*—The sharpest curve is of 600 feet radius.

(e) *Gradients.*—Of a total length of 20.25 miles, 0.80 mile is on the ruling gradient of 1 in 300.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		ROHILKUND AND KUMAON SYSTEM— (3' 3½" gauge.)				
17	(a)	COMPANY'S SECTION—				
		Bhoojeeपुरा to Kathgodam	1882	12-10-84	53'92	
		TOTAL COMPANY'S SECTION . . . . .	...	...	...	53'92
17	(b)	LUCKNOW-BAREILLY STATE RAILWAY SECTION— (3' 3½" gauge.)				
		<i>Main line—</i>				
		Lucknow to Sitapur	8-10-84	15-11-86	55'00	
		Sitapur to Lakhimpur		15-4-87	28'50	
		Lakhimpur to Gola Gokaran Nath		15-12-87	21'50	
		Gola Gokaran Nath to Pilibhit	27-12-89	1-4-91	57'55	
		Pilibhit to Bhoojeeपुरा	Bareilly to mile 4'62 on 17-3-82.	15-11-84	24'00	
		Bhoojeeपुरा to Bareilly	Mile 4'62 to Pilibhit, 24- 2-83.	12-10-84	12'00	
		Total Main line . . . . .	...	...	...	198'55
		<i>Branches—</i>				
		Bareilly grain siding	24-3-92	1-4-94	1'75	
		<i>Dudhwa branch—</i>				
		Mailani to Sarda	Mailani to Dudhwa, 3-12-90; Dudhwa to Sonaripur 2-11-93	1-1-93	15'00	
		Sarda to Sohela		10-3-93	8'50	
		Sohela to Sonaripur		18-3-94	7'37	
		Total Branches . . . . .	...	...	...	32'62
		TOTAL OPEN MILEAGE, LUCKNOW-BAREILLY . . . . .	...	...	...	231'17
		<i>Line under construction or sanctioned for construction—</i>				
		<i>Dudhwa branch—</i>				
		Dudhwa to Mohan river.	12-4-01	3-4-03	5'93	
		Total Line under construction . . . . .	...	...	...	5'93
		TOTAL, LUCKNOW-BAREILLY SECTION . . . . .	...	...	...	237'10
17	(c)	POWAYAN LIGHT— (2' 6" gauge.)				
		Shahjahanpur to Powayan	Jany. 1889, Feby. 1894.	17-6-90	17'00	
		Powayan to Khotar		19-5-91	14'00	
		Khotar to Mailani		22-12-94	8'50	
		TOTAL, POWAYAN LIGHT . . . . .	...	...	...	39'50
		GRAND TOTAL, ROHILKUND AND KUMAON SYSTEM . . . . .	...	...	...	330'52

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Rohilkund and Kumaon railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(a) Rohilkund and Kumaon railway (3' 3½" gauge)	53'92	...	53'92
(b) Lucknow-Bareilly State railway (3' 3½" gauge)	231'17	5'93	237'10
(c) Powayan Light railway (2' 6" gauge)	39'50	...	39'50
Total	324'59	5'93	330'52

2. Rohilkund and Kumaon and Lucknow-Bareilly State railways.—

(a) The Rohilkund and Kumaon, and Lucknow-Bareilly State railways are worked under the following contracts—

Contract of—12th October 1882.—Rohilkund and Kumaon Railway Company's original contract.

8th September 1890.—Contract for the working and maintenance of the Lucknow-Bareilly State railway and the Rohilkund and Kumaon Company's line as one system. (Principal contract).

31st December 1892.—Relating to advances of capital by Government.

5th February 1901.—Contract modifying the terms of the previous contracts.

(b) The general conditions of the contracts are as follows:—

(i) *Government aid.—Company's section.*—Government guaranteed interest at 4 per cent. in sterling on the capital expended up to £200,000 until the line was opened for traffic, but not for longer than the first two years of the contract; thereafter a subsidy of Rs. 20,000 half-yearly for ten years from date of opening, which ceased after 31st December 1894. Land was provided free, subject to the condition that the Company pay on demand to Government the cost price of land purchased by the latter subsequent to the date of the principal contract.

Lucknow-Bareilly section.—The Company to raise £160,000 capital by debentures which Government guarantees as to repayment of capital and payment of interest, the Company undertaking to reimburse Government from its own funds any amount by which the guarantee may exceed the annual limit of Rs. 96,000. Land was also provided free of charge.

Notes.—All sums to be advanced by Government after the 31st December 1900 bear interest at the rate of 3½ per cent. per annum under agreement dated the 5th February 1901.

(ii) *Terms of contract.*—The Lucknow-Bareilly section was taken over in an unfinished state by the Company which raised the sum of £160,837 by the issue of debentures for the purpose of completing it. The remainder of the capital expended has been supplied by Government. The contract provides that the railway shall be worked in conjunction with the Company's own line, a joint account of working expenses being kept and the total amount divided half-yearly between the State line and the Company's line in proportion to their respective gross earnings.

(iii) *Currency of contracts.*—

Rohilkund and Kumaon railway.—Government may terminate the contract at the end of the 30th year (i.e., on the 31st December 1912) or the 50th year (i.e., on the 31st December 1932) by giving 12 months' notice. If the contract terminate by such notice or by efflux of time, Government is to pay 25 times the average net earnings, deducting the Government share of surplus profits during the 5 years preceding the termination. The Government may also determine the contract at any time on six months' notice if the Company fail to observe their obligations, on payment of the value of permanent way, stock and plant, or may call upon the Company to accept the same in lieu of payment in which case the Company must remove their property within nine months from termination of contract, otherwise it becomes the property of the Government.

Lucknow-Bareilly State railway.—Government may determine the contract on the 31st December 1907, or on the 31st December of any subsequent year by giving twelve months' notice. In the event, however, of the original contract dated the 12th October 1882 terminating by efflux of time or under notice of purchase or notice of determination, this contract *ipso facto* also terminates at the same time. Government may also terminate the contract if the Company fail to observe their obligation after six months' notice. On determination of the contract, Government resume possession of the State railway on payment to the Company of the amount of the capital received or take over their liabilities with respect to such capital.

(iv). *Power of Company to surrender contract.*—Nil.

(v) *Terms of working.—Company's section.*—During the period that the Government are liable to pay interest after deducting working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision) the surplus profits, after repayment of the guaranteed interest, go to the Company. Subsequently, half the surplus profits, after 5 per cent

Note.—It has been agreed that, in calculating the surplus profits for division, sums received by the Company as their share of the surplus profits of the Lucknow-Bareilly railway shall not be taken into account.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.					
		ROHILKUND AND KUMAON SYSTEM—concl'd.				
16	(c)	SAGULI-RAXAUL— (See Bengal and North-Western system, page 260.)				
10	(d)	SHORANUR-COCHIN— (See Madras system, page 348.)				
1	(c)	SOUTH BEHAR— (See East Indian system, page 322.)				

on the 31st December 1902, alphabetically arranged.

REMARKS.

2. Rohilkund and Kumaon and Lucknow-Bareilly State railways—concluded.

(b) General conditions—concluded.

(v) Terms of working—concluded.

for the year (within a limit of £ 5,000 for each half-year) has been appropriated to the Company, is to be applied in repayment to Government of arrears of Guaranteed interest and of interest thereon. The other half and any ultimate surplus to belong to the Company. After the year ending 31st December 1897, Government are to receive half the surplus profits in excess of 6 per cent.

Lucknow-Bareilly section.—The working expenses of the system (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision) are divided between the Company's line and the State railway in proportion to their gross earnings, the profits of the State railway being applied:—in meeting payment of interest on the debentures, and of interest at 4 per cent. on any further capital supplied by the Company for the undertaking or advanced by Government; in payment to Government of interest at 4 per cent. on their capital in the undertaking; the residue to be divided half-yearly between Government and the Company in the ratio of their respective shares of capital in the undertaking.

Any insufficiency of the profits to meet the charges under (1) that may be met by money supplied by Government shall be a cumulative preference charge against subsequent profits before division of residue.

(vi) *Rates and fares*—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

3. Powayan Light railway—The working and maintenance of this railway was taken over by the Rohilkund and Kumaon Railway Company from the 17th December 1900.

4. General remarks.—The Rohilkund and Kumaon railway works over 12'00 miles of the Lucknow-Bareilly State railway from Bhojeepera to Bareilly.

The following lengths of the Lucknow-Bareilly State railway are worked over by foreign lines—Daliganj to Aishbagh, 3'66 miles by the Bengal and North-Western railway; and Bhojeepera to Bareilly 12'00 miles by the Rohilkund and Kumaon railway.

5. Details of construction.—

(a) *Permanent-way.*—The line is laid principally with 41½lb. steel rails (with the exception of the old Oudh and Rohilkhand railway 60lb. steel rails between Daliganj and Lucknow Junction), and sál, asna and deodar sleepers. On the Powayan Light railway, the rails are flat-bottomed steel, weighing 25lb. to the yard, laid on sál sleepers.

(b) *Ballast.*—The ballast consists of brick, shingle and kunker. The Powayan Light railway is earth ballasted.

(c) *Fencing.*—The system is unfenced except at stations.

(d) *Curves.*—The only curve under a radius of 1,000 feet occurs between Lucknow Junction and Lucknow City, the length of which is 0'63 mile.

(e) *Gradients.*—Of a total mileage of 324'59 miles on the system, 3'00 miles are on the ruling gradient of 1 in 70.

Appendix 47.
History of railways.

History of railways constructed and in prog.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Tota
Main.	Sub.				Miles.	Miles
35	(a)	SHAHDARA-SAHARANPUR LIGHT— (2' 6" gauge.)				
		Shahdara to Saharanpur	4-1-02	...	95'00	
		Baraut to Meerut	4-1-02	...	30'00	
		Total, Shabdara-Saharanpur Light .	...	...	...	125'0

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

Appendix 47.
History of railways.

REMARKS.

History of railways constructed and in progr

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total
Main.	Sub.					
		SOUTH INDIAN SYSTEM— (3' 3½" gauge).			Miles.	Miles.
22	(a)	SOUTH INDIAN—				
		MADRAS-TUTICORIN SECTION—				
		<i>Main line—</i>				
		Madras (Beach Joint to Beach old)	1900	15-1-00	0'33	
		Madras Beach old to Park zero	25-2-73	1-1-79	1'60	
		Madras (Park zero) to Tindivanam		1-9-76	76'05	
		Tindivanam to Cuddalore old town	12-6-74	1-1-77	52'01	
		Cuddalore old town to Porto Novo		1-7-77	17'15	
		Porto Novo to Chidambaram	1899	1-10-78	6'73	
		Chidambaram to Coleroon		1-7-79	4'57	
		Coleroon to Shiyali	May '59	1-1-78	6'06	
		Shiyali to Mayavaram		1-7-77	12'24	
		Mayavaram to Tanjore	2-3-72	15-2-77	43'76	
		Tanjore to Trichinopoly Junction		11-3-62	31'14	
		Trichinopoly Junction to Madura	1899	1-9-75	96'04	
		Madura to Tuticorin		1-1-76	98'71	
		Tuticorin to Foreshore		7-8-99	0'41	
		Total Main line . . . . .	...	...	...	446'80
		<i>Branches—</i>				
		<i>Arkonam branch—</i>				
		Chingleput to Walajabad	Nov. '79	1-8-80	13'66	
		Walajabad to Conjeeveram		1-1-81	7'94	
		Conjeeveram to Arkonam	11-3-64	8-5-65	17'65.	
		<i>Pondicherry branch—</i>				
		Villupuram to Gingee river, inclusive of bridge over the river	May '79	15-12-79	39'25	
		<i>Nagore branch—</i>				
		Tanjore to Tiruvallur	May '59	2-12-61	33'83	
		Tiruvallur to Negapatam		11-11-98	15-7-61	14'33
		Negapatam to Nagore		1-12-99	4'67	
		<i>Pulliarpati Quarry branch—</i>				
		Tanjore to buffer end, Pulliarpati quarry	1898	1-7-98	52'83	
		<i>Erode branch—</i>				
		Trichinopoly Junction to Fort	May '59	11-3-62	2'52	
		Trichinopoly Fort to Karur		3-12-66	44'65	
		Karur to Kodumudi		1-7-67	16'70	
		Kodumudi to Erode		1-1-68	23'54	
		<i>Pamban branch—</i>				
		Madura to Mandapam	21-4-99	1-8-02	89'50	
		<i>Tinnevelly branch—</i>				
		Maniyachi to Tinnevelly	2-3-72	1-1-76	18'23	
		<i>Wharf branch—</i>				
		Cuddalore old town to Wharf	1899	7-8-99	1'54	
		<i>Capper quarry branch—</i>				
		Junction with main line to Capper Quarry	1900	15-4-00	0'86	
		<i>Salt branch—</i>				
		Tuticorin to buffer end of Sevandacolam salt siding.	1899	12-11-99	2'14	
		Junction of Sevandacolam salt siding to buffer end of Livingepuram.		12-11-99	0'25	
		Total Branches . . . . .	...	...	...	313'05
		TOTAL, MADRAS-TUTICORIN SECTION . . . . .	...	...	...	759'85
		Carried over . . . . .	...	...	...	759'85

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The South Indian railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total Miles.
(a) South Indian railway (3' 3½" gauge)	1,123'13	17'38	1,140'51
(b) Tinnevelly-Quilon (Travancore) branch (British section) (3' 3½" gauge)	19'05	31'33	50'38
(c) Tanjore District Board (Mayavaram-Mutupet) railway (3' 3½" gauge)	71'11	33'88	104'99
(d) Karaikkal-Peralam railway (3' 3½" gauge)	14'65	...	14'65
(e) Pondicherry railway (3' 3½" gauge)	7'85	...	7'85
(f) Tinnevelly-Quilon (Travancore) branch (Native State section) (3' 3½" gauge)	...	57'95	57'95
Total	1,235'79	140'54	1,376'33

2. South Indian railway.—

(a) The South Indian railway is worked under the following contracts—

Contract of—24th November 1890 (between the Secretary of State and the South Indian Railway Company) for working.
27th June 1901 (between the Secretary of State and the South Indian Railway Company) relating to the Pamban branch.

(b) The general conditions of the contracts are as follows:—

- (i) *Terms of contract.*—The original South Indian Railway Company ceased to exist at the end of 1890, when the railway was purchased by the State. The purchase was effected by means of a cash payment to the Company, and all the contracts then subsisting between the Secretary of State and the Company were determined. The purchase price was £4,197,557.* The Secretary of State assumed all liability in connection with the Company's debentures and debenture stock, which is irredeemable. The present Company (practically the old one in a modified form) was

	£
* Company's stock at date of purchase ...	3,208,280
Premium ...	989,277
	<u>4,197,557</u>

constituted, with a capital of £1,000,000, as the agency for carrying on the working of the lines after their acquisition by the Government, and for completing a system of State lines which was under construction by the former Company at the date of the termination of its contract. Any further moneys required to be either provided by the Secretary of State, or raised by the Company under guarantee. Subject to the provision of the contract, all moneys paid by the Company become the absolute property of the Secretary of State.

- (ii) *Currency of contract.*—Government may determine the contract on the 31st December 1910 or at the end of any succeeding fifth year, giving 12 months' previous notice. Government may also determine it, by giving six months' notice, should the Company fail to observe their obligations, or the line be worked at a loss for not less than three half-years continuously. On the expiration of the contract, Government are to take possession of the railway and all its appliances, repaying at par to the Company their capital of £1,000,000 and any further capital raised by them and paid to Government.

- (iii) *Power of Company to surrender contract.*—Nil.

- (iv) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government) the net receipts to be applied in payment to Government of—the equivalent in rupees of interest at 4½ per cent. on £425,000 irredeemable debenture stock of the old Company (at "the prescribed rate" of exchange); 3 per cent. on the net expenditure shown by the capital advance, stores and capital accounts, after deducting the sums of Rs. 1,40,00,000 and Rs. 59,50,000 (the contract equivalents of the Company's capital and of the irredeemable debenture stock respectively); and in payment of the residue to Government and the Company in the ratio of the respective capital amounts contributed by each.

- (v) *Rates and fares.*—Certain maxima and minima have been fixed within which the Company are permitted to vary their rates.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total
Main.	Sub.				Miles.	Miles
		SOUTH INDIAN SYSTEM—continued. (3' 3½" gauge.)				
22	(a)	SOUTH INDIAN—concluded.				
		Brought forward . . . . .	...	...	...	759'8
		VILLUPURAM-DHARMAVARAM SECTION—				
		<i>Main line—</i>				
		Villupuram to Tiruvannamalai	Nov. '88	17-11-90	41'80	
		Tiruvannamalai to Pakala		18-3-91	96'55	
		Pakala to Vayalpad		1-1-92	46'69	
		Vayalpad to Dharmavaram		1-3-92	94'14	
		Total Main line . . . . .	...	...	279'18	
		<i>Branch—</i>				
		<i>Gudur branch—</i>				
		Pakala to Tirupati West	Nov. '88	18-3-91	25'05	
		Tirupati to Gudur	15-11-83	15-9-87	59'05	
		Total Branch . . . . .	...	...	84'10	
		TOTAL, VILLUPURAM-DHARMAVARAM SECTION . . . . .	...	...	...	363'21
		TOTAL OPEN MILEAGE, SOUTH INDIAN PROPER . . . . .	...	...	...	1,123'13
		<i>Lines under construction or sanctioned for construction—</i>				
		<i>Marina loop—</i>				
		Saidapet to Madras Beach	9-12-02	...	8'38	
		<i>Pamban branch—</i>				
		Tiruppachetti to Sivagunga	21-4-99	...	9'00	
		Total Lines under construction . . . . .	...	...	...	17'38
		GRAND TOTAL, SOUTH INDIAN PROPER . . . . .	...	...	...	1,140'51
22	(c)	Tinnevelly-Quilon (Travancore branch)—(British section).				
		Tinnevelly to Kallidaikurichi	21-4-99	1-6-02	19'05	
		TOTAL OPEN MILEAGE . . . . .	...	...	...	19'05
		<i>Line under construction or sanctioned for construction—</i>				
		Kallidaikurichi to British frontier near Shencottah	21-4-99	*1-4-03	31'33	
		Total, Line under construction . . . . .	...	...	...	31'33
		TOTAL, TINNEVELLY-QUILON (TRAVANCORE BRANCH)—(BRITISH SECTION) . . . . .	...	...	...	50'38
		Carried over . . . . .	...	...	...	1,190'89

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

2. South Indian railway—concluded.

(vi) *General remarks.*—The line from Negapatam to Erode was commenced in May 1859 by the late Great South Indian Railway Company and was completed on the 5' 6" gauge. It was converted to 3' 3½" gauge in sections as follows:—Negapatam to Trichinopoly, June and July 1875; Trichinopoly to Karur, July 1879; Karur to Erode, December 1879. The line from Arkonam to Little Conjeeveram was commenced on the 11th March 1864 by the Indian Tramway Company under the subsidy system and was completed on the 3' 6" gauge. It was converted to 3' 3½" gauge in July 1878.

On the 1st January 1891, the South Indian railway was purchased by the Secretary of State and handed over, together with the Villupuram-Guntakal State railway, to a new Company called the "South Indian Railway Company Limited," the whole now forming the South Indian railway system.

The Pamban branch has been constructed with the object of placing the island of Ramesvaram in communication with the South Indian railway system.

3. The Tanjore District Board (Mayavaram-Mutupet) railway—

(a) The Tanjore District Board (Mayavaram-Mutupet) railway is worked under the following contract:—

Contract of—22nd July 1897 (between the Secretary of State and the South Indian Railway Company) for working.

(b) The general conditions of the contract are as follows:—

(i) *Government aid.*—Land was provided free of cost.

(ii) *Terms of contract.*—The funds for the Mayavaram-Mutupet section were in the first instance provided in equal proportions by the Government of Madras from Provincial Revenues and by the Tanjore District Board from its railway guaranteed fund created by a special local cess. On the 1st January 1900, the Tanjore District Board took over the Government section and became sole owners, the purchase money Rs. 12,34,720, being treated as a loan at 4 per cent. per annum. The extension of the line is being carried out by the South Indian Railway Company at the cost of the Tanjore District Board.

(iii) *Currency of contract.*—Contract to remain in force until either party gives 12 months notice expiring on the 31st December in any year. The Government of India reserve the right of taking over the whole of the railway at any time, on twelve months' notice by assuming liability for any debentures which the District Board may have issued and by repayment of any further amounts which it may have spent out of its railway guaranteed fund. Under ordinary circumstances, this condition will not be enforced up to 31st December 1920 (Government of India No. 303 R.C., dated 5th March 1898).

(iv) *Terms of working.*—The line is worked for the same percentage of gross receipts as obtain on the undertaking (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year) plus 5 per cent. on the gross receipts of the line for use of rolling-stock, and in addition all other charges properly debitable to revenue.

(v) *Rates and fares.*—To be agreed upon from time to time between Government and Company within the maxima and minima in force on the undertaking.

(vi) *General remarks.*—The money for this railway was raised by the imposition, with the concurrence of the inhabitants or their representatives on the District board, of a special cess of 3 pies in the rupee on all lands which would be served by the railway or benefited by its construction. It was entirely a new departure, and has opened the way for the provision of railways for which Government are unable to find the money either by the District Board itself raising the capital when the cess is sufficient for this purpose, or by guaranteeing a company.

4. Karaikkal-Peralam railway.—

(a) The Karaikkal-Peralam railway is worked under the following contract:—

Contract of—27th March 1902 (between the Government of the French Settlements in India and the South Indian Railway Company) for working.

Appendix 47.
History of railways.

History of railways constructed and in progr

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total
Main.	Sub.					
		SOUTH INDIAN SYSTEM—concluded:				

on the 31st December 1902, alphabetically arranged.

REMARKS.

6. Tinnevely-Quilon (Travancore branch)—(British and Native state sections).—concluded.

(iv) *General remarks.*—The line is partly in British and partly in Native State territories, and is being constructed with the object of placing the Native State of Travancore in communication with the South Indian railway system.

7. Details of construction—

(a) *Permanent-way.*—The main line from the Beach at Madras to Tuticorin is laid with 50lb. rails on east-iron pots; the rest of the line is laid with various descriptions of rails and sleepers.

(b) *Ballast.*—The line is ballasted.

(c) *Bridges.*—The following are the important bridges of 1,000 feet length and over: Palar (between Kolatur North and Padalam), 18 spans of 120 feet; Ponnar (between Serndanur and Panruti), 17 spans of 100 feet; Gadilam (between Nellikuppam and Cuddalore N. T.), 15 spans of 100 feet; New Coleroon (between Chidambaram and Coleroon), 14 spans of 150 feet; Vaigai (between Samayanallur and Madura), 15 spans of 70 feet; Gingee (between Kandamangalam and Villianur), 7 spans of 150 feet; Amravati (between Karur and Pugalur), 20 spans of 50 feet; Palar (between Vellore and Katpadi), 13 spans of 150 feet.

(d) *Fencing.*—The South Indian and Pondicherry railways have stone and wire fencing (with the exception of the Villupuram-Dharmavaram and Pakala-Gudur sections and Pamban branch which are unfenced). The Tanjore District Board (Mayavaram-Puttakkottai) and Karaikal-Peralam railways and Tinnevely-Kallidaikurichi section are unfenced.

(e) *Curves.*—There are only 1.45 miles of curves under a radius of 1,000 feet.

(f) *Gradients.*—Of a total open mileage of 1,235.79 miles on the system, 3.56 miles are on the ruling gradient of 1 in 100.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		SOUTHERN MAHRATTA SYSTEM— (3' 3½" gauge.)				
21	(a)	COMPANY'S SECTION—				
		<i>Main Line—</i>				
		Frontier to Castle Rock . . . . .	...	3-2-88	3'63	
		Castle Rock to Deuli . . . . .	...	15-6-87	2'75	
		Deuli to Dharwar . . . . .	...	24-1-87	56'00	
		Dharwar to Hospet	} Bellary to Hubli, Nov. '81. {	1-7-85	101'25	
		Hospet to Bellary		24-3-84	40'51	
		Bellary to Guntakal . . . . .	...	16-5-87*	29'99	
		Guntakal to Nandyal	} 26-9-83 {	11-7-87	90'25	
		Nandyal to Cumbum		15-6-90	63'18	
		Cumbum to Tadepalli		3-10-89	122'41	
		Total Main line . . . . .	...	...	...	509'97
		<i>Branches—</i>				
		<i>Harihar branch—</i>				
		Hubli to Harihar (temporary station) . . . . .	...	18-10-86	} 81'00	
		Temporary station to permanent station . . . . .	...	21-2-89		
		<i>Bijapur branch—</i>				
		Gadag to Hotgi	April 1879	1-8-84	173'08	
		<i>Poona branch—</i>				
		Londa to Belgaum . . . . .	...	21-3-87	33'00	
		Belgaum to Miraj	} 29-11-83 {	22-12-87	85'01	
		Miraj to Koregaon		2-5-87	76'00	
		Koregaon to Ghorpuri		18-11-86	83'07	
		Ghorpuri to Poona		4-10-90	0'91	
					277'99	
		Total Branches . . . . .	...	...	...	532'07
		GRAND TOTAL, COMPANY'S SECTION . . . . .	...	...	...	1,042'04
		Carried over . . . . .	...	..	...	1,042'04

* Dates of opening of original 5' 6" gauge line: Guntakal to Virapur, 16th January 1871; Virapur to Bellary, 1st March 1871.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Lines comprising system.—The Southern Mahratta railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total Miles.
(a) Southern Mahratta railway (3' 3½" gauge)	1,042·04	...	1,042·04
(b) Mysore section (Southern Mahratta) (3' 3½" gauge)	296·22	...	296·22
(c) Guntakal-Mysore frontier railway (3' 3½" gauge)	119·50	...	119·50
(d) Hindupur (Yesvantpur-Mysore Frontier) railway (3' 3½" gauge)	51·35	...	51·35
(e) Birur-Shimoga railway (3' 3½" gauge)	37·92	...	37·92
(f) Kolhapur railway (3' 3½" gauge)	29·27	...	29·27
(g) Mysore-Nanjangud railway (3' 3½" gauge)	15·80	...	15·80
(h) West of India Portuguese railway (3' 3½" gauge)	51·11	...	51·11
(i) Bellary-Rayadrug (3' 3½" gauge) . . . . .	...	33·00	33·00
(j) Hospet-Kottur (3' 3½" gauge) . . . . .	...	38·10	38·10
Total	1,643·21	71·10	1,714·31

2. Southern Mahratta railway—

(a) The Southern Mahratta railway is worked under the following contracts :—

Contract of—1st June 1882.—Southern Mahratta Railway Company's principal contract.

28th October 1885.—Contract supplemental to that of 1882, for construction and working of the West Deccan railway.

31st August 1887.—Contract supplemental to those of 1882 and 1885, for construction and working of a line from Ranibennur to Harihar and a line from Bellary to Guntakal.

27th February 1889.—Contract supplemental to those of 1882, 1885 and 1887, for completion and working of the Bellary-Kistna railway.

(b) The general conditions of the contracts are as follows :—

(i) *Government aid*.—Interest in sterling on share capital at 3½ per cent. is guaranteed and an additional ½ per cent. until 31st December 1890. Land was also provided free.

(ii) *Terms of contract*.—The contract provides that the Company raise £5,000,000, and that any further moneys required shall be supplied by the Secretary of State.

(iii) *Currency of contracts*.—The contract is current for a period of 50 years. Government may however determine the contract after 25, 35 or 45 years (*i.e.*, on 30th June 1907, 30th June 1917, or 30th June 1927), on one year's previous notice; or on six months notice given at any time if the Company fail to observe their obligations, or the line is worked at a loss. Upon determination of the contract by efflux of time or by notice, Government is to repay to the Company the amount of the par value of the share capital paid to Government.

(iv) *Power of Company to surrender contracts*.—The Company may determine the contract on the 30th June in any year, by giving one year's previous notice.

(v) *Terms of working*.—Up to the 31st December 1890 after deducting working expense (which include any single item of capital expenditure, not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 23,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts belonged to Government unless one-fourth part of the same exceeded the extra guarantee of ½ per cent., in which case the amount of the excess was payable to the Company. After 31st December 1890, three-fourths of the net receipt go to Government and one-fourth to the Company.

(vi) *Rates and fares*.—To be fixed from time to time by the Company with the approval of Government.

(vii) *General remarks*.—The Bellary branch of the Madras railway from Bellary to Guntakal was made over to the Southern Mahratta Railway Company on the 1st February 1887, and was converted from 5' 6" to 3' 3½" gauge on the 16th May 1887.

3. Mysore section (Southern Mahratta)—

(a) The Mysore section is worked under the following contract :—

Contract of—31st August 1887 (between the Secretary of State and the Southern Mahratta Railway Company) for construction, maintenance and working.

(b) The general conditions of the contract are as follows :—

(i) *Government aid*.—Guarantee of interest in sterling at 4 per cent. on £ 1,200,000 debenture stock.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		SOUTHERN MAHRATTA SYSTEM—continued. (3' 3½" gauge.)				
		Brought forward . . . . .	...	...	...	1,042'04
21	(8)	MYSORE SECTION—				
		Mysore to Mandya	20-9-77	25-2-82	28'11	
		Mandya to Channapatna		20-3-81	23'25	
		Channapatna to Bangalore		1-2-81	34'75	
		Bangalore to Tumkur	6-10-82	11-8-84	43'00	
		Tumkur to Gubbi	18-1-84	26-12-84	11'00	
		Gubbi to Birur . . . . .	...	12-8-89	76'57	
		Birur to Harihar . . . . .	...	21-2-89	79'68	
		TOTAL, MYSORE SECTION . . . . .	...	...	...	296'22
		Carried over . . . . .	...	...	...	1,338'26

REMARKS.

3. Mysore section (Southern Mahratta)—concluded.

(b) General conditions—concluded.

- (ii) *Terms of contract.*—To meet the cost of constructing the Gubbi-Harihar extension, the Company raised £1,224,000, by the issue of debenture stock for the nominal amount of £1,200,000. The stock is redeemable on or after the 1st March 1936. The contract provides that the Company raise £1,224,000, and that any further moneys required be supplied by the Secretary of State. All moneys whatsoever received by or on behalf of the Company in respect of the undertaking are the absolute property of the Secretary of State during the continuance of this contract.
- (iii) *Currency of contract.*—Government may determine the contract at any time, on six months' notice should the Company fail to observe their obligations, or the line be worked at a loss. It is also provided that should the Company's contract for the Southern Mahratta system determine, then this contract also determines. On the termination of the contract, the Secretary of State, if so required by the Company, takes over all liability in respect of the debenture stock issued by the latter (which is not redeemable until the 1st March 1936).
- (iv) *Power of Company to surrender contract.*—Nil.
- (v) *Terms of working.*—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) the net receipts are divided in proportion of three-fourths to Government and one-fourth to the Company.
- (vi) *Rates and fares.*—To be fixed from time to time by the Company with the approval of Government.

4. Guntakal-Mysore Frontier railway.—

(a) The Guntakal-Mysore Frontier section is worked under the following contract:—

Contract of—21st August 1898 (between the Secretary of State and the Southern Mahratta Railway Company) for construction and working.

(b) The general conditions of the contract are as follows:—

- (i) *Government aid.*—The line is the property of Government.
- (ii) *Currency of contract.*—The same as the Southern Mahratta railway.
- (iii) *Power of Company to surrender contract.*—The same as the Southern Mahratta railway.
- (iv) *Terms of working.*—The working expenses of the entire system of railways worked by the Company (including this railway) exclusive of Government supervision charges of the Southern Mahratta Railway and Mysore section are divided between this railway and the other railways worked, in proportion to their gross receipts. This railway's share of the working expenses is retained from its gross receipts. The residue is paid to Government.
- (v) *Rates and fares.*—To be fixed from time to time by the Company with the approval of Government.

5. Hindupur (Yesvantpur-Mysore Frontier) and Birur-Shimoga railways—

(a) The Hindupur and Birur-Shimoga railways are worked under the following contract:—

Contract of—2nd December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for working and maintenance.

(b) The general conditions of the contract are as follows:—

- (i) *Government aid.*—The lines are the property of the Mysore State.
- (ii) *Currency of contract.*—Either party may determine the contract, on giving twelve months' notice, on the 31st December 1904, or on the 1st January or 1st July in any year thereafter. If not determined sooner, the agreement terminates, without prior notice, on the date the Mysore contract of the 31st August 1887 terminates. On the determination of the contract, the Mysore Government resume possession of the railway and take over the liabilities incurred by the Company on behalf of the railway, and the working stores belonging to the railway at a valuation.
- (iii) *Terms of working.*—The working expenses of the system excluding expenditure on New Minor Works are divided between these railways and the others, comprising the system in proportion to their gross earnings. The company retain the share attributable to these lines (which include any single item of capital expenditure not exceeding Rs. 1,000 or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pay the residue to the Mysore Durbar.
- (iv) *Rates and fares.*—To be fixed from time to time by the Company with the approval of Government.

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		SOUTHERN MAHRATTA SYSTEM—continued.				
		Brought forward . . . . .	...	...	...	1,338'26
21	(c)	GUNTAKAL-MYSORE FRONTIER— (3' 3½" gauge.)				
		Guntakal to Dharmavaram	June '89	1-3-93	62'95	
		Dharmavaram to Hindupur	26-1-91	23-4-93	49'28	
		Hindupur to Mysore Frontier	August '91	17-9-93	7'27	
		TOTAL, GUNTAKAL-MYSORE FRONTIER . . . . .	...	...	...	119'50
21	(d)	HINDUPUR (YESVANTPUR-MYSORE FRONTIER)— (3' 3½" gauge.)				
		Yesvantpur to Dodballapur	} March '90 {	15-12-92	19'93	
		Dodballapur to Mysore Frontier		17-9-93	31'42	
		TOTAL, HINDUPUR . . . . .	...	...	...	51'35
21	(e)	BIRUR-SHIMOGA— (3' 3½" gauge.)				
		Birur to Shimoga	12-8-96	1-12-99	37'92	
		TOTAL, BIRUR-SHIMOGA . . . . .	...	...	...	37'92
21	(f)	KOLHAPUR— (3' 3½" gauge.)				
		Kolhapur to Miraj	February '88	21-4-91	29'27	
		TOTAL, KOLHAPUR . . . . .	...	...	...	29'27
21	(g)	MYSORE-NANJANGUD— (3' 3½" gauge.)				
		Mysore to Nanjangud . . . . .	...	1-12-91	14'90	
		Nanjangud station to Nanjangud town . . . . .	...	12-7-99	0'76	
		TOTAL, MYSORE-NANJANGUD . . . . .	...	...	...	15'80
21	(h)	WEST OF INDIA PORTUGUESE— (3' 3½" gauge.)				
		Mormugao to Sonauli	} 18-4-88 {	17-1-87	41'00	
		Sonauli to the Portuguese frontier		3-2-88	10'11	
		TOTAL, WEST OF INDIA PORTUGUESE . . . . .	...	...	...	51'11
		GRAND TOTAL, OPEN MILEAGE, SOUTHERN MAHRATTA SYSTEM				1,643'21
		<i>Lines under construction or sanctioned for construction—</i>				
		<i>Famine lines (Madras Presidency)—</i>				
21	(i)	BELLARY-RAYADRUG— (3' 3½" gauge.)				
		Bellary to Rayadrug	24-10-02	...	33'00	
21	(j)	HOSPET-KOTTUR— (3' 3½" gauge.)				
		Hospet to Kottur	24-10-02	...	38'10	
		TOTAL, LINES UNDER CONSTRUCTION . . . . .	...	...	...	71'10
		GRAND TOTAL, SOUTHERN MAHRATTA SYSTEM . . . . .	...	...	...	1,714'31

on the 31st December 1902, alphabetically arranged.

REMARKS:

6. Kolhapur railway.—

(a) The Kolhapur railway is worked under the following contract:—

Contract of—17th July 1891 (between the Kolhapur Darbar and the Southern Mahratta Railway Company) for working and maintenance.

(b) The general conditions of the contract are as follows:—

(i) *Government aid.*—The line is the property of the Kolhapur State.

(ii) *Currency of contract.*—The contract may be terminated, upon six months' notice, by either party.

(iii) *Terms of working.*—The working expenses of the system excluding Government supervision charge and New Minor Works are divided between this railway and the others comprising the system in proportion to their gross earnings. The Company retain the share attributable to these lines (which include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pay the residue to the Kolhapur Durbar.

(iv) *Rates and fares.*—The same as in force on the Southern Mahratta railway.

7. Mysore-Nanjangud railway.—

(a) The Mysore-Nanjangud railway is worked under the following contract:—

Contract of—14th December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for working.

(b) The general conditions of the contract are as follows:—

(i) *Government aid.*—The line is the property of the Mysore State.

(ii) *Currency of contract.*—The contract is terminable on the 1st January or 1st July in any year on six months' notice by either party. If not terminated sooner, this agreement terminates on the date on which the Mysore contract of the 31st August 1887 terminates. On determination, the Company make over to the Mysore Government the railway and works and pay to that Government all moneys on account of the railway, the Government indemnifying the Company against all debts and liabilities incurred on account of the railway then subsisting. The working stores, if mutually agreed, to be taken over by the Mysore Government at a valuation.

(iii) *Terms of working.*—After deduction of expenditure on new minor works, which is debited to each railway direct, from the total working expenses of the Company's railway system, the balance is divided between the Nanjangud railway and the other railway comprised in the Company's system in the proportion which the gross receipts of the Nanjangud railway bear to the gross receipts of such other railways, and the sum so ascertained, together with any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000, but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, representing the working expenses of the Nanjangud railway retained by the Company, and the residue paid to the Mysore Government.

(iv) *Rates and fares.*—To be fixed by the Company with the approval of Government.

8. West of India Portuguese railway—

(a) The West of India Portuguese railway is worked under the following contracts:—

Contract of—18th April 1881, modified by the contract of 19th December 1892 (between the Portuguese Government and the West of India Portuguese Railway Company) for the construction of a harbour at the Port of Mormugao and a railway from Mormugao to the Portuguese Frontier.

18th March 1902, between the Southern Mahratta Railway Company and the West of India Portuguese Railway Company for the maintenance and working of the railway from Mormugao to the Portuguese Frontier and the harbour at the Port of Mormugao.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class : No.		Name and sections of railway:	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		SOUTHERN MAHRATTA SYSTEM—continued.				

on the 31st December 1902, alphabetically arranged.

REMARKS.

8. West of India Portuguese railway—concluded.

(b) The general conditions of the contracts are as follows:—

- (i) *Government (Portuguese) aid.*—Five per cent. per annum is guaranteed to the West of India Portuguese Railway Company on £ 800,000 and 6 per cent. on £ 550,000.
- (ii) *Currency of contracts.*—The contract of 1881 is current for a period of 99 years from date of opening, when the line and all its appurtenances become the property of the Portuguese Government by payment to the Company of the value of rolling-stock, moveable machinery, stores, etc. The Portuguese Government may, however, determine the contract at any time, on six months' previous notice, by payment in sterling of the actual outlay of the Company on the railway, telegraph and other works, with 10 per cent. added thereto, together with the then value of rolling-stock, machinery, station appliances and stores. The contract of 1902, between the Southern Mahratta and West of India Portuguese Railway Companies which took effect from the 1st July 1902 is to continue in force, for five years subject to amendment or determination after two years on six months' notice by either party.
- (iii) *Power of Company to surrender contract.*—By the contract of 1881 as modified by that of 1892 the West of India Portuguese Railway Company can at any time surrender the contract by giving six months' notice if the Portuguese Government fail to pay in full the interest guaranteed on their capital. On surrender of the contract, the Portuguese Government are to pay to the Company in sterling an amount equal to the total capital expended on the railway, telegraph, etc., and in addition 10 per cent. of such expenditure; and also purchase the rolling-stock, machinery, etc., at a valuation.
- (iv) *Terms of working by Southern Mahratta Railway Company.*—The West of India Portuguese and Southern Mahratta railways are worked as one concern and the expenses of the system (exclusive of expenditure on 'New Minor Works' and of interest payable by the Southern Mahratta railway on the capital cost of telegraph lines) divided in proportion to their gross earnings, the net earnings to be applied—In payment of a contribution sanctioned by the Portuguese Government towards a reserve fund; in payment of the guaranteed dividends on the capital of the Company; and in payment of the residue to the Portuguese Government and the Company in equal proportions.

The contract of 1902 provides that a separate account be kept of the revenue transactions at the Port of Mormugao, and the amount to be charged for working to be the actual expenses of working and maintenance plus 10 per cent. thereon for supervision by the Southern Mahratta railway, subject to the provision that the relation of the aggregate expenses of working—including supervision—to the total receipts shall not exceed, without the sanction of the West of India Portuguese railway, the mean of the figures which represent the relation of such expenditure to receipts during the years 1895, 1896 and 1899; should any such excess occur it is to be annulled or reduced as much as possible by a corresponding diminution in the charge for supervision.

- (v) *Rates and fares.*—Subject to the maxima prescribed in the contract between the Portuguese Government and the West of India Portuguese railway and to the maxima and minima prescribed in the contracts between the Secretary of State and the Southern Mahratta railway the rates both for through and local working shall be fixed from time to time by the Southern Mahratta railway and shall be applicable to the whole system.

The shipping and port charges to conform with those in force under the Bombay Port Trust, and not to exceed those charges without the mutual consent of the British and Portuguese Governments.

- (vi) *General remarks.*—The line was constructed with the object of connecting the British and Portuguese territories and of affording the Southern Mahratta country a harbour on the West coast. The Southern Mahratta railway took over the working of the line as from the 1st July 1902.

9. Bellary-Rayadrug—
and
10. Hospet-Kottur— } With the object of increasing the facilities for distributing food to the population in the Madras Presidency and of lessening the difficulties and troubles incidental to periods of scarcity, sanction was accorded to the construction of these feeder lines (see also Madras railway system).

11. General remarks—The Southern Mahratta railway has running powers over 2.97 miles of the North-East line, Madras railway, from Tadepalli to Bezwada.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
		SOUTHERN MAHRATTA SYSTEM—concluded.				
6	(b)	SOUTHERN PUNJAB (DELHI-SAMASATA). (See North Western system, page 366.)				
22	(b)	TANJORE DISTRICT BOARD (MAYAVARAM-MUTUPET RAILWAY)— (See South Indian system, page 388.)				
8	(b)	TAPTI VALLEY. (See Bombay, Baroda and Central India system, page 280.)				

on the 31st December 1902, alphabetically arranged.

REMARKS.

12. Details of construction—

(a) *Permanent-way*—

Southern Mahratta railway.—The permanent-way consists of 41½ lb. steel rails on wooden and steel sleepers, except for the portion from the Portuguese Frontier to Castle Rock which is laid with 62 lb. rails. A portion of the line is being relaid with 50 lb. rails.

Mysore section, Birur-Shimoga and Mysore-Nanjangud railways.—The permanent-way consists of 41½ lb. steel rails laid on Mysore teak sleepers. The Bhadra bridge is laid with 50 lb. steel rails.

Guntakal-Mysore Frontier and Kolhapur railways.—The permanent-way consists of 41½ lb. flat-footed steel rails laid on steel sleepers.

Hindupur railway.—The rails used are of the State railway type, weighing 50 lb. to the yard on the ghat section, 11 miles in length, and 41½ lb. to the yard on the remainder of the line. The sleepers are of Mysore teak throughout.

West of India Portuguese railway.—The permanent-way throughout is of 62 lb. State railway type with ten sleepers to the rail. The sleepers used are creosoted pine, sal, teak and jamba.

(b) *Ballast.*—The system is ballasted throughout.

West of India Portuguese railway.—The line is ballasted with laterite and blue stone.

(c) *Tunnels.*—The following are the important tunnels of 500 feet length and over:—Castle Rock (between Dadrajar and Castle Rock), 1,242 feet; Nandiconama (between Chelama and Diguvametta), 1,527 feet; tunnel at mile 265½, 560 feet; tunnel No. 1 (between Phursangi and Alandi), 536 feet; tunnel No. 2 (between Rajiwadi and Alandi), 630 feet; and tunnel at mile 214.2 (between Wathar and Adhorki), 500 feet. There are two other tunnels aggregating 684 feet in length.

West of India Portuguese railway.—The following are important tunnels of 500 feet length and over:—Tunnel No. 1 (below Dudhsagar) 504 feet; Tunnel No. 5 (near Dudhsagar) 665 feet; and Tunnel No. 10 (above Dudhsagar) 842 feet. There are nine other tunnels and 2 covered ways, 2 of which are over 500 feet in length.

(d) *Bridges.*—The important bridges of 1,000 feet length and over are as follows:—Tungabhadra (between Muniabad and Hospet), 38 spans of 60 feet; Hagari (between Bellary and Hagari), 34 spans of 64 feet (2,396 feet); Kistna (between Kudchi and Shedbal), 14 spans of 150 feet (2,339.50 feet); Ghatprabha (between Dhupdhal and Gokak Road), 45 spans of 40 feet; Malprabha (between Alur and Badami), 12 spans of 100 feet; Kistna (between Sitimani and Alimati), 21 spans of 150 feet (2,392 feet); Bhima (between Lachyan and Tadval), 14 spans of 150 feet (2,342 feet); Wardha (between Hattimattur and Karajgi), 15 spans of 60 feet; Tungabhadra (between Chalgeri and Harihar), 16 spans of 60 feet; Pennar (between Khadarpett and Kalluru), 11 spans of 150 feet (1,740 feet); Raptad (between Anantapur and Kandukur), 14 spans of 64 feet; Cauvery (between French Rocks and Seringapatam), 9 spans of 30 feet, and 24 spans of 27½ feet; Cauvery (between Seringapatam and Pascham-vahini), 13 spans of 30 feet, and 16 spans of 27½ feet and Dhorabvi viaduct (between Chelama and Diguvametta), 1 span of 250 feet, 2 spans of 150 feet and 1 span of 66½ feet (670 feet).(e) *Fencing.*—The system is only partially fenced, except the Hindupur railway, which is fenced throughout.

West of India Portuguese railway.—The line is partially wire fenced.

(f) *Curves.*—The sharpest curves vary from 600 feet to 955 feet radius.

West of India Portuguese railway.—The sharpest curve is of a radius of 720 feet.

(g) *Gradients.*—Of a total open mileage of 1,643.21 miles on the system 15.40 miles are on the ruling gradient of 1 in 40.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
26	(a)	TARAKESHWAR-MAGRA LIGHT.— (2' 6" gauge).				
		Tarakeshwar to Basua	} 18-12-91 {	7-11-94	12.50	
		Basua to Magra		8-3-95	18.62	
		TOTAL, TARAKESHWAR-MAGRA. . . . .	...	...	...	31.12
1	(a)	TARKESSUR— (See East Indian system, page 322.)				

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Tarakeshwar-Magra Light railway—

(a) The Tarakeshwar-Magra Light railway is maintained and worked on the terms in Bengal Government, Public Works Department, Notification No. 1 of the 4th January 1896 under the following agreement :—

Agreement of—16th October 1890 (between the District Board of Hooghly and the Bengal Provincial Railway Company).

(b) The general conditions are as follows :—

(i) *Currency of contract.*—In the event of the District Board wishing to purchase the railway at the end of 21 years, under the provisions of section 41 of the Bengal Tramways Act, 1883, the promoters bind themselves to make it over at a price two-fifths in excess of the original capital outlay.

(ii) *Terms of working.*—The line is worked by the owning Company.

(iii) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary its rates.

(iv) *General remarks.*—On the 13th January 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

2. Details of construction—

(a) *Permanent-way.*—The permanent-way consists of flat-bottomed steel rails, weighing 30lb. to the yard, laid on patent steel sleepers for 10 miles and pyinkado wood sleepers for the remainder.

(b) *Ballast.*—The line is laid with sand ballast and brick boxing.

(c) *Fencing.*—The line is partially fenced.

(d) *Curves.*—The sharpest curve is of 955 feet radius and is 0·18 mile in length.

(e) *Gradients.*—Of a total open mileage of 31·12 miles, 0·49 mile is on the ruling gradient of 1 in 350.

Appendix 47.
History of railways.

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	
Main.	Sub.				Miles.	Miles.	
28	(a)	TEZPUR-BALIPARA LIGHT—					
		(2' 6" gauge).					
		Tezpur ghat to Bindukuri	} Oct. 1894	{	9-8-94	8'10	
		Bindukuri to Balipara			1-9-95	12'00	
	TOTAL, TEZPUR-BALIPARA	...	...	...	20'10	

DIX 47—continued.

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Tezpur-Balipara Light railway.—

(a) The Tezpur-Balipara Light railway is maintained and worked under—

Terms—contained in notification issued by the Chief Commissioner of Assam under No. 33 of 1st June 1895.

(b) The general conditions are as follows:—

(i) *Government aid*.—Land alone was provided free of cost.(ii) *Currency of terms*.—The Secretary of State can, after the railway has been opened for fifteen years and thereafter at intervals of seven years, terminate the contract, and take over the railway with all its equipments, buildings and property, upon giving 12 months' previous notice, and on paying the Company the value of the property as a dividend earning investment together with an additional bonus of 20 per cent. over and above such value.(iii) *Terms of working*.—The line is worked by the owning Company.(iv) *Rates and fares*.—Certain rates and fares have been fixed.(v) *General remarks*.—On the 3rd May 1898, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

2. Details of construction.—

(a) *Permanent-way*.—The permanent-way consists of flat-bottomed steel rails, weighing 30lb. to the yard, laid on uriam and nahor sleepers, 2,200 to the mile.(b) *Ballast*.—The line is unballasted.(c) *Fencing*.—The line is fenced round stations only.(d) *Curves*.—There are two curves of a radius of 500 feet on the first mile, the lengths of which are 294 feet and 450 feet, respectively. In station yards the minimum radius is 300 feet.(e) *Gradients*.—Of a total open mileage of 20·10 miles, 0·66 mile is on the ruling gradient of 1 in 100.

Class : No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
33	(a)	THATON-DUYINZAIK LIGHT— (2' 6" gauge.) Thaton to Duyinzaik TOTAL, THATON-DUYINZAIK	1883 ...	11-2-85 ...	776 ...	776
22	(c) & (f)	TINNEVELLY-QUILON (TRAVANCORE BRANCH.) (British and Native State sections)— (See South Indian system, pages 386 and 388.)				
16	(b)	TIRHOOT— (See Bengal and North-Western system, page 260.)				
10	(h)	TIRUPATTUR-KRISHNAGIRI— (See Madras system, page 350.)				

on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Thaton-Duyinzaik Light railway—

(a) The Thaton-Duyinzaik Light railway is worked under the following contract:—

Contract of—10th January 1884 (between the Secretary of State and the late Mr. G. E. L. Dawson of Rangoon) for construction and working.

(b) The general conditions of the contract are as follows:—

(i) *Government aid*.—Land has been provided at a pepper-corn rent. Under an Agreement, dated 6th June 1896, the proprietors receive Rs. 350 per mensem for the carriage of mails between Moulmein and Thaton *via* Duyinzaik, including both steamer and railway journeys.

(ii) *Currency of contract*.—The contract is in force for a period of 99 years. After the railway has been open for 30 years, and thereafter at intervals of 10 years, the Secretary of State can terminate the contract and take over the railway, upon giving 12 months' notice, and paying the value of the permanent-way, buildings and rolling-stock, together with a bonus of 25 per cent. on the value. Government may also determine the contract, if the railway is not worked for six consecutive calendar months, or if the proprietors fail to carry out the agreement.

(iii) *Terms of working*.—The railway is now worked and maintained by the Irrawaddy Flotilla Company, who bought the concern on the 1st December 1900.

(iv) *Rates and fares*.—Certain maxima have been fixed within which the proprietors are permitted to vary the rates.

2. Details of construction.—

(a) *Permanent-way*.—The rails are steel, Vignole's section, and weigh 20lb. to the yard; the sleepers are of steel and wood.

(b) *Ballast*.—The line is ballasted.

(c) *Fencing*.—The line is unfenced.

(d) *Curves*.—The total length of curves under a radius of 1,000 feet is 1,343 feet, the radii varying from 207 feet to 500 feet.

(e) *Gradients*.—Of a total open mileage of 7.76 miles, 0.82 mile is on the ruling gradient of 1 in 80.

Appendix 47.
History of railways.

APPEN

History of railways constructed and in progress

Class: No.		Name and sections of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main.	Sub.				Miles.	Miles.
19	(a)	UDAIPUR-CHITOR— (3' 3½" gauge.)				
		Berach near Chitorgarh to Debari near Udaipur	Feby. 1894	1-8-95	60.39	
		Separate station at Chitorgarh	} 2-6-98 {	15-8-98	0.47	
		Debari to Udaipur		25-8-99	6.44	
		TOTAL, UDAIPUR-CHITOR	...	...	...	67.30
8	(j)	VIJAPUR-KALOL-KADI— (See Bombay, Baroda and Central India system, page 288.)				
21	(h)	WEST OF INDIA PORTUGUESE— (See Southern Mahratta system, page 396.)				

DIX 47—concluded.
on the 31st December 1902, alphabetically arranged.

REMARKS.

1. Udaipur-Chitor railway—

The line is owned and has been worked by the Udaipur State, since the 31st December 1897, prior to which date it was worked by the Bombay, Baroda and Central India railway as a temporary measure.

2. Details of construction—

- (a) *Permanent-way*.—The permanent-way consists of 41½ lb. flat-footed steel rails, 30 feet long, laid on deodar sleepers.
- (b) *Ballast*.—The ballast consists of broken stone.
- (c) *Fencing*.—The line is fenced round stations only.
- (d) *Curves*.—On the Berach-Debari section, the sharpest curve is of 1,146 feet radius and is 0·54 mile in length; and on the extension from Debari to the Ahr river near Udaipur, at the 61st mile, the sharpest curve has a radius of 820 feet and is 0·16 mile in length.
- (e) *Gradients*.—Of a total length of 67·30 miles, 0·46 mile are on the ruling gradient of 1 in 100.

Appendix 48.
Cost of bridges.

Cost and particulars of some of the large railway bridges in India up to the 31st December (Referred to in part)

APPE

RAILWAY.	Serial No.	NAME OF BRIDGE.	Date of opening.	No. of spans.	Span in clear.	Length of bridge.	Depth of foundation below low-water.	Height from low-water level to underside of girders.	Total weight of girders.	Cost of work to Girders-level.			
					Feet.	Feet.	Feet.	Feet.	Tons.	Rs.			
G. & S. GAUGES.)	1	Sone	22nd Dec. 1862	28	150'00	4,726'00	32	35'60	3,702'00	...			
	2	Jumna (Allahabad)	15th Aug. 1865	16	14 of 200'00 2 of 30'00	3,150'00	42	58'75	4,300'00	29,86,000			
	3	Jumna (Delhi)	1st Jan. 1867	12 2	211'30 30'00	2,697'00	7 to 39	24'00	3,491'00	5,28,473			
	4	Jubilee (over the Hooghly, between Hooghly station on the E. I. R. and Naihati on the E. B. S. R.) Do. Approach viaducts { Naihati Hooghly .	15th Mar. 1887	2	523'67	1,213'25	98'50	55'00	3,460'15	(f) 10,71,653			
				1	106'50								
				29	10'83						44'00
				35	10'83						
				74	29'17						3,278'00
				1	25'83						
	1	43'00	...	...							
1	48'00	...	...								
1	200'00	...	...								
5	Barakar	4th Sept. 1893	5 6	150'00 100'00	(i) 1,850'00	(j) 5 to 85(k)	(l)	1,307'00	4,13,000				
6	Sone (Delhi) †	22nd Feb. 1900	5 93	(h) 29'25 100'00	10,052'00	38'00	26'50	6,510'00	14,28,857				
7	Tonse	4th April 1864	2 2	150'00 32'00	1,194'00	27'75	89'67	1,207'00	8,74,865				
8	Kanhan	1st Sept. 1887	6	170'00	1,237'00	9 to 26	50'00	1,061'10	3,81,109				
9	Weingaaga	29th April 1889	2 9	60'00 150'00	1,450'00	21	54'00	1,734'47	(e) 7,38,652				
10	Sheonath No. II	31st May 1889	14	150'00	2,250'00	6 to 12	57'00	1,912'40	4,91,353				
BENGAL-NAGPUR.	11	Eeb	1st Aug. 1890	9	150'00	1,461'00	42 to 55	38'00	1,229'40	2,63,515			
	12	Damoodar	12th June 1890	10	200'00	2,364'00	4 to 75	40'75	2,330'00	3,62,448			
				2	100'00								
	13	Sahaarika	6th Mar. 1899	11	150'00	1,908'00	65'00	30'00	1,553'00	5,39,016			
				2	60'00								
	14	Byturney	15th Oct. 1899	15	150'00	2,400'00	73'01	27'73	2,173'00	4,97,249			
	15	Brahmini	15th Oct. 1899	29	150'00	4,640'00	78'06	31'83	4,162'00	10,36,691			
	16	Barupa	15th Oct. 1899	16	100'00	1,728'00	45'18	32'96	1,172'80	3,42,919			
	17	Mahanadi	11th Mar. 1900	64	100'00	6,912'00	68'80	28'54	4,691'20	15,17,666			
	18	Kuakhai	7nd April 1900	19	150'00	3,212'00	80'73	36'32	2,870'00	7,74,933			
19	Kathjori	2nd April 1900	18	150'00	2,890'00	80'81	40'32	2,583'00	7,39,340				
20	Rooparain	19th April 1900	7	300'00	2,632'00	88'00	39'75	4,163'00	26,45,904				
			4	100'00									
21	Cossye . . . . .	...	16	100'00	...	...	...	...	...
INDIAN MIDLAND.	22	Chumbal	15th May 1891	12	186'00	2,714'00	75	107'20	3,026'00	17,39,057			
				2	136'00								
	23	Jumna (Kalpi)	1st Feb. 1888	10	250'00	2,626'00	90	77'00	3,200'00	12,65,842			
	24	Betwa (Manikpur)	5th June 1889	13	150'00	2,166'00	13	91'04	1,772'30	8,19,541			
				1	60'00								
	25	Ken (Banda)	1st Aug. 1889	12	100'00	1,558'00	4	70'82	1,125'30	3,92,243			
26	Betwa (Lalitpur)	1st Jan. 1889	9	250'00	1,446'00	12	58'14	1,200'86	4,09,749				
PAL-ROSI.	27	Norbudda	18th Nov. 1884	14	150'00	2,306'00	4	64'50	1,980'00	3,45,606			
				1	60'00								

DIX 48.

Appendix 48.
Cost of bridges.1902, of 1,000 feet length and over and costing not less than Rs. 6,00,000 each.
(graph 49 of Report).

Total cost of girders.	Cost of protective works.	Total cost, including cost of protective works.	Cost per lineal foot, excluding protective works where separately stated.	Cost of erection of girders per ton.	Serial No.	REMARKS.
Rs.	Rs.	Rs.	Rs.	Rs.		
(a) 10,33,324	...	(b) 43,33,324	917	79	1	Has the rails above and the roadway below. The roadway was subsequently doubled. (a) Represents the cost of the second line only. (b) Represents the total expenditure on the bridge debited to Capital, and includes some special items not separately detailed, as well as the cost of iron work for the first line.
(c) 14,63,300	...	(d) 44,46,300	1,412	110	2	The substructure of this bridge is for a double line, but the girders are erected for a single line only. It has the rails above and the roadway below. (c) Of this amount Rs. 13,13,000 represents the cost of girders, and Rs. 1,47,300 the cost of upper and lower roadways. (d) Represents the total expenditure on the bridge debited to Capital, and includes some special items not separately detailed.
10,49,779	...	(e) 16,60,335	616	74	3	The girders of this bridge are erected for a double line. It has the rails above and the roadway below. (e) Represents the total expenditure on the bridge debited to Capital and includes some special items not separately detailed.
21,78,858	1,21,184	33,71,689	2,679	(g) 350	4	The approach viaducts are brick arches.
...	...	64,611	147	...		
...	...	4,80,263	147	...		
3,79,078	(m) 13,726	8,05,806	428	58	5	(k) In viaducts. (i) From front to front of abutments. (j) On rock. (k) In sand. (l) Deck bridge various; 75 feet to rails. (m) Stone round piers only. No training works.
16,85,480	1,18,393	*32,32,730	310	30	6	† The superstructure of this bridge is for a double line, but the girders are erected for a single line only, hanging decked with corrugated steel floor plates. Hand rails on both sides, and a foot way below between girders for inspection. Rails above. * Approximate.
4,54,473	...	(n) 14,08,401	1,180	138	7	(n) Including Rs. 79,063 on account of cost of flooring.
2,78,832	13,174	6,72,915	533	Not known	8	
(p) 2,42,833	(q) 22,248	10,02,733	677	43	9	Has been converted from 3' 3½" to 5' 6" gauge. The expenditure shown represents the cost of the bridge as a 5' 6" gauge one. The 3' 3½" gauge was opened on the 7th June 1889 and 5' 6" gauge on the 29th April 1889.
3,91,240	...	8,83,593	393	87	10	(o) Including the cost of the old 3' 3½" gauge bridge (Rs. 6,74,612). (p) Actual cost of girders only. The cost of the 3' 3½" gauge girder removed, which is not included in these figures, was Rs. 2,40,303. (q) Cost of protective works as it was on the 3' 3½" gauge bridge.
3,42,958	23,856	6,30,329	415	...	11	
6,26,230	40,328	10,39,006	422	65	12	
4,16,274	37,033	9,30,048	468	69	13	
4,94,615	29,299	10,26,174	415	33	14	
9,55,213	1,13,651	21,41,731	437	34	15	
2,78,777	26,602	6,74,882	375	40	16	
11,69,130	88,282	27,91,784	391	35	17	These figures are not final.
7,14,971	37,714	15,27,183	464	36	18	
6,39,649	35,741	14,10,446	476	35	19	
11,60,261	...	39,37,438	1,496	279	20	
...	...	6,37,102	...	...	21	
9,02,295	6,29,683	32,71,035	973	78	22	
11,41,231	1,59,564	25,66,637	917	107	23	The abutments and piers are built for a double line, but the girders are erected for a single line only, with a roadway on the same level which has been brought into use from the 1st May 1895.
5,74,179	...	13,93,720	643	85	24	
3,39,954	...	7,32,197	471	84	25	
3,59,308	2,615	7,64,672	527	64	26	The abutments are built for a double line.
5,77,925	...	(r) 9,44,171	422	85	27	(r) Including some special items not separately detailed.

Appendix 48.
Cost of bridges.

APPEN

Cost and particulars of some of the large railway bridges in India up to the 31st December
Referred to in part

RAILWAY.	Serial No.	NAME OF BRIDGE.	Date of opening.	No. of spans.	Span in clear.	Length of bridge.	Depth of foundation below low-water.	Height from low-water level to underside of girders.	Total weight of girders.	Cost of work to girder-level.
					Feet.	Feet.	Feet.	Feet.	Tons.	Rs.
NORTH WESTERN STATE.	28	Sutlej (Ludhiana)	January 1870	(a) 47	4 of 71'00 41 of 99'00 1 of 99'67 1 of 96'67	3,131'00	28 to 42	20'79	(b) 2,314'00	20,97,296
	29	Beas	April 1869	34	2 of 120'00 32 of 100'00 22 of 99'00	3,828'00	43 to 70	20'00	1,660'00	15,66,476
	30	Jumna (Saharanpur)	January 1869	24	2 of 100'00	2,674'75	39 to 41	19'00	1,308'00	7,64,430
	31	Kaisar-i-Hind (over the Sutlej at Ferozepore)	8th May 1887	27	144'50	4,493'00	78	21'00	6,000'00	14,48,037
	32	Ravi as originally constructed	12th April 1875	33	90'00	3,217'00	75	20'00	1,410'00	(c) 9,50,202
		Ravi as reconstructed	15th July 1893	15	90'00	1,465'00	75	19'00	1,381'00	...
	33	Alexandra (over the Chenab between Warisabad and Kathala) as originally constructed	22nd Jan. 1876	64	133'50	9,083'00	75	20'00	5,248'00	24,03,756
		Alexandra as reconstructed	1st Nov. 1891	28	133'50	3,926'00	75	20'00	5,073'40	22,020
	34	Jhelum as originally constructed	Towards end of 1876.	50	90'00	4,874'00	30	20'75	2,150'00	6,90,137
		Jhelum as reconstructed	20th Nov. 1895	50 1 land span.	90'00 18'50	4,899'42	30	22'63	2,475'00	1,79,770
	35	Attock	24th May 1883	5	2 of 296'25	1,522'00	(d)	111'00	2,202'00	14,77,560
					3 of 246'25					
					2 land spans.	40'00				
	36	Empress (over the Sutlej at Adaswahian)	8th June 1878	16	250'00	4,210'00	100	32'07	6,702'00	26,98,885
	37	Victoria (over the Jhelum at Chak Nizam)	16th May 1887	17	135'00	2,720'00	82	19'00	2,988'00	7,73,481
	38	Lansdowne over the Indus at Sukkur—	27th Mar. 1889	1 1 1	790'00	900'00	None in river	51'00	3,292'00	3,88,320
					270'00					
					230'00					
					90'00	620'00	6	46'00	1,014'00	1,79,468
	39	Sher Shah (over the Chenab at Sher Shah)	1st Feb. 1890	17	200'00	3,650'00	75	29'00	3,740'00	10,84,453
40	Indus (Kotri)	25th May 1900	1 5	100'00 350'00	1,948'00	49 to 60	40'00	4,761'00	6,93,691	
41	Sohan	1st April 1899	1 4 2	119'00	1,204'50	(e)	96'00	1,150'00	5,91,487	
				200'00						
				100'00						
42	Gumti (Jaunpur)	24th Dec. 1874	16	82'00	1,472'00	45 to 50	44'17	811'00	4,21,530	
43	Ramganga (Barilly)	24th June 1874	1 31	55'00	2,277'00	85	25'77	903'85	4,50,625	
				56'00						
44	Ganges (Rajhat, Aligarh branch)	5th June 1874	1 33	72'00 80'00	2,040'00	53	24'39	1,050'00	3,18,991	
45	Ganges (Cawnpore)	15th July 1875	2 2	100'00	2,850'00	50 to 65	31'66	1,815'00	7,11,073	
				96'00						
46	Ganges (Balawali)	9th May 1887	11	40'00 249'50	7,886'00	100	37'94	3,944'00	30,16,438	
47	Solani	1st Jan. 1886	11	149'58	1,749'50	60	16'75	1,563'00	4,03,182	
48	Dufferin (over the Ganges at Benares)	1st Oct. 1887	7	331'00	3,507'48	25 to 141	75'32	6,780'00	15,04,407	
49	Ramganga (Moradabadi)	8th June 1894	9 10	103'00	2,126'00	75 to 83	21'50	2,602'76	3,26,267	
				200'00						
...	Ganges (Gurmukhtesr)	11th April 1901	11	200'00	2,332'00	81	28'00	2,374'00	5,21,135	
50	Gorai	1st Jan. 1871	7 9	174'71	1,759'00	75 to 95	53'17	1,645'00	...	
				41'69						
51	Teesta	1st April 1901	2 13	18'00	2,116'40	60	27'27	154'00	3,25,322	
				150'00						
52	Dharila	2nd Jan. 1902	10	150'00	1,620'00	75 to 77	26'22	1,290'00	3,70,962	
53	Sankosh	23rd Sept. 1902	9	150'00	1,458'00	85	23'08	1,165'59	3,83,760	

NORTH WESTERN STATE.

ODISH AND ROHILKHAND STATE.

ASTERN BENGAL STATE.

DIX 48—continued.

Appendix 48.
Cost of bridges.

1902, of 1,000 feet length and over and costing not less than Rs. 6,00,000 each—contd.
Graph 49 of Report).

Total cost of girders.	Cost of protective works.	Total cost including cost of protective works.	Cost per lineal foot, excluding protective works where separately stated.	Cost of erection of girders per ton.	Serial No.	REMARKS.
Rs.	Rs.	Rs.	Rs.	Rs.		
(c) 10,08,780	(d) 2,54,000	33,60,076	(e) 605	(g)	28	(a) Twelve spans have been removed. (b) Does not include weight of girders removed. (c) Does not include cost of girders removed. (d) Including cost to 1874, since which date a large amount of additional expenditure has been incurred. (e) Calculated as for the present length. (f) The contract rate for the construction of these three bridges, including protective works, was Rs. 428 per foot run of the bridges, and the figures as to cost are approximate only. (g) Contract included erection.
7,23,690	3,00,000	25,90,166	598	(g)	29	
5,70,180	2,00,000	15,34,600	499	(g)	30	
15,32,329	11,07,900	41,08,266	699	50	31	Carries the rails below and the roadway above.
5,01,641	1,50,472	16,02,315	451	(h) 125	32	(h) Originally carried the rails above and a footpath below. This has now been changed. (i) Including the road bridge (634 tons). (j) The railway and road bridges are separate and run alongside one another on the same piers. Railway bridge has entirely new girders, the rails being carried above top booms. Road bridge has girders (taken from the old railway bridge) which carry on top booms as corrugated flooring 16 feet wide and a metalled roadway 13' 8" clear between guard rails.
1,94,098	96,386	2,90,484	132	(j) 40		
19,94,271	9,40,336	53,38,363	484	121	33	The bridge has been reduced from 64 to 28 spans. The girders doubled, and new cross and rail girders put in. The track is carried between the girders and there are foot-paths on cantilevers outside. The cost of reconstruction only is shown against this entry. The bridge was not closed for traffic during reconstruction; all restrictions were removed on the 1st November 1891, and the bridge was thrown open for traffic as usual.
2,45,769	49,381	3,18,070	68	27		
9,40,487	81,248	17,11,872	335	124	34	Originally carried the rails above and a foot-path below. This has now been changed. The railway and road bridges are separate and run alongside one another on the same piers. Railway bridge has entirely new girders, the rails being carried above top booms. Road bridge has girders (taken from the old railway bridge) which carry on top booms a corrugated flooring 16 feet wide and a metalled roadway 14' 6" between guard timbers.
8,33,243	86,664	10,99,676	207	37		
15,96,980	1,45,956	32,20,016	2,020	437 252	35	Has the rails above and a military roadway below. (k) Pier No. 1.—All standards and struts founded at same level, <i>vis.</i> , 343'68 or 21'68 feet above low-water level. Pier No. 2.—All standards and struts founded at same level, <i>vis.</i> , 319'12 or 2'88 feet below low-water level. Pier No. 3.—Up-stream strut on east side of pier was founded at 311'88 or 10'12 feet below low-water level; all other standards and struts founded at same level, <i>vis.</i> , 313'30 or 8'70 feet below low water level. Pier No. 4.—Two main standards and one down-stream strut, all on west side of pier, were founded at 337'29 or 15'29 feet above low-water level; all other standards and struts founded at same level, <i>vis.</i> , 343'29 or 21'29 feet above low-water level.
23,96,558	(l) 20,06,246	71,01,689	1,210	105	36	Has a combined road and railway on the same level.
8,02,104	3,73,226	10,48,811	(m) 579	(m) 66	37	(l) Including Rs. 1,98,055, cost of materials for temporary bridge. Has a combined road and railway on the same level and a footway on each side, supported on wrought iron brackets, and provided with hand rails.
24,96,074	4,946	27,89,340	3,094	185	38	(m) Calculated on cost, which includes Rs. 18,000 on account of cost of staging.
3,77,912	...	5,57,380	899	110		
10,83,528	6,66,120	28,34,101	594	56	39	Has a roadway on the same level as the rails, and a footway on each side, the roadway being formed of steel corrugated troughs fitted with teak scantlings.
16,06,334	...	23,00,025	1,181	(n) 107	40	Has a roadway on the same level as the rails, 15' wide between girders and 14' 6" headway at centre from rail-level to bottom of cross girders of top boom. The roadway consists of corrugated steel troughs fitted with deodar battens.
3,32,098	3,547	9,27,132	767	65	41	(n) Including staging erection, painting and share of service works, contingencies, plant and general charges.
3,24,622	8,526	7,54,678	507	109	42	(o) Pier No. 2 10' below low-water. " " 3 43' " " " " 4 48' " " " " 5 53' " " " " 6 80' " " " " 1, 7 and 8 above low-water.
1,90,000	9,25,508	15,66,133	281	63	43	
3,10,388	1,32,724	8,22,103	227	28	44	
8,75,745	1,74,160	17,60,978	557	(p)	45	Has the rails above and the roadway below. (p) Included in the cost of girders.
10,86,000	6,73,430	27,75,868	728	62	46	
3,99,277	2,20,091	10,22,550	458	10	47	
32,55,035	1,45,329	47,04,771	929	47	48	Has a roadway on the same level as the rails, and a footway on each side, supported on cantilevers outside the girders.
6,88,391	1,21,837	11,36,495	477	43	49	Has a roadway on the same level as the rails. The permanent way is laid on cross sleepers laid on trough foot plates, which are filled in with rammed kunkur and are used as a military road for guns, etc.
7,78,519	5,67,542	18,67,196	604	51	...	
...	...	(q) 14,83,750	830	...	50	(q) Including Rs. 22,618 charged to revenue, and Rs. 379 charged to capital, for the protection of piers. The cost is approximate.
4,20,941	6,56,778	14,34,041	367	53	51	
3,81,006	4,71,918	12,23,976	464	53	52	
3,21,993	3,84,871	10,92,624	485	59	53	

Appendix 48.
Cost of bridges.

APPEN

Cost and particulars of some of the large railway bridges in India up to 31st December
(Referred to in para

RAILWAY.	Serial No.	NAME OF BRIDGE.	Date of opening.	No. of spans.	Span in clear.	Length of bridge.	Depth of foundation below low-water.	Height from low-water level to underside of girders.	Total weight of girders.	Cost of work to girder-level.	
					Fect.	Fect.	Fect.	Fect.	Tons.	Rs.	
GREAT INDIAN PENINSULA.	54	Kistna	9th Oct. 1873	36	100'00	3,855'09	(a) 9	48'67	2,556'00	(b) 6,11,463	
	55	Tapti	12th Aug. 1872	5	138'00	2,556'00	15'96	60'33	2,392'00	(c) 7,72,163	
				28	59'00						
	56	Nerbudda	8th Mar. 1870	5	137'00	1,052'00	4'60	81'33	525'00	4,06,032	
	57	Girna	10th May 1901	6	40'00	1,572'00	48'00	57'00	1,653'00	4,52,221	
	58	Girna	15th Oct. 1900 23rd June 1861	13	100'00	1,417'00	7'00	39'00	1,040'00	1,72,999	
				25	183'50	4,687'50	76	48'50	4,650'00	2,21,400	
	BOHRA, BARODA AND CENTRAL INDIA.	59	Nerbudda	16th May 1881	6	40'00	1,572'00	48'00	57'00	1,653'00	4,52,221
		60	Tapti	19th Nov. 1860	30	60'00	1,875'00	20	50'50	1,950'00	..
	MADRAS.	61	Choyer	1st Sept. 1865 1st May 1880	50	64'00	3,500'00	100	14'00	988'00	9,10,934
36					64'00	4,060'00	14	34'00	1,213'00	6,83,038	
62		Tungabhadra	16th Jan. 1871	44	29'00	girders. arches.	14	34'00	1,213'00	6,83,038	
63		Ponner	May 1869 1st Oct. 1889	13	131'00	1,830'00	33 to 54'33	22'00	1,999'00	..	
				19	131'00	2,670'00	18 to 78	18'00	2,938'00	..	
64		Chitravati	1st Sept. 1868 6th Mar. 1890	20	64'00	1,410'00	...	...	...	..
				15	131'00	2,110'00	52'50 to 62'00	15'00	2,391'00	5,93,030	
MADRAS (NORTH-EAST LINE).		66	Kistna	17th Mar. 1893 for coal traffic, and 1st Jan. 1894 for metre gauge traffic.	12	292'00	3,736'00 outside and 3,684'00 inside abutments.	82	46'50	6,426'00	16,43,567
		67	Rushu Kulya	1st Sept. 1895	10	150'00	1,598'00	70	23'00	1,437'25	3,33,996
		68	Ponner	20th Dec. 1898	23	70'00	1,990'00	8'59 to 40'40	39'58 to 42'17	911'75	3,91,961
	5				40'00	9,000'00 between abutments 9,096 over all.	48 to 100	3,475'00	7,568'00	..	
69	Godavari	6th Aug. 1900	56	150'00	9,000'00 between abutments 9,096 over all.	48 to 100	3,475'00	7,568'00	..		
SOUTH BEHAR (LUCKER-SERAI-GYA). (3' 3 3/4" GAUGE.)	70	Phulgu	3rd July 1899	18	100'00	2,064'00	45'00	18'00	1,520'00	5,74,661	
				1	30'00	..	..	..	..	..
BENGAL AND NORTH-WESTERN TIRHOO section.	71	Gandak	25th April 1887	8	250'00	2,176'00	40 to 90	40'46	2,495'00	6,07,131	
	72	Kosi	26th June 1902	15	200'00	3,172'60	95	42'72	3,060'00	15,47,671	
	73	Raoti	15th June 1886	9	150'00	1,445'00	86	41'00	1,145'70	4,03,054	
	74	Elgin	24th Dec. 1898	17	200'00	3,695'00 including abutments.	94 to bottom of wall curbs.	28'50	4,199'00	6,80,322	
RAJPUTANA-MALWA.	75	Jumna (Agra)	1st Jan. 1876	16	133'00	2,272'00	70	31'66	2,551'40	3,92,188	
				6	23'00	..	..	..	..	..
	76	Nerbudda	14th June 1877	14	183'00	(p) 2,836'00	14	80'00	2,352'00	9,39,401	
SOUTHERN MAHARATTA.	77	Jumna (Muttra)	15th Dec. 1884	7	150'00	1,146'00	71	27'00	1,309'00	3,06,534	
	78	Bhima	1st Aug. 1884	14	150'00	2,342'00	18'50	58'77	1,680'00	3,33,255	
	79	Kistna (Bijapur branch)	1st Aug. 1884	21	150'00	3,392'00	13'00	43'17	2,498'00	3,43,344	
	80	Kistna (Poona Branch)	2nd Feb. 1888	14	150'00	2,339'50	4'17	75'79	1,897'12	2,65,222	
	81	Hagari	4th Oct. 1877	34	64'00	2,396'00	68'25	16'30	660'90	6,42,711	
	82	Dorabavi viaduct	15th June 1890	1	250'00	670'00	..	(s) 29'00 to 179'63	5,60'00	3,33,093	
				2	150'00	..	..	..	..
BURMA	83	Gokteik viaduct	1st June 1901	7	60'00	2,260'00	..	..	4,241'00	2,33,221
				10	120'00	..	..	..	..
GUNTAKAL-MYSORE FRONTIER, ASSAM-BENGAL.	84	Pennep	1st June 1892	16	40'00	1,740'00	21'00 to 55'00	18'71	1,077'00	2,89,771	
				11	150'00	..	..	..	..
				85	Barak	23rd April 1899	8	60'00	1,368'00	(u)	70'21	1,107'00	4,72,441

DIX 48—concluded.

Appendix 48.
Cost of bridges.1902, of 1,000 feet length and over, and costing not less than Rs. 6,00,000 each—concl'd.
graph 49 of Report.)

Total cost of girders.	Cost of protective works.	Total cost, including cost of protective works.	Cost per lineal foot, excluding protective works where separately stated.	Cost of erection of girders per ton.	Serial No.	REMARKS.
Rs.	Rs.	Rs.	Rs.	Rs.		
6,61,903	...	12,73,066	310	30	54	The girders are for a single line, and the piers for a double line. (a) Nine piers and two abutments are founded above low-water level. (b) Including Rs. 25,656, being the cost of other items not separately detailed.
7,90,175	64,910	16,27,248	611	71	55	Carries a double line. (c) Including Rs. 95,918, being the cost of other items not separately detailed.
2,63,064	...	6,69,096	636	235	56	The girders are for a single line, and the piers for a double line.
4,62,308	...	9,14,529	582	32	57	Braced N type girders over corrugated iron cylinder piers and a masonry abutment for single line.
2,61,357	...	4,34,286	306	26	58	Braced N type girders over masonry piers and abutments for single line.
12,58,929	(d) 5,61,188	(e) 41,41,117	764	49	59	The figures as to cost refer to the new bridge only; the cost of the old bridge is not known. (d) Including some special items not separately detailed. (e) Excluding cost of the approaches. (f) Including Rs. 5,948 being the cost of raising rail-level on up and down lines and Rs. 3,05,511 on account of the renewal of Warren girders with 60 feet plate girders. (g) Including some special items not separately detailed, but excluding the cost of the old bridge, Rs. 4,06,293.
...	...	(f) 12,13,541	647	...	60	
1,95,689	...	(g) 12,45,464	356	...	61	
2,38,970	...	(h) 10,54,862	260	54	62	(h) Including Rs. 2,99,106 being the expenditure incurred on strengthening the bridge, and some special items relating to original construction not separately detailed.
2,84,610	...	(i) 11,32,077	619	...	63	The cost does not include the expenditure incurred on the old bridge, Rs. 1,72,576. (i) Includes some special items not separately detailed.
3,85,833	...	(j) 13,58,194	509	...	64	The cost does not include the expenditure incurred on the old bridge, Rs. 3,54,705.
...	...	(j) 1,62,354	...	...	65	(j) Approximate.
3,63,332	38,568	9,94,930	453	(k) 12	65	(k) Including superintendence and all charges after girders were unloaded from wagons.
18,74,433	5,14,000	40,32,000	942	34	66	The cost of approaches, Rs. 4,71,000, has not been entered.
3,41,642	41,453	7,16,191	422	57	67	
1,83,921	54,663	6,30,545	316	30	68	
...	...	47,14,849	518	22	69	
3,70,681	15,060	9,60,402*	458	25	70	Has the rails over girders. Pathway below formation, decked with corrugated sheets, girders hanging. * Approximate.
7,29,506	48,244	(l) 13,84,883	614	61	71	Has a foot-way on each side, supported on wrought-iron brackets and provided with a hand-rail. (l) Excluding cost of viaduct, Rs. 1,40,505.
7,33,424	15,18,364	37,79,464	712	64	72	
(m) 3,29,522	6,34,665	(n) 14,58,143	570	65	73	(m) Including cost of erection of girders, Rs. 74,543. (n) Including Rs. 28,971, on account of protective works, Rapti bridge, incurred during 1894-95.
11,09,548	6,17,298	24,07,068	484	47	74	Has military blockhouses at either end and a roadway at rail-level which is being adapted to artillery.
6,90,683	48,776	(o) 18,33,877	786	85	75	Lattice girders carrying the rails below and the carriage road above. This bridge is built for and carries the standard gauge. (o) Including some special items not separately detailed.
4,42,205	777	(p) 18,73,925	660	106	76	Triangulated girders—designed to carry the rails above and a carriage road below. (p) Including two abutment spans. (q) Including some special items not separately detailed.
3,72,000	14,194	(r) 8,49,000	728	35	77	Has a combined road and a railway on the same level.
4,71,097	26,419	8,30,772	343	73	78	(r) Including some special items not separately detailed.
7,48,444	47,852	11,39,641	322	84	79	
4,79,402	5,474	7,50,104	318	...	80	
1,21,173	...	7,63,905	319	...	81	
3,61,198	405	(s) 6,95,537	1,038	100	82	(s) The height is from ground to underside of girders. (t) Including charges on account of hand-railing.
14,64,997	...	16,98,210	751	...	83	Height 320'.
3,10,941	1,49,430	7,50,145	345	40	84	
4,38,442	21,561	9,21,705	658	133	85	(u) South abutment 34'08'. North abutment 35'00'. Pier 1, 72'33'; Pier 2, 82'00'. Land spans above T. W. level 27'54'.

Appendix 49.
Cost of tunnels.

Cost and particulars of some of the important tunnels on the railways in India up to the 31st
(Referred to in p.)

RAILWAY.	Serial No.	Name of tunnel.	Position of tunnel (nearest station).	Single or double line.	Gauge.	LENGTH.				TOTAL.	Total cost, including tools and plant.
						Unlined. Feet.	½ lined. Feet.	¾ lined. Feet.	Completely lined. Feet.			Feet.	Rs.
5' 6" GAUGE.) EAST INDIAN,	1	Monghyr (a)	Below Jamalpur	Built for double line, but 2' too narrow.	5' 6"	434	...	...	466	900	No record
	2	Darekasa	Darekasa	Single	5' 6"	735	...	...	...	735	1,32,984
BENGAL-NAGPUR.	3	Saranda	Goukera	Single	5' 6"	388	...	1,253	...	1,641	8,66,964
	4	Bhortonk	Khodri (Katni Branch)	Single	5' 6"	...	...	...	1,000	1,000	2,09,674
GODHARA-RUTLA-LAM-NAGDA.	5	Panchpipla	Bajrangarh	Single	5' 6"	540	...	...	225	765	(b) 2,29,824
	6	Sohawa No. 1	Sohawa	Single	5' 6"	...	...	538½	...	538½	(c) 1,67,624
NORTH WESTERN STATE (Main line).	7	Margalla No. 3	Sarai Kala	Single	5' 6"	...	450	500	...	950	(c) 1,87,154
	8	Attock No. 4	Khairabad	Single	5' 6"	...	...	677½	...	677½	(c) 1,30,924
	9	Attock No. 5	Khairabad	Single	5' 6"	...	...	722	...	722	(c) 1,63,004
	10	Khairabad No. 7	Khairabad	Single	5' 6"	...	...	401½	...	401½	(c) 1,55,544
NORTH WESTERN STATE (Sind-Pishin section).	11	Gundakinduff	Midway between Babar Kachh and Kochali.	Single	5' 6"	...	...	569½	...	569½	2,08,826
	12	Kochali, Lower	Kochali	Single	5' 6"	...	...	506	...	506	1,24,664
	13	Karez No. 1	Dirgi	Single	5' 6"	806	...	...	...	806	1,32,384
	14	Karez No. 2 Karez	Dirgi	Single	5' 6"	2,034	...	...	...	2,034	4,41,964
	15	Lower Chapper Arching	Mangi	Single	5' 6"	...	...	592	...	592	1,62,657
NORTH WESTERN STATE (Chamars extension).	16	Iron Gates	Mangi	Single	5' 6"	1,227	...	...	...	1,227	3,12,679
	17	Mudgorge Arching	Mudgorge	Single	5' 6"	...	...	1,087	...	1,087	4,12,344
	18	Khojak No. 18	Shelabagh	Double	5' 6"	...	...	12,870	...	12,870	(d) 68,26,790
	19	No. 20	3½ miles below Shelabagh.	Double	5' 6"	...	...	756	...	756	2,24,027
	20	No. 23	6½ miles below Shelabagh.	Double	5' 6"	...	...	800	...	800	2,57,294

DIX 49.

December 1902, of 500 feet length and over and costing not less than Rs. 1,50,000 each.
(graph 49 of Report).

Cost per foot run.	Time taken to drive heading.	TIME TAKEN TO COMPLETE TUNNEL.		Serial No.	REMARKS GIVING NATURE OF GROUND PASSED THROUGH, ETC.
		From	To		
Rs.					
..	Not known	March 1856 (Work suspended)	June 1861 during one year)	1	Quartz and slate. (a) A foot-path has been laid and fenced off through the tunnel.
249	Not known	May 1879	6th Nov. 1893	2	All hard rock.
328	1'75 years	January 1888	Sept. 1892	3	Very hard slaty rock with a great deal of water.
210	1'00 year	14th March 1888	6th Dec. 1890	4	Gneiss interspersed with veins of quartz. The total cost excludes the cost of plant.
300	0'63 year	24th August 1892	7th April 1894	5	Northern 500 feet hard basalt; southern 265 feet hard rock, but composed of boulders liable to fall. This part has been lined. (b) Including Rs. 17,000 for machinery.
(c) 311	0'50 year	November 1878	15th March 1880	6	Red clay and sandstone. War prices were paid owing to the Afghan war. Common coolies were getting 8 annas per day. The heading was got through in six months, and the work was then left quite in abeyance, pending further orders, till September 1879; otherwise the work would have been complete within a year.
(c) 197	0'54 year	4th April 1881	15th Aug. 1882	7	Nummulitic limestone shales with clay seams.
(c) 267	.....	Not recorded		8	Treacherous shale.
(c) 226	.....	Not recorded		9	Treacherous shale.
(c) 287	.....	Not recorded		10	Treacherous shale. (c) The charges do not include tools and establishment, for which an addition of, say, 15 to 20 per cent. should be made to the figures given. Cost of faces is included. Probably charges for timber, etc., have not been exactly distributed; a rate for a completely lined tunnel would apparently be about Rs. 230 per foot.
367	.....	1884	1886	11	Sandstone in hard and soft beds.
364	.....	1884	1886	12	Soft sandstone with beds of soft earth.
164	.....	.....	.....	13	Hard limestone. The frequent openings near the roof, as in some karozes, give the tunnel its name.
217	.....	.....	.....	14	Hard limestone.
275	.....	.....	.....	15	Gravel with red clay. This was originally intended to be an open cutting, but owing to the difficulty of getting it out, it had to be arched over.
255	.....	.....	.....	16	Hard limestone.
379	.....	.....	.....	17	Middle eocene gypsiferous deposits. This was originally intended to be an open cutting, but owing to the constant slips, etc., it was eventually covered in.
530	2'01 years	13th April 1889	September 1891	18	Lining practically completed on the 31st October 1894. Water bearing shales and layers of soft mud. The tunnel has been three-quarters lined throughout. (d) The cost of tunnel is Rs. 66,00,518, that of lining, Rs. 2,25,601, and that of capital establishment, Rs. 671.
296	0'34 year	December 1888	June 1890	19	Hard and soft shales with beds of mud. This is a cut and cover on 902 ft. radius.
328	0'44 year	April 1889	November 1890	20	Through soft and hard water bearing shales on 819 ft. radius.

Appendix 49.
Cost of tunnels.

APPEN

Cost and particulars of the important tunnels on the railways in India up to the 31st
(Referred to in part)

RAILWAY.	Serial No.	Name of tunnel.	Position of tunnel (nearest station).	Single or double line.	Gauge.	LENGTH.				TOTAL.	Total cost, including tools and plant.	
						Unlined.	lined.	lined.	Complete-ly lined.			
						Feet.	Feet.	Feet.	Feet.	Feet.	Rs.	
NORTH WESTERN STATE (Mushkaf-Bolan section).	21	No. 2	Mushkaf	Double	5' 6"	...	...	650	...	650	1,70,662
	22	No. 7	Ocepar	Double	5' 6"	...	528	211	...	739	2,16,783	
	23	Panir No. 9	Panir	Double	5' 6"	...	523	2,695	...	3,218	12,81,710	
	24	Soetal No. 12	Peshi	Double	5' 6"	...	...	1,035	...	1,035	2,95,510
	25	Cascade No. 14	Dozan	Double	5' 6"	...	189	353	...	542	1,66,830	
NORTH WESTERN STATE (Mark-Afchock section).	26	No. 1	Jalbar	Single	5' 6"	101	...	...	1,076	1,180	2,49,142
	27	" 2		Single	5' 6"	...	...	...	854	854	1,81,443
	28	" 3		Single	5' 6"	104	...	...	1,671	1,775	3,41,143
	29	" 4		Single	5' 6"	388	...	...	842	1,230	2,01,614
	30	" 5		Single	5' 6"	...	...	...	1,614	1,614	2,91,451
	31	" 6		Single	5' 6"	...	...	...	1,897	1,897	3,65,807
	32	" 9	Chhab	Single	5' 6"	...	...	...	1,300	1,300	2,60,793
GREAT INDIAN PENINSULA, (5' 3 3/4" GAUGE.)	33	Thull Ghat No. 2	Kasara	Double	5' 6"	...	...	1,625	...	1,625	3,90,394
	34	Thull Ghat No. 4	Kasara	Double	5' 6"	628	...	85	...	713	1,15,770	
	35	Thull Ghat No. 7	Igatpuri	Double	5' 6"	1,461	...	...	...	1,461	1,77,355
	36	Thull Ghat No. 8	Igatpuri	Double	5' 6"	1,247	...	...	...	1,247	1,52,315
	37	Thull Ghat No. 11	Igatpuri	Double	5' 6"	777	...	...	...	777	94,605
	38	Bagra	Bagra	Double	5' 6"	...	...	910	...	910	2,15,747
	39	Bhore Ghat No. 7	Palasdhari	Double	5' 6"	837	...	...	...	837	1,06,627
	40	Bhore Ghat No. 8	Palasdhari	Double	5' 6"	858	...	...	...	858	1,13,907
	41	Bhore Ghat No. 9	Thakurvadi	Double	5' 6"	825	...	...	...	825	1,08,677
	42	Bhore Ghat No. 13	Thakurvadi	Double	5' 6"	1,305	...	...	...	1,305	1,73,649
	43	Bhore Ghat No. 22	Reversing station	Double	5' 6"	828	...	...	...	828	1,12,982
	44	Bhore Ghat No. 23	Reversing station	Double	5' 6"	405	...	363	...	768	2,09,780	
	45	Bhore Ghat No. 24	Reversing station	Double	5' 6"	975	...	48	...	1,023	1,30,351	
	RAJPUTANA-MALWA,	46	Mhow Ghats No. 1	Patal Pani to Kalakhand.	Single	3' 3 3/4"	279 1/2	...	279 1/2	53,895
		47	Mhow Ghats No. 2				305 1/2	...	60 1/2	...	365 1/2	42,100
48		Mhow Ghats No. 3	...				...	344 1/2	...	344 1/2	1,94,925
49		Mhow Ghats No. 4	...				...	622 1/2	...	622 1/2	1,25,190
SOUTHERN MAHARATTA,	50	Bear's Rock	Castle Rock	Double	3' 3 3/4"	...	...	...	471	471	3,61,666
	51	Castle Rock	Castle Rock	Double	3' 3 3/4"	...	...	...	1,242	1,242	9,08,615
	52	No. 2	Alandi	Single	3' 3 3/4"	630	...	...	...	630	1,53,663
	53	Nandicanama	Chelyama	Single	3' 3 3/4"	...	...	...	1,527	1,527	4,41,465
WEST OF INDIA PORTUGUESE,	54	No. 1	About 3 1/4 miles below Dudhsagar.	Double	3' 3 3/4"	422 1/2	...	81 1/2	...	504	1,75,609	
	55	No. 5	Dudhsagar	Double	3' 3 3/4"	561	39	65	...	665	1,81,872	
	56	No. 10	About 2 1/4 miles above Dudhsagar.	Double	3' 3 3/4"	772	70	...	...	842	1,54,522
ASSAM-BENGAL,	57	No. 1 (Division 8, Section II).	Between Bihera and Damchara.	Single	3' 3 3/4"	...	...	...	671	671	3,61,414
	58	No. 2 Durgacherra (Division 8, Section II).	Damchara	Single	3' 3 3/4"	...	...	...	427	427	3,34,463
	59	No. 3 (Division 8, Section II).	Between Damchara and Harangajao.	Single	3' 3 3/4"	...	...	...	457	457	2,19,861

DIX 49—concluded.

Appendix 49.
Cost of tunnels.December 1902, of 500 feet length and over and costing not less than Rs. 1,50,000 each—concl'd.
(graph 49 of Report.)

Cost per foot run.	Time taken to drive heading.	TIME TAKEN TO COMPLETE TUNNEL.		Serial No.	REMARKS GIVING NATURE OF GROUND PASSED THROUGH, ETC.
		From	To		
Rs.					
263	0'25 year . . .	October 1893 . . .	June 1895 . . .	21	Through clay and sandstone bands on the straight.
293	0'25 year . . .	November 1893 . . .	March 1895 . . .	22	Through conglomerate : 354 feet on 4° curve and the rest straight.
398	0'81 year . . .	November 1893 . . .	May 1895 . . .	23	Through mammulitic limestone of varying degrees of hardness on the straight.
286	0'63 year . . .	March 1893 . . .	September 1895 . . .	24	Through clay and conglomerate bands, 1,000 feet straight and the rest on 3° curve.
308	0'37 year . . .	August 1892 . . .	November 1894 . . .	25	Through hard limestone on the straight.
211	2 years . . .	1891 . . .	1897 . . .	26	Lime and sandstone, also shale.
212	2 years . . .	1891 . . .	1896 . . .	27	Lime and sandstone, also shale.
192	2 years . . .	1891 . . .	1897 . . .	28	Lime and sandstone, also shale.
178	2 years . . .	1891 . . .	1896 . . .	29	Lime and sandstone, also shale.
180	2 years . . .	1891 . . .	1897 . . .	30	Lime and sandstone, also shale.
193	2 years . . .	1891 . . .	1897 . . .	31	Lime and sandstone, also shale.
201	2 years . . .	1896 . . .	1898 . . .	32	Sandstone, red clay and shale.
240	4'75 years . . .	February 1858 . . .	March 1864 . . .	33	Loose rock.
162	3'58 years . . .	December 1860 . . .	July 1864 . . .	34	Rock.
121	4'08 years . . .	March 1859 . . .	May 1864 . . .	35	Rock.
122	5'08 years . . .	July 1859 . . .	August 1864 . . .	36	Rock.
122	3'17 years . . .	February 1859 . . .	September 1863 . . .	37	Broken rock.
237	...	About 6 years . . .		38	Hard rock with fissures.
127	5'17 years . . .	January 1857 . . .	December 1862 . . .	39	Trap rock.
133	...	...	October 1862 . . .	40	Trap rock.
133	5'25 years . . .	October 1856 . . .	December 1862 . . .	41	Trap rock.
133	5'08 years . . .	October 1856 . . .	December 1862 . . .	42	Trap rock.
136	4'25 years . . .	May 1856 . . .	June 1862 . . .	43	Trap rock.
273	4'00 years . . .	August 1856 . . .	February 1862 . . .	44	Trap rock.
147	3'75 years . . .	January 1857 . . .	March 1861 . . .	45	Trap rock.
192	} Not known . . .	1873 . . .	December 1877 . . .	46	Columnar basalt. It was originally intended that the line at this place should be in an open cutting, but, owing to numerous slips, due to the existence of clay between the basaltic columns, it was found necessary to construct an arched covered way and fill in above with moorum.
115				47	
565				48	
201				49	
772	About 2 years . . .	April 1883 . . .	October 1889 . . .	50	Loam.
732	About 3 years . . .	April 1883 . . .	October 1889 . . .	51	Loam.
244	About 2 years . . .	1884 . . .	1886 . . .	52	Black trap rock.
289	About 2½ years . . .	1884 . . .	1890 . . .	53	Limestone rock.
348	1'33 years . . .	March 1884 . . .	November 1886 . . .	54	.....
274	1'17 years . . .	May 1885 . . .	April 1887 . . .	55	Black trap and granite gneiss.
184	1'41 years . . .	January 1885 . . .	April 1887 . . .	56	Head granite rock.
539	0'67 year . . .	1st January 1895 . . .	December 1898 . . .	57	Through hard sand interspersed with shale with occasional seams of clayey ground and laterite. The tunnel is timbered on the English system with 4 to 6 drawing bars.
783	1 year . . .	February 1895 . . .	December 1898 . . .	58	Laminated shale throughout.
480	0'31 year . . .	October 1893 . . .	December 1899 . . .	59	Through loose laminated sandstone. Rock throughout. Except for the faces which are of stone masonry, the lining is of cement concrete averaging 21 inches thick with semi-circular arch and straight side walls.

APPENDICES
of
IMPORTANT DOCUMENTS.

APPENDIX A.

Memorandum, dated 18th March 1903, by the Honourable Mr. A. T. Arundel, C.S.I., I.C.S., on the anticipated capital expenditure on railways for the year 1903-04.

In preparing the programme of anticipated railway capital expenditure for the year 1903-1904, I have kept the same classification as last year. The proposed allotments for open lines (a) are first shown, including the provision of rolling stock, and the other requirements for the maintenance and development of traffic : (b) next the funds necessary for the steady prosecution and early completion of lines already in progress; and finally (c) the amounts to be allotted for the construction of new lines.

Statement A shows these figures to be as follows :—

	Budget for 1903-1904. Rs.
(a) Open lines and rolling stock	(a) 5,76,68,000
(b) Lines already under construction	4,44,24,000
	<hr/> 10,20,92,000
(c) New lines proposed to be begun in 1903-1904	79,08,000
	<hr/> 11,00,00,000

As explained last year, the principle followed has been that the amount required to meet the needs of open lines should be regarded as a first charge upon the money available for railway purposes; and that every effort should be made to provide in full for all demands arising out of the development of existing traffic : that next in order, provision should be made for the steady prosecution and early completion of lines in progress; and lastly, that provision should be made for undertaking new projects so far as the State is able to find money to complete them without financial embarrassment to the Government.

2. In the present Statement A no detailed figures are given of the probable expenditure on railways in the years 1904-1905 and 1905-1906, as any such details must necessarily be misleading, but it may be remarked there is no reason to suppose that the requirements for works necessary for dealing with existing traffic and the development of railways will be in any degree less in those years than during 1903-1904; on the contrary, it is probable that they will continue to increase year by year.

3. In earlier years, the money available for Capital expenditure on railways was comparatively scanty and the allotment for open lines had to be restricted to allow of the construction of new lines, but the demands of open lines have gradually become so pressing that it was found necessary to increase the total allotment for Capital expenditure in 1902-1903 and in the coming year (1903-1904) to 11 crores.

4. The following statement shows the allotments for open lines and for lines under construction during the five years from 1899-1909 :—

Year.	Open Lines.	Lines under construction and new lines.	Total. Rs.
1899-1900	2,86,23,000	5,96,04,000	8,82,27,000
1900-1901	2,88,70,000	4,64,14,000	7,52,84,000
1901-1902	4,59,97,000	5,72,47,000	10,32,44,000
1902-1903	5,50,82,000	5,49,18,000	11,00,00,000
1903-1904	(a) 5,76,68,000	5,23,32,000	11,00,00,000

(a) Includes reserve of Rs. 74,08,000 for new lines.

Appendix A—continued.

5. Notwithstanding the large increase which has been made in the allotment for railway expenditure, the demands of open lines have grown so much that they now absorb a great part of the money available, and there is every prospect of their continuing to do so if the natural development of the railways is not to be checked.

6. The large allotment for open lines has necessarily reduced the money available for the construction of new lines, and it has only been possible this year to authorise work being begun by the State on 479 miles of railway, particulars of which will be found in Statement A.

7. Several offers have, however, been made to the Government for the construction of railways by private promoters or syndicates, a list of which will be found in Statement C. To some, concessions have been given but the companies have not yet been floated. In the case of others, the terms suggested either are such as to practically amount to a guarantee which of course would necessitate the inclusion of the project in, and subject it to the limitations of, the programme, or go greatly beyond the terms hitherto conceded. Their acceptance would involve a complete departure from the terms offered for the construction of branch lines in Resolution No. 514 R.C. of 1896, and the question is one which necessarily requires very careful investigation. To advise on the best methods of extending construction and of administering and working Indian railways, Mr. Thos. Robertson, C.V.O., was appointed by Government as special Commissioner for Indian railways, and Government anticipate that much benefit will be derived from the recommendations and advice in the report which he is about to present.

8. Statement B, "new lines to be taken up as funds permit," has been prepared on the same lines as last year. No specified order of urgency has been adhered to, the new lines being grouped geographically.

9. After providing for the requirements of "open lines" and "lines under construction," the programme for "new construction" provides for an expenditure of Rs. 55,94,000 in the forthcoming year on the following projects:—

1. Jech-Doab (Southern Section).
2. Bengal-Nagpur, including the Gondia-Chanda and the Brahmapuri-Nagpur extension.
3. Lower Sind extension of the North Western railway.
4. Hapur-Meerut.
5. Rameswaram extension of the South Indian railway.

10. The following lines in the Madras Presidency are being constructed as Protective Works chargeable to the Famine Insurance grant:—

	Length in miles.	Gauge.	Estimated cost. Rs.
Bellary-Rayadrug	33-00	Metre	8,32,872
Hospet-Kottur	38-10	"	10,37,344
Morrapur-Dharmapoori	18-37	2' 6"	7,04,914
Tripatur-Krishnagiri	26-47	"	8,82,271
TOTAL	115-94		34,63,401

It is, however, probable that we shall be relieved of the cost of the two metre gauge lines, since a syndicate has applied for permission to construct them along with other "feeders" to the Southern Mahratta railway, for which they have obtained the promise of a guarantee from the Local District Board in which the lines will lie.

Appendix A—continued.

In consideration of the commendable enterprise which certain District Boards in the Madras Presidency have shewn in the matter of improving the means of communication within their jurisdiction, the Government of India in order to encourage and expedite the construction of railways, have declared their willingness to advance funds from the Provincial Loan Account, on the security of the resources of the Boards which include the proceeds of a special cess leviable under the Local Boards Act, 1884.

Such loans would be repayable in regular instalments, and it is hoped that full advantage will be taken of this measure.

11. The official year 1902-1903 began with a railway mileage of 25,378·34 miles open for traffic and of 2,784·82 miles under construction. Between the 1st of April 1902 and up to date of going to press, 863·85 miles have been added to those open for traffic, and 231·98 miles are expected to be opened before the close of this month, making the total mileage open for traffic at the close of the year 1902-1903, as shown by Statement D, 26,470·57 miles.

Sanction was given during the year to the construction of 682·22 miles of new railway, details of which will also be found in Statement D, and there are now 2,371·07 miles under construction or sanctioned for construction.

12. The railways of India, taken as a whole, for the third year in succession show a balance to the credit of the general revenues after paying working expenses, interest charges and payments for annuities in redemption of Capital. The approximate figures for 1902-1903, as compared with the two previous years, are as follows :—

	1900-1901. (000 omitted.)	1901-1902. (000 omitted.)	1902-1903. (000 omitted.)
	Rs.	Rs.	Rs.
Surplus of revenue over expenditure .	48,77	1,26,89	24,08

13. Compared with the figures of the previous year the results for the year 1902-1903 show a falling off of Rs. 1,02,91. The receipts are less by Rs. 29,94, the working expenses are higher by Rs. 43,87, while interest charges, etc., have increased by Rs. 29,10. Exceptionally favourable conditions obtained in 1901-1902 and the fall in the earnings of the current year was anticipated and allowed for in the Budget Estimate. The increase in working expenses occurs chiefly on the Great Indian Peninsula railway system and on the North Western railway, where largely increased outlay has been necessary on maintenance and renewals of Way and Rolling Stock. The charges for interest, etc., rise with the steadily increasing expenditure on Capital account.

Appendix A—*continued.*

Appendix A.
Important
documents.

STATEMENT A.

STATEMENT

OF

Anticipated Capital Expenditure on Railways, Open or under Construction,
for the year 1903-1904.

Branch lines under Rebate terms are excluded.

Appendix A—continued.
Capital Expenditure on Railways—1903-1904.
(OMITTING 000).

No.	RAILWAY.	Grants allotted for 1903-1904.	Distribution of grants during 1903-1904.
		Rs.	Rs.
OPEN LINES.			
BY STATE AGENCY.			
1	Eastern Bengal	48,52	46,40
2	Ondh and Rohilkhand	44,45	39,44
3	North Western	60,16	55,00
4	Warora Colliery	—70	—82
5	Stores and Reserve	—1,50	74,08
6	Frontier Railway Reserve	58	...
7	Jodhpur-Hyderabad (British section)	69	30
8	Peabawar Railway Reserve	1	...
Total Open Lines by State Agency		1,52,21	2,14,80
BY THE AGENCY OF MAIN LINE COMPANIES.			
9	East Indian	87,74	1,03,95
10	Rajputana-Malwa	24,00	27,00
11	Tirhoot	33,65	15,50
12	South Indian	8,00	15,50
13	Great Indian Peninsula	16,25	26,50
14	Madras Railway—North-East line	20,00	20,00
15	Bezawada Extension	8	18
16	Guntakal-Mysore Frontier	6	13
17	Bhopal	2,70	3,00
18	Nilgiri	*35,17	23
19	Palanpur-Decan	4	...
Total Open Lines by Agency of Main Line Companies		2,22,69	2,11,99
Carried over		3,74,90	4,26,89

Appendix A—continued.

Capital Expenditure on Railways—1903-1904—contd.

Appendix A.
Important
documents.

(OMITTING 000.)

No.	RAILWAY.	Grants allotted for 1902-03.	Distribution of grants during 1903-04.
	OPEN LINES—contd.		
	Brought forward	Rs. 3,74,90	Rs. 4,26,89
	AGAINST THE CAPITAL ACCOUNTS OF THE OLD GUARANTEED RAILWAY COMPANIES.		
20	Madras	20,69	30,00
21	Bombay, Baroda and Central India	21,59	15,00
	Total Open Lines, old Guaranteed Companies	42,28	45,00
	AGAINST THE CAPITAL ACCOUNTS OF INDIAN RAILWAY COMPANIES OTHER THAN THE OLD GUARANTEED RAILWAY COMPANIES.		
22	Bengal Central	2,41	1,31
23	Bengal-Nagpur (including Northern section of East Coast railway)	8,79	12,00
24	Burma	38,57	30,00
25	Indian Midland	12,04	40,00
26	Lucknow-Bareilly	9,88	10,35
27	Southern Mahratta (including Mysore)	6,93	9,79
	Total Open Lines, other Railway Companies	78,63	1,03,35
	CAPITAL ACCOUNTS OF BRANCH LINE COMPANIES WITH A FIRM GUARANTEE.		
28	Hardwar-Dehra	10	1,30
29	Brahmaputra-Sultanpur	87	24
	Total Open Lines by Branch Line Companies	97	1,44
	TOTAL OPEN LINES—carried over	4,96,77	5,76,68

Appendix A—continued.
Capital Expenditure on Railways—1903-1904—contd.
(OMITTING 000.)

No.	RAILWAY.	Length.	Amount of estimate or approximate cost.	Outlay to end of 1901-02.	Grants allotted during 1902-03.	Distribution of grants during 1903-04.						
							Miles.	Rs.	Rs.	Rs.	Rs.	
	TOTAL OPEN LINES—brought forward	...	...	...	4,96,77	5,76,68			
	LINES UNDER CONSTRUCTION.											
	BY AGENCY OF MAIN LINE COMPANIES.											
30	Sabarmati-Dholka . . . . .	...	...	...	60	...			
31	Assam-Bengal	} 743	12,00,00	*10,60,90	} †72,44	} 30,00						
							(i) Construction chargeable to Part II					
							(ii) Land chargeable to Part I					
	(iii) Chittagong jetties . . . . .	...	7,36	6,63	4,00						
32	East Indian	} 78	76,55	57,32	9,24	2,00						
							(i) Barun-Daltonganj					
							(ii) Grand Chord	99	1,41,14	5,98	20,95	63,14
							(iii) Colliery Sidings	14	8,86	1,05	5,07	2,91
	(iv) Shikohabad-Furukhabad	66	45,20	...	6,50	15,50						
33	Madura-Pamban (including Rameswaram Extension)	100	96,64	47,78	12,51	11,00						
34	Marina loop	8	14,92	...	6	5,25						
35	Tinnevely-Quilon, British section	50	45,06	26,86	6,17	6,70						
36	Ditto Native state section	68	1,12,65	50,81	31,19	20,25						
37	Azikhah-Mangalore	77	1,08,63	...	4,45	30,00						
	TOTAL	1,293	18,57,01	12,57,33	1,69,18	1,90,75						
	AGAINST THE CAPITAL ACCOUNT OF THE OLD GUARANTEED RAILWAY COMPANIES.											
38	Calicut-Cannanore branch, Madras railway	59	67,55	70,23	13,40	1,50						
39	Godhra-Baroda, B. B. & C. I. ry.	44	34,11	...	11,50	12,00						
	TOTAL	103	1,01,66	70,23	24,90	13,50						
	AGAINST THE CAPITAL ACCOUNT OF INDIAN RAILWAY COMPANIES OTHER THAN THE OLD GUARANTEED RAILWAY COMPANIES.											
40	Bengal-Nagpur	} 353	8,02,45	8,52,66	1,66,13	1,32,00						
							Sini-Midnapur-Cuttack-Calcutta					
							Jubbulpore-Gondia (Satpura)	258	85,11			
							Midnapur-Jherria extension	114	1,07,81			
							Grand Chord link	28	31,57			
	Colliery lines	25	18,54	}	}							
41	Letpadan-Henzada-Basscin Extension, Burma railways	109	98,62	86,84	19,93	4,50						
	TOTAL	882	11,44,10	9,19,50	1,86,06	1,36,50						
	Total Lines under Construction by Companies—carried over	22,78	31,02,77	22,47,06	3,80,14	3,40,75						
	TOTAL OPEN LINES—carried over	...	...	...	4,96,77	5,76,68			

* Includes Rs. 4,49,33 from Company's funds.
† Includes a credit of Rs. 62 to Company's funds.

Appendix A—continued.

Appendix A.
Important
documents.

Capital Expenditure on Railways—1903-1904—contd.

(OMITTING 000.)

No.	RAILWAY.	Length.	Amount of estimate or approximate cost.	Outlay to end of 1901-02.	Grants allotted during 1902-03.	Distribution of grant during 1903-04.
		Miles.	Rs.	Rs.	Rs.	Rs.
	Total Open Lines—brought forward . . . . .	...	...	...	4,96,77	5,76,68
	Total Lines under Construction—brought forward	2,278	31,02,77	22,47,06	3,80,14	3,40,75
	LINES UNDER CONSTRUCTION—contd.					
	BY THE STATE.					
42	Agra-Delhi Chord	121	90,76	1,02	17,65	45,00
	(i) Chitpore extension . . . . .	...	20,45	17,17	7,53	5,00
	(ii) Doubling the line between Dum-Dam and Kancoorgachi Chord	28	24,51	1,26	7,19	7,25
43	Eastern Bengal (iii) Rungpur-Dhubri	51	45,44	55,02	6,72	1,10
	(iv) Dhubri-Gauhati	151	92,31	...	32	10,00
44	Nowshera-Durgai	42	22,08	20,56	4,87	1,50
45	Khushalgarh-Kohat-Thal	88	50,96	32,26	22,55	1,25
46	Jeb-Doab (Northern section).	52	25,70	1,56	14,47	5,40
47	Allahabad-Fyzabad	97	1,17,09	6,29	53,49	46,25
48	Moorshedabad branch, Eastern Bengal State railway	96	84,48	...	16,13	40,00
49	Quetta-Nushki	82	70,06	...	6,75	10,00
50	Hapur-Meerut	20	5,75	...	...	6,94
51	Balawan-Madhoganzj	14	3,88	...	...	2,88
	Total Lines under Construction by the State	842	6,53,47	1,35,14	1,57,67	1,82,57
	Total Lines under Construction	3,120	37,56,24	23,82,20	5,37,81	5,23,32
	GRAND TOTAL—Open Lines and Lines under Construction . . . . .	...	...	...	10,34,58	11,00,00

Statement of Capital Expenditure on Railways—1903-1904—concl'd.

(OMITTING 000.)

No.	RAILWAY.	Distribution of grants during 1903-04.	
ABSTRACT BY OPEN LINES AND CONSTRUCTION.			
I.—CAPITAL FOR OPEN LINES.			
		Rs.	
i.	By State agency	2,14,90	
ii.	By agency of Main Line Companies	2,11,99	
iii.	By " " old Guaranteed Companies	45,00	
iv.	By " " other Railway Companies	1,03,35	
v.	By " " Branch Companies	1,44	
	TOTAL OPEN LINES	5,76,68	
II.—CAPITAL FOR LINES UNDER CONSTRUCTION BY COMPANIES.			
i.	By agency of Main Line Companies	1,90,75	
ii.	By " " old Guaranteed Railway Companies	13,50	
iii.	By " " other railway Companies	1,36,50	
iv.	By " " Branch Line Companies . . . . .	...
	TOTAL LINES UNDER CONSTRUCTION BY COMPANIES	3,40,75	
	III.—CAPITAL FOR LINES UNDER CONSTRUCTION BY THE STATE	1,82,57	
	GRAND TOTAL	11,00,00	
ABSTRACT SHOWING DISTRIBUTION BY FUNDS.			
I.—From Imperial Funds.	(i) By State Agency	(a) Open Lines	2,14,90
		(b) Construction	1,82,57
		Total	3,97,47
	(ii) By the Agency of Main Line Companies.	(a) Open Lines	2,11,99
(b) Construction		1,90,75	
	Total	4,02,74	
	TOTAL, I	8,00,21	
II.—Against the Capital Accounts of the old Guaranteed Railway Companies.	(a) Open Lines	45,00	
	(b) Construction	13,50	
	TOTAL, II	58,50	
III.—Against the Capital Accounts of Indian Railway Companies other than the old Guaranteed Railway Companies.	(a) Open Lines	1,03,35	
	(b) Construction	1,36,50	
	TOTAL, III	2,39,85	
IV.—Against the Capital Accounts of Branch Line Companies which are in receipt of a firm Government Guarantee.	(a) Open Lines	1,44	
	(b) Construction . . . . .	...
	TOTAL, IV	1,44	
	TOTAL I TO IV	5,76,68	
	GRAND TOTAL	11,00,00	

Appendix A—continued.

Appendix A.
Important
documents.

Statement B.

List of new lines to be taken up as funds permit, with the estimated yearly provision required to ensure an economical rate of progress when once started.

(Lakhs of rupees.)

No.	Railway.	Miles.	Estimated cost.	APPROXIMATE AMOUNT EACH YEAR.				
				1st.	2nd.	3rd.	4th.	Future.
			Lakhs.	Lakhs.	Lakhs.	Lakhs.	Lakhs.	Lakhs.
EAST INDIAN RAILWAY SYSTEM—								
1	Agra City terminus . . . . .	...	9	9	...	...	...	...
2	Bishenpur-Hooghly	71	132	20	62	50	...	...
3	Hooghly-Cutwa	65	64	4	30	30	...	...
BENGAL-NAGPUR RAILWAY SYSTEM—								
4	Gondia-Chanda (including Brahmapuri-Nagpur)	200	60	15	25	20	...	...
5	Vizianagram-Raipur	810	250	10	60	60	60	60
EASTERN BENGAL STATE RAILWAY—								
6	Quadrupling Eastern Bengal State railway	20	32	10	10	12	...	...
7	Ganges bridge at Sara (or elsewhere) . . . . .	...	110	10	30	50	20	...
BENGAL AND NORTH-WESTERN RAILWAY—								
8	Mansi-Baptiahi	79	50	10	20	20	...	...
9	Bairagnia-Shikarpur	58	35	20	15	...	...	...
10	Bettiah-Bagaha	49	32	20	12	...	...	...
11	Katihar-Godagiri or Sara (exclusive of Ganges bridge).	187	155	15	50	50	40	...
12	Shikarpur-Bikna-Thoree	22	5	5	...	...	...	...
13	Sakri-Jainagar	30	16	5	11	...	...	...
OUDEH AND ROHILKHAND RAILWAY—								
14	Moradabad-Rampur	52	25	10	15	...	...	...
15	Allahabad-Jaunpur	62	48	10	30	8	...	...
16	Bareilly-Soron	63	54	10	30	14	...	...
17	Minor feeder lines to Oudh and Rohilkhand railway.	100	50	10	20	20	...	...
NORTH WESTERN RAILWAY—								
18	Lower Sind extension	61	35	20	15	...	...	...
19	Indus bridge (Khushalgarh)	2	12	2	10	...	...	...
20	Conversion Khushalgarh-Kohat railway to 5' 6" gauge.	91	15	5	10	...	...	...
21	Minor feeder lines to North Western railway	100	50	10	20	20	...	...
BOMBAY, BARODA AND CENTRAL INDIA RAILWAY—								
22	Rewari-Phulera	133	53	3	30	20	...	...
23	Baran-Ajmer-Marwar	213	135	16	48	48	23	...
24	Bombay-Kutch connection	275	340	10	30	30	30	240
25	Nagda-Baran-Muttra (or Bandikui)	355	350	10	50	90	90	110
GREAT INDIAN PENINSULA RAILWAY—								
26	Warora-Chanda	42	46	16	30	...	...	...
27	Minor feeder lines to Great Indian Peninsula railway.	60	30	5	15	10	...	...
MADRAS RAILWAY—								
28	Coonoor-Ootacamund	12	19	9	10	...	...	...
SOUTHERN MAHRATTA AND SOUTH INDIAN RAILWAYS—								
29	Trichinopoly-Tirukoilur	97	75	10	35	30	...	...
30	Nanjangud-Erode	120	123	23	50	50	...	...
31	Phirangipuram-Gurzala (famine feeder)	51	18	3	10	...	...	...
BURMA RAILWAY—								
32	Henzada-Kyangin	66	55	15	30	10	...	...
33	Pegu-Moulmein	70	75	5	40	30	...	...
34	Pegu-Syriam	100	64	10	30	24	...	...
35	Sagaing bridge . . . . .	...	50	10	25	15	...	...
TOTAL		3,216	3,667	375	908	711	263	41

Appendix A.
Important
documents.

Appendix A—continued.

Statement C.

Statement showing the lines of railway proposed, or which were or are the subject of negotiations, for construction by private companies.

No.	Name of railway.	Length.	Estimated cost.	REMARKS.
<i>Madras—</i>		Miles.	Rs.	
1	Kurnool Road (Dhone)—Kurnool	32	7,11,000	} Negotiations still proceeding, the promoters having asked for certain modifications of the terms offered and for the inclusion in the original scheme of railways 3 to 6. Concession extended to 31st March 1903.
2	Berwada-Masulipatam	50	27,89,000	
3	Guntur-Repalle	38	17,34,000	
4	Phirangipuram-Gurzala	51	12,60,000	
5	Bellary-Rayadrug	33	8,33,000	
6	Hospet-Kottur	38	10,37,000	
7	Vizianagram-Raipur with Sointilla branch	359	2,81,05,000	} Negotiations in progress.
8	Berhampore-Russelkonda	49	14,91,000	
<i>Hyderabad—</i>				
9	Raichur-Wondalli	43	12,53,000	Concession granted in June 1900, but scheme no further advanced.
<i>Rajputana—</i>				
10	Baran-Ajmer-Marwar	213	1,36,67,000	} Under consideration.
11	Nagda-Baran-Mutra	355	3,50,69,000	
<i>United Provinces of Agra and Oudh—</i>				
12	Fatehpur-Markundi	72	98,46,000	Negotiations dropped by the promoters.
<i>Punjab—</i>				
13	Kangra Valley	90	50,84,000	} Negotiations in progress.
14	Jullundur-Hoshiarpur	24	14,10,000	
15	Amritsar-Tarn Taran-Patti	27	13,39,000	
16	MacLeodganj Road-Fazilka-Ferozepore-Ludhiana	150	(a)	
17	Rawal Pindi-Murree with extension to Kuldana and Gharial	50	(b)	Under consideration.
<i>Bengal—</i>				
18	Shibnibah (Kissengunge)— Kotchandpur-Magura	64	49,94,000	} Negotiations dropped by the promoters.
19	Phulbari-Sunjhia	13	4,42,000	
20	Akhaura-Bhairab Bazar	19	19,42,000	Concession lapsed.
21	Hooghly-Cutwa-Ahmedpur-Ondal	139	(c)	} Negotiations in progress.
22	Bardwan-Cutwa	34	26,49,000	
<i>Assam—</i>				
23	Tilagaon-Sylhet	39	36,17,000	Concession lapsed.

(a) The Ferozepore-Ludhiana section, 77 miles, has alone been surveyed and is estimated to cost Rs. 44,88,000.

(b) Under survey.

(c) The Hooghly-Cutwa section, 65 miles, and the Cutwa-Ahmedpur section, 32 miles, which have been surveyed, are respectively estimated to cost Rs. 63,12,000 and Rs. 32,90,000.

Appendix A—continued.

Appendix A.
Important documents.

STATEMENT D.

Memorandum on the construction of railways.

At the commencement of 1902-03, i.e., on the 1st April 1902, the total length of railways open for traffic was 25,378.34 miles, made up as follows:—

	Miles.	Miles.		Miles.	Miles.	
(i) East Indian	1,838.04	6,532.60				
Bengal Central (a)	125.01					
Bengal-Nagpur	1,552.98					
Indian Midland	(b) 708.25					
Great Indian Peninsula	1,548.27					
Bhopal-Itarsi (British section)	(b) 18.11					
Godhra-Katlam-Nagda	(c) 141.14					
Godhra extension	(d) 20.28					
Madras railway (North-East line)	(e) & (f) 467.23					
(g) & (h) 2,077.15						
(ii) North Western	1,037.63	4,362.69				
Oudh and Rohilkhand	208.04					
(iii) Eastern Bengal	460.90	1,334.07				
Bombay, Baroda and Central India	873.17					
(iv) Madras	(i) 102.24	602.33				
Delhi-Umballa-Kalka	(i) 22.23					
Tarapur	(i) 78.76					
South Behar	(j) 4.23.26					
Southern Punjab	(k) 23.04					
Hardwar-Dehra	(e) 155.48					
Tupil Valley	7.85					
Calcutta Port Commissioners	(b) 7.86					
Amraoti	(b) 5.72					
Bina-Gaona-Baran	(b) 145.59					
Bhopal-Ujjain	(b) 113.27					
Bhopal-Itarsi (Native state section)	(b) 44.28	723.50				
The Nizam's Guaranteed State	330.18					
Nagda-Ujjain	(c) 34.22					
Petlad-Cambay (Anand-Tarapur section)	(c) 31.50					
Petlad-Cambay (Tarapur-Cambay section)	(c) 10.92					
Kolar Gold-Fields	(c) 9.88					
(vi) Rajpura-Bhatinda	(f) 107.05		201.68			
Jammu and Kashmir (Native state section)	(f) 15.32					
Ludhiana-Dhuri-Jakhal	(f) 78.68					
5' 6" gauge—						
(i) State lines worked by companies	6,532.60					
(ii) State lines worked by the State	4,362.69					
(iii) Guaranteed companies	1,334.07					
(iv) Assisted companies	882.33					
(v) Lines owned by native states and worked by companies	723.50					
(vi) Lines owned by native states and worked by state railway agency	201.68					
					14,056.82	
3' 3 1/2" gauge—						
(vii) State lines worked by companies	7,595.41					
(viii) State lines worked by the State	667.93					
(ix) Assisted companies	463.42					
(x) Lines owned by native states and worked by companies	618.25					
(xi) Lines owned and worked by native states	1,134.77					
(xii) Foreign lines	73.61					
					10,553.39	
Special 2' 6" and 2' 0" gauges—						
(xiii) State lines worked by companies	56.24					
(xiv) State lines worked by the State	76.68					
(xv) Assisted companies	239.76					
(xvi) Lines owned by native states and worked by companies	267.31					
(xvii) Lines owned by native states and worked by state railway agency	33.78					
(xviii) Lines owned and worked by native states	94.36					
					768.13	
					25,378.34	

(a) Although for convenience classed amongst State railways, this line is the property of the Bengal Central Railway Company.
 (b) Worked by the Great Indian Peninsula Railway Company.
 (c) Worked by the Bombay, Baroda and Central India Railway Company.
 (d) Worked by His Highness the Nizam's Guaranteed State Railways Company.
 (e) Worked by the Madras Railway Company.
 (f) Including 2.06 miles laid on a mixed (5' 6" and 3' 3 1/2") gauge, and 0.31 mile on the 3' 3 1/2" gauge.
 (g) Including 5.03 miles of military line not used for public traffic.
 (h) Including 26.28 miles of mixed (5' 6" and 3' 3 1/2") gauge between Kot Kapura and Bhatinda, worked over by the North Western State and Rajputana-Malwa railways.
 (i) Worked by the E. of India Railway Company.
 (j) Worked by the North Western State railway.
 (k) Worked by the Oudh and Rohilkhand State railway.
 (l) Although for convenience classed amongst State railways, this line is the property of the Bengal and North-Western Railway Company.

(m) Including 2.10 miles at Ujjain and 3.07 miles between Agra East bank and Agra cantonment, laid on the 5' 6" gauge.
 (n) Worked by the Southern Mahratta Railway Company.
 (o) Worked by the South Indian Railway Company.
 (p) Worked by the Jodhpur-Bikaner railway.
 (q) Excluding 3.66 miles of the Lucknow-Bareilly railway between Daliganj and Aishbagh, but including the length, Bara Banki to Burhwal, 16.79 miles, and the length over the Cawnpore bridge, 0.48 mile, laid on a mixed gauge.
 (r) Worked by the Eastern Bengal State railway.
 (s) Worked by the Assam Railways and Trading Company.
 (t) Worked by the Bengal and North-Western Railway Company.
 (u) Including 4.87 miles of Bhavnagar Dock estates and Junagad quarry lines.
 (v) Worked by the Bhavnagar-Gondal-Junagad-Forbandar railway.
 (w) Including 3.99 miles of Bedi-Bandar Dock estate siding.
 (x) Worked by the Rohilkund and Kumaon Railway Company.
 (y) Worked by the Bengal-Nagpur Railway Company.

Appendix A.
Important
documents.

And the mileage under construction or sanctioned for construction on the same date was 2,784·82 miles as follows:—

	Miles.	Miles.
5' 6" gauge—		
(i) State lines worked by companies ...	568·02	
(ii) State lines worked by the State ...	157·70	
(iii) Guaranteed companies ...	31·09	
(iv) Assisted companies ...	0·79	
		757·60

3' 8½" gauge—		
(v) State lines worked by companies ...	760·59	
(vi) State lines worked by the State ...	36·85	
(vii) Assisted companies ...	107·41	
(viii) Lines owned by native states and worked by companies ...	164·57	
(ix) Lines owned and worked by native states ...	160·85	
		1,230·27

Special (2' 6" and 2' 0") gauges—		
(x) State lines worked by companies ...	252·67	
(xi) State lines worked by the State ...	92·20	
(xii) Assisted companies ...	354·45	
(xiii) Lines owned by native states and worked by companies ...	97·63	
		796·95
TOTAL ...		2,784·82

There was thus a grand total of railways completed and in hand, on the 1st April 1902, of miles ... **28,163·16**

	Miles.	Mil.
East Indian—		
Shikohabad to Farukhabad (a) ...	60·83	
Sone Kasi bank to Dallouganj ...	78·33	
Manpur to 0·87 mile beyond Gurpa	24·25	
Portion of the main line of the Moghal Sarai-Gra branch ...	0·94	
Mile 13½ from Howrah to Sitarampur ...	6·90	191·33
Katragarh to Khanodih ...	7·80	
Jherriah to Dhanbaid ...	3·75	
Taara siding ...	1·75	
Northern half of the Mulkeera-Katragarh cross connection ...	0·71	
(i) Bengal-Nagpur—		
Hooghly foreshore to Kidderpore Docks ...	0·80	
Midnapore to Bhojudih ...	114·77	
Haukauli to Nodosh in the Chaurassio coal-fields ...	9·48	568·1
Bhojudih to Hariharpur (a) ...	27·00	
Bhojudih to Paridulhi ...	1·45	177·77
Bhojudih to Bhoda, including the Bhaga connection ...	31·38	
Bhowra siding ...	1·50	
Southern half of the Mulkeera-Katragarh cross connection ...	0·71	
Agra-Delhi Chord (a) ...		121·16
Azikhil-Mangalore extension ...		77·76
(ii) North Western—		
Jech Doab line—		
Majkwal to the Karau Hills ...		51·40
Oadh and Rohilkhand—		
Allahabad to Fyzabad ...		94·07
(iii) Eastern Bengal—		
Extension of Chitpore terminus ...	1·66	
Panchooria to the Ganges ...	6·60	11·63
Kankurgachi to new Junction ...	3·97	
(iii) Madras—		
Badagara to Azhikal ...		31·01
(iv) Southern Punjab—		
Delhi Brewery to Delhi ...		0·71

Bengal and North-Western—		
Tirhoot section—		
Sakri to Jainagar (a) ...	30·47	
Koel bridge and approaches, Kurva to Katarah ...	5·75	100·23
Company's section—		
Azamgarh to Shahganj ...	34·91	
Balla to Ghansipur ...	31·16	
Rohilkhand and Kumaon (Lucknow-Bareilly section)—		
Dudhwa to the Mohan river ...		5·96
Rajputana-Malwa—		
Hewari-Paulera Chord (a) ...		133·32
(v) South Indian—		
Madara to Mandapam ...	31·33	100·33
Tirupachettu to Sivaganga ...	9·00	
Tinnevely-Qullon (Travancore) (British section)—		
Tinnevely bridge to the British frontier near Shencottah	50·33	
Tanjore District Board (Mayavaram-Matupet)—		
Matupet to Arantangi ...	44·86	50·49
Adirampattam and Thambikkottal salt sidings and Arantangi quarry branch ...	5·63	
Assam-Bengal—		
Damehara to Lumding ...	99·40	155·24
Lakwa to Tinsukia ...	55·84	
Burma—		
Halpaw to Lashio (b) ...	50·30	164·70
Bassain via Henzada to Letpadaung ...	114·40	
(vi) Eastern Bengal—		
New Gitaldaha station to Dhubri ...		38·55
(vii) Bengal Doars—		
Chalsa to Hantupara ...		30·00
Noakhali (Bengal)—		
Laksm via Noakhali to Ichakhali ...		34·95
Ahmedabad-Dholka ...		33·46
Sabarmati to Dholka ...		
(viii) Vijapur-Katol-Kadi—		
Vijapur to Kadi ...		41·00
Shoranur-Cochin—		
Shoranur to Ernakulam ...		64·83
Tinnevely-Qullon (Travancore) (Native state section)—		
Qullon to the frontier of the Travancore state near Shencottah ...		57·64
(ix) Jodhpur-Bikaner—		
Bikaner section—		
Suratgarh to Bhatinda ...		88·00
Jaipur—		
Sanganer to Siwal-Madhupur ...		72·65

(x) Bengal-Nagpur (Jubbulpore-Gondia extension) (2' 6")—		
Jubbulpore to Gondia ...	143·43	232·67
Neinpur to Mandia ...	31·75	
Neinpur to Chinalwara ...	87·49	
(xi) Kuchalgarh-Kohat-Thal (2' 6")—		
Barsi Light (2' 6")—		
Barsi Road Junction to Pandharpur (a) ...	31·00	57·70
Barsi Town to Tadwala ...	26·70	
Kalka-Simla (2' 6") ...		60·00
Bukhtiarpur-Bihar Light (2' 6")—		
Bukhtiarpur to Bihar ...		16·75
(xii) Madara District Board (2' 6")—		
Ammayarakkumar to Kotagodi ...	55·00	93·00
Periyakulam to Krishna-Mansik's Tops ...	5·00	
Theni to Karuvanath ...	33·00	
Shahdara-Saharanpur Light—		
Shahdara-Saharanpur ...	95·00	125·00
Baraut to Meerut ...	30·00	
(xiii) Rewah (2' 6")—		
Rewah to Satna (a) ...		31·81
Gaekwar's Dabhol (2' 0")—		
Padra to Bhoda ...		9·00
Gwalior Light (2' 0")—		
Gwalior to Sabalgarh ...		50·82

(a) Commencement of work not yet authorized.

(b) The portion of the Mandalay-Kullon railway from Lashio to the right bank of the Salween river.

Appendix A—continued.

Appendix
Imports
document

	Miles.	Miles.	Miles.
(i) East Indian— Mile 0-87 beyond Gurpa to Hariharpur	...	74-84	64-82
Indian Midland— Ait to Kunch	...	8-85	
Madras (North-East line)— Korukkuppel to Basin Road station	...	0-08	
(ii) North Western— Junction with North Western State railway, 13 miles from Quetta to Nushki	...	83-50	171-97
Oudh and Rohilkhand— Nakman to Madhoganj	...	14-47	
Eastern Bengal— Banshat to Moorshadabad	...	78-00	
(iii) Bombay, Baroda and Central India— Godhra to Baroda	44-85

(iv) Bengal and North-Western— Company's section— Anarhar to Janspur	...	38-14	115-63
Famine lines (Madras Presidency)— Bellary to Raydrug	...	39-00	
Hospet to Kottur	...	39-10	
South Indian— Marina Loop— Saidpet to Madras Beach	...	8-38	
(v) Eastern Bengal— Gulokganj to the Brahmaputra, opposite Gauhati	151-82

(vi) Famine lines (Madras Presidency)— Morappur to Dharmapuri (2' 6")	...	18-37	44-84
Tirupattur to Krishnagiri (2' 6")	...	28-47	
(vii) Howrah-Amta (2' 6")— Jagadharpur to Champadanga	...	17-40	40-50
Antpur to Kajbhat	...	3-50	
Dwara-Therria (2' 6")— Noorpore to Therria Ghat	...	19-50	
(viii) Moharbbasj (2' 6")— Baripada to Baripada Road station	...	...	28-50

(ix) East Indian— Mile 132 from Howrah to Sitarampur	...	8-99	66-06
Some East bank to Daitonganj	...	78-13	
Portion of the main line of the Moghal Sarai-Gya branch	...	0-94	
Bengal-Nagpur— Hooghly foreshore to Kidderpore Docks	...	0-60	
Midnapore to Bhojudih	...	114-77	146-21
Bhojudih to Mhoda, including the Bhaga connec- tion	...	21-36	
Ramkanali to Noodcha, in the Chaurasia coal- fields	...	9-48	
(x) Eastern Bengal— Extension of Chitpore terminus	...	1-08	7-66
Poochooria to the Ganges	...	6-58	
(xi) Madras— Badagara to Ashikal	21-98

(xii) Bengal and North-Western— Tirhoot Section— Kool bridge and approaches Kurela to Kata- raah	...	3-75	69-75
Company's section— Azamgarh to Sbaganj	...	34-84	
Balla to Ghazipur	...	31-16	
(xiii) South Indian— Madura to Mandapam	...	90-98	417-85
Tinnevely-Qailon (Travancore) (British section)	...	19-07	
Tanjore District Board (Mayavaram-Mutupet)— Mutupet to Pattakottai	...	17-03	
Assam-Bengal— Lakwa to Tinsukia	...	55-84	
(xiv) Burma— Hawpaw to Lashio	...	50-30	164-70
Bassein via Hanzada to Letpadan	...	114-40	
(xv) Eastern Bengal— New Ghaldaha station to Dhulri	30-95
(xvi) Bengal-Decans— Chala to Laina	...	15-00	48-46
Ahmedabad-Dholka— Sabarmati to Dholka	...	33-46	
(xvii) Vijapur-Kalol-Kadi— Vijapur to Kadi	...	41-80	100-93
Sherapur-Cochin— Sherapur to Ernakulam	...	61-93	
(xviii) Jodhpur-Bikaner— Bikaner section— Suratgarh to Bhatinda	...	...		60-00

(xix) Bengal-Nagpur (Jubbulpore-Gondia extension) (2' 6")— Gondia to Balaghat	...	...	25-23
(xx) Khushalgarh-Kohat-Thal (2' 6")— Khushalgarh via Kohat to Thal	...	...	93-20
(xxi) Gaskwar's Dabholi (2' 6")— Padra to Bhoba	...	...	9-20

During 1902-1903, i.e., from 1st April 1902 to 31st March 1903, 682.22 miles of new railways have been authorized as follows:—

	Miles.	Miles.
5' 6" gauge—		
(i) State lines worked by com- panies	...	84-32
(ii) State lines worked by the State	...	171-97
(iii) Guaranteed companies	...	44-85
		<u>301-</u>

3' 3 1/2" gauge—		
(iv) State lines worked by com- panies	...	115-62
(v) State lines worked by the State	...	151-62
		<u>267-</u>

	Miles.	Miles.
Special (2' 6" and 2' 0") gauges—		
(vi) State lines worked by com- panies	...	44-84
(vii) Assisted companies	...	40-50
(viii) Lines owned by native states and worked by companies	...	28-50
		<u>113</u>
TOTAL	...	<u>682</u>

And 1,095.83 miles have been or are likely to be opened to public traffic as follows:—

	Miles.	Miles.
5' 6" gauge—		
(ix) State lines worked by com- panies	...	232-27
(x) State lines worked by the State	...	7-66
(xi) Guaranteed companies	...	31-98
		<u>271</u>

3' 3 1/2" gauge—		
(xii) State lines worked by com- panies	...	417-35
(xiii) State lines worked by the State	...	36-85
(xiv) Assisted companies	...	48-46
(xv) Lines owned by native states and worked by companies	...	106-63
(xvi) Lines owned and worked by native states	...	88-00
		<u>697</u>

	Miles.	Miles.
Special (2' 6") gauge—		
(xvii) State lines worked by com- panies	...	25-23
(xviii) State lines worked by the State	...	92-20
(xix) Lines owned by native states and worked by companies	...	9-20
		<u>126</u>
TOTAL	...	<u>1,095</u>

Appendix A.
Important documents.

The total length of open line at the commencement of 1903-1904, i.e., on the 1st April 1903, will, therefore, be 26,470.57 miles, comprising:—

5' 6" gauge—

(i) State lines worked by companies ...	6,777.63
(ii) State lines worked by the State ...	4,897.92
(iii) Guaranteed companies ...	1,866.25
(iv) Assisted companies ...	882.21
(v) Lines owned by native states and worked by companies ...	709.89
(vi) Lines owned by native states and worked by state railway agency ...	202.98
Total	14,836.83

8' 3 1/2" gauge—

(vii) State lines worked by companies ...	8,024.29
(viii) State lines worked by the State ...	699.09
(ix) Assisted companies ...	495.40
(x) Lines owned by native states and worked by companies ...	725.02
(xi) Lines owned and worked by native states ...	1,223.04
(xii) Foreign lines ...	73.61
Total	11,240.45

Special (2' 6" and 2' 0") gauges—

(xiii) State lines worked by companies ...	81.47
(xiv) State lines worked by the State ...	166.88
(xv) Assisted companies ...	239.76
(xvi) Lines owned by native states and worked by companies ...	276.51
(xvii) Lines owned by native states and worked by state railway agency ...	83.60
(xviii) Lines owned and worked by native states ...	93.07
Total	893.29
TOTAL	26,470.57

Appendix A—continued.

	Miles.	Miles.
East Indian	1,523.92	
Bengal Central (a)	128.01	
Bengal-Nagpur	1,809.19	
Indian Midland	(b) 798.26	
Great Indian Peninsula	1,547.83	
(i) Khamgaon	(b) (c) 7.89	6,777.63
Amraoti	(b) (c) 5.72	
Bhopal-Itarsi (British section)	(c) 13.11	
Godhra-Buland-Nagda	(c) 141.14	
Berwada extension	(d) 20.58	
Madras Railway (North-East line)	(e) & (f) 497.19	
North Western	(g) & (h) 3,080.61	
(ii) Oudh and Rohilkhand	1,037.83	4,897.92
Eastern Bengal	279.48	
Bombay, Baroda and Central India	(a) 480.80	1,866.25
(iii) Madras	905.36	
Delhi-Umballa-Kalka	(b) 162.34	
Turkash	(c) 22.23	
South Bebar	(c) 78.76	
(iv) Southern Punjab	(c) 423.81	882.21
Haridwar-Dehra	(b) 37.04	
Tapti Valley	(c) 155.48	
Calcutta Port Commissioners	(c) 7.85	
Bina-Gooch-Barua	(b) 145.29	
Bhopal-Ujjain	(b) 113.27	
Bhopal-Itarsi (Native state section)	(b) 45.23	
The Nizam's Guaranteed State	330.13	
(v) Nagda-Ujjain	(c) 34.32	709.89
Peled-Cambay (Anand-Tarapur section)	(c) 21.50	
Peled-Cambay (Tarapur-Cambay section)	(c) 10.92	
Kolar Gold-fields	(c) 9.88	
(vi) Rajpura-Bhatinda	(j) 107.39	
Jammu and Kashmir (Native state section)	(j) 15.92	202.98
Ludhiana-Dhuri-Jakhal	(j) 79.61	
Bengal and North-Western—	519.10	
Tirhoot section	809.00	
Company's section (i)	231.17	
Rohilkhand and Kumaon (Lucknow-Bareilly section)	(c, d, e, m) 1,049.36	
Rajputana-Malwa	(c) 17.28	
Palampur-Deesa	1,043.04	
Southern Mahratta	(n) 119.50	
Guntakal-Mysore frontier	(n) 236.22	8,024.29
(vii) Mysore section (Southern Mahratta)	(e) & (s) 16.90	
Nilgiri	1,128.13	
South Indian	19.05	
Tinnevely-Qullon (Tiruvannamalai) (British section)	19.05	
Tanjore District Board (Mayavaram-Matupet)	(e) 71.11	
Assam-Bengal	645.06	
Barua	1,322.49	
Jodhpur-Hyderabad (British section)	(r) 123.88	
Eastern Bengal—		
Northern and Bebar sections (including the Kanchi-Dharidra, 5' 6" gauge branch, and British section, Cooh Behar-Sourbhari extension, 5' 6" gauge)	533.27	
(viii) Dacca section	85.22	893.29
Cawnpore-Burhwal (Metro gauge line)	(g) 79.80	
Deoghar	4.79	
Brahmaputra-Saltanpur	(c) 59.37	
Mymensingh-Jamalpur-Jagannathganj	(r) 63.37	
Rohilkhand and Kumaon (Company's section)	53.82	
Bengal Doon	36.40	
(ix) Bengal Doon extensions	92.76	495.40
Dibru-Sydia	27.60	
Ledo and Tikak-Margherita Colliery	(s) 11.00	
Ahmedabad-Parantij	(c) 64.70	
Saganj-Raxaul	(t) 19.09	
Ahmedabad-Dholka	(c) 33.50	
Geakwar's Mahasa	(c) 92.03	
Hyderabad-Godavari Valley	(d) 391.42	
Koilapur	(n) 29.27	
(x) Hindupur (Tevantpur-Mysore frontier)	(n) 51.85	725.02
Mysore-Nanjangad	(n) 16.80	
Vijapur-Kalol-Kadi	(e) 41.80	
Shoranur-Cochin	(e) 64.83	
Birur-Shimoga	(n) 37.22	
Jodhpur-Bikaner	700.29	
Udaipur-Chiter	67.30	
(xi) Bhavnagar-Gondal-Junagad-Porbandar	(a) 334.19	1,223.04
Jetapur-Rajkot	(a) 48.21	
Jamnagar	(a) & (m) 54.22	
Dhruvadra	(n) 20.33	
(xii) West of India Portuguese	(n) 51.11	
Pondicherry	(c) 7.85	73.61
Karaikkal-Peralam	(c) 14.65	
(xiii) Bengal-Nagpur (Jubbulpore-Gondia extension) (2' 6")	35.23	81.47
Gondia to Balaghat	59.24	
Raipur-Dhamtari branch	30.25	
(xiv) Jachat (2' 0")	30.25	166.88
Nawabshah-Durgal (2' 6")	(j) 40.25	
Dandot Light (2' 0")	(j) 6.18	
Khushalnagar-Kohat-Thal (2' 6")	(j) 92.20	
Darjeeling-Himalayan (2' 0")	51.00	
Bareilly Light (2' 6")	21.89	
Howrah-Amra (2' 6")	29.69	
Howrah-Sheakbala (2' 0")	19.75	
(xv) Ranaghat-Krishnagar (2' 6")	20.25	239.76
Tarakshwar-Magra (2' 6")	31.12	
Tezpur-Balipara (2' 6")	20.10	
Powayan (2' 6")	(z) 39.50	
Thaton-Dnyuzank Light (2' 6")	7.70	
Geakwar's Dabhol (2' 6")	(c) 88.00	
(xvi) Rajpura (2' 6")	(c) 37.37	276.51
Parlakimedi (2' 6")	(y) 25.00	
Gwallior Light (2' 0")	(b) 128.14	
(xvii) Cooh Behar (2' 6")		83.60
(xviii) Morvi (2' 6")		93.07

(a) Although for convenience classed amongst State railways, this line is the property of the Bengal Central Railway Company.
 (b) Worked by the Great Indian Peninsula Railway Company.
 (c) Worked by the Bombay, Baroda and Central India Railway Company.
 (d) Worked by His Highness the Nizam's Guaranteed State Railways Company.
 (e) Worked by the Madras Railway Company.
 (f) Including 2.86 miles laid on a mixed gauge and 0.31 mile on the 3' 6" gauge.
 (g) Including 5.63 miles of military lines not used for public traffic.
 (h) Including 26.23 miles of mixed gauge (5' 6" and 3' 3 1/2") between Kot Kapura and Bhatinda, worked over by the North Western State and Rajputana-Malwa railways.
 (i) Worked by the East Indian Railway Company.
 (j) Worked by the North Western State railway.
 (k) Worked by the Oudh and Rohilkhand State railway.
 (l) Although for convenience classed amongst State railways, this line is the property of the Bengal and North-Western Railway Company.
 (m) Including 2.10 miles at Ujjain and 3.07 miles between Agra East bank and Agra Cantonment laid on the 5' 6" gauge.
 (n) Worked by the Southern Mahratta Railway Company.
 * Correction of mileage.
 † Made up as follows:—

(o) Worked by the South Indian Railway Company.
 (p) Worked by the Jodhpur-Bikaner railway.
 (q) Excluding 3.08 miles of the Lucknow-Bareilly railway between Daliganj and Ainkhagh, but including the length, Bara Banki to Burhwal, 16.79 miles, and the length over Cawnpore bridge, 0.60 mile, laid on a mixed gauge.
 (r) Worked by the Eastern Bengal State railway.
 (s) Worked by the Assam Railways and Trading Company.
 (t) Worked by the Bengal and North-Western Railway Company.
 (u) Including 4.23 miles of Bhavnagar Dock estates and Junagad quarry lines.
 (v) Worked by the Bhavnagar-Gondal-Junagad-Porbandar railway.
 (w) Including 3.33 miles of Bodi Bander Dock estate siding.
 (x) Worked by the Rohilkhand and Kumaon Railway Company.
 (y) Worked by the Bengal-Nagpur Railway Company.
 (z) Purchased by the State with effect from the 1st January 1903.
 (a) Includes 31.25 miles between Viramgam and Wadhwan converted from the 5' 6" gauge to the 3' 3 1/2" gauge on the 14th December 1902.
 (b) Classed as a State railway in consequence of the lease in perpetuity of the Assigned Districts of Berar to the British Government with effect from the 1st October 1902.

Open at the commencement of 1902-03	25,378.84
Add—Opened during 1902-03	1,095.83
Total	26,474.67
Add—Increase due to correction of mileage	3.09
Total	26,477.76
Less—Mileage abandoned on the opening of the Moghalhat-Dhuri extension	6.00
Total	26,471.76

Appendix A—continued.

Appendix A.
Important documents.

And the mileage under construction or sanctioned for construction on the 31st March 1903 will be 2,371·07 miles, made up as follows:—

	Miles.	Miles.	Miles.
East Indian—			
Katrasgarh to Khanoodh ...	7·80		
Northern half of the Mulkeera-Katrasgarh cross connection ...	0·71		
Manpur to Hariharpur ...	99·79	179·63	
Jberriah to Dhanbaid ...	3·75		
Tasea siding ...	1·75		
Shikohabad to Farukhabad ...	05·92		
Bengal-Nagpur—			
Bhojudih to Parthadahi ...	1·45		
Bhowra siding ...	1·50	31·56	419·39
Southern half of the Mulkeera-Katrasgarh cross connection ...	0·71		
Bhojudih to Hariharpur ...	27·90		
India Midland—			
Ait to Kunch ...			8·95
Madras (North-East line)—			
Kerukuppetai to Basin Road station ...			0·98
Ara-Dabli Chord ...			321·16
Amhital-Mangalore extension ...			77·27
North Western—			
Malkwal to the Karana Hills ...	51·40		
Junction with the North Western State railway, 12 miles from Quetta to Nushki ...	93·50	133·90	
Oudh and Rohilkhand—			
Allahabad to Fyzabad ...	94·87	109·14	331·92
Balamba to Madhoganj ...	14·47		
Eastern Bengal—			
Bansghat to Moorsshedabad ...	75·00		
Kantargachi Chord ...	3·35		
Kantargachi to Canal Junction ...	1·53	78·78	
Bombay, Baroda and Central India—			
Godhra to Baroda ...			44·75
Southern Punjab—			
Delhi Brewery to Delhi ...			0·79

	Miles.	Miles.	Miles.
Bengal and North-Western—			
Tichoot section—			
Sakri to Jaunagarh (e) ...	30·47		
Company's section—			
Aunthar to Jaunpur ...	30·14	60·61	
Rohilkhand and Kumaon (Lucknow-Bareilly section)—			
Dadhara to the Mohan river ...			5·96
Rajputana-Malwa—			
Rewari to Phulera (e) ...			133·32
Famine lines (Madras Presidency)—			
Bellary to Rayadrug ...	33·00		
Hospet to Kottar ...	38·10	71·10	
South Indian—			
Tiruppacbetru to Sivaganga ...	9·00		
Saidapet to Madras Beach ...	5·38	17·38	459·93
Trinnevely-Quilon (Travancore) (British section)—			
Kallidukurichi to the British frontier near Shenocottah ...			31·28
Tanjore District Board (Mayavaram-Mutupet)—			
Pattukottai to Arantangi ...	25·35		
Adirampattam and Thambikkottai salt sidings and Arantangi quarry branch ...	5·93	33·28	
Assam-Bengal—			
Damchura to Lumding ...			99·40
Eastern Bengal—			
Goleghanj to the Brahmaputra opposite Ganhati ...			151·63
Bengal Doars—			
Dains to Hantupara ...			23·30
Noakhali (Bengal)—			
Lakson and Noakhali to Kothakhali ...			34·95
Trinnevely-Quilon (Travancore) (Native state section)—			
Quilon to the frontier of the Travancore State near Shenocottah ...			67·94
Jaipur—			
Sanganer to Sival-Modhopur ...			72·95

	Miles.	Miles.	Miles.
Bengal-Nagpur (Jubbulpore-Gondia extension) (2' 6")—			
Balaghat to Jubbulpore ...	118·30		
Neispar to Mandla ...	31·75	237·44	
Neispar to Chindwara ...	67·49		
Famine lines (Madras Presidency)—			
Morsappur to Dharmapuri (2' 6") ...	18·37		
Tirupattur to Krishnagiri (2' 6") ...	38·47	44·84	372·26
Barri (2' 0")—			
Barri Road Junction to Pandharpur (e) ...	30·67		
Barri Town to Tadwala ...	26·70	57·37	
Howrah-Amra (2' 0")—			
Jagatbullaipur to Champadanga ...	17·50		
Asipur to Rajbulhat ...	3·50	31·00	
Kalka-Simla (2' 6")—			
Kalka to Simla ...			60·00
Dwara-Therria (2' 6")—			
Noospore to Therria Ghat ...			19·50
Bukhaispur-Behar (2' 6") ...			18·75
Madras District Board (2' 6")—			
Ammayayakkunur to Kotagudi ...	55·00		
Periyakulam to Krishna-Manaik's Top ...	5·00	63·00	
Theal to Karavanah ...	33·00		
Shahdara-Saharapur (2' 6")—			
Shahdara to Saharapur ...	95·00		
Baraut to Meerut ...	30·00	125·00	
Moharhanj (2' 6") (2)—			
Baripada to Baripada Road Station ...			28·20
Rewah (2' 6")—			
Rewah to Satna (e) ...			31·91
Gwalior (2' 6")—			
Gwalior to Sabulgarh ...			58·93

	Miles.	Miles.
5' 6" gauge—		
(i) State lines worked by companies ...	419·39	
(ii) State lines worked by the State ...	321·82	
(iii) Guaranteed companies ...	44·85	
(iv) Assisted companies ...	0·79	
		<u>786·85</u>

	Miles.	Miles.
3' 3½" gauge—		
(v) State lines worked by companies ...	459·03	
(vi) State lines worked by the State ...	151·62	
(vii) Assisted companies ...	58·75	
(viii) Lines owned by native states and worked by companies ...	57·94	
(ix) Lines owned and worked by native states ...	72·85	
		<u>800·19</u>

	Miles.	Miles.
Special (2' 6" and 2' 0") gauges—		
(x) State lines worked by companies ...	272·28	
(xi) Assisted companies ...	394·62	
(xii) Lines owned by native states and worked by companies ...	117·18	
		<u>784·03</u>

TOTAL ... 2,371·07

Making a grand total of railways completed and in hand, at the commencement of 1903-1904, of miles ... *28,841·64

And showing after allowing for corrections of mileage, an advance on the previous year of miles. ... 678·48

	Miles.
(a) Commencement of work not yet authorized.	
(b) Question of working agency not yet finally settled.	
Made up as follows—	
Complete and in hand at the beginning of 1903-1903 ...	28,163·16
Sanctioned during 1903-1903 ...	653·23
	<u>28,845·39</u>
Add—	
Increase due to corrections of mileage ...	1·93
	<u>28,847·33</u>
Deduct—	
Mileage abandoned on the opening of the Mogalhat-Dhubri extension (Kurigram to Jatroapur) ...	5·69
	<u>28,841·64</u>

Appendix A.
Important documents.

Appendix A—concluded.

It is expected that the following lengths of unfinished line will be opened for public traffic in 1903-1904:—

	Miles.	Miles.
5' 6" gauge—		
(i) State lines worked by companies ...	17.67	
(ii) State lines worked by the State ...	148.40	
(iii) Guaranteed companies ...	44.85	
		205.92
3' 3½" gauge—		
(iv) State lines worked by companies ...	164.99	
(v) Lines owned by native states and worked by companies ...	57.94	
		222.93
Special 2' 6" gauge—		
(vi) State lines worked by companies ...	165.83	
(vii) Assisted companies ...	60.00	
		225.83
TOTAL ...		654.18

Leaving the undermentioned lines for completion in 1904-1905 or later:—

	Miles.	Miles.
5' 6" gauge—		
(viii) State lines worked by companies ...	401.72	
(ix) State lines worked by the State ...	178.42	
(x) Assisted companies ...	0.79	
		580.93
3' 3½" gauge—		
(xi) State lines worked by companies ...	294.04	
(xii) State lines worked by the State ...	151.62	
(xiii) Assisted companies ...	58.75	
(xiv) Lines owned and worked by native states ...	72.85	
		577.26
Special (2' 6" and 2' 0") gauges—		
(xv) State lines worked by companies ...	106.95	
(xvi) Assisted companies ...	334.62	
(xvii) Lines owned by native states and worked by companies ...	117.13	
		558.70
TOTAL ...		1,716.89

	Miles.	Miles.	Miles.
(i) East Indian— Jharrish to Dhanbad 3.75 Katrasgarh to Khanoodh 7.60 Tasra siding 1.75 Northern half of the Mulkeera-Katrasgarh cross connection 0.71 Bengal-Nagpur— Bhojudih to Parhadih 1.45 Bhowra siding 1.50 Southern half of the Mulkeera-Katrasgarh cross connection 0.71		14.01	17.07
(ii) North Western— Jech Doab line— Malakwal to the Karana Hills Oudh and Rohilkhand— Phaphaman to Fyzabad		51.40	148.40
(iii) Bombay, Baroda and Central India— Godhra to Baroda		44.85	
(iv) Rohilkhand and Kumaon (Lucknow-Bareilly section)— Dudhwa to the Mubhan river 5.66 Tinnevely-Quilon (Travancore) (British section)— Kallidai Kurichi to the British frontier near Shenocottah 31.28 Tanjore District Board (Mayavaram-Mutapet)— Pattukotal to Arantangi 28.35 Assam-Bengal— Dancohara to Lumding 99.40			164.69
(v) Tinnevely-Quilon (Travancore) (Native state section)— Quilon to the frontier of the Travancore State near Shenocottah			87.64
(vi) Bengal-Nagpur (Jubbulpore-Gondia extension) (2' 6")— Balaghat to Jubbulpore 118.20 Neinpur to Seoni 47.13			165.33
(vii) Kalka-Simla (2' 6")			60.00
(viii) East Indian— Mampur to Haridwar 29.79 Sikohabad to Farukhabad 65.83 Bengal-Nagpur— Bhojudih to Haridwar 27.80 Indian Midland— Ait to Kuch 5.85 Madras (North-East line)— Korukkuppattai to Basin Road 0.25 Agra-Delhi Chord 181.18 Azikhai to Mangalore extension 77.27 North Western— Junction with the North Western State railway, 12 miles from Quetta to Nuakhi 62.50 Oudh and Rohilkhand— Allahabad to Phaphaman 2.67 Balasau to Madhoganj 14.47 Eastern Bengal— Banaghat to Moorshedabad 75.00 Kankurgachi Chord 2.25 Kankurgachi to Canal Junction 1.53		165.01	401.72
(ix) Southern Punjab— Delhi Brewery to Delhi			0.79
(x) Bengal and North-Western— Tirhoot section— Sakri to Jainagar (a) 30.47 Company's section— Anurihar to Jampur 36.14 Rajputana-Malwa— Bewari to Phulera (a) Famine lines (Madras Presidency)— Bellary to Heydrug 33.00 Hoopet to Kottar 38.10 South Indian— Tirupuchettu to Srirangana 9.00 Saldapet to Madras Beach 8.38 Tanjore District Board (Mayavaram-Mutapet)— Adirampattam and Thambikkottai Salt sidings and Arantangi quarry branch 5.63 Eastern Bengal— Golokganj to the Brahmaputra, opposite Gauhati Nonkhali (Bengal)— Laksam via Nonkhali to Ichakhali 34.25 Bengal Doorga— Daina to Hantupara 23.80 Jaipur— Sanganer to Siwal-Madhopur		133.22	294.04
(xi) Bengal-Nagpur (Jubbulpore-Gondia extension) (2' 6")— Neinpur to Mandla 21.75 Seoni to Ghindwara 40.36 Famine lines (Madras Presidency)— Morappur to Dharmapuri (2' 6") 18.27 Tirupattur to Krishnagiri (2' 6") 26.47 Bard (2' 6")— Bassi Town to Tedwala 26.70 Bardi Road Junction to Pandharpar (a) 30.67 Howrah-Amita (2' 0") 17.50 Amitpur to Rajbhat 3.50 Dwara-Cherra (2' 6")— Noorpur to Theria Ghat Bukhtiarpora-Beher (2' 6") 19.50 Madras District Board (2' 6")— Ammayanoyakkanar to Kotagodi 18.75 Periyakulam to Krishna-Manaik's Topo 55.00 Theni to Karuvanthi 5.00 Shahdara-Saharanpur (2' 6") 33.00 Shahdara to Saharanpur Baraut to Meerut 85.00 Moharbhauj (2' 6") (b) 30.00 Baripada to Baripada Road station Rewah (2' 6") (a) 28.50 Rewah to Satna Gwalior (2' 0") 31.81 Gwalior to Sebulgarh 56.82			106.95
(xii) Jaipur— Sanganer to Siwal-Madhopur			2.85

(a) Commencement of work not yet authorized.
(b) Question of working agency not yet finally settled.