

# EAST INDIA (RAILWAYS).

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## ADMINISTRATION REPORT

ON THE

## RAILWAYS IN INDIA

FOR THE

Calendar Year 1911.

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

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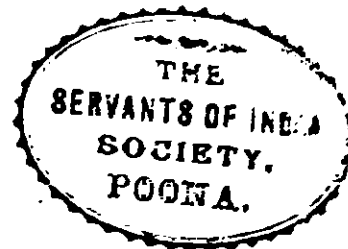
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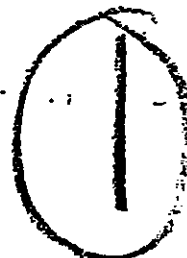
## ADMINISTRATION REPORT



ON THE

# RAILWAYS IN INDIA

FOR THE

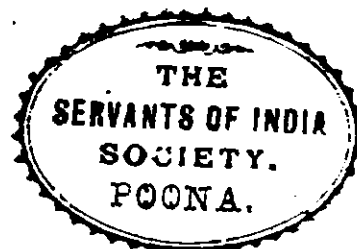


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Map of India showing railways open and under construction corrected up to the 31st March 1912 . . . . .	
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NOTE.

The figures on this scale represent lakhs for the Capital Outlay, tens of thousands for Gross Earnings and Working Expenses, and Miles for Open mileage. 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.

The "Total Capital Outlay" is that on all Indian railways, viz., (i) open, (ii) partly or wholly under construction, and (iii) on miscellaneous items; while for the purposes of the "Percentage of Net Earnings on Capital Outlay" (i) alone is reckoned.

[The decrease in the Total Capital Outlay in 1903 is due to revision of the outlay hitherto adopted for lines purchased by the State from Guaranteed Ry. Companies.]

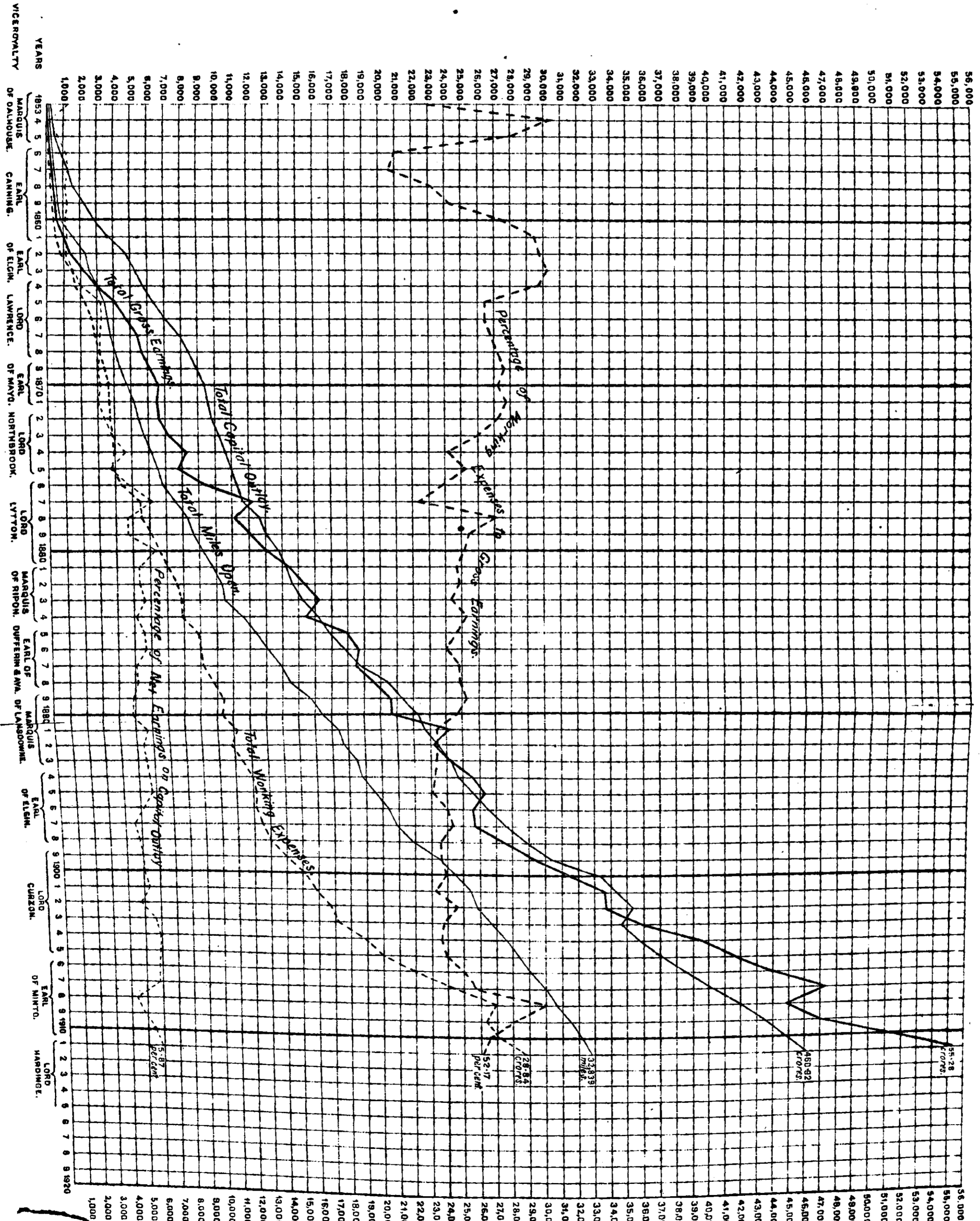


DIAGRAM SHOWING, FOR EACH YEAR, THE TOTALS UP TO 31st DECEMBER 1911, FOR CAPITAL OUTLAY, GROSS EARNINGS, WORKING EXPENSES, MILES OPEN, PERCENTAGE OF NET EARNINGS ON CAPITAL OUTLAY AND PERCENTAGE OF WORKING EXPENSES TO GROSS EARNINGS.

INDIAN RAILWAYS.

ADMINISTRATION REPORT  
ON THE  
**RAILWAYS IN INDIA**  
FOR THE  
**CALENDAR YEAR 1911.**

**Mileage.**

During the year 1911 there were 755 miles of line opened to traffic, bringing the total mileage open, after allowing for minor corrections of mileage due to realignments, re-measurements, etc., up to 32,839 miles of the following gauges:— App. 1

17,016	of 5' 6" gauge (standard),	
13,759	" 3' 3½" " (metre).	
1,632	" 2' 6" "	}
432	" 2' 0" "	
32,839		(special).

There were 841 miles of line sanctioned during the year, viz. —

483	of 5' 6" gauge (standard).	
166	" 3' 3½" " (metre).	
186	" 2' 6" "	}
6	" 2' 0" "	
841		(special).

At the end of 1911 there were 2,673.78 miles of line under construction as follows:—

1,193.86	of 5' 6" gauge (standard).	
745.86	" 3' 3½" " (metre).	
724.56	" 2' 6" "	}
9.50	" 2' 0" "	
2,673.78		(special).

**Capital.**

2. The actual capital outlay (excluding premia for the purchase of companies' lines) from the commencement of operations on all open lines amounted, at the close of the calendar year 1911, to Rs. 45,006.80 lakhs, and that on lines under construction to Rs. 955.48 lakhs. In addition Rs. 130.12 lakhs were incurred on miscellaneous items (English stores, etc.) connected with railways. The total outlay amounted to Rs. 46,092.40 lakhs. App. 2

The actual expenditure on open line rolling-stock, and on other open line expenditure, during the year 1911 amounted to 351 lakhs and 573 lakhs, respectively.

3. All sanctions for expenditure are given with reference to the official year, and the sum of Rs. 1,350 lakhs, (£9,000,000), has been provided for 1912-13 divided as under:—

	Rs. Lakhs.
(a) For open lines, including Rs. 465.35 lakhs for rolling-stock	351.18
(b) For lines already under construction—	
(i) begun prior to 1911-12	279.18
(ii) begun during 1911-12	107.64
(c) For lines to be begun in 1912-13	12.00
<b>Total</b>	<b>1,350.00</b>



### Financial Results to the State.

4. The financial result to the State during the year 1911 of the working of the State railways, after meeting, in addition to the expenses of working, all charges for interest on capital outlay by the State and on capital raised by Companies, also annuity payments connected with the purchase of railways by the State, was a net gain of Rs. 406.94 lakhs (£2.71 million). This result, however, is arrived at after inclusion in the charges against revenue of a sum of Rs. 135.63 lakhs (£904 thousand) representing the portion of annuity payments in redemption of capital. Omitting this item, which is not properly a revenue charge, the true result for the year is a net gain of Rs. 543 lakhs (£3.62 million).

The subjoined table compares the financial results of the year 1911 with those of the two preceding years. [It is to be noted that the figures of surplus of net revenue over interest shown therein understate the real surplus derived from the railways open to traffic, as the interest charges include the interest on the capital of lines under construction, which, if these lines were being constructed by private enterprise, would be charged to the capital account.]

	1909.			1910.			1911.		
	State railways.	Guaranteed railways.	Total.	State railways.	Guaranteed railways.	Total.	State railways.	Guaranteed railways.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<b>REVENUE.</b>									
Gross traffic receipts.—State railways.	42,19,87,416	—	42,19,87,416	45,70,51,083	—	45,70,51,083	48,56,61,423	—	48,56,61,423
Gross traffic earnings.—Guaranteed railways.	—	—	—	—	—	—	—	—	—
Repayment of advances of interest.—Subsidised railways.	8,71,127	—	8,71,127	5,77,368	—	5,77,368	8,71,668	—	8,71,668
<b>Total revenue</b>	<b>42,28,58,543</b>	<b>—</b>	<b>42,28,58,543</b>	<b>45,76,28,651</b>	<b>—</b>	<b>45,76,28,651</b>	<b>48,65,33,091</b>	<b>—</b>	<b>48,65,33,091</b>
<b>EXPENDITURE.</b>									
Working expenses.—State railways.	24,17,73,734	—	24,17,73,734	24,57,39,271	—	24,57,39,271	25,77,01,430	—	25,77,01,430
Working expenses.—Guaranteed railways.	—	2,745	2,745	—	—	—	—	—	—
Share of surplus profits paid to Companies, etc.	69,69,371	1,52,843	61,52,218	60,97,813	—	60,97,813	64,05,341	—	64,05,341
Land and depreciation charges.—Guaranteed railways.	—	—24,533	—24,533	—	—24,841	—24,841	—	833	833
Land and building charges.	11,20,167	—	11,20,167	3,75,697	—	3,75,697	5,62,317	—	5,62,317
Miscellaneous railway expenditure.	4,18,525	—	4,18,525	4,08,636	—	4,08,636	3,47,678	—	3,47,678
<b>Total expenditures</b>	<b>24,82,05,017</b>	<b>1,71,806</b>	<b>24,84,56,823</b>	<b>25,16,06,537</b>	<b>—24,841</b>	<b>25,15,81,696</b>	<b>26,40,36,661</b>	<b>833</b>	<b>26,40,37,494</b>
<b>Net revenue</b>	<b>17,46,53,526</b>	<b>—1,71,806</b>	<b>17,43,71,720</b>	<b>20,60,22,114</b>	<b>14,841</b>	<b>20,60,37,306</b>	<b>22,15,96,430</b>	<b>—833</b>	<b>22,15,95,597</b>
<b>ORDINARY INTEREST CHARGES.</b>									
Interest on capital outlay.—State railways.	5,37,66,554	—	5,37,66,554	5,63,10,170	—	5,63,10,170	6,59,30,150	—	6,59,30,150
Interest on debt for purchase of railways.	2,64,44,415	—	2,64,44,415	2,53,61,795	—	2,53,61,795	2,55,32,445	—	2,55,32,445
Interest on advances of capital to Companies.	79,51,554	—	79,51,554	66,75,761	—	66,75,761	69,66,248	—	69,66,248
Interest on capital raised by Companies.	2,75,69,808	—	2,75,69,808	3,10,04,520	—	3,10,04,520	2,73,16,011	—	2,73,16,011
Portion of annuities for purchase of railways representing interest on capital.	4,01,62,970	—	4,01,62,970	3,39,01,300	—	3,39,01,300	3,94,37,445	—	3,94,37,445
Interest on capital of Guaranteed Companies.	—	—	—	—	—	—	—	—	—
<b>Total interest</b>	<b>15,59,37,001</b>	<b>—</b>	<b>15,59,37,001</b>	<b>16,80,54,176</b>	<b>—</b>	<b>16,80,54,176</b>	<b>16,73,36,204</b>	<b>—</b>	<b>16,73,36,204</b>
<b>Surplus of net revenue over interest</b>	<b>1,45,56,525</b>	<b>—1,71,806</b>	<b>1,43,84,719</b>	<b>4,20,68,346</b>	<b>14,841</b>	<b>4,20,83,189</b>	<b>5,43,59,136</b>	<b>—833</b>	<b>5,43,57,303</b>
Portion of annuity payments representing redemption of capital also charged against revenue.	1,26,69,910	—	1,26,69,910	1,31,66,300	—	1,31,66,300	1,36,84,226	—	1,36,84,226
<b>Actual net gain +, or loss —</b>	<b>+19,87,615</b>	<b>—1,71,806</b>	<b>+17,15,809</b>	<b>+3,89,02,146</b>	<b>+14,841</b>	<b>+3,89,74,989</b>	<b>+4,06,74,911</b>	<b>—833</b>	<b>+4,05,94,078</b>

App. 3. 5. As regards the capital liability in connection with railways owned by the State there are some complications in stating the amount, owing to the fact that, in the case of some of the lines taken over, the purchase price is being paid by means of annuities. In these cases it seems correct to deduct, from the original commuted capital at which the lines were taken over, the amount redeemed by annuity payments up to date. On this basis the subjoined table shows the capital liability at the end of 1911 on account of all railways classed as State railways, including the Madras railway which was purchased by the State on 1st

January 1908, the Indian Midland railway, purchased on the 31st December 1910, and the Hardwar-Dehra railway—the State outlay, as recorded in rupees in the accounts, being converted into sterling at the rate of Rs. 15=£1. The total capital at charge amounts to £328·60 million (the details by railways being shown in Appendix 3); and on this the net revenue of the State railways for 1911, £14·77 million, gives a return of 4·49 per cent. Including, however, the sum of 9·58 million on account of capital redeemed by annuities and charged off to revenue in the accounts of successive years, the total capital outlay amounts to £338·13 million, and the net revenue of £14·77 million in 1911 gives a return on this figure of 4·37 per cent.

*Capital liability on account of railways classed as State railways at end of 1911.*

1. Share capital of purchased railways being paid off by annuities:—

	£	£
Computed value of stock purchased ... ..	97,829,817	
<i>Deduct—</i>		
Commuted capital representing annuities which were purchased by creation of debt (liability included under item 3) ...	12,741,462	
New stock of the Great Indian Peninsula railway exchanged for portion of annuity (liability included under item 5) ...	1,750,000	
New stock of the Madras and Southern Mahratta Railway Company issued in exchange for portion of annuity (liability included under item 5) ...	1,500,000	
Capital redeemed by annuity payments ... ..	9,526,731	
	<u>25,518,193</u>	
Net outstanding ... ..		72,311,624
2. State outlay ... ..		130,162,308
3. Debt incurred for purchase of railways ... ..		57,842,567
4. Capital advanced by Government to Companies ... ..		12,349,576
5. Capital raised by Companies on the Secretary of States' guarantee (including overdrafts of capital) ... ..		56,440,484
		<u>328,606,559</u>

**Statistical Results of Working.**

3. With a net addition of 740 miles to the open mileage, the gross earnings of all Indian railways during the calendar year 1911 amounted in round figures to Rs. 5,527·92 lakhs, compared with Rs. 5,114·22 lakhs in 1910, being an increase of Rs. 413·70 lakhs, while the working expenses were more than in 1910 by Rs. 168·20 lakhs. The net earnings amounted to Rs. 2,644·00 lakhs, against Rs. 2,398·50 lakhs in 1910, or an increase of Rs. 245·50 lakhs. These net earnings yielded a return on the capital outlay (Rs. 45,006·80 lakhs) on open lines, i.e., on mileage earning revenue, of 5·87 per cent, as compared with 5·46 in 1910. App. 7.

Of the increase of Rs. 413·70 lakhs in the gross earnings, the East Indian railway accounted for Rs. 67·28 lakhs or 16·26 per cent, the North Western railway for Rs. 65·53 lakhs or 15·84 per cent, the Great Indian Peninsula railway for Rs. 49·16 lakhs, or 9·71 per cent, the Bengal-Nagpur railway for Rs. 31·17 lakhs, the Rajputana-Malwa railway for Rs. 24·17 lakhs and the Bombay, Baroda and Central India railway for Rs. 24·30 lakhs. App. 6.

The total number of passengers carried was 389·86 million, against 371·53 million, and the earnings therefrom amounted to Rs. 1,849·08 lakhs, against Rs. 1,712·04 lakhs. The number of third class passengers carried was more by 16·02 million and the earnings therefrom by Rs. 107·99 lakhs. The increase of Rs. 137·04 lakhs in the passenger earnings was contributed chiefly by the North Western railway (Rs. 26·84 lakhs), the East Indian railway (Rs. 16·08 lakhs), the Great Indian Peninsula railway (Rs. 12·35 lakhs), the Bombay, Baroda and Central India railway (Rs. 10·03 lakhs), the Eastern Bengal railway (3' 3<sup>3</sup>/<sub>8</sub>" gauge section) (Rs. 9·20 lakhs), the Oudh and Rohilkhand railway (Rs. 8·69 lakhs) and the Rajputana-Malwa railway (Rs. 8·56 lakhs), and was due to the development of traffic and to the Coronation Durbar held at Delhi. App. 4.

App. 7. The average rate charged to passengers of all classes was 2.47 pies per mile, just over  $\frac{1}{4}$ th of a penny, and the average distance travelled was about 37 miles. There have been no material fluctuations in these figures since 1884.

App. 4. The aggregate tonnage of goods moved during the year 1911 was 71.27 million tons and the earnings therefrom were Rs. 3,293.32 lakhs, an increase over the previous year of 5.67 million tons and of Rs. 250.15 lakhs in earnings. Of the increase in the goods receipts the East Indian railway contributed Rs. 49.05 lakhs or 19.21 per cent and the North Western railway Rs. 36.69 lakhs or 14.67 per cent, while the remainder was contributed principally by the Bengal-Nagpur, the Great Indian Peninsula, the South Indian, the Bombay, Baroda and Central India and the Rajputana-Malwa railways.

The increase in goods earnings on the East Indian railway was chiefly due to heavy bookings of "Grain and Pulse" for export to Europe, and of "Coal" due to larger takings by foreign railways; that on the North Western railway arose from larger despatches of "Wheat" and "Other grain and pulse" for export to Europe.

App. 10. The total weight of the traffic in "Grain and pulse," "Coal," "Cotton, raw and manufactured," "Oils," "Oil-seeds," "Sugar," "Salt" and "Jute" during the year 1911 amounted to 38.73 million tons and the earnings therefrom to Rs. 2,172.55 lakhs, against 35.61 million tons and Rs. 2,004.19 lakhs, respectively, in the previous year. The traffic in these commodities amounted during the year 1911 to 71.43 per cent in weight and 71.05 per cent in earnings of the total traffic carried for the public, against 70.89 per cent and 70.55 per cent, respectively, in the previous year.

There was an increase of 2,438 thousand tons and Rs. 159.71 lakhs under "Grain and Pulse," owing to larger exports of "Wheat" and "other Grains" to Europe; of 119 thousand tons and Rs. 8.21 lakhs in the "Jute" traffic, owing to better outturn of "Jute" and to greater bookings to Europe; of 152 thousand tons and Rs. 11.75 lakhs under "Oils," owing to the greater consumption of "Kerosine" oil by factories and the cheaper rates inducing larger sales; and of 162 thousand tons and Rs. 6.73 lakhs under "Oil seeds," due to excellent crops and to greater demand of "Castor" and "Linseed" for export. There was, however, a falling off of 277 thousand tons and Rs. 42.84 lakhs under "Cotton," owing to the partial failure of crops in the Punjab, Central Provinces and Berar.

App. 13. *Coal*.—During the year 1911 the total output from the collieries in India and Burma amounted, as shown in Appendix 13, to 12.72 million tons, against 12.05 million tons in 1910. The exports of Indian coal to Indian ports, principally from Calcutta to Bombay, Karachi and Madras, fell from 1.85 million tons to 1.60 million tons or by 247.24 thousand tons, due to some extent to the coal being sent by the rail route instead of by the sea route; and those to ports outside India, including Burma, principally from Calcutta to Rangoon and Ceylon, from 1,391.25 thousand tons to 1,253.97 thousand tons or by 137.28 thousand tons. The imports of coal from the United Kingdom fell from 261.32 thousand tons to 245.04 thousand tons or by 16.27 thousand tons, while those from other countries rose from 54.74 thousand tons to 73.71 thousand tons or by 18.97 thousand tons.

App. 12. The total quantity of Indian coal consumed by railways during the year 1911 increased from 3.80 million tons to 4.22 million tons or by 421.77 thousand tons, and the amount of foreign coal consumed decreased from 52.15 thousand tons to 32.13 thousand tons.

App. 10. The traffic in coal carried by railways increased from 18.91 million tons in 1910 to 14.52 million tons in 1911, and the earnings therefrom from Rs. 385.41 lakhs to Rs. 413.63 lakhs. The increase occurred principally on the Bengal-Nagpur railway and was due to the diversion to the rail route of a proportion of coal which previously was sent by the sea route to destination.

App. 7. The average rate for all descriptions of goods carried per ton per mile was 4.78 pies, compared with 4.83 pies in 1910, or just under  $\frac{1}{4}$  penny; while the average distance over which a ton of goods was carried was 187 miles, against 184 miles in the previous year.

### Important Works.

7. The following is a brief abstract of the more important works completed during the year 1911:—

*Bengal-Nagpur railway system, 5' 6" gauge section.*—Works in connection with the duplication of the wagon ferry from Shalimar to Kidderpore, across the river Hooghly, and the remodelling of the station yards at Gondia and Kharagpur.

*Bombay, Baroda and Central India railway system, 5' 6" gauge section.*—The strengthening of the Godhra-Rutlam-Nagda line with additional sleepers, and the relaying of 40 miles of 69-lbs. permanent-way with 90-lbs. rails.

*3' 3½" gauge section.*—The relaying of 20 miles of 41½-lbs. rails with 50-lbs. steel rails on the Ajmer division and the Mhow district; the renewal of weak girders on the main line of the Rajputana-Malwa railway; and the remodelling of Rewari and Phulera station yards.

*Eastern Bengal railway system, 5' 6" gauge section.*—The relaying with 90-lbs. rails of the Central section between Dum Dum Junction and Khulna, the up line as far as Poradaha and the single line between Poradaha and Bhairamara on the Eastern section, and the Faridpur branch; also the renewal of girders on the Central section (with the exception of some spans of 80 feet and 100 feet) and the remodelling of Khulna station yard.

*3' 3½" gauge section.*—Additional waterways on the Gauhati extension, necessitated by the extensive damages that were caused by floods during 1910.

*East Indian railway system.*—The renewal of the girders of the Hulohur bridge.

*Great Indian Peninsula railway system.*—The relaying of 40 miles of 82-lbs. section track with that of 100-lbs. on the Dongargaon and Chandni banks, between Khandwa and Bhusaval; while the strengthening and renewal of 30-foot girders, and the strengthening of the Tapti bridge by a third road cylinder pier and the new superstructure of 14 spans of 60 feet and 5 of 142 feet, were practically completed, as were also five Carriage and Wagon Shops at Matunga which were brought into use.

*North Western railway system, 5' 6" gauge section.*—The remodelling of the station yards at Samasata and Malakwal, and of the locomotive and traffic yards at Khanewal.

*Oudh and Rohilkhand railway system.*—New bridge (consisting of 25 spans of 100 feet and one of 40 feet) over the Ganges river at Cawnpore for the use of 5' 6" gauge traffic only.

*Bengal and North-Western railway system.*—The relaying with 50-lb. rails of the Bettiah branch from Muzaffarpur to Bettiah and the replacement of all the weak girders by others of the standard type.

*Burma railways system.*—The new locomotive yard at Malagon and the new station and locomotive yards at Pegu, which were practically completed, were brought into use.

8. Of works in progress at the end of 1911 the following are the more important:—

*Eastern Bengal railway system, 5' 6" gauge section.*—The Lower Ganges bridge near Sara, to link up the 5' 6" and 3' 3½" gauge sections of this line. At the approaches to the bridge a continuous bank 20 feet wide and 5 feet above high flood level was constructed, a pair of stone-pitched guide banks were built at the bridge site and work was started on five well foundations.

*South Indian railway system, Indo-Ceylon Connection, 3' 3½" gauge section.*—Good progress was made during the year on the links and connected works described in the previous Report as being required to connect India with Ceylon. A project has been suggested by the Company for ultimately displacing the ferry service by the construction of a line of railway along Adam's Reef. In view of the very heavy capital outlay that would be incurred, it has been decided to make careful enquiries and to ascertain all the advantages and disadvantages which would result from its construction, before proceeding to develop the project.

*Bengal and North-Western railway system.*—The permanent bridge over the Gogra river (18 spans of 200 feet girders) and approaches at Manjhi Ghat, which were under completion in December last, were opened to traffic in February 1912.

The Ganges bridge at Allahabad (40 spans of 150 feet girders), with a connecting line to Allahabad station, is the remaining link in connecting Benares with Allahabad on the 3' 3½" gauge. Well sinking on the bridge is nearly completed, 33 piers having been built and 14 spans of girders erected, and the earthwork on the line from the bridge to Allahabad is in hand.

The Gundak bridge at Bagaha (15 spans of 100 feet girders) and approaches are in progress, and it is hoped will be ready for opening in June 1912.

## Railway Surveys.

9. The following surveys were completed during 1911:—

Province.	Railway Administration.	Survey.			Class of survey.	Gauge.	Length.	REMARKS.	
		From	Via	To					
Bengal	Bukhtiarpore-Bihar	Silao	...	Rajgirkund	Detailed	3' 6"	4.75		
	Darjeeling-Himalayan.	Siliguri	Nuxalbari	Kissengunge	"	3' 0"	72.00		
		"	"	"	Teesta bridge	"	"	29.50	
		Darjeeling	"	"	Lebong	"	"	5.00	
		Ghoom	"	"	Tukdah	"	"	6.00	
Bombay	North Western	Kotri*	...	Bohri	"	5' 6"	172.35	* In connection with the project for doubling the section.	
	Aden Tramway	Tawahi	Maala	Sheikh Othman	"	3' 6"	11.88		
		Maala	"	Crater	"	"	"	"	
	Bhavnagar	Botad	"	Jasdan	"	3' 3 1/2"	33.47		
	Jamnagar	Jamnagar	Khambhalia	Dwarka	"	"	"	75.27	
		Khambhalia	"	Sakia	"	"	"	"	
	Great Indian Peninsula.	Dhond	"	Baramati	"	3' 6"	28.00		
✓ Nizam's Guaranteed State.	Wadi	"	Gadag	(See under Hyderabad.)	"	"	"		
Burma	Burma.	Ta-Hapalai	...	Nampai	Detailed	3' 3 1/2"	26.43		
		Pyinmans	...	Minbyin	"	"	29.11		
		Hensada	Hnegyo, Donabyu and Akyaw.	Yegyi	"	"	"	63.89	
		Hensada	Donngyi, Zalon, Donabyu and Akyaw.	Yegyi	"	"	"	67.73	
		Mile 466A, Sagaing-Alon branch.	"	Sainbyin	"	"	"	28.08	
Central Provinces.	Great Indian Peninsula.	Murtajapur	Karinje and Darwa.	Yeotmal	"	2' 6"	71.80		
		Pulgaon	"	Arvi	"	"	21.50		
		Murtajapur	"	Ellichpur	"	"	47.00		
	Madras and Southern Mahratta.	Rajahmundry	"	Sironcha	(See under Madras.)	"	"		
Eastern Bengal and Assam.	Eastern Bengal	Sarat	...	Santahar	Detailed	5' 6"	49.51	† For laying a 5' 6" gauge track alongside the existing metre gauge.	
		Raja Bhat Khawa	...	Dalsingpara	"	3' 3 1/2"	17.43		
		Ulipur	...	Chilmari	"	2' 6"	17.00		
Hyderabad	Nizam's Guaranteed State.	Wadi	...	Gadag	"	3' 6"	‡ For a re-alignment of 118.43 miles, out of a total length (as surveyed in 1903) of 178.24 miles.		
Madras	Madras and Southern Mahratta.	Rajahmundry	...	Sironcha	"	"	§ 209 miles by the direct route, and 215.50 by the alternative route <i>via</i> Gokavaram.		
		Bengal-Nagpur	Parlakmedi	Gunnur	"	2' 6"	81.63		
	South Indian	Erode	...	Nanjangud	"	3' 3 1/2"	141.81		
		Kottamangalam	...	Mettupalaiyam	"	"	"		
	Quillon	...	Trivandrum	"	"	"	39.15		
Mysore	Madras and Southern Mahratta.	Mysore	...	Hassan	"	"	74.00		
	South Indian	Erode	...	Nanjangud	(See under Madras.)	"	"		

## Railway Surveys completed—concl'd.

Province.	Railway Administration.	SURVEY.			Class of survey.	Gauge.	Length.	REMARKS.
		From	Via	To				
Punjab	North Western	Lahore*	...	Racwind	Detailed ...	5' 6"	24-75	* In connection with the project for doubling the section.  † Includes the Bulandshahr branch of 16-07 miles.
Rajputana	Dholpur-Bari	Dholpur	...	Rajakhera	" ...	2' 6"	22-35	
United Provinces.	Oudh and Rohilkhand	Rosa	...	Budaon	" ...	5' 6"	73-65	
		Budaon	...	Babrala	" ...	"	54-84	
		Dibait	...	Hapur	" ...	"	73-30	
		"	...	Kasganj	" ...	"	37-03	
		Unao	Safipur	Bangarman	" ...	"	36-23	
"	Hyderabad	"	" ...	"	38-26			
"	Madhoganj	...	"	" ...	"	18-71		

## 10. The following surveys were in progress during 1911:—

Province.	Railway Administration.	SURVEY.			Class of survey.	Gauge.	Length.	REMARKS.
		From	Via	To				
Bengal	Eastern Bengal	Khulna	Gournadi	Barisal	Reconnaissance.	5' 6"	78-00	Miles.
		"	...	Bagirhat	Detailed ...	2' 6"	20-00	
Bombay	Great Indian Peninsula.	Talegaon	...	Khed	Resurvey...	"	22-50	
	Madras and Southern Mahratta.	Kudahi	Jamkhandi...	Bagalkot	Detailed ...	3' 3 1/2"	76-00	
	Junagad	Una	...	Visavadar	" ...	"	...	
	Ambaji-Tarang Light.	Samia	...	A point within 3 to 4 miles of Amba Mata temple.	" ...	2' 6"	14-00	
	Gujarat	Kapadvanj	...	Meghraj	" ...	"	42-00	Birma
	Maungdaw-Buthidaung Light	Maungdaw	...	Buthidaung	" ...	"	17-25	
Central India	East Indian	Sutna	...	Bewa	" ...	5' 6"	82-00	Central Provinces.
	Great Indian Peninsula.	Khamgaon	Amerpur	Chikli	" ...	2' 6" and 5' 6"	36-00	
	Railway Board	Khandwa	Akola	Hingoli	" ...	3' 3 1/2"	185-00	
Eastern Bengal and Assam.	Eastern Bengal	Sara	...	Seraiganj	" ...	5' 6"	50-00	
		Natore	Rampur Balia.	Godagari	" ...	"	41-65	
		Khulna	Gournadi	Barisal	(See under Bengal.)			
	Bengal-Doon	Chalsa	...	Matelli	Detailed ...	3' 3 1/2"	5-10	Hyderabad
	Railway Board	Khandwa	Akola	Hingoli	(See under Central Provinces.)			
	South Indian	Virudupati	...	Tenkasi	Detailed ...	3' 3 1/2"	78-00	
Mysore	Madras and Southern Mahratta.	Bowringpot	...	Kolar	" ...	2' 6"	10-00	North-West Frontier Province.
	North Western	Peau	...	Tank	" ...	"	21-75	

## Feeder Lines for which Concessions have been granted to Private Syndicates.

11. During 1911 certain private Syndicates were granted the following concessions:—

### RAILWAYS.

- (a) *Nadiad-Kapadvanj and Godhra-Lunavada railways.*—Messrs. Killick Nixon & Co. were granted a concession to float a Branch Company for the construction, on rebate terms under the Branch Line Terms of 1910, of 2' 6" gauge railways from Nadiad to Kapadvanj (Bombay), about 28 miles; and from Godhra to Lunavada (Bombay), about 25 miles in length. The Branch Company has been formed.
- (b) *Mandra-Bhon railway.*—Messrs. Rocha Ram & Sons were granted a concession to float a Branch Company for the construction, on rebate terms under the Branch Line Terms of 1910, of a 5' 6" gauge railway from Mandra to Bhon (Punjab), a length of about 47 miles. The Branch Company has not yet been formed.
- (c) *Southern Punjab railway.*—The Southern Punjab Railway Company were granted a concession on rebate terms for the construction of 5' 6" gauge extensions of their system from Ferozepur, *via* Lohian and Kapurthala, to Jullundur (Punjab), about 73 miles in length; and from Lohian to Phillaur (Punjab), about 39 miles in length, in the Jullundur Doab.
- (d) *Darjeeling-Himalayan railway.*—Messrs. Gillanders Arbuthnot & Co. were granted a concession to form a Branch Company for the construction, on rebate terms under Branch Line Terms of 1910, of 2' 0" gauge extensions of the Darjeeling-Himalayan railway from—
- |  |   |           |
|--|---|-----------|
| <p>(1) Siliguri to Kissengunge,<br/> (2) Siliguri to the Teesta Bridge,<br/> (3) Darjeeling to Lebong, and<br/> (4) Ghum to Hum,</p> | } | (Bengal), |
|--|---|-----------|
- a total length of about 112 miles. The Branch Company has not yet been formed.
- (e) *Krishnagar-Jalangi railway.*—Messrs. H. V. Low & Co. were granted a concession to float a Branch Company for the construction of a 2' 6" gauge railway from Krishnagar to Jalangi (Bengal), a length of about 56 miles. The line will be subsidised by the District Board of Nadia. The Company has not yet been formed.

### TEAMWAYS.

- (f) *Bukhtiarpore-Bihar Light railway.*—The Bukhtiarpore-Bihar Light Railway Company were granted a concession for the construction, under the Bengal Tramways Act, III of 1883, of a 2' 6" gauge extension of their line from Silao, the present terminus, to Rajgir (Bengal), a distance of about 5 miles. The District Board of Patna will extend to this extension the guarantee granted by them in regard to the existing line.

### Rolling-stock and Safety Appliances.

12. For the year 1911-1912 a provision of Rs. 454 lakhs was made in the Budget estimates for additional rolling-stock for open lines of railway. This provision is only Rs. 12 lakhs less than that for 1910-1911.

App. 15 and 16. The additions made during the year 1911 to the rolling-stock of the railways consisted of 222 engines, 1,039 coaching vehicles and 3,485 goods vehicles, the number under supply being 253 engines, 1,245 coaching vehicles and 8,250 goods vehicles.

Subsequent to the 31st December 1911 the provision of 84 additional engines, 199 coaches and 1,044 wagons has been authorised.

App. 17. 13. Four hundred and thirty-five engines, 1,131 coaches and 8,002 wagons were fitted with automatic brakes, bringing the total number so fitted at the close of the year up to 5,713 engines, 17,462 coaches and 56,721 wagons, as against 1,702 engines, 3,944 coaches and 94,608 wagons not fitted.

App. 18. 14. One thousand three-hundred and twenty-four vehicles were fitted for gas and electricity, making the total number so fitted at the close of the year 17,415, as compared with 4,317 not fitted. The number fitted for gas was 376 and for electricity 948.

App. 19 and 20. 15. The fitting of passenger communication to vacuum-braked stock continues to be rapidly pushed on and the work has been completed on most of the principal railways. The number and class of trains and of carriages on railways which are so fitted is shown in Appendices 19 and 20.

16. *Accident Vans.*—A Committee of Medical and Railway Officers was appointed to consider the question of improving the facilities for giving medical aid on the occurrence of serious railway accidents, and as a result of their deliberations, a revised list of contents of medicine chests and appliances for provision in railway accident relief trains, together with plans of standard types of combined ambulance and surgery carriages (5' 6" and 3' 3½" gauges), were drawn up and ordered for adoption on State railways, the recommendations being at the same time circulated to other Railway Administrations for information.

### Interlocking and Block Working.

17. One hundred and twenty-eight stations were fitted during the year with apparatus for interlocking points and signals, and 309 stations with automatic instruments for signalling trains between stations.

App. 21.

### Fares and Rates.

18. *General Classification of Goods.*—The General Classification by the Indian Railway Conference Association, was sanctioned and brought into force from the 1st September 1911, "subject to the condition that no railway shall charge for any commodity at a higher rate than that permissible on that railway on the 30th June 1910."

*Famine traffic.*—Owing to the prospects of a fodder famine in parts of the Bombay Presidency, the Punjab, Rajputana, and Central India in consequence of the partial failure of the south-west monsoon of 1911, the Railway Administrations, at the instance of the Railway Board, generally agreed to co-operate in the measures adopted by the Government for the protection of cattle by quoting specially reduced rates for the carriage of fodder. With a view to effecting the movement of fodder in quantities sufficiently large to provide for the safety of the cattle within the affected areas, it was further decided in September 1911 that, as in 1907-08, the freight on consignments of fodder as specified (excepting fodder for the Army Department) booked to stations in the affected areas should be recovered from the consignor or consignee at the rate of half an anna per four-wheeled, and one anna per bogie wagon per mile, and that the balance of freight calculated at the special reduced rates agreed to by Railway Administrations, or at the ordinary tariff rates in cases where the rate had not been specially reduced, should be paid by the Government.

*Military traffic.*—Pending the submission by the Indian Railway Conference Association of definite proposals for the adoption permanently or otherwise of the enhanced vehicle rates for the conveyance of military traffic, which were introduced tentatively for the years 1910 and 1911, sanction was accorded in December 1911 to their continuance until further notice.

### Accidents.

19. The following is a statement of accidents of all descriptions to persons which have occurred during the last five years :—

App. 22.

YEAR.	Passengers.						Servants.						Other persons.								Total all classes.			
	By accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.		By 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.		Trespassers.		Suicides.		Miscellaneous, not included in preceding columns.				Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.			Killed.	Injured.
1907	45	150	150	459	195	609	40	120	405	546	445	666	51	44	919	808	189	7	35	36	1,194	890	1,634	1,665
1908	121	284	156	470	277	754	43	175	411	550	454	725	41	31	1,108	807	230	5	33	30	1,406	373	2,137	1,853
1909	29	127	161	487	190	614	31	131	384	321	365	663	47	36	1,116	269	157	12	26	30	1,376	347	1,931	1,633
1910	3	184	184	475	187	659	37	193	361	545	398	653	37	26	1,066	268	157	8	42	30	1,372	353	1,857	1,664
1911	12	134	198	565	210	699	27	125	396	666	423	791	49	39	1,126	301	223	3	47	31	1,445	379	2,078	1,869



The number of passengers killed from causes beyond their own control was 0·03 per million of passengers travelling, which gives an average of 1 in 1,197·74 millions of miles travelled.

20. The following are particulars of the more serious train accidents :—

No. 1 up passenger train was wrongly admitted on to the second line at Mohendranagar station, on the northern section of the *Eastern Bengal railway* (3' 3 $\frac{3}{4}$ " gauge), on the 6th January 1911, where it collided with No. 4 down mail train which was standing there. Four passengers and six railway servants were injured.

A trolley, conveying the Assistant Engineer, Maymyo, and a companion, ran into an up goods train between two small tunnels at mile 398—19-20-L., between Zibingyi and Sedaw stations on the Lashio branch of the *Burma railways*, on the 7th March 1911. Two of the trollymen were killed, and the Assistant Engineer's companion, who was fatally injured, died while being conveyed to Mandalay for treatment. The Assistant Engineer and the other two trollymen were seriously injured. The cause of the accident is not known.

A collision occurred between No. 61 up passenger train and No. 58 down local train at Sukkur station, on the *North Western railway*, on the 13th March 1911, due to the carelessness of the railway staff. Six passengers were injured and the rolling-stock was considerably damaged.

No. 8 down express passenger train was derailed and completely wrecked at mile 349 $\frac{1}{2}$ , between Sadisopur and Neora stations, on the *East Indian railway*, on the 5th April 1911, in consequence of a rail having been removed from the down main line by some person or persons unknown. One passenger was killed, and thirty-two passengers were more or less injured. The damage to rolling-stock was considerable.

No. 1 ballast train was derailed while entering the loop at Balamau station, on the *Oudh and Rohilkhand railway*, on the 9th April 1911, owing to the switch of the double slip not having been spiked and the points not having been properly secured. Three persons were killed and one was injured, and the rolling-stock and permanent-way were considerably damaged.

A collision occurred at Balasore station on the *Bengal-Nagpur railway*, on the 16th April 1911, between No. 161 down passenger and No. 204 up goods trains, owing to the former having been wrongly admitted to the line on which the latter was standing. Eighteen passengers and nine railway servants were injured, and the rolling-stock was considerably damaged.

No. 352 goods collided with No. 1 Boat mail train at mile 170-11, near Anatandavapuram station, on the *South Indian railway* (3' 3 $\frac{3}{4}$ " gauge), on the 18th April 1911, owing to the disregard of rules on the part of the assistant station master at that place. Four passengers and one railway servant were injured and the rolling-stock was seriously damaged.

No. 5 up mixed train was derailed between Lakhminia and Lakho stations, on the *Bengal and North-Western railway system*, on the 4th May 1911, due to the breaking of the buffer of a covered goods wagon on the train. Six passengers were killed and fourteen injured. Two of the latter subsequently died.

One of the two engines of the Jumna pilot, while coming out from Khanoodih extension (Katrasgarh) of the *East Indian railway*, on the 25th July 1911, with a rake of loaded wagons, collided with the other engine which was pushing some empties from the opposite direction, owing to the carelessness of the guard in charge of the pilot. A number of wagons were derailed and one of the engines was capsized. Five railway servants were injured.

While No. 257 down goods train was running over bridge No. 72, between Seoni and Bhoma stations on the Chhindwara branch of the *Bengal-Nagpur railway*, on the 7th August 1911, the engine was felt to sway and jump violently as it reached the second pier, when the draw-bar between the engine and tender broke. The engine jumped forward and was brought to a stand about 80 feet beyond the abutment of the bridge, the tender fell over the bridge into the stream below; the ten wagons immediately following were capsized and lay on the further bank; the next three fell into the stream; the fourteenth was suspended from the second pier, and the fifteenth was derailed. The engine khalasi and a boy travelling on the engine were killed, and the rolling-stock and permanent-way were considerably damaged. The accident is reported to have been due to the excessive speed at which the train was travelling, combined with the sudden and full application of the vacuum brake from the rear of the train.

A motor trolley, conveying the Manager of the *Gondal-Porbandar railway* including the *Jetalsar-Rajkot railway*, from Jetalsar to Gondal, left the rails about 30 yards from a bridge of one 20-foot girder span near Gondal station on the 10th September 1911. The trolley ran against the right hand parapet, and was violently deflected and shot across the bridge sideways. The Manager was thrown against the coping, and sustained internal injuries from which he died a few hours later. Three of the trollymen were also injured. The accident was probably due to the trolley being driven at too fast a speed.

No. 1 Boat mail train collided with No. 4 passenger train which was standing at Sundaraperumalkoyil station platform, on the *South Indian railway* (3' 3½" gauge), on the 15th September 1911, owing to the driver of the former running against signals. Ten passengers were injured.

### Damages by Floods and Rainfall.

**21. Bengal-Nagpur railway system.**—On the night of the 5th August 1911 heavy rain caused breaches in places on the Satpura railway, the most important being one of about three rail-lengths at a bridge at mile 630-5-8, where the water flowed about 2 feet over the top of the coping stones, and another, near a bridge at mile 632-2-3, where the line was submerged under 18 inches of water, the bank washed out for half its width for about a length of 300 feet and a gap of about 30 feet long made near an abutment of the bridge. Through traffic was resumed on the afternoon of the 8th August.

In August 1911 the line from Howrah to Madras was badly breached at mile 257, owing to abnormal floods and the bursting of the embankment of the Khoakhye river. A 20-foot girder road bridge was completely destroyed and 300 feet of 20-foot bank washed away. Transhipment of passengers was necessary between the 19th and 28th August.

On the night of 23rd September 1911 a severe cyclone passed across the East Coast section and caused heavy damage to both buildings and track. Practically all station buildings between mile 412 and mile 490 were unroofed, and the line at mile 468 was seriously breached by floods which came down the Langulia valley. Transhipment of passengers was necessary from 23rd to 29th September.

**Bombay, Baroda and Central India railway system.**—On the 27th and 28th September 1911 heavy rain caused breaches in places between Alwar and Delhi. One breach, at mile 0-6-B, occurred just as the engine of No. 1 up mail train was passing slowly over the spot; the engine and one bogie brakevan subsided into a hole and the third following bogie carriage was derailed. Transhipment was necessary up to the evening of the 29th September, when a diversion was laid and through traffic resumed.

**Eastern Bengal railway system.**—In July 1911 the line between Sorupeta and Tihu, on the Gauhati extension, was badly breached in several places owing to unusually heavy rain and floods. The permanent-way and several bridges were damaged, through communication was interrupted for nine days, and all coaching and goods traffic for and from Gauhati, Shillong, and other stations beyond Sorupeta, was diverted *via* Dhubri Ghat.

**Madras and Southern Mahratta railway system.**—On the night of the 16th October 1911 short lengths of the permanent-way between Singarayakonda and Surareddipalem stations, on the North-East section, were breached by heavy rain, necessitating the transhipment of passengers until through communication was restored on the morning of the 21st October.

**South Indian railway system.**—On the 20th December 1911 the Rameswaram-Dhanushkodi section (Pamban Branch), was breached in eleven places by heavy rain and high tides, resulting in the suspension of through traffic for about 7 days.

**Assam-Bengal railway.**—On the night of the 17th August 1911, the line was breached at mile 389-6, near Diphu station, due to the percolation of water from the Dharam Nala. No. 103 up goods train ran into the breach. The engine, 9 wagons and 1 timber truck capsized, the driver was killed and the fireman and the engine khalassi were injured. Transhipment of mails and passengers was necessary till the evening of the 21st August, when communication was restored by spanning the breach with 40-foot girders on sleeper stacks.

**Bengal Dooars railway.**—During the rains of July 1911, which were unusually heavy in the Dooars, serious breaches occurred on the Eastern extension. The damage was so severe in some places that it took two months to restore through communication, twenty miles of the embankment having been more or less damaged and one bridge washed away.

### Railway Staff.

**22.** The total number in railway employ at the close of the year was 563,030, of which App. 7,699 were Europeans, 9,877 Anglo-Indians and 545,454 Indians. Of the Europeans and Anglo-Indians 14,632 were enrolled as volunteers.

23. The use of railway schools continued to be appreciated, and at the close of 1911 there were 8,679 children and 8,280 apprentices and workmen attending schools.

### Important Contracts and Agreements entered into and modifications of those existing.

#### CONTRACTS.

24. *Bengal and North-Western railway.*—On the 7th December 1910 a contract was entered into between the Secretary of State and the Company for the construction, on the 3' 3½" gauge, of a branch line from the Company's station at Thawe, *via* Tewaripatti and Padrauna, to Captainganj.

*Sind Light railways.*—A contract, dated the 13th July 1911, was entered into between the Secretary of State and the Company for the construction and working by the Administration of the Jodhpur-Bikaner railway, of the Mirpur Khas-Jhudo railway.

#### AGREEMENTS.

25. *Bombay, Baroda and Central India Railway Company and the Government of His Highness the Gaekwar of Baroda.*—An agreement, dated the 3rd December 1910, which had effect from 23rd October 1910, was entered into for the working, by the Company, of His Highness the Gaekwar's Manund Road-Chanasma-Harij and Chanasma-Bechraji railways. It was sanctioned in March 1911.

*The Bombay Port Trust and the Great Indian Peninsula and Bombay, Baroda and Central India Railway Companies.*—An agreement, dated the 2nd March 1911, was finally concluded between the two Railway Companies and the Bombay Port Trust, relative to the construction of the Bombay Port Trust railway and the provision of other facilities for the expansion of the export traffic in Bombay.

*Great Indian Peninsula Railway Company and the Gwalior Durbar.*—A revised agreement, having effect from the 1st January 1904, was entered into between the Great Indian Peninsula Railway Company and the Gwalior Durbar, for the working of the Gwalior Light railways, including the Sabalgarh extension.

*Great Indian Peninsula Railway Company and the Matheran Steam Tramway Company.*—An agreement, dated the 30th October 1909, which had effect from the date of the opening of the Matheran tramway, was entered into between the Matheran Steam Tramway Company and the Great Indian Peninsula Railway Company for the working of the tramway by the latter. It was formally sanctioned in February 1911.

*Madras and Southern Mahratta Railway Company.*—An agreement, dated the 15th September 1911, which had effect from 1st January 1909, was entered into between the Secretary of State and the Madras and Southern Mahratta Railway Company for the maintenance and working of the Dhone-Kurnool railway.

#### Miscellaneous.

26. *Amendment of the Indian Tramways Act, XI of 1886.*—The Bill further to amend the Act to make it applicable to mono-railways and to electric tramways was passed into law in March 1911.

*Future working and management of the railways in Kathiawar.*—It was stated in the Report for 1910 that the proposal, made by the Railway Board, regarding the introduction of the scheme for the separate working of the lines comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway system, was subject to the condition that the members of the "coalition" should give up the claims set up by them against each other. The Government of Bombay subsequently recommended that this condition should be withdrawn, and that, in its place, it should be laid down that all the claims of the Railway Proprietors against each other should be submitted to arbitrators appointed by that Government. This recommendation was accepted, and the separate working of the several railways was introduced with effect from 1st April 1911, as under—

- (i) Bhavnagar, including the Dhrangadra,
- (ii) Gondal-Porbandar, including the Jetalsar-Rajkot,
- (iii) Jamnagar, and
- (iv) Junagad.

*Deoghur railway.*—The Deoghur 3' 3½" gauge railway, 4.12 miles, was taken over by the East Indian Railway Company as from 1st July 1911, but the Company actually commenced to work the line on and from 9th November 1911.

**Taxation by Municipalities of Railway Companies in India.**—In the last Report it was stated that the question of the taxation of railways in India by Municipalities was under consideration. The notification issued on this subject by the Government of India in the Department of Commerce and Industry, No. 9977-Railways, dated the 29th November 1907, has since been cancelled, and a fresh notification has been issued specifying each tax which is payable by each Railway Administration to each particular local body.

**Use of local manufactures for railway purposes.**—Purchases of wagon frames and bodies built by local firms continued to be made during 1911 for the three State railways. A Government test-house is being built and is nearly completed at Alipur, near Calcutta under the Superintendent of Local Manufactures with the object of carrying on mechanical tests of metals and of cement purchased in the local market for State railways and other Government Departments. It is also intended to have chemical tests performed in this test-house. A Government Laboratory is also being erected at Kalimati, on the Bengal-Nagpur railway, in order to test on the spot the steel rails manufactured at Messrs. Tata and Sons' Iron and Steel Works for State railways.

**Coronation Durbar at Delhi.**—To deal with the exceptional traffic of the Coronation Durbar at Delhi in December 1911, the North Western railway constructed a total length of 19 miles of railway, of which 10 were double line, together with the requisite buildings and yards. The arrangements made proved adequate and all traffic was handled with promptitude.

**Gratuities on retirement to subordinate employes of Indian railways.**—With the approval of the Secretary of State the following rule was sanctioned for introduction on all Company-worked and State-worked railways in India, with effect from the 1st September 1911 :—

“ As an addition to the benefits given under the Provident Fund Rules, the Boards of Directors and the Railway Board, respectively, may, at their discretion, grant from Revenue to a subordinate employé on the Indian staff, or to his widow and children dependent on him, for good, efficient, faithful and continuous service, a bonus equal to a half month's actual pay at time of retirement for each year's service, subject to the proviso that no bonus shall be given to an employé of under 15 years' continuous service and that no bonus shall accrue for any year over 30 years' service.”

**Mr. J. H. Trott's map of railway systems.**—This additional map is included only in copies of the report used for official purposes. It may be obtained by the public, on payment, from Mr. J. H. Trott, 66, Kilpauk High Road, Madras, who holds the copyright.

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## Details of mileage open and

Serial No.	Names of railways under each classification by gauges.	Date of first opening for traffic.	Agency for working. [For abbreviations used see Index to Appendix 9.]	TRACK MILEAGE (EXCLUDING SIDINGS) OPENED DURING THE CALENDAR YEAR 1911.					ROUTE MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.		
				Date of opening.	SECTION OPENED.		MILEAGE OPENED.		Single line.	Double, treble, etc., lines, as the case may be.	Total route mileage.
					From	To	Single line.	Second, third, etc., lines as the case may be.			
1	2	3	4	5	6	7	8	9	10	11	12
<b>PART</b>											
<b>Railways, the transactions of which</b>											
<b>I--STATE LINES WORKED</b>											
<b>5' 6" GAUGE.</b>											
1	Eastern Bengal	2-1-03	E. B. Ry.	---	---	---	---	---	397'30	111'78 (double) 31'8 (quad- ruple)	518'16
2	North Western	18-5-01	N. W. Ry.	2-5-11 12-9-11 20-4-11	Jaranwala ... Dhilwan ... Jullundur Can- tonment.	Shorkot Road Ramra ... Phagwara ...	87'70 ... ...	6'83 10'22	...	...	...
				1-6-11 10-1-11 10-1-11	Phagwara ... Ludhiana ... Gobindgarh ...	Ludhiana ... Deraha ... Sirhind ...	...	23'15 14'00 5'00	(d) 3,075'43	(e) 580'87 (double)	3,656'30
							87'70	58'20			
3	Oudh and Rohilkhand	23-4-07	O. & R. Ry.	2-2-11 7-5-11 3-11-11 2-11-11	Sitapur City ... Gajroula ... Phaphaman ... Dalman ...	Sitapur Cantt. Chandpur ... Rae Bareilly ... Daryapur ...	3'28 21'88 68'90 18'35	...	(f) 1,423'66	5'38 (double)	1,431'99
							168'39				
	Total						198'09	58'20	4,806'39	704'06	5,600'45
<b>3' 3 1/2" GAUGE.</b>											
4	Cawnpore-Buthwal (3' 3 1/2" gauge) link.	24-11-06	B. & N. W. Ry. Co.	---	---	---	---	---	(j) 79'60	---	79'60
5	Eastern Bengal	28-8-77	E. B. Ry.	---	---	---	---	---	962'22	---	962'22
6	Oudh and Rohilkhand	1-4-99	B. & N. W. Ry. Co.	---	---	---	---	---	(k) 2'18	---	2'18
	Total								1,044'00	---	1,044'00
<b>2' 6" GAUGE.</b>											
7	Eastern Bengal	18-7-01	E. B. Ry.	---	---	---	---	---	35'24	---	35'24
8	Kalka-Simla	9-11-08	N. W. Ry.	---	---	---	---	---	59'92	---	59'92
9	Kohat-Thal	1-4-03		---	---	---	---	---	61'75	---	61'75
10	Nowshera-Durgai	1-1-01		---	---	---	---	---	40'25	---	40'25
11	Trans-Indus (Kalabagh-Banna).	---		---	---	---	---	---	---	---	---
	Total								197'16	---	197'16
<b>2' 0" GAUGE</b>											
12	Jorhat (Provincial)	15-12-04	Provincial Govt.	3-12-11	River Terminus station at Borghop.	Further down the river.	2'00	---	32'00	---	32'00
	Total State lines worked by the State.						198'09	58'20	6,100'55	704'06	6,878'61

DIX I.

sanctioned for construction.

TRACK MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.			TRACK MILEAGE (EXCLUDING SIDINGS) SANCTIONED OR UNDER CONSTRUCTION AT CLOSE OF THE CALENDAR YEAR 1911.						Serial No.	REMARKS.
Running track.	Sidings.	Total.	Date of sanction.	Agency for construction.	SECTION SANCTIONED.		MILEAGE SANCTIONED.			
13	14	15	16	17	From	To	Single line.	Second, third, etc., lines, as the case may be.	22	23
			7-9-11	E. B. Ry...	Dum Junction.	Dum Kankinara...	...	(a) 35-10 (3rd and 4th lines).		(a) Work commenced.
638-28	263-01	896-89	30-6-10	E. B. Ry...	Approaches to Dum Junction.	Chitpore yard Canal Junction.	(a) 2-84	...	1	(b) Work commenced on 11-36 miles only. (c) This is an independent 5' 6" gauge track alongside the existing 3' 3 3/4" gauge line.
			19-12-08	State	Lower Ganges bridge at Sara Bhairamara	Point near Gopalpur.	(b) 14-22	(a) 10-98 (2nd line).		(d) Includes 3-50 miles, between Hussainiwalla and Ferozapore Cantonment (military line, not intended to be used for ordinary public traffic), and 26-28 miles of mixed (5' 6" and 3' 3 3/4") gauge line between Bhatinda and Kot Kapura over which the Rajasthan-Malwa railway trains also work.
			28-12-11	E. B. Ry...	Sara	Santabar	(a) & (c) 46-51	46-08		
4,237-17	1,076-78	5,315-95	9-2-11 2-3-11 5-5-11 14-10-11 12-4-10	N. W. Ry.	Jakhal Serai Kala Jullundur Lahore Ambala	Hissar Havelian Hoshiarpur Raewind Saharanpur	(a) 50-63 (a) 34-50 (a) 24-03 ...	(a) 24-75 (a) 48-29 68-04	2	(e) Includes 2-18 miles, between Lahore Cantonment East and Lahore Cantonment West, (military line, not intended to be used for ordinary public traffic).
1,440-33	(g) 277-73	1,718-04	30-9-10 12-10-10 5-3-09 8-2-11 3-2-11 3-2-10 25-4-10	O. & E. Ry.	Akbarpur Dhakra Unchahar Cawnpore Sumerpore Saharanpur	Tanda Sambhal Unao Khirada Belatal Khan Alampura Moghal Sarai	(a) 11-07 (a) 14-64 (b) 69-08 (a) 75-92 (c) 64-55 ...	(a) 1-23 (a) 9-07 10-40	3	(f) Excludes 2-18 miles of 3' 3 3/4" gauge line at Benares shown under 3' 3 3/4" gauge, but includes 16-79 miles of mixed (5' 6" and 3' 3 3/4") gauge line, between Burhwal and Bara Banki, 1-17 miles of 3' 3 3/4" gauge line over the Ramgunga bridge, Bareilly, and 0-49 mile of mixed (5' 6" and 3' 3 3/4") gauge line over the Ramgunga bridge, Moradabad, over which the Rohilkand and Kumaon railway trains also work.
6,310-77	1,620-11	7,930-88					235-26	10-40		
79-60	10-28	89-88					409-09	124-52		
962-23	221-40	1,183-63	21-12-10 14-12-09 12-10-11	E. B. Ry.	Singhiani Rangiya Raja Bhat-Khawa.	Fulchhari Tangla Dalsingpara	(a) 27-82 (a) 24-30 (a) 17-48 69-55	...	4 5	(g) Includes 1-06 miles of 3' 3 3/4" gauge sidings on mixed (5' 6" and 3' 3 3/4") gauge section between Burhwal and Bara Banki.
2-18	...	2-18					...	...	6	(h) Since opened. (i) Not commenced.
1,044-00	281-66	1,275-66					69-55	...		
35-24	1-57	36-81					...	...	7	(j) Excludes 3-40 miles of the Lucknow-Bareilly railway, between Aishbagh and Daliganj, worked over, but includes 16-79 miles referred to in remark (f) above and 0-59 mile over the Ganges bridge, Cawnpore.
59-93	8-01	67-93					...	...	8	
61-75	3-03	64-78					...	...	9	
40-25	5-71	45-96					...	...	10	(k) Length between the O. & E. Ry. Cantonment and the E. & N. W. Ry. City stations at Benares.
...	...	...	30-12-09	N. W. Ry.	Kalabagh	Bannu	(a) 88-65	...	11	
197-16	16-37	213-53					83-66	...		
32-00	2-04	34-04					...	...	12	
7,883-93	1,872-18	9,456-11					563-20	124-52		

Details of mileage open and

Serial No.	Names of railways under each classification by gauge.	Date of first opening for traffic.	Agency for working. (For abbreviations used see Index to Appendix 9.)	TRACK MILEAGE (EXCLUDING SIDINGS) OPENED DURING THE CALENDAR YEAR 1911.					ROUTE MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.		
				Date of opening.	SECTION OPENED.		MILEAGE OPENED.		Single line.	Double, treble, etc., lines, as the case may be.	Total route mileage.
					From	To	Single line.	Second, third, etc., lines, as the case may be.			
1	2	3	4	5	6	7	8	9	10	11	12
PART											
Railways, the transactions of which											
II.—STATE LINES WORKED											
13	Agra-Delhi Chord	15-11-04	G. I. P. Ry. Co.	15-10-11	Loop line at Delhi	...	0-24	0-24 (2nd line).	125-66	0-24 (double)	125-90
14	Barru-Kotah	1-7-08		...	...	...	...	...	40-29	...	40-29
15	Bengal-Nagpur	0-0-80	B. N. Ry. Co.	15-9-11	Itwari	Nagpur	4-59	...	1,778-48	73-23 (double)	1,851-71
				1-2-11	Kalimati	Onajori	34-12	...			
				6-4-11	Onajori	Goramahisani	5-98	...			
16	Beawada Extension	10-2-99	N. G. S. Ry. Co.	...	...	...	...	44-60	20-58	...	20-58
17	Bhopal Itarsi (British section).	1-6-82	G. I. P. Ry. Co.	...	...	...	...	...	12-18	...	12-18
18	Bombay, Baroda and Central India.	10-2-60	B. B. & C. I. Ry. Co.	...	...	...	...	...	218-29	251-90 (double)	465-12 (d)
19	East India	15-9-54	E. I. Ry. Co.	19-1-11	Barharwa	Dhulia-Ganges	16-72	Second line.	1,005-47	609-75 (double) 13-89 (triple) 2-42 (quad-ruple) 0-51 (sextuple)	2,321-74
				1-7-11	Bhagalpur	Mandah Hill	31-55				
				6-7-11	Mirzapore	Bindhachal	...				
				12-7-11	Bindhachal	Birohi	3-38				
				26-9-11	Birohi	Gaipura	3-54				
				10-10-11	Gaipura	Jigna	3-25				
				16-11-11	Jigna	Mandah Road	4-08				
				30-11-11	Mandah Road	Unchdih	4-47				
				23-11-11	Unchdih	Meja Road	4-44				
				26-10-11	Meja Road	Tonse Bridge	4-36				
				10-4-11	Tonse Bridge	Bheerpur	2-83				
			9-4-11	Bheerpur	Karohana	4-67					
						6-00					
						48-37	41-41	626-27			
20	Godhra-Rutlam-Nagda	16-1-63	B. B. & C. I. Ry. Co.	...	...	...	...	...	141-14	...	141-14
21	Great Indian Peninsula	18-4-58	G. I. P. Ry. Co.	...	...	...	...	...	1,800-94	615-17 (double) 4-29 (quad-ruple) 619-46	2,420-40
22	Madras and Southern Mahratta.	1-7-56	M. & S. M. Ry. Co.	...	...	...	...	...	986-79 (g)	44-94 (double)	1,031-73
23	Nagda-Mutta	15-7-07	B. B. & C. I. Ry. Co.	...	...	...	...	...	330-35	...	330-35
24	Rajputana-Malwa	1-1-78	See remarks (h) and (i) in column 23.	...	...	...	...	...	(h) 5-17	(i) 0-09	5-26
25	South Indian	23-5-60	S. I. Ry. Co.	...	...	...	...	...	445-94	...	445-94
	Total	...	...	...	...	...	98-11	41-65	7,545-16	1,616-18	9,161-29

DIX I—contd.

sanctioned for construction.

TRACK MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.			TRACK MILEAGE (EXCLUDING SIDINGS) SANCTIONED OR UNDER CONSTRUCTION AT CLOSE OF THE CALENDAR YEAR 1911.						Serial No.	REMARKS.
Running track.	Sidings.	Total.	Date of sanction.	Agency for construction.	SECTION SANCTIONED.		MILEAGE SANCTIONED.			
13	14	15	16	17	From.	To.	Single line.	Second, third, etc., lines, as the case may be.	22	
125.90	50.05	175.95	..	..	..	..	..	..	13	
40.29	3.39	43.68	..	..	..	..	..	..	14	
1,924.94	420.51	2,345.45	26-1-06 9-2-11 17-3-11	B. N. Ry. Co.	Parvatipuram Mohuda Bobbili	Raipur Jamuni Salara	(a) 260.67 (b) 12.02 (b) 16.30	..	15	(a) Work commenced on 37.48 miles only. (b) Work commenced.
20.58	0.97	21.55	..	..	..	..	232.99	..	16	
12.13	(c)	12.13	..	..	..	..	..	..	17	(c) Included with the Native State section, serial No. 111.
717.02	143.48	860.50	..	..	..	..	..	..	18	(d) Excluding 39.23 miles of 3' 3 3/4" gauge line between Virangan and Wadhwan, shown under 3' 3 3/4" gauge.
2,908.48	938.62	3,847.10	5-3-06 23-6-08 27-9-10	E. I. Ry. Co.	Dhulia- Ganges. Katwa Uttarpara	Katwa Hooghly Baidyabati	(b) 84.70 (b) 64.80 ..	(b) 12.23 (third line).	19	
141.14	17.33	158.47	..	..	..	..	149.50	12.23	20	
3,049.44	610.20	3,659.64	8-6-09 8-8-09 8-8-09 17-2-05	G. I. P. Ry. Co.	Itarsi Hirdagarh Pandhurna Ravali	Hirdagarh Jamal Nagpur Mahim	(b) 115.98 (e) 6.69 (e) 64.89 (f) 1.30	(f) 1.30 (2nd line)	21	(e) Not commenced. (f) Opening deferred.
1,076.67	306.11	1,382.78	..	..	..	..	188.77	1.30	22	(g) Includes 1.30 miles of mixed (5' 6" and 3' 3 3/4") gauge line between Bezwada and Kistna Block hut.
339.35	58.21	397.56	28-4-11	B. B. & C. I. Ry. Co.	Bayana	Agra	(b) 49.58	..	23	
5.35	11.81	17.16	..	..	..	..	..	..	24	
445.94	68.09	514.03	..	..	..	..	..	..	25	(h) 2.10 miles at Ujjain worked by the Bombay, Baroda and Central India railway, and 3.07 miles at Agra worked by the East Indian railway. (i) Mileage at Delhi, worked by the Agra-Delhi-Chord railway.
10,803.23	2,530.83	13,334.06	..	..	..	..	670.34	12.53		



Details of mileage open and

Serial No.	Names of railways under each classification by gauge.	Date of first opening for traffic.	Agency for working. [For abbreviations used see Index to Appendix 9.]	TRACK MILEAGE (EXCLUDING SIDINGS) OPENED DURING THE CALENDAR YEAR 1911.					ROUTE MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.		
				Date of opening.	SECTION OPENED.		MILEAGE OPENED.		Single line.	Double, treble, etc., lines, as the case may be.	Total route mileage.
					From	To	Single line.	Second, third, etc., lines, as the case may be.			
1	2	3	4	5	6	7	8	9	10	11	12
<b>PART</b>											
<i>Railways, the transactions of which</i>											
<b>II.—STATE LINES WORKED</b>											
26	Assam-Bengal	1-7-95	A. B. Ry. Co.	...	...	...	...	...	759-89	...	759-89
27	Bombay, Baroda and Central India.	14-12-03	B. B. & C. I. Ry. Co.	...	...	...	...	...	(a) 39-23	...	39-23
28	Burma	2-5-77	B. Rys. Co.	25-8-11 10-8-11 26-5-11 23-5-11 1-8-11 2-10-11 26-5-11 8-8-11	Malagon Pegu Shwale Payagyi Pyinbongyi Kadok Paungdawthi Daiku	Bebktaw Shwale Payagyi Pyinbongyi Kadok Paungdawthi Daiku Pyuntaza	1-70 ...	Second line 557 491 783 625 473 530 673	1,422-91	118-94 (double)	1,341-85
29	Burma extensions	15-4-07	B. Rys. Co.	...	...	...	1-70	41-32	186-93	...	186-93
30	East Indian	23-12-83	E. I. Ry. Co.	...	...	...	...	...	4-12	...	4-12
31	Dhone-Kurnool	1-1-09	M. & S. M. Ry. Co.	...	...	...	...	...	32-00	...	32-00
32	Jodhpur-Hyderabad (British section) (f).	18-8-92	J. R. Ry. Co.	...	...	...	...	...	123-98	...	123-98
33	Lucknow-Bareilly	12-10-84	R. & K. Ry. Co.	2-1-11	Sonaripur Junction.	Kauriala Ghat	20-63	...	257-57	...	257-57
34	Madras and Southern Mahratta.	24-3-84	M. & S. M. Ry. Co.	...	...	...	...	...	(g) 1,520-80	...	1,520-80
35	Mysore section (Madras and Southern Mahratta railway).	1-2-81		...	...	...	...	...	296-23	...	296-23
36	Nilgiri	15-6-99	S. I. Ry. Co.	...	...	...	...	...	28-96	...	28-96
37	Palampur-Deesa (h)	8-11-93	B. B. & C. I. Ry. Co.	...	...	...	...	...	17-28	...	17-28
38	Rajputana-Malwa	14-2-73		...	...	...	...	...	1,768-41	2-92 (double)	(i) 1,771-33
39	South Indian	15-7-61	S. I. Ry. Co.	...	...	...	...	...	876-80	...	876-80
40	Southern Eban States	...	...	...	...	...	...	...	...	...	...
41	Trinnevelly-Quilon (Travancore) (British section).	1-6-02	S. I. Ry. Co.	...	...	...	...	...	50-41	...	50-41
42	Tirhoot	1-11-75	B. & N. W. Ry. Co.	...	...	...	...	...	758-99	10-05 (double)	769-04
	<b>Total</b>	...	...	...	...	...	23 82	41-82	7,974-50	131-91	8,106-41

DIX I—contd.

sanctioned for construction.

TRACK MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.			TRACK MILEAGE (EXCLUDING SIDINGS) SANCTIONED OR UNDER CONSTRUCTION AT CLOSE OF THE CALENDAR YEAR 1911.						Serial No.	REMARKS.
Running track.	Sidings.	Total.	Date of sanction.	Agency for construction.	SECTION SANCTIONED.		MILEAGE SANCTIONED.			
13	14	15	16	17	From	To	Single line.	Second, third, etc., lines, as the case may be.	22	23
789.89	124.83	914.72	3-3-06 17-8-10	A. B. Ry. Co.	Kalaura ...	Ferozganj	(a) 15.07 (b) & (c) 39.46	...	26	(a) Since opened. (b) Excluding wagon ferry, 2.50 miles. (c) Work commenced.
39.23	3.43	42.66	...	...	...	...	...	...	27	(d) This is the length between Viramgam and Wadhwan.
1,486.79	292.69	1,753.68	...	...	...	...	...	...	28	
186.98	35.59	222.52	1-6-06	B. Ry. Co.	Begayet ...	Neikban ...	(e) 66.25	...	29	(e) In abeyance.
4.12	0.69	4.81	...	...	...	...	...	...	30	
32.00	2.89	34.82	...	...	...	...	...	...	31	
123.93	15.76	137.74	...	...	...	...	...	...	32	(f) The Native State section of this railway forms an integral part of the Jodhpur railway.
257.57	37.26	294.83	24-5-09 28-9-10	B. & K. Ry. Co.	Pilibhit ...	Baramdeo ...	(c) 33.75	...	33	
					Sarota Phanta	Garwari Ghat	(c) 15.29	...		
							54.64	...		
1,520.80	167.68	1,688.48	...	...	...	...	...	...	34	(g) Includes 1.90 miles of mixed (5' 6" and 3' 3 1/4") gauge line between Barwada and Kistna Block hut.
296.22	30.62	327.04	...	...	...	...	...	...	35	
28.96	3.85	32.81	...	...	...	...	...	...	36	
17.23	1.29	18.57	...	...	...	...	...	...	37	(h) This line is the joint property of Government and the Palampur Darbar.
1,774.25	343.58	2,117.83	...	...	...	...	...	...	38	(i) Excludes 5.26 miles of 5' 6" gauge line shown under 5' 6" gauge, but includes 26.23 miles of mixed (5' 6" and 3' 3 1/4") gauge line between Bhatinda and Kot Kapura over which the North Western railway trains also work.
876.80	143.98	1,020.78	16-9-04 16-9-04	S. I. Ry. Co.	Mandayan...	Toni Torai...	(c) 1.86	...	39	
					Toni Torai...	Pamban ...	(c) 1.33	...		
							3.19	...		
...	...	...	23-7-09	B. Ry. Co.	Thasi ...	Yawnghwe	(c) 100.00	...	40	
50.41	(j) 12.90	63.31	...	...	...	...	...	...	41	(j) Includes sidings on the Native State section, serial No. 129.
779.09	147.68	926.73	16-2-09 17-12-09 9-2-11	B. & N. W. Ry. Co.	Begmati bridge at Dhang and approaches.	Rosarah ...	(c) 4.94	...	42	
					Samastipur	Rosarah ...	(c) 17.20	...		
					Rosarah ...	Khagaria ...	(c) 37.00	...		
							59.14	...		
8,236.32	1,268.03	9,504.35	...	...	...	...	337.75	...		

Details of mileage open and

Serial No.	Names of railways under each classification by gauges.	Date of first opening for traffic.	Agency for working. [For abbreviations used see Index to Appendix 9.]	TRACK MILEAGE (EXCLUDING SIDINGS) OPENED DURING THE CALENDAR YEAR 1911.					ROUTE MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.		
				Date of opening.	SECTION OPENED.		MILEAGE OPENED.		Single line.	Double, treble, etc., lines, as the case may be.	Total route mileage
					From	To	Single line.	Second, third, etc., lines, as the case may be.			
1	2	3	4	5	6	7	8	9	10	11	12
<b>PART</b>											
<i>Railways, the transactions of which</i>											
<b>II.—STATE LINES WORKED</b>											
43	Bronch-Jambasat	---	---	---	---	---	---	---	---	---	---
44	Gondia-Chanda	10-11-08	} B. N. Ry. Co.	15-3-11	Line at Itwari		1-49	---	181-26	---	181-26
45	Jubbulpore-Gondia Extension.	18-4-08		---	---	---	---	---	---	275-35	---
46	Morappur-Dharmapuri...	18-1-08	S. I. Ry. Co.	---	---	---	---	---	16-53	---	16-53
47	Nagpur-Chhindwara	1-1-11	} B. N. Ry. Co.	1-1-11	Itwari	Lodhikhera	39-00	}	50-94	---	50-94
				10-5-11	Lodhikhera	Sansar	7-40				
				1-1-11	Saoner Junction.	Khapa	4-54				
48	Purnia-Banchi	15-11-07	} B. N. Ry. Co.	---	---	---	---	---	72-68	---	72-68
49	Raipur-Dhamtari	10-9-00		---	---	---	---	---	---	56-94	---
50	Tirupattur-Krishnagiri...	18-9-05	S. I. Ry. Co.	---	---	---	---	---	25-38	---	25-38
	Total	---	---	---	---	---	53-48	---	681-12	---	681-12
	3' 0" GAUGE. Nil.	---	---	---	---	---	---	---	---	---	---
	Total State lines worked by Companies.	---	---	---	---	---	167-86	83-97	16,300-78	1,748-04	17,948-82
<b>III.—COMPANIES' LINES GUARANTEED</b>											
51	5' 6" GAUGE. Hardwar-Dehra	1-3-00	O. & B. Ry.	---	---	---	---	---	32-04	---	32-04
	3' 3 1/2" GAUGE. Nil.	---	---	---	---	---	---	---	---	---	---
	2' 6" GAUGE. Nil.	---	---	---	---	---	---	---	---	---	---
	2' 0" GAUGE. Nil.	---	---	---	---	---	---	---	---	---	---
	Total Companies' lines guaranteed by Government under modern contracts.	---	---	---	---	---	---	---	32-04	---	32-04
<b>IV.—LEASED</b>											
52	5' 6" GAUGE. South Bihar	5-7-09	E. I. Ry. Co.	---	---	---	---	---	79-19	---	79-19
	3' 3 1/2" GAUGE Nil.	---	---	---	---	---	---	---	---	---	---
	2' 6" GAUGE Nil.	---	---	---	---	---	---	---	---	---	---
	2' 0" GAUGE. Nil.	---	---	---	---	---	---	---	---	---	---
	Total Leased lines	---	---	---	---	---	---	---	79-19	---	79-19
	TOTAL PART I	---	---	---	---	---	866-95	141-17	32,481-56	2,452-10	24,983-66

DIX I—contd.

sanctioned for construction.

TRACK MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.			TRACK MILEAGE (EXCLUDING SIDINGS) SANCTIONED OR UNDER CONSTRUCTION AT CLOSE OF THE CALENDAR YEAR 1911.						Serial No.	REMARKS.
Running track.	Sidings.	Total.	Date of sanction.	Agency for construction.	SECTION SANCTIONED.		MILEAGE SANCTIONED.			
					From	To	Single line.	Second, third, etc., lines, as the case may be.		
13	14	15	16	17	18	19	20	21	22	23

I—concl'd.

pass through the Government accounts.

BY COMPANIES—concl'd.

...	...	...	28-4-11	B. B. & C. I. Ry. Co.	Broach ...	Jambusar ...	(a)28'15	...	43	(a) Work commenced.
181'26	15'82	197'08	26-8-04	B. N. Ry. Co.	Rajoli ...	Chanda ...	(a)28'18	...	44	
275'39	31'77	307'16	24-8-04 30-12-09	B. N. Ry. Co.	{ Khiradoh { Balaghat ...	Singora Katangi ...	(b)18'48 (a)29'24	...	45	(b) Not commenced.
18'53	2'27	20'80	2-3-09	S. I. Ry. Co.	Dharmapuri	Hosur ...	(a)54'87	...	46	
50'94	4'50	55'44	10-2-09	B. N. Ry. Co.	{ Sansar ... { Katchidhara	Chhindwara Branch ...	(a)42'23 (a)8'02	...	47	
72'68	7'90	80'58	20-2-11	B. N. Ry. Co.	Ranchi ...	Lohardaga...	46'15 (a)42'82	...	48	
56'94	3'50	60'44	...	...	...	...	...	...	49	
25'38	2'52	27'90	...	...	...	...	...	...	50	
681'12	68'28	749'40	...	...	...	...	248'80	...		
19,725'67	3,967'14	23,692'81	...	...	...	...	1,257'39	18'53		

BY GOVERNMENT UNDER MODERN CONTRACTS.

32'04	4'47	36'51	...	...	...	...	...	...	51	
...	...	...	...	...	...	...	...	...		
...	...	...	...	...	...	...	...	...		
...	...	...	...	...	...	...	...	...		
32'04	4'47	36'51	...	...	...	...	...	...		

LINES.

79'19	8'61	87'80	...	...	...	...	...	...	52	
...	...	...	...	...	...	...	...	...		
...	...	...	...	...	...	...	...	...		
...	...	...	...	...	...	...	...	...		
79'19	8'61	87'80	...	...	...	...	...	...		
27,420'88	5,852'40	33,273'28	...	...	...	...	1,625'59	138'05		

## APPEN

## Details of mileage open and

Serial No.	Names of railways under each classification by gauge.	Date of first opening for traffic.	Agency for working. [For abbreviations used see Index to Appendix 9.]	TRACK MILEAGE (EXCLUDING SIDINGS) OPENED DURING THE CALENDAR YEAR 1911.					ROUTE MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.		
				Date of opening.	SECTION OPENED.		MILEAGE OPENED.		Single line.	Double, triple, etc., lines, as the case may be.	Total route mileage.
					From	To	Single line.	Second, third, etc., lines, as the case may be.			
1	2	3	4	5	6	7	8	9	10	11	12
<b>PART</b>											
<i>Railways, the transactions of which do</i>											
<b>V.-DISTRICT.</b>											
	5' 6" GAUGE. Nil.	...	...	...	...	...	...	...	...	...	...
	3' 3 1/2" GAUGE.										
53	Bowdich-Masulipatam ...	4-3-98	M. & S. M. Ry. Co.	...	...	...	...	...	51-80	...	51-80
54	Tanjore District Board...	2-4-94	S. I. Ry. Co.	...	...	...	...	...	108-88	...	108-88
	Total ...	...	...	...	...	...	...	...	158-16	...	155-16
	2' 6" GAUGE. Nil.	...	...	...	...	...	...	...	...	...	...
	2' 0" GAUGE. Nil.	...	...	...	...	...	...	...	...	...	...
	Total District Boards' lines.	...	...	...	...	...	...	...	158-16	...	155-16
<b>VI.-BRANCH LINE COMPANIES' RAILWAYS</b>											
55	Amritsar-Patti ...	21-9-08	N. W. Ry.	...	...	...	...	...	54-26	...	54-26
56	Jullundur-Doab ...	...		...	...	...	...	...	...	...	...
57	Southern Punjab ...	10-11-97		...	...	...	...	...	424-08	...	424-08
58	Southern Punjab "Indians" Extension.	10-6-05		...	...	...	...	...	153-04	...	153-04
59	Sutlej Valley ...	6-7-10	...	...	...	...	...	208-19	...	208-19	
60	Tapi Valley ...	1-12-98	B. B. & G. I. Ry. Co.	...	...	...	...	...	155-48	...	155-48
	Total ...	...	...	...	...	...	...	...	994-08	...	994-08
	3' 3 1/2" GAUGE.										
61	Ahmedabad-Dholka ...	23-2-03	B. B. & G. I. Ry. Co.	...	...	...	...	...	88-54	...	88-54
62	Ahmedabad-Parantij ...	1-5-97		1-7-11	Himmatnagar	Khod Brahma	84-00	...	88-70	...	88-70
63	Mymensingh-Jamalpur-Jagannathganj.	15-10-98	H. B. Ry.	...	...	...	...	...	55-22	...	55-22
	Total ...	...	...	...	...	...	84-00	...	177-48	...	177-48
	2' 6" GAUGE.										
64	Nadiad-Kapadvanj ...	...	...	...	...	...	...	...	...	...	...
	2' GAUGE. Nil.	...	...	...	...	...	...	...	...	...	...
	Total branch line Companies' railways assisted by Government under "rebate" terms.	...	...	...	...	...	84-00	...	1,171-48	...	1,171-48

DIX I—contd.

sanctioned for construction.

TRACK MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.			TRACK MILEAGE (EXCLUDING SIDINGS) SANCTIONED OR UNDER CONSTRUCTION AT CLOSE OF THE CALENDAR YEAR 1911.						Serial No.	REMARKS.
Running track.	Sidings.	Total.	Date of sanction.	Agency for construction.	SECTION SANCTIONED.		MILEAGE SANCTIONED.			
					From	To	Single line.	Second, third, etc., lines, as the case may be.		
18	14	15	16	17	18	19	20	21	22	23

II.

not pass through the Government accounts.

BOARDS' LINES.

...	...	...	...	...	...	...	...	...	...	...
51-50	7-53	59-33	...	...	...	...	...	...	53	
108-36	9-04	112-40	...	...	...	...	...	...	54	
155-16	16-57	171-73	...	...	...	...	...	...		
...	...	...	...	...	...	...	...	...		
...	...	...	...	...	...	...	...	...		
155-16	16-57	171-73	...	...	...	...	...	...		

ASSISTED BY GOVERNMENT UNDER "REBATE" TERMS.

54-26	7-42	61-08	...	...	...	...	...	...	55	
...	...	...	2-6-11	S. P. Ry. Co.	Ferozepore Cantt. Lohian	Jullundur City. Phillour	(a) 73-14	...	56	(a) Work commenced.
...	...	...	...	...	...	...	(a) 89-30	...	...	
424-06	30-51	504-37	...	...	...	...	...	...	57	
133-04	16-43	169-47	...	...	...	...	...	...	58	
208-19	27-26	235-45	...	...	...	...	...	...	59	
155-48	10-17	165-65	...	...	...	...	...	...	60	
994-03	141-79	1,135-83	...	...	...	...	118-03	...		
33-54	2-78	36-32	...	...	...	...	...	...	61	
58-70	(b) 12-07	100-77	...	...	...	...	...	...	62	(b) Includes 1-63 miles of 4' 6" gauge sidings.
55-22	10-17	65-39	...	...	...	...	...	...	63	
177-46	25-02	202-48	...	...	...	...	...	...		
...	...	...	12-1-11	Gujarat Ry. Co.	Nadiad	Kapadvanj...	(c) 17-98	...	64	
...	...	...	...	...	...	...	...	...		
1,171-49	166-81	1,338-30	...	...	...	...	141-01	...		

Serial No.	Names of railways under each classification by gauges.	Date of first opening for traffic.	Agency for working. [For abbreviations used see Index to Appendix 2.]	TRACK MILEAGE (EXCLUDING SIDINGS) OPENED DURING THE CALENDAR YEAR 1911.					ROUTE MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.		
				Date of opening.	SECTION OPENED.		MILEAGE OPENED.		Single line.	Double, treble, etc., lines, as the case may be.	Total route mileage
					From	To	Single line.	Second, third, etc., lines, as the case may be.			
1	2	3	4	5	6	7	8	9	10	11	12
<b>PART</b>											
<i>Railways, the transactions of which do</i>											
<b>VII.—COMPANIES' LINES GUARANTEED</b>											
	5' 6" GAUGE. Nil.	...	...	...	...	...	...	...	...	...	...
	3' 3½" GAUGE. Nil.	...	...	...	...	...	...	...	...	...	...
65	Bangalore-Chickballapur Light. 2' 0" GAUGE. Nil.	...	...	...	...	...	...	...	...	...	...
	Total Companies' lines guaranteed by Native States.	...	...	...	...	...	...	...	...	...	...
<b>VIII.—ASSISTED COMPANIES' LINES SUBSIDIZED</b>											
66	Delhi-Umballa-Kalka ... 5' 6" GAUGE.	1-3-01	E. I. Ry. Co.	...	...	...	...	...	192-12	...	192-12
67	Rohilkhand and Kumaon 3' 3½" GAUGE.	12-10-04	B. & K. Ry. Co.	24-2-11	Pilibhit Junction.	Bisalpur ...	(5) 28-14	...	225-20	...	225-20
68	Murtajapur-Elichpur ... 2' 6" GAUGE. Nil.	...	...	...	...	...	...	...	...	...	...
	Total Assisted Companies' lines subsidized by the Government of India.	...	...	...	...	...	28-14	...	417-32	...	417-32
<b>IX.—ASSISTED COMPANIES' LINES</b>											
69	Dibru-Sadiya ... 3' 3½" GAUGE. 2' 6" GAUGE.	15-8-02	Assam Ry. & Trading Co.	...	...	...	...	...	86-02	...	86-02
70	Maungdaw-Buthidaung... 2' 6" GAUGE.	...	...	...	...	...	...	...	...	...	...
71	Darjeeling-Himalayan ... 2' 6" GAUGE.	23-8-00	D. H. Ry. Co.	...	...	...	...	...	51-00	...	51-00
	Total Assisted Companies' lines subsidized by Local Governments.	...	...	...	...	...	...	...	187-02	...	187-02

DIX I—contd.

sanctioned for construction.

TRACK MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.			TRACK MILEAGE (EXCLUDING SIDINGS) SANCTIONED OR UNDER CONSTRUCTION AT CLOSE OF THE CALENDAR YEAR 1911.						Serial No.	REMARKS.
Running track.	Sidings.	Total.	Date of sanction.	Agency for construction.	SECTION SANCTIONED.		MILEAGE SANCTIONED.			
					From	To	Single line.	Second, third, etc., lines, as the case may be.		
13	14	15	16	17	18	19	20	21	22	
..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	
..	..	..	10-9-09	B. C. Ls. Ry. Co.	Bangalore ...	Chickballapur	(a) 37-85	..	65 (a) Not commenced.	
..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	87-85	..	..	
<b>BY THE GOVERNMENT OF INDIA.</b>										
192-12	21-75	213-90	..	..	..	..	..	..	66 (b) Opened only in a restricted sense, and did not form part of the open mileage earning revenue.	
225-20	30-51	255-71	17-8-09	R. & K. Ry. Co.	Bisalpur -- Shahbanagar	Carewganj (Shajahanpur). Shahjahanpur	(c) 31-12 (a) 23-56 33-63	..	67 (c) Since opened.	
..	..	..	14-12-10	G. I. P. Ry. Co.	Murtajapur	Ellichpur ...	(a) 67-65	..	68	
..	..	..	..	..	..	..	..	..	..	
417-33	53-29	469-61	..	..	..	..	81-33	..	..	
<b>SUBSIDIZED BY LOCAL GOVERNMENTS.</b>										
..	..	..	..	..	..	..	..	..	..	
86-03	14-01	100-03	..	..	..	..	..	..	69	
..	..	..	31-8-11	Arakan Flo-tille Com-pany.	Maungdaw	Buthidaung	(a) 17-25	..	70	
51-00	4-24	55-24	..	..	..	..	..	..	71	
..	..	..	..	..	..	..	..	..	..	
187-03	18-25	155-27	..	..	..	..	17-25	..	..	



## Details of mileage open and

Serial No.	Names of railways under each classification by gauge.	Date of first opening for traffic.	Agency for working. [For abbreviations used see Index to Appendix 9.]	TRACK MILEAGE (EXCLUDING SIDINGS) OPENED DURING THE CALENDAR YEAR 1911.					ROUTE MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.		
				Date of opening.	SECTION OPENED.		MILEAGE OPENED.		Single line.	Double, treble, etc., lines, as the case may be.	Total route mileage.
					From	To	Single line.	Second, third, etc., lines, as the case may be.			
1	2	3	4	5	6	7	8	9	10	11	12
<b>PART</b>											
<i>Railways, the transactions of which do</i>											
<b>X.-ASSISTED COMPANIES' LINES</b>											
	5' 6" GAUGE.	Nil	...	...	...	...	...	...	...	...	...
	3' 3 1/2" GAUGE.										
73	Bengal-Doonars	15-1-93	B. D. Ry. Co.	...	...	...	...	...	86-40	...	86-40
	2' 6" GAUGE.										
73	Arrah-Sasaram Light	6-3-11	A. S. Lt. Ry. Co.	6-3-11	Arrah	Sasaram	60-50	...	60-50	...	60-50
74	Baraset-Basirhat Light	1-2-05	B. B. Ry. Co.	...	...	...	...	...	51-12	...	51-12
75	Bukhtiarpore-Bihar Light	1-7-08	B. B. Lt. Ry. Co.	1-11-11	Silao	Rajgir Kund	3-00	...	33-00	...	33-00
76	Jessore-Jhenidah Light	...	...	...	...	...	...	...	...	...	...
77	Tezpur-Palipara Light	9-8-94	T. B. Lt. Ry. Co.	...	...	...	...	...	20-10	...	20-10
	Total	...	...	...	...	...	65-50	...	164-72	...	164-72
	2' 0" GAUGE.										
78	Howrah-Amta Light	1-7-97	H. A. Lt. Ry. Co.	...	...	...	...	...	43-57	...	43-57
79	Howrah-Sheakhala Light	2-8-97	H. S. Lt. Ry. Co.	...	...	...	...	...	19-75	...	19-75
	Total	...	...	...	...	...	...	...	63-32	...	63-32
	Total Assisted Companies' lines subsidized by District Boards.	...	...	...	...	...	65-50	...	264-74	...	264-74
<b>XI.-ASSISTED COMPANIES' LINES RECEIV-</b>											
	5' 6" GAUGE.										
80	Tarkessur	1-1-85	E. I. Ry. Co.	...	...	...	...	...	22-21	...	22-21
	3' 3 1/2" GAUGE.										
81	Bengal and North-Western	2-4-84	B. & N. W. Ry. Co.	12-3-11	Burhwal Junction.	Sitapur	59-76	...	1,175-84	...	1,175-84
82	Bengal Doonars extensions	20-4-00	B. D. Ry. Co.	...	...	...	...	...	116-56	...	116-56
83	Mirpur Khas-Jhudo	12-4-00	J. B. Ry. Co.	...	...	...	...	...	50-43	...	50-43
84	Mirpur Khas-Khadro	...		...	...	...	...	...	...	...	...
	Total	...	...	...	...	...	59-76	...	1,342-83	...	1,342-83
	2' 6" GAUGE.										
85	Paral Light	1-2-97	B. Lt. Ry. Co.	1-5-11	Tadwale	Latur	33-00	...	115-84	...	115-84
86	Champaner-Shivrajpur Light.	2-2-11	Shivrajpur Syndicate.	2-2-11	Champaner Road Junction.	Champaner City	11-00	}	20-24	...	20-24
				10-11-11	Champaner City	Shivrajpur	6-00				
				1-1-11	Shivrajpur	Bamankua mines.	1-14				
				24-1-11	Shivrajpur	Shivrajpur mines.	1-80				
	Carried over	...	...	...	...	...	20-24	...	186-08	...	186-08

**DIX I—contd.**

*sanctioned for construction.*

TRACK MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.			TRACK MILEAGE (EXCLUDING SIDINGS) SANCTIONED OR UNDER CONSTRUCTION AT CLOSE OF THE CALENDAR YEAR 1911.						Serial No.	REMARKS-
Running track.	Sidings.	Total.	Date of sanction.	Agency for construction.	SECTION SANCTIONED.		MILEAGE SANCTIONED.			
					From	To	Single line.	Second, third, etc., lines, as the case may be.		
18	14	15	16	17	18	19	20	21	22	23

**II—contd.**

*not pass through the Government accounts.*

**SUBSIDIZED BY DISTRICT BOARDS.**

36.40	4.37	40.77	...	...	...	...	...	...	72	
60.50	4.00	64.50	...	...	...	...	...	...	73	
51.12	5.05	56.17	...	...	...	...	...	...	74	
33.00	2.10	35.50	...	...	...	...	...	...	75	
...	...	...	2-12-10	J. J. Lt. By. Co.	Jessore ... Kaliganj ...	Jhenidah ... Kot Chandpur ...	(a) 28.90 (a) 7.90	...	76	(a) Work commenced.
20.10	1.11	21.21	...	...	...	...	36.80	...	77	
104.72	12.86	177.88	...	...	...	...	36.80	...		
43.87	5.04	48.91	20-3-02	H. A. Lt. By. Co.	Autpur ...	Rajbulhat ...	(b) 8.80	...	78	(b) Not commenced.
19.75	2.40	22.15	...	...	...	...	...	...	79	
63.62	7.44	71.06	...	...	...	...	3.50	...		
264.74	24.47	289.21	...	...	...	...	40.80	...		

**ING LAND ONLY FROM GOVERNMENT.**

22.21	3.42	25.63	...	...	...	...	...	...	80	
1,175.84	193.50	1,369.34	9-5-09 26-1-09 4-10-09 21-7-10	B. & N. W. Ry. Co.	Gogra bridge at Manjhi Ghat and approaches. Jhusi ... Allahabad ... Gundak bridge at Bagaha and approaches. Thawe ... (Captainganj)		(c) 4.81 (a) 3.99 (a) 5.43 (a) 59.75	...	81	(c) Since opened.
116.56	11.80	128.36	...	...	...	...	78.95	...	82	
50.43	2.63	53.06	...	...	...	...	...	...	83	
...	...	...	19-9-10	J. B. Ry.	Mirpur Khas	Khadro	(c) 49.50	...	84	
1,342.93	207.93	1,550.76	...	...	...	...	123.49	...		
115.84	12.96	128.80	21-11-06	B. Lt. Ry. Co.	Pandharpur	Pandharpur town.	(b) 1.36	...	85	
20.24	2.74	22.98	...	...	...	...	...	...	86	
136.08	15.70	151.78	...	...	...	...	1.96	...		

## Details of mileage open and

Serial No.	Names of railways under each classification by gauges.	Date of first opening for traffic.	Agency for working. [For abbreviations used see Index to Appendix 9.]	TRACK MILEAGE (EXCLUDING SIDINGS) OPENED DURING THE CALENDAR YEAR 1911.					ROUTE MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.		
				Date of opening.	SECTION OPENED.		MILEAGE OPENED.		Single line.	Double, treble, etc., lines, as the case may be.	Total route mileage.
					From	To	Single line.	Second, third, etc., lines, as the case may be.			
1	2	3	4	5	6	7	8	9	10	11	12
<b>PART</b>											
<b>Railways, the transactions of which do</b>											
<b>XI.-ASSISTED COMPANIES' LINES RECEIV-</b>											
	2' 6" GAUGE—concd.										
	Brought forward	...	...	...	...	...	57-23	...	136-08	...	136-08
87	Dwara-Therria Light	...	...	...	...	...	...	...	...	...	...
88	Ponagan Light	17-6-90	R. & K. Ry. Co.	...	...	...	...	...	39-50	...	39-50
89	Shabdara-(Delhi)-Saharanpur Light.	7-5-07	S. & L. Ry. Co.	...	...	...	...	...	92-50	...	92-50
	Total	...	...	...	...	...	57-23	...	268-08	...	268-08
<b>2' 0" GAUGE.</b>											
90	Matheran Light	22-3-07	G. I. P. Ry. Co.	...	...	...	...	...	12-61	...	12-61
	Total Assisted Companies' lines receiving land only from Government.	...	...	...	...	...	116-99	...	1,645-73	...	1,645-73
<b>XII.-UNASSISTED</b>											
<b>5' 6" GAUGE.</b>											
<b>NIL.</b>											
<b>3' 3½" GAUGE.</b>											
91	Ledo and Tikal-Margherita colliery.	17-2-84	Assam Ry. & Trading Co.	...	...	...	...	...	5-50	...	5-50
<b>2' 6" GAUGE.</b>											
92	Ambaji-Taranga Light	...	...	...	...	...	...	...	...	...	...
93	Dehri-Rohas Light	6-2-11	D. R. L. Ry. Co.	6-2-11	Dehri on Sonb	Rohas (Akbarpur).	23-83	...	23-83	...	23-83
94	Madaya Light	...	...	...	...	...	...	...	...	...	...
95	Tarkessur-Magra Light	7-11-94	B. P. Ry. Co.	...	...	...	...	...	33-27	...	33-27
	Total	...	...	...	...	...	23-83	...	57-10	...	57-10
<b>2' 0" GAUGE.</b>											
96	Jagadhri Light	11-8-11	J. L. Ry. Co.	11-8-11	Jagadhri Junction.	Jagadhri town	8-31	...	8-31	...	8-31
	Total Unassisted Companies' lines.	...	...	...	...	...	27-14	...	65-01	...	65-01
<b>XIII.-NATIVE STATE LINES</b>											
<b>5' 6" GAUGE.</b>											
<b>NIL.</b>											
<b>3' 3½" GAUGE.</b>											
97	Bhavnagar	20-12-80	Bhavnagar Durbar.	1-10-11	Dhams	Lalia Mota	20-80	...	157-35	...	157-35
98	Bikaner	9-12-91	J. B. Ry. ...	8-7-11	Churu	Hissar	79-36	...	385-40	...	385-40
99	Dhrangadra	1-6-98	Bhavnagar Durbar.	...	...	...	...	...	20-83	...	20-83
100	Gondal-Forbandar	19-1-81	Gondal and Forbandar Durbar.	...	...	...	...	...	148-01	...	148-01
	Carried over	...	...	...	...	...	100-16	...	712-19	...	712-19

DIX I—contd.

sanctioned for construction.

TRACK MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.			TRACK MILEAGE (EXCLUDING SIDINGS) SANCTIONED OR UNDER CONSTRUCTION AT CLOSE OF THE CALENDAR YEAR 1911.						Serial No.	REMARKS.
Running track.	Sidings.	Total.	Date of sanction.	Agency for construction.	SECTION SANCTIONED.		MILEAGE SANCTIONED.			
					From	To	Single line.	Second, third, etc., lines, as the case may be.		
13	14	15	16	17	18	19	20	21	22	

II—contd.

not pass through the Government accounts.

ING LAND ONLY FROM GOVERNMENT—contd.

138-08	15-70	151-78	...	...	...	...	138	...	...	
...	...	...	15-5-02	D. T. Lt. Ry. Co.	{ Dwara ... Maolong ...	Maolong ... Tharria Ghat	(a) 13-50 (b) 6-00 19-50	...	87	(a) Work suspended.
39-50	1-85	41-35	...	...	...	...	...	...	88	(b) Commencement of work not authorized.
92-50	8-52	101-02	4-1-02	S. S. Lt. Ry. Co.	Baraut ...	Meerut ...	(c) 30-00	...	89	(c) Not commenced.
268-08	26-07	294-15	...	...	...	...	50-86	...		
12-61	1-18	13-79	...	...	...	...	...	...	90	
1,645-73	238-60	1,884-33	...	...	...	...	174-34	...		

COMPANIES' LINES.

...	...	...	...	...	...	...	...	...	...	
5-50	7-66	13-16	...	...	...	...	...	...	91	
...	...	...	8-7-11	A. T. Lt. Ry. Co.	Baroda Frontier	Sarnia ...	(c) 18-00	...	92	
25-82	2-00	25-82	...	...	...	...	...	...	93	
...	...	...	13-2-06	Madaya Tramway Co.	Madaya ...	Mandalay (Zegyo).	(d) 16-00	...	94	(d) Portion since opened.
33-27	2-10	35-37	...	...	...	...	...	...	95	
57-10	4-10	61-20	...	...	...	...	34-00	...		
3-81	0-55	3-86	...	...	...	...	...	...	96	
65-21	12-31	78-22	...	...	...	...	34-00	...		

WORKED BY NATIVE STATES.

...	...	...	...	...	...	...	...	...	...	
187-95	25-65	188-60	29-2-10	Bhavnagar Durbar.	Lilia Mota	Savar Kundla	(e) 14-61	...	97	(e) Since opened.
385-40	18-88	408-78	29-2-11	J. B. Ry.	Bikaner ...	Ratangarh...	(g) 85-00	...	98	(f) Includes 1-03 miles of Dock estate line which is worked for goods traffic only.
20-83	1-82	22-65	...	...	...	...	...	...	99	(g) Work commenced.
148-01	16-15	164-16	...	...	...	...	...	...	100	(h) Includes 1-55 miles from Porbandar to Porbandar Bandar and 3-70 miles of Banawao quarry branch which are worked for goods traffic only.
712-10	63-00	774-19	...	...	...	...	99-61	...		

Details of mileage open and

Serial No.	Names of railways under each classification by gauges.	Date of first opening for traffic.	Agency for working. [For abbreviations used see Index to Appendix 2.]	TRACK MILEAGE (EXCLUDING SIDINGS) OPENED DURING THE CALENDAR YEAR 1911.					ROUTE MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.		
				Date of opening.	SECTION OPENED.		MILEAGE OPENED.		Single line.	Double, triple, etc., lines, as the case may be.	Total route mileage.
					From	To	Single line.	Second, third, etc., lines, as the case may be.			
1	2	3	4	5	6	7	8*	9	10	11	12
<b>PART</b>											
<i>Railways, the transactions of which do</i>											
<b>XIII.—NATIVE STATE LINES</b>											
	<b>3' 3 1/2" GAUGE—concl'd.</b>										
	Brought forward	---	---	---	---	---	100'16	---	712'19	---	712'19
101	Jamnagar	8-4-97	Jamnagar Durbar.	---	---	---	---	---	(a) 54'22	---	54'22
102	Jetalpur-Rajkot	12-4-93	Gondal and Porbandar Durbar.	---	---	---	---	---	46'21	---	46'21
103	Jodhpur	21-6-82	J. B. Ry. ...	---	---	---	---	---	525'00	---	525'00
104	Junagad	1-9-88	Junagad Durbar.	---	---	---	---	---	(b) 86'36	---	86'36
105	Morvi	11-3-86	Morvi Durbar.	---	---	---	---	---	78'94	---	78'94
106	Udaipur-Ghitorgarh	1-8-95	Udaipur Durbar.	---	---	---	---	---	67'30	---	67'30
	<b>Total</b>	---	---	---	---	---	100'16	---	1,567'82	---	1,567'82
	<b>2' 6" GAUGE.</b>										
107	Cutch	18-5-03	Cutch Durbar.	---	---	---	---	---	86'78	---	86'78
108	Dholpur-Bari	24-2-06	Dholpur Durbar.	---	---	---	---	---	19'02	---	19'02
109	Morvi	24-3-87	Morvi Durbar.	---	---	---	---	---	18'89	---	18'89
	<b>Total</b>	---	---	---	---	---	---	---	75'29	---	75'29
	<b>2' 0" GAUGE.</b>										
110	Pipar Road-Bhavi Light	25-11-10	Jodhpur Durbar.	---	---	---	---	---	19'00	---	19'00
	<b>Total Native State lines worked by Native States.</b>	---	---	---	---	---	100'16	---	1,662'11	---	1,662'11
	<b>5' 6" GAUGE.</b>										
<b>XIV.—NATIVE STATE</b>											
111	Bhopal-Itarsi (Native State section).	18-11-84	G. I. P. Ry. Co.	---	---	---	---	---	44'49	---	44'49
112	Bhopal-Ujjain	11-11-95		---	---	---	---	---	118'27	---	118'27
113	Bina-Goona-Baran	23-9-95		---	---	---	---	---	145'01	---	145'01
114	Kolar Gold-fields	1-6-94	M. and S. M. Ry. Co.	---	---	---	---	---	9'88	---	9'88
115	Nagda-Ujjain	15-7-86	B. B. & C. I. Ry. Co.	---	---	---	---	---	34'82	---	34'82
116	Nizam's Guaranteed State	9-10-74	N. G. S. Ry. Co.	---	---	---	---	---	(g) 330'18	---	330'18
117	Petlad-Cambay (Amud-Tarapur section).	5-5-90	B. B. & C. I. Ry. Co.	---	---	---	---	---	21'50	---	21'50
118	Petlad-Cambay (Tarapur-Cambay section).	20-6-01		---	---	---	---	---	12'30	---	12'30
	<b>Total</b>	---	---	---	---	---	---	---	711'50	---	711'50
	<b>3' 3 1/2" GAUGE.</b>										
119	Birur-Shimoga	1-12-99	M. & S. M. Ry. Co.	---	---	---	---	---	87'92	---	87'92
120	Gaekwar's Mehsana	21-8-87	B. B. & C. I. Ry. Co.	---	---	---	---	---	138'00	---	138'00
121	Hindapur (Yesvantpur-Mysore Frontier).	15-12-92	M. & S. M. Ry. Co.	---	---	---	---	---	51'85	---	51'85
122	Hingoli branch	---	---	---	---	---	---	---	(g)	---	---
123	Hyderabad Godavari Valley.	21-10-99	N. G. S. Ry. Co.	---	---	---	---	---	891'18	---	891'18
124	Jaipur	10-11-05	B. B. & C. I. Ry. Co.	---	---	---	---	---	72'84	---	72'84
	<b>Carried over</b>	---	---	---	---	---	---	---	691'24	---	691'24

DIX I—contd.

sanctioned for construction.

TRACK MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.			TRACK MILEAGE (EXCLUDING SIDINGS) SANCTIONED OR UNDER CONSTRUCTION AT CLOSE OF THE CALENDAR YEAR 1911.						Serial No.	REMARKS.
Running track.	Sidings.	Total.	Date of sanction.	Agency for construction.	SECTION SANCTIONED.		MILEAGE SANCTIONED.			
					From	To	Single line.	Second, third, etc., lines, as the case may be.		
13	14	15	16	17	18	19	20	21	22	23

II—contd.

not pass through the Government accounts.

WORKED BY NATIVE STATES—contd.

713-19	62-00	775-19	...	...	...	...	99-61	...		
54-22	3-75	57-97	...	...	...	...	...	...	101	(a) Includes 3-93 miles, from Jamnagar to Bedi Bandar, worked for goods traffic only.
46-21	4-66	50-87	...	...	...	...	...	...	102	
525-00	28-70	553-70	...	...	...	...	...	...	103	
68-98	8-95	97-91	11-11-11	Junagad Durbar.	Junagad	...	Visavadar...	(c) 26-56	104	(b) Includes 2-35 miles of Junagad quarry line and 0-80 mile of Dock Estate line which are worked for goods traffic only.
73-94	7-62	81-56	...	...	...	...	...	...	105	
67-80	4-85	72-15	...	...	...	...	...	...	106	
1,567-82	120-53	1,688-35	...	...	...	...	126-17	...		(c) Earthwork alone has been sanctioned at present.
86-78	2-70	89-48	...	...	...	...	...	...	107	
19-62	3-86	23-48	...	...	...	...	...	...	108	
18-20	2-63	21-52	...	...	...	...	...	...	109	
75-29	9-19	84-48	...	...	...	...	...	...		
19-00	0-70	19-70	(d) 7-3-12	Jodhpur Durbar.	Bhavi	...	Bilara	(e) 6-00	110	(d) Construction commenced in 1911, in anticipation of sanction. (e) Since opened.
1,662-11	130-42	1,792-53	...	...	...	...	132-17	...		

LINES WORKED BY COMPANIES.

44-49	(f) 24-70	69-19	...	...	...	...	...	...	111	(f) Includes sidings on the British section, serial No. 17.
113-27	8-96	122-23	...	...	...	...	...	...	112	
145-61	11-80	157-21	...	...	...	...	...	...	113	
9-88	5-74	15-62	...	...	...	...	...	...	114	
34-82	1-06	35-88	...	...	...	...	...	...	115	
330-13	43-71	373-84	...	...	...	...	...	...	116	(g) Includes 5-82 miles of mixed (5' 6" and 3' 3 1/4") gauge line between Hyderabad and Secunderabad over which both the Nizam's Guaranteed State and the Hyderabad-Godavari Valley railway trains work.
21-50	2-05	23-55	...	...	...	...	...	...	117	
12-30	3-81	16-11	...	...	...	...	...	...	118	
711-50	101-63	813-13	...	...	...	...	...	...		
87-92	4-57	92-49	...	...	...	...	...	...	119	
188-00	15-27	183-27	...	...	...	...	...	...	120	
51-35	4-08	55-38	...	...	...	...	...	...	121	
...	...	...	12-3-09	N. G. S. Ry. Co.	Purna	...	Hingoli	(h) 50-26	122	(h) Work commenced.
391-13	45-71	436-84	...	...	...	...	...	...	123	
72-84	7-29	80-13	...	...	...	...	...	...	124	
691-34	76-87	768-11	...	...	...	...	50-26	...		

## Details of mileage open and

Serial No.	Names of railways under each classification by gauges.	Date of first opening for traffic.	Agency for working. [For abbreviations used see Index to Appendix 9.]	TRACK MILEAGE (EXCLUDING SIDINGS) OPENED DURING THE CALENDAR YEAR 1911.					ROUTE MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.		
				Date of opening.	SECTION OPENED.		MILEAGE OPENED.		Single line.	Double, treble, etc., lines, as the case may be.	Total route mileage.
					From	To	Single line.	Second, third, etc., lines, as the case may be.			
1	2	3	4	5	6	7	8	9	10	11	12
<b>PART</b>											
<i>Railways, the transactions of which do</i>											
<b>XIV.—NATIVE STATE LINES</b>											
<b>3' 3 1/2" GAUGE—concl'd.</b>											
	Brought forward								601.24		601.24
125	Kolhapur	21-4-91	M. & S. M. Ry. Co.						29.27		29.27
126	Mysore-Nanjangud	1-12-91							15.80		15.80
127	Sangli	1-4-07							4.90		4.90
128	Shoranur-Cochin	2-6-02	S. I. Ry. Co.						64.75		64.75
129	Tinnevely-Qulou (Travancore) (Native State section)	1-6-04							58.05		58.05
130	Vijapur-Kalol-Kadi	10-6-02	B. B. & C. I. Ry. Co.						41.37		41.37
	Total								905.33		905.33
<b>3' 6" GAUGE.</b>											
131	Billimora-Kalamba										
132	Gackwar's-Dabhoi	8-4-73	B. B. & C. I. Ry. Co.						24.48		24.48
133	Kocamba-Zankavav										
134	Mourbhauj	20-1-05	B. N. Ry. Co.						32.41		32.41
135	Parlakir-odi Light	1-4-00							24.03		24.03
136	Petlad-Vaso										
137	Rajpipla	1-7-07	B. B. & C. I. Ry. Co.						37.37		37.37
	Total								188.88		188.88
<b>2' 0" GAUGE.</b>											
138	Gwalior Light	2-12-00	G. I. P. Ry. Co.						249.96		249.96
	Total Native State lines worked by Companies.								2,055.72		2,055.72
<b>5' 6" GAUGE.</b>											
<b>XV.—NATIVE STATE LINES</b>											
139	Jammu and Kashmir (Native State section) (2)	15-3-00	N. W. Ry.						15.79		15.79
140	Khanpur-Chachran	2-7-11		2-7-11	Khanpur	Chachran	23.08		22.02		22.02
141	Ludhiana-Dhuri-Jakhal	10-4-01							78.65		78.65
142	Rajpura-Bhatinda	1-11-04							107.01		107.01
	Total						22.02		228.47		228.47





APPEN

Details of mileage open and

Serial No.	Names of railways under each classification by gauge.	Date of first opening for traffic.	Agency for working. [For abbreviations used see Index to Appendix 2.]	TRACK MILEAGE (EXCLUDING SIDINGS) OPENED DURING THE CALENDAR YEAR 1911.					ROUTE MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.		
				Date of opening.	SECTION OPENED.		MILEAGE OPENED.		Single line.	Double, treble, etc., lines, as the case may be.	Total route mileage.
					From	To	Single line.	Second, third, etc., lines, as the case may be.			
1	2	3	4	5	6	7	8	9	10	11	12
<b>PART</b>											
<i>Railways, the transactions of which do</i>											
<b>XV.-NATIVE STATE LINES</b>											
143	Cooch Behar	15-9-93	E. B. Ry. Co.	...	...	...	...	...	83'09	...	83'09
	3 3/4" GAUGE.										
	2' 6" GAUGE.										
	NIL.										
	2' 0" GAUGE.										
	NIL.										
	Total Native State lines worked by State Railway Agency.						22'02	...	256'56	...	256'56
<b>XVI.-LINES IN FOREIGN</b>											
144	Popalam-Karsikkal	14-3-98	S. I. Ry. Co.	...	...	...	...	...	14'65	...	14'65
145	Pondicherry	15-12-79		...	...	...	...	...	7'85	...	7'85
146	West of India Portuguese	17-1-87	M. & S. M. Ry. Co.	...	...	...	...	...	51'10	...	51'10
	Total								73'60	...	73'60
	3' 6" GAUGE.										
	NIL.										
	2' 0" GAUGE.										
	NIL.										
	TOTAL FOREIGN LINES								73'60	...	73'60
	TOTAL PART II						365'95	...	7,905'30	...	7,905'30
	TOTAL PART I						365'95	(141'17)	22,481'36	2,452'10	24,933'66
	GRAND TOTAL OF ALL RAILWAYS						(n) 754'90	(141'17)	30,288'92	2,452'10	32,639'02

**DIX I—concl'd.**

*sanctioned for construction.*

TRACK MILEAGE OPEN AT CLOSE OF THE CALENDAR YEAR 1911.			TRACK MILEAGE (EXCLUDING SIDINGS) SANCTIONED OR UNDER CONSTRUCTION AT CLOSE OF THE CALENDAR YEAR 1911.						Serial No	REMARKS.
Running track.	Sidings.	Total.	Date of sanction.	Agency for construction.	SECTION SANCTIONED.		MILEAGE SANCTIONED.			
					From	To	Single line.	Second, third, etc., lines, as the case may be.		
13	14	15	16	17	18	19	20	21	22	23

**II—concl'd.**

*not pass through the Government accounts.*

**WORKED BY STATE RAILWAY AGENCY—concl'd.**

3309	188	3492	...	...	...	...	...	...	143
...	...	...	...	...	...	...	...	...	...
25658	3128	28784	...	...	...	...	...	...	...

**TERRITORY.**

...	...	...	...	...	...	...	...	...	...
1465	218	1678	...	...	...	...	...	...	144
785	189	974	...	...	...	...	...	...	145
5110	1565	6675	...	...	...	...	...	...	146
7860	1967	9827	...	...	...	...	...	...	...
790536	99461	8,89997	...	...	...	...	84919	...	...
27,49083	5,85040	33,34023	...	...	...	...	1,83559	13805	...
35,85619	6,76701	42,62320	...	...	...	...	2,07878	13805	...

(a) This is the actual mileage opened. The net mileage added (i.e., mileage actually opened, plus or minus corrections of mileage, due to realignments, remeasurements, abandonments, etc., during 1911 is 739.72 miles.

(i) Capital outlay during the year and

CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		RAILWAYS.	Gauge.	CAPITAL OUTLAY DURING THE YEAR (IN THOUSANDS OF RUPEES).				Total capital outlay on final heads (excluding ferries).		
Main head.	Sub-head.			On new lines, i.e., lines under construction for which there is a separate grant.	On rolling-stock.	On improvement of existing lines.	Total capital outlay.	Open.	Under construction.	
1	2	3	4	5	6	7	8	9	10	
<b>PART</b>										
<b>Railways, the transactions of which</b>										
<b>I.—STATE LINES WORKED</b>										
3	(a)	Eastern Bengal	5' 6"	...	6,42	34,08	41,40	18,17,39	...	
3	(b)	Eastern Bengal	3' 3 1/2" & 2' 6"	...	8,24	17,75	25,99	10,85,58	9,70	
		Lower Ganges Bridge	5' 6"	98,53	...	...	98,52	...	1,40,54	
8	(a)	North Western, Commercial section	"	6,56	70,59	1,37,74	2,04,89	51,78,59	7,20	
		Military	"	...	...	4,71	4,71	17,69,48	...	
8	(j)	Kalka-Simla	2' 6"	...	1,10	1,57	2,67	1,96,92	...	
8	(k)	Kohat-Thal	"	...	32	7	39	43,17	...	
8	(l)	Nowshera-Dargai	"	...	2	4	6	25,24	...	
8	(m)	Trans-Indus (Kalabagh-Banna)	"	21,14	...	...	21,14	...	22,03	
9	(a)	Ondh and Rohilkhand	5' 6"	...	64,49	14,18	30,31	1,08,98	18,19,43	89,05
9	(c)	Cawnpore-Burhwal	3' 3 1/2"	...	...	...	...	...	...	
46	(a)	Jorhat (Provincial)	2' 0"	...	...	4	4	9,87	...	
<b>TOTAL</b>					<b>1,90,71</b>	<b>1,00,91</b>	<b>2,17,17</b>	<b>5,06,79</b>	<b>1,14,23,66</b>	<b>2,69,52</b>
<b>II.—STATE LINES WORKED</b>										
1	(a)	Bengal-Nagpur	5' 6"	12,12	23,07	18,96	34,15	30,37,86	5,56	
1	(b)	Gondia-Chanda	2' 6"	...	...	...	...	...	...	
1	(c)	Jubbulpore-Gondia extension	"	...	...	...	...	...	...	
1	(e)	Nagpur-Chhindwara	"	26,58	4,96	87	32,41	3,60,83	28,56	
1	(g)	Parulia-Ranchi	"	...	...	...	...	...	...	
1	(h)	Kaiper-Dhamteri	"	...	...	...	...	...	...	
2	(a)	Bombay, Baroda and Central India §	5' 6"	...	31,65	26,90	58,55	51,45,59	...	
2	(b)	Godhra-Batlam-Nagda	"	...	...	4,09	4,09	1,93,25	...	
2	(c)	Nagda-Mutta	"	2,94	11,63	4,64	19,11	4,15,30	2,84	
2	(r)	Broach-Jambhar	2' 6"	1,23	...	...	1,23	...	1,23	
2	(l)	Palanpur-Dessa	3' 3 1/2"	...	...	...	...	2,46	...	
2	(m)	Rajputana-Malwa	"	...	8,52	6,41	14,93	15,55,01	...	
<b>Carried over</b>					<b>42,77</b>	<b>79,83</b>	<b>61,67</b>	<b>1,54,47</b>	<b>70,11,89</b>	<b>88,19</b>

**NOTE 1**—In this statement the figures in the column headed "Equivalent in sterling" have been calculated in the following manner:—

(i) In the case of railways purchased from the old Guaranteed Companies the outlay since purchase, as recorded in rupees in India has been converted at Rs. 15 = £1 and added to the sterling capital issued by the Companies before purchase.

East Indian. South Indian.  
 Eastern Bengal. Great Indian Peninsula.  
 Ondh and Rohilkhand. Bombay, Baroda and Central India.  
 Sindh Punjab and Delhi (North Western). Madras (now included under the Madras and Southern  
 Maharashtra and South Indian railway systems).

(ii) In the case of railways constructed from State funds as well as in the case of lines purchased out of funds provided by the State for the construction of railways, the total expenditure as recorded in rupees in India has been converted at Rs. 15 = £1.

† Nilgiri (South Indian railway). Brahmputra-Sultanpur (Eastern Bengal railway).  
 Fagnall-Bazaul (Tirhoot railway). Kanaghat-Krishnagar (Eastern Bengal railway).

(iii) In the case of Companies' lines, and those guaranteed under modern contracts, branch lines and private companies' lines, as well as Native State lines and lines in Foreign territory, if the capital was raised or advanced by the State in sterling, the sterling figures have been taken. And if it was raised or advanced in rupees the expenditure has been converted at Rs. 15 = £1.

‡ Assam-Bengal. Indian Midland.  
 Bengal-Nagpur. Lucknow-Barilly.  
 Bengal Central (Eastern Bengal railway). Mysore.  
 Burma. Madras and Southern Maharashtra.

DIX 2.

(ii) total capital outlay to end of the year 1911.

TOTAL CAPITAL OUTLAY TO END OF THE YEAR—(IN THOUSANDS OF RUPEES).										CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		REMARKS.			
Cost per mile (excluding ferries and suspense).		Ferries, etc.		Suspense (value of stores, etc., not finally charged off in the accounts).		Total capital outlay, (including ferries and suspense).		Grand total. (columns 17 & 18).		Sub-head.	Main head.				
Open (calculated on mileage in column 12 of Appendix I).	Of single track including sidings (calculated on mileage in column 15 of Appendix I).	Open.	Under construction.	Open.	Under construction.	Open.	Under construction.	In thousands of rupees.	Equivalent in sterling (in thousands of pounds).						
11	12	13	14	15	16	17	18	19	20	21	22	23			
<b>I.</b>															
<b>pass through the Government Accounts.</b>															
<b>BY THE STATE.</b>															
2,57	1,47	23,45	...	99,37	...	14,40 21	...	14,40 21	} 18,038	{ (a)	3	3			
1,07	87	32,44	...	...	7	10,98,02	9,77	11,07,79					(b)	3	
...	...	...	...	...	32,75	...	1,78,29	1,78,29					1,155	...	...
2,05	1,32	39,89	...	2,20,70	3,85	54,97,17	11,05	55,08,22	} 53,329	{ (a)	3	3			
1,58	1,25	2,64	...	...	...	17,72,12	...	17,72,12					(f)	3	
3,29	2,94	...	...	...	...	1,66,92	...	1,96,92					(g)	3	
70	67	...	...	...	...	43,7	...	43,17					(h)	3	
64	56	28	...	...	...	26,02	...	26,02	(i)	3	3				
...	...	...	8,08	...	4,71	...	29,82	29,82	199	(n)	3	3			
1,20	1,01	...	...	42,48	27	18,61,91	89,82	19,51,83	16,188	{ (a)	9	9			
29	28	...	...	85	...	9,72	...	9,72	65				(c)	46	
...	...	99,70	3,08	4,22,90	41,65	1,19,45,26	3,18,25	1,22,63,51	88,934						
<b>BY COMPANIES.</b>															
1,64	1,30	47,51	...	78,86	...	31,63,73	5,56	31,69,29	} 24,564	{ (a)	1	1			
57	53	33	...	...	6	3,01,15	23,62	3,24,77					(b)	1	
...	...	...	...	...	...	...	...	...					...	(c)	1
3,11	1,69	...	...	46,17	...	14,91,76	...	14,91,76					12,575	(a)	2
1,88	1,23	...	...	...	...	1,95,25	...	1,95,25					1,802	(b)	2
1,22	1,04	...	...	21	1,60	4,15,00	4,44	4,20,04	2,800	(c)	2				
75	73	...	...	...	...	...	1,23	1,23	8	(d)	2				
88	73	...	...	73,56	...	16,22,57	...	16,22,57	10,837	(m)	2	2			
...	...	47,83	...	1,96,80	1,66	72,53,52	89,85	72,98,87	52,122						

§ Includes the capital outlay on the Patri branch (Rs. 8,08,405).  
 ¶ The expenditure shown against this railway in this part represents the capital outlay incurred by Government.  
 ¶ Calculated on the outlay incurred by Government and the Palanpur Durbar.

NOTE 2.—The Premia paid in purchase of companies' lines are as under:—

	Rs.	Rs.
East Indian railway	6,550,000 @ Rs. 15 =	9,82,50,000
Eastern Bengal railway	1,136,437	1,70,46,535
Sindh-Punjab and Delhi railway	2,933,304	4,40,07,060
South Indian railway	989,277	1,48,39,155
Ondh and Rohilkhand railway	1,036,049	1,55,40,735
Great Indian Peninsula railway	14,839,218	22,23,88,379
Bombay, Ekoda and Central India railway	4,135,260	6,20,29,200
Madras railway	2,561,928	3,84,22,920

## (i) Capital outlay during the year and

CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9)		RAILWAYS	Gauge.	CAPITAL OUTLAY DURING THE YEAR (IN THOUSANDS OF RUPEES).				Total capital outlay on final heads (excluding ferries).	
Main head.	Sub-head.			On new lines, &c., lines under construction for which there is a separate grant.	On rolling-stock.	On improvement of existing lines.	Total capital outlay.	Open.	Under construction.
1	2								
<b>PART</b>									
<b>II.—STATE LINES WORKED</b>									
		Brought forward	...	49,77	79,53	61,57	1,84,47	70,11,89	38,19
4	(a)	East Indian	3' 6"	49,50	29,80	62,04	1,41,43	59,67,21	1,02,38
5	(a)	Great Indian Peninsula	"	43,70	56,56	61,98	1,65,19	50,32,96	1,01,87
5	(b)	Agra-Delhi Ghord	"	...	9	7,64	7,73	1,42,06	...
5	(c)	Baran-Kotah	"	...	...	-1	-1	45,63	...
5	(d)	Bhopal-Itarsi (British section)	"	...	...	76	76	36,39	...
6	(a)	Madras and Southern Mahratta	"	...	14,23	11,36	25,59	17,18,57	...
6	(c)	Madras and Southern Mahratta	3' 3 1/2"	...	10,90	8,91	16,94	12,10,65	...
6	(f)	Dhone-Karrool	"	...	...	23	23	9,74	...
6	(g)	Mysore section (M. and S. M.)	"	...	11,49	11,52	13,01	1,75,09	...
7	(b)	Barwade extension	3' 6"	...	...	17	17	12,19	...
10	(a)	South Indian	"	...	2,60	6,06	8,66	6,46,40	...
10	(b)	South Indian	3' 3 1/2"	2,58	10,71	3,79	17,09	8,11,23	4,73
10	(c)	Nilgiri	"	...	96	7	1,08	75,18	...
10	(d)	Morappur-Dharmapuri	2' 6"	7,63	...	1	7,83	8,34	11,93
10	(e)	Tirupattur Krishnagiri	"	...	...	2	2	10,76	...
10	(h)	Tinnevely-Quilon (Travancore) (British section)	3' 3 1/2"	...	2	16	18	44,41	...
10	(i)	Tinnevely-Quilon (Travancore) (Native State section)	"	...	2	-2	...	1,18,04	...
11	(e)	Assam-Bengal	"	20,41	7,80	6,75	35,05	12,76,54	25,66
12	(b)	Tirhoot	"	7,82	2,48	2,95	15,26	7,16,85	17,02
15	(a)	Burma	"	...	11,29	36,01	47,30	15,92,90	...
15	(b)	Burma extensions	"	1,28	1	49	1,89	2,12,62	26
15	(c)	Southern Shan States	"	18,28	6	...	18,34	...	36,82
19	(c)	Jodhpur-Hyderabad (British section)	"	...	...	36	36	40,81	...
22	(b)	Lacknow-Bareilly	"	6,21	21	6,76	12,23	1,49,40	16,19
		TOTAL	...	2,01,57	2,30,38	2,79,84	7,11,74	2,72,52,79	3,54,93
<b>III.—COMPANIES LINES GUARANTEED</b>									
9	(b)	Hardwar-Dehra	3' 6"	...	...	25	25	30,11	...
<b>IV.—LEASED</b>									
4	(c)	South Behar	3' 6"	...	...	...	...	1,19,77	...
		UNCLASSIFIED EXPENDITURE	...	...	...	...	...	...	...
		TOTAL, PART I	...	3,92,28	3,81,24	4,97,26	12,20,78	3,88,26,38	6,32,54

DIX 2—contd.

(ii) total capital outlay to end of the year 1911.

TOTAL CAPITAL OUTLAY TO END OF THE YEAR—(IN THOUSANDS OF RUPEES).										CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		REMARKS.	
Cost per mile (excluding ferries and suspense).		Ferries, etc.		Suspense (value of stores, etc., not finally charged off in the accounts).		Total capital outlay (including ferries and suspense).		Grand total (columns 17 and 18).		Sub-head.	Main head.		
Open (calculated on mileage in column 11 of Appendix 1).	Of single track, including sidings (calculated on mileage in column 15 of Appendix 1).	Open.	Under construction.	Open.	Under construction.	Open.	Under construction.	In thousands of rupees.	Equivalent in sterling (in thousands of pounds).				
11	12	13	14	15	16	17	18	19	20	21	22	23	
<b>I—contd.</b>													
<b>BY COMPANIES—contd.</b>													
...	...	47.83	...	1,93.80	1.66	73,58.52	39.83	73,98.37	52,122				
2.64	1.55	19.50	...	1,19.73	17	61,06.44	1,02.50	62,08.94	49,585	(a)	4		
2.08	1.38	...	...	1,46.72	...	51,79.68	1,01.87	52,81.05	43,320	(a)	5		
1.18	81	...	...	...	...	1,42.06	...	1,42.06	947	(b)	5		
1.18	1.05	...	...	...	...	45.66	...	45.66	304	(c)	5		
2.93	...	...	...	...	...	38.29	...	38.29	255	(d)	5		
1.66	1.38	...	...	60.11	...	17,73.68	...	17,73.68	23,701	(a)	6		
86	78	...	...	29.70	...	13,40.33	...	13,40.33		(c)	6		
80	28	...	...	...	...	9.74	...	9.74		65	(f)	6	
58	58	...	...	5.80	...	1,80.96	...	1,80.96		1,338	(g)	6	
57	54	...	...	...	...	12.19	...	12.19	82	(b)	7		
1.45	1.26	...	...	11.93	...	6,57.73	...	6,57.73	13,100	(a)	10		
92	79	...	...	47.54	...	8,57.77	4.73	8,62.50		(b)	10		
2.60	2.29	...	...	2.11	...	77.29	...	77.29		(c)	10		
45	40	...	...	9	...	8.48	11.95	20.38		(f)	10		
42	39	...	...	25	...	11.01	...	11.01		(h)	10		
88	...	...	...	...	...	44.41	...	44.41	1,084	(b)	10		
2.04	...	21	...	...	...	1,18.25	...	1,18.25		(c)	10		
1.74	1.50	58.88	7	17.14	1.24	14,52.51	26.97	14,79.48	10,206	(a)	11		
98	78	11.78	...	8.95	1.57	7,37.53	18.59	7,56.17	5,041	(b)	12		
1.18	90	17.55	...	47.21	...	16,48.66	...	16,48.66	12,451	(a)	15		
1.14	96	2.24	...	31	...	2,15.17	26	2,15.43		(b)	15		
...	...	...	...	...	8.80	...	45.12	45.12		(c)	15		
88	30	26	...	95	...	42.02	...	42.02	280	(c)	19		
58	50	...	...	5.80	54	1,55.29	16.73	1,72.02	1,172	(b)	22		
...	...	1,53.20	7	7,02.73	18.98	2,81,18.71	3,68.07	2,84,81.78	2,15,053				
<b>BY GOVERNMENT UNDER MODERN CONTRACTS.</b>													
84	83	...	...	...	...	30.11	...	30.11	201	(b)	9		
LINES.	1.86	...	...	...	...	1,19.77	...	1,19.77	798	(c)	4		
...	...	...	...	...	...	...	...	1,80.12	867				
...	...	2,56.90	3.15	11,25.62	55.68	4,09,08.83	6,81.32	4,10,20.29	305,833				

\* Includes the expenditure on the Native State section also.

† Includes also the expenditure incurred on the Birur-Shimoga, Hindapur and Mysore-Nanjangud railways.

‡ Includes the outlay of Rs. 44.97 thousand or 2295 thousand on State works incurred from the joint debenture stock.

## APPEN

## (i) Capital outlay during the year and

CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		RAILWAYS.	Gauge.	CAPITAL OUTLAY DURING THE YEAR (IN THOUSANDS OF RUPEES).				Total capital outlay on final heads (excluding ferries).	
Main head.	Sub-head.			On new lines, i.e., lines under construction for which there is a separate grant.	On rolling-stock.	On improvement of existing lines.	Total capital outlay.	Open.	Under construction.
1	2	3	4	5	6	7	8	9	10
<b>PART</b>									
<b>Railways, the transactions of which</b>									
<b>V.—DISTRICT</b>									
6	(a)	Berwada-Masulipatam . . . . .	3' 3 1/2"	—	—	28	25	21.83	—
10	(g)	Tanjore District Board . . . . .	" "	—	—	12	12	42.57	—
		<b>TOTAL</b>	—	—	—	38	38	70.40	—
<b>VI.—BRANCH LINE COMPANIES' RAILWAYS</b>									
2	(g)	Tapti Valley . . . . .	5' 6"	—	—	17	17	1,81.87	—
2	(h)	Ahmedabad-Dholka . . . . .	3' 3 1/2"	—	—	7	7	11.18	—
2	(i)	Ahmedabad-Parantij . . . . .	" "	—	—	7.69	7.69	26.41	—
3	(d)	Mymensingh-Jamalpur-Jagannathganj . . . . .	" "	—	—	41	41	25.72	—
8	(j)	Amritsar-Patti . . . . .	5' 6"	—	—	2.01	2.01	28.68	—
8	(k)	Jullundur-Doab . . . . .	" "	23.05	—	—	23.05	—	23.05
8	(l)	Southern Punjab . . . . .	" "	—	—	3.86	3.86	2,43.05	—
8	(m)	Southern Punjab, "Ludhiana" extension . . . . .	" "	—	—	41	41	19.44	—
8	(n)	Sutlej Valley . . . . .	" "	—	—	-1.58	-1.58	1,52.18	—
38	(e)	Nadiad-Kapadvanj . . . . .	2' 6"	1.23	—	—	1.23	—	1.23
		<b>TOTAL</b>	—	24.28	—	13.07	37.35	7,18.43	24.28
<b>VII.—COMPANIES' LINES GUARANTEED</b>									
<b>VIII.—ASSISTED COMPANIES' LINES SUBSIDIZED</b>									
4	(b)	Delhi-Umballa-Kalka . . . . .	5' 6"	—	—	2.33	2.33	1,77.78	—
22	(a)	Bahilkund and Kumaon . . . . .	3' 3 1/2"	7.83	7	-9	7.86	1,35.36	23.09
5	(c)	Murtajapur-Kilichepur . . . . .	2' 6"	1.71	—	—	1.71	—	1.99
		<b>TOTAL</b>	—	9.59	7	2.24	11.90	3,13.11	25.08
<b>IX.—ASSISTED COMPANIES' LINES SUBSIDIZED</b>									
16	(a)	Dibru-Sadiya . . . . .	3' 3 1/2"	—	—	98	5.89	1,01.33	—
42	(a)	Darjeeling-Himalayan . . . . .	2' 0"	—	—	51	58	36.73	—
		<b>TOTAL</b>	—	—	—	1,49	6.47	1,38.06	—
<b>X.—ASSISTED COMPANIES' LINES SUBSIDIZED</b>									
18	(a)	Bengal Doon . . . . .	3' 3 1/2"	—	—	1.38	1.38	23.76	—
25	(a)	Arrah-Basaram Light . . . . .	2' 6"	—	1.62	3.90	5.52	20.73	—
27	(a)	Barrack-Basirhat Light . . . . .	" "	—	—	49	49	21.73	—
29	(a)	Bukhtiarpur-Bahar Light . . . . .	" "	—	—	1	1	11.84	—
35	(a)	Jessore-Jhenidah Light . . . . .	" "	2.71	—	—	2.71	—	21
41	(a)	Tesopore-Balipara Light . . . . .	" "	—	—	7	12	4.87	—
43	(a)	Howrah-Amta Light . . . . .	2' 0"	—	—	12	5	21.75	—
44	(a)	Howrah-Sheakhala Light . . . . .	" "	—	—	5	5	6.89	—
		<b>TOTAL</b>	—	2.71	1.62	5.95	10.23	1,17.07	21

DIX 2—contd.

(ii) total capital outlay to end of the year 1911.

TOTAL CAPITAL OUTLAY TO END OF THE YEAR—(IN THOUSANDS OF RUPEES).										CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		REMARKS.
Cost per mile (excluding ferries and suspense).		Ferries, etc.		Suspense (value of stores, etc., not finally charged off in the accounts).		Total capital outlay, (including ferries and suspense).		Grand total (columns 17 & 18).		Sub- head.	Main head.	
Open (calcu- lated on mileage in column 12 of Appen- dix 1).	Of single track, in- cluding sidings (cal- culated on mileage in column 15 of Appendix 1).	Open.	Under con- struc- tion.	Open.	Under con- struc- tion.	Open.	Under construc- tion.	In thousands of rupees.	Equiva- lent in sterling (in thousands of pounds).			
11.	12	13	14	15	16	17	18	19	20	21	22	23
<b>II.</b>												
<i>do not pass through the Government accounts.</i>												
<b>BOARDS' LINES.</b>												
42	37	...	...	...	...	21,33	...	21,33	146	(d)	6	
47	43	...	...	...	...	48,57	...	48,57	324	(g)	10	
...	...	...	...	...	...	70,40	...	70,40	470			
<b>ASSISTED BY GOVERNMENT UNDER "REBATE" TERMS.</b>												
34	79	...	...	...	...	1,31,37	...	1,31,37	876	(g)	2	
33	31	...	...	...	...	11,18	...	11,18	75	(g)	2	
41	36	...	...	...	...	36,40	...	36,40	243	(g)	2	
46	39	...	...	...	...	25,72	...	25,72	171	(g)	3	
53	47	...	...	...	...	23,68	...	23,68	191	(g)	3	
57	48	...	...	...	...	9,17	32,22	32,22	215	(a)	3	
59	58	...	...	...	...	2,43,05	...	2,43,05	1,434	(g)	3	
73	65	...	...	...	...	89,84	...	89,84	600	(g)	3	
...	...	...	...	...	...	1,52,18	...	1,52,18	1,015	(g)	3	
...	...	...	...	...	1,73	...	2,96	2,96	20	(a)	38	
...	...	...	...	...	...	10,90	7,18,42	7,38,60	4,890			
<b>TRUSTED BY NATIVE STATES.</b>												
Nil.												
<b>BY THE GOVERNMENT OF INDIA.</b>												
33	33	...	...	...	...	1,77,78	...	1,77,78	1,185	(b)	4	
67	59	...	...	...	...	1,25,67	23,53	1,59,23	1,096	(a)	22	
...	...	...	...	...	...	...	1,99	1,99	13	(g)	5	
...	...	...	...	...	...	34	49	3,13,45	2,294			
<b>BY LOCAL GOVERNMENTS.</b>												
1,18	1,01	23	...	1,50	...	1,03,06	...	1,03,06	687	(a)	16	
72	66	...	...	1,79	...	38,51	...	38,53	257	(a)	42	
...	...	23	...	3,39	...	1,41,53	...	1,41,53	944			
<b>BY DISTRICT BOARDS.</b>												
32	78	1,35	...	7	...	31,18	...	31,18	202	(a)	13	
33	30	...	...	3	...	20,76	...	20,76	138	(a)	25	
42	39	...	...	60	...	23,13	...	23,13	143	(a)	27	
36	33	...	...	54	...	12,38	...	12,38	82	(a)	29	
...	...	...	...	...	2,50	...	2,71	2,71	18	(a)	35	
24	23	...	...	...	...	4,87	...	4,87	32	(a)	41	
50	44	...	...	1,39	...	23,04	...	23,04	154	(a)	43	
32	29	...	...	17	...	6,56	...	6,56	44	(a)	44	
...	...	1,35	...	2,40	2,50	1,30,93	2,71	1,33,63	818			



(i) Capital outlay during the year and

CLASSIFICATION NO. OF RAIL- WAY (DETAILED IN "INDEX" TO APPENDIX 9).		RAILWAYS.	Gauge.	CAPITAL OUTLAY DURING THE YEAR (IN THOUSANDS OF RUPEES).				Total capital outlay on final heads (excluding ferries).	
Main head.	Sub- head.			On new lines, i.e., lines under construction for which there is a separate grant.	On rolling- stock.	On improvement of existing lines.	Total capital outlay.	Open.	Under construc- tion.
1	2	3	4	5	6	7	8	9	10
<b>XI.—ASSISTED COMPANIES' LINES RECEIVING</b>									
4	(d)	Tarkessur . . . . .	5' 6"	...	...	2	2	18,05	...
5	(h)	Matheran . . . . .	3' 0"	...	1	1	2	11,38	...
12	(a)	Bengal and North-Western . . . . .	3' 3 1/2"	5,26	4,18	29,37	38,66	8,00,67	93,60
13	(b)	Bengal Dooms extensions . . . . .	"	...	...	1,78	1,78	92,12	...
19	(d)	Mirpur Khas-Jhudo . . . . .	"	...	...	-1	-1	7,20	...
19	(e)	Mirpur Khas-Khadro . . . . .	"	7,63	...	...	7,63	...	7,67
22	(c)	Powayan Light . . . . .	2' 6"	...	...	...	...	8,95	...
26	(a)	Barsi Light . . . . .	"	10,80	-3,28	1,41	9,93	49,00	18,80
30	(a)	Champaner-Shivrajpur Light . . . . .	"	-1,23	2,06	...	83	8,60	...
34	(a)	Dwara-Therrin Light . . . . .	"	...	...	...	...	...	10,03
39	(a)	Shahdara (Delhi)-Saharanpur Light . . . . .	"	...	24	17	41	41,81	...
		TOTAL	...	23,46	4,16	33,65	50,27	10,37,76	1,30,09
<b>XII.—UNASSISTED</b>									
16	(b)	Ledo and Tikak-Margherita Colliery . . . . .	3' 3 1/2"	...	...	...	...	16,94	...
32	(a)	Dehri-Rohtas Light . . . . .	2' 6"	54	17	...	71	5,26	...
36	(a)	Madsya Light . . . . .	"	1,28	...	...	1,33	...	3,19
40	(a)	Tarkessur-Magra Light . . . . .	"	...	1	4	5	11,07	...
45	(a)	Jagadhri Light . . . . .	2' 0"	32	38	...	70	1,06	...
		TOTAL	...	2,14	56	4	2,74	34,33	3,19
<b>XIII.—NATIVE STATE LINES WORKED</b>									
14	(a)	Bhavnagar . . . . .	3' 3 1/2"	10,20	-12	-19	9,99	86,95	9,51
14	(b)	Dhrangadra . . . . .	"	...	...	-1	-1	5,85	...
17	(a)	Gondal-Porbandar . . . . .	"	...	-14	9	-5	66,97	...
17	(b)	Jetalpur-Bajkot . . . . .	"	...	...	...	...	16,14	...
18	(a)	Jamnagar . . . . .	"	...	-23	15	-7	23,16	...
19	(a)	Jodhpur . . . . .	"	...	67	72	1,44	1,41,78	...
19	(b)	Bikaner . . . . .	"	2,85	64	2,26	5,95	86,31	1,36
20	(a)	Junagad . . . . .	"	5	81	1,38	2,24	46,69	5
21	(a)	Morvi (including 2' 6" gauge) . . . . .	"	...	31	19	50	49,34	...
23	(a)	Udaipur-Chitorgarh . . . . .	"	...	18	...	18	31,16	...
31	(a)	Cutch . . . . .	2' 6"	...	...	6	6	9,49	...
33	(a)	Dholpur-Bari . . . . .	"	...	43	2	44	7,41	...
47	(a)	Pipar Road-Bhavi Light . . . . .	2' 0"	42	14	...	56	1,97	55
		TOTAL	...	13,67	2,69	4,77	21,12	5,63,12	11,54

DIX 2—contd.

(ii) total capital outlay to end of the year, 1911.

TOTAL CAPITAL OUTLAY TO END OF THE YEAR—(IN THOUSANDS OF RUPEES).										CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		REMARKS.
Cost per mile (excluding ferries and suspense).		Ferries, etc.		Suspense (value of stores, etc., not finally charged off in the accounts).		Total capital outlay (including ferries and suspense.)		Grand total (columns 17 & 18).		Sub-head.	Main head.	
Open (calculated on mileage in column 12 of Appendix 1).	Of single track, including sidings (calculated on mileage in column 15 of Appendix 1).	Open.	Under construction.	Open.	Under construction.	Open.	Under construction.	In thousands of rupees.	Equivalent in sterling (in thousands of pounds).			
11	12	13	14	15	16	17	18	19	20	21	22	23
<b>II—contd.</b>												
<b>LAND ONLY FROM GOVERNMENT.</b>												
81	70	...	...	...	...	18.05	...	18.05	120	(a)	4	
90	83	...	...	...	...	11.36	...	11.36	76	(A)	5	
68	58	24.06	...	6.72	6.76	8,31.45	1,00.36	9,31.81	6,464	(a)	12	
79	72	...	...	1.21	...	93.43	...	93.43	624	(b)	13	
14	13	...	...	...	...	7.20	...	7.20	48	(d)	19	
23	23	...	...	...	...	7.67	...	7.67	51	(e)	19	
23	23	...	...	...	...	42.95	...	42.95	60	(c)	22	
42	38	...	...	...	14	49.00	12.94	67.94	453	(a)	28	
42	37	...	...	48	...	9.03	...	9.03	60	(a)	30	
45	41	...	...	38	...	10.02	...	10.02	67	(a)	34	
45	41	...	...	38	...	42.17	...	42.17	281	(a)	39	
...	...	24.06	...	8.22	6.90	10,70.64	1,36.99	12,07.63	8,304			
<b>COMPANIES' LINES.</b>												
3.08	1.29	...	...	7	...	16.94	...	16.94	113	(b)	16	
22	20	...	...	...	13	5.33	...	5.33	36	(a)	32	
23	31	...	...	24	...	3.32	...	3.32	22	(e)	36	
32	27	...	...	...	...	11.32	...	11.32	75	(a)	40	
32	27	...	...	...	...	1.06	...	1.06	7	(a)	45	
...	...	1	...	81	13	34.65	3.32	37.97	253			
<b>BY NATIVE STATES.</b>												
64	55	...	...	2.57	33	89.52	9.24	98.76	672	(a)	14	
23	26	...	...	...	...	5.85	...	5.85	39	(b)	14	
45	41	...	...	11	...	68.86	...	68.86	446	(a)	17	
35	32	...	...	...	...	16.14	...	16.14	108	(b)	17	
46	43	...	...	11	...	23.27	...	23.27	155	(a)	18	
27	26	...	...	5.69	...	1,47.47	7	1,47.54	994	(a)	19	
22	21	...	...	1.06	9.19	97.27	10.55	97.22	652	(b)	19	
52	48	...	...	1.21	...	48.00	5	46.05	320	(a)	20	
53	49	...	...	57	...	49.91	...	49.91	333	(a)	21	
31	29	...	...	...	...	21.16	...	21.16	141	(a)	23	
26	24	...	...	...	...	9.49	...	9.49	63	(a)	31	
38	32	...	...	...	...	7.41	...	7.41	49	(a)	33	
10	10	...	...	...	...	1.97	55	2.32	17	(a)	47	
...	...	...	...	11.20	9.52	5,74.82	21.00	5,95.82	3,969			

\* Includes the expenditure of Rs. 6,18,993 incurred prior to the transfer of the working of the line to the Robilkund and Kumson Railway Company.

## (i) Capital outlay during the year and

CLASSIFICATION No. OF RAIL- WAY (DETAILED IN "INDEX" TO APPENDIX 9)		RAILWAYS.	Gauge.	CAPITAL OUTLAY DURING THE YEAR (IN THOUSANDS OF RUPEES).				Total capital outlay on final heads (excluding ferries).		
Main head.	Sub- head.			On new lines, &c., lines under construction for which there is a separate grant.	On rolling- stock.	On improve- ment of existing lines.	Total capital outlay.	Open.	Under construc- tion.	
1	2	3	4	5	6	7	8	9	10	
<b>PART</b>										
<b>XIV.—NATIVE STATE LINES WORKED</b>										
1	(d)	Mourbhanj . . . . .	2' 6"	—	—	—	7	7	7,30	—
1	(f)	Parlakimedi Light . . . . .	"	—	—	—	7	7	7,36	—
2	(d)	Narda-Ujjain . . . . .	5' 6"	—	—	—	—	—	23,41	—
2	(e)	Petlad-Cambay (Anand-Tarapur section)	"	—	—	—	6	6	11,29	—
2	(f)	Petlad-Cambay (Tarapur-Cambay section)	"	—	—	—	8	8	8,65	—
2	(j)	Gaekwar's Mohamm . . . . .	3' 3 1/2"	—	—	—	1,14	1,14	57,08	—
2	(k)	Jaipur . . . . .	"	—	—	—	6	6	24,10	—
2	(c)	Palanpur Deesa . . . . .	"	—	—	—	—	—	1,85	—
2	(u)	Vijapur-Kalol-Kadi . . . . .	"	90	—	—	75	1,74	13,98	1,03
2	(e)	Gaekwar's Dabhoi . . . . .	2' 6"	3,90	—	—	—	3,90	25,78	9,15
2	(p)	Rajpipla . . . . .	"	—	15	—	11	26	13,90	—
2	(e)	Billimora-Kalamba . . . . .	"	30	—	—	—	30	—	30
2	(e)	Kosamba-Zankavav . . . . .	"	1,00	60	—	—	1,60	—	11,53
2	(i)	Petlad Vaso . . . . .	"	40	—	—	—	40	—	40
3	(d)	Bhopal Itarsi (Native State section)	5' 6"	—	—	—	—	—	50,00	—
3	(e)	Bhopal-Ujjain . . . . .	"	—	—	—	4	4	78,77	—
5	(f)	Bina-Gooma-Baran . . . . .	"	—	—	—	19	19	1,00,33	—
5	(g)	Gwalior Light . . . . .	3' 6"	—	4	—	28	29	67,47	—
6	(b)	Kolar Gold-fields . . . . .	5' 6"	—	—	—	—	—	12,06	—
6	(e)	Birur-Shimoga . . . . .	3' 3 1/2"	—	—	—	—	—	24,32	—
6	(g)	Hindupur (Yesvanpur-Mysore Frontier)	"	—	—	—	—	—	24,99	—
6	(A)	Kolhapur . . . . .	"	—	—	—	—	—	23,26	—
6	(c)	Mysore-Nanjangud . . . . .	"	—	—	—	—	—	6,56	—
6	(k)	Sangli . . . . .	"	—	—	—	2	2	1,77	—
7	(a)	Nizam's Guaranteed State . . . . .	5' 6"	—	—	—	—	—	4,56,68	—
7	(c)	Hyderabad-Godavari Valley . . . . .	3' 3 1/2"	—	—	—	—	—	2,66,59	—
7	(d)	Hingoli Branch . . . . .	"	7,90	—	—	—	7,90	—	19,24
10	(f)	Shoranur-Cochin . . . . .	"	—	—	—	7	10	68,23	—
<b>TOTAL</b>				14,45	9,53	11,01	84,99	12,94,78	41,57	
<b>XV.—NATIVE STATE LINES WORKED</b>										
3	(c)	Cooch Behar . . . . .	3' 3 1/2"	—	—	—	—	—	19,05	—
3	(c)	Jammu and Kashmir (Native State section).	5' 6"	—	—	—	—	—	10,14	—
3	(d)	Khanpur-Chachran . . . . .	"	10,60	—	—	—	10,60	18,95	—
3	(e)	Ludhiana-Dhuri-Jakhal . . . . .	"	—	—	—	4	4	41,92	—
3	(f)	Kajpura-Bhatinda . . . . .	"	—	—	—	97	97	69,89	—
<b>TOTAL</b>				10,60	—	—	10,37	1,54,95	—	
<b>XVI.—LINES IN</b>										
6	(i)	West of India Portuguese . . . . .	3' 3 1/2"	—	—	—	70	70	1,77,41	—
10	(d)	Peralam-Karaikkal . . . . .	"	—	—	—	—	—	7,24	—
10	(e)	Kondisberry . . . . .	"	—	—	—	—	—	5,69	—
<b>TOTAL</b>				—	—	—	70	70	1,90,34	—
<b>TOTAL, PART II</b>				99,99	20,04	75,55	1,95,58	47,82,35	2,35,96	
<b>GRAND TOTAL</b>				4,92,27	3,51,28	5,72,81	14,16,36	4,35,53,68	8,59,50	

DIX 2—conold.

(ii) total capital outlay to end of the year 1911.

TOTAL CAPITAL OUTLAY TO END OF THE YEAR—(IN THOUSANDS OF RUPEES).										CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		REMARKS.
Cost per mile (excluding ferries and suspense).		Ferries, etc.		Suspense (value of stores, etc., not finally charged off in the accounts).		Total capital outlay, (including ferries and suspense).		Grand total (columns 17 & 18).		Sub-head.	Main head.	
Open (calculated on mileage in column 12 of Appendix 1).	Of single track, including sidings (calculated on mileage in column 15 of Appendix 1).	Open.	Under construction.	Open.	Under construction.	Open.	Under construction.	In thousands of rupees.	Equivalent in sterling (in thousands of pounds).			
11	12	13	14	15	16	17	18	19	20	21	22	23
<b>II—conold.</b>												
<b>BY COMPANIES.</b>												
22	21	...	...	...	...	7,20	...	7,20	48	(d)	1	
30	29	...	...	...	...	7,96	...	7,96	49	(d)	1	
65	63	...	...	...	...	22,41	...	22,41	149	(d)	2	
52	48	...	...	11	...	11,40	...	11,40	76	(d)	2	
70	54	...	...	...	...	8,65	...	8,65	58	(d)	2	
41	37	...	...	...	...	57,02	...	57,02	380	(d)	2	
33	30	...	...	...	...	24,10	...	24,10	161	(d)	2	
...	...	...	...	...	...	1,85	...	1,85	12	(d)	2	
34	31	...	...	...	14	13,98	1,17	15,15	101	(d)	2	
27	25	...	...	29	2,16	26,02	11,23	37,25	249	(d)	2	
37	33	...	...	...	...	13,90	...	13,90	93	(d)	2	
...	...	...	...	...	...	...	20	20	1	(d)	2	
...	...	...	...	...	1	...	11,56	11,56	72	(d)	2	
...	...	...	...	...	...	...	40	40	3	(d)	2	
1,15	+1,29	...	...	...	...	50,00	...	50,00	333	(d)	5	
70	64	...	...	...	...	78,77	...	78,77	525	(d)	5	
69	64	...	...	...	...	1,00,33	...	1,00,33	669	(f)	5	
27	26	...	...	...	...	67,47	...	67,47	450	(d)	5	
1,22	77	...	...	...	...	12,06	...	12,06	80	(d)	6	
64	57	...	...	...	...	24,32	...	24,32	162	(d)	6	
49	45	...	...	...	...	24,98	...	24,98	167	(d)	6	
79	75	...	...	...	...	23,26	...	23,26	155	(d)	6	
42	39	...	...	...	...	6,56	...	6,56	44	(d)	6	
36	34	...	...	...	...	1,77	...	1,77	12	(d)	6	
1,28	1,22	...	...	6,71	...	4,63,37	...	4,63,37	3,569	(a)	7	
73	66	...	...	4,99	...	2,91,88	...	2,91,88	1,928	(d)	7	
...	...	...	...	...	5,43	...	24,67	24,67	164	(d)	7	
1,05	91	87	...	48	...	69,57	...	69,57	464	(f)	10	
...	...	87	...	12,58	7,76	14,08,23	49,33	14,57,56	10,174			
<b>BY STATE RAILWAY AGENCY.</b>												
53	55	4	...	...	...	19,09	...	19,09	127	(d)	8	
64	53	...	...	...	...	10,14	...	10,14	68	(d)	8	
63	55	...	...	1	...	13,96	...	13,96	93	(d)	8	
53	50	...	...	...	...	41,92	...	41,92	279	(d)	8	
65	56	...	...	...	...	69,89	...	69,89	466	(f)	8	
...	...	4	...	1	...	1,55,00	...	1,55,00	1,033			
<b>FOREIGN TERRITORY.</b>												
3,47	...	...	...	...	...	1,77,41	...	1,77,41	1,452	(d)	6	
49	48	...	...	...	...	7,24	...	7,24	48	(d)	10	
72	58	...	...	...	...	5,69	...	5,69	38	(d)	10	
...	...	...	...	...	...	1,90,34	...	1,90,34	1,538			
...	...	26,56	...	89,04	88,20	47,97,95	2,74,16	50,72,11	34,687			
...	...	2,58,46	8,15	11,64,66	98,88	4,50,06,80	19,55,48	\$4,60,92,40	340,540			

\* The expenditure shown against this railway in this part represents the capital outlay incurred by the Palampur Darbar.

† Including the British section.

‡ Included with the Mysore section (M. and S.M. ry.).

§ Includes Rs. 1,30,12 thousand on account of "Unclassified expenditure," vide column 19 on page 35.

Capital liability on account of railways closed

CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9.)		CAPITAL LIABILITY									
Main head.	Sub-head.	Railways.	SHARE CAPITAL OF PURCHASED RAILWAYS BEING PAID OFF BY ANNUITIES.						State outlay.	Debt incurred for purchase of railways.	
			Computed value of stock purchased.	Deduct.		Net capital to be paid off by annuities.	Deduct amount redeemed by annuity payments.	Net outstanding.			
1	2	3		4	5				6	7	8
			£	£	£	£	£	£	£	£	£
<b>I—STATE LINES</b>											
—	—	Akharpur-Tanda	—	—	—	—	—	—	—	6,538	—
—	—	Allahabad-Rae Bareilly-Cawnpore	—	—	—	—	—	—	—	336,144	—
—	—	Balrampur-Sitapur	—	—	—	—	—	—	—	141,168	—
—	—	Bilaspur-Etawah	—	—	—	—	—	—	—	5,000	—
—	—	Cawnpore-Banda	—	—	—	—	—	—	—	23,880	—
3	(a) & (b)	Dhubri-Gauhati	—	—	—	—	—	—	—	841,887	—
—	—	Eastern Bengal 5' 6", 3' 3 1/2" and 2' 6" gauges	3,891,917	513,473	—	2,848,445	341,937	3,586,508	12,979,437	1,337,850	—
—	—	Dhaka-Sambhal	—	—	—	—	—	—	—	23,946	—
—	—	Expenditure in England for stores purchased and remaining unappropriated.	—	—	—	—	—	—	—	314,829	—
—	—	Frontier railway reserve	—	—	—	—	—	—	—	299,958	—
—	—	Gajraul-Ghazipur	—	—	—	—	—	—	—	44,193	—
41	—	Ganges bridge at Kachhla	—	—	—	—	—	—	—	5,095	—
—	—	Jorhat (Provincial)	—	—	—	—	—	—	—	64,820	—
—	—	Jullundur-Hoshiarpur (closed account)	—	—	—	—	—	—	—	960	—
—	—	Jullundur-Hoshiarpur construction	—	—	—	—	—	—	—	2,789	—
—	—	Jakhal-Hissar	—	—	—	—	—	—	—	20,042	—
—	—	Kalabagh-Banna	—	—	—	—	—	—	—	198,797	—
—	—	Lower Ganges Bridge	—	—	—	—	—	—	—	1,155,241	—
—	—	Ludhiana-Ferozepore	—	—	—	—	—	—	—	1,697	—
8	(a)	Nagpur-Chhattisgarh (Depreciation Account)	—	—	—	—	—	—	—	43,802	—
—	—	North Western	14,009,124	4,911,216	—	9,097,908	1,025,121	3,072,787	11,910,338	3,828,741	—
9	(a)	Raja Bhat Khawa-Dalsingpora	—	—	—	—	—	—	—	804	—
—	—	Oudh and Rohilkhand	—	—	—	—	—	—	—	5,833,003	10,711,461
—	—	Petroleum operations in Baluchistan	—	—	—	—	—	—	—	7,946	—
—	—	Ranaghat-Bhagwangola	—	—	—	—	—	—	—	20,164	—
—	—	Rangiya-Tangla	—	—	—	—	—	—	—	45,241	—
—	—	Rosa-Sitapur	—	—	—	—	—	—	—	316,867	—
—	—	Sabarnati-Dholka	—	—	—	—	—	—	—	3,993	—
—	—	Sarsi Kala-Havelian	—	—	—	—	—	—	—	41,855	—
—	—	Singhiani-Fulekhari	—	—	—	—	—	—	—	19,008	—
—	—	Shorkot Road-Chishoki	—	—	—	—	—	—	—	510,787	—
—	—	Southern Mahratta (Depreciation on works)	—	—	—	—	—	—	—	35,188	—
—	—	State railway stores	—	—	—	—	—	—	—	42,343	—
—	—	Umaria Colliery	—	—	—	—	—	—	—	12,178	—
—	—	Vizagapatam-Maipur	—	—	—	—	—	—	—	16,838	—
—	—	Warora Colliery	—	—	—	—	—	—	—	74,002	—
<b>Total</b>			<b>17,401,041</b>	<b>5,454,688</b>	—	<b>11,946,353</b>	<b>1,967,058</b>	<b>10,879,295</b>	<b>68,600,780</b>	<b>18,677,543</b>	—
<b>II—STATE LINES WORKED</b>											
5	(b)	Agra-Delhi Chord	—	—	—	—	—	—	—	947,058	—
11	(a)	Assam-Bengal	—	—	—	—	—	—	—	6,181,825	—
5	(c)	Baran-Kotah	—	—	—	—	—	—	—	304,392	—
<b>Carried over</b>			—	—	—	—	—	—	—	<b>7,433,275</b>	—

**DIX 3.**

*as State railways and of the Hardwar-Dehra railway at the end of 1911.*

**AT END OF THE YEAR.**

NOMINAL AMOUNTS OF COMPANIES' CAPITAL.							Over-drafts.	Capital not bearing interest including discounts on capital raised.	ADVANCES BY THE SECRETARY OF STATE TO COMPANIES.				Total capital liability (excluding capital not bearing interest, column 19).	REMARKS.
Share Capital.				Debenture and Debenture stock.		In England.			In India.					
In England.		In India.		In England.		Rate of interest.			Amount.	Rate of interest.	Amount.			
Rate of interest.	Amount.	Rate of interest.	Amount.	Rate of interest.	Amount.			Rate of interest.	Amount.	Rate of interest.	Amount.			
12	13	14	15	16	17	18	19	20	21	22	23	24	25	
	£		£		£	£	£		£		£	£		
<b>WORKED BY THE STATE.</b>														
...	...	...	...	...	...	...	...	...	...	...	...	6,538		
...	...	...	...	...	...	...	...	...	...	...	...	536,144		
...	...	...	...	...	...	...	...	...	...	...	...	143,168		
...	...	...	...	...	...	...	...	...	...	...	...	5,009		
...	...	...	...	...	...	...	...	...	...	...	...	23,860		
...	...	...	...	...	...	...	...	...	...	...	...	841,837		
...	...	...	...	...	...	...	...	...	...	...	...	17,623,295		
...	...	...	...	...	...	...	...	...	...	...	...	23,946		
...	...	...	...	...	...	...	...	...	...	...	...	314,829		
...	...	...	...	...	...	...	...	...	...	...	...	292,838		
...	...	...	...	...	...	...	...	...	...	...	...	41,198		
...	...	...	...	...	...	...	...	...	...	...	...	5,095		
...	...	...	...	...	...	...	...	...	...	...	...	64,820		
...	...	...	...	...	...	...	...	...	...	...	...	969		
...	...	...	...	...	...	...	...	...	...	...	...	2,789		
...	...	...	...	...	...	...	...	...	...	...	...	24,042		
...	...	...	...	...	...	...	...	...	...	...	...	198,797		
...	...	...	...	...	...	...	...	...	...	...	...	1,155,241		
...	...	...	...	...	...	...	...	...	...	...	...	1,067		
...	...	...	...	...	...	...	...	...	...	...	...	43,802		
...	...	...	...	...	...	...	...	...	...	...	...	53,811,736		
...	...	...	...	...	...	...	...	...	...	...	...	804		
...	...	...	...	...	...	...	...	...	...	...	...	16,545,444		
...	...	...	...	...	...	...	...	...	...	...	...	7,946		
...	...	...	...	...	...	...	...	...	...	...	...	20,164		
...	...	...	...	...	...	...	...	...	...	...	...	45,244		
...	...	...	...	...	...	...	...	...	...	...	...	216,387		
...	...	...	...	...	...	...	...	...	...	...	...	3,393		
...	...	...	...	...	...	...	...	...	...	...	...	41,855		
...	...	...	...	...	...	...	...	...	...	...	...	19,062		
...	...	...	...	...	...	...	...	...	...	...	...	510,737		
...	...	...	...	...	...	...	...	...	...	...	...	35,138		
...	...	...	...	...	...	...	...	...	...	...	...	42,343		
...	...	...	...	...	...	...	...	...	...	...	...	12,178		
...	...	...	...	...	...	...	...	...	...	...	...	16,336		
...	...	...	...	...	...	...	...	...	...	...	...	74,002		
...	...	...	...	...	...	...	...	...	...	...	...	92,966,623		
<b>BY COMPANIES.</b>														
...	...	...	...	...	...	...	...	...	...	...	...	947,058		
...	3% 1,500,000	...	...	3% 480,000	3 1/2% 435,000	3 1/2% 650,000	...	...	...	...	...	9,237,725		
...	...	...	...	...	...	...	...	...	...	...	...	304,392		
...	1,300,000	...	...	...	1,535,900	...	...	...	...	...	...	10,489,175		

## Capital liability on account of railways classed as State

CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9.)		RAILWAYS.	CAPITAL LIABILITY									
			SHARE CAPITAL OF PURCHASED RAILWAY BEING PAID OFF BY ANNUITIES.								State outlay.	Debt incurred for purchase of railways.
			Commuted value of stock purchased.	Deduct.		Net capital to be paid off by annuities.	Deduct amount redeemed by annuity payments.	Net outstanding.				
				Commuted capital representing annuities which were purchased by creation of debt (liability included in column 11).	New stock of Great Indian Peninsula and Madras and Southern Mahratta Railway Companies issued in exchange for portions of annuities.							
1	2	3	4	5	6	7	8	9	10	11		
			£	£	£	£	£	£	£	£		
<b>II.—STATE LINES</b>												
		Brought forward							7,483,275			
		Bayana-Agra							29,624			
1	(a) to (c), (e), (g) & (h)	Bengal-Nagpur							2,061,987			
2	(f)	Broach-Jambhar							8,183			
7	(b)	Bezwa Extension							81,875			
1		Bhopal Itarsi (British section)							285,262			
15	(a)	Bombay, Baroda and Central India							1,620,118	12,556,908		
15	(a)	Burma							6,484,155			
15	(b)	Burma Extensions							1,786,937			
1		Coochpur-Ootacamund							248,804			
1		Dharmapuri-Hosur							79,654			
6	(f)	Dhone-Kurnool							64,945			
4	(a)	East Indian	32,750,000	7,286,774		25,463,226	3,406,748	22,056,483	4,347,787	10,081,450		
8	(a)	Great Indian Peninsula	34,859,218		1,750,000	33,109,218	4,384,961	28,724,257	2,447,853	5,904,666		
19	(c)	Indian Midland							2,542,056	5,947,921		
		Jodhpur-Hyderabad (British section)							260,117			
22	(b)	Lucknow-Bareilly							341,409			
6	(a)	Madras and Southern Mahratta*	12,819,558		1,500,000	11,319,558	368,069	10,951,489	9,155,605	2,167,916		
6	(f)	Mysore section (Madras and Southern Mahratta)										
2	(c)	Nagda-Mittra							2,770,660			
2	(b)	Palampur-Deost							16,889			
		Roserah-Khagarzia							1,458			
2	(b) & (m)	Rajputana-Malwa (including Godhra-Batham-Narda)							12,158,781			
		Samastipur-Roserah							47,238			
10	(a)	South Indian							4,416,849	4,726,169		
10	(h)	Tinnevely-Quilon (Travancore) (British section)							8,011			
10	(f)	Tinnevely-Quilon (Travancore) (Native State section)							11,871			
13	(a)	Tirhoot							4,992,428			
<b>TOTAL</b>			<b>80,428,776</b>	<b>7,286,774</b>	<b>3,250,000</b>	<b>69,893,002</b>	<b>8,159,678</b>	<b>61,732,329</b>	<b>63,652,122</b>	<b>41,465,025</b>		
<b>III.—COMPANIES' LINES</b>												
9	(b)	Hardwar-Dehra										
<b>GRAND TOTAL</b>			<b>87,829,817</b>	<b>12,741,482</b>	<b>3,250,000</b>	<b>81,838,335</b>	<b>9,526,781</b>	<b>72,311,624</b>	<b>130,162,208</b>	<b>57,842,567</b>		

\* The figures relating to the purchase of the late Madras railway as shown in columns 4, 6, 7, 8, 9 and 11, though for convenience incorporated with those for the Madras and Southern Mahratta railway, relate also to the South Indian railway, with which a portion of the late Madras railway has been amalgamated.

† The expenditure shown against this railway in this appendix represents the outlay incurred by Government.

DIX 3—*conold.*

*railways and of the Hardwar-Dehra railway at the end of 1911.*

AT END OF THE YEAR.

NOMINAL AMOUNTS OF COMPANIES' CAPITAL.												Total capital liability (excluding capital not bearing interest, column 19).	REMARKS.
Share Capital.						ADVANCES BY THE SECRETARY OF STATE TO COMPANIES.							
In England.		In India.		Debtures and Debenture stock.		Over-drafts.	Capital not bearing interest including discounts on capital raised.	In England.		In India.			
Rate of interest.	Amount.	Rate of interest.	Amount.	Rate of interest.	Amount.			Rate of interest.	Amount.	Rate of interest.	Amount.		
12	13	14	15	16	17	18	19	20	21	22	23	24	25
	£		£		£	£	£		£		£	£	
<b>WORKED BY COMPANIES—<i>conold.</i></b>													
...	1,500,000	...	...	...	1,555,900	...	-1,908	...	...	...	...	10,499,175	
...	...	...	...	...	...	...	...	...	...	...	...	22,624	
4%	3,000,000	...	...	3%	1,250,000	...	...	...	...	...	...	...	
				3½%	1,411,100	...	...	...	...	...	...	...	
				3½%	2,639,600	4,537,870	-14,323	3½%	2,900,000	3½%	6,483,510	24,578,826	
				4%	155,000	...	...	...	...	4%	323,580	...	
...	...	...	...	...	...	...	...	...	...	...	...	8,183	
...	...	...	...	...	...	...	...	...	...	...	...	81,275	
...	...	...	...	...	...	...	...	...	...	...	...	255,262	
8%	2,000,000	...	...	3½%	1,000,000	...	-40,636	...	...	...	...	17,177,916	
3½%	3,000,000	...	...	3%	1,350,000	32,454	-90,181	...	...	...	...	10,776,609	
...	...	...	...	...	...	...	...	...	...	...	...	1,736,987	
...	...	...	...	...	...	...	...	...	...	...	...	218,201	
...	...	...	...	...	...	...	...	...	...	...	...	79,654	
...	...	...	...	...	...	...	...	...	...	...	...	64,915	
...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	3%	8,000,000	...	-711,937	...	...	...	...	51,485,700	
...	...	...	...	3½%	7,000,000	...	...	...	...	...	...	...	
3%	2,575,000	...	...	3½%	3,500,000	...	-246,842	3½%	3,500,000	...	...	45,711,876	
...	...	...	...	...	...	...	...	...	...	...	...	8,459,977	
...	...	...	...	...	...	...	...	...	...	...	...	280,117	
...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	3½%	75,000	...	...	...	...	3½%	190,960	...	
...	...	...	...	3½%	32,000	...	18,102	...	...	4%	184,407	1,123,796	
...	...	...	...	4%	300,000	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	
3½%	4,901,510	3½%	8,460	3%	180,000	1,331,270	25,483	...	...	...	...	29,978,280	
...	...	...	...	3½%	1,070,000	...	...	...	...	...	...	1,900,000	
...	...	...	...	3½%	100,000	...	24,000	...	...	...	...	2,770,660	
...	...	...	...	4%	1,200,000	...	...	...	...	...	...	16,390	
...	...	...	...	...	...	...	...	...	...	...	...	1,458	
...	...	...	...	...	...	...	...	...	...	...	...	12,158,781	
...	...	...	...	...	...	...	...	...	...	...	...	47,238	
...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	3½%	175,000	...	...	...	...	...	...	10,581,018	
8%	1,000,000	...	...	3½%	73,000	...	...	...	...	...	...	...	
...	...	...	...	4%	200,000	...	...	...	...	...	...	...	
...	...	...	...	4%	27,493	...	...	...	...	...	...	...	
...	...	...	...	3½%	67,875	...	432	...	...	...	...	295,111	
...	...	...	...	3½%	198,742	...	...	...	...	...	...	...	
...	...	...	...	4%	29,517	...	...	...	...	...	...	...	
...	...	...	...	3½%	369,125	...	818	...	...	...	...	786,571	
...	...	...	...	3½%	376,253	...	...	...	...	...	...	4,992,423	
...	...	...	...	...	...	...	...	...	...	...	...	...	
...	18,086,540	...	8,480	...	32,277,900	5,902,742	-931,143	...	3,400,000	...	6,949,576	235,453,742	
<b>GUARANTEED UNDER MODERN CONTRACTS.</b>													
...	...	...	184,842	...	...	1,948	...	...	...	...	...	186,196	
...	...	...	...	...	...	...	...	...	...	...	...	...	
...	18,086,540	...	193,802	...	32,277,900	5,902,742	-931,143	...	3,400,000	...	6,949,576	235,602,569	

\* State share of "Joint Debenture Stock" of £ 600,000. The proceeds of this loan were not paid over to Government.















Details of gross earnings

CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 2.)		Railway system.	Year.	COACHING TRAFFIC.												Other coaching traffic earnings. [In thousands.]	
Main head.	Sub-head.			PASSENGER TRAFFIC.													
				1st class.		2nd class.		Inter. class.		3rd class.		Season and vendors' tickets.		Total.			
1	2	3	4	No. [In hundreds.]	Earnings. [In thousands.]	No. [In hundreds.]	Earnings. [In thousands.]	No. [In hundreds.]	Earnings. [In thousands.]	No. [In hundreds.]	Earnings. [In thousands.]	No. [In hundreds.]	Earnings. [In thousands.]	No. [In hundreds.]	Earnings. [In thousands.]	17	
					Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	
23	(a) & (b)	3 3/4" gauge - special. Rohilkhand and Kumaon.	1905	6.1	45	24.8	87	18.8	11	1,727.1	6.20	...	...	1,771.8	7.63	97	
			1906	6.2	44	26.6	86	22.6	20	2,751.4	8.46	...	...	2,806.8	9.96	1.11	
			1907	6.8	48	26.4	87	27.5	26	3,133.8	9.47	...	...	3,194.9	11.06	1.16	
			1908	7.4	52	27.9	86	26.8	26	2,968.6	8.99	...	...	3,046.0	10.53	1.18	
			1909	6.9	54	24.3	91	29.0	27	3,322.8	10.54	7.3	...	3,369.7	12.37	1.29	
			1910	6.1	49	24.4	98	31.7	39	3,852.2	11.61	6.6	...	3,931.0	13.39	1.35	
			1911	5.8	47	23.9	92	33.6	31	4,007.5	12.26	5.4	...	4,076.3	13.97	1.38	
10	(f)	Shoranur-Cochin.	1905	2.2	5	15.3	18	...	...	619.8	2.05	7.4	1	644.7	2.24	12	
			1906	2.4	5	15.4	18	...	...	624.8	2.00	8.3	1	650.9	2.19	11	
			1907	2.5	6	16.3	18	...	...	666.8	2.13	10.0	1	695.1	2.33	13	
			1908	...	6	...	16	...	...	...	2.48	...	...	...	2.66	17	
			1909	...	7	...	18	...	...	...	2.65	...	...	...	2.91	16	
			1910	...	9	...	21	...	...	...	2.88	...	...	...	3.19	20	
10	(b), (d), (e) & (g) to (v)	South Indian.	1905	24.5	1.28	150.1	2.46	...	...	19,798.6	69.04	415.0	18	19,833.3	72.96	4.27	
			1906	25.0	1.33	159.0	2.67	...	...	19,727.6	70.67	439.0	20	20,256.6	74.92	4.49	
			1907	26.4	1.50	178.6	2.93	...	...	23,938.9	77.99	517.1	23	23,656.0	83.70	5.07	
			1908	49.4	1.51	129.0	3.20	...	...	30,277.3†	78.18	1,660.3	30	31,290.0†	83.19	5.27	
			1909	47.2	1.30	132.8	3.72	...	...	30,538.5†	85.02	1,003.6	37	31,900.1†	91.01	5.51	
			1910	42.6	1.73	131.4	3.96	...	...	32,479.9†	86.02	1,195.4	49	34,059.3†	92.35	5.94	
			1911	46.6	1.85	132.4	4.15	...	...	36,122.1†	92.55	1,426.7	58	37,987.3†	96.08	6.64	
23	(a)	Udaipur-Obitor-garh.	1905	7	4	2.2	6	...	...	253.5	1.12	5	...	256.0	1.22	10	
			1906	1.0	4	2.0	6	1.3	...	271.1	1.21	5	...	275.9	1.33	14	
			1907	1.5	6	2.4	6	3.0	...	280.8	1.23	5	...	282.2	1.38	10	
			1908	2.0	9	2.6	7	2.5	...	276.1	1.23	5	...	283.7	1.43	13	
			1909	1.0	7	2.1	6	2.2	...	266.9	1.24	5	...	272.7	1.39	10	
			1910	1.0	6	1.7	5	1.9	...	265.7	1.27	5	...	260.8	1.40	11	
25	(a)	2' gauge Arrah-Saran Light.	1911	4	1	...	...	3.7	...	236.5	1.00	...	...	230.6	1.04	8	
			1905	...	...	...	...	...	...	298.5	1.04	...	...	298.5	1.04	4	
			1906	...	...	...	...	...	...	412.5	1.39	...	...	412.5	1.39	5	
			1907	...	...	...	...	...	...	501.5	1.62	...	...	501.5	1.62	5	
			1908	...	...	...	...	...	...	400.5	1.37	...	...	400.5	1.37	4	
			1909	2	1	2.3	2	12.3	...	439.8	1.42	21.1	...	470.9	1.55	6	
27	(a)	Baraset-Banhat Light.	1910	2	1	2.7	3	11.3	...	502.4	1.60	31.6	...	533.3	1.94	12	
			1911	4	1	2.9	3	14.6	...	615.3	2.14	36.8	...	670.5	2.33	9	
			1905	...	...	...	...	...	...	100.9	32	...	...	101.3	33	4	
			1906	5	1	4	1	...	...	176.3	67	...	...	177.3	69	3	
			1907	3	2	6.3	6	...	...	654.5	3.02	...	...	658.8	3.10	8	
			1908	3	1	2.5	4	...	...	503.5	2.24	...	...	506.3	2.29	6	
28	(a)	Baral Light.	1909	4	1	2.3	5	...	...	73.3	3.41	...	...	73.3	3.47	9	
			1910	5	1	3.7	6	...	...	300.8	3.65	...	...	304.5	3.72	10	
			1911	5	1	2.8	5	...	...	776.5	3.64	...	...	779.3	3.70	12	
			1905	...	...	...	...	...	...	252.2	66	...	...	252.2	66	3	
			1906	...	...	...	...	...	...	374.1	66	...	...	374.1	66	4	
			1907	...	...	...	...	...	...	314.1	79	...	...	314.1	79	3	
29	(a)	Bakhtiar-pore-Bihar Light.	1908	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			1909	1.0	1	1.9	1	13.1	...	379.9	69	...	...	379.9	69	4	
			1910	9	1	1.9	1	13.5	...	365.5	1.00	...	...	411.5	1.03	4	
			1911	6	1	2.1	2	13.5	...	349.3	78	...	...	365.5	67	4	
20	(a)	Champener-Shivrajpur Light.	1911	...	...	1	...	...	...	87.0	16	...	...	87.1	16	1	
			1905	...	...	...	...	...	...	2.7	1	...	...	2.7	1	...	
21	(a)	Cach	1906	...	...	...	...	...	...	3.8	2	...	...	6.8	2	...	
			1907	...	...	...	...	...	...	21.4	7	...	...	21.4	7	...	
			1908	...	...	...	...	...	...	23.4	6	...	...	23.4	6	...	
			1909	1	...	...	...	...	...	75.7	34	...	...	75.3	34	...	
			1910	2	...	1.2	2	...	...	97.6	42	...	...	98.0	44	...	
			1911	2	...	1.4	2	...	...	85.4	40	...	...	87.0	42	...	

\* Included with the South Indian railway, 2 3/4" gauge section.

† Includes figures for the Nilgiri, Shoranur-Cochin, Morappur-Dharmapuri and Tirupattur-Krishnagiri railways.

DIX 4—contd.

of each railway system.

GOODS TRAFFIC.																	
Total coaching traffic earnings. [In thousands.]	MERCHANDISE GENERAL.		MILITARY STORES.		COAL AND COKE FOR THE PUBLIC AND FOREIGN RAILWAYS.		REVENUE STORES, INCLUDING COAL AND MATERIALS FOR CONSTRUCTION.		LIVESTOCK.		OTHER GOODS TRAFFIC.	TOTAL GOODS TRAFFIC.		Electric telegraph earnings. [In thousands.]	Steam boat earnings. [In thousands.]	Sundry earnings. [In thousands.]	Total gross earnings. [In thousands.]
	Tons. [In thousands.]	Earnings. [In thousands.]	Tons. [In thousands.]	Earnings. [In thousands.]	Tons. [In thousands.]	Earnings. [In thousands.]	Tons. [In thousands.]	Earnings. [In thousands.]	Tons. [In thousands.]	Earnings. [In thousands.]		Tons. [In thousands.]	Earnings. [In thousands.]				
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Rs.	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
8.60	341	9.56	1	6	1	1	98	73	...	...	6	441	10.42	8	...	78	19.38
11.07	385	11.18	2	12	1	2	114	75	...	...	6	502	12.13	8	...	1.31	24.59
12.24	419	12.68	2	12	1	2	211	1.13	...	...	12	634	14.06	9	...	1.28	27.65
11.71	462	13.36	4	16	3	3	314	95	...	1	24	789	14.74	...	...	1.95	27.60
12.47	512	13.68	9	16	5	5	135	1.10	...	...	12	681	15.12	10	...	1.21	29.88
14.74	539	13.99	6	11	5	5	115	1.35	...	1	12	665	15.51	8	...	1.37	31.71
15.30	556	15.32	3	7	6	5	80	73	...	3	1	645	16.21	10	...	2.53	34.14
2.36	73	1.42	...	...	...	...	9	3	...	...	3	82	1.44	1	...	6	3.87
2.30	73	1.48	...	...	...	...	10	3	...	...	3	83	1.54	1	...	6	3.91
2.46	81	1.57	...	...	...	...	15	5	...	...	2	98	1.64	1	...	6	4.17
2.33	†	1.52	...	...	...	...	†	2	...	...	2	†	1.56	1	...	4	4.44
3.07	†	2.00	...	...	...	...	†	2	...	1	3	†	2.03	1	...	2	5.16
3.39	†	2.18	...	...	...	...	†	2	...	...	4	†	2.19	1	...	4	5.63
3.56	†	2.33	...	...	...	...	†	4	...	1	5	†	2.43	1	...	1	6.01
77.23	1,403	57.73	...	4	32	53	1,653	253	5	41	37	3,103	61.63	31	...	1.96	141.03
79.41	1,483	58.73	...	5	19	26	1,725	232	6	41	41	3,233	62.67	32	...	2.25	144.68
87.77	1,598	60.60	...	5	35	41	1,919	283	7	45	31	3,589	64.65	33	...	1.83	154.57
88.46	12,466	63.52	13	8	†5	43	11,549	2,14	19	43	29	14,062	66.89	33	...	1.93	157.60
90.33	12,166	61.91	13	5	†22	84	1401	1.90	19	35	49	12,601	65.04	31	...	2.69	164.86
93.19	12,280	66.47	13	5	†29	48	1391	2.13	114	69	61	12,717	70.58	34	...	2.30	171.41
1,05,73	12,529	73.36	12	6	†20	39	1325	2.60	119	91	74	12,955	83.58	38	...	2.20	191.88
1.32	16	71	...	...	...	...	...	1	...	...	1	16	73	1	...	2	2.03
1.46	23	95	...	...	...	...	...	1	...	...	1	27	97	1	...	3	2.47
1.48	22	97	...	...	...	...	...	1	...	...	1	23	99	1	...	3	2.51
1.55	17	78	...	...	...	...	...	1	...	...	2	17	80	1	...	3	2.39
1.49	21	87	...	...	...	...	...	1	...	...	1	22	90	1	...	3	2.43
1.51	22	92	...	...	...	...	...	1	...	...	1	23	95	2	...	4	2.52
1.34	20	91	...	...	...	1	...	1	...	1	1	21	94	1	...	5	2.34
1.12	8	20	...	...	...	1	...	...	...	...	...	8	21	...	...	...	1.33
1.03	2	3	...	...	...	...	...	...	...	...	...	2	3	...	...	...	1.11
1.44	4	6	...	...	...	...	...	...	...	...	...	4	6	...	...	...	1.51
1.67	3	5	...	...	...	...	...	...	...	...	...	3	5	...	...	...	1.73
1.41	2	8	...	...	...	...	...	...	...	...	...	2	8	...	...	...	1.49
1.61	2	18	...	...	...	...	...	...	...	...	...	2	13	...	...	...	1.74
2.06	13	29	...	...	...	...	...	...	...	...	...	13	29	...	...	1	2.36
2.43	17	35	...	...	...	...	...	...	...	...	...	17	35	...	...	1	2.78
37	79	1.77	...	...	...	...	3	2	...	...	...	82	1.79	...	...	3	2.19
79	56	1.88	...	...	...	...	1	1	...	...	...	57	1.40	...	...	6	2.19
2.13	80	2.09	...	...	1	1	...	...	...	...	...	82	2.11	...	...	13	5.43
2.35	69	1.93	...	...	...	...	...	...	...	...	...	69	1.93	...	...	8	4.31
2.55	67	2.68	...	...	1	2	...	6	...	...	...	110	2.76	...	...	10	6.45
2.82	102	2.99	...	...	2	4	...	4	...	...	...	106	2.97	...	...	17	6.98
3.32	105	3.25	...	...	2	4	...	6	...	...	...	113	3.35	...	...	25	7.45
63	19	20	...	...	...	...	...	...	...	...	...	19	26	...	...	...	89
70	23	41	...	...	...	...	...	...	...	...	...	23	41	...	...	...	1.11
89	21	23	...	...	...	...	...	...	...	...	...	21	23	...	...	...	1.11
78	28	37	...	...	...	...	...	...	...	...	...	28	37	...	...	...	1.10
1.12	29	39	...	...	...	...	...	...	...	...	...	29	39	...	...	...	1.52
91	26	34	...	...	...	...	...	...	...	...	...	26	33	...	...	...	1.24
91	28	43	...	...	...	...	...	...	...	...	...	28	43	...	...	...	1.34
17	47	46	...	...	...	...	...	...	...	...	...	47	46	1	...	...	64
1	7	37	...	...	...	...	...	...	...	...	...	7	27	...	...	...	28
2	11	38	...	...	...	...	...	...	...	...	...	11	33	...	...	...	40
3	9	24	...	...	...	...	...	...	...	...	...	9	29	...	...	...	43
3	9	25	...	...	...	...	...	...	...	...	...	9	29	...	...	...	40
4	15	35	...	...	...	...	...	...	...	...	...	15	43	...	...	...	85
50	17	34	...	...	...	...	...	...	...	...	...	17	43	...	...	...	94
50	19	40	...	...	...	...	...	...	...	...	...	19	50	...	...	...	1.01

\* Live-stock has been converted into tons as:-  
 A head of cattle, or a pony or horse ... = 0.25 ton.  
 A head of sheep, goat, etc. ... = 0.025 ton.  
 An elephant ... = 250 tons.  
 † Included with the South Indian railway, 3' 3" gauge section.  
 ‡ Includes figures for the Nilgiri, Shoranur-Cochin, Morappur-Dharmapuri and Tirupattur-Krishnagiri railways.



Details of gross earnings

CLASSIFICATION No. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 2.)		Railway system.	Year.	COACHING TRAFFIC.												Other coaching traffic earnings [in thousands.]	
Main head.	Sub-head.			PASSENGER TRAFFIC.													
				1st class.		2nd class.		Inter. class.		3rd class.		Season and vendors' tickets.		Total.			
1	2	3	4	No. [In hundreds.]	Earnings [In thousands.]	No. [In hundreds.]	Earnings [In thousands.]	No. [In hundreds.]	Earnings [In thousands.]	No. [In hundreds.]	Earnings [In thousands.]	No. [In hundreds.]	Earnings [In thousands.]	No. [In hundreds.]	Earnings [In thousands.]	17	
					Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	
32	(a)	2' 6" GAUGE —concl. Dehri-Roh-tas Light.	1911	2	—	—	—	4	—	33,4	8	—	—	34,0	8	1	
33	(a)	Dholpur-Bari.	1908	1	—	—	—	—	—	39,4	11	—	—	39,5	11	1	
			1909	—	—	2	—	—	—	—	52,9	14	—	—	52,2	14	1
			1910	—	1	6	—	—	—	—	72,0	20	—	—	72,6	21	2
			1911	—	—	4	—	—	—	—	71,0	19	—	—	71,6	19	1
		Kalka-Simla.	1905	5,5	73	10,3	65	—	—	81,2	1,00	—	—	97,0	2,33	1,04	
			1906	4,7	68	10,6	68	—	—	80,8	1,68	—	—	96,1	2,19	1,08	
			1907	Amalgamated with the North Western railway												—	
30	(j) & (k)	Morappur-Dharmapuri and Tirupatur-Krishnagiri.	1905	—	—	4	—	—	—	35,5	9	1,1	—	37,0	9	—	
			1906	—	2	1,9	—	1	—	—	238,5	51	4,2	—	244,8	52	2
			1907	—	—	2,2	—	2	—	—	267,6	61	2,1	—	291,9	63	3
			1908	—	—	—	—	1	—	—	—	62	—	—	—	63	3
			1909	—	—	—	—	2	—	—	—	52	—	—	—	54	3
			1910	—	—	—	—	2	—	—	—	64	—	—	—	66	3
		1911	—	—	—	—	2	—	—	—	63	—	—	—	65	3	
1	(d)	Mour-bhani.	1905	1	—	4	1	5	—	28,9	10	—	—	29,9	11	1	
			1906	2	—	4	1	1,8	—	1	62,4	20	—	—	64,3	22	2
			1907	—	—	5	1	1,8	—	1	66,1	22	—	—	68,4	24	2
			1908	—	—	5	1	1,5	—	1	67,8	22	—	—	69,9	24	2
			1909	—	1	6	1	1,6	—	1	69,8	22	—	—	72,2	25	1
			1910	—	—	4	1	1,6	—	1	63,3	20	—	—	65,4	22	2
		1911	—	—	5	1	1,8	—	1	70,7	23	—	—	73,2	25	2	
1	(f)	Parlakimedi Light.	1905	3	1	—	—	2,7	1	65,1	15	—	—	68,1	17	2	
			1906	3	—	—	—	2,6	—	1	79,3	13	—	—	82,1	14	1
			1907	3	—	—	—	2,3	—	1	111,9	15	—	—	114,5	17	1
			1908	4	—	—	—	1,3	—	—	117,1	17	—	—	118,8	18	1
			1909	3	—	—	—	1,8	—	1	121,1	17	—	—	123,2	19	2
			1910	4	—	—	—	2,3	—	1	127,7	18	—	—	130,4	20	2
		1911	2	—	3	—	2,2	—	1	129,8	21	—	—	132,5	20	2	
22	(c)	Pownyan Light.	1905	2	—	1,2	1	—	—	296,4	46	—	—	297,8	47	2	
			1906	2	—	1,6	1	—	—	—	320,6	50	—	—	323,4	51	2
			1907	—	—	1,7	1	—	—	—	327,2	51	—	—	328,9	52	1
			1908	—	—	1,7	1	—	—	—	349,0	48	—	—	350,8	49	1
			1909	—	—	1,9	1	—	—	—	314,9	49	—	—	316,0	50	2
			1910	—	—	2,0	1	—	—	—	341,5	56	—	—	363,6	57	2
		1911	—	—	2,3	2	—	—	—	390,7	58	—	—	393,1	60	2	
30	(a)	Shabdara (Delhi)-Sahasrampur Light.	1907	—	—	—	—	—	—	165,0	59	—	—	165,0	59	1	
			1908	—	—	—	—	10,5	—	6	589,7	2,00	—	—	600,6	2,07	7
			1909	—	1	2	—	8,9	—	5	651,4	2,14	—	—	660,7	2,20	8
			1910	—	4	1	—	12,4	—	7	848,7	2,78	—	—	861,5	2,88	9
			1911	—	4	—	—	18,6	—	8	939,2	3,10	—	—	958,2	3,19	9
40	(a)	Tarkesur-Magra Light.	1905	1	—	1,3	—	14,9	3	426,8	63	12,0	—	456,1	68	2	
			1906	2	—	1,3	—	16,4	—	3	477,1	72	13,1	—	508,1	77	3
			1907	—	—	1,6	—	19,7	—	3	512,5	78	17,2	—	551,0	85	3
			1908	—	—	1,2	—	22,3	—	4	594,7	80	21,4	—	639,7	87	4
			1909	—	—	1,2	—	23,1	—	4	552,4	78	22,4	—	599,3	86	4
			1910	—	—	1,5	—	25,4	—	4	534,6	78	20,2	—	592,8	86	4
		1911	—	—	1,7	—	24,9	—	4	531,6	76	20,7	—	598,1	84	5	
41	(a)	Tezporo-Balipara Light.	1905	2,5	3	—	—	3,9	1	147,8	33	1,0	—	155,2	39	4	
			1906	2,2	2	—	—	4,4	—	1	138,3	33	1,0	—	155,8	37	5
			1907	2,2	2	—	—	4,5	—	1	176,9	32	1,2	—	180,0	37	5
			1908	1,9	2	—	—	4,9	—	1	186,0	32	1,2	—	192,0	36	5
			1909	1,7	2	—	—	4,5	—	1	124,0	31	1,0	—	144,1	35	4
			1910	2,3	2	—	—	4,8	—	1	132,3	33	1,5	—	154,9	38	6
		1911	2,0	2	—	—	5,4	—	2	143,6	36	1,6	—	167,5	41	6	

\* Included with the South Indian railway, 3' 8 1/2" gauge section.

DIX 4—contd.

of each railway system.

GOODS TRAFFIC.																	
Total coaching traffic earnings. [In thousands.]	MERCHANDISE, GENERAL.		MILITARY STORES.		COAL AND COKE FOR THE PUBLIC AND FOREIGN RAILWAYS.		REVENUE STORES, INCLUDING COAL AND MATERIALS FOR CONSTRUCTION.		LIVE-STOCK.		OTHER GOODS TRAFFIC.	TOTAL GOODS TRAFFIC.		Electric telegraph earnings. [In thousands.]	Steamboat earnings. [In thousands.]	Sundry earnings. [In thousands.]	Total gross earnings. [In thousands.]
	Tons. [In thousands.]	Earnings. [In thousands.]	Tons. [In thousands.]	Earnings. [In thousands.]	Tons. [In thousands.]	Earnings. [In thousands.]	Tons. [In thousands.]	Earnings. [In thousands.]	Tons. [In thousands.] †	Earnings. [In thousands.]	Earnings. [In thousands.]	Tons. [In thousands.]	Earnings. [In thousands.]				
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
9	8	12	...	...	3	3	...	...	...	...	...	10	15	...	...	...	24
12	17	9	...	...	...	...	...	...	...	...	...	17	9	...	...	...	21
15	26	20	...	...	...	...	...	...	...	...	...	26	20	...	...	1	36
23	19	24	...	...	...	...	...	...	...	...	...	19	24	1	...	...	48
20	21	21	...	...	...	...	...	...	...	...	...	21	21	...	...	...	41
4,37	20	2,47	1	11	3	31	3	9	...	...	1	27	2,99	2	...	14	7,53
4,27	25	2,65	1	13	4	42	2	5	...	...	2	32	3,27	2	...	8	7,64
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	3	4	...	...	...	...	...	...	...	...	...	2	4	...	...	...	13
54	14	24	...	...	1	1	...	...	...	...	...	15	25	...	...	...	79
65	15	26	...	...	...	1	...	...	...	...	...	15	27	...	...	1	93
66	...	24	...	...	...	...	...	...	...	...	...	...	24	...	...	...	91
57	...	23	...	...	...	...	...	...	...	...	...	...	23	...	...	...	85
69	...	33	...	...	...	...	...	1	...	...	1	...	34	...	...	...	1,03
68	...	37	...	...	...	...	...	...	...	...	...	...	38	...	...	...	1,06
12	3	7	...	...	...	...	10	11	...	...	1	13	19	...	...	...	31
24	12	19	...	...	...	...	...	...	...	...	1	12	20	1	...	1	46
25	11	17	...	...	...	1	...	...	...	...	...	11	18	...	...	1	44
26	16	24	...	...	...	...	...	...	...	...	...	16	24	1	...	...	51
26	15	23	...	...	...	...	...	...	...	...	...	15	23	1	...	...	55
24	17	31	...	...	...	...	1	1	...	...	1	18	33	...	...	1	53
27	20	34	...	...	...	...	...	...	...	...	...	20	34	1	...	...	62
19	10	9	...	...	...	...	...	...	...	...	...	10	8	...	...	...	27
15	6	5	...	...	...	...	1	1	...	...	...	7	6	...	...	...	21
18	7	5	...	...	...	...	1	2	...	...	...	8	6	...	...	1	23
19	7	5	...	...	...	...	...	2	...	...	...	8	7	...	...	...	26
21	5	4	...	...	...	...	...	1	...	...	...	6	5	...	...	...	26
22	6	5	...	...	...	...	...	...	...	...	...	6	5	...	...	...	27
27	6	5	...	...	...	...	...	1	...	...	...	6	6	...	...	...	33
49	29	43	...	...	...	...	1	...	...	...	1	30	44	...	...	...	93
53	31	46	...	...	...	...	1	...	...	...	...	33	46	...	...	...	99
53	23	33	...	...	...	...	...	1	...	...	...	24	34	...	...	...	87
50	21	32	...	...	...	...	1	...	...	...	1	23	31	...	...	...	81
51	27	36	...	...	...	...	7	4	...	...	...	34	40	...	...	...	92
59	25	35	...	...	...	...	2	1	...	...	...	27	36	...	...	...	95
62	34	37	...	...	...	...	2	1	...	...	3	36	41	...	...	...	1,03
60	14	41	...	...	...	...	...	5	...	...	...	14	41	...	...	1	1,01
2,14	42	1,16	...	...	...	...	3	1	...	...	...	45	1,21	...	...	...	3,36
2,23	63	1,77	...	...	...	...	3	1	...	...	...	71	1,73	...	...	2	4,06
2,95	75	2,07	...	...	...	...	...	...	...	...	...	75	2,07	...	...	...	5,04
3,23	80	2,01	...	...	...	1	...	...	...	...	...	80	2,02	...	...	2	5,32
70	21	13	...	...	...	...	1	2	...	...	...	22	15	1	...	1	87
80	25	17	...	...	...	...	1	1	...	...	...	26	18	1	...	1	1,00
86	32	20	...	...	...	...	1	1	...	...	...	33	21	...	...	1	1,10
91	29	20	...	...	...	...	1	1	...	...	...	30	21	...	...	1	1,13
91	45	10	...	...	...	...	...	1	...	...	...	46	31	1	...	1	1,24
90	47	32	...	...	...	1	...	...	...	...	...	48	33	...	...	1	1,24
89	53	35	...	...	...	...	...	...	...	...	...	53	35	1	...	1	1,26
42	12	50	...	...	...	...	...	...	...	...	...	14	55	1	...	5	1,03
42	13	56	...	...	...	...	...	...	...	...	...	16	64	1	...	8	1,15
42	13	53	...	...	...	...	...	...	...	...	...	15	62	2	...	6	1,12
41	6	33	...	...	...	...	...	...	...	...	...	9	42	1	...	5	89
39	6	30	...	...	...	...	10	...	...	...	...	10	45	1	...	4	86
44	6	33	...	...	...	...	11	...	...	...	...	10	45	1	...	4	94
47	8	44	...	...	...	...	17	...	...	...	...	14	62	2	...	4	1,15

\* Included with the South Indian railway, 3' 3 1/2" gauge section.  
 † Live stock has been converted into tons as:—  
 A head of cattle, or a pony or horse ... = 0.25 ton.  
 A head of sheep, goat, etc. ... = 0.025 ton.  
 An elephant ... = 2.50 tons.

Details of gross earnings

CLASSIFICATION NO. OF RAILWAY. (OBTAINED IN "INDEX" TO APPENDIX 9.)		Railway system.	Year.	COACHING TRAFFIC.												Other coaching traffic earnings. [In thousands.]	
Main head.	Sub-head.			PASSENGER TRAFFIC.													
				1st class.		2nd class.		Inter. class.		3rd class.		Season and vendors' tickets.		Total.			
1	2	3	4	No. [In hundreds.]	Earnings. [In thousands.]	No. [In hundreds.]	Earnings. [In thousands.]	No. [In hundreds.]	Earnings. [In thousands.]	No. [In hundreds.]	Earnings. [In thousands.]	No. [In hundreds.]	Earnings. [In thousands.]	No. [In hundreds.]	Earnings. [In thousands.]	17	
					Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	
42	(a)	Darjeeling-Himalayan.	1905	65	74	197	1,01	...	...	111,2	1,31	...	...	137,4	3,06	96	
			1906	71	82	192	99	...	...	109,0	1,38	...	...	134,3	3,14	98	
			1907	72	85	198	92	...	...	118,3	1,38	...	...	145,3	3,15	93	
			1908	78	89	213	96	...	...	136,6	1,48	...	...	165,7	3,33	94	
			1909	83	94	213	92	...	...	144,3	1,53	...	...	173,9	3,35	97	
			1910	77	94	219	92	...	...	176,1	1,55	...	...	205,7	3,41	1,00	
			1911	78	92	207	84	...	...	208,5	1,63	...	...	237,0	3,39	96	
43	(a)	Howrah-Amra Light.	1905	...	...	...	...	...	...	339,6	2,98	...	...	339,6	2,98	3	
			1906	...	...	...	...	...	...	392,9	3,16	...	...	392,9	3,16	3	
			1907	...	...	...	...	...	...	1,047,3	3,40	...	...	1,047,3	3,40	4	
			1908	...	...	...	...	...	...	1,131,5	3,62	...	...	1,131,5	3,62	6	
			1909	3	...	9	1	22,8	11	1,060,1	3,69	119,2	11	1,231,3	3,92	9	
			1910	3	...	9	1	21,8	11	1,181,9	4,04	137,7	13	1,342,6	4,29	10	
			1911	3	1	1,8	1	23,6	11	1,261,0	4,15	178,3	15	1,465,0	4,53	9	
44	(a)	Howrah-Sheakhala Light.	1905	...	...	...	...	...	...	350,9	79	...	...	350,9	79	...	
			1906	...	...	...	...	...	...	364,4	80	...	...	364,4	80	1	
			1907	...	...	...	...	...	...	392,4	85	...	...	392,4	85	1	
			1908	...	...	...	...	...	...	415,8	91	...	...	415,8	91	2	
			1909	1	...	...	...	6,6	2	354,6	80	123,7	13	485,0	95	2	
			1910	1	...	...	...	6,1	2	432,4	90	123,7	14	562,3	1,06	2	
			1911	1	...	...	...	5,3	2	411,2	90	205,5	21	622,1	1,13	2	
45	(a)	Jagadhri Light.	1911	...	...	4	...	...	...	56,8	5	...	...	57,3	5	1	
46	(a)	Jorhat (Provincial).	1905	...	...	...	...	...	...	166,6	26	...	...	166,6	26	...	
			1906	...	...	...	...	...	...	161,6	27	...	...	161,6	27	...	
			1907	...	...	...	...	...	...	185,3	39	...	...	185,3	39	...	
			1908	...	...	...	...	...	...	194,4	31	...	...	194,4	32	...	
			1909	...	...	...	...	...	...	194,5	31	...	...	194,5	31	...	
			1910	...	...	...	...	...	...	201,6	39	...	...	201,6	32	...	
			1911	...	...	...	...	...	...	208,9	36	...	...	208,9	36	...	
47	(a)	Pipar Road-Bhavi Light.	1910	...	...	...	...	...	...	3,9	1	...	...	3,9	1	...	
			1911	...	...	...	...	...	...	53,4	11	...	...	53,6	11	1	
TOTAL OF ALL RAILWAYS.				1905	662,6	45,19	2,948,7	64,66	8,104,0	83,06	218,418,1	10,68,70	18,028,9	12,23	348,157,3	12,73,83	1,66,67
				1906	683,8	47,23	3,025,1	67,85	8,496,7	86,87	239,391,2	11,58,48	19,469,2	13,38	371,063,0	13,68,81	1,71,16
				1907	732,0	50,24	3,908,1	70,21	9,873,4	93,10	271,223,0	12,76,92	20,733,3	14,08	305,905,8	15,04,50	1,80,76
				1908	747,7	50,84	3,327,5	71,10	10,080,3	93,61	244,578,9	13,06,72	22,454,7	14,54	321,169,0	15,38,87	1,88,00
				1909	748,4	51,90	3,344,8	71,63	10,028,4	87,87	291,544,3	13,38,95	23,715,7	15,59	329,379,0	15,65,94	1,69,67
				1910	778,4	58,82	3,982,1	77,23	11,032,9	94,99	332,461,7	14,65,10	24,340,9	15,85	371,578,0	17,12,04	2,09,01
				1911	798,8	66,37	3,135,4	83,83	11,782,4	1,08,88	348,473,5	15,78,15	25,687,5	16,85	389,562,6	18,49,08	2,38,81

DIX 4—conold.  
of each railway system.

GOODS TRAFFIC.																	
Total coaching traffic earnings [In thousands.]	MERCHANDISE, GENERAL.		MILITARY STORES.		COAL AND COKE FOR THE PUBLIC AND FOREIGN RAILWAYS.		REVENUE STORES, INCLUDING COAL AND MATERIALS FOR CONSTRUCTION.		LIVE-STOCK.		OTHER GOODS TRAFFIC.	TOTAL GOODS TRAFFIC.		Electric telegraph earnings [In thousands.]	Steam boat earnings [In thousands.]	Sundry earnings [In thousands.]	Total gross earnings [In thousands.]
	Tons [In thousands.]	Earnings [In thousands.]	Tons [In thousands.]	Earnings [In thousands.]	Tons [In thousands.]	Earnings [In thousands.]	Tons [In thousands.]	Earnings [In thousands.]	Tons [In thousands.]	Earnings [In thousands.]		Tons [In thousands.]	Earnings [In thousands.]				
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
4.02	36	4.89	...	7	2	15	6	35	...	...	11	44	5.57	3	...	10	9.72
4.12	36	4.83	...	6	2	15	6	36	...	...	9	44	5.46	2	...	17	9.20
4.03	34	4.49	...	11	3	22	6	31	...	...	10	46	5.24	2	...	16	9.50
4.27	32	4.36	...	9	3	21	6	32	...	1	9	48	5.07	3	...	7	9.44
4.32	37	4.78	...	9	2	20	6	31	...	...	9	47	5.45	3	...	9	9.83
4.41	35	4.81	...	8	3	23	6	35	...	...	6	46	5.53	3	...	6	10.03
4.37	38	5.08	...	7	3	28	9	37	...	2	...	50	5.82	3	...	8	10.30
3.00	17	23	...	...	...	...	...	...	...	...	...	17	28	...	...	1	3.23
3.19	20	32	...	...	...	...	...	...	...	...	...	20	32	...	...	...	2.51
3.44	16	26	...	...	...	...	...	...	...	...	...	16	26	...	...	...	3.70
3.68	17	29	...	...	...	...	...	...	...	...	...	17	29	...	...	...	3.98
4.01	19	35	...	...	...	...	...	...	...	...	...	19	35	...	...	...	4.37
4.39	20	44	...	...	...	...	...	...	...	...	...	20	44	...	...	...	4.64
4.52	28	46	...	...	...	...	...	...	...	...	...	28	46	...	...	...	4.99
79	6	8	...	...	...	...	...	...	...	...	...	6	8	...	...	...	83
81	7	9	...	...	...	...	...	...	...	...	...	7	9	...	...	...	81
86	7	9	...	...	...	...	...	...	...	...	...	7	9	...	...	...	85
93	6	8	...	...	...	...	...	...	...	...	...	6	8	...	...	...	1.01
97	8	10	...	...	...	...	...	...	...	...	...	8	10	...	...	...	1.07
1.08	8	12	...	...	...	...	...	...	...	...	...	8	12	...	...	...	1.20
1.15	9	11	...	...	...	...	...	...	...	...	...	9	11	...	...	...	1.26
6	3	2	...	...	...	...	...	...	...	...	...	3	2	...	...	...	8
26	10	48	...	...	...	...	...	...	...	...	...	10	48	2	...	...	79
27	15	59	...	...	...	...	...	...	...	...	...	15	59	2	...	...	93
30	14	57	...	...	...	...	...	...	...	...	...	14	57	2	...	...	62
32	17	65	...	...	...	...	...	...	...	...	...	17	65	2	...	...	1.01
31	16	64	...	...	...	...	...	...	...	...	...	16	64	2	...	...	99
32	19	61	...	...	...	...	...	...	...	...	...	19	61	1	...	...	93
36	21	71	...	...	...	...	...	...	...	...	...	21	71	1	...	...	1.00
1	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2
12	3	4	...	...	...	...	...	...	...	...	...	...	3	...	...	...	16
14,38.51	80,433	21,32,27	93	20,63	10,202	2,89,19	14,708	1,46,51	108	18,46	20,33	54,938	26,20,73	8,78	21,06	20,77	41,69,92
15,86.65	32,772	22,36,58	87	20,58	11,184	3,21,84	14,704	1,51,54	122	20,35	16,85	53,869	27,59,89	8,63	24,73	23,83	44,13,58
16,82.18	35,381	23,97,38	87	19,12	12,191	3,17,71	14,300	1,50,28	140	20,59	18,87	62,099	29,24,27	9,24	27,49	27,53	47,30,51
17,22.87	32,501	20,52,03	96	10,50	13,257	3,57,82	16,381	1,52,22	163	21,68	14,80	62,398	26,32,06	8,47	28,61	28,69	44,32,69
17,52.32	37,926	22,59,98	106	13,18	12,159	3,30,05	14,545	1,76,36	166	21,37	16,26	60,902	25,12,48	7,43	24,00	1,06,15	47,06,88
19,17.42	36,207	24,49,72	112	6,24	12,911	3,94,62	15,184	1,72,90	189	26,81	8,20	65,603	30,43,17	8,05	29,32	1,16,26	51,14,22
20,83.97	39,553	26,28,23	155	16,86	14,515	4,12,76	16,816	1,91,65	224	32,66	19,17	71,298	32,33,32	9,01	31,78	1,09,89	55,37,92

\* Live stock has been converted into tons as:—  
A head of cattle, or a pony or horse = 0.25 ton.  
A head of sheep, goat, etc. = 0.025 ton.  
An elephant = 2.50 tons.

## Details of working expenses of each railway

CLASSIFICATION No. of RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 2.)		Railway system.	Year.	Maintenance of way, works and stations.		Locomotive expenses.		Carriage and wagon expenses.		Traffic expenses.	
Main head.	Sub-head.			Ra.	Proportion per cent to gross earnings.	Ra.	Proportion per cent to gross earnings.	Ra.	Proportion per cent to gross earnings.	Ra.	Proportion per cent to gross earnings.
1	2	3	4	5	6	7	8	9	10	11	12
		5' 6" GAUGE.									
1	(a) to (c), (e), (g) and (h).	Bengal-Nagpur	1905 1906 1907 1908 1909 1910 1911	26,53 26,38 27,07 32,91 32,38 32,94 34,88	10.84 9.79 9.34 12.12 11.59 10.68 10.27	31,69 40,12 48,65 51,36 49,55 50,54 54,66	12.95 14.89 16.79 19.91 17.22 16.38 16.09	9,35 11,95 13,69 16,30 15,34 14,29 18,03	8.82 4.44 4.72 6.00 5.82 4.62 5.31	19,28 23,34 24,97 27,38 27,21 26,59 30,26	7.68 8.66 8.62 10.03 9.46 9.36 8.91
2	(a), (c) to (g), (e) and (p).	Bombay, Baroda and Cen- tral India.	1905 1906 1907 1908 1909 1910 1911	17,89 21,28 20,81 23,07 25,01 29,29 35,82	8.45 9.71 8.99 12.35 10.08 10.27 11.68	36,14 41,26 37,93 43,92 49,02 56,37 55,13	17.07 18.62 18.89 19.32 19.67 19.95 18.95	11,02 12,40 13,19 12,01 9,99 12,85 12,22	5.20 5.66 5.70 5.22 4.91 4.90 4.00	13,92 15,53 16,09 19,14 19,43 21,40 22,25	6.57 7.09 6.95 8.43 7.62 7.53 7.28
3	(a)	Eastern Bengal	1905 1906 1907 1908 1909 1910 1911	*16,31 23,54 23,68 21,53 20,51 26,57 25,26	18.08 18.68 20.51 19.81 18.75 16.07 19.45	*18,52 19,98 22,09 21,27 20,01 23,29 26,37	14.86 14.14 13.45 19.45 17.82 14.15 14.65	*6,51 6,37 7,27 10,61 7,56 7,30 9,10	5.22 4.52 4.43 6.60 4.65 4.72 5.02	*16,64 22,53 26,64 26,93 28,23 25,46 27,45	13.35 15.96 16.22 16.75 17.28 15.40 15.15
4	(c) to (d)	East Indian	1905 1906 1907 1908 1909 1910 1911	59,44 77,02 77,47 80,00 74,76 74,74 78,18	7.62 9.32 9.25 9.38 9.02 8.39 8.16	79,94 85,67 97,32 1,12,66 80,77 1,02,19 1,14,71	10.25 10.37 11.62 12.20 9.75 11.48 11.93	33,86 34,41 30,02 47,47 36,95 42,76 42,26	4.34 4.17 3.52 5.56 4.45 4.80 4.41	59,96 70,12 79,15 87,06 63,45 76,03 66,43	7.69 8.49 9.45 10.21 10.07 8.54 9.03
5	(e) to (A)	Great Indian Peninsula	1905 1906 1907 1908 1909 1910 1911	60,07 65,23 66,12 73,41 67,08 79,36 95,68	9.52 10.12 9.60 12.12 10.16 10.87 12.35	1,28,94 1,25,81 1,62,74 1,67,63 1,67,06 1,76,22 1,79,20	20.45 21.09 23.64 27.68 25.27 23.98 23.14	30,75 30,61 34,73 29,08 36,24 28,72 33,15	4.68 4.75 5.04 4.90 5.42 3.92 4.22	48,57 51,63 56,64 61,23 62,16 66,94 67,63	7.71 8.06 8.22 10.12 9.40 9.12 8.73
		Madras	1905 1906 1907	23,78 26,34 49,10	12.61 16.99 22.25	44,76 44,49 48,22	21.46 20.80 21.82	15,86 19,34 15,08	7.61 6.24 6.84	15,23 16,53 18,45	7.31 7.73 8.27
6	(a) and (b)	Madras and Southern Maharatta.	1908 1909 1910 1911	32,52 22,16 21,82 22,61	19.75 12.25 11.50 11.41	43,39 44,33 44,82 42,78	26.10 24.50 23.68 21.60	15,03 11,86 12,97 13,67	9.04 6.56 6.84 6.90	15,32 14,06 13,66 13,62	9.22 7.77 7.15 6.88
7	(c) and (g)	Nizam's Guaranteed State	1905 1906 1907 1908 1909 1910 1911	3,77 5,62 4,89 4,00 6,49 8,35 12,26	8.16 11.65 8.84 7.94 12.97 15.64 21.87	4,74 5,16 5,51 6,14 6,30 7,34 8,43	10.24 10.88 10.40 12.20 12.59 12.97 18.91	1,41 1,59 1,58 1,43 1,71 1,83 2,07	3.05 3.20 2.98 2.83 3.42 3.22 3.42	2,59 2,78 2,86 3,09 3,46 3,76 3,71	5.59 5.75 5.29 6.13 6.91 6.65 6.12
8	(a) to (I)	North Western—									
		Commercial section	1905 1906 1907 1908 1909 1910 1911	†72,08 †76,64 93,62 1,08,71 99,12 1,24,14 1,19,57	12.09 12.27 12.71 12.62 14.25 17.41 14.39	†1,22,93 †1,28,52 1,42,58 1,38,15 1,92,18 1,64,50 1,72,44	20.60 21.80 19.25 21.37 27.82 21.28 20.70	†19,89 †21,78 20,20 26,25 29,68 47,82 55,27	8.34 8.43 4.10 6.21 4.80 6.14 6.84	†42,00 †45,62 55,31 62,21 64,18 79,19 77,04	7.05 7.18 7.50 10.65 9.29 10.15 9.25
		Military section	1905 1906 1907 1908 1909 1910 1911	12,80 16,56 19,23 29,06 20,59 19,32 18,46	29.75 29.94 28.97 52.76 39.82 26.09 32.71	17,15 20,61 21,02 32,08 32,95 26,03 27,05	26.99 40.98 41.27 60.32 63.76 48.64 47.91	2,19 2,32 2,27 4,17 3,55 4,02 5,36	4.72 4.60 5.66 7.84 6.86 9.21 9.48	6,42 7,53 8,50 8,75 9,62 9,49 9,55	12.97 14.92 16.67 16.45 18.77 17.78 16.95

\* Includes the Bengal Central railway, which, for the first-half of 1905, was worked independently of the Eastern Bengal railway.  
† Excludes the Kalka-Simla railway, the working of which was made over to the North Western railway from 1st January 1907.

DIX 5.

system. [In thousands of rupees.]

General charges.		Steam-boat expenses.		Special and miscellaneous expenses, including contribution to Provident Fund.		Total working expenses.		Year.	Railway system.	CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9.)	
Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.			Sub-head.	Main head.
13	14	15	16	17	18	19	20	21	22	23	24
18,56	5.54	2,25	0.92	8,01	3.27	1,10,67	45.22	1905	5 <sup>th</sup> 6 <sup>th</sup> GAUGH.	...	1
14,31	5.31	3,14	1.17	8,71	3.23	1,27,96	47.49	1906			
15,16	5.23	3,39	1.14	8,51	3.23	1,41,34	49.77	1907			
16,67	6.14	3,94	1.45	8,93	3.29	1,57,49	57.99	1908			
17,95	6.24	3,48	1.21	9,41	3.27	1,56,30	54.32	1909			
17,78	5.76	4,07	1.32	9,70	3.15	1,58,21	51.28	1910			
18,28	5.88	3,91	1.15	11,46	3.27	1,71,48	60.48	1911			
8,31	3.98	...	...	5,19	2.45	92,47	43.67	1905			
9,71	4.43	...	...	3,36	1.53	1,03,54	47.23	1906			
8,78	3.80	...	...	4,72	2.04	1,01,52	43.87	1907			
10,90	4.80	...	...	5,75	2.53	1,19,79	52.73	1908			
10,81	4.34	...	...	5,98	2.40	1,20,30	49.27	1909			
11,51	4.03	...	...	6,08	2.15	1,38,50	49.03	1910			
11,48	3.74	...	...	9,55	3.11	1,43,61	48.76	1911			
6,62	5.31	...	...	4,32	3.95	69,52	55.77	1905	Bombay, Baroda and Central India.	(a), (d) to (g), (o) and (p).	2
6,75	4.78	...	...	3,96	2.80	83,13	59.90	1906			
8,26	5.03	...	...	5,48	3.34	1,03,43	62.98	1907			
8,84	5.50	...	...	4,96	3.03	1,14,14	70.99	1908			
9,33	5.73	...	...	4,69	2.83	1,09,37	67.23	1909			
8,24	4.99	...	...	4,01	2.43	95,47	57.76	1910			
9,05	4.99	...	...	5,96	3.29	1,13,19	62.45	1911			
26,32	3.33	2,74	0.86	19,89	2.56	2,32,15	36.20	1905	Eastern Bengal	(a)	3
26,63	3.45	2,23	0.27	23,77	2.66	3,21,75	38.95	1906			
30,67	3.65	2,30	0.27	18,62	2.22	3,35,46	40.04	1907			
33,89	3.97	5,10	0.60	25,60	3.00	3,91,80	45.92	1908			
33,32	4.02	2,52	0.30	20,72	2.60	3,32,49	40.12	1909			
32,56	3.66	1,53	0.18	19,33	2.24	3,40,34	39.29	1910			
32,56	3.40	1,33	0.19	19,35	2.02	3,75,27	39.19	1911			
23,26	3.69	...	...	13,78	2.16	3,05,37	48.44	1905	Bombay, Baroda and Central India.	(a) to (d)	4
24,98	3.83	...	...	13,50	2.09	3,23,01	50.00	1906			
25,79	3.74	...	...	19,11	2.78	3,65,13	59.03	1907			
27,13	4.43	...	...	18,26	3.01	3,76,79	62.21	1908			
28,36	4.29	...	...	20,47	3.10	3,81,36	57.69	1909			
28,87	3.92	...	...	31,99	4.33	4,12,70	56.20	1910			
29,29	3.78	...	...	23,38	3.02	4,23,33	55.80	1911			
10,17	4.88	...	...	7,59	3.44	1,22,39	58.73	1905	Great Indian Peninsula ...	(a) to (b)	5
10,83	5.06	...	...	5,56	2.60	1,27,09	59.42	1906			
11,74	5.32	...	...	5,39	2.44	1,48,04	67.10	1907			
10,47	6.30	...	...	3,70	2.23	1,20,73	72.64	1908	Madras	...	...
9,96	5.50	...	...	5,05	2.79	1,07,43	59.37	1909			
9,92	5.23	...	...	5,11	2.69	1,08,20	57.04	1910			
9,77	4.93	...	...	5,87	2.96	1,03,32	54.68	1911			
2,41	5.21	...	...	80	1.73	15,72	33.98	1905	Madras and Southern Mahratta.	(a) and (b)	6
3,47	5.10	...	...	80	1.65	18,43	33.13	1906			
2,57	4.66	...	...	93	1.75	18,14	34.22	1907			
3,74	5.44	...	...	91	1.60	18,31	36.34	1908			
2,81	5.61	...	...	1,31	3.62	22,08	44.12	1909			
2,89	5.11	...	...	1,66	3.29	26,53	46.89	1910	Nizam's Guaranteed State	(a) and (b)	7
2,91	4.80	...	...	1,70	3.20	32,03	52.92	1911			
...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	North Western—	(a) to (l)	8
...	...	...	...	...	...	...	...	...			
†15,51	2.60	†—2	—0.01	†7,80	1.81	†2,51,14	47.13	1905	Commercial section	...	...
†16,29	2.56	†6	0.01	†8,32	1.80	†3,09,24	48.65	1906			
19,55	2.65	8	0.01	10,61	1.44	3,51,96	47.76	1907			
21,95	3.76	7	0.01	16,35	2.80	4,28,69	73.42	1908			
21,69	3.14	19	0.08	18,21	2.64	4,25,25	61.57	1909			
22,44	2.91	7	0.01	19,34	2.58	4,66,56	60.56	1910			
23,99	2.83	6	0.01	15,84	1.90	4,64,50	55.77	1911			
...	...	...	...	...	...	...	...	...			
3,48	7.51	11	0.24	76	1.69	43,97	94.81	1905	Military section	...	...
3,68	7.31	13	0.24	1,01	2.02	50,83	101.07	1906			
3,86	7.68	14	0.26	1,11	2.17	57,37	112.53	1907			
4,39	8.26	...	...	1,23	2.41	78,72	143.05	1908			
4,43	8.69	...	...	1,49	2.89	72,75	140.80	1909			
4,43	8.28	...	...	1,37	2.66	65,57	123.51	1910			
4,46	7.90	...	...	1,38	2.44	66,27	117.39	1911			
...	...	...	...	...	...	...	...	...			

\* Includes the Bengal Central railway, which, for the first-half of 1905, was worked independently of the Eastern Bengal railway.  
 † Includes the Kalka-Simla railway, the working of which was made over to the North Western railway from 1st January 1907.

## Details of working expenses of each railway

CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 2.)		Railway system.	Year.	Maintenance of way, works and stations.		Locomotive * expenses.		Carriage and wagon expenses.		Traffic expenses.	
Main head.	Sub-head.			Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.
1	2	3	4	5	6	7	8	9	10	11	12
		<b>5' 6" GAUGE—consolid.</b>									
		Total Commercial and Military sections (North Western).	1905	85.83	13.36	1,41,08	21.97	22,08	3.44	48.48	7.55
			1906	94.20	13.74	1,59,13	23.20	21,10	3.51	53.16	7.75
			1907	1,13,49	14.40	1,63,61	20.77	33,07	4.20	63.81	8.10
			1908	1,36,76	21.47	2,15,23	33.78	40,42	6.35	70.96	11.14
			1909	1,19,71	16.12	2,25,13	30.32	33,23	4.48	73.87	9.95
			1910	1,53,46	18.63	1,90,59	23.13	53,25	6.34	87.68	10.64
			1911	1,36,33	15.55	1,99,49	22.43	60,63	6.62	86.60	9.73
9	(a) to (c)	Oudh and Rohilkhand	1905	31.92	20.32	26,45	16.35	5.03	3.20	17.15	10.92
			1906	22,06	13.13	30,39	18.09	5.86	3.49	17.37	10.34
			1907	27,74	14.93	51,57	27.75	7.13	3.84	19.06	10.26
			1908	25,89	15.66	42,21	25.52	11.13	6.73	20,29	12.37
			1909	23,56	14.23	29,92	18.07	20,74	18.57	19,43	11.74
			1910	26,97	14.42	23,99	15.50	8,84	4.72	19,70	10.53
			1911	24,41	11.72	29,72	14.27	12,32	5.92	20,81	10.00
10	(a)	South Indian	1905	7.40	12.92	12,32	21.52	5.55	9.70	2.51	6.13
			1909	4.46	7.16	17,03	27.24	2.65	4.25	4.43	7.19
			1910	5.38	8.48	17,81	23.09	3.39	5.35	5.26	8.30
			1911	6.21	8.91	14,07	20.20	2.52	3.62	4.74	6.80
		<b>3' 3½" GAUGE.</b>									
11	(a)	Assam-Bengal	1905	10.03	28.30	7.83	23.49	2.35	6.76	4.54	13.03
			1906	12.68	30.06	8.87	21.01	2.69	6.33	5.27	12.49
			1907	13,18	26.95	10,65	21.75	2.98	6.11	6.45	13.13
			1908	13,22	23.16	11,01	23.44	2.91	6.19	7.13	15.23
			1909	13,56	27.59	11,17	22.73	2.52	5.13	7.23	14.71
			1910	13,47	26.05	10,15	19.63	2.91	5.63	9.65	13.07
			1911	14,04	25.13	11,29	20.25	2.96	5.31	8.63	15.43
12	(a) & (b)	Bengal and North-West- ern.	1905	14.42	11.57	12,06	10.56	3.47	2.61	9.85	7.96
			1906	20,48	14.24	15,10	10.50	4.22	2.93	10.53	7.62
			1907	21,87	18.26	18,45	11.18	4.77	2.69	11.63	7.06
			1908	17,34	10.74	20,92	12.95	5.36	3.32	12.99	8.04
			1909	17,50	11.20	20,23	13.06	5.03	3.22	12.89	8.26
			1910	17,56	10.53	20,45	12.29	5.15	3.07	12,30	7.84
			1911	23,20	12.31	19,76	10.49	6.22	3.30	13,05	6.92
13	(a) & (b)	Bengal Dooms	1905	1.23	14.56	83	9.92	26	2.99	63	7.13
			1906	92	9.29	91	9.19	24	2.44	74	7.89
			1907	2,87	25.99	1,03	10.05	23	2.21	75	7.36
			1908	97	9.17	89	8.31	21	2.04	71	6.71
			1909	84	7.96	83	7.87	22	2.09	70	6.64
			1910	1,24	10.74	86	7.60	18	1.66	73	6.29
			1911	1,43	11.30	85	7.07	22	1.83	67	5.53
		Bhavnagar-Gondal-Juna- gad-Forbandar.	1905	3.17	14.15	2.63	11.74	87	3.30	1.73	7.93
			1906	3,07	13.01	2,77	11.77	77	3.25	1.91	8.12
			1907	3,54	12.82	3,16	11.46	73	2.65	2.13	7.74
			1908	3,13	10.86	4,24	14.72	74	2.57	2.27	7.87
			1909	3,94	13.92	6,06	21.41	93	3.23	2.50	8.65
			1910	4,73	14.74	3,84	11.97	96	2.99	2.52	7.86
14	(a) & (b)	Bhavnagar	1911	1.49	9.60	1.73	11.15	31	1.99	1.27	6.13
15	(a) & (b)	Burma	1905	27,35	17.65	33,93	21.54	6.34	4.40	14,03	8.92
			1906	27,15	17.26	34,01	21.62	8.44	5.37	14,91	9.46
			1907	27,26	18.24	36,33	21.64	11,61	6.92	16,47	9.31
			1908	27,34	14.30	37,94	20.17	10,66	5.66	13,13	9.67
			1909	35,16	18.06	39,24	20.16	11,73	6.02	13,31	9.66
			1910	33,13	16.74	39,59	19.97	11,00	5.55	13,63	9.43
			1911	41,86	20.16	40,52	19.60	14,34	6.94	13,67	9.03
		Deoghur	1905	6	13.12	13	27.03	2	4.49	6	13.73
			1906	7	12.36	7	13.86	6	10.16	7	13.33
			1907	5	8.46	11	19.71	12	20.93	8	13.76
			1908	5	9.93	13	25.10	3	6.63	9	17.40
			1909	6	11.26	10	20.20	4	8.33	9	17.44
			1910	†	†	†	†	†	†	†	†
			1911				Amalgamated		with the	East Indian	

\* Excludes the Kalka-Simla railway, the working of which was made over to the North Western railway from 1st January 1907.

† Information not furnished.

## DIX 5—contd.

system. [In thousands of rupees.]

General charges.		Steam-boat expenses.		Special and miscellaneous expenses, including contribution to Provident Fund.		Total working expenses.		Year.	Railway system.	CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX D).		
Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.			Sub-head.	Main head.	
13	14	15	16	17	18	19	20	21	22	23	24	
									5' 6" GAUGE—conold.			
18,99	2.96	99	0.01	8,58	1.33	8,25,11	50.82	1905	Total Commercial and Military sections (North Western).	...	...	
19,97	2.91	18	0.03	9,33	1.36	8,60,07	52.50	1906				
23,41	2.97	22	0.02	11,72	1.49	4,09,83	51.95	1907				
26,34	4.14	7	0.01	17,63	2.76	5,07,41	79.65	1908				
26,17	3.53	19	0.03	19,70	2.65	4,98,00	67.08	1909				
26,87	3.26	7	0.01	21,21	2.57	5,22,15	64.58	1910				
25,46	3.20	5	0.01	17,22	1.93	5,30,77	59.67	1911				
7,06	4.49	...	...	4,61	2.95	92,31	58.74	1905	Oudh and Rohilkhand ...	(e) to (e)	9	
7,43	4.42	...	...	5,42	2.33	88,53	52.69	1906				
8,06	4.34	...	...	4,63	2.53	1,13,24	63.64	1907				
8,77	5.30	...	...	4,92	2.97	1,13,21	68.45	1908				
8,93	5.29	...	...	5,19	3.14	1,17,77	71.14	1909				
8,71	4.65	...	...	3,05	1.63	96,26	51.45	1910				
9,09	4.37	...	...	4,81	2.31	1,01,16	49.59	1911				
3,38	4.26	...	...	24	1.47	32,00	55.90	1908	South Indian ...	(a)	10	
3,38	5.42	...	...	2,12	3.40	34,12	54.76	1909				
3,18	4.94	...	...	3,47	5.47	33,44	60.63	1910				
3,41	4.90	...	...	68	0.83	31,53	45.26	1911				
6,05	17.38	34	1.00	1,84	5.29	32,09	84.75	1905	3' 3 1/2" GAUGE.	...	(a)	11
5,51	13.05	25	0.59	2,65	6.28	37,92	89.86	1906				
5,76	11.77	28	0.57	3,20	6.55	42,50	86.91	1907				
5,85	12.45	31	0.66	5,95	12.68	46,48	98.87	1908				
6,06	12.33	24	0.49	3,89	7.92	44,67	90.90	1909				
5,90	11.41	10	0.19	1,68	3.25	43,56	94.83	1910				
5,94	10.65	12	0.21	1,41	2.53	44,38	79.59	1911				
6,37	5.16	4,81	3.73	1,53	1.24	68,81	43.13	1905	Bengal and North-Western.	(a) & (b)	12	
6,73	4.68	4,71	3.23	2,16	1.50	68,93	44.45	1906				
7,42	4.50	4,96	3.01	3,95	2.39	72,05	44.23	1907				
7,71	4.78	5,33	3.61	2,78	1.73	72,93	45.16	1908				
8,11	5.19	5,88	3.77	2,71	1.74	72,50	46.42	1909				
7,90	4.71	4,83	2.88	2,54	1.53	70,84	43.26	1910				
7,94	4.21	4,61	2.45	3,39	1.79	73,17	41.47	1911				
1,08	12.20	†	...	22	2.52	4,35	49.32	1905	Bengal Doonars ...	(a) & (b)	13	
1,08	10.83	†	...	16	1.65	4,05	40.79	1906				
1,08	10.53	†	...	21	2.10	5,97	58.24	1907				
1,08	10.19	†	...	24	2.27	4,09	38.69	1908				
1,01	9.57	†	...	26	2.46	3,86	38.59	1909				
1,07	9.34	†	...	18	1.57	4,26	37.20	1910				
1,07	8.89	7	0.61	24	2.00	4,55	37.88	1911				
2,06	9.19	...	...	48	2.15	10,99	49.08	1905	Bhavnagar-Gondal-Juna-gad-Forbandar.	...	...	
1,98	8.38	...	...	48	2.05	10,98	46.58	1906				
2,26	8.16	...	...	87	3.16	12,68	45.99	1907				
2,22	7.68	...	...	60	2.09	13,20	45.79	1908				
2,13	7.52	...	...	60	2.13	16,16	57.08	1909				
2,06	6.43	...	...	69	2.15	14,82	46.19	1910				
90	6.33	...	...	23	1.43	6,01	38.72	1911				
9,31	6.22	1,41	0.90	1,83	1.19	95,95	60.82	1905	Barma ...	(a) & (b)	15	
10,18	6.47	1,33	0.84	2,63	1.70	93,70	62.74	1906				
11,33	6.69	1,63	0.97	2,30	1.97	1,07,83	64.24	1907				
12,25	6.51	1,63	0.87	3,30	1.75	1,11,79	59.48	1908				
12,34	6.59	2,43	1.25	3,61	1.83	1,23,33	63.60	1909				
13,06	6.57	2,03	1.03	4,40	2.23	1,31,90	61.49	1910				
13,05	6.31	2,23	1.10	4,24	2.05	1,34,76	65.19	1911				
4	7.44	...	...	...	...	30	55.89	1905	Deoghur ...	...	...	
4	7.42	...	...	...	...	31	57.12	1906				
5	9.43	...	...	...	...	41	72.29	1907				
4	7.83	...	...	...	...	34	68.94	1908				
4	6.53	...	...	...	...	33	66.28	1909				
†	†	...	...	†	†	†	†	1910				
†	†	...	...	†	†	†	†	1911				
railway	system.											

\* Excludes the Kalka-Simla railway, the working of which was made over to the North Western railway from 1st January 1907.

† Steam-boat expenses were shown with traffic expenses.

‡ Information not furnished.



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APPEN

Details of working expenses of each railway

CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9).		Railway system.	Year.	Maintenance of way, works and stations.		Locomotive expenses.		Carriage and wagon expenses.		Traffic expenses.	
Main head.	Sub-head.			Rs.	Proportion per cent to gross earn- ings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.
1	2	3	4	5	6	7	8	9	10	11	12
		<b>3' 3½" GAUGE—contd.</b>									
16	(a) & (b)	Dibru-Sadiya	1905	1,89	18-63	1,14	11-26	1,00	9-88	68	6-28
			1906	2,15	20-04	1,24	11-56	1,89	12-95	70	6-52
			1907	2,78	25-27	1,83	16-62	61	5-52	73	6-65
			1908	1,75	15-97	1,98	18-10	71	6-51	79	7-24
			1909	1,75	14-71	2,18	18-32	89	7-48	90	7-58
			1910	1,92	16-08	2,41	20-09	93	7-75	91	7-58
			1911	2,59	22-73	2,23	17-45	95	7-51	99	7-72
3	(b) to (d)	Eastern Bengal	1905	12,68	14-19	11,04	12-35	2,06	2-30	8,05	9-01
			1906	16,15	14-74	13,08	11-94	6,32	5-77	10,47	9-55
			1907	15,70	14-73	14,84	13-73	4,70	4-41	11,55	10-83
			1908	15,23	12-87	19,94	16-86	14,70	12-42	13,01	11-00
			1909	13,18	10-96	20,76	17-28	6,45	5-28	14,97	12-45
			1910	16,54	13-30	17,74	14-23	5,82	4-63	13,43	10-80
			1911	20,85	14-83	22,55	16-28	9,98	7-10	14,60	10-39
17	(a) & (b)	Gondal-Forbandar	1911	1,36	11-10	2,07	16-90	24	2-00	1,04	8-50
7	(c)	Hyderabad-Godavari Valley.	1905	6,72	23-73	3,80	12-82	52	1-75	2,33	7-85
			1906	6,29	20-73	3,64	12-02	52	2-04	2,44	8-05
			1907	4,79	14-71	3,74	11-49	57	1-75	2,48	7-62
			1908	5,88	18-15	4,14	12-76	56	1-73	2,71	8-35
			1909	6,79	20-86	4,55	13-98	53	1-78	2,89	8-88
			1910	5,85	16-00	4,97	13-60	69	1-89	3,15	8-61
			1911	5,66	24-76	5,13	14-81	96	2-75	3,36	9-61
18	(a)	Jamnagar	1911	31	12-50	40	16-36	8	2-26	20	7-96
19	(a) to (d)	Jodhpur-Bikaner	1905	4,51	12-80	5,52	15-66	85	2-42	1,98	5-61
			1906	5,95	14-59	7,04	17-27	93	2-27	2,37	5-83
			1907	6,61	17-25	7,13	18-64	1,18	3-07	2,40	6-28
			1908	5,17	14-93	7,52	21-73	1,61	4-64	2,41	6-86
			1909	6,28	16-73	7,48	19-92	1,69	4-50	2,66	7-06
			1910	4,95	10-42	8,28	17-43	1,50	3-16	3,25	6-84
			1911	5,23	8-49	10,29	16-56	1,98	3-19	3,59	6-78
20	(a)	Junagad	1911	53	11-65	67	15-02	8	1-79	37	8-30
		Southern Mahratta	1905	18,41	16-21	24,38	21-01	6,06	5-23	9,36	8-07
			1906	17,94	14-38	27,56	22-11	6,44	5-17	10,13	8-13
			1907	20,23	14-55	28,56	20-54	9,27	6-67	11,10	7-96
6	(c) to (f)	Madras and Southern Mahratta.	1908	18,49	11-82	36,04	21-85	8,63	5-23	12,96	7-86
			1909	21,51	13-23	37,58	23-20	9,33	5-76	13,65	8-48
			1910	22,07	12-92	39,50	23-12	9,85	5-76	13,34	7-81
			1911	24,56	13-65	40,83	22-69	10,23	5-71	13,55	7-53
21	(a)	Morvi	1905	24	7-55	56	17-33	6	1-03	30	9-19
			1906	27	8-92	45	14-61	11	3-43	23	7-50
			1907	26	6-44	54	13-14	10	2-33	23	5-63
			1908	29	5-60	95	18-63	16	3-18	35	6-33
			1909	37	7-68	99	20-88	19	4-05	40	8-62
			1910	47	8-92	92	17-34	13	2-42	37	7-08
			1911	38	6-07	77	12-14	18	2-39	39	6-09
10	(c)	Nilgiri	1905	73	23-24	1,23	39-15	6	2-63	33	10-41
			1906	83	27-65	1,23	33-57	7	2-16	34	10-52
			1907	96	29-79	1,15	34-32	6	1-75	36	10-87
			1908	46	13-69	1,66	49-40	38	11-31	23	6-85
			1909	51	12-60	2,21	54-04	18	4-40	36	8-61
			1910	63	13-78	2,30	50-32	19	4-16	39	8-45
			1911	67	13-53	2,12	42-23	18	3-64	41	8-26
2	(b) & (h) to (n)	Rajputana-Malwa	1905	24,23	8-31	50,43	17-21	15,16	5-17	19,27	6-57
			1906	27,83	9-61	54,83	18-94	16,34	5-64	20,61	7-13
			1907	31,94	10-72	56,73	19-06	15,83	5-33	25,35	8-47
			1908	35,80	12-82	61,60	23-78	15,86	6-05	25,87	9-98
			1909	31,49	11-88	57,42	21-67	15,52	5-66	26,42	9-97
			1910	30,02	10-01	56,01	18-87	14,51	4-84	27,14	9-06
			1911	35,09	10-83	62,59	19-31	15,99	4-93	28,44	8-77

## DIX 5—contd.

system. [In thousands of rupees.]

General charges.		Steam-boat expenses.		Special and miscellaneous expenses, including contribution to Provident Fund.		Total working expenses.		Year.	Railway system.	CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9.)	
Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.			Sub-head.	Main head.
13	14	15	16	17	18	19	20	21	22	23	24
84	8.59	...	...	5	0.16	5.55	54.78	1905	3' 3½' GAUGE—contd., Dibru-Sadiya	(a) & (b)	16
86	8.02	...	...	6	0.56	6.40	59.65	1906			
86	7.87	...	...	5	0.49	6.88	62.42	1907			
88	7.98	...	...	5	0.51	6.16	58.81	1908			
93	7.82	...	...	6	0.50	6.71	56.39	1909			
97	8.08	...	...	7	0.59	7.22	60.17	1910			
1.00	7.92	...	...	5	0.42	8.11	63.75	1911			
4.15	4.64	5.23	5.25	1.47	1.65	44.68	49.99	1905	Eastern Bengal	(b) to (d)	3
4.89	4.45	6.39	5.33	1.33	1.76	53.23	54.04	1906			
5.16	4.85	7.12	6.68	2.61	2.45	61.48	57.68	1907			
5.85	4.95	7.62	6.44	3.27	2.77	79.61	67.31	1908			
6.39	5.31	8.99	7.47	2.25	1.67	72.99	60.68	1909			
6.18	4.97	11.96	9.63	2.28	1.83	73.95	59.49	1910			
6.50	4.62	10.32	7.34	2.57	1.63	87.67	62.37	1911			
94	7.70	...	...	10	0.80	5.75	47.00	1911	Gondal-Forbandar	(a) & (b)	17
2.62	8.83	...	...	35	1.18	16.35	55.16	1905	Hyderabad-Godavari Valley.	(c)	7
2.68	8.83	...	...	41	1.44	16.11	58.12	1906			
2.78	8.55	...	...	45	1.38	14.81	45.50	1907			
2.94	9.08	...	...	57	1.75	16.80	51.82	1908			
3.00	9.22	...	...	72	2.21	18.53	56.98	1909			
3.07	8.41	...	...	77	2.11	18.50	50.62	1910			
3.11	8.59	...	...	58	1.68	21.85	62.48	1911			
23	9.39	...	...	7	2.71	1.29	52.30	1911	Jamnagar	(a)	18
1.28	3.57	...	...	79	2.25	14.91	42.31	1905	Jodhpur-Bikaner	(a) to (d)	19
1.43	3.51	...	...	94	2.31	13.66	45.78	1906			
1.46	3.82	...	...	89	2.32	19.67	51.38	1907			
1.54	4.44	...	...	89	2.56	19.14	55.26	1908			
1.65	4.39	...	...	1.47	3.92	21.23	56.54	1909			
1.96	4.12	...	...	1.60	3.37	21.54	45.24	1910			
2.16	3.47	...	...	2.75	4.43	26.05	41.91	1911			
49	10.99	...	...	26	5.83	2.39	53.59	1911	Junagad	(a)	20
8.94	7.70	1.34	1.15	1.81	1.56	70.70	60.93	1905	Southern Mahratta	...	...
9.67	7.76	1.49	1.19	2.38	1.91	75.61	60.65	1906			
9.65	6.95	2.04	1.47	2.15	1.54	83.00	59.70	1907			
10.99	6.67	2.45	1.48	3.27	1.98	93.83	56.89	1908	Madras and Southern Mahratta.	(a) to (l)	6
11.10	6.85	2.03	1.25	2.60	1.61	97.80	60.38	1909			
10.75	6.29	2.26	1.32	3.11	1.82	1,00.88	59.04	1910			
11.19	6.22	2.04	1.18	4.16	2.32	1,06.64	59.25	1911			
28	8.59	...	...	5	1.50	1.49	46.09	1905	Morvi	(a)	21
35	11.29	...	...	7	2.37	1.48	48.11	1906			
35	8.58	...	...	8	1.82	1.56	37.89	1907			
34	6.63	...	...	17	3.41	2.26	44.43	1908			
32	6.94	...	...	32	6.80	2.59	54.68	1909			
29	5.51	...	...	15	2.78	2.33	44.00	1910			
31	4.92	...	...	10	1.46	2.13	33.57	1911			
21	6.61	...	...	8	2.44	2.66	84.43	1905	Nilgiri	(c)	10
21	6.46	...	...	10	3.02	2.83	86.33	1906			
22	6.43	...	...	9	2.81	2.34	85.02	1907			
14	4.17	...	...	6	1.79	2.93	87.21	1908			
22	5.40	...	...	7	1.72	3.55	86.87	1909			
24	5.25	...	...	10	2.19	3.95	84.15	1910			
24	4.85	...	...	8	1.62	3.70	74.75	1911			
12.94	4.41	...	...	3.62	1.24	1,25.85	42.91	1905	Rajputana-Malwa	(b) & (k) to (n)	3
12.32	4.43	...	...	4.53	1.57	1,36.96	47.31	1906			
13.97	4.69	...	...	4.40	1.48	1,48.23	49.75	1907			
15.20	5.87	...	...	5.31	2.05	1,59.44	61.55	1908			
14.25	5.88	...	...	4.43	1.67	1,49.53	56.48	1909			
14.94	4.98	...	...	4.76	1.58	1,47.38	49.13	1910			
15.45	4.77	...	...	7.55	2.33	1,65.11	50.94	1911			

## Details of working expenses of each railway

CLASSIFICATION No. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9).		Railway system.	Year.	Maintenance of way, works and stations.		Locomotive expenses.		Carriage and wagon expenses.		Traffic expenses.	
Main head.	Sub-head.			Ra.	Proportion per cent to gross earnings.	Ra.	Proportion per cent to gross earnings.	Ra.	Proportion per cent to gross earnings.	Ra.	Proportion per cent to gross earnings.
1	2	3	4	5	6	7	8	9	10	11	12
		<b>3' 3½" GAUGE—conold.</b>									
22	(a) & (b)	Rohilkund and Kumaon	1905	3,22	16.24	2,61	13.12	78	3.92	1,68	7.93
			1906	2,90	11.76	3,68	14.77	1,06	4.38	1,89	8.10
			1907	2,54	9.18	4,33	15.47	1,32	4.72	2,40	8.68
			1908	2,88	10.44	4,36	15.76	1,69	5.78	2,72	9.87
			1909	4,25	14.23	4,34	14.52	1,34	4.50	2,96	9.90
			1910	3,42	15.75	4,11	18.93	1,18	5.44	2,80	12.90
			1911	4,14	12.13	4,38	12.93	1,53	4.43	2,05	6.64
10	(f)	Shoranur-Cochin	1905	49	12.52	87	22.49	31	7.95	30	7.78
			1906	60	16.19	87	22.19	26	6.64	33	8.37
			1907	82	19.74	95	23.53	31	7.37	38	9.14
			1908	48	10.73	91	20.43	30	6.71	35	7.86
			1909	43	8.33	1,00	21.15	7	1.46	46	8.88
			1910	60	10.66	1,16	20.61	24	4.27	50	8.90
			1911	74	12.33	1,19	19.71	23	3.80	47	7.81
10	(b), (d), (e) and (g) to (i)	South Indian	1905	17,30	12.27	24,27	17.21	5,94	4.21	10,61	7.52
			1906	22,20	15.34	29,27	20.23	6,47	4.47	11,06	7.65
			1907	18,81	12.82	25,77	16.67	6,56	4.24	11,80	7.63
			1908	15,24	9.67	30,15	19.13	8,60	5.46	13,33	8.46
			1909	14,05	8.52	30,84	18.71	10,00	6.07	15,16	9.19
			1910	14,44	8.42	34,11	19.90	8,83	5.15	15,35	8.96
			1911	20,19	10.52	36,09	18.81	11,12	5.80	15,26	7.95
23	(e)	Udaipur-Chitorgarh	1905	34	16.45	31	15.09	5	2.26	17	6.16
			1906	37	14.97	34	13.59	5	3.16	18	7.33
			1907	37	14.61	33	13.21	6	2.33	20	8.07
			1908	39	16.49	33	13.72	7	2.72	23	9.66
			1909	39	16.17	34	14.16	7	2.68	19	7.89
			1910	33	13.19	36	14.30	9	3.78	20	8.08
			1911	38	13.40	37	12.89	9	3.39	22	7.67
25	(e)	2' 6" GAUGE. Arrah-Sasaram Light	1911	23	17.36	20	15.13	2	1.99	23	16.96
27	(e)	Buraset-Basirhat Light	1905	14	12.54	12	11.20	3	3.24	19	17.23
			1906	18	12.33	16	10.43	6	3.39	24	15.69
			1907	20	11.70	24	13.99	8	4.32	27	15.72
			1908	22	14.83	27	17.80	9	6.08	24	16.38
			1909	32	19.37	29	16.54	6	3.65	29	16.85
			1910	50	21.37	45	19.55	10	4.40	40	16.65
			1911	51	18.26	44	15.62	7	3.62	48	17.27
28	(e)	Barai Light	1905	10	4.55	23	10.49	5	2.18	16	7.63
			1906	11	5.16	27	12.50	6	2.83	21	9.62
			1907	62	11.40	1,02	18.60	11	1.97	45	8.33
			1908	30	6.94	32	19.13	10	2.80	40	9.39
			1909	31	4.80	36	13.34	5	0.85	41	6.35
			1910	43	6.16	1,03	14.81	22	3.15	47	6.76
			1911	37	4.97	1,16	15.83	19	2.49	58	7.83
29	(e)	Bakhtiarpore-Bihar Light	1905	11	12.56	14	16.08	3	3.41	19	21.52
			1906	13	11.92	17	15.04	4	3.76	23	20.78
			1907	13	11.88	18	15.36	4	3.81	24	21.73
			1908	13	11.19	19	17.37	5	3.98	22	20.24
			1909	15	9.94	33	25.24	6	3.39	28	18.23
			1910	12	9.82	20	15.32	4	2.18	24	19.26
			1911	11	8.07	21	15.57	3	2.06	25	18.96
29	(e)	Champaner-Shivrajpur Light	1911	14	21.61	14	21.85	3	4.53	9	13.55
31	(e)	Cutch	1905	1	3.51	4	14.04	1	3.51	1	5.57
			1906	6	14.83	9	22.75	1	3.15	4	9.57
			1907	3	7.49	8	18.78	2	4.96	3	7.17
			1908	3	7.47	8	20.88	4	9.29	4	10.52
			1909	10	11.72	12	18.87	4	5.13	8	9.24
			1910	12	12.73	12	12.78	4	4.43	7	7.75
			1911	14	15.79	15	15.06	4	3.08	7	7.27
32	(e)	Dehri-Bohates Light	1911	9	33.94	6	24.43	2	7.70	15	63.02

## DIX 5—contd.

system. [In thousands of rupees.]

General charges.		Steam-boat expenses.		Special and miscellaneous expenses, including contribution to Provident Fund.		Total working expenses.		Year.	Railway system.	CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9.)				
Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.			Sub-head.	Main head.			
13	14	15	16	17	18	19	20	21	22	23	24			
1,51	7.60	...	...	43	2.15	10,13	50.96	1905	3' 3 1/2" GAUGE—conold. Rohilkund and Kumaon ...	(c) & (b)	22			
1,72	8.93	...	...	1,27	5.17	12,67	51.12	1906						
1,93	7.05	...	...	39	1.41	12,28	46.53	1907						
2,40	8.71	...	...	35	1.25	14,29	51.78	1908						
2,22	7.42	...	...	66	2.21	15,77	52.78	1909						
2,03	9.25	...	...	39	1.60	13,93	64.17	1910						
2,29	6.71	...	...	40	1.17	15,69	45.95	1911						
19	4.97	...	...	10	2.58	2,28	53.29	1905				Shoranur-Cochin ...	(f)	10
20	5.17	...	...	10	2.66	2,36	60.22	1906						
23	5.45	...	...	9	2.18	2,31	67.46	1907						
26	5.60	...	...	14	3.30	2,44	54.38	1908						
31	6.04	...	...	19	3.62	2,55	49.46	1909						
33	5.79	...	...	23	4.09	3,06	54.32	1910	South Indian ...	(b), (d), (e) and (g) to (i)	10			
39	5.52	...	...	15	2.56	3,11	51.75	1911						
8,96	6.36	...	...	2,69	1.90	69,77	49.47	1905						
9,60	6.67	...	...	2,50	1.73	81,00	55.99	1906						
9,61	6.21	...	...	2,98	1.94	76,63	49.51	1907						
10,03	6.36	...	...	5,67	3.58	82,92	52.61	1908	Arrah-Sasaram Light ...	(a)	25			
10,01	6.07	...	...	5,87	3.26	85,43	51.82	1909						
10,41	6.07	...	...	5,35	3.12	88,49	51.62	1910						
10,79	5.62	...	...	6,00	3.13	99,45	51.33	1911	Udaipur-Chitorgarh ...	(a)	33			
13	6.49	...	...	4	1.74	1,04	50.19	1905						
14	5.83	...	...	4	1.45	1,12	45.33	1906						
14	5.74	...	...	4	1.47	1,14	45.43	1907						
15	6.23	...	...	4	1.76	1,21	50.59	1908						
14	5.76	...	...	5	1.97	1,18	43.62	1909						
15	5.80	...	...	5	1.95	1,13	47.05	1910						
16	5.66	...	...	9	3.06	1,31	46.07	1911	Baraset-Basirhat Light ...	(a)	27			
20	14.73	...	...	1	0.62	89	66.79	1911						
6	5.24	...	...	1	0.48	55	49.93	1905						
6	4.23	...	...	1	0.61	71	47.23	1906						
7	3.87	...	...	1	0.66	87	50.26	1907						
7	4.84	...	...	1	0.78	90	60.69	1908				Barsi Light ...	(a)	28
7	4.27	...	...	2	0.77	1,05	60.45	1909						
14	5.93	...	...	2	0.89	1,62	63.89	1910						
14	5.08	...	...	2	0.83	1,66	59.67	1911						
22	9.88	...	...	4	1.66	80	36.39	1905						
40	13.46	...	...	4	1.64	1,09	49.90	1906	Bakhtiarpore-Bihar Light ...	(a)	29			
36	17.67	...	...	3	0.59	3,19	58.76	1907						
32	21.24	...	...	5	1.08	2,59	60.08	1908						
33	13.60	...	...	4	0.64	2,55	39.58	1909						
33	12.64	...	...	5	0.66	3,08	44.13	1910						
1,09	14.59	...	...	5	0.70	3,46	46.44	1911	Champaner-Shivrajpur Light ...	(a)	30			
5	5.83	...	...	1	0.39	53	59.84	1905						
5	4.63	...	...	1	0.61	63	56.77	1906						
5	4.83	...	...	1	0.64	65	56.45	1907	Cutch ...	(a)	31			
6	5.46	...	...	1	0.80	65	59.04	1908						
6	3.75	...	...	1	0.56	94	61.70	1909						
6	5.30	...	...	3	2.66	69	55.99	1910						
9	6.73	...	...	3	1.99	72	53.38	1911						
8	13.34	...	...	1	0.66	49	75.74	1911	Dehri-Bohtas Light ...	(a)	32			
...	...	...	...	...	...	7	26.63	1905						
...	...	...	...	...	...	20	50.64	1906						
3	5.33	...	...	...	...	19	44.31	1907						
3	6.30	...	...	...	...	23	54.41	1908						
3	3.65	...	...	...	...	37	43.61	1909						
2	2.55	...	...	...	...	37	40.24	1910						
2	2.25	...	...	...	...	42	42.05	1911						
4	16.93	...	...	...	...	36	151.07	1911						

## Details of working expenses of each railway

CLASSIFICATION No. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9.)		Railway system.	Year.	Maintenance of way, works and stations.		Locomotive expenses.		Carriage and wagon expenses.		Traffic expenses.	
Main head.	Sub-head.			Rs.	Propor- tion per cent to gross earnings.	Rs.	Propor- tion per cent to gross earnings.	Rs.	Propor- tion per cent to gross earnings.	Rs.	Propor- tion per cent to gross earnings.
1	2	3	4	5	6	7	8	9	10	11	12
		3' 6" GAUGE—contd.									
33	(a)	Dholpur-Bari	1908 1909 1910 1911	13 5 6 6	58.88 15.39 13.12 14.10	7 9 9 6	31.44 23.33 17.95 15.00	1 2 2 2	4.85 5.90 5.20 7.71	6 7 5 5	29.85 19.92 10.19 12.15
		Kalka-Simla	1905 1906 1907	9 1.05 ...	1.14 13.71 ...	1.77 1.67 ...	23.48 21.81 ...	22 17 ...	2.98 2.30 Amalgamated	67 85 with the	8.03 11.11
10	(j) & (k)	Morappur-Dharmapuri and Tirupattur-Krish- nagiri.	1905 1906 1907 1908 1909 1910 1911	6 5 23 19 20 24 31	46.15 6.33 25.31 20.27 23.53 23.30 29.25	3 37 29 42 49 39 39	23.08 46.84 30.76 43.59 57.04 37.67 36.79	2 11 9 10 5 5 5	15.89 13.92 9.67 11.29 5.88 4.85 4.72	2 14 11 7 7 8 7	15.83 17.72 11.91 8.04 8.24 7.77 6.60
1	(d)	Mourbhanj	1905 1906 1907 1908 1909 1910 1911	5 7 6 6 7 13 6	15.93 14.75 13.78 12.25 12.50 21.08 9.88	6 7 7 7 10 9 9	18.49 15.62 16.31 13.23 17.94 14.88 14.52	2 4 2 1 6 2 4	5.33 9.27 5.01 2.32 9.23 3.33 6.45	4 4 5 5 7 7 7	13.88 9.08 10.70 10.78 12.67 12.18 11.29
1	(f)	Parlakimodi Light	1905 1906 1907 1908 1909 1910 1911	5 6 7 8 7 5 8	18.21 25.79 28.20 31.80 26.52 19.41 24.24	9 16 17 8 6 7 8	32.44 72.87 65.99 31.63 24.12 24.03 24.24	1 5 2 2 ... 1 2	3.71 22.62 8.24 10.76 ... 3.35 6.06	4 3 3 4 4 3 3	13.61 14.94 13.25 12.85 14.34 11.50 9.69
22	(c)	Powayan Light	1905 1906 1907 1908 1909 1910 1911	15 15 15 14 13 14 14	16.17 15.17 17.02 17.18 14.08 14.70 13.24	15 17 17 20 21 19 19	16.06 17.43 18.79 24.88 22.94 19.66 18.57	5 6 4 3 4 5 6	5.71 5.79 4.95 3.01 3.86 5.73 5.86	9 9 8 7 8 8 10	10.08 9.10 9.53 9.17 9.80 8.85 9.93
29	(a)	Shabdara (Delhi)-Saharan- pur Light.	1907 1908 1909 1910 1911	14 43 33 45 41	13.80 12.78 8.11 8.86 8.26	27 55 58 63 59	26.23 16.40 14.36 12.38 10.97	4 9 11 8 8	3.35 2.84 2.62 1.70 1.53	22 45 63 64 66	21.33 18.94 15.43 12.76 13.41
40	(a)	Tarkessur-Magra Light	1905 1906 1907 1908 1909 1910 1911	13 13 14 14 16 15 16	14.92 13.17 12.47 12.74 12.89 11.95 12.41	17 16 22 26 26 21 21	19.59 16.07 19.98 23.27 21.00 16.60 17.06	4 4 5 6 8 7 8	4.03 4.26 4.57 5.02 6.59 5.71 6.25	17 19 20 20 21 22 23	20.16 18.57 17.96 18.09 17.09 16.13 16.18

DIX 5—contd.

system. [In thousands of rupees.]

General charges.		Steam-boat expenses.		Special and miscellaneous expenses, including contribution to Provident Fund.		Total working expenses.		Year.	Railway system.	CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 2.)	
Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.			Sub-head.	Main head.
13	14	15	16	17	18	19	20	21	22	23	24
4	24.77	...	...	1	2.95	32	152.74	1908	} Dholpur-Bari ...	(a)	33
6	16.24	...	...	1	2.68	30	84.08	1909			
8	12.58	...	...	...	...	28	58.29	1910			
6	15.44	...	...	1	1.10	27	65.50	1911			
62	8.41	...	...	14	1.81	3.51	46.78	1905	} Kalka-Simla ...	...	...
77	10.15	...	...	6	0.74	4.57	59.32	1906			
		...	...	...	...	...	...	1907			
8	10.13	...	...	1	7.69	14	107.69	1905	} Morappur-Dharmapuri and Tirupattur-Krishnagiri.	(j) & (k)	10
7	7.40	...	...	6	7.59	81	102.53	1906			
5	6.84	...	...	5	5.37	84	90.32	1907			
7	8.24	...	...	3	3.46	36	94.51	1908			
5	4.85	...	...	3	3.53	91	107.06	1909			
5	4.73	...	...	2	1.94	83	80.53	1910			
5	4.73	...	...	1	0.94	88	83.02	1911			
5	16.33	...	...	...	...	22	70.01	1905	} Mourbhanj ...	(d)	1
1	2.45	...	...	...	...	23	51.17	1906			
2	4.68	...	...	...	...	22	50.46	1907			
2	4.29	...	...	1	0.65	22	43.62	1908			
2	3.87	...	...	...	...	31	56.23	1909			
2	3.56	...	...	1	1.17	33	56.70	1910			
2	3.22	...	...	1	1.61	29	46.77	1911			
4	15.55	...	...	...	...	23	83.52	1905	} Parlakimedi Light ...	(f)	1
1	6.42	...	...	...	...	31	145.14	1906			
2	7.42	...	...	...	...	31	123.10	1907			
2	9.78	...	...	...	...	26	98.32	1908			
2	8.07	...	...	...	...	19	73.05	1909			
2	7.20	...	...	1	4.01	19	68.50	1910			
2	6.06	...	...	...	...	23	69.89	1911			
11	11.27	...	...	1	1.13	56	60.37	1905	} Powayan Light ...	(g)	32
12	11.81	...	...	1	1.04	60	60.84	1906			
7	7.90	...	...	1	1.10	52	60.34	1907			
5	6.11	...	...	...	...	49	60.25	1908			
8	9.19	...	...	1	1.03	55	60.35	1909			
10	10.43	...	...	1	0.91	57	60.31	1910			
12	11.85	...	...	1	0.55	62	60.00	1911			
4	4.14	...	...	1	1.20	72	70.55	1907	} Shabdara (Delhi)-Sabaranpur Light.	(a)	39
36	10.71	...	...	6	1.66	1.94	57.73	1908			
39	9.70	...	...	6	1.48	2.10	51.70	1909			
36	7.59	...	...	3	1.51	2.25	44.60	1910			
33	7.08	...	...	7	1.38	2.22	41.61	1911			
14	16.05	...	...	...	...	65	74.81	1905	} Tarakesur-Magra Light...	(a)	40
13	13.32	...	...	2	1.37	67	67.26	1906			
14	13.51	...	...	1	1.37	76	62.70	1907			
14	12.04	...	...	3	1.36	83	73.04	1908			
13	10.64	...	...	2	1.30	96	69.46	1909			
15	12.25	...	...	1	0.73	81	65.36	1910			
15	12.25	...	...	1	0.73	81	65.36	1910			
15	11.63	...	...	1	0.52	84	66.05	1911			

## Details of working expenses of each railway

CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9.)		Railway system.	Year.	Maintenance of way, works and stations.		Locomotive expenses.		Carriage and wagon expenses.		Traffic expenses.	
Main head.	Sub-head.			Ra.	Propor- tion per cent to gross earnings.	Ra.	Propor- tion per cent to gross earnings.	Ra.	Propor- tion per cent to gross earnings.	Ra.	Propor- tion per cent to gross earnings.
1	2	3	4	5	6	7	8	9	10	11	12
		<b>2' 6" GAUGE—contd.</b>									
41	(a)	Tesore-Balipara Light ...	1905	14	13.24	20	19.01	10	9.47	18	17.76
			1906	14	11.87	31	17.99	13	10.28	18	15.83
			1907	16	14.71	21	18.37	12	10.76	18	16.05
			1908	15	17.23	15	16.94	7	7.18	15	16.90
			1909	12	13.97	13	14.57	8	9.76	14	16.57
			1910	14	14.73	13	14.09	9	9.90	15	16.02
			1911	24	20.77	14	11.77	11	9.96	17	14.92
		<b>2' 0" GAUGE.</b>									
42	(a)	Darjeeling-Himalayan ...	1905	1.20	12.33	1.63	17.30	53	5.39	80	8.23
			1906	1.34	13.67	1.65	16.79	53	5.46	85	8.68
			1907	1.00	10.51	1.44	15.16	56	5.86	85	8.90
			1908	98	10.40	1.52	16.03	46	4.88	91	9.67
			1909	85	8.63	1.77	17.37	48	4.87	98	9.87
			1910	94	9.40	1.74	17.37	59	5.83	1.00	9.90
			1911	1.04	10.15	1.50	17.47	57	5.54	1.02	9.87
43	(a)	Howrah-Amta Light ...	1905	34	10.24	39	11.61	18	5.41	45	13.53
			1906	32	9.21	55	15.55	21	5.87	51	14.42
			1907	33	8.94	49	13.14	16	4.29	54	14.48
			1908	44	10.79	61	15.29	20	5.02	58	14.45
			1909	59	13.40	65	14.81	16	3.70	66	15.21
			1910	56	11.54	83	17.20	33	6.85	67	15.32
			1911	51	10.19	65	13.66	26	5.17	69	13.90
44	(a)	Howrah-Sheakhala Light ...	1905	11	13.02	9	10.66	5	5.87	20	22.20
			1906	11	11.96	12	13.06	3	4.01	22	23.35
			1907	12	12.43	13	13.96	4	4.75	21	21.61
			1908	16	15.82	17	16.39	7	7.27	21	20.88
			1909	18	16.68	17	15.83	5	4.48	23	21.47
			1910	11	9.67	12	9.95	3	2.43	21	17.30
			1911	16	12.23	13	10.37	3	2.59	22	17.45
45	(a)	Jagadhri Light ...	1911	1	19.36	3	40.60	...	...	2	20.65
46	(a)	Jerhat (Provincial) ...	1905	19	24.13	23	29.85	7	8.42	14	17.75
			1906	22	23.90	25	26.77	6	5.93	14	15.63
			1907	26	27.84	27	29.83	9	10.63	15	15.93
			1908	23	22.71	31	30.02	6	6.32	16	16.99
			1909	16	16.20	35	34.70	4	4.47	16	17.71
			1910	22	22.97	23	23.84	3	3.63	14	15.05
			1911	21	19.27	24	23.02	7	6.42	14	12.34
47	(a)	Pipar Road-Bhavi Light...	1910	...	...	1	63.51	...	...	...	...
			1911	3	19.87	5	30.90	1	5.63	2	10.75
		<b>Total of all railways</b>	1905	4,91,54	11.55	7,02,36	16.84	1,84,06	4.61	3,31,02	7.94
			1906	5,43,70	12.32	7,72,09	17.51	1,93,71	4.50	3,71,48	8.41
			1907	5,99,19	12.67	8,58,43	18.15	2,18,30	4.61	4,17,67	8.33
			1908	6,22,19	13.88	9,76,59	21.79	2,63,37	5.88	4,55,21	10.15
			1909	6,82,95	12.39	9,52,19	20.23	2,54,42	5.40	4,63,54	9.85
			1910	6,35,86	12.43	9,51,61	18.61	2,52,68	4.94	4,77,91	9.34
			1911	6,97,47	12.62	10,00,77	18.10	2,85,78	5.17	4,97,03	8.99

DIX 5—concl.

system. [In thousands of rupees.]

General charges.		Steam-boat expenses.		Special and miscellaneous expenses, including contribution to Provident Fund.		Total working expenses.		Year.	Railway system.	CLASSIFICATION No. OF RAILWAY, (DETAILED IN "INDEX" TO APPENDIX 9.)	
Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.	Rs.	Proportion per cent to gross earnings.			Sub-head.	Main head.
13	14	15	16	17	18	19	20	21	22	23	24
<b>2' 6" GAUGE—concl.</b>											
13	12-80	...	...	1	1-52	76	73-80	1905	} Tespore-Palipara Light ...	(a)	41
14	12-16	...	...	1	1-38	80	69-51	1906			
14	12-69	...	...	2	1-47	83	74-05	1907			
14	15-69	...	...	2	2-29	63	78-43	1908			
14	15-74	...	...	1	1-61	62	72-52	1909			
15	16-18	...	...	2	1-49	63	73-40	1910			
15	13-89	...	...	2	1-42	63	72-23	1911			
<b>2' 0" GAUGE.</b>											
1,11	11-86	...	...	32	3-29	5,63	57-99	1905	} Darjeeling-Himalayan ...	(a)	42
1,11	11-29	...	...	31	3-18	5,79	59-07	1906			
1,06	11-21	...	...	30	3-18	5,21	54-81	1907			
1,05	11-09	...	...	31	3-31	5,23	55-33	1908			
1,02	10-29	...	...	39	3-99	5,49	55-52	1909			
1,01	10-08	...	...	34	3-36	5,62	55-96	1910			
1,07	10-37	...	...	35	3-46	5,85	56-86	1911			
13	3-83	...	...	1	0-45	1,50	45-42	1905	} Howrah-Amta Light ...	(a)	43
13	3-60	...	...	2	0-60	1,74	49-45	1906			
13	3-54	...	...	2	0-74	1,67	45-13	1907			
16	4-03	...	...	3	0-86	2,02	50-67	1908			
17	3-86	...	...	3	0-81	2,26	51-79	1909			
24	4-30	...	...	6	1-17	2,63	55-43	1910			
27	5-24	...	...	8	1-70	2,43	49-36	1911			
5	5-25	...	...	...	...	50	56-30	1905	} Howrah-Sheakhala Light	(a)	44
5	5-33	...	...	1	0-85	54	59-11	1906			
5	5-08	...	...	1	0-88	53	53-31	1907			
5	4-69	...	...	1	1-00	67	63-05	1908			
5	4-70	...	...	1	1-00	69	64-16	1909			
8	6-57	...	...	1	1-14	58	47-11	1910			
9	6-92	...	...	1	1-07	64	59-08	1911			
1	6-75	...	...	...	...	7	87-36	1911	Jagadhri Light ...	(a)	45
12	15-68	...	...	1	1-04	76	96-37	1905	} Jorhat (Provincial) ...	(a)	46
12	12-82	...	...	1	0-83	80	85-93	1906			
13	14-21	...	...	1	0-94	91	99-43	1907			
13	13-04	...	...	1	0-78	90	83-36	1908			
14	14-53	...	...	1	1-02	88	88-66	1909			
15	15-67	...	...	1	1-05	88	92-16	1910			
11	10-09	...	...	1	0-92	78	71-56	1911			
...	...	...	...	...	...	1	63-51	1910	} Pipar Road-Bhavi Light	(a)	47
...	...	...	...	...	...	11	67-20	1911			
1,86,96	4-49	18,01	0-43	91,35	2-19	19,95,30	47-55	1905	} Total of all railways	...	...
1,95,15	4-49	19,72	0-45	97,47	2-21	22,03,22	49-89	1906			
2,11,49	4-47	21,84	0-46	1,05,40	2-23	24,32,31	51-42	1907			
2,31,29	5-16	26,95	0-60	1,24,65	2-73	27,00,25	60-24	1908			
2,35,07	4-99	25,76	0-55	1,24,55	2-65	26,38,48	56-06	1909			
2,35,29	4-60	26,94	0-53	1,36,43	2-65	27,15,72	53-10	1910			
2,42,63	4-39	25,23	0-46	1,35,00	2-44	23,33,92	52-17	1911			









## APPENDIX 6—contd.

## General results of working each railway system.

CLASSIFICATION No. OF RAILWAY. (REFEREND IN "INDEX" TO APPENDIX 0).		Railway system.	Year.	Mileage open at close of the calendar year.	Total train-mileage (in thousands of miles).	Total capital outlay, including ferries and suspense, on open line (in thousands of rupees).	Gross earnings (in thousands of rupees).	Working expenses (in thousands of rupees).	Net earnings (in thousands of rupees).	Percentage of working expenses to gross earnings.	Percentage of net earnings on total capital outlay given in column (7).
Main head.	Sub-head.										
1	2	3	4	5	6	7	8	9	10	11	12
		3' 3 3/4" GAUGE— consolid.									
23	(a)	Udaipur-Chitor- garh.	1905 1906 1907 1908 1909 1910 1911	67-80 67-80 67-80 67-80 67-80 67-80 67-80	53 55 54 57 55 56 77	20,67 20,76 20,76 20,78 20,96 20,97 21,16	2,08 2,48 2,51 2,89 2,43 2,52 2,84	1,04 1,12 1,14 1,21 1,18 1,18 1,31	1,04 1,36 1,37 1,18 1,25 1,34 1,53	50-19° 45-33° 45-43° 50-59° 48-62° 47-05° 46-07°	5-03 6-55 6-60 5-68 5-96 6-36 7-24
25	(a)	2' 6" GAUGE, Arrah-Sasaram Light.	1911	60-50	73	20,76	1,38	89	44	68-78°	2-13
27	(a)	Baraset-Basirhat Light.	1905 1906 1907 1908 1909 1910 1911	26-06 26-06 26-06 26-06 24-50 51-12 51-12	41 53 57 58 70 122 124	9,07 9,58 10,05 10,53 14,21 21,81 22,13	1,11 1,51 1,73 1,49 1,74 2,36 2,78	55 71 87 90 1,05 1,62 1,66	56 80 86 89 69 74 1,12	49-93° 47-23° 50-26° 60-69° 60-45° 68-89° 59-87°	6-17 8-89 8-56 5-60 4-88 8-86 5-07
28	(a)	Barni Light ...	1905 1906 1907 1908 1909 1910 1911	27-93 78-50 78-50 78-50 78-50 78-50 115-84	25 37 128 118 133 145 149	13,02 41,11 47,48 48,29 49,56 50,34 49,00	2,19 2,19 5,43 4,81 6,45 6,98 7,45	80 1,09 3,19 2,59 2,55 3,08 3,45	1,39 1,10 2,24 1,72 3,90 2,90 3,99	36-39° 49-90° 58-78° 60-08° 69-58° 44-18° 46-44°	10-68 2-63 4-72 3-56 7-67 7-75 6-84
29	(a)	Bukhtiarpora- Bihar Light.	1905 1906 1907 1908 1909 1910 1911	18-50 18-50 18-50 18-50 28-00 28-00 39-00	27 31 29 33 45 43 44	8,23 8,43 8,93 9,01 11,97 12,01 12,38	89 1,11 1,11 1,10 1,52 1,24 1,34	53 68 65 85 94 69 72	36 48 46 45 58 55 62	59-84° 56-77° 58-45° 59-04° 61-70° 55-99° 53-33°	4-37 5-69 5-15 4-99 4-85 4-54 5-04
30	(a)	Champaner-Shiv- rajpur Light.	1911	20-24	27	9,03	64	49	15	75-74°	1-72
31	(a)	Cutch ...	1905 1906 1907 1908 1909 1910 1911	11-67 11-67 11-67 36-78 36-78 36-78 36-73	— 16 24 19 27 29 32	4,36 4,48 4,58 8,75 9,43 9,43 9,49	28 40 48 40 85 94 1,01	7 20 19 22 37 37 42	21 20 24 18 48 57 59	26-63° 50-54° 44-31° 54-41° 43-61° 40-24° 42-06°	4-93 4-48 5-24 2-06 5-03 6-04 6-17
32	(a)	Dehri-Rohas Light.	1911	23-83	20	5,33	24	36	-12	151-07°	...
33	(a)	Dholpur-Bari	1908 1909 1910 1911	19-62 19-62 19-62 19-62	15 19 20 19	7,34 6,92 6,97 7,41	21 36 48 41	32 30 28 27	-11 6 20 14	152-74° 84-06° 53-89° 65-50°	... 0-67 2-86 1-93
...	...	Kalka-Simla ...	1905 1906 1907	59-44 59-44	164 143	1,76,12 1,77,93	7,52 7,64	3,51 4,67	4,01 3,07	46-73° 59-82°	2-23 1-73
10	(f) & (g)	Morappur- Dharmapuri and Tirupattur- Krishnagiri.	1905 1906 1907 1908 1909 1910 1911	25-38 43-91 43-91 43-91 43-91 43-91 43-91	11 30 36 33 34 34 30	10,64 19,16 19,29 19,27 19,24 19,58 19,44	13 79 93 81 85 1,08 1,06	14 81 84 86 91 83 83	-1 -2 9 5 -6 20 13	107-69° 102-53° 90-82° 94-51° 107-06° 80-53° 93-02°	... 0-47 0-26 ... 1-02 0-33
1	(d)	Mourbhanj ...	1905 1906 1907 1908 1909 1910 1911	32-41 32-41 32-41 32-41 32-41 32-41 32-41	40 24 24 26 25 26 26	6,22 6,95 7,13 7,19 7,20 7,20 7,30	31 45 44 51 55 53 63	22 23 22 22 31 33 29	9 23 22 29 25 25 33	70-01° 51-17° 50-46° 43-62° 56-25° 56-70° 46-13°	1-45 3-17 3-09 4-03 3-33 3-47 4-53

\*See Appendix 3.



## APPENDIX 7.

*Main results of working of all Indian railways treated as one system.*

Serial number.	Particulars.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	REMARKS.
1	2	3	4	5	6	7	8	9	10
1	Mileage open at close of the calendar year. Miles	28,287	29,059	29,957	30,576	31,490	32,099	32,899	
2	Total Capital outlay, including ferries and suspense, on open lines (in thousands of rupees)	Rs. 3,58,51,80	3,71,27,05	3,91,88,98	4,11,91,71	4,29,83,20	4,39,04,78	4,50,06,80	
3	Gross earnings (in thousands of rupees)	41,69,92	44,18,58	47,80,51	44,82,09	47,06,88	51,14,22	55,27,92	
4	Gross earnings per mile open	14,744	15,176	15,794	14,668	14,948	15,936	16,838	
5	Gross earnings per mile open per week	284	292	304	282	287	306	324	
6	Gross earnings per train-mile	3.89	3.85	3.79	3.51	3.67	3.85	3.87	
7	Total working expenses (in thousands of rupees)	19,95,30	22,02,22	24,32,31	27,00,25	26,38,48	27,15,72	28,83,92	
8	Working expenses per mile open	7,055	7,572	8,121	8,838	8,380	8,462	8,782	
9	Working expenses per train-mile	1.86	1.92	1.95	2.11	2.06	2.04	2.02	
10	Percentage of working expenses to gross earnings	47.85	49.89	51.42	60.24	56.06	58.10	62.17	
11	Net earnings (in thousands of rupees)	Rs. 21,74,62	22,11,36	22,98,20	17,82,44	20,67,80	23,98,50	26,44,00	
12	Net earnings per mile open	7,669	7,604	7,673	5,830	6,568	7,474	8,051	
13	Net earnings per train-mile	3.08	1.93	1.84	1.40	1.61	1.61	1.65	
14	Percentage of net earnings on total capital outlay (item 2)	6.07	5.96	5.86	4.33	4.81	5.46	5.87	
15	Coaching train-miles (in thousands)	83,491	87,155	43,258	47,885	48,191	48,598	50,838	
16	Goods train-miles (in thousands)	89,712	41,698	46,869	44,875	44,065	47,893	53,219	
17	Mixed train-miles (in thousands)	29,892	81,014	30,142	29,944	30,859	31,986	33,746	
18	Total, including miscellaneous train-miles (in thousands)	107,046	114,489	124,786	127,981	128,260	132,823	142,944	
19	Unit-mileage of passengers (in thousands)	9,900,481	10,688,095	11,840,849	12,102,929	12,364,579	13,432,477	14,372,948	
20	Freight ton-mileage of goods (in thousands)	9,040,760	9,770,574	10,840,885	9,925,830	9,340,441	12,092,916	12,358,264	
21	Average miles a ton of goods was carried.	176.60	166.97	174.58	159.07	158.37	184.83	167.44	
22	Average rate charged for carrying a ton of goods one mile	5.19	5.42	5.18	5.09	5.78	4.83	4.73	
<i>Average miles a passenger was carried.</i>									
23	1st class	98.29	100.71	100.69	100.76	103.35	99.72	111.60	
24	2nd class	72.92	74.47	70.91	71.28	69.24	75.07	76.33	
25	Intermediate class	63.78	64.12	59.29	58.82	54.89	52.41	57.27	
26	3rd class	40.92	40.36	39.65	38.65	38.74	37.12	37.72	
27	Season and Vendors' tickets.	9.16	9.57	9.31	8.94	8.69	8.79	8.78	
28	Total	99.90	99.48	98.71	97.68	97.54	96.15	96.87	
<i>Average rate charged per passenger per mile.</i>									
29	1st class	18.31	18.16	18.06	12.95	12.89	14.55	14.29	
30	2nd class	5.77	5.74	5.76	5.76	5.94	6.67	6.78	
31	Intermediate class	3.09	3.06	3.05	3.04	3.06	3.15	3.19	
32	3rd class	2.80	2.29	2.28	2.28	2.28	2.28	2.29	
33	Season and Vendors' tickets.	1.42	1.38	1.40	1.39	1.42	1.42	1.43	
34	Total	2.47	2.46	2.44	2.44	2.43	2.45	2.47	

## APPENDIX 8.

Railways and tramways projected up to the 31st December 1911.

NAME OF PROJECT.	Connected existing railway system. (For abbreviations used see "Index" to Appendix 9).	Initial and terminal points.	Surveyed or not.	Gauge.	Length.	Estimated cost.	REMARKS.
1	2	3	4	5	6	7	8
					Miles.	Lakhs of rupees.	
<b>BALUCHISTAN.</b>							
Khanai-Hindu Bagh railway	N. W.	Khanai to Hindu Bagh	Surveyed in 1908.	5' 6"	52	64.33	Fully equipped line. Light line. Fully equipped line. Light line. Light line. Projected to develop mining industry and open up Zhob Valley.
				5' 6"	47	28.95	
				2' 6"	32	49.04	
				2' 6"	47	25.94	
<b>BENGAL.</b>							
Bankura (or Bishenpur) Calcutta chord railway.	R. N.	Bishenpur to Hooghly	Surveyed in 1901-1902.	5' 6"	71	132.55	Double line. Single line. Add for Hooghly bridge 6 miles and 73.58 lakhs if at Comipore or 5 miles and 54.47 lakhs if at Panihati; both double line.
		or Bishenpur to Howrah		5' 6"	61	91.02	
						147.11	
						100.75	
Bansi-Baidyanath railway	E. I.	Bansi to Baidyanath	Surveyed in 1899.	5' 6"	44	32.35	
Bechpur-Rangach Bokhara Coalfield railway.	O. & R.	Bechpur (Moghal Sarai) to Lainya.	Surveyed in 1910.	5' 6"	260	361.64	
Bhadrak-Chandballi railway	R. N.	Bhadrak to Chandballi	Not	5' 6"	30	...	New project.
Bhagalpur-Nalhati (or Ahmadpur) railway.	E. I.	Bhagalpur to Nalhati	Surveyed in 1895-1896.	5' 6"	...	...	Bhagalpur to Bansi opened on 1st October 1911.
		or Bhagalpur to Ahmadpur					
Bhojodih-Dalbonganj railway	B. N.	Bhojodih to Dalbonganj	Surveyed in 1889-90 and 1897-98.	5' 6"	171	108.00	
Bokhara and Rangach Coalfields railway.	B. N.	Mohuda to a point on the left bank of the Chootya Nala.	Surveyed in 1908-1909.	5' 6"	42	50.02	Mohuda-Jamooni Section (11 miles) under construction. Second Section from Jamooni to a distance of 12 miles will shortly be commenced.
Futwah-Islampur railway	E. I.	Futwah to Islampur	Not	2' 6"	26	...	New project. Survey by promoters sanctioned since the close of the year.
Gya-Sherghatty railway	E. I.	Gya to Sherghatty	Not	5' 6"	29	...	New project. Survey sanctioned since the close of the year.
Hazaribagh Road-Hazaribagh railway.	E. I.	Hazaribagh Road to Hazaribagh	Not	2' 6"	41	14.00	Reconnitred by promoters. Construction of the first alternative under consideration.
		or Kodarma to Hazaribagh.					
Iseri-Parasnath railway	E. I.	Iseri to Madhubun	Not	2' 6"	12	3.77	Reconnitred by promoters.
Katwa-Ahmadpur railway	E. I.	Katwa to Ahmadpur	Surveyed in 1901-1902.	5' 6"	32	28.28	This alignment favoured by East Indian railway. Concession for construction granted to a private syndicate.
		or Katwa to Sainikha					
Krishnagar-Jalangi railway	E. B.	Krishnagar to Jalangi	Surveyed in 1905.	2' 6"	58	16.29	
Lohardaga-Palkote extension railway.	B. N.	Lohardaga to Palkote	Under survey.	2' 6"	45	...	
Mourthanj Light railway extension.	B. N.	Baripada to Patri and Talband.	Not	2' 6"	48	11.00	
Muzaffarpur-Darbhanga chord railway.	B. & N. W.	Muzaffarpur to Darbhanga	Surveyed in 1906-1907.	3' 3 1/2"	38	32.70	

\* With second-hand materials and rolling-stock. With new materials and rolling-stock cost is 18.14 lakhs.

## APPENDIX 8—contd.

Railways and tramways projected up to the 31st December 1911.

NAME OF PROJECT.	Connected existing railway system. (For abbreviations used see "Index" to Appendix 9).	Initial and terminal points.	Surveyed or not.	Gauge.	Length.	Estimated cost.	REMARKS.
1.	2.	3.	4.	5.	6.	7.	8.
					Miles.	Lakhs of rupees.	
<b>BENGAL—concl'd.</b>							
Sambalpur-Khurda railway	B. N.	Sambalpur to Khurda	Surveyed in 1891-1892.	3' 6"	190	237'00	Bengal Government urged construction by State on administrative and political grounds.
Shibnibash-Kotabandpur-Magura branch railway.	B. B.	Shibnibash to Magura.			32	48'94	Estimate includes cost of branch No. (1).
		(i) via Khallispur, Durgapur and Jhenidah.	Surveyed in 1897-98 for a 2' 6" gauge line and re-surveyed in 1900-1901 for 5' 6" gauge line.	5' 6"	48	58'07	Estimate includes cost of branch No. (2).
		(ii) via Khallispur and Kaliganj direct to Magura.			55	52'49	Estimate includes cost of branch No. (1).
		(iii) via Khallispur, Kaliganj and Jhenidah.				12	...
Branch—		(1) Jhenidah to Sulkopa or (2) Kaliganj to Sulkopa.			20	...	
Sointilla-Sompur branch railway.	B. N.	Sointilla to Sompur	Surveyed in 1897-98.	5' 6"	48	30'62	To connect Raipur-Vizianagram with Sambalpur-Khurda.
Tewaraha-Sitamathi branch railway.	B. & N. W.	Tewaraha to Sitamathi	Surveyed in 1906-1907.	3' 3½"	80	16'53	Tewaraha is at mile 19 on projected Munzafpur-Darbhanga chord railway.
<b>BOMBAY.</b>							
Aden railway	...	Tawahi to Shaik Othman	Surveyed in 1910-1911.	3' 6"	10	5'58	Maala-Shaik Othman section, 7'85 miles, cost 3'7 lakhs.
Bagal Kot-Hungund branch railway.	M. & S. M.	Bagal Kot to Hungund	Surveyed in 1900.	3' 3½"	31	24'42	
Baroda-Savli railway	B. B. & C. I.	Baroda to Savli, via Wagodhia, Ajwa and Jarod.	Surveyed in 1909-1910.	2' 6"	33	...	The Wagodhia-Jarod section is under construction. Commencement of earthwork on the Jarod-Savli section sanctioned as a measure of famine relief since the close of the year.
Belapur (or Lakh) Sangamner branch railway.	G. I. P.	Dakh to Sangamner	Surveyed in 1900.	5' 6"	22	...	Alternative alignment, via Babliwar, 4 miles shorter.
Bombay-Sind Connection railway.	B. B. & C. I. & N. W.	Virangam to Badin, via Badhanpur, Suigam and Nagarparker.	Surveyed in 1907-1909.	5' 6"	270	318'19	The project as a whole is in abeyance but construction of Virangam-Sami section (45 miles) under consideration; commencement of earthwork for famine labour on which has been sanctioned since the close of the year.
Botad-Jasdan railway	B. N. G.	Botad to Jasdan	Surveyed in 1911.	3' 3½"	84	10'48	New project. Commencement of earthwork sanctioned as a measure of famine relief.
Dabhora-Ambaji Mata railway.	B. B. & C. I.	A point on the Gadhwada thank Frontier to Ambaji Mata.	Partly surveyed in 1910.	2' 6"	27	...	Construction of the first 16 miles to Samia sanctioned in July 1911. Estimated cost 7'27 lakhs.
Deesa-Tharad railway	B. B. & C. I.	Deesa to Tharad with branches.					
		(i) Diodar to Badhanpur	Surveyed in 1900	3' 3½"	85	22'72	Extension of Palanpur-Deesa. Deesa-Diodar Section (28 miles) cost 7'36 lakhs and Diodar-Tharad Section (33 miles) cost 5'44 lakhs.
		(ii) Abasana to Suigam					Cost 21'70 lakhs including cost of promotion, etc. Re-survey sanctioned.
Dholka-Dholera railway	B. B. & C. I.	Dholka to Dholera	Surveyed in 1906-1909.	3' 3½"	40	19'56	Proposals for construction by private enterprise under consideration.
Dhond-Baramati railway	G. I. P.	Dhond to Baramati	Surveyed in 1911.	2' 6"	27	10'15	
Dhulia-Amalner branch railway.	G. I. P.	Dhulia to Amalner	Surveyed in 1892-1893.	5' 6"	20	20'00	
Gadag-Yalvigi railway	M. & S. M.	Gadag to Yalvigi, with branches to Gold mines.	Surveyed in 1905-1906.	3' 3½"	33	...	
Jacobabad-Kashmore railway	N. W.	Jacobabad to Kashmore	Not	2' 6"	78	...	New project. Survey sanctioned.



## APPENDIX 8—contd.

Railways and tramways projected up to the 31st December 1911.

NAME OF PROJECT.	Connected existing railway system. (For abbreviations used see "Index" to Appendix 9A)	Initial and terminal points.	Surveyed or not.	Gauge.	Length.	Estimated cost.	REMARKS.
1	2	3	4	5	6	7	8
					Miles.	Lakhs of rupees.	
<b>BOMBAY—contd.</b>							
Jamnagar-Dwarka extension railway.	J. N.	Jamnagar to Dwarka, <i>via</i> Khambhalia, with Khambhalia-Salaya branch.	Surveyed in 1911.	3' 3½"	{ 80 10	{ ... ...	Proposed by Navanagar State. The line lies partly in that State and partly in Baroda. Commencement of earthwork on Navanagar portion sanctioned as a measure of famine relief and the Baroda portion sanctioned for construction.
Junagad-Una railway ...	J. N. D.	Junagad to Una ...	Under survey.	...	...	...	Earthwork on Junagad-Visavadar section sanctioned as a measure of famine relief; also on the Una-Sodardi section since the close of the year. A portion of the former section, up to Bilkha (14 miles), is under construction.
Kakoohi-Kakhal railway ...	B. B. & C. I.	Kakoohi to Kakhal with Khalipur-Patan branch.	Surveyed in 1911.	3' 3½"	43	15.80	Proposed by Baroda Durbar. Construction sanctioned since the close of the year.
Kalyan-Belapur-Paneval-Karjat Light railway.	G. I. P. ...	Kalyan to Karjat, <i>via</i> Taloja and Chowk. with Taloja-Sansola branch, <i>via</i> Belapur. Chowk to Nagothna extension.	Surveyed in 1907-1908. Not ...	{ 2' 0" 2' 6" 2' 0" 2' 6" 2' 0" 2' 6"	{ 40 9 37	{ 15.29 16.17 2.57 2.79	Proposals from private enterprises for construction on 2' 6" gauge from Kalyan to Paneval, <i>via</i> Taloja, with Taloja-Sansola branch, under consideration.
Kapadvanj-Meghraj railway	N. K.	Kapadvanj to Meghraj ...	Under survey.	2' 6"	47	...	Reconnoitred in 1907-1908. New project.
Koregaon-Satara railway ...	M. & S. M.	Koregaon to Satara ...	Surveyed in 1911.	3' 3½"	13	4.44	Surveyed by promoters.
Kudchi-Bagalkot railway ...	M. & S. M.	Kudchi to Bagalkot, <i>via</i> Jamkhandi.	Under survey.	3' 3½"	76	...	New project.
Kundla-Bhavnagar railway...	B. N. G. ...	Kundla to Bhavnagar, <i>via</i> Mohwa.	Under survey.	3' 3½"	35	...	Proposed by Bhavnagar State. Commencement of earthwork on Kundla-Mohwa section sanctioned as a measure of famine relief.
Kurla-Trombay railway ...	G. I. P. ...	Kurla to Trombay ...	Surveyed in 1907-1908.	5' 6"	5	...	
Larkhana-Kambar-Shahdadpur railway.	N. W. ...	Larkhana to Shahdadpur ...	Surveyed in 1899-1900.	{ 2' 6" 5' 6"	{ 33 33	{ 11.68 19.33 18.07	Fully equipped. Light line.
Light Railways in Sind ...	J. B. ...	(i) Shadipalli to Mehoo Suboo. (ii) Shadipalli to a point on (iii) <i>via</i> Samara. (iii) Chhor to Tatta ... (iv) Mirpur Buttora on (ii) to Dhindee. (v) Belo on (iii) to Shahbunder. (vi) Hyderabad (or Kotri) to Karachi, <i>via</i> Tatta.	Not ...	...	...	...	(vi) Will be constructed by State.
Lower Sind branches ...	N. W. ...	(i) Badin to Jungahahi ... (ii) Tanjo Muhammad Khan to Mirpur Buttora.	Surveyed in 1902.	5' 6"	{ 70 33	{ 37.42 17.19	The Chhor-Tatta and Mirpur Buttora-Dhindee lines proposed under the Sind Light railways scheme partially cover the alignment of these branches.
Lunavada-Jhalod railway ...	G. I.	Lunavada to Jhalod, <i>via</i> Sunth and Rampur.	Not ...	2' 6"	37	...	New project. Survey mentioned.
Miraj-Bijapur branch railway	M. & S. M.	Miraj to Bijapur ...	Not...	2' 6"	77	...	Construction by Barai Light railway contemplated.
Nadiad-Kaira railway ...	B. B. & C. I.	Nadiad to Kaira, <i>via</i> Piroj Vasan and Natar.	Not...	2' 6"	18	...	New project.
Nipani branch railway ...	M. & S. M.	Nipani to a point on the Poona branch of the M. & S. M. railway.	Not..	3' 3½"	34	...	New project. Survey mentioned.
Pandharpur-Miraj extension railway.	B. I. ...	Pandharpur town to Miraj	Surveyed in 1908.	2' 6"	34	50.81	Construction by Barai Light railway contemplated.

## APPENDIX 8—contd.

Railways and tramways projected up to the 31st December 1911.

NAME OF PROJECT.	Connected existing railway system. (For abbreviations used see "Index" to Appendix 9).	Initial and terminal points.	Surveyed or not.	Gauge.	Length.	Estimated cost.	REMARKS.
Projects are arranged under Provinces in which situated.							
1.	2.	3.	4.	5.	6.	7.	8.
					Miles.	Lakhs of rupees.	
<b>BOMBAY—contd.</b>							
Talegaon-Manchar railway	G. I. P.	Talegaon to Manchar	Partly surveyed in 1910.	2' 6"	80	...	First section to Khed (21 miles) surveyed by promoters. Estimated cost 18'77 lakhs. Resurvey of the section sanctioned.
Timba-Savli railway	B. B. & C. I.	Timba to Savli	Not...	2' 6"	80	...	Proposed by Baroda Durbar.
Vasad-Katna railway	B. B. & C. I.	Vasad to Katna via Borsad and Vadali or via Dabhasi, Bochasan, Golel Unali, Shahijpur and Bas.	Not...	2' 6"	...	...	New project. Traffic prospects being investigated.
Vijapur-Chhara railway	B. B. & C. I.	Vijapur to Chhara	Not ...	3' 3 1/2"	...	...	Proposed by Baroda Durbar as extension of their Kalol-Vijapur railway.
Vismagar (or Vadnagar)-Vijapur extension railway.	B. B. & C. I.	Vismagar to Vijapur or Vadnagar to Vijapur	Sur-veyed in 1904	3' 3 1/2"	16 17	5'34 ...	This alternative is favoured by Baroda Durbar, in whose territory the line lies throughout. With the existing Kalol-Vijapur railway the extension will form a chord between B. M. railway and Gaekwar's Mehsana railway. Project is at present in abeyance.
Wadi-Gadag railway	N. G. S.	Wadi to Gadag	Surveyed in 1909.	5' 6"	174	186'84	Construction by His Highness the Nizam's Guaranteed State Railway Company contemplated.
Zankavav-Vajipur railway...	B. B. & C. I.	Zankavav to Vajipur	Surveyed in 1903.	2' 6"	37	...	Extension of Kosamba-Zankavav railway at present under construction.
<b>BURMA.</b>							
Alon-Saingbyin railway	B.	Alon to Saingbyin via Budalin.	Surveyed in 1911.	3' 3 1/2"	28	28'00	New project.
Assam-Burma connection railway.	A. B. & B.	(i) Chittagong-Akyab-Minbla. (Aong Pass route.) (ii) Lunding-Manipur-Tamru-Yawo-Kyathin (Manipur route.) (iii) Makum to Mogaung... (Hukong valley route.) (iv) Chittagong-Taungup-Prome.	Sur-veyed in 1894-1895. Surveyed in 1908-1909.	3' 3 1/2"	450 385 284 490	700'00 650'00 338'00 841'34	
Bhamo-Momein (Tengyueh) railway.	B.	Bhamo to Momein	Surveyed in 1905-1906.	2' 6"	122	127'52	
Kyangin-Petye railway	B.	Kyangin to Petye	Surveyed in 1908.	3' 3 1/2"	8	...	
Lower Burma railways	B.	(i) Ye to Tavoy (ii) Tavoy to Amya, via Myitta. (iii) Moulmein to Three Pagodas. (iv) Ye to Three Pagodas	Not ...	3' 3 1/2"	350	...	New project. Reconnaissance survey sanctioned.
Madouk-Nyaunglebin-Pado railway.	B.	Madouk to Nyaunglebin and Nyaunglebin to Pado	Sur-veyed in 1908-1910.	3' 3 1/2"	10 13	5'40 6'27	
Moulmein-Myawaddy railway	B.	Battery point, north of Moulmein to Myawaddy.	Surveyed in 1907.	3' 3 1/2"	78	100'19	
Moulmein-Ye railway	B.	Battery point, north of Moulmein to Ye.	Surveyed in 1906.	3' 3 1/2"	94	88'82	
Pegu-Syriam railway	B.	Pegu to Syriam	Surveyed in 1904-1905.	3' 3 1/2"	67	53'30	

## APPENDIX 8—contd.

Railways and tramways projected up to the 31st December 1911.

NAME OF PROJECT.	Connected existing railway system. (If or abbreviations used see "Index" to Appendix 9).	Initial and terminal points.	Surveyed or not.	Gauge.	Length.	Estimated cost.	REMARKS.
1	2	3	4	5	6	7	8
					Miles.	Lakhs of rupees.	
<b>BURMA—contd.</b>							
Pyinmau-Magwe railway	B.	Pyiwin to Taungdwingyi... and Taungdwingyi to Myingia (near Magwe.)	Sur- veyed in 1907- 1908.	3' 3½"	69 51	49.74 40.95	Proposed in 1905 in case of necessity as a famine relief work. The Pyinmau-Minbyin section, 29 miles long, resurveyed in 1911, as a light line and estimated to cost Rs. 15.17 lakhs.
Shwebo-Thabeitkyin railway	B.	Shwebo to Thabeitkyin, via Letkrobin.	Surveyed in 1899.	3' 3½"	30	14.43	Projected to tap Kabwe collieries and ruby mine district. Collieries served by first section to Letkrobin (33 miles). Cost 9.94 lakhs.
Shwebo-Yeu Light railway	B.	Shwebo to Yeu	Surveyed in 1907.	3' 3½"	23	—	Projected to serve country to be irrigated by Shwebo and Yeu canals.
Ta Hapaki-Nam Pai railway	B.	Ta Hapaki (on Lashio Branch) to Nam Pai (on Burma Mines Light rail- way).	Surveyed in 1910.	3' 3½"	26	17.63	Project abandoned at present.
<b>CENTRAL INDIA.</b>							
Barwaha-Bodeli Light rail- way.	B. B. & C. I.	Barwaha to Bodeli	Surveyed in 1905.	2' 6"	163	61.15	Construction of Bodeli-Chhota Udapur section under consideration. Detailed survey of this section sanctioned since the close of the year.
Bir-Bhopal railway	G. I. P.	Bir to Bhopal	Surveyed in 1906-1907.	3' 6"	102	166.12	Estimate is for double line without rolling-stock. Proposed as alternative to doubling the Itarsi-Bhopal section, shortening through mileage.
Mirzapur-Maithar chord railway.	—	(See under United Pro- vinces.)	—	—	—	—	
Rewah-Sutna railway	R. I.	Rewah to Sutna	Under re- survey.	2' 6"	32	7.61	Proposals for its construction are under consideration. Resurvey on 5' 6" gauge sanctioned.
<b>CENTRAL PROVIN- CES.</b>							
Amraoti-Sonnair railway	G. I. P.	Amraoti to Narkher, via Morai.	Surveyed in 1906-1907.	5' 6"	70	65.70	The Itarsi-Nagpur railway supersedes the section from Narkher to Sonnair.
Bellapur-Warangal (or Kaspit) railway.	—	(See under Hyderabad).	—	—	—	—	
Bilaspur-Mungeli-Mandla railway.	B. N.	Bilaspur to Cheraidongri...	Surveyed in 1905- 1908.	3' 6"	153	101.74	Excluding interest on capital.
Bir-Bhopal railway	—	(See under Central India).	—	—	—	—	
Borkhedi-Hinganghat rail- way.	G. I. P.	Borkhedi to Hinganghat ...	Surveyed in 1906-1907.	5' 6"	26	20.91	Chord between the North-East line and the Wardha coal branch.
Dhamtari-Bastar-Salur rail- way.	B. N.	Dhamtari to Salur, via Bastar.	Not ...	2' 6"	200	—	Reconnaissance survey sanc- tioned.
Khamgaon-Jalna railway	G. I. P.	Khamgaon to Jalna	Surveyed in 1892-1900.	3' 6"	93	32.65	Fresh survey of Khamgaon-Chickli section (36 miles) sanctioned.
Khandwa-Akola-Hingoli rail- way.	B. B. & C. I.	Khandwa to Hingoli, via Akola and Basim.	Under re- survey.	3' 3½"	200	155.00	On Purna-Hingoli railway (under construction). Estimate is based on preliminary survey. Detailed survey sanctioned in 1911. Cost of Hyderabad section, 17 miles, will be 12.29 lakhs. Line forms part of North and South 3' 3½" gauge connection.
Pulgaon-Arvi railway	G. I. P.	Pulgaon to Arvi	Surveyed in 1911.	2' 6"	22	—	New project.
Rajahmundry-Sironcha rail- way.	M. & S. M.	Rajahmundry to Sironcha direct.	Surveyed in 1909- 1910.	3' 6"	209	307.96	
Sambalpur-Khurda railway	—	Via Gokavaram (See under Bengal).	—	—	215	307.84	

## APPENDIX 8—contd.

Railways and tramways projected up to the 31st December 1911.

NAME OF PROJECT.	Connected existing railway system. (For abbreviations used see "Index" to appendix 8).	Initial and terminal points.	Surveyed or not.	Gauge.	Length.	Estimated cost.	REMARKS.
1	2	3	4	5	6	7	8
					Miles.	Lakhs of rupees.	
<b>EASTERN BENGAL AND ASSAM.</b>							
Assam-Burma connection railway	...	(See under Burma) ...	...	...	...	...	
Barisal connection railway	E. B. ...	Barisal to a point on the Khoorna branch of the Eastern Bengal railway.	Not ...	3' 6"	...	...	New project. Reconnaissance of the country between Bagirhat and Barisal, and between Nowpara, Gournadi and Barisal sanctioned.
Bhairab Bazar-Netrakona-Mymensingh railway.	A. B. & E. B. ...	(i) Bhairab Bazar to Netrakona via Iwarganj.			10	75.55	Has been reconnoitred in 1911. Will be constructed by State.
		(ii) Iwarganj to opposite Mymensingh.	Not ...	3' 3 1/2"	15	13.32	
		(iii) Bridge over the Brahmaputra at Mymensingh.			...	8.17	
		(iv) Netrakona to Durgapur.			17	16.37	
Cooch District tramways...	A. B. ...	Sealtick to Lala Bazar* ...			24		
		Silchar to Duarbund ...	Reconnoitred in 1897.	3' 6"	22	14.75	Government of Eastern Bengal and Assam propose survey as feeders.
		Silchar to Tikalpur ...			14		
Chalsa-Matali railway ...	B. D. ...	Chalsa to Matali ...	Under survey.	3' 3 1/2"	5	...	New project.
Dacca-Mymensingh railway extension.	E. B. ...	(i) Dacca to Airoha or Tangi to Airoha, via Daccora.			45	76.71	
		(ii) Mymensingh to Bara Ari via Netrakona with Shambhuganj-Gauripur branch.	Surveyed in 1899-1900.	3' 3 1/2"	36	27.27	If a ferry over Brahmaputra is substituted for a bridge, cost will be 20.93 lakhs. Mymensingh-Netrakona will be constructed by State.
		(iii) Singhani to Nalatabari, via Sharpore.			25	12.89	
		(iv) Bara Ari to Doleapur, via Lengar Bazar.			50	46.43	
Darangiri Coal field railway	...	Shangang to Darangiri Coal field.	Surveyed in 1909.	3' 3 1/2"	54	75.76	Shangang is on the proposed Mymensingh Lengar Bazar line. Mymensingh-Shangang section, 13 miles, cost 17.81 lakhs.
Goalundo-Narayanganj extension railway.	E. B. ...	Lakhee Khal Hat (opposite Faridpur) to Munshiganj.	Surveyed in 1898.	3' 3 1/2"	40	58.47	
Hajiganj-Shatnal branch railway	A. B. ...	Hajiganj to Shatnal ...	Surveyed in 1899.	3' 3 1/2"	24	32.81	
Kampur-Silghat Light railway.	A. B. ...	Kampur to Silghat, via Nowgong.	Surveyed in 1908-1909.	3' 3 1/2" } 3' 6" }	48	17.95 } 17.66 }	
Kurigram-Ulipur-Chilmari railway.	E. B. ...	Kurigram to Ulipur and Ulipur to Chilmari.	Surveyed in 1910.	2' 6" } 2' 6" } 3' 3 1/2" }	12 } 17 }	...	
Nachoul-Rampur Boalia-Gopalpur railway.	E. B. ...	Mile 85 1/2 of the Katihar-Godagari extension, near Nachoul, to Abdulpur.	Surveyed in 1907.	3' 3 1/2"	50	45.46	Certain portion is under realignment.
Nattore-Rampur Boalia-Godagari railway.	E. B. ...	Nattore to Godagari, via Rampur Boalia.	Surveyed in 1910.	3' 6"	44	...	Nattore to Rampur Boalia (2 1/2 miles) surveyed. Estimated cost 11.15 lakhs.
Nattore-Sirajganj railway	E. B. ...	Nattore to Sirajganj ...	Partly Surveyed in 1910.	3' 6"	55	...	Alternative to "Sara-Sirajganj" project.
Phulbari-Samjhia branch railway.	E. B. ...	Phulbari to Samjhia ...	Surveyed in 1895-1896.	3' 3 1/2"	13	4.42	
Rai-Titalia railway ...	E. B. ...	Raiganj to Titalia, via Banisankoll, Nekmurd, Labiri and Alwakhowa, with a branch from Nekmurd to Thakurgaon.	Not ...	3' 3 1/2"	...	...	New project.

\*Also known as Hailakandi Light railway.

## APPENDIX 8—contd.

Railways and tramways projected up to the 31st December 1911.

NAME OF PROJECT.	Connected existing railway system. For abbreviations used see "Index" to appendix 8.	Initial and terminal points.	Surveyed or not.	Gauge.	Length.	Estimated cost.	REMARKS.
1	2	3	4	5	6	7	8
					Miles.	Lakhs of rupees.	
<b>EASTERN BENGAL AND ASSAM—contd.</b>							
Santabar-Malda railway ...	E. B. ...	Santabar to Malda ...	Surveyed in 1910.	3' 3½"	55	...	
Sara-Sirajganj-Jagannathganj railway.	E. B. ...	(i) Sara to Sirajganj ...	Surveyed in 1903-1904.	5' 6"	49	63.09	Being resurveyed.
		(ii) Sirajganj to Brahmaputra right bank.		5' 6"	3	3.70	
		(iii) Steam ferry across the Brahmaputra river.		...	...	9.30	
		(iv) Brahmaputra left bank to Jagannathganj, with Subarnakhal branch.		3' 3½"	26	15.28	
Sylhet District tramways ...	A. B. ...	(i) Juri to Solgai, via Siina and Pathini.	Surveyed	2' 0"	22	6.41	
		(ii) Branch of (i) from Baitakhal Station to Dulacherra.	Not ...	2' 0"	10	4.82	Reconnitred in 1910.
		(iii) Karimganj to Chandkhira, with a branch from Patharkhandi-Basar to Magam Cherra.	Not ...	2' 6"	43	12.00	Arrangements being made for a survey of the line.
		(iv) Srimangal to Manumukh.	Not ...	2' 6"	22	8.81	Arrangements being made for a survey for both the 2' 6" and 3' 3½" gauges.
		(v) Sutang to Madna ...	Not ...	2' 6"	30	11.34	Detailed survey being made of the Madna-Habiganj-Shaistaganj Section (21 miles), with an extension (7 miles) southwards to tea garden on 2' 0" gauge.
<b>HYDERABAD.</b>							
Bellarpur-Warangal (or Kazipet) railway.	G. I. P. & N. G. S.	Bellarpur to Kazipet, via Rajpur, Tandur and Pedapali, with branch to Warangal.	Resurveyed in 1910.	5' 6"	155	168.66	These projects supersede the earlier Eastern and Western routes between Bellarpur and Warangal.
		Bellarpur to Stroncha ...	Surveyed in 1904-1905.	2' 6"	107	42.26	
Hyderabad-Kistna River-railway.	N. G. S. ...	Hyderabad to Kistna river	Surveyed in 1905.	3' 3½"	148	123.68	Figures are approximate as results of survey not known. Part of North and South 3' 3½" gauge connection.
Khamgaon-Jalna railway ...	...	(See under Central Provinces.)	...	...	...	...	
Khandwa-Akola Hingoli railway.	...	(See under Central Provinces.)	...	...	...	...	
Wadi-Gadag railway ...	...	(See under Bombay)	...	...	...	...	
<b>KASHMIR.</b>							
Hazi Kala-Abbottabad-Srinagar railway.	...	(See under Punjab.)	...	...	...	...	
<b>MADRAS.</b>							
Ammayanayakkanur-Uttamapalayam railway.	S. I. ...	Ammayanayakkanur to Uttamapalayam.	Surveyed in 1906.	3' 3½"	61	...	
Attur-Chinna Selam-Tirumandora railway.	S. I. ...	Attur to Chinna Selam ... or to Tirumandora	Not ...	3' 3½"	20	...	New project. Survey sanctioned.
Bezawada-Jaggiapett railway	M. & S. M.	Bezawada to Jaggiapett ...			Not ...	5' 6"	
Cuddalore-Vridhdachalam railway.	S. I. ...	Cuddalore to Vridhdachalam	Surveyed in 1905.	3' 3½"	34	...	
Dhantari-Bastar-Salur railway.	...	(See under Central Provinces).	...	...	...	...	
Dharmapuri-Bangalore railway.	S. I. ...	Dharmapuri to Bangalore, via Palakodu, with Palakodu-Krishnagiri branch.	Surveyed in 1906.	2' 6"	107	37.53	Dharmapuri-Palakodu-Hosur section (60 miles, cost 23.51 lakhs) under construction.
Dharmapuri-Karur railway	S. I. ...	Dharmapuri to Karur, via Loker and Salem.	Not ...	3' 3½"	86	...	New project.
Dindigul-Palghat railway ...	S. I. ...	Dindigul to Palghat, via Palmi, Pollachi and Kollengode.	Surveyed in 1903-1904 and 1905-1906.	3' 3½"	111	78.90	
Ganjam District Light railways.	B. N. ...	Berhampore to Busselkonda	Surveyed in 1899.	2' 6"	49	14.91	Other lines comprised in the scheme are superseded or abandoned.
Guntur-Ropalli branch railway.	M. & S. M.	Guntur to Ropalli ...	Surveyed in 1902	3' 3½"	28	17.34	

## APPENDIX 8—contd.

Railways and tramways projected up to the 31st December 1911.

NAME OF PROJECT.	Connected existing railway system. (For abbreviations used see "Index" to appendix 9).	Initial and terminal points.	Surveyed or not.	Gauge.	Length.	Estimated cost.	REMARKS.
1	2	3	4	5	6	7	8
					Miles.	Lakhs of rupees.	
<b>MADRAS—contd.</b>							
Kalikiri-Rayachoti branch railway.	M. & S. M.	Kalikiri (or Piler) to Rayachoti.	Surveyed in 1899-1900.	3' 3½"	84	10'76	
Karaikudi-Arattangi railway	S. I.	Karaikudi to Arattangi ...	Surveyed in 1910.	3' 3½"	18	...	Alternative to Devakota-Arattangi branch of the Trichinopoly-Ramnad railway.
Kavali-Udayagiri railway ...	M. & S. M.	Kavali to Udayagiri ...	Surveyed in 1908.	2' 6"	51	15'96	
Kumbakonam-Mannargudi railway.	S. I.	Kumbakonam to Mannargudi.	Surveyed in 1905.	3' 3½"	22	18'61	See remarks on "Nidamangalam-Vedaraniem railway," which comprises Nidamangalam-Mannargudi section of this railway.
Mysore-Tellicherry railway	M. & S. M.	Mysore to Tellicherry ...	Surveyed in 1899-1900.	2' 6"	145	81'00	
Nandyal-Atmakur railway...	M. & S. M.	Nandyal to Atmakur, via Volgode. (See under Mysore).	Surveyed in 1909.	3' 3½"	30	14'87	Surveyed on behalf of the District Board of Kurnool.
Nanjangud-Erode railway ...	...	...	...	...	...	...	
Nidamangalam-Vedaraniem railway.	S. I.	(i) Nidamangalam to Mannargudi.	Surveyed in 1905.	3' 3½"	8	5'88	Construction of (i) and (iii) on behalf of the District Board of Tanjore under consideration. Comprises the Nidamangalam-Mannargudi section of the Kumbakonam-Mannargudi line.
		(ii) Mannargudi to Tiruturaipundi.	Not ...	...	...	...	
		(iii) Tiruturaipundi to Vedaraniem.	Surveyed in 1905-1908.	3' 3½"	20	10'68	
Palni-Satyamangalam railway.	...	Palni to Satyamangalam, with a branch from Satyamangalam to Mettapalayam.	Surveyed in 1903-1904.	3' 3½"	84	84'33	
Parlakimedi-Gunupur railway.	B. N.	Parlakimedi to Gunupur ...	Surveyed in 1910-1911.	2' 6"	32	8'29	Surveyed at the instance of the Parlakimedi State.
Phirangipuram-Guzala branch railway.	M. & S. M.	Phirangipuram to Guzala.	Surveyed in 1901.	3' 3½"	50	12'60	
Podanur-Pollachi railway ...	S. I.	Podanur to Pollachi ...	Surveyed in 1908-1909.	3' 3½"	26	21'78	Surveyed on behalf of District Board of Coimbatore. Cost as a low grade line 10'66 lakhs.
Ramnad-Virudupatti railway	S. I.	Ramnad to Virudupatti ...	Surveyed in 1909.	3' 3½"	66	27'89	
Rajahmundry-Sironcha railway.	...	(See under Central Provinces).	...	...	...	...	
Salem-Attur branch railway	S. I.	Salem to Attur ...	Surveyed in 1910.	3' 3½" 5' 6"	33 36	17'59	
Singarayakonda-Kanigiri railway.	M. & S. M.	Singarayakonda to Kanigiri.	Surveyed in 1908.	2' 6"	41	13'83	
Tinnevely-Tiruchendur railway.	S. I.	Tinnevely to Tiruchendur.	Surveyed in 1903-1904.	3' 3½"	38	20'52	Proposed by the District Board of Tinnevely.
Trichinopoly-Panruti railway	S. I.	Trichinopoly to Panruti via Srirangam, Tirupattur, Parambalur, Volcondah, Parione and Adiyar.	Surveyed in 1907.	3' 3½"	95	107'20	
Trichinopoly-Ramnad railway	S. I.	Trichinopoly to Ramnad, with branch from Devakota to Arattangi.	Surveyed in 1909.	3' 3½"	108	54'23	Alternative to Trichinopoly-Thondi railway.
Trichinopoly-Thondi railway	S. I.	Trichinopoly to Thondi ...	Not ...	3' 3½"	26	17'84	
Ulundurpettai-Chinna Selam railway.	S. I.	Ulundurpettai to Chinnasalam.	Surveyed in 1909.	3' 3½"	38	18'32	New project.
Vaigai Valley railway ...	S. I.	Ammayayakkannur to Kotagudi, with extensions.—			55		Ammayayakkannur-Uttamapalayam line proposed by District Board at Madurai covers a large portion of this project.
		(i) Periyakulam to Krishnama Naik's tops.	Not ...	2' 6"	5	22'38	
Virudupatti-Tenkasi railway	S. I.	Virudupatti to Tenkasi, via Sivakasi.	Under survey.	3' 3½"	18	78	New project.
Vizianagaram-Bimlipatam railway.	B. N.	Vizianagaram to Bimlipatam.	Not ...	5' 6"	15	9'39	
Yerragudipad-Jammalamadugu railway.	M. & S. M.	Yerragudipad to Jammalamadugu.	Surveyed in 1900.	2' 6"	24	10'45	Will be merged in the Yerragudipad-Nandyal project.
Yerragudipad-Nandyal railway.	M. & S. M.	Yerragudipad to Nandyal...	Surveyed in 1908-1909.	3' 3½"	71	40'85	

## APPENDIX 8—contd.

Railways and tramways projected up to the 31st December 1911.

NAME OF PROJECT.	Connected existing railway system. (For abbreviations used see "Index" to appendix 9).	Initial and terminal points.	Surveyed or not.	Gauge.	Length.	Estimated cost.	REMARKS.
Projects are arranged under provinces in which situated.							
1	2	3	4	5	6	7	8
					Miles.	Lakhs of rupees.	
<b>MYSORE.</b>							
Arsikere-Mangalore railway	M. & S. M.	Arsikere to Mangalore, via Hassan.	Surveyed in 1899-1900.	2' 6"	186	85.44	Sub-grade for 3' 3½" gauge from Arsikere to Hassan (29 miles) is included in the estimate.
Bowringpet-Kolar railway	M. & S. M.	Bowringpet to Kolar	Under survey.	2' 6"	10	...	New project.
Dharmapuri-Bangalore railway	...	(See under Madras.)	...	...	...	...	
Dodbele-Kolar Gold-fields railway.	M. & S. M.	Dodbele to Kolar Gold-fields.	Surveyed in 1907.	3' 3½"	72	...	
Mysore-Hassan railway	M. & S. M.	Mysore to Hassan	Surveyed in 1909-1910.	3' 3½"	74	53.75	
Mysore-Tellicherry railway	...	(See under Madras.)	...	...	...	...	
Nanjangud-Erode railway	M. & S. M.	Nanjangud to Erode	Surveyed in 1908-1910.	3' 3½"	121	123.03	83.7 miles in Mysore. The Durbar do not propose to construct this section till the British section is put in hand. The line including a branch from Sattayamangalam to Mettupalayam (29 miles) is being re-surveyed.
<b>NORTH-WEST FRONTIER PROVINCE.</b>							
Mardan-Charsadda railway	N. W.	Mardan to Charsadda	Surveyed in 1910.	2' 6"	17	9.06	
Mardan-Swabi railway	N. W.	Mardan to Swabi	Surveyed in 1910.	2' 6"	31	21.52	
Sarni Kala-Abbottabad-Srinagar railway.	...	(See under Punjab)	...	...	...	...	
Trans-Indus railway	N. W.	(i) Kohat to Banna, (ii) Laki to Dera Ismail Khan.	Surveyed in 1909.	2' 6"	140	90.05	A line from Laki to Tank, via Peshawar as alternative to (ii) is preferred and survey of Peshawar-Tank portion sanctioned.
<b>PUNJAB.</b>							
Bhagtanwali-Sargodha railway.	N. W.	Bhagtanwali to Sargodha	Not	5' 6"	16	...	To connect with the proposed Sangla-Chiniot-Khushab railway.
Dhak branch railway	N. W.	Dhak to Tajuwala	Surveyed in 1906-1907.	3' 6"	11	4.97	To serve coal mines.
Jhang-Sangla railway	N. W.	Jhang to Chiniot and Chiniot to Sangla	Surveyed in 1906.	3' 6"	50.63 23.78	32.94 18.39	Estimates revised in 1911. Sangla to Chiniot section considered the more important section. Extension to Khushab, via Sargodha and Shahpur, also recommended by Punjab Government.
Karnal-Kaithal-Nabha branch railway.	E. I.	Karnal to Nabha, via Kaithal	Not	3' 6"	70	36.00	
Mandra-Bhon railway	N. W.	Mandra to Bhon, via Chakwal.	Surveyed in 1907-1908.	3' 6"	47	33.05	
Pothankot-Nurpur railway	N. W.	Pothankot to Nurpur	Not	3' 6"	16	...	New project. Survey sanctioned since the close of the year.
Patials-Jakhal railway	N. W.	Patials to Jakhal	Surveyed in 1906.	3' 6" 3' 3½"	54	34.00 24.63	
Phagwara-Nawashar railway	N. W.	Phagwara to Nawashar with branches to Garshanker and Bahon.	Surveyed in 1909.	3' 6" 2' 6"	33	25.59 22.27	Will be constructed by State.
Phillour-Garshanker railway	N. W.	Phillour to Garshanker, via Nawashar.	Under survey.	3' 6"	23	...	Alternative to Phagwara-Nawashar railway.

\* Excluding rolling-stock.

APPENDIX 8—*conold.**Railways and tramways projected up to the 31st December 1911.*

NAME OF PROJECT.	Connected existing railway system. (For abbreviations used see Index to appendix 9.)	Initial and terminal points.	Surveyed or not.	Gauge.	Length.	Estimated cost.	REMARKS.
1	2	3	4	5	6	7	8
<b>PUNJAB—<i>conold.</i></b>							
Sarai Kala-Abbottabad-Srinagar railway.	N. W. ...	Saralkala to Srinagar, <i>via</i> Abbottabad. (Comprises the following sections). (i) Saralkala to Abbottabad. (ii) Abbottabad to Garhi Habibulla. (iii) Garhi Habibulla to Kashmir frontier. (iv) Kashmir frontier to Domel. (v) Kashmir frontier to Srinagar.	... Resurveyed in 1907-1909 Surveyed in 1892-1893.	... 5' 6" 5' 6" 5' 6" 5' 6" 3' 3 3/4"	... 51 28 4 5 109	... 87.76 77.39 10.41 27.24 157.89	Portions within British and Kashmir territories to be constructed and owned by the Government of India and Durbar, respectively. Sarai Kala-Havelian portion of the line sanctioned for construction on the 5' 6" gauge.
Sialkot-Amritsar railway ...	N. W. ...	Sialkot to Amritsar or to Batala ...	Surveyed in 1910.	5' 6" 2' 6" 5' 6" 2' 6"	78 80 68 66	111.76 89.28 101.02 78.50	
<b>RAJPUTANA.</b>							
Baran-Marwar railway ...	B. B. & C. I.	Baran to Marwar or Baran to Nasrabad with Jehaspur to Paondero Branch.	Surveyed in 1898-1899.	3' 3 3/4"	218 153 71	136.67 96.12 31.68	The section Baran to Kotah (41 miles) has been constructed on 5' 6" gauge and is open to traffic.
Bari-Tantpur railway ...	D. B. ...	Bari to Tantpur	Surveyed in 1911.	2' 6"	16	4.68	New project. Proposed by Dholpur Durbar.
Dholpur-Rajakheda Extension railway.	B. B. & C. I.	Dholpur to Rajakheda	Surveyed in 1910-1911.	2' 6"	23	...	Proposed by Dholpur Durbar.
Karanli branch railway ...	B. B. & C. I.	Gangapur to Karanli	Not ...	...	25	...	Proposed by Karanli Durbar as a famine relief work.
Maali-Nathdwara railway ...	U. C. ...	Maali to Nathdwara	Surveyed in 1896.	3' 3 3/4"	15	4.73	
Sri Madhopur-Borawar chord railway.	B. B. & C. I.	Sri Madhopur to Borawar.	Not ...	3' 3 3/4"	...	...	
Sri Madhopur-Sikar railway	B. B. & C. I.	Sri Madhopur to Sikar	Surveyed in 1900.	3' 3 3/4"	31	8.69	
<b>UNITED PROVINCES.</b>							
Auriya-Phaphund railway ...	E. I. ...	Auriya to Phaphund	Surveyed in 1907.	5' 6"	18	8.88	
Dehra-Rajpur railway ...	O. & B. ...	Dehra to Rajpur	Not ...	5' 6"	8	...	New project. Survey sanctioned.
Fatehpur-Markundi chord railway.	E. I. ...	Fatehpur to Markundi alternatives. (i) Fatehpur to Karwi ... (ii) Khaga to Manikpur ...	Surveyed in 1900-1901.	5' 6"	73 52 57	98.46 72.59 85.98	
Hardoi-Sandi branch railway	O. & B. ...	Hardoi to Sandi	Surveyed in 1902	5' 6"	14	3.62	
Karwi-Rajapur railway ...	G. I. P. ...	Karwi to Rajapur direct or <i>via</i> Pahari ...	Surveyed in 1906-07.	5' 6"	19 21	7.76 8.42	Government of United Provinces favour the route, <i>via</i> Pahari.
Kaganj-Bajhat (or Atranli) railway.	O. & B. ...	Kaganj to Bajhat or Atranli.	Surveyed in 1910-1911.	5' 6"	54	...	Alternative to Budaon-Babra section of the Tilhar-Hapur project. Certain amount of earthwork done in 1906 as famine relief work.
Kunch-Madhogarh railway...	G. I. P. ...	Kunch to Shankarpur, <i>via</i> Jalaon, with Jalaon-Madhogarh Branch.	Surveyed in 1906.	5' 6"	36 16	13.44 5.92	
Mirzapore-Malhar chord railway.	E. I. ...	Mirzapore to Malhar	Surveyed in 1903.	5' 6"	140	155.00	
Rosa-Budaon railway ...	O. & B. ...	Rosa to Budaon	Surveyed in 1910-1911.	5' 6"	56	...	Alternative to the Tilhar-Budaon portion of the Tilhar-Hapur railway.
Tilhar-Budaon-Hapur railway	O. & B. ...	Tilhar to Hapur <i>via</i> Budaon with a branch from Jehangirabad to Bulandshahr.	Surveyed in 1909.	5' 6"	147	180.21	
Unao-Madhoganj railway ...	O. & B. ...	Unao to Madhoganj	Surveyed in 1909.	5' 6"	16	...	
			Surveyed in 1910-1911.	5' 6"	47	...	



## APPENDIX 9.

*History of railways constructed and in progress.*

## Index.

Railway.	Abbreviations of names of railways.	Number.		Gauge.	Working agency.	Page.
		Main head.	Sub-head.			
I	2	3	4	5	6	7
<b>A</b>						
Agra-Delhi Chord . . . . .	A.D.C.	5	(b)	5'6"	G. I. P. Ry. Co.	155
Ahmedabad-Dholka . . . . .	A.D.	2	(h)	3'3½"	} B. B. and C. I. Ry. Co. {	114
Ahmedabad-Parantij . . . . .	A.P.	2	(i)	3'3½"		115
Ambaji-Tarang Light . . . . .	A.T.	24	(a)	2'6"		267
Amritsar-Patti . . . . .	A.P.T.	8	(b)	5'6"	N. W. Ry.	193
Arrah-Sasaram Light . . . . .	A.S.	25	(a)	3'6"	A. S. Light Ry. Co.	267
Assam-Bengal . . . . .	A.B.	11	(a)	3'3½"	A. B. Ry. Co.	225
<b>B</b>						
Bangalore-Chickballapur Light . . . . .	B.C.	26	(a)	2'6"		268
Baran-Kotah . . . . .	B.K.	5	(c)	5'6"	G. I. P. Ry. Co.	156
Barasat-Basirhat Light . . . . .	B.B.L.	27	(a)	2'6"	B. B. L. Ry. Co.	269
Barai Light . . . . .	B.L.	28	(a)	2'6"	B. L. Ry. Co.	271
Bengal and North-Western . . . . .	B.&N.W.	12	(a)	3'3½"	B. & N. W. Ry. Co.	227
Bengal Dooars . . . . .	B.D.	13	(a)	3'3½"	} B. D. Ry. Co. {	234
Bengal Dooars Extensions . . . . .	B.D.E.	13	(b)	3'3½"		236
Bengal-Nagpur . . . . .	B.N.	1	(a)	5'6"	B. N. Ry. Co.	94
Bezwada Extension . . . . .	B.E.	7	(b)	5'6"	N. G. S. Ry. Co.	186
Bezwada-Masulipatam . . . . .	B.M.	6	(d)	3'3½"	M. & S. M. Ry. Co.	171
Bhavnagar . . . . .	B.N.G.	14	(a)	3'3½"	Bhavnagar Durbar	237
Bhopal-Itarsi (British section) . . . . .	} B.I.	5	(d)	5'6"	} G. I. P. Ry. Co. {	157
Bhopal-Itarsi (Native State section).						
Bhopal-Ujjain . . . . .	B.U.	5	(e)	5'6"		158
Billimora-Kalamba . . . . .	B.K.B.	2	(g)	2'6"		128
Bina-Goonsa-Baran . . . . .	B.G.B.	5	(f)	5'6"	G. I. P. Ry. Co.	160
Birur-Shimoga . . . . .	B.S.G.	6	(e)	3'3½"	M. & S. M. Ry. Co.	172
Bombay, Baroda and Central India.	B.B.&C.I.	2	(a)	5'6"	} B. B. & C. I. Ry. Co. {	103
Broach-Jambusar Branch . . . . .	B.J.	2	(r)	2'6"		128
Bukhtiarpore-Bihar Light . . . . .	B.B.	29	(a)	2'6"	B. B. Light Ry. Co.	273
Burma . . . . .	B.	15	(a)	3'3½"	} B. Rys. Co. {	239
Burma Extensions . . . . .	B.B.E.	15	(b)	3'3½"		242
<b>C</b>						
Calcutta Port Commissioners' . . . . .	...	...	...	5'6"	Calcutta Port Commissioners	129
Cawnpore-Burhwal link . . . . .	C.B.M.	9	(c)	3'3½"	B. & N. W. Ry. Co.	210
Champaner-Shivrajpur Light . . . . .	C.S.	30	(a)	2'6"	Shivrajpur Syndicate of Bombay.	275
Cooch Behar . . . . .	C.B.	3	(e)	3'3½"	E. B. Ry.	135
Cutch . . . . .	C.	31	(a)	2'6"	Cutch Durbar	276
<b>D</b>						
Darjeeling-Himalayan . . . . .	D.H.	42	(a)	2'0"	D. H. Ry. Co.	286
Dehri-Bohtas Light . . . . .	D.B.	32	(a)	2'6"	D. B. Light Ry. Co.	277
Delhi-Umballa-Kalka . . . . .	D.U.K.	4	(b)	5'6"	E. I. Ry. Co.	145
Dholpur-Bari . . . . .	D.B.	33	(a)	2'6"	Dholpur Durbar	278
Dhone-Kurnool . . . . .	D.K.	6	(f)	3'3½"	M. & S. M. Ry. Co.	174
Dhrangadra . . . . .	D.H.R.	14	(b)	3'3½"	Bhavanagar Durbar	238
Dibru-Sadiya . . . . .	D.S.	16	(a)	3'3½"	Assam Rys. & Tradg. Co.	244
Dwara-Therria Light . . . . .	D.T.	34	(a)	2'6"	...	278

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Railway.	Abbreviations of names of railways.	Number.		Gauge.	Working agency.	Page.
		Main head.	Sub-head.			
1	2	3	4	5	6	7
<b>E</b>						
Eastern Bengal	E.B.	3	(a)	5'6"	} E. B. Ry. } E. I. Ry. Co.	130
Eastern Bengal	E.B.M.	3	(b)	3'3½"		133
Eastern Bengal		3	(b)	2'6"		135
East Indian	E.I.	4	(a)	5'6"		139
<b>G</b>						
Gaekwar's Dabhoi	G.D.	2	(a)	2'6"	} B. B. & C. I. Ry. Co. } Gondal and Porbandar Durbar.	125
Gaekwar's Mehsana	G.M.	2	(j)	3'3½"		118
Godhra-Rotlam-Nagda	G.R.N.	2	(b)	5'6"		106
Gondal-Porbandar	G.P.	17	(a)	3'3½"		247
Gondia-Chanda Extension	G.C.	1	(b)	2'6"	B. N. Ry. Co.	98
Great Indian Peninsula	G.I.P.	5	(a)	5'6"	} G. I. P. Ry. Co. }	150
Gwalior Light	G.L.	5	(g)	2'0"		162
<b>H</b>						
Hardwar-Dehra	H. D.	9	(b)	5'6"	O. & R. Ry.	209
Hindupur (Yesvantpur-Mysore Frontier).	H.	6	(g)	3'3½"	M. & S. M. Ry. Co.	175
Hingoli Branch	H. B.	7	(d)	3'3½"	N. G. S. Ry. Co.	189
Howrah-Amta Light	H. A.	43	(a)	2'0"	H. A. Light Ry. Co.	288
Howrah-Sheakhala Light	H. S.	44	(a)	2'0"	H. S. Light Ry. Co.	290
Hyderabad-Godavari Valley	H. G. V.	7	(c)	3'3½"	N. G. S. Ry. Co.	188
<b>J</b>						
Jagadhri Light	J. L.	45	(a)	2'0"	J. L. Ry. Co.	291
Jaipur	J. S. M.	2	(b)	3'3½"	B. B. & C. I. Ry. Co.	120
Jammu and Kashmir (Native State section).	J. K.	8	(c)	5'6"	N. W. Ry.	195
Jamnagar	J. N.	18	(a)	3'3½"	Jamnagar Durbar	249
Jessore-Jhenidah Light	J. J.	35	(a)	2'6"	Gondal and Porbandar Durbar.	279
Jetalsar-Rajkot	J. R.	17	(b)	3'3½"		247
Jodhpur-Bikaner (Jodhpur section).	J. B.	19	(a)	3'3½"	} J. B. Ry. }	250
" " (Bikaner section).	J. B. B.	19	(b)	3'3½"		251
Jodhpur-Hyderabad (British section).	J. H.	19	(c)	3'3½"		252
Jorbat (Provincial)	J.	46	(a)	2'0"	Provincial Govt.	292
Jubbulpore-Gondia Extension	J. G. E.	1	(c)	2'6"	B. N. Ry. Co.	98
Jullundur Doab	J. D.	8	(m)	5'6"	Junagad Durbar	205
Junagad	J. N. D.	20	(a)	3'3½"		256
<b>K</b>						
Kalka-Simla	K. S.	8	(j)	2'6"	} N. W. Ry. }	203
Khanpur-Chachran	K. C.	8	(d)	5'6"		196
Kohat-Thal	K. T.	8	(b)	2'6"	} M. & S. M. Ry. Co. }	204
Kolar Gold-fields	K. G.	6	(b)	5'6"		168
Kolhapur	K. L.	6	(h)	3'3½"		176
Kosamba-Zankavav	K. Z.	2	(a)	2'6"		128

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History of railways constructed and in progress.

## Index—contd.

Railway.	Abbreviations of names of railways.	NUMBER.		Gauge.	Working agency.	Page.
		Main head.	Sub-head.			
1	2	3	4	5	6	7
<b>L</b>						
Ledo and Tikak-Margherita Colliery.	L. T.	16	(b)	3' 3½"	Assam Rys. & Tradg. Co.	245
Lucknow-Bareilly	L. B.	22	(b)	3' 3½"	R. & K. Ry. Co.	263
Ludhiana-Dhuri-Jakhal	L. D. J.	8	(c)	5' 6"	N. W. Ry.	197
<b>M</b>						
Madaya Light	M.	36	(a)	2' 6"	M. Tramway Co.	279
Madras and Southern Mahratta	M. & S. M.	6	(a)	5' 6"	} M. & S. M. Ry. Co. {	165
Madras and Southern Mahratta	M. & S. M. M.	6	(c)	3' 3½"		169
Matheran Light	M. T. H.	5	(h)	2' 0"	G. I. P. Ry. Co.	163
Maungdaw-Buthidaung	M. W. B.	37	(a)	2' 6"	...	279
Mirpur Khas-Jhudo	M. K.	19	(d)	3' 3½"	} J. B. Ry. {	254
Mirpur Khas-Khadro	M. K. K.	19	(e)	3' 3½"		255
Morappur-Dharmapuri	M. D.	10	(j)	2' 6"	S. I. Ry. Co.	223
Mourbhanj	M. B.	1	(d)	2' 6"	B. N. Ry. Co.	99
Morvi	M. B. W.	21	(a)	{ 3' 3½" 2' 6"	} Morvi Durbar {	257
Murtajapur-Ellichpur	M. E.	5	(i)	2' 6"		...
Mymensingh-Jamalpur-Jaganathganj	M. J. J.	3	(d)	3' 3½"	E. B. Ry.	137
Mysore-Nanjangud	M. N.	6	(i)	3' 3½"	} M. & S. M. Ry. Co. {	177
Mysore section (Madras and Southern Mahratta)	M. S.	6	(j)	3' 3½"		177
<b>N</b>						
Nadiad-Kapadvanj	N. K.	38	(a)	2' 6"	...	279
Nagda-Muttra	N. M.	2	(c)	5' 6"	} B. B. & C. I. Ry. Co. {	107
Nagda-Ujjain	N. U.	2	(d)	5' 6"		108
Nagpur-Chhindwara Extension	N. C.	1	(e)	2' 6"	B. N. Ry. Co.	100
Nilgiri	N.	10	(c)	3' 3½"	S. I. Ry. Co.	215
Nizam's Guaranteed State	N. G. S.	7	(a)	5' 6"	N. G. S. Ry. Co.	184
North Western	N. W.	8	(c)	5' 6"	} N. W. Ry. {	190
Nowshera-Durgai	N. D.	8	(d)	2' 6"		204
<b>O</b>						
Oadh and Rohilkhand	O. & R.	9	(a)	5' 6"	O. & R. Ry.	206
<b>P</b>						
Palanpur-Deesa	P. D.	2	(i)	3' 3½"	B. B. & C. I. Ry. Co.	121
Parlakimedi Light	P. L. L.	1	(j)	2' 6"	B. N. Ry. Co.	100
Peralam-Karaikkal	P. K.	10	(d)	3' 3½"	S. I. Ry. Co.	216
Petlad-Cambay (Anand-Tarapur section).	P. C. A.	2	(e)	5' 6"	} B. B. & C. I. Ry. Co. {	109
Petlad-Cambay (Tarapur-Cambay section).	P. C. T.	2	(f)	5' 6"		110
Petlad-Vaso	P. V.	2	(g)	2' 6"	...	128
Pipar Road-Bhavi Light	P. B.	47	(a)	2' 0"	Jodhpur Durbar	298
Pondicherry	P.	10	(c)	3' 3½"	S. I. Ry. Co.	217
Powayan Light	P. W. L.	22	(e)	2' 6"	R. & K. Ry. Co.	264
Purnia-Banchi Branch	P. B.	1	(g)	2' 6"	B. N. Ry. Co.	101

## APPENDIX 9—contd.

History of railways constructed and in progress.

## Index—concl'd.

Railway.	Abbreviations of names of railways.	NUMBER.		Gauge.	Working agency.	Page.
		Main head.	Sub-head.			
1	2	3	4	5	6	7
<b>R</b>						
Raipur-Dhamtari Branch . . . . .	R. D.	1	(h)	2' 6"	B. N. Ry. Co. . . . .	102
Rajpipla . . . . .	R.	2	(p)	2' 6"	B. B. & C. I. Ry. Co. . . . .	127
Rajpura-Bhatinda . . . . .	R. B.	8	(f)	5' 6"	N. W. Ry. . . . .	198
Rajputana-Malwa . . . . .	R. M.	2	(m)	3' 3½"	B. B. & C. I. Ry. Co. . . . .	123
Rohilkund and Kumaon . . . . .	R. & K.	22	(a)	3' 3½"	R. & K. Ry. Co. . . . .	258
<b>S</b>						
Sangli . . . . .	S.	6	(k)	3' 3½"	M. & S. M. Ry. Co. . . . .	179
Shahdara (Delhi)-Saharanpur Light. . . . .	S. S.	39	(a)	2' 6"	S. S. Light Ry. Co. . . . .	280
Shoranur-Cochin . . . . .	S. C.	10	(f)	3' 3½"	S. I. Ry. Co. . . . .	219
South Behar . . . . .	S. B.	4	(c)	5' 6"	E. I. Ry. Co. . . . .	146
South Indian . . . . .	S. I.	10	(a)	5' 6"	S. I. Ry. Co. . . . .	211
South Indian . . . . .	S. I. M.	10	(b)	3' 3½"		212
Southern Punjab . . . . .	S. P.	8	(g)	5' 6"	N. W. Ry. . . . .	199
Southern Punjab "Ludhiana" Extension. . . . .	S. P. E.	8	(h)	5' 6"		201
Southern Shan States . . . . .	S. S. S.	15	(c)	3' 3½"	N. W. Ry. . . . .	243
Sutlej Valley . . . . .	S. V.	8	(s)	5' 6"		202
<b>T</b>						
Tanjore District Board . . . . .	T. D. B.	10	(g)	3' 3½"	S. I. Ry. Co. . . . .	220
Tapti Valley . . . . .	T. V.	2	(g)	5' 6"	B. B. & C. I. Ry. Co. . . . .	112
Tarkessur-Magra Light . . . . .	B. P.	40	(a)	2' 6"	B. P. Ry. Co. . . . .	282
Tarkessur . . . . .	T.	4	(d)	5' 6"	E. I. Ry. Co. . . . .	148
Tezapore-Balipara Light . . . . .	T. B.	41	(a)	2' 6"	T. B. Light Ry. Co. . . . .	284
Tinnevelly-Quilon (Travancore) (British section). . . . .	T. Q. B.	10	(k)	3' 3½"	S. I. Ry. Co. . . . .	221
Tinnevelly-Quilon (Travancore) (Native State section). . . . .	T. Q. N.	10	(i)	3' 3½"		223
Tirhoot . . . . .	T. S.	12	(b)	3' 3½"	B. & N. W. Ry. Co. . . . .	232
Tirupattur-Krishnagiri . . . . .	T. K.	10	(k)	2' 6"	S. I. Ry. Co. . . . .	224
Trans Indus (Kalabagh-Bannu). . . . .	K. B.	8	(n)	2' 6"	N. W. Ry. . . . .	205
<b>U</b>						
Udaipur-Chitorgarh . . . . .	U. C.	23	(a)	3' 3½"	Udaipur Durbar . . . . .	265
<b>V</b>						
Vijapur-Kalol-Kadi . . . . .	V. K. K.	2	(n)	3' 3½"	B. B. & C. I. Ry. Co. . . . .	124
<b>W</b>						
West of India Portuguese . . . . .	W. I. P.	6	(l)	3' 3½"	M. & S. M. Ry. Co. . . . .	180

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

## GENERAL.

From the year 1906-07 Interest on Debt in India has been calculated at the actual average rate for the year of interest on the mean non-specific debt of India, instead of at the fixed rates of 4 and 3½ per cent previously employed. The actual rates from 1906-07 to 1910-11 were 3·437, 3·412, 3·358, 3·384 and 3·377 per cent, respectively.

One effect of the change is that, in some cases, while the capital outlay on a railway at the end of 1907 was ahead of that at the end of 1906, the interest charge in connection therewith was less.

Number Main head 1 **BENGAL-NAGPUR RAILWAY SYSTEM—**  
Sub-heads (a) to (h)

Chairman—SIR SAMUEL HOARE, BART.

Managing Director—J. MANSON, ESQ.

Offices—132, Gresham House, Old Broad Street, London, E.C.

Lines comprised in the system.—The Bengal-Nagpur railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) { Bengal-Nagpur railway (5' 6" gauge)	1,530·16	262·90	1,813·15
{ East Coast railway, Northern section (5' 6" gauge)*	831·55	...	331·55
(b) Gondia-Chanda Extension, Bengal-Nagpur railway (2' 6" gauge)	181·26	36·13	219·39
(c) Jubbulpore-Gondia Extension, Bengal-Nagpur railway (3' 6" gauge)	275·39	37·67	313·06
(d) Mourdhani railway (2' 6" gauge)	32·41	...	32·41
(e) Nagpur-Chhindwara Extension, Bengal-Nagpur railway (3' 6" gauge)	50·04	46·15	97·09
(f) Parlakimedi Light railway (2' 6" gauge)	24·62	...	24·62
(g) Purlia-Ranchi branch, Bengal-Nagpur railway (2' 6" gauge)	73·68	42·83	115·51
(h) Raipur-Dhamtari branch, Bengal-Nagpur railway (2' 6" gauge)	56·94	...	56·94
Total	2,545·95	447·77	2,993·72

## Running powers—

## Home line over Foreign lines:—

At Katni, East Indian railway	} for passenger and goods trains.	}	0·80
At Asansol and Katrasgarh, East Indian railway			1·16
At Howrah, East Indian railway, for passenger trains only			1·00
At Nagpur, Great Indian Peninsula railway	} for passenger and goods trains.	}	0·65
Waltair to Vizagapatam, including wharf and swamp lines, Madras and Southern Maharatta railway (5' 6" gauge)			4·97
Total			8·08

## Foreign line over Home line:—

Great Indian Peninsula railway at Katni, for passenger trains only	1·60
--	------

1 (a) Bengal-Nagpur railway (5' 6" gauge)—  
Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	REMARKS.
<b>BENGAL-NAGPUR PROGRESS—</b>					
<i>Main line—</i>					
Asansol to Damoodar	12-6-89	4·62			
Damoodar to Purlia	14-12-89	44·56			
Purlia to Chakardharpore	22-1-90	72·23			
Chakardharpore to Gailkera	15-5-90	20·90			
Gailkera to Jharsuguda	1-2-91	104·92			
Jharsuguda to Raigarh	20-4-90	44·42			
Raigarh to Bilaspur	10-2-90	82·40			
Bilaspur to Raipur	10-1-89	63·52			
Raipur to Raj-Nandgaon	4-12-88	42·04			
Raj-Nandgaon to Nagpur	1900, '81 & '82†	144·94		629·55	
<i>Branches—</i>					
<i>Sanctoria coal branch—</i>					
Damoodar to the Sanctoria collieries	12-6-89	7·40		7·40	
<i>Chaurashi branch—</i>					
Ramkanali to Nodiha Colliery siding (siding No. 7)	1-2-03	8·52		8·52	
<i>Sambalpur branch—</i>					
Jharsuguda to Sambalpur	1-2-93	29·90		29·90	
<i>Katni branch—</i>					
Bilaspur to Birsinghpur	1-2-91	142·82			
Birsinghpur to Umaria	11-5-90	18·46			
Umaria to Katni	2-11-86	35·88			
Katni to Marwara Junction	1-1-01	0·65		197·31	
Kanhan to Dattapahar	26-9-07	17·39		17·39	
Carried over	...	...	...	890·07	
				890·07	

† These are the dates of opening of the original 3' 3½" gauge line, which was converted to the 5' 6" gauge and reopened on the 27th. November 1888.

\* Transferred for working as an integral part of the Bengal-Nagpur railway from the 1st January 1901.

**APPENDIX 9—contd.**  
*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 1 **BENGAL-NAGPUR RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (h) **1 (a) Bengal-Nagpur railway (5' 6" gauge)—contd.**  
Progress in opening—conold.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
<b>Brought forward . . . . .</b>					
<i>Calcutta extension—</i>	...	...	...	890'07	
Sini to Khargpur . . . . .	1-6-98	100'02			
Khargpur to Khal Bridge . . . . .	17-12-98	36'57			
Khal Bridge to Bajapur Khal . . . . .	24-5-00	18'80			
Bajapur Khal to Howrah . . . . .	14-12-00	15'81			
Port Gloster branch 1'36, Lawrence Mill 0'83 and East Roop Narain Bank 0'81 and Kidderpore Port line 0'60	14-12-00	8'80			
<i>Shalimar branch—</i>			174'50		
Santragachi to Shalimar . . . . .	15-8-01	8'15			
<i>Cuttack extension—</i>			3'15		
Khargpur to Balasore . . . . .	17-12-98	71'89			
Balasore to Cuttack . . . . .	10-1-99	110'40			
<i>Jharia extension—</i>			162'29		
Khargpur to Cosye river . . . . .	20-12-99	6'40			
Right bank of the Cosye river to Midnapore . . . . .	8-6-01	1'55			
Midnapore to Bhojudih . . . . .	1-2-03	114'95			
Bhojudih to Gomoh . . . . .	1-1-07	26'15			
<b>BRANCHES AND EXTENSIONS ON THE JHARIA COAL-FIELDS.</b>			149'05		
<i>Bhojudih-Bhaga-Mohuda loop—</i>					
Bhojudih to Bhaga . . . . .	20-4-03	6'96			
Bhaga to Malkera . . . . .	1-9-03	8'79			
Malkera to Mohuda . . . . .	15-8-04	3'37			
<i>Bhowra branch—</i>			19'12		
Bhowra branch . . . . .	14-5-08	3'08			
<i>Bhojudih-Pathardihi link . . . . .</i>			3'08		
Bhojudih-Pathardihi link . . . . .	1-2-08	0'66			
<i>Katras connections—</i>			0'86		
Malkera to Katras . . . . .	24-8-03	0'58			
Khanoodih to Katras . . . . .	1-1-07	1'89			
<i>Murulidih branch—</i>			2'47		
Mohuda to Murulidih collieries . . . . .	1-1-07	2'65			
<i>Jamadoba loop—</i>			2'65		
Jamadoba loop . . . . .	16-9-03	5'42			
<i>Kendua branch—</i>			5'42		
Kendua branch . . . . .	10-10-99	2'60			
<i>Aldih branch—</i>			2'60		
Aldih branch . . . . .	1-2-06	2'54			
<i>Vizianagram-Parvatipuram section—</i>			2'54		
Vizianagram to Bobbili . . . . .	24-12-08	33'18			
Bobbili to Parvatipuram . . . . .	8-3-09	15'20		48'38	
<i>Kalimati Gorumahisani extension—</i>				640'09	
Kalimati to Onajori . . . . .	1-2-11	34'12			
Onajori to Gorumahisani . . . . .	6-4-11	5'98			
<b>KALAMNA-ITWARI-NAGPUR SECTION—</b>			40'10		
Kalamna via Itwari to Nagpur . . . . .	15-9-11	3'88			
<b>TOTAL OPEN LINE, BENGAL-NAGPUR PROPER EAST COAST RAILWAY, NORTHERN SECTION—</b>	...	...	...	1,530'16	
<i>Main line—</i>					
Cuttack to Bhubaneswar . . . . .	1-2-97	17'13			
Bhubaneswar to Khurda Road . . . . .	20-7-96	11'75			
Khurda Road to Rambha . . . . .	1-3-96	61'80			
Rambha to Berhampore-Ganjam . . . . .	1-9-95	29'54			
Berhampore-Ganjam to Palasa . . . . .	1-4-95	45'99			
Palasa to Parlakimedi Road (Naupada) . . . . .	17-12-94	15'97			
Parlakimedi Road (Naupada) to Vizianagram . . . . .	20-7-94	72'36			
Vizianagram to Waltair . . . . .	15-7-93	37'78			
Naupada salt branch . . . . .	...	2'37		294'49	
<i>Puri branch—</i>					
Khurda Road to Puri . . . . .	1-2-07	25'34			
Temporary Puri station to new Puri station . . . . .	1-6-98	1'73		27'06	
<b>TOTAL EAST COAST RAILWAY, NORTHERN SECTION . . . . .</b>	...	...	...	321'55	
<b>TOTAL OPEN MILEAGE, BENGAL-NAGPUR RAILWAY, 5' 6" GAUGE.</b>	...	...	...	1,851'71	
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>					
Raipur to Parvatipuram (sanctioned on 26th January 1906) . . . . .	...	260'67			
<b>BOKHARO-BANGARH EXTENSION—</b>					
Mohuda to Jamuni (sanctioned on 9th February 1911) . . . . .	...	12'02			
<b>BOBBILI-SALURU BRANCH—</b>					
Bobbili to Saluru (sanctioned on 17th March 1911) . . . . .	...	10'30			
			282'99	282'99	
<b>GRAND TOTAL, BENGAL-NAGPUR, 5' 6" GAUGE.</b>	...	...	...	2,134'70	
<b>DOUBLE LINE—</b>					
<b>BENGAL-NAGPUR PROPER—</b>					
Howrah to Santragachi . . . . .	12-12-00	3'43			
Santragachi to Bauria . . . . .	17-6-02	10'80			
Bauria to Khargpur . . . . .	15-3-07	55'86			
Shalimar branch . . . . .	...	3'15			
<b>TOTAL DOUBLE LINE . . . . .</b>	...	...		73'23	

\*Opened for goods traffic only.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 1</sup> <sub>Sub-heads (a) to (h)</sub> **BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*****1 (a) Bengal-Nagpur railway (5' 6" gauge)—*contd.*****Details of construction—**

**Permanent-way.**—The line is laid with 75-lb., 85-lb. and 90-lb. steel rails on transverse wooden, steel and cast iron pot sleepers.

**Ballast.**—The line is ballasted throughout with stone, except for a few miles on the Adra district (between Khargpur and Garbetta) where laterite is used.

**Fencing.**—The line is fenced only between Nagpur and Kamptee and at the more important stations, also at some of the station yards and first class level crossings on the Barang-Waltair section.

**Curves.**—On the main line there are no curves sharper than 1,000 feet radius.

**Gradients.**—The ruling gradient between Asansol and Nagpur, and Bilaspur and Katni is 1 in 100; between Sini and Khargpur, 1 in 125; between Khargpur and Waltair, 1 in 150; between Khargpur and Howrah, and Khurda Road and Puri, 1 in 200; and between Midnapore and Bhojudih, 1 in 200 in the down direction, and 1 in 125 in the up direction and between Vizianagram and Parvatipuram, 1 in 125.

**Contracts—**

Dated the 9th March 1887 (called the original contract), between the Secretary of State and the Bengal-Nagpur Railway Company, as to taking over certain State railways and the construction of other lines, and their management, maintenance and working.

Dated the 31st December 1891 (supplemental to the contract of 1887), between the Secretary of State and the Bengal-Nagpur Railway Company, as to the construction and working of the Sambalpur Branch railway.

Dated the 27th June 1901 (called the Debenture contract, supplemental to the contract of 1887), between the Secretary of State and the Bengal-Nagpur Railway Company, as to the issue of debentures.

Dated the 23rd January 1902 (supplemental to the contract of 1887), between the Secretary of State and the Bengal-Nagpur Railway Company, as to the construction of certain new lines and the working of the Northern section of the East Coast railway.

Dated the 23th April 1903 (supplemental to the contract of 1887), between the Secretary of State and the Bengal-Nagpur Railway Company, as to the adoption of 1s. 4d. per rupee as the "prescribed" rate of exchange.

Dated the 22nd February 1910 (supplemental to the contracts of 1887, 1891, 1901, 1902 and 1903), between the Secretary of State and the Bengal-Nagpur Railway Company, as to the construction of certain further extensions and branch lines in connection with the Company's undertaking and to certain questions under the contract of 1902.

**Main provisions of contracts—**

- (i) **Land.**—Provided by the Government at the cost of capital.
- (ii) **Government aid.**—Guarantee of interest at 4 per cent per annum in sterling on the Company's share capital of £3,000,000. On further capital that may be required the guarantee to be 4 per cent, or such other rate as may be agreed upon.
- (iii) **Distribution of profits.**—The surplus profits for any complete calendar year, after providing for—
  - (a) payment to the Government of interest at 3½ per cent per annum on advances of capital made by it to the Company up to and including the 30th June 1909, and thereafter at 3½ per cent per annum for advances of capital expenditure on the Company's new extensions and on overdrafts of capital in connection with open line capital expenditure,
  - (b) repayment of interest paid by Government to the Company for that year,
  - (c) payment of interest on capitalized interest under clause 21 of the supplemental contract dated the 23rd January 1902,
 are divided in the ratio of ¾ths to the Government and ¼th to the Company.

As from 1st January 1901 interest at 3½ per cent per annum on the capital expended by the Government on the Northern section of the East Coast railway is a charge against the net earnings of the Company's undertaking, and the ¾th share of surplus profits formerly payable to the Company is further divisible between the Government and the Company in the proportion which the gross earnings of the Northern section of the East Coast railway bear to the gross earnings of the remainder of the Company's undertaking.

- (iv) **Rates and fares.**—The Government to authorise maximum and minimum rates, and prescribe the various classes of passengers and goods as well as the extent to which, within the maxima and minima, the Company may vary the rates in respect of distance, weight or special conditions.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 1</sup> Sub-heads (a) to (f) . BENGAL-NAGPUR RAILWAY SYSTEM—contd.

## 1 (a) Bengal-Nagpur railway (5' 6" gauge)—concl'd.

## Main provisions of contracts—concl'd.

## (v) Special obligations as to the conveyance of.—

(a) Mails, troops, police, high Government officials and Government stores.—To be conveyed on the same general conditions as those in force on State railways of the same gauge and at rates to be approved by Government.

(b) Government bullion and coin and the persons in charge thereof.—To be carried at special rates approved by Government.

(vi) Power of the Government to determine contract.—The railway and its appurtenances are declared to be absolutely the property of the Government, which 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.

The Government may also determine the contract at any time on six months' notice if the Company fail to fulfil its obligations, or the line be worked at a loss for three consecutive half-years.

On the termination of the contract the Company is to hand over to the Government the railway and all its belongings of every description, and the Government is to repay the amount at par of the share capital which has been paid in by the Company.

The contract for the Sambalpur branch brings this branch 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.

The contract of 22nd February 1910 provides for the construction maintenance and working of the new lines as part of the Company's undertaking and is to remain in force until the original contract of 1887 shall be determined.

(vii) Power of the Company to surrender contract.—Nil.

(viii) Term of contract [if not determined under (vi) or (vii)].—None specified.

Statistics of working (Those for the periods prior to 1888 will be found in Appendix 38 to the Report for 1907.)—

TABLE I							TABLE II			
Includes the Northern section of the late East Coast railway, the Gondia-Chanda, Nagpur-Chhindwara and the Jabulpore-Gondia Extensions and the Furulia-Ranchi and the Raipur-Dhamtari branches.										
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) attributable to each calendar year.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1888	224.50	5,23,92,291	15,83,298	5,17,461	0.99	23,62,947	...	-18,45,486	136	67.89
1889	348.18	7,08,75,456	20,40,944	4,03,160	0.57	29,96,964	...	-25,93,204	112	80.25
1890	586.01	8,14,66,762	28,64,578	5,47,463	0.67	33,83,852	...	-28,41,389	94	80.89
1891	831.58	9,08,04,164	54,57,356	26,84,453	2.96	35,05,676	...	-8,21,223	126	50.31
1892	831.58	9,56,14,796	60,83,563	30,08,166	3.15	39,05,245	...	-8,97,179	141	59.25
1893	862.33	9,60,03,424	64,17,751	32,62,220	3.33	43,97,594	...	-11,35,374	144	49.17
1894	880.88	9,81,73,789	66,90,648	32,58,414	3.32	45,83,998	...	-13,25,579	149	51.80
1895	960.68	9,83,94,777	68,74,740	35,41,444	3.53	48,56,800	...	-13,15,356	153	48.49
1896	880.88	11,08,80,319	63,65,825	29,27,869	2.65	48,27,504	...	-18,99,635	142	54.03
1897	860.88	13,04,58,784	62,00,309	29,79,559	2.28	51,95,240	...	-21,55,631	138	51.94
1898	1,067.41	14,67,03,520	68,73,198	38,63,854	2.29	54,28,186	...	-20,59,332	124	51.10
1899	1,190.16	16,65,90,365	90,78,460	47,21,814	2.83	56,75,853	...	-12,64,039	147	47.96
1900	1,284.35	17,41,74,604	1,29,75,228	77,13,050	4.43	64,80,637	2,24,836	+ 9,97,577	194	40.56
1901	1,009.22	21,23,65,661	1,30,77,769	61,43,648	2.89	79,88,163	...	-18,89,515	156	52.93
1902	1,602.24	23,05,09,658	1,42,18,237	69,37,742	3.01	85,44,311	...	-16,06,569	170	51.21
1903	1,815.65	24,97,58,040	1,55,47,702	70,45,255	2.33	89,66,131	...	-19,30,376	165	54.69
1904	1,965.68	26,14,85,453	1,59,12,137	95,87,326	3.67	95,41,624	...	+ 45,702	185	49.31
1905	1,960.47	27,33,72,579	2,44,70,900	1,34,04,052	4.30	1,00,32,818	6,76,785	+ 26,92,949	238	45.22
1906	1,996.50	28,49,48,582	2,69,47,181	1,41,51,232	4.97	1,08,41,779	7,88,611	+ 30,20,862	253	47.49
1907	2,113.35	30,21,30,534	2,89,80,537	1,48,46,149	4.30	1,08,35,645	9,05,730	+ 31,04,874	263	48.77
1908	2,300.83	32,39,77,888	2,71,55,960	1,14,06,971	3.52	1,12,34,518	...	+ 1,72,453	227	57.99
1909	2,348.68	33,91,49,381	2,87,72,437	1,21,42,678	3.68	1,16,99,565	2,87,725	+ 11,58,886	236	53.32
1910	2,395.89	34,75,01,036	3,08,52,837	1,50,32,327	4.33	1,20,04,993	6,06,079	+ 24,21,655	248	51.24
1911	2,488.22	35,59,06,842	3,33,70,044	1,68,21,823	4.73	1,22,61,532	9,27,241	+ 36,33,030	262	50.48



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 1</sup> <sub>Sub-heads (a) to (h)</sub> BENGAL-NAGPUR RAILWAY SYSTEM—contd.1 (b) Gondia-Chanda Extension, Bengal-Nagpur railway (2' 6" gauge)—  
Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
Gondia to Nagbhir . . . . .	10-11-08	81.74	181.28	
Nagbhir, via Itwari, to Motibagh . . . . .	10-11-08	65.47		
Line at Itwari . . . . .	1-2-10	0.81		
Nagbhir to Rajoli . . . . .	15-2-11	0.09		
	1-12-10	1.49		
		31.66		
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Rajoli to Chanda (sanctioned on 26th August 1904) . . . . .	...	37.55	38.18	219.38
Motibagh to Nagpur . . . . .	...	0.58		

## Details of construction—

*Permanent-way.*—The line is laid with 40-lb. flat-footed steel rails on s&al sleepers.*Ballast.*—The line is ballasted with stone and moorum.*Fencing.*—The line is not fenced.*Curves.*—The sharpest curve is of 955 feet radius.*Gradients.*—The ruling gradient is 1 in 100.

## Contracts—

The line forms an integral part of the Bengal-Nagpur railway and is worked under the contracts noted under 1 (a), Bengal-Nagpur railway (5' 6" gauge).

## Statistics of working—

Included under 1 (c), Jubbulpore-Gondia Extension (2' 6" gauge).

## 1 (c) Jubbulpore-Gondia Extension, Bengal-Nagpur railway (2' 6" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<i>Main line—</i>				
Nainpur to Gondia . . . . .	18-4-03	72.66	139.98	
Nainpur to Jubbulpore. . . . .	5-7-04	67.32		
	7-4-05			
	15-9-05			
<i>Branches—</i>				
Nainpur to Garha Mandla . . . . .	15-2-09	28.49	135.41	275.39
Nainpur to Seoni . . . . .	12-2-04	47.10		
Seoni to Chhindwara . . . . .	27-7-04	40.18		
Chhindwara to Khirsadoh . . . . .	1-9-04	16.18		
Khirsadoh to Barkuhi . . . . .	15-3-06	5.60		
	21-3-07			
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Khirsadoh to Sirgora (sanctioned on 24th June 1904) . . . . .	...	8.43	37.67	37.67
Balaghat to Katangi (sanctioned on 30th December 1902) . . . . .	...	29.24		
				313.06

## Details of construction—

*Permanent-way.*—The permanent-way consists of 41-lb. flat-footed steel rails on s&al sleepers.*Ballast.*—The line is ballasted with stone, except between Seoni and Chhindwara where good black basalt has been used. Between Chhindwara and Barkuhi the ballast consists mainly of moorum.*Fencing.*—Only important station yards are fenced.*Curves.*—The sharpest curve is of 409 feet radius.*Gradients.*—The ruling gradient is 1 in 80, except between Khirsadoh and Barkuhi where it is 1 in 60.

## Contracts—

The line forms an integral part of the Bengal-Nagpur railway and is worked under the contracts noted under 1 (a), Bengal-Nagpur railway (5' 6" gauge).

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 1 **BENGAL-NAGPUR RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (h).1 (a) Jubbulpore-Gondia Extension, Bengal-Nagpur railway (2' 6" gauge)—concl'd.  
Statistics of working—

TABLE I.				TABLE II.			
Includes the Gondia-Chanda and Nagpur-Chhindwara Extensions (2' 6" gauge), 1 (b) and 1 (c).							
Calendar year	Mileage open at end of each year.	Total capital outlay, including expense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1903	76.95	85,32,012	45,307	20,527	0.24	.16	54.69
1904	212.77	1,05,77,313	2,41,318	64,298	0.61	.29	73.36
1905	222.77	1,24,84,733	5,09,764	1,27,468	1.02	.44	74.29
1906	245.05	1,45,32,197	7,59,695	2,44,105	1.68	.60	67.58
1907	250.10	1,39,72,323	10,02,418	3,65,276	1.93	.77	69.56
1908	397.67	2,36,27,804	10,91,800	3,05,552	1.29	.53	72.01
1909	428.46	2,61,54,633	11,33,743	1,67,544	0.64	.58	85.38
1910	458.57	2,76,45,635	14,02,244	2,90,059	1.04	.59	79.31
1911	507.59	3,26,46,622	15,64,717	3,59,177	1.10	.59	77.05

## 1 (d) Mourbhanj railway (2' 6" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Rupia to Baripada station.	20-1-05	32.41	32.41

Details of construction—

**Permanent way.**—The line is laid with 81-lb. flat-footed steel rails on s&il sleepers.**Ballast.**—The line is ballasted with screened laterite, gravel and broken laterite.**Fencing.**—The line is unfenced.**Curves.**—The sharpest curve is of 955 feet radius.**Gradients.**—The ruling gradient is 1 in 100.

Agreement—

Without date, between the Maharaja of Mourbhanj and the Bengal-Nagpur Railway Company, as to management, maintenance and working approved in Railway Board's letter No. 223-R.T. of the 10th March 1905.

Main provisions of agreement—

(i) **Land.**—Provided by the Mourbhanj State at the cost of capital.(ii) **Government aid.**—The railway was constructed by the Mourbhanj State, whose property it is, and is managed, maintained, stocked and worked by the Bengal-Nagpur Railway Company as if it were part of the Company's undertaking.(iii) **Terms of working.**— } The total amount of actual working expenses of the line, including(iv) **Distribution of profits.**— } cost of maintenance, is deducted by the Company from the gross receipts and the balance is paid to the Maharaja of Mourbhanj at the end of each year.(v) **Rates and fares.**—Controlled by the Company.(vi) **Special obligations as to the conveyance of.**—

(a) Mails, troops, police, high Government officials and Government stores—

(b) Government bullion, coin and the persons in charge thereof—

} None specified.

(vii) **Power of the Maharaja to determine agreement.**—(viii) **Power of the Company to surrender agreement.**—

} The agreement is terminable on 31st December of any year on three months' previous notice given by either party to the other.

(ix) **Term of agreement [if not determined under (vii) or (viii)].**—Not specified.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 1 Sub-heads (a) to (k) BENGAL-NAGPUR RAILWAY SYSTEM—contd.

## 1 (a) Mourbhanj railway (2' 6" gauge)—contd.

## Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1905 . . . . .	33.41	6,29,160	31,494	9,444	1.50	20	70.01
1906 . . . . .	33.41	6,76,547	44,825	21,688	3.23	27	51.17
1907 . . . . .	32.41	7,12,765	48,832	21,567	3.03	26	50.46
1908 . . . . .	32.41	7,18,970	50,791	23,633	3.28	30	48.62
1909 . . . . .	32.41	7,19,675	55,490	24,269	3.37	33	55.25
1910 . . . . .	32.41	7,19,735	53,333	25,356	3.51	35	53.70
1911 . . . . .	32.41	7,20,259	62,154	33,486	4.65	37	49.13

## 1 (c) Nagpur-Chhindwara Extension, Bengal-Nagpur railway (2' 6" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<i>Main line—</i>				
Itwari to Lodhikhera . . . . .	1-1-11	38.88		
Lodhikhera to Sansar . . . . .	10-5-11	7.40	46.28	
<i>Branch—</i>				
Saoner to Khapa . . . . .	1-1-11	4.66	4.66	
<i>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</i>				50.94
Sansar to Chhindwara (sanctioned on 10th February 1909) . . . . .	—	46.15	46.15	46.15
				97.09

## Details of construction—

*Permanent way.*—The permanent-way consists of 41-lb. flat-footed steel rails on s&al sleepers.

*Ballast.*—Cuttings are fully ballasted and banks are being moomed throughout.

*Fencing.*—The line is not fenced.

*Curves.*—The sharpest curve is of 636.6 feet radius.

*Gradients.*—The ruling gradient is 1 in 80.

## Contracts—

This line forms an integral part of the Bengal-Nagpur railway and is worked under the contracts noted under 1 (a), Bengal-Nagpur railway (5' 6" gauge).

## Statistics of working—

Included under 1 (c), Jubulpore-Gondia Extension (2' 6" gauge).

## 1 (f) Parlakimedi Light railway (2' 6" gauge)—

On the 20th May 1901 the Indian Railways Act, 1890 (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.

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Naipada to Parlakimedi . . . . .	1-4-00	24.62	24.62

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 1. **BENGAL-NAGPUR RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (h).**1 (f) Parlakimedi Light railway (2' 6" gauge)—contd.****Details of construction—****Permanent-way.**—The line is laid with 31-lb. flat-footed steel rails on transverse wooden sleepers.**Ballast.**—The line is ballasted throughout with laterite, gravel and stone.**Fencing.**—Short lengths of fencing have been provided in a few places where the railway runs in cutting alongside the road.**Curves.**—There are no curves of less than 1,000 feet radius.**Gradients.**—The ruling gradient is 1 in 100.**Agreement—**

Dated the 24th January 1905, between the Raja of Parlakimedi and the Bengal-Nagpur Railway Company, as to management, maintenance and working.

**Provisions of agreement—**(i) **Land.**—Provided by the Parlakimedi State at the cost of capital.(ii) **Government aid.**—The railway was constructed by the Parlakimedi State, whose property it is, and is managed, maintained, stocked and worked by the Bengal-Nagpur Railway Company as if it were part of the Company's undertaking.(iii) **Terms of working.**—(iv) **Distribution of profits.**— } The total amount of actual working expenses of the line, including cost of maintenance, is deducted by the Company from the gross receipts, and the balance is paid to the Raja of Parlakimedi.(v) **Rates and fares.**—Controlled by the Company.(vi) **Special obligations as to the conveyance of—**(a) Mails, troops, police, high Government officials and Government stores.— } None specified.  
(b) Government bullion and coin, and the persons in charge thereof.—(vii) **Power of the Raja to determine agreement.**—(viii) **Power of the Company to surrender agreement.**— } The agreement is terminable on 31st December of any year on three months' previous notice given by either party to the other.(ix) **Term of agreement [if not determined under (vii) or (viii)].**—None specified.**Statistics of working—**

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per-mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1902	Miles. 24-68	Rs. 7,10,974	Rs. 17,485	Rs. -14,812	...	14	185-00
1903	24-68	7,10,974	14,683	-9,267	...	13	155-71
1904	24-68	7,10,974	20,675	-1,901	...	16	106-29
1905	24-68	7,12,466	27,181	4,479	0-63	21	83-82
1906	24-68	7,12,466	21,494	-9,702	...	17	145-14
1907	24-68	7,12,602	25,440	-5,877	...	20	128-10
1908	24-68	7,13,374	22,365	837	0-12	21	98-82
1909	24-68	7,16,538	25,830	6,961	0-97	20	73-03
1910	24-68	7,23,690	27,134	8,277	1-14	21	69-50
1911	24-68	7,36,081	38,166	10,374	1-41	26	68-74

**1 (g) Purulia-Ranchi branch, Bengal-Nagpur railway (2' 6" gauge)—****Progress in opening—**

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
Purulia to Ranchi	15-11-07	72-68	72-68	
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>				
Ranchi to Lohardaga (sanctioned on 20th February 1911).	...	42-83	42-83	115-51

**Details of construction—****Permanent-way.**—The line is laid with 40-lb. flat-footed steel rails on transverse wooden sleepers.**Ballast.**—The line is ballasted with stone and gravel.**Fencing.**—Only the important level crossings have posts and chains padlocked.**Curves.**—The sharpest curve is of 955 feet radius.**Gradients.**—The ruling gradient is 1 in 80.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 1 BENGAL-NAGPUR RAILWAY SYSTEM—concl'd.  
Sub-heads (a) to (h)

1 (g) Purulia-Ranchi branch, Bengal-Nagpur railway (2' 6" gauge)—concl'd.

## Contracts—

The line forms an integral part of the Bengal-Nagpur railway and is worked under the contracts noted under 1 (a), Bengal-Nagpur railway (5' 6" gauge).

## Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1907	72.49	34,48,245	54,108	43,404	1.28	114	19.78
1908	72.68	41,71,743	3,44,434	2,28,979	5.37	91	33.81
1909	72.68	47,56,335	3,38,520	1,86,930	3.93	90	41.78
1910	72.68	48,51,707	3,62,940	1,68,155	3.89	96	48.14
1911	72.68	49,08,599	3,83,864	1,95,681	3.99	96	46.07

1 (h) Raipur-Dhantari branch, Bengal-Nagpur railway (2' 6" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
Main line—				
Raipur to Kurud	10-9-00	31.50		
Kurud to Dhantari	17-12-00	14.04	45.54	
Branch—				
Abhanpur to Rajim	15-10-00	11.40	11.40	56.94

## Details of construction—

**Permanent-way.**—The line is laid with 31-lb. flat-footed steel rails on s&l sleepers.

**Ballast.**—Moorum or sand and stone in a few cuttings.

**Fencing.**—The line is unfenced.

**Curves.**—The sharpest curve is of 409 feet radius, at Raipur station.

**Gradients.**—The ruling gradient of the line is 1 in 200.

## Contracts—

The line forms an integral part of the Bengal-Nagpur railway and is worked under the contracts noted under 1 (a), Bengal-Nagpur railway (5' 6" gauge).

Statistics of working (Those for 1901 will be found in Appendix 38 to the Report for 1907)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902	56.24	18,85,968	62,786	14,268	1.08	21	77.27
1903	56.24	18,96,065	75,187	26,288	1.81	26	68.37
1904	56.24	18,96,065	1,06,587	48,417	3.47	35	58.24
1905	56.24	18,96,077	1,07,418	46,363	3.53	37	56.53
1906	56.94	14,19,283	1,16,088	57,608	4.08	39	50.88
1907	56.94	14,18,139	1,16,696	58,828	4.15	39	49.59
1908	56.94	14,18,139	1,16,387	45,966	3.24	39	60.51
1909	56.94	14,20,126	1,16,202	41,337	2.91	39	64.43
1910	56.94	14,20,126	1,22,475	58,088	3.74	41	56.86
1911	56.94	14,22,020	1,42,003	65,138	4.18	50	55.99

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 2 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—  
Sub-heads (a) to (t)

Chairman.—COLONEL SIR W. S. S. BISSET, K.C.I.E.

Secretary.—C. A. R. CROMMELIN, Esq.

Office.—Gloucester House, 110, Bishopsgate, London, E.C.

The property vested in the former Bombay, Baroda and Central India Guaranteed Railway Company was purchased by the Secretary of State on the 31st December 1905, from which date all the contracts then subsisting between the Secretary of State and that Company were determined and the railway was worked temporarily under the terms of the provisional contract, dated the 27th December 1905, pending the execution of the new contract, dated the 8th April 1907, as from the 1st January 1906. The purchase price was fixed at the sum of £11,685,581, and the Secretary of State agreed to create and issue to the Company, on the 31st December 1905, India 3 per cent stock to the amount of £10,089,146 in satisfaction of £9,645,581, part of the purchase price, the Company raising a new stock capital of £2,000,000 being the unpaid balance of the purchase money of £11,685,581.

Lines comprised in the system.—The Bombay, Baroda and Central India railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Bombay, Baroda and Central India railway: { 5' 6" gauge) 465.12 { 5' 3 1/2" gauge) 38.23 }	504.35	...	504.35
(b) Godhra-Bottam-Nagda railway (5' 6" gauge)	141.14	...	141.14
(c) Nagda-Muttra railway (5' 6" gauge)	339.35	49.58	388.93
(d) Nagda-Ujjain railway (5' 6" gauge)	34.32	...	34.32
(e) Petlad-Cambay railway (Anand-Tarapur section) (5' 6" gauge)	21.50	...	21.50
(f) Petlad-Cambay railway (Tarapur-Cambay section) (5' 6" gauge)	12.30	...	12.30
(g) Tapti Valley railway (5' 6" gauge)	155.48	...	155.48
(h) Ahmedabad-Dholka railway (3' 3 1/2" gauge)	33.54	...	33.54
(i) Ahmedabad-Parantij railway (3' 3 1/2" gauge)	88.70	...	88.70
(j) Geokwar's Mohana railway (3' 3 1/2" gauge)	138.00	...	138.00
(k) Jaipur railway (3' 3 1/2" gauge)	72.84	...	72.84
(l) Palanpur-Deesa railway (3' 3 1/2" gauge)	17.28	...	17.28
(m) Rajputana-Malwa railway (3' 3 1/2" gauge)	1,776.59	...	1,776.59
(n) Vijapur-Kalol-Kadi railway (3' 3 1/2" gauge)	41.37	4.97	46.34
(o) Geokwar's Dabhoi railway (2' 6" gauge)	94.48	57.93	152.41
(p) Rajpipla railway (2' 6" gauge)	37.37	...	37.37
(q) Billimora-Kelamba railway (2' 6" gauge)	...	34.83	34.83
(r) Broach-Jambusar branch railway (2' 6" gauge)	...	29.15	29.15
(s) Kosamba-Zankavav railway (2' 6" gauge)	...	26.12	26.12
(t) Petlad-Vase railway (2' 6" gauge)	...	15.74	15.74
Total	3,508.61	218.31	3,726.92

## Running powers—

## Home line over foreign lines:—

Dadar Junction to Carnao bridge, Great Indian Peninsula railway (for goods trains only)	4.39
Muttra-Delhi section of the Agra-Delhi Chord railway	88.68
Total	93.07

## Foreign lines over home line:—

East Indian railway, Agra East Bank to Agra Fort (for passenger trains only)	1.10
Great Indian Peninsula railway at Ujjain (for passenger and goods trains)	9.24 1/2
" " " Dadar Junction to Dohiba (for goods trains only)	7.25
" " " at Agra (for passenger and goods trains)	3.69
Total	11.38 1/2

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 2. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (d)

## 2 (a) Bombay, Baroda and Central India railway (5' 6" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
<b>Main line—</b>					
Colaba to Marine lines . . . . .	18-1-70	2-00			
Marine lines to Charni Road . . . . .	19-6-69	0-75			
Charni Road to Grant Road . . . . .	19-9-68	0-75			
Grant Road to Buleir . . . . .	28-11-64	131-00			
Buleir to Navsari . . . . .	9-9-61	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	26-75			
Anklesvar to the Nerbudda . . . . .	5-12-60	5-86			
Nerbudda to Broach . . . . .	22-6-60				
Broach to Baroda . . . . .	9-1-61	43-75			
Baroda to Dholia . . . . .	23-4-61	11-25			
Dholia to Mehmudabad and Kaira Road . . . . .	3-9-62	39-25			
Mehmudabad and Kaira Road to Ahmedabad . . . . .	21-1-63	17-89			
Ahmedabad to Sabarmati . . . . .	1-1-70	8-75			
Sabarmati to Sanand . . . . .	24-5-71	18-75			
Sanand to Virangam . . . . .	30-11-71	22-98			
<b>5' 3 1/4" gauge—</b>			350-12		
Virangam to Wadhwan . . . . .	25-5-72	39-23			
<b>Branches—</b>			39-23		
<b>Godhra branch—</b>					
Anand to Dakor . . . . .	8-4-74	16-75			
Dakor to Rukhyal . . . . .	6-1-75	1-75			
Rukhyal to Hungari . . . . .	6-12-78	9-00			
Hungari to Sevalia . . . . .	29-1-77	4-71			
Sevalia to Godhra . . . . .	26-2-82	17-00			
<b>Patri branch—</b>			49-21		
Khatrigoda to Virangam . . . . .	12-5-73	22-12			
<b>Godhra-Baroda chord—</b>			22-12		
Baroda to Godhra . . . . .	23-12-68	43-67			
<b>TOTAL OPEN MILEAGE, BOMBAY, BARODA AND CENTRAL INDIA RAILWAY.</b>				504-35	
<b>DOUBLE LINE—</b>					
Colaba to Marine lines . . . . .	18-1-70	1-91			
Marine lines to Charni Road . . . . .	19-6-69	0-71			
Charni Road to Grant Road . . . . .	19-9-68	1-29			
Grant Road to Mahim . . . . .	20-7-65	5-44			
Mahim to Bandra . . . . .	22-2-66	1-67			
Bandra to Santa Cruz . . . . .	22-5-66	1-83			
Santa Cruz to Andheri . . . . .	22-8-67	2-71			
Andheri to Bhayandar . . . . .	27-4-65	18-83			
Bhayandar to Virar . . . . .	7-10-65	10-84			
Virar to Palghar . . . . .	1-12-67	19-28			
Palghar to Dahann Road . . . . .	17-1-68	20-67			
Dahann Road to Gholvad . . . . .	20-4-60	6-68			
Gholvad to Daman Road . . . . .	18-10-60	28-19			
Daman Road to Buleir . . . . .	29-1-62	16-44			
Buleir to Sachin . . . . .	21-4-62	22-90			
Sachin to Kankra Khari . . . . .	4-7-67	6-86			
Kankra Khari to Surat . . . . .	5-6-68	2-72			
Surat to Utran . . . . .	9-10-67	2-19			
Utran to Sayan . . . . .	25-5-68	6-43			
Sayan to Kim . . . . .	7-10-68	6-83			
Kim to Anklesvar . . . . .	11-12-69	16-16			
Broach to Miyagam . . . . .	15-10-69	25-42			
Miyagam to Itola . . . . .	15-9-67	7-81			
Itola to Baroda . . . . .	7-6-65	10-77			
Barejadi to Ahmedabad . . . . .	2-6-67	10-21			
<b>Total double line . . . . .</b>			251-90†		

† This is the date for the original 5' 6" gauge line. The date for the 5' 3 1/4" gauge line is 14th December 1962.

† Excluding 4-17 miles from Anklesvar to Nerbudda Block station constructed but not opened for traffic.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 2 **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***  
Sub-heads (a) to (f)**2 (a) Bombay, Baroda and Central India railway (5' 6" gauge)—*contd.*****Details of construction—**

**Permanent-way.**—The main line is laid with 69-lb. double-headed, 82-lb. bull-headed and 90-lb. flat-footed steel rails on creosoted pine, Australian and oval pot sleepers.

The branches are laid mostly with 69-lb. double-headed and 4½-lb., 48-lb., 50-lb. and 75-lb. flat-footed steel rails on oval pot and wooden sleepers.

**Ballast.**—The line is mostly ballasted with broken stone, gravel and shingle.

**Fencing.**—The line is fenced throughout except the Pátri branch.

**Curves.**—The sharpest curve on the main line and on the Godhra branch is of 1,500 feet radius, on the Pátri branch of 2,865 feet radius, and on the Godhra-Baroda Chord of 1,910 feet radius.

**Gradients.**—The ruling gradient on the greater part of the main line is 1 in 500, but there are short lengths of 1 in 200 at the approaches to major bridges. On the Godhra branch the ruling grade is 1 in 200, except for a short length at the Mahi low level bridge where it is 1 in 80; on the Pátri branch and the Godhra-Baroda Chord it is 1 in 300, except for short lengths of 1 in 200 on the latter.

**contracts—**

Dated the 8th April 1907 (called the principal contract), between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Dated the 15th October 1908 (supplemental to the contract of 1907), between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to debentures and debenture stock.

**Main provisions of contracts—**

(i) **Land.**—Was provided by the Government free of cost to the former Company. After the 31st December 1905, the cost of land provided by the Government is debited to the appropriate capital account.

(ii) **Government aid.**—The Government undertake to pay to the Company interest at the rate of 3 per cent. per annum on its stock capital of £ 2,000,000 raised in satisfaction of the unpaid balance of the purchase money of £ 11,685,581.

All capital moneys required for the purposes of the Bombay, Baroda and Central India railway, and of the Rajputana-Malwa railway so long as it forms part of the undertaking, is, at the option of the Secretary of State, either to be provided by him at such rate of interest as shall be agreed upon; or be raised by the Company by the issue of further capital stock, or debentures, or debenture stock, subject to such terms and conditions, etc., as to interest or otherwise as may be approved by the Government.

(iii) **Terms of working.**— } From the half-yearly gross earnings of the undertaking (i.e., the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and the subsidiary lines, as defined in clause 1 of the contract of the 8th April 1907) are deducted the working expenses of the undertaking attributable to each half-year, the remainder being the net receipts.

From the net receipts of the undertaking is deducted the total of the following sums:—

(a) the amount by which the gross earnings for the half-year of the subsidiary lines forming part of the undertaking exceed the sums payable to the Company for their working;

(b) allowances for rebate, direction and other deductions, in terms of the contracts then subsisting for the working of each of the subsidiary lines as form part of the undertaking, in accordance with clause 46 of the contract of 1907.

(c) After the deduction from the net receipts of the sums mentioned against (a) and (b), the residue of such net receipts (so long as the Rajputana-Malwa railway forms part of the undertaking) are applied half-yearly in the following manner and order:—

(1) in payment to the Secretary of State of the sum of Rs. 1,00,00,000;

(2) in repayment to the Government in rupee currency of the interest on any capital stock of the Company created and issued after the 31st December 1905 in excess of £ 2,000,000; and of the interest on any debenture stock or debentures of the Company created and issued, and on any outstanding amount provided by the Government for capital expenditure on the undertaking, after the said date.

The resulting surplus attributable to the two halves of any calendar year belongs as to  $\frac{2}{10}$ ths to the Government, as to  $\frac{1}{10}$ th to the Company: provided that should the Company's  $\frac{1}{10}$ th share of surplus exceed  $\frac{1}{2}$  per cent. on the average amount of the Company's existing capital stock, then



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 2 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (f)

## 2. (a) Bombay, Baroda and Central India railway (5' 6" gauge)—contd.

## Main provisions of contracts—contd.

1/5th part of such excess shall belong to the Company and the balance to the Government: provided also that if the Company's capital stock of £ 2,000,000 be increased by the issue of further shares or stock, the Company's share of the surplus shall be such as may be agreed upon between the Company and the Government.

When and if the Rajputana-Malwa railway ceases to form part of the undertaking, the aforesaid residue of the net receipts is to continue to be applied in the manner indicated against (c), except that the sum to be paid to the Government under (c) (1) is to be reduced to Rs. 35,00,000.

(v) *Rates and fares.*—The Government will from time to time authorize maxima and minima rates, and prescribe the several classes and descriptions of passengers and goods to which such rates shall be respectively applicable, as well as the extent to which, within the authorized maxima and minima, the Company may vary the said rates. The Railway Board may at any time require the Company to quote such rates over the undertaking for both passengers and goods to and from the western ports between Karachi and Bombay, inclusive, including a rate from stations of origin and delivery where the route is either entirely or only partly over the undertaking, so as to secure equal treatment of such ports.

(vi) *Special obligations as to the conveyance of.*—

(a) Mails, troops, high Government officials and Government stores.—To be conveyed on the same general conditions, and at rates to be approved by the Government not being less than those in force on State railways of the same gauge.

(b) Government bullion and coin, and the persons in charge thereof.—To be carried at special rates to be approved by the Government.

(vii) *Power of the Government to determine contract.*—

(viii) *Power of the Company to surrender contract.*— } May be determined by either party on the 31st December 1930, or on the 31st December of any succeeding fifth year, by giving to the other party in England, 12 calendar months' notice.

(ix) *Term of contract [if not determined under (vii) and (viii)].*—Not specified.

Statistics of working (Those for the periods prior to 1906 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay including suspense to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction. (3) <sup>a</sup>	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) attributable to each calendar year.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses earnings.
(1)	(2)	(3) <sup>a</sup>	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1906	504.35	12,63,16,478	1,99,81,754	1,05,39,688	8.34	72,58,353	3,95,638	+28,85,502	809	47.27
1907	504.35	12,96,92,431	2,10,78,442	1,18,80,851	9.16	71,98,558	4,52,699	+42,29,694	852	53.48
1908	504.35	13,48,94,409	2,04,49,999	97,63,718	7.24	72,93,726	1,50,000	+22,19,987	780	52.25
1909	504.35	14,18,69,493	2,21,96,727	1,17,56,514	8.29	75,19,552	1,52,517	+40,34,445	844	49.69
1910	504.35	14,82,24,042	2,40,62,075	1,24,94,578	8.72	77,49,590	6,30,787	+43,14,196	917	49.07
1911	504.35	14,92,98,743	2,47,34,178	1,23,43,704	8.27	78,64,423	4,42,338	+40,41,888	948	50.07

## 2 (b) Godhra-Rutlam-Nagda railway (5' 6" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Godhra to Limkhera	16-1-33	25.09	
Limkhera to Dohad	7-11-34	19.55	
Dohad to Rutlam	22-10-34	70.46	
Rutlam to Nagda	11-5-35	26.04	
			141.14

<sup>a</sup> Includes State outlay on Pétri branch, viz., Rs. 8,08,405.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> <sub>Sub-heads (a) to (f)</sub> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

## 2 (b) Godhra-Rutlam-Nagda railway (5' 6" gauge)—contd.

## Details of construction—

**Permanent-way.**—The permanent-way consists of 75-lb. flat-footed steel rails on transverse steel, deodar and creosoted pine sleepers.

**Ballast.**—The line is ballasted throughout with broken stone and gravel.

**Fencing.**—There are 76½ miles of fencing. The rest of the line is unfenced except in station yards.

**Curves.**—The sharpest curve is of 1,000 feet radius.

**Gradients.**—The ruling gradient is 1 in 200, with short lengths of 1 in 100, and from 1 in 101 to 1 in 150, between Godhra and Jékót.

## Contracts—

This line is the property of the State and is managed, maintained and worked as a part of the Rajputana-Malwa railway under the contracts noted under 2 (a), Bombay, Baroda and Central India railway (5' 6" gauge).

## Statistics of working—

Included with 2 (m), Rajputana-Malwa railway (3' 3½" gauge).

## 2 (c) Nagda-Muttra railway (5' 6" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
Nagda to Morak	15-7-07	101.51		
Morak to Kotah City	23-2-08	35.13		
Kotah City to Kotah Junction	1-5-09	3.48		
Kotah Junction to Siwai Mádhopur	1-5-09	67.88		
Siwai Mádhopur to Gangapur City	1-5-09	39.00		
Gangapur City to Hindaun City	1-10-09	22.24		
Hindaun City to Muttra Junction	15-5-09	66.02		
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION.			339.35	
Bayana to Agra (sanctioned on 28th April 1911).		49.58	49.58	388.93

## Details of construction—

**Permanent-way.**—The permanent-way consists of 87-lb. and 90-lb. flat-footed steel rails on sal, deodar and Australian wood sleepers.

**Ballast.**—Broken stone.

**Fencing.**—Most of the station yards only are fenced.

**Curves.**—The sharpest curve is of 1,275 feet radius.

**Gradients.**—The ruling gradient is 1 in 200.

## Contract—

The line is the property of the State, and, pending the settlement of permanent arrangements, is managed, maintained and worked by the Bombay, Baroda and Central India Railway Company as part of its undertaking on the terms (in principle on the basis of actual cost, plus 5 per cent. on the capital cost of the Company's rolling-stock used on the State line reduced by the hire for the latter's rolling-stock in use on the Bombay, Baroda and Central India railway) mentioned in Appendix A. to the Agent's despatch to his Board, No. 19, dated the 9th May 1908, enclosed in the letter from the Company's Board to the Under Secretary of State for India, No. 69, dated the 8th July 1909.

## Statistics of working—

Calendar year.	Mileage open at end of each year.	Total capital outlay including suspense to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	TABLE I.		Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State pertaining to each calendar year.	TABLE II.	
			Gross earnings.	Net earnings.				Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1907	101.00	2,76,57,016	70,180	7,510	0.03	8,09,524	-8,01,914	29	39.16
1908	126.68	3,43,41,804	2,98,751	-37,397	---	10,64,042	-11,01,439	43	117.60
1909	339.35	8,36,01,559	6,16,319	-23,699	1.45	12,73,908	-13,02,670	85	104.66
1910	339.35	8,99,47,396	17,73,001	5,80,129	1.45	12,37,303	-7,57,104	100	67.29
1911	339.35	4,20,04,259	33,20,478	19,41,417	4.62	18,90,193	+5,51,224	128	41.53

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> <sub>Sub-heads (a) to (d)</sub> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

## 2 (d) Nagda-Ujjain railway (5' 6" gauge)—

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Nagda to Ujjain . . . . .	15-7-96	84.82	84.82

## Details of construction—

**Permanent-way.**—The permanent-way consists of 75-lb. flat-footed steel rails on cast iron oval pot sleepers.

**Ballast.**—The line is ballasted with broken stone.

**Fencing.**—Only station yards are fenced.

**Curves.**—The sharpest curve is of 1,910 feet radius.

**Gradients.**—The ruling gradient is 1 in 200.

## Agreement and contracts—

Agreement, without date, having effect from the 15th July 1896, between His Highness the Maharaja Scindia of Gwalior and the Bombay, Baroda and Central India Railway Company, as to management, maintenance and working.

Contract, dated the 1st February 1901, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the revising, and extending up to the 31st December 1905, of the arrangements for working the Rajputana-Malwa railway and other lines.

Contract, dated the 8th April 1907 (called the principal contract), between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

## Main provisions of agreement and contracts—

(i) **Land.**—Provided free of cost by the Gwalior Durbar.

(ii) **Government aid.**—The line is the property of the Gwalior Durbar (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Bombay, Baroda and Central India Railway Company as part of the Company's railway system.

(iii) **Terms of working.**— } The Nagda-Ujjain railway is debited with a share of the working expenses of the Company's railway system in proportion to the total

(iv) **Distribution of profits.**— } earnings of the Nagda-Ujjain railway in each half-year, and the balance in favour of or against the Gwalior Durbar is paid over to, or by it, as the case may be.

(v) **Rates and fares.**—To conform generally to those in force on the Godhra-Rutlam-Nagda railway, unless otherwise specially agreed between the Durbar and the Company.

(vi) **Special obligations as to the conveyance of—**

(a) **Mails, troops, high Government officials and Government stores.**—Mails and postal officers on duty to be carried at the rates and on the conditions in force from time to time on State railways. (The agreement does not contain any provision for the carriage at special rates of troops, high Government officials and Government stores).

(b) **Government bullion and coin, and the persons in charge thereof.**—Not specified.

(vii) **Power of the Durbar to determine agreement.**— } The agreement may be terminated at any time on one year's notice from either party, expiring

(viii) **Power of the Company to determine agreement.**— } on the 30th June or 31st December in any year.

(ix) **Term of agreement [if not determined under (vii) and (viii)].**—Not specified.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> <sub>Sub-heads (a) to (d)</sub> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (d) Nagda-Ujjain railway (5' 6" gauge)—concl'd.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

TABLE I						TABLE II	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902 . . . . .	24-32	22,39,663	1,57,211	85,851	5-38	88	45-39
1903 . . . . .	24-32	22,41,231	1,20,951	62,949	2-81	68	47-95
1904 . . . . .	24-32	22,41,231	1,23,654	66,441	2-96	69	46-27
1905 . . . . .	24-32	22,40,441	1,71,435	99,907	4-46	96	41-72
1906 . . . . .	24-32	22,40,441	1,71,491	91,060	4-08	86	46-90
1907 . . . . .	24-32	22,40,441	1,99,985	1,06,620	4-76	112	46-69
1908 . . . . .	24-32	22,40,441	1,95,491	88,228	3-71	109	57-43
1909 . . . . .	24-32	22,40,441	2,50,437	1,21,895	5-14	140	51-33
1910 . . . . .	24-32	22,40,600	2,59,690	1,34,098	5-28	146	48-38
1911 . . . . .	24-32	22,40,600	2,89,814	1,43,929	6-42	162	50-34

2 (e) Petlad-Cambay railway (Anand-Tarapur section) (5' 6" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Anand to Petlad . . . . .	5-5-90	13-17	
Petlad to Tarapur . . . . .	20-6-01	8-33	21-70

Details of construction—

**Permanent-way.**—The permanent-way consists of 66½-lb. flat-footed steel rails on steel sleepers from Anand to Petlad and on creosoted pine sleepers from Petlad to Tarapur.

**Ballast.**—The line is ballasted with gravel.

**Fencing.**—Thirteen miles, between Anand and Petlad, are fenced. The rest of the line is unfenced, except in station yards.

**Curves.**—The sharpest curve is of 1,433 feet radius.

**Gradients.**—The ruling gradient is 1 in 200.

Agreements and contract—

Agreement, without date, having effect from the 5th May 1890, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, as to management, maintenance and working.

Contract, dated the 8th April 1907 (called the principal contract), between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa and other subsidiary lines.

Agreement, dated the 3rd March 1909, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, modifying the agreement of 5th May 1890.

Agreement, dated the 16th May 1910, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, modifying further the agreement of 5th May 1890.

## APPENDIX 9—contd.

## History of railways constructed and in progress

[For Index see page preceding this appendix.]

Number Main head 3 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (f)

## 2 (c) Petlad-Cambay railway (Anand-Tarapur section) (5' 6" gauge)—contd.

## Main provisions of agreements and contract—

- (i) *Land*.—Provided free of cost by the Baroda Durbar.
- (ii) *Government aid*.—The line is the property of the Baroda Durbar (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Bombay, Baroda and Central India Railway Company as part of the company's railway system.
- (iii) *Terms of working*.—
- (iv) *Distribution of profits*.— } Excepting the cost of making good damages due to extraordinary casualty which is borne by the Durbar and is chargeable against capital the Petlad railway is debited for maintenance and working expenses, including the cost of supervision and hire of rolling-stock, with the same percentage of gross earnings as may be incurred in the half-year on the 5' 6" and 3' 3½" gauge lines of the Bombay, Baroda and Central India Railway system, and with 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. The balance in favour of or against the Baroda Durbar is paid over to or by it, as the case may be.
- (v) *Rates and fares*.—To be fixed from time to time by the Company with the approval of the Durbar, but in the absence of any special agreement between them, they are, as far as may be, to conform to those generally in force on the Bombay, Baroda and Central India railway.
- (vi) *Special obligations as to the conveyance of—*
- (a) *Mails, troops, high Government officials and Government stores*.—Mails and postal officers on duty to be carried at the rates and on the conditions in force from time to time on State railways in British India. (There is no provision for the carriage at special rates of troops, high Government officials and Government stores.)
- (b) *Government bullion and coin, and the persons in charge thereof*.—Not specified.
- (vii) *Power of the Durbar to determine agreement*.—
- (viii) *Power of the Company to determine agreement*.— } Either party may at any time determine the agreement on giving 12 calendar months' notice to the other.
- (ix) *Term of agreement [if not determined under (vii) and (viii)]*.—Not specified.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902	21.50	11,85,930	1,05,981	58,818	4.79	95	46.37
1903	21.50	11,48,092	98,451	50,289	4.38	88	48.92
1904	21.50	11,46,552	1,20,974	64,876	5.68	108	46.37
1905	21.50	11,31,273	1,40,463	81,968	7.25	126	41.65
1906	21.50	11,30,873	1,39,209	78,634	6.51	124	47.11
1907	21.50	11,30,869	1,68,978	82,593	7.81	149	47.18
1908	21.50	11,31,294	1,86,283	80,125	7.08	167	56.99
1909	21.50	11,31,692	1,68,043	90,705	6.01	168	51.76
1910	21.50	11,33,238	2,19,645	1,13,373	10.00	196	48.28
1911	21.50	11,39,453	2,39,635	1,19,188	10.46	214	59.26

## 2 (f) Petlad-Cambay railway (Tarapur-Cambay section) (5' 6" gauge)—

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Tarapur to Cambay	20-6-01	12.30	12.00

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> <sub>Sub-heads (a) to (f)</sub> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

## 2 (f) Petlad-Cambay railway (Tarapur-Cambay section) (5' 6" gauge)—concl'd.

## Details of construction—

*Permanent-way.*—The permanent-way consists of 66½-lb. flat-footed steel rails on creosoted pine sleepers.*Ballast.*—The line is ballasted with gravel.*Fencing.*—Only station yards are fenced.*Curves.*—The sharpest curve is of 1,910 feet radius.*Gradients.*—The ruling gradient is 1 in 600, with a short length of 1 in 200 between Sayama and Cambay.

## Agreements and contract—

Agreement, dated the 17th May 1902, between the Cambay Durbar and the Bombay, Baroda and Central India Railway Company, as to management, maintenance and working.

Contract, dated the 8th April 1907 (called the principal contract), between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Agreement, dated the 17th October 1908, between the Cambay Durbar and the Bombay, Baroda and Central India Railway Company, modifying the agreement of 17th May 1902.

Agreement, dated the 10th May 1910, between the Cambay Durbar and the Bombay, Baroda and Central India Railway Company, modifying further the agreement of 17th May 1902.

## Main provisions of agreements and contract—

- (i) *Land.*—Provided free of cost by the Cambay Durbar.
- (ii) *Government aid.*—The line is the property of the Cambay Durbar (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Bombay, Baroda and Central India Railway Company as part of the Company's railway system.
- (iii) *Terms of working.*—
- (iv) *Distribution of profits.*—
- (v) *Rates and fares.*—
- (vi) *Special obligations as to the conveyance of.*—
- (a) Mails, troops, police, high Government officials and Government stores.—
- (b) Government bullion and coin, and the persons in charge thereof.—
- (vii) *Power of the Durbar to determine agreement.*—
- (viii) *Power of the Company to determine agreement.*—
- (ix) *Term of agreement [if not determined under (vii) and (viii)].*—

As noted under 2 (e), Petlad-Cambay railway (Anand-Tarapur section) (5' 6" gauge).

Statistics of working (Those for 1901 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902 . . . . .	10-22	7,49,876	25,497	18,822	1-82	45	46-52
1903 . . . . .	110-22	7,49,876	25,151	12,808	1-71	44	49-10
1904 . . . . .	10-22	7,63,728	32,199	17,276	2-25	37	49-25
1905 . . . . .	10-22	8,06,482	33,636	19,603	2-43	39	41-72
1906 . . . . .	12-30	8,11,255	34,531	18,265	2-25	54	47-11
1907 . . . . .	12-30	8,10,876	42,518	22,555	2-76	66	47-17
1908 . . . . .	12-30	8,16,876	44,098	18,332	2-33	69	57-07
1909 . . . . .	12-30	8,50,220	43,431	20,932	2-47	68	51-69
1910 . . . . .	12-30	8,87,150	51,709	26,668	3-11	81	48-48
1911 . . . . .	12-30	8,65,463	57,830	28,728	3-33	90	50-28

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 2 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (f)

## 2 (g) Tapti Valley railway (5' 6" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	
Kankra Khazi to Vyāra . . . . .	1-12-99	35.59	
Vyāra to Chinchpāda . . . . .	10-7-99	36.55	
Chinchpāda to Nandurbār . . . . .	8-10-99	25.20	
Nandurbār to Dondaiche . . . . .	11-11-99	31.44	
Dondaiche to Nardāna . . . . .	25-11-99	19.78	
Nardāna to Amalner . . . . .	15-3-00	16.92	
			155.78

## Details of construction—

*Permanent-way.*—The permanent-way consists of 70-lb. flat-footed steel rails on wooden sleepers.*Ballast.*—The line is ballasted throughout with stone.*Fencing.*—Only station yards and important level crossings are fenced.*Curves.*—The sharpest curve is of 1,910 feet radius.*Gradients.*—The ruling gradient is 1 in 200.

## Contracts—

- Dated the 28th August 1896 (called the principal contract), between the Secretary of State and the Tapti Valley Railway Company ;
- Dated the 30th October 1896 (set forth in the schedule to the principal contract of 1896), between the Secretary of State and the Bombay, Baroda and Central India Railway Company ;
- Dated the 1st February 1901, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, revising, and extending up to the 31st December 1905, the arrangements for the working of the Rajputana-Malwa and other lines.
- Dated the 16th January 1902, between the Secretary of State and the Tapti Valley Railway Company, modifying the terms on which the Company's line is worked by the Bombay, Baroda and Central India Railway Company.
- Dated the 8th April 1907, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.
- Dated the 26th August 1907, between the Secretary of State and the Tapti Valley Railway Company, for the continuance of the working of the Tapti Valley railway on the terms in force on the 31st December 1905.
- Dated the 10th July 1908, between the Secretary of State and the Bombay, Baroda and Central India Railway Company ;
- Dated the 12th November 1908, between the Secretary of State and the Tapti Valley Railway Company ;
- as to the construction, management, maintenance and working of the Tapti Valley railway.
- giving effect, as from the 1st July 1908, to the arrangement agreed upon for the improvement of the rebate from interchanged traffic payable to the Tapti Valley Railway Company by the Bombay, Baroda and Central India Railway Company.

## Main provisions of contracts—

- (i) *Land.*—In British territory provided by the Government free of cost to Company. The Secretary of State to use his influence to obtain the free grant of land in Native States.
- (ii) *Government aid.*—
- (iii) *Distribution of profits.*— } The Government constructed the line (from funds supplied by the Company), and manage, work, stock and maintain it, through the agency of the Bombay, Baroda and Central India Railway Company. During the continuance of the contracts between the Secretary of State and the Bombay, Baroda and Central India Railway Company relating to the working of State branches the charge to the Tapti Valley Railway Company in each half-year for the provision of rolling-stock and the working and maintenance of the line is the share of the general working expenses of the whole of the broad and metre gauge system of railways worked by the Bombay, Baroda and Central India Railway Company which is attributable to the Tapti Valley railway in proportion to its gross earnings, less the rebate of 45 per cent of the combined shares attributable to the Bombay, Baroda and Central India and Rajputana-Malwa railways of the gross earnings from traffic interchanged between those railways which the Government is entitled to retain, provided that the charge is not to exceed 44 per cent of the gross earnings in any year. In the event of the termination of the contracts above referred to, the charge is to be a percentage of the gross earnings not exceeding in any half-year that obtaining on the Bombay, Baroda and Central India railway, nor in any year 50 per cent. The residue of the gross earnings, after deduction of the charge for working, etc., is payable to the Tapti Valley Railway Company.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.  
<sub>Sub-heads (a) to (f)</sub>

2 (g) Tapti Valley railway (5' 6" gauge)—contd.

Main provisions of contracts—contd.

By agreement with the Bombay, Baroda and Central India Railway Company, the Government allow to the Tapti Valley Railway Company in respect of each calendar year, by way of rebate, a sum not exceeding 45 per cent of the combined shares attributable to the Bombay, Baroda and Central India and Rajputana-Malwa railways of the gross earnings from traffic interchanged between those railways, or either of them, and the Tapti Valley railway, as will, together with the net earnings of the Tapti Valley Railway Company, make up an amount equal to interest for the year at the rate of 4 per cent per annum on the actual capital expenditure. The Government also allow the Company the sum of Rs. 6,000 per annum towards its office expenses and expenses of management.

(iv) *Rates and fares.*—To be such as may from time to time be arranged between the Government and the working agency, but it is provided that they shall be within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway. The classification of goods is to be in conformity with that in force on the Bombay, Baroda and Central India railway.

(v) *Special obligations as to the conveyance of.*—

(a) Mails, troops, high Government officials, and Government stores.—

(b) Government bullion and coin, and the persons in charge thereof.—

As in the case of 2  
(a), Bombay, Baroda  
and Central India rail-  
way (5' 6" gauge).

(vi) *Power of the Government to determine contract.*—The Government may, by giving 12 months' notice, determine the contract and acquire the railway—

(a) on the 31st December 1921, or at the end of any subsequent period of 10 years, in which case the Government undertakes to pay to 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, nor be less than such capital expenditure; or

(b) on the 31st December 1950, in which case the Government will pay to the Company in rupees an amount equal to the total capital expenditure.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract [if not determined under (vi) or (vii)].*—Not specified.

Statistics of working—

TABLE I.										TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (8).	Rebate from the Bombay, Baroda and Central India railway.	Total income.	Percentage of total income on total capital outlay given in column (8).	REMARKS.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.			Rs.	
1898	35·91	82,70,413	2,896	—	—	—	—	—	The net earnings for 1898, 1899 and 1st-half of 1900 were credited to interest on capital, and those for 2nd-half of 1900 (including rebate) were treated as a set off against the charge to capital for interest in the accounts for 1st-half of 1901.	18	48·70
1899	188·88	1,21,09,193	2,42,593	—	—	—	—	73		47·40	
1900	155·45	1,28,31,391	6,68,475	—	—	—	—	85		47·68	
1901	155·48	1,29,18,780	6,00,553	3,42,243	2·65	33,226	3,75,469	2·90		74	43·01
1902	155·48	1,29,70,581	8,26,485	4,63,242	3·57	45,196	5,08,438	3·92		102	43·95
1903	155·48	1,30,02,400	8,62,753	4,83,142	3·73	40,258	5,23,400	4·03		107	44·00
1904	155·48	1,30,77,018	6,53,740	3,68,894	3·63	28,441	3,97,335	3·04		81	44·00
1905	155·48	1,30,83,629	10,11,322	5,86,921	4·49	2,928	5,89,849	4·51		125	41·96
1906	155·48	1,30,82,838	11,34,712	6,35,460	4·86	—	6,35,460	4·86		140	44·00
1907	155·48	1,30,97,237	10,34,612	5,79,383	4·42	—	5,79,383	4·42		128	44·00
1908	155·48	1,30,90,929	9,98,927	5,59,899	4·27	—	5,59,899	4·27	124	44·00	
1909	155·48	1,31,10,800	11,06,584	6,19,676	4·73	—	6,19,676	4·73	137	44·00	
1910	155·48	1,31,20,549	11,85,910	6,64,110	5·06	—	6,64,110	5·06	147	44·00	
1911	155·48	1,31,87,174	12,91,325	7,23,422	5·51	—	7,23,422	5·51	160	44·00	



## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 2 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (f)

## 2 (A) Ahmedabad-Dholka railway (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Sabarmati to Bavla	23-2-03	24.75	33.54
Bavla to Dholka	1-4-03	8.79	

## Details of construction—

*Permanent-way.*—The permanent-way consists of 41½-lb. flat-footed steel rails on deodar sleepers.

*Ballast.*—Ballast is provided only at points and crossings, and for 100 feet on each side of bridges and level crossings; elsewhere sand is used with stone top dressing.

*Fencing.*—Only station yards are fenced.

*Curves.*—The sharpest curve is of 1,146 feet radius.

*Gradients.*—The ruling gradient is 1 in 300, except for 400 feet near Sabarmati, where it is 1 in 200 and for 4,000 feet between miles 1 and 2, where it is 1 in 286.

## Contracts—

Dated the 1st February 1901, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, revising, and extending up to the 31st December 1905, the arrangements for the working of the Rajputana-Malwa railway and other lines.

Dated the 25th March 1902, between the Secretary of State and the Ahmedabad-Dholka Railway Company; } as to the construction, management, maintenance and working of the Ahmedabad-Dholka railway.

Dated the 18th July 1902, between the Secretary of State and the Bombay, Baroda and Central India Railway Company; }

Dated the 17th September 1902, between the Secretary of State and the Ahmedabad-Dholka Railway Company, modifying the contract of 1902, as to the issue and allotment to the Secretary of State of a certain number of fully paid up shares in the capital of the Company.

Dated the 8th April 1907, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Dated the 10th July 1908, between the Secretary of State and the Bombay, Baroda and Central India Railway Company; } giving effect, as from the 1st July 1908, to the arrangement agreed upon for the improvement of the rebate from inter-

Dated the 12th November 1908, between the Secretary of State and the Ahmedabad-Dholka Railway Company; } changed traffic payable to the Ahmedabad-Dholka Railway Company by the Bombay, Baroda and Central India Railway Company.

## Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*— } The Government constructed the line (from funds supplied by the Company), and manage, work, stock and maintain it, through the agency of the Bombay, Baroda and Central India Railway Company. During

(iii) *Distribution of profits.*— } the continuance of the working agreement with the Bombay, Baroda and Central India Railway Company, the charge to the Ahmedabad-Dholka Railway Company for the provision of rolling-stock and the working and maintenance of the line, is the share of the general working expenses of the whole system of the broad and metre gauge lines worked by the Bombay, Baroda and Central India Railway Company which is attributable to the Ahmedabad-Dholka railway in proportion to its gross earnings less the amount of rebate of 45 per cent of the combined shares attributable to the Bombay, Baroda and Central India and Rajputana-Malwa railways of the gross earnings from traffic interchanged between those railways which the Government is entitled to retain, provided that the charge is not to exceed 44 per cent of the gross earnings in any year. In the event of the working agreement with the Bombay, Baroda and Central India Railway Company terminating before the contract with the Ahmedabad-Dholka Railway Company, the charge for working the latter Company's line is to be such percentage of the gross earnings as may be provided in any other working agreement that may be entered into, or, if the line is worked by State agency, such percentage as the Secretary of State may consider just

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> <sub>Sub-heads (a) to (i)</sub> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

## 2 (b) Ahmedabad-Dholka railway (3' 3½" gauge)—contd.

## Main provisions of contracts—contd.

or reasonable; but it is not in either case to exceed the percentage of working expenses on gross earnings obtaining on the Rajputana-Malwa railway, or 50 per cent in any year. The residue of the gross earnings, after deduction of the charge for working, etc., is payable to the Ahmedabad-Dholka Railway Company. By agreement with the Bombay, Baroda and Central India Railway Company, the Government allow to the Ahmedabad-Dholka Railway Company in respect of each calendar year, by way of rebate, a sum not exceeding 45 per cent of the combined shares attributable to the Bombay, Baroda and Central India and Rajputana-Malwa railways of the gross earnings from traffic interchanged between those railways, or either of them, and the Ahmedabad-Dholka railway, as will, together with the net earnings of the Ahmedabad-Dholka Railway Company, make up an amount equal to interest for the year at the rate of 4 per cent per annum on the actual capital expenditure. The Government also allow the Company the sum of Rs. 5,000 per annum towards its office expenses and expenses of management; but when the Company's net earnings in any year exceed 4 per cent on the capital expenditure, the excess is to be applied towards the reduction of this allowance.

(iv) *Rates and fares.*—To be such as may from time to time be arranged between the Government and the working agency, but it is provided that they shall be within the maximum and minimum for the time being in force on the Rajputana-Malwa railway. The classification of goods is to be in conformity with that in force on the Rajputana-Malwa railway.

(v) *Special obligations as to the conveyance of.*—

(a) Mails, troops, high Government officials, and Government stores.—

(b) Government bullion and coin, and the persons in charge thereof.—

As in the case of 2 (m), Rajputana-Malwa railway (3' 3½" gauge).

(vi) *Power of the Government to determine contract.*—The Government may, by giving 12 months' notice, determine the contract and acquire the railway on the 30th June 1922, or at the end of any subsequent period of 10 years, in which case the Government undertakes to pay to the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years, provided that such sum shall not exceed by more than 20 per cent the total capital expenditure of the Company, nor be less than such capital expenditure.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract [if not determined under (vi) or (vii)].*—Not specified.

## Statistics of working—

TABLE I									TABLE II	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from the Bombay, Baroda and Central India railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1903	33-50	10,02,173	64,261	35,988	3-59	...	35,988	3-59	45	44-00
1904	33-50	10,17,908	99,044	55,465	5-45	...	55,465	5-45	57	44-00
1905	33-50	10,44,995	98,214	57,208	5-47	...	57,208	5-47	56	41-75
1906	33-50	10,88,722	1,00,743	56,418	5-21	...	56,418	5-21	58	44-00
1907	33-50	11,11,330	1,15,159	64,489	5-80	...	64,489	5-80	66	44-00
1908	33-50	10,91,212	1,23,206	71,795	6-58	...	71,795	6-58	74	44-00
1909	33-54	11,05,286	1,30,149	67,283	6-09	...	67,283	6-09	69	44-00
1910	33-54	11,10,937	1,39,669	72,615	6-51	...	72,615	6-51	74	44-00
1911	33-54	11,17,717	1,32,107	73,980	6-62	...	73,980	6-62	76	44-00

## 2 (i) Ahmedabad-Parantij railway (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Ahmedabad to Talod . . . . .	1-5-07	32-62	
Talod to Parantij . . . . .	2-7-07	7-83	
Parantij to Himmatnagar . . . . .	28-10-07	14-05	
Himmatnagar to Khed Brahme . . . . .	1-7-11	84-00	88-70

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> <sub>Sub-heads (a) to (d)</sub> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

## 2 (i) Ahmedabad-Parantij railway (3' 3½" gauge)—contd.

## Details of construction—

*Permanent-way.*—The permanent-way consists of 41½-lb. flat-footed steel rails on creosoted pine and deodar sleepers.

*Ballast.*—The line is ballasted with kunkur, sand and stone.

*Fencing.*—Only station yards are fenced.

*Curves.*—The sharpest curve is of 1,146 feet radius.

*Gradients.*—The ruling gradient is 1 in 200.

## Contracts—

Dated the 13th March 1896 (called the principal contract), between the Secretary of State and the Ahmedabad-Parantij Railway Company, as to the construction of the Ahmedabad-Parantij railway.

Dated the 4th June 1896, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the management, maintenance and working by the Company of the Ahmedabad-Parantij railway.

Dated the 1st February 1901, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, revising, and extending up to the 31st December 1905, the arrangements for the working of the Rajputana-Malwa and other lines.

Dated the 29th January 1902, between the Secretary of State and the Ahmedabad-Parantij Railway Company, modifying the terms on which the Company's line is worked by the Bombay, Baroda and Central India Railway Company.

Dated the 8th April 1907, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Dated the 17th September 1907, between the Secretary of State and the Ahmedabad-Parantij Railway Company, for the continuance of the working of the Ahmedabad-Parantij railway on the terms in force on the 31st December 1905.

Dated the 2nd October 1908, between the Secretary of State and the Bombay, Baroda and Central India Railway Company ;

Dated the 24th November 1910, between the Secretary of State and the Ahmedabad-Parantij Railway Company ;

as to the construction, management, maintenance and working of the Brahmakhed extension as part of the Ahmedabad-Parantij railway, subject to the modifications therein set forth of the terms applicable to the main line.

## Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost to the Company. The Secretary of State to use his influence to obtain the free grant of land in Native States.

(ii) *Government aid.*— } The Government constructed the line (from funds supplied by the Company), and manage, work, stock and maintain it, through the agency of the  
 (iii) *Distribution of profits.*— } Bombay, Baroda and Central India Railway Company. During the continuance of the contracts between the Secretary of State and the Bombay, Baroda and Central India Railway Company relating to the working of State branches, the charge to the Ahmedabad-Parantij Railway Company in each half-year for the provision of rolling-stock and the working and maintenance of the line is the share of the general working expenses of the whole of the broad and metre gauge system of railways worked by the Bombay, Baroda and Central India Railway Company which is attributable to the Ahmedabad-Parantij railway in proportion to its gross earnings, less the rebate of 10 per cent of the combined shares attributable to the Bombay, Baroda and Central India and Rajputana-Malwa railways of the gross earnings from traffic interchanged between those railways which the Government is entitled to retain, provided that the charge is not to exceed 44 per cent of the gross earnings in any year. In the event of the termination of the contracts above referred to, the charge is to be a percentage of the gross earnings not exceeding in any half-year that obtaining on the Bombay, Baroda and Central India railway, nor in any year 44 per cent. The residue of the gross earnings, after deduction of the charge for working, etc., is payable to the Ahmedabad-Parantij Railway Company.

By agreement with the Bombay, Baroda and Central India Railway Company, the Government allow to the Ahmedabad-Parantij Railway Company in respect of each calendar year, by way of rebate, a sum not exceeding 10 per cent of the combined shares attributable to the Bombay, Baroda and

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 2 . BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.  
 Sub-heads (a) to (t)

## 2 (i) Ahmedabad-Parantij railway (3' 3½" gauge)—contd.

## Main provisions of contracts—contd.

Central India and Rajputana-Malwa railways of the gross earnings from traffic interchanged between those railways, or either of them, and the Ahmedabad-Parantij railway, as will, together with the net earnings of the Ahmedabad-Parantij Railway Company, make up an amount equal to interest for the year at the rate of 4 per cent per annum until the close of the half-year next after that in which the Brahmakhed extension is opened throughout for public traffic, and thereafter at 5 per cent per annum, on the actual capital expenditure. The Government also allow the Company the sum of Rs. 5,000 per annum until the close of the half-year next after that in which the Brahmakhed extension is opened throughout for public traffic, and thereafter Rs. 6,000 per annum towards its office expenses and expenses of management.

(iv) *Rates and fares.*—To be such as may from time to time be arranged between the Government and the working agency, but it is provided that they shall be within the maximum and minimum rates and fares for the time being in force on the Rajputana-Malwa railway. The classification of goods is to be in conformity with that in force on the Rajputana-Malwa railway.

(v) *Special obligations as to the conveyance of.*—

(a) Mails, troops, high Government officials, and Government stores.—

(b) Government bullion and coin, and the persons in charge thereof.—

As in the case of 2 (m),  
Rajputana-Malwa railway  
(3' 3½" gauge).

(vi) *Power of the Government to determine contract.*—The Government may, by giving 12 months' notice, determine the contract and acquire the railway—

(a) on the 31st December 1930, or at the end of any subsequent period of 10 years, in which case the Government undertakes to pay to 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, nor be less than such capital expenditure, or

(b) on the 31st December 1946, in which case the Government will pay to the Company in rupees an amount equal to the total capital expenditure.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract [if not determined under (vi) or (vii)].*—Not specified.

## Statistics of working—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from the Bombay, Baroda and Central India railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1897	54.59	19,49,911	69,069	36,665	1.89	...	36,665	1.89	46	46.92
1898	54.59	19,49,971	1,49,790	65,636	4.42	...	85,836	4.42	53	43.70
1899	54.70	19,49,616	2,10,634	1,21,637	6.24	...	1,21,637	6.24	74	43.23
1900	54.70	19,55,805	2,65,103	1,55,952	7.96	...	1,55,952	7.96	93	41.17
1901	54.70	19,49,365	1,77,438	99,365	5.10	...	99,365	5.10	62	44.00
1902	54.70	19,70,012	1,79,794	1,00,685	5.11	...	1,00,685	5.11	63	44.00
1903	54.70	19,88,869	1,50,112	84,063	4.23	...	84,063	4.23	53	44.00
1904	54.70	19,80,045	1,86,237	1,04,267	5.24	...	1,04,267	5.24	65	44.00
1905	54.70	19,91,753	1,98,713	1,15,469	5.80	...	1,15,469	5.80	70	41.89
1906	54.70	19,96,023	2,20,994	1,23,727	6.19	...	1,23,727	6.19	78	44.00
1907	54.70	20,08,866	2,61,637	1,48,197	7.38	...	1,48,197	7.38	93	44.00
1908	54.70	20,26,012	2,95,664	1,65,572	8.17	...	1,65,572	8.17	104	44.00
1909	54.70	20,39,797	3,04,894	1,70,735	8.40	...	1,70,735	8.40	107	44.00
1910	54.70	28,71,789	3,21,710	1,80,158	6.27	...	1,80,158	6.27	113	44.00
1911	66.70	36,40,022	3,52,475	1,97,366	5.42	...	1,97,366	5.42	94	44.00

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> <sub>Sub-heads (a) to (f)</sub> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (j) Gaekwar's Mehsana railway (3' 3½" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Mehsana to Vadnagar . . . . .	21-3-87	20.75	
Vadnagar to Kheralu . . . . .	12-12-68	7.00	
Virangam to Mehsana . . . . .	1-2-91	40.21	
Mehsana to Patan . . . . .	20-7-91	24.60	
Manund Road to Harij . . . . .	23-10-08	20.95	
Chanasma to Bechraji . . . . .		16.68	
Kheralu to Taranga Hill . . . . .	20-8-09	7.79	
			138.00

Details of construction—

**Permanent-way.**—Except from mile 10 to mile 24.69 of the Mehsana-Patan section, which is laid with 40-lb. iron rails on deodar sleepers, the line is laid with 41½-lb. flat-footed steel rails on steel, deodar, half round jungle teak and Australian hard wood sleepers.

**Ballast.**—The line between Mehsana and Kheralu is ballasted with sand, between Kheralu and Taranga Hill with stone, between Manund Road and Harij and between Chanasma and Bechraji, with lime stone and the rest with kunkur.

**Fencing.**—Of the Manund Road-Harij and Chanasma-Bechraji sections only the station yards are fenced; and of the other three sections 41½ miles are fenced by wire, and the rest with cactus, but this has in several places been entirely destroyed by floods and locusts and what remains is much broken up.

**Curves.**—The sharpest curve is of 1,432 feet radius.

**Gradients.**—On the Mehsana-Kheralu section the ruling gradient is 1 in 150, except for 5,100 feet between Varethha and Taranga Hill where it is 1 in 75. On the Mehsana-Virangam section it is 1 in 400, except for 1,350 feet between miles 5 and 6 where it is 1 in 200 and 900 feet between miles 12 and 13 where it is 1 in 300. On the Mehsana-Patan section it is 1 in 400, except for 850 feet between miles 6 and 7 where it is 1 in 200. On the Manund Road-Harij section it is 1 in 200 and on the Chanasma-Bechraji section, 1 in 366, all in banking section.

Agreements and contract—

Agreement, dated the 17th June 1893 (called "the Mehsana Working Agreement"), between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, as to the management, maintenance and working by the Company of the Gaekwar's Mehsana railway

Contract, dated the 8th April 1907 (called the principal contract), between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Agreement, dated the 20th July 1908, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, as to the construction by the Company of the Gaekwar's Kheralu-Dabhora railway.

Agreement, dated the 20th July 1908, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, as to the construction by the Company of the Gaekwar's Manund Road-Harij and Chanasma-Bechraji railways.

Agreement, dated the 16th February 1909, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, modifying, as from the 27th March 1908 to the 26th March 1909, inclusive, the Mehsana Working Agreement of the 17th June 1893.

Agreement, dated the 15th December 1909, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, as to the management, maintenance and working of the Manund Road-Harij and Chanasma-Bechraji lines from the date of opening to public traffic up to and including the 22nd October 1910.

Agreement, dated the 16th May 1910, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, for the continuance of the management, maintenance and working, from the 27th March 1909, of the Mehsana-Kheralu, Mehsana-Virangam and Mehsana-Patan railways, subject to further modifications of the Mehsana Working Agreement of the 17th June 1893.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> <sub>Sub-heads (a) to (i)</sub> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

## 2 (j) Gaekwar's Mehsana railway (3' 3½" gauge)—concl'd.

## Agreements and contract—concl'd.

Agreement, dated the 17th May 1910, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, as to the management, maintenance and working of the Kheralu-Varetha (Taranga Hill) extension, subject to further modifications of the Mehsana Working Agreement of the 17th June 1893.

Agreement, dated the 3rd December 1910, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, as to the maintenance and working of the Manund Road-Harij and Chanasma-Bechraji lines as from the 23rd October 1910, subject to further modifications of the Mehsana Working Agreement of the 17th June 1893.

## Main provisions of agreements and contract—

- (i) *Land.*—As under 2(c), Petlad-Cambay railway (Anand-Tarapur section), (5' 6" gauge.)
- (ii) *Government aid.*—The lines are the property of the Baroda Durbar (which provides all funds chargeable to the capital account), and are managed, maintained, stocked and worked by the Bombay, Baroda and Central India Railway Company as part of the Company's railway system.
- (iii) *Terms of working.*— } Excepting the cost of making good damages due to extraordinary
- (iv) *Distribution of profits.*— } casualty which is borne by the Durbar and is chargeable against capital, the Mehsana railway and the Manund Road-Harij and Chanasma-Bechraji railways are debited for maintenance and working expenses, including the cost of supervision and hire of rolling-stock, with the same percentage of gross earnings as may be incurred in the half-year on the 5' 6" and 3' 3½" gauge lines of the Bombay, Baroda and Central India Railway system, and also with any single item of capital expenditure on "New minor works" costing Rs. 2,000 or less, 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. The balance in favour of or against the Baroda Durbar is paid over to or by it, as the case may be.
- (v) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Durbar; but in the absence of any special agreement between them, they are, as far as may be, to conform to those generally in force on the Rajputana-Malwa railway.
- (vi) *Special obligations as to the conveyance of.*—
- (a) Mails, troops, high Government officials and Government stores.—
- (b) Government bullion and coin, and the persons in charge thereof.—
- (vii) *Power of the Durbar to determine agreement.*—
- (viii) *Power of the Company to determine agreement.*—
- (ix) *Term of agreement [if not determined under (vi) and (viii)].*—

As under 2(e), Petlad-Cambay railway (Anand-Tarapur section) (5' 6" gauge).

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 36 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1907	92.68	38,75,891	3,74,515	1,98,977	5.89	78	46.87
1908	92.68	38,78,182	3,47,053	1,77,466	5.25	72	48.87
1904	92.68	38,95,678	3,82,249	2,04,906	6.06	79	46.89
1905	92.68	34,36,885	4,52,184	2,62,901	7.65	91	41.58
1906	92.68	42,78,368	4,20,777	2,24,194	5.25	87	46.74
1907	92.68	50,55,781	4,34,903	2,30,317	4.56	90	47.04
1908	130.21	52,15,404	4,55,740	1,93,036	3.70	88	37.64
1909	138.01	53,48,871	5,57,732	2,56,206	4.79	78	54.06
1909	138.00	55,89,610	6,30,415	3,13,759	5.61	88	50.23
1910	138.00	55,89,610	6,30,415	3,13,759	5.61	88	50.23
1911	138.00	57,02,244	6,46,429	3,20,799	5.63	90	50.37

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> <sub>Sub-heads (a) to (t)</sub> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

## 2 (k) Jaipur railway (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Sanganer to Nawal Nawal to Siwaj-Madhapur	10-11-05 17-10-07	33-18 40-68	74-84

## Details of construction—

*Permanent-way.*—The permanent-way consists of 41½-lb. flat-footed steel rails laid on deodar sleepers.

*Ballast.*—The line is ballasted with stone.

*Fencing.*—The line is unfenced except at stations and at points where the line crosses the main road.

*Curves.*—The sharpest curve is of 2,865 feet radius.

*Gradients.*—The ruling gradient is 1 in 250, except for 4 miles and 1,080 feet at the beginning of the line where it is 1 in 200.

## Agreement—

Agreement, dated the 11th September 1906, between the Jaipur Durbar and the Bombay, Baroda and Central India Railway Company, as to the management, maintenance and working by the Company of the Jaipur railway.

Railway Board's letter No. 1310 R.T., dated the 30th October 1907, as to the payment of rebate to the Jaipur Durbar.

## Main provisions of agreement—

- (i) *Land.*—Provided by the Jaipur Durbar at the cost of capital.
- (ii) *Government aid.*—The line is the property of the Jaipur Durbar (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Company as part of its railway system. By way of rebate the Government allow out of their share of the net earnings of the Rajputana-Malwa railway, (outside the contract between the Secretary of State and the Bombay, Baroda and Central India Railway Company), a sum up to 10 per cent of the net earnings of the main line from traffic interchanged with the Jaipur railway to such extent as is necessary to make up, together with the net earnings of the Jaipur railway, an amount sufficient to give a return of 3½ per cent per annum on the capital expenditure incurred.
- (iii) *Terms of working.*—
- (iv) *Distribution of profits.*— } Excluding the cost of making good damages due to extraordinary casualty which is borne by the Durbar and is chargeable against capital, the Jaipur railway is debited for maintenance and working expenses, including the cost of supervision and use of rolling-stock, with the same percentage of the gross earnings of the Jaipur railway as the total expenditure incurred on the entire Bombay, Baroda and Central India Railway system bears to the earnings of that system, and also with any single item of capital expenditure not exceeding Rs. 2,000, subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on that system.
- (v) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Jaipur Durbar and, in the absence of any special agreement between them, to conform, as far as may be, to those generally in force on the Rajputana-Malwa railway.
- (vi) *Special obligations as to the conveyance of.*—
- (a) Mails, troops, high Government officials and Government stores.—Mails and postal officers on duty to be carried at the rates and on the conditions in force from time to time on State railways in British India. (There is no provision for the carriage at special rates of troops, high Government officials and Government stores).
- (b) Government bullion and coin, and the persons in charge thereof.—Not specified.
- (vii) *Power of the Durbar to determine agreement.*—
- (viii) *Power of the Company to determine agreement.*— } After 2 years from the date of opening (*vis.*, the 17th October 1907) of the Jaipur railway, the agreement may be determined by either party giving to the other 12 calendar months' notice expiring on the 30th June or 31st December of any year.
- (ix) *Term of agreement [if not determined under (vii) and (viii)].*—None specified.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> <sub>Sub-heads (a) to (f)</sub> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (k) Jaipur railway (3' 3½" gauge)—concl'd.

Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1905	33.18	13,20,421	12,299	6,779	0.51	52	44.88
1906	33.18	14,77,188	68,948	36,617	2.48	41	46.39
1907	72.84	23,42,013	97,734	49,708	2.12	46	49.14
1908	72.84	24,01,041	1,16,415	49,648	2.07	51	57.35
1909	72.84	24,02,410	1,44,902	68,820	2.88	58	52.51
1910	72.84	24,03,971	2,14,761	1,10,290	4.89	57	48.65
1911	72.84	24,09,763	2,70,084	1,33,743	5.55	71	50.48

2 (l) Palanpur-Deesa railway (3' 3½" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Palanpur to Deesa	8-11-93	17.28	17.28

Details of construction—

**Permanent-way.**—The permanent-way consists of 40-lb. flat-footed iron rails, except in station yards and the first 3 miles of the line which are laid with 4½-lb. steel rails. The rails are laid on Denham-Olpherts' plate, cast iron pot, and steel dish cover sleepers.

**Ballast.**—The line is ballasted with stone and sand.

**Fencing.**—The line is fenced throughout.

**Curves.**—The sharpest curve is of 1,910 feet radius.

**Gradients.**—The ruling gradient is 1 in 150.

Contracts—

Letter from the Government of India, Public Works Department, No. 352-B.C., dated the 25th March 1892, to the Government of Bombay;

Letter from the Under Secretary of State for India, No. 682, dated the 18th May 1892, to the Board of Directors, Bombay, Baroda and Central India Railway Company;

Letter from the Board of Directors, Bombay, Baroda and Central India Railway Company, No. 611, dated the 20th May 1892, to the Under Secretary of State for India;

Letter from the Under Secretary of State for India, No. 920, dated the 22nd June 1892, to the Board of Directors, Bombay, Baroda and Central India Railway Company;

Letter from the Government of India, Public Works Department, No. 1643, dated the 19th August 1892, to the Government of Bombay;

Contract, dated the 1st February 1901, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, revising, and extending up to the 31st December 1905, the arrangements for the working of the Rajputana-Malwa and other lines.

Contract, dated the 8th April 1907, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

as to the construction, management, maintenance and working, by the Bombay, Baroda and Central India Railway Company, of the Palanpur-Deesa railway as a part of the Rajputana-Malwa railway.



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 3 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (f)

## 2 (f) Palanpur-Deesa railway (3' 3½" gauge)—contd.

## Main provisions of contracts—

- (i) *Land*.—Provided free of cost by the Palanpur Durbar.
- (ii) *Government aid*.—The railway is owned jointly by the Government and the Palanpur Durbar, and the former provides any further open line capital funds. It was constructed and is managed, maintained, stocked and worked by the Bombay, Baroda and Central India Railway Company as part of the Rajputana-Malwa railway.
- (iii) *Terms of working*.—The railway is debited with a share of the general working expenses of the Bombay, Baroda and Central India Railway Company's system in proportion to the gross earnings of the Palanpur-Deesa railway.
- (iv) *Distribution of profits*.—The net earnings, after deducting the working expenses as in (iii) above, in any half-year are to be divided between the Government and the Palanpur Durbar in proportions of the capital provided by each, after excluding (so long as the line remains a metre gauge one) from the Government capital the sum of Rs. 25,117 the extra expenditure incurred in providing a 5' 6" gauge sub-structure.
- (v) *Rates and fares*.—
- (vi) *Special obligations as to the conveyance of*.—
- (a) Mails, troops, high Government officials and Government stores.—
- (b) Government bullion and coin, and the persons in charge thereof.—
- (vii) *Power of the Government to determine agreement*.—
- (viii) *Power of the Company to determine agreement*.—
- (ix) *Term of agreement*.—
- As under 2 (m), Rajputana-Malwa railway (3' 3½" gauge).
- The agreement is co-terminous with the Company's contract with the Secretary of State for working the Rajputana-Malwa railway, unless it be decided to extend the branch, in which case it will be open to the Government to terminate the working arrangement on giving the Company 6 months' notice.

## Statistics of working—

TABLE I.											TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on		Gross earnings.	Net earnings.		Percentage of net earnings on total capital outlay given in columns (3) and (4).		Interest on Government capital.	Gain or loss to Government pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
		(i) lines open and	(ii) lines partly or wholly under construction.		Attributable to the Durbar.	Attributable to Government.	On capital contributed by the Durbar.	On capital contributed by Government.				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	
1893	17-28	1,85,000	1,78,933	4,436	1,335	1,110	0-72	0-62	5,371	-4,261	33	44-88
1894	17-28	1,85,000	2,14,601	37,544	11,365	11,781	6-14	5-49	8,783	+2,998	43	36-35
1895	17-28	1,85,000	2,15,374	39,182	11,333	11,512	6-13	5-35	8,378	+3,134	42	40-17
1896	17-28	1,85,000	2,32,746	51,629	14,101	15,072	7-62	6-48	9,149	+5,923	57	48-49
1897	17-28	1,85,000	2,33,264	43,264	10,888	12,243	5-88	5-36	9,305	+2,988	48	46-55
1898	17-28	1,85,000	2,33,264	38,199	10,334	11,628	5-59	4-99	9,331	+2,297	43	43-51
1899	17-28	1,85,000	2,33,264	44,628	12,102	13,618	6-54	5-84	9,380	+4,288	50	42-37
1900	17-28	1,85,000	2,33,264	47,689	12,686	14,218	6-88	6-10	9,380	+4,883	53	43-67
1901	17-28	1,85,000	2,33,264	36,905	9,375	10,548	5-07	4-52	9,380	+1,218	41	45-67
1902	17-28	1,85,000	2,36,786	33,690	8,329	9,521	4-50	4-02	9,408	+113	37	47-01
1903	17-28	1,85,000	2,37,069	29,734	7,141	8,181	3-86	3-45	9,432	-1,251	33	46-47
1904	17-28	1,85,000	2,37,069	29,185	7,280	8,340	3-94	3-52	9,474	-1,184	33	46-48
1905	17-28	1,85,000	2,37,069	35,178	9,469	10,348	5-12	4-58	9,472	+1,376	39	42-35
1906	17-28	1,85,000	2,39,155	40,154	9,962	11,376	5-33	4-76	9,581	+1,345	45	47-11
1907	17-28	1,85,000	2,39,155	42,061	10,266	11,378	5-55	4-97	7,223	+4,655	47	47-85
1908	17-28	1,85,000	2,47,156	45,699	9,097	10,728	4-92	4-34	8,215	+2,515	51	36-00
1909	17-28	1,85,000	2,45,700	53,323	11,757	13,034	6-36	5-71	8,259	+5,775	53	57-63
1910	17-28	1,85,000	2,45,700	58,152	13,663	16,291	7-39	6-63	8,216	+8,075	65	48-49
1911	17-28	1,85,000	2,45,700	52,775	11,949	14,248	6-46	5-80	8,392	+5,916	59	50-36

## APPENDIX 9—contd.

History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 2 Sub-heads (a) to (f) BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2 (m) Rajputana-Malwa railway (3' 3½" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
<b>RAJPUTANA SECTION—</b>					
<i>Main line—</i>					
Delhi to Rewari	14-2-78	51.21			
Rewari to Alwar	15-9-74	48.10			
Alwar to Bandikui	7-12-74	37.51			
Bandikui to Dausa	20-4-74	17.84			
Dausa to Jaipur	12-10-74	38.14			
Jaipur to Phulera	1-8-75	34.20			
Phulera to Ajmer	1-8-75	48.92			
Ajmer to Beawar	15-5-78	32.41			
Beawar to Haripur	12-8-79	20.85			
Haripur to Sojat Road	20-10-80	20.54			
Sojat Road to Palanpur	1-1-81	148.44			
Palanpur to Ahmedabad	15-11-79	82.36			
New zero of Ahmedabad-Dholka railway to facing point on main line of Sabarmati	12-2-08	0.66			
<i>Branches—</i>					
Farukhnagar Salt branch	14-2-78	7.64		530.18	
<i>Agra branch—</i>					
Bandikui to Bharatpur	20-4-74	60.28		7.64	
Bharatpur to Agra Fort	11-8-78	33.24			
Agra Fort to Jumna, East Bank (Agra)	1-1-78	1.50		95.02	
<i>Sambhar Lake Salt branch</i>					
Japog extension	1-8-75	4.50			
Extension of Sambhar branch to Jhaura	0-10-76	4.50			
Kankaroola siding	20-12-79	17.00			
Additional salt sidings in the Sambhar lake	15-2-81	1.25			
<i>5' 6" gauge lines—</i>					
Jumna, East Bank (Agra) to Idgah (Agra)	1-1-78	3.07		33.49	
At Delhi	12-11-03	0.09			
<b>MALWA SECTION—</b>					
<i>Main line—</i>					
Khandwa to Sanawad	1-2-74	34.25			
Sanawad to Mortakka	1-4-74	8.50			
Mortakka to Choral	20-1-75	20.50			
Choral to Mhow	1-1-78	15.69			
Mhow to Indore	3-8-78	18.00			
Indore to Fatehabad Junction	3-8-78	25.23			
Fatehabad Junction to Rutlam	11-7-78	48.75			
Rutlam to Jaora	25-2-80	30.50			
Jaora to Mandasaur	8-4-80	81.75			
Mandasaur to Neemuch	2-7-80	30.25			
Neemuch to Nimbahera	10-3-81	16.40			
Nimbahera to Chitorgarh	19-3-81	17.45			
Chitorgarh to Nasirabad	1-12-81	100.65			
Nasirabad to Ajmer	14-2-76	14.15			
<i>Ujjain branch—</i>					
Fatehabad to Ujjain	3-8-76	12.00		302.27	
Ujjain branch extension across the Sipra river to Ujjain city.	1-3-84	42.88		24.88	
<b>CANPORE-ACHNERA SECTION—</b>					
<i>Main line—</i>					
Canpore Mill line	26-4-00	2.34			
Canpore to Kanauj	15-12-80	49.20			
Kanauj to Farukhabad	1-2-81	36.71			
Farukhabad to Kasganj	14-1-84	68.78			
Kasganj to Hathras Road	1-7-84	34.04			
Hathras Road to Muttra Cantonment	19-10-75	29.11			
Jumna bridge	1-7-84	1.00			
Muttra Cantonment to old connection Muttra Junction	11-11-07	2.82			
Old connection to Achnera	7-11-81	20.95		242.45	
<i>Branches—</i>					
Brahmavart branch	10-11-85	4.78			
Brindaban branch	20-8-89	7.25		12.03	
<b>REWARI-BHATINDA-FASILKA SECTION—</b>					
<i>Main line—</i>					
Rewari to Hissar	20-8-88	88.20			
Hissar to Sirsa	1-1-84	50.75			
Sirsa to Kot Kapura	1-10-84	173.24			
Kot Kapura to Fasilka	1-1-85	30.26		262.45	
<i>Rewari-Phulera Chord—</i>					
Rewari to Narnaul	11-12-04	33.35			
Narnaul to Phulera	15-5-05	100.53		133.88	
<b>TOTAL, RAJPUTANA-MALWA RAILWAY</b>					
<b>DOUBLE LINE, RAJPUTANA SECTION—</b>					
<i>3' 3½" gauge—</i>					
Agra Fort to Idgah Junction (Agra)	11-9-78	1.14			
At Delhi	25-12-02	1.78		2.92	
<i>5' 6" gauge—</i>					
At Delhi	27-2-05	0.09		0.09	
<b>Total double line..</b>					
				3.01	

\* Of this, the length on the Jumna bridge is of mixed (5' 6" and 3' 3½") gauge.

† Includes 2.10 miles, 5' 6" gauge, from Sipra Junction to station, opened in 1899.

‡ Of this 26.28 miles, between Bhatinda and Kot Kapura, are of mixed (5' 6" and 3' 3½") gauge.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> <sub>Sub-heads (a) to (f)</sub> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

## 2 (a) Rajputana-Malwa railway (3' 3½" gauge)—contd.

## Details of construction—

**Permanent-way.**—The Rajputana section is laid with 50-lb. flat-footed steel rails on deodar sleepers. The Malwa section has mixed 40-lb. iron, 41½-lb. and 50-lb. steel flat-footed rails on deodar sleepers. The Cawnpore-Achnera section has 41½-lb. and 50-lb. steel rails on deodar sleepers. The Rewári-Fázilka section has 41½-lb. steel rails on deodar sleepers.

**Ballast.**—The line is ballasted throughout with stone, kunkur, sand and hard quartz.

**Fencing.**—The following lines are fenced: (1) Rajputana section, main line, Delhi to Ahmedabad *via* the Rewári-Phulera Chord, 483.56 miles; Rewári-Bandikui-Phulera loop, 173.76 miles, and branches, 94.61 miles; (2) Malwa section, main line, Khandwa to Ajmer, 97.85 miles, and branch, 2.17 miles; (3) Cawnpore-Achnera section, main line, 148.23 miles and Brindaban branch, 2.69 miles; and (4) Rewári-Fázilka section, 114.23 miles including stations.

**Curves.**—The sharpest curve is of 600 feet radius.

**Gradients.**—On the main line of the Rajputana section, Delhi to Ahmedabad, *via* Rewári-Phulera Chord; on the Rewári-Bandikui-Phulera loop; and on the Brahmavart branch, the ruling gradient is 1 in 150. On the Agra branch it is 1 in 150, except for 1,058 feet on 1 in 142 and 841 feet on 1 in 145 at mile 1. On the Sambhar branch, it is 1 in 200, except for 3,810 feet on 1 in 150 at the beginning of the line. On the Farukhnagar branch it is 1 in 100. On the Malwa section it is 1 in 150, except between Khandwa and Kalakhund where it is 1 in 100 and between Kalakhund and Patal Pani (Mhow Ghat) where it is 1 in 40. On the Cawnpore-Achnera section, and on the Brindaban branch it is 1 in 200; and on the Rewári-Fázilka section it is 1 in 169.

## Contract—

Dated the 8th April 1907, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

## Main provisions of contract—

As noted under 2 (a), Bombay, Baroda and Central India railway (5' 6" gauge).

Statistics of working (Those for the periods prior to 1906 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.							TABLE II.			
INCLUDES THE GODHRA-BUTLAK-NAGDA RAILWAY, 2 (b).										
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) attributable to each calendar year.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
1906	Miles. 1,915.50	Rs. 16,65,57,367	Rs. 2,80,04,905	1,47,43,530	8.25	Rs. 65,99,940	Rs. ...	Rs. + 81,48,590	Rs. 281	47.35
1907	1,919.20	16,85,93,557	2,67,22,171	1,43,93,902	8.54	53,09,963	...	+ 90,88,989	268	49.39
1908	1,918.54	17,64,83,727	2,47,43,850	94,10,603	5.33	60,67,222	...	+ 33,43,381	249	61.97
1909	1,919.72	18,04,84,544	2,51,98,999	1,08,98,636	6.04	61,19,498	...	+ 47,79,138	252	56.75
1910	1,919.64	18,18,63,774	2,55,10,644	1,44,84,804	7.96	61,72,944	...	+ 83,11,860	266	49.20
1911	1,917.73	18,23,81,723	3,03,25,507	1,50,83,603	6.27	63,40,819	...	+ 87,42,784	309	51.07

## 2 (a) Vijapur-Kalol-Kadi railway (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
Vijapur to Kalol	10-6-02	29.44		
Kalol to Kadi	13-7-03	11.93		
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				41.37
Kadi to Bhojani Road (sanctioned on 26th July 1910)	...	4.97	4.97	46.34

## Details of construction—

**Permanent-way.**—16 miles are laid with 41½-lb. flat-footed steel rails and 25 miles with 40-lb. flat-footed iron rails on deodar sleepers.

**Ballast.**—The line is ballasted with broken stone and shingle.

**Fencing.**—Only station yards and 11.07 miles of the Vijapur-Kalol section are fenced.

**Curves.**—The sharpest curve is of 3,820 feet radius.

**Gradients.**—The ruling gradient is 1 in 150.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 2 **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (f)**2 (a) Vijapur-Kalol-Kadi railway (3' 3½" gauge)—concl'd.****Agreements and contract—**

Agreement, dated the 23rd November 1903, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, as to the management, maintenance and working, by the Bombay, Baroda and Central India Railway Company, of the Vijapur-Kalol-Kadi railway.

Contract, dated the 8th April 1907 (called the principal contract), between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Agreement, dated the 3rd March 1909, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, modifying as from the 1st July 1908 to the 30th June 1909, inclusive, the agreement of 23rd November 1903.

Agreement, dated the 16th May 1910, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, for the continuance of the management, maintenance and working, from the 1st July 1909, of the Vijapur-Kalol-Kadi railway, subject to further modifications of the agreement of the 23rd November 1903.

**Main provisions of agreements and contract—**

As noted under 2 (j), Gaekwar's Mehsana railway (3' 3½" gauge).

**Statistics of working—**

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column(5).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902	29.44	10,47,188	19,514	9,227	0.88	23	52.72
1903	41.37	11,84,248	56,916	28,783	2.43	31	49.43
1904	41.37	13,35,402	74,572	40,063	3.00	35	46.25
1905	41.37	18,19,588	87,131	50,496	3.88	40	42.65
1906	41.37	18,24,825	95,660	50,648	3.82	44	47.65
1907	41.37	18,05,631	1,14,340	60,246	4.61	53	47.31
1908	41.37	18,12,860	1,20,643	51,999	3.96	56	56.90
1909	41.37	18,08,338	1,17,311	56,498	4.82	54	51.80
1910	41.37	18,39,176	1,32,202	68,019	5.12	61	48.55
1911	41.37	18,14,964	1,35,691	67,532	4.48	63	50.27

**2 (o) Gaekwar's Dabhoi railway (2' 6" gauge)—****Progress in opening—**

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
Miyagam to Dabhoi	8-4-73	20.00		
Dabhoi to Ohanded	13-4-79	10.62		
Dabhoi to Sankheda Bahadarpur	17-9-79	9.64		
Dabhoi to Goya Gate	1-7-80	17.00		
Goya Gate to Vishvamitri	24-1-81	1.63		
Sankheda Bahadarpur to Bodoli	16-6-90	12.77		
Vishvamitri to Pindra	1-7-97	7.14		
Pindra to Mobha	16-7-98	3.20		
Mobha to Masar Road	1-11-04	6.48	94.48	
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>				
Miyagam to Malsar	15-1-12	24.72		
Sankheda Bahadarpur to Bhatpur (sanctioned on 5th January 1909)	...	3.43		
Dabhoi to Jarod (sanctioned on 17th January 1910)	...	24.78	57.93	152.41

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 2 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (f)

## 2 (c) Gaekwar's Dabhoi railway (2' 6" gauge)—concl'd.

## Details of construction—

**Permanent-way.**—The line is laid with 31-lb. flat-footed steel rails on wooden sleepers, but there is still about one mile of 28-lb. iron rails in the road.

**Ballast.**—The line is ballasted chiefly with sand.

**Fencing.**—The line is practically unfenced except in station yards.

**Curves.**—The sharpest curve is of 500 feet radius.

**Gradients.**—The ruling gradient is 1 in 400, with small lengths of 1 in 200 and 1 in 300.

## Agreement and contract—

Agreement, without date, having effect from the 1st January 1897, between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company, as to the management, maintenance and working, by the Company, of the Dabhoi railway.

Contract, dated the 8th April 1907, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India, the Rajputana-Malwa and other subsidiary lines.

## Main provisions of agreement and contract—

- (i) **Land.**— } As noted under 2 (c), Petlad-Cambay railway (Anand-Tarapur section)  
(ii) **Government aid.**— } (5' 6" gauge).  
(iii) **Terms of working.**— } The Company work the Dabhoi railway at actual cost, plus a sum equal  
(iv) **Distribution of profits.**— } to 10 per cent of total working expenses, but not less than Rs. 500 per  
} mensem, in the half-year for superintendence; and it is also debited with  
} a contribution from its net earnings to the Company's Provident Fund calculated at the same  
} basis as obtains on the Bombay, Baroda and Central India railway. The balance in favour of  
} or against the Baroda Durbar is paid over to or by it, as the case may be.  
(v) **Rates and fares.**— }  
(vi) **Special obligations as to the conveyance of.**— } As noted under 2 (c),  
(a) Mails, troops, high Government officials and Government stores.— } Petlad-Cambay railway  
(b) Government bullion and coin, and the persons in charge thereof.— } (Anand-Tarapur section)  
} (5' 6" gauge).  
(vii) **Power of the Durbar to determine agreement.**— } The agreement may be terminated at any time  
(viii) **Power of the Company to determine agreement.**— } on one year's notice from either side to expire on  
} the 30th June or 31st December in any year.  
(ix) **Term of contract [if not determined under (vii) and (viii)].**—Not specified.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 36 to the Report for 1907.)—

TABLE I.						TABLE II.		
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	REMARKS.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.			Rs.	
1902 . . . . .	78.80	22,53,598	2,22,573	76,267	3.39	The decrease in net earnings in 1903 was due principally to the cost of 3 engines having been charged to Revenue.	54	65.69
1903 . . . . .	83.00	23,60,528	2,60,560	7,467	0.32		60	97.18
1904 . . . . .	94.49	24,64,882	2,99,906	1,26,426	5.13		65	57.79
1905 . . . . .	94.49	24,72,909	3,72,487	2,04,004	8.25		76	45.25
1906 . . . . .	94.48	24,75,587	3,94,817	1,78,665	7.22		80	54.75
1907 . . . . .	94.48	25,62,795	4,69,515	2,63,120	10.23		95	44.17
1908 . . . . .	94.48	25,94,874	4,66,069	2,44,526	9.42		95	47.53
1909 . . . . .	94.48	25,99,580	4,98,182	2,81,818	10.84		101	43.48
1910 . . . . .	94.48	31,41,668	5,95,304	3,46,177	11.01		121	41.85
1911 . . . . .	94.48	37,35,219	6,22,780	3,59,448	9.62		127	42.38

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 2 **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (f)

2 (p) Rajpipla railway (2' 6" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Anklesvar to Baj-Pardi	1-7-07	19.08	
Baj-Pardi to Umalla	19-1-09	4.95	
Umalla to Amletha	1-6-09	7.85	
Amletha to Nandod	20-7-09	5.54	
			37.57

Details of construction—

**Permanent-way.**—The line is laid with 41½-lb. flat-footed steel and iron rails on half-round jungle teak sleepers.**Ballast.**—The line is ballasted chiefly with coarse river sand.**Fencing.**—Only the station yards and small lengths at miles 4 and 9 are fenced.**Curves.**—The sharpest curve is of 1,432 feet radius.**Gradients.**—The ruling gradient is 1 in 150.

Agreement and contract—

Agreement, dated the 19th March 1900, between the Rajpipla State and the Bombay, Baroda and Central India Railway Company, as to the maintenance and working of the Rajpipla railway.

Contract, dated the 8th April 1907, between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India, the Rajputana-Malwa and other subsidiary lines.

Main provisions of agreement and contract—

(i) **Land.**—Provided free of cost by the Rajpipla State.(ii) **Government aid.**—The line is the property of the Rajpipla State (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Bombay, Baroda and Central India railway as part of the Company's system.(iii) **Terms of working.**— } The Rajpipla railway is debited with the actual cost of working plus a sum equal to 12½ per cent. on total working expenses (but not less than Rs. 300 per mensem nor more than an average of Rs. 800 per mensem) in the half year for supervision; and in addition thereto a contribution from its net earnings to the Company's Provident Fund calculated on the basis of the Bombay, Baroda and Central India railway Provident Fund rules 6, 7 and 8.(iv) **Distribution of profits.**—(v) **Rates and fares.**—(vi) **Special obligations as to the conveyance of.**—

(a) Mails, troops, high Government officials and Government stores.—

(b) Government bullion and coin and the persons in charge thereof.—

} As under 2 (o), Gaekwar's Dabhoi railway (2' 6" gauge).

(vii) **Power of the Rajpipla State to determine agreement.**— } The agreement may be determined by either party, at the end of any calendar half year, on one year's notice from either side.(viii) **Power of the Company to determine agreement.**—(ix) **Term of agreement [if not determined under (vii) and (viii)].**—Not specified.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902 . . . . .	37.37	13,05,415	38,726	10,131	0.78	20	73.34
1903 . . . . .	37.37	13,04,281	44,830	10,674	0.82	23	76.19
1904 . . . . .	37.37	13,04,522	49,207	16,690	1.29	35	65.68
1905 . . . . .	37.37	13,04,522	63,017	26,194	2.16	32	54.54
1906 . . . . .	37.37	13,04,867	67,137	32,526	2.49	35	51.55
1907 . . . . .	37.37	13,51,650	80,183	42,622	3.17	41	46.59
1908 . . . . .	37.37	13,53,352	81,269	37,422	3.08	42	60.78
1909 . . . . .	37.37	13,61,118	83,439	38,688	3.12	43	65.38
1910 . . . . .	37.37	13,64,149	1,02,324	41,139	3.02	53	59.75
1911 . . . . .	37.37	13,90,221	1,23,490	54,336	3.94	64	55.59

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 2</sup> <sub>Sub-heads (a) to (t)</sub> BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*concl'd.*

## 2 (q) Billimora-Kalamba railway (2' 6" gauge)—

The construction of this line by the Baroda Durbar was sanctioned in 1911.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Billimora to Kalamba (sanctioned on 5th July 1911) . . . . .	...	34·82	34·82

## 2 (r) Broach-Jambusar Branch railway (2' 6" gauge)—

The construction of this line as an integral part of the Bombay, Baroda and Central India railway was sanctioned in 1911.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Broach to Jambusar (sanctioned on 28th April 1911) . . . . .	...	29·15	29·15

## 2 (s) Kosamba-Zankavav railway (2' 6" gauge)—

The construction of this line by the Bombay, Baroda and Central India Railway Company from funds provided by the Gaekwar of Baroda was sanctioned in 1907.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Kosambá to Zankavav (sanctioned on 18th October 1907) . . . . .	...	26·12	26·12

## 2 (t) Petlad-Vaso railway (2' 6" gauge)—

The construction of this line by the Baroda Durbar was sanctioned in 1911.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Petlad to Vaso (sanctioned on 7th June 1911) . . . . .	...	15·74	15·74

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

**CALCUTTA PORT COMMISSIONERS' RAILWAY (5' 6" gauge).—**

The railway serves the godowns, warehouses, jetties, workshops, jute, sugar, tea, rice and grain depôts, timber yards, mills and coal depôts on both the Calcutta and Howrah Foreshores, and is used for goods traffic only. The railway is of a single track, but there are a large number of sidings for crossing trains and loading goods.

The first section, from Chandpal Ghât to Kidderpore Docks, was laid in 1886, being included in the general sanction for the Docks, and was used solely for the carriage of material for the construction of the Docks. It was opened to general goods traffic in 1891.

**Progress in opening—**

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<i>Lines on the Calcutta Foreshore—</i>				
<i>Main line—</i>				
Cossipore (Gun Foundry Road) to Bagh Bazar . . . . .	1-6-78	1.14		
Bagh Bazar to Meerbohur Ghât . . . . .	1-11-75	1.76		
Meerbohur Ghât to Jetties . . . . .	1-6-78	0.84		
Jetties to Chandpal Ghât . . . . .	1-12-80	0.32		
Chandpal Ghât to Kidderpore Docks (Graving Dock) . . . . .	1-1-87	2.16		
Graving Dock to Chetla . . . . .	0-0-93	3.20		
			9.42	
<i>Branches—</i>				
Graving Dock to Majherat . . . . .	0-0-93	2.34		
Dock Junction to Bengal-Nagpur railway junction . . . . .	0-0-01	1.35		
			3.69	
<i>Line on the Howrah Foreshore—</i>				
Telkul Ghât <i>via</i> Bhurpara Khal to Shalimar . . . . .	31-12-01	...	2.28	
				15.34

**Details of construction—**

**Permanent-way.**—The Cossipore-Chandpal Ghât section is laid partly with iron and partly with steel rails weighing 60 and 75 lbs. to the yard on Maclellan's patent sleepers and s&l sleepers. The Chandpal Ghât-Kidderpore Dock section is laid partly with new rails on Maclellan's patent sleepers and partly with East Indian railway second-hand material on transverse wooden sleepers. The Shalimar branch is laid with 75-lb. double-headed steel rails on cast iron chairs spiked on s&l sleepers. The Dock section is laid with 60-lb. and 75-lb. flanged and double-headed rails laid on wooden sleepers.

**Ballast.**—On the Cossipore-Chandpal Ghât section, packing and boxing is generally done with coal cinders and in some places with 1st class ballast. The Chandpal Ghât-Kidderpore Dock section is packed with ballast. On the Shalimar branch, packing is done with 1st class *jhama* ballast.

**Fencing.**—The line is fenced throughout. The Chandpal Ghât-Kidderpore Dock section is fenced on both sides.

**Curves.**—The radius of the sharpest curve is 250 feet.

**Gradients.**—The ruling gradient is 1 in 300.

**Contract—**

Nil. The line was constructed by the Port Commissioners out of Port Trust Funds and is maintained and worked by them. The land from Chandpal Ghât to Ahiritollah Ghât was originally transferred to the Commissioners by Government for which the former pay a quit rent of Rs. 37,292 per annum. The land north of Ahiritollah Ghât was acquired by the Commissioners under the Land Acquisition Act and that south of Chandpal Ghât was transferred to the Commissioners by Government.

**Statistics of working—**Not available.



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 3 EASTERN BENGAL RAILWAY SYSTEM—  
Sub-heads (a) to (d)

Lines comprised in the system.—The Eastern Bengal railway system is made up of—

	Open line. Miles.	Under construction or sanctioned for construction. Miles.	Total. Miles.
(a) Eastern Bengal railway (5' 6" gauge) . . . . .	512.16	65.57	577.73
(b) { Eastern Bengal railway (3' 3½" gauge) . . . . .	962.22	69.55	1,031.77
{ Eastern Bengal railway (3' 6" gauge) . . . . .	35.24	—	35.24
(c) Cooch Behar railway (3' 3½" gauge) . . . . .	33.00	—	33.00
(d) Mymensingh-Jamalpur-Jagannathganj railway (3' 3½" gauge) . . . . .	55.22	—	55.22
Total . . . . .	1,597.93	135.12	1,733.05

## Running powers—

Foreign line over home line :—

East Indian railway . . . . .	{ Nalhati to Majherat, including Kakargachi Chord Canal Junction to Chitpore }	for goods trains only . . . . .	{ 33.25 1.75 35.00
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## 3 (a) Eastern Bengal railway (5' 6" gauge)—

Progress in opening.—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.			
<b>EASTERN SECTION—</b>								
<i>Main line—</i>								
Calcutta to Ranaghat . . . . .	29-9-62	45.25	153.23					
Ranaghat to Jagati Junction . . . . .	15-11-62	61.83						
Jagati Junction to mile 145 . . . . .	1-1-71	37.88						
Mile 145 to Pachooria Junction . . . . .	30-6-11	0.73						
Pachooria Junction to new Goalundo . . . . .	1-4-90	8.16						
<i>Branches—</i>								
Jagati Junction to river Ganges (Kuchik branch) . . . . .	22-10-68	6.38	313.65					
Kuchik loop line . . . . .	15-2-64	3.77						
Canal Junction to Chitpore (Chitpore branch) . . . . .	1-6-81	1.17						
Portion in Chitpore yard for goods traffic . . . . .	25-9-73	1.88						
Pachooria Junction to Shivarampore { Faridpur	13-4-63	0.12						
Shivarampore to Faridpur { branch. }	20-10-63	8.77						
Durgapur Ghat Line . . . . .	9-4-69	7.43						
Chuzni Extension . . . . .	1-7-07	4.51						
Extensions to Chitpore Terminus (Belgaahhi	1-1-02	1.30						
bridge to Cossipore). . . . .	1-3-03	0.68						
Pattipooker to Chitpore connection . . . . .	1-9-03	0.98						
Kakargachi Chord—	4-12-10	1.17						
Kakargachi Road to Gobra . . . . .						81.93		
<i>Damukdia branch—</i>								
Poradaha to Bhairamara . . . . .	1-2-07	2.26				2.26		
Bhairamara to Golabnugur (Damukdia) . . . . .	19-1-78	11.79						
Extension of Damukdia Ghat line to Raiba . . . . .	8-12-63	7.41						
Golbathan Extension . . . . .	9-11-10	5.20						
<i>Murshidabad branch—</i>								
Ranaghat to Bhagwangola . . . . .	1-1-02	2.26	26.63					
Bhagwangola to Krishnapur . . . . .	1-9-05	33.85						
Krishnapur to Lalgola Ghat . . . . .	10-11-05	5.90						
<b>TOTAL, EASTERN SECTION</b> . . . . .								
..	..	..	..	313.65	..			
<b>SOUTHERN SECTION—</b>								
<i>Main line—</i>								
Calcutta (Belinghata) to Sonarpur . . . . .	2-1-62	10.00	38.87					
Sonarpur to Baraipur . . . . .	10-6-62	5.30						
Baraipur to Magra Hat . . . . .	18-12-62	9.55						
Magra Hat to Diamond Harbour . . . . .	25-4-63	12.69						
Diamond Harbour towards Hara Fort	25-4-63	0.42						
Junction with Eastern section . . . . .	15-8-65	0.41	18.79					
<i>Branches—</i>								
<i>Canning branch—</i>								
Sonarpur to Champahati . . . . .	2-1-62	5.00				18.79		
Champahati to Port Canning . . . . .	15-5-63	12.79						
Banara diversion extension . . . . .	5-2-00	0.25						
<i>Budge-Budge branch—</i>								
Ballygunge to Budge-Budge . . . . .	17-11-02	0.75	18.66					
..	1-5-90	18.66						
<b>TOTAL, SOUTHERN SECTION</b> . . . . .								
..	..	..	..	70.32	..			
<b>Total, carried over</b> . . . . .								
..	..	..	..	884.47	..			

## APPENDIX 9—contd.

History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 8</sup> Sub-heads (a) to (d). **EASTERN BENGAL RAILWAY SYSTEM—contd.**  
 3 (a) Eastern Bengal railway (5' 6" gauge)—contd.

Progress in opening—concld.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
<b>CENTRAL SECTION—</b>					
Brought forward	...	...	...	384.47	
<b>Main line—</b>					
Dum-Dum Junction to Dattapukur	2-4-88	14.25			
Dattapukur to Gobardanga	7-12-88	17.00			
Gobardanga to Bongong	22-4-84	12.00			
Bongong to Khoolna	16-2-84	61.26			
<b>Branches—</b>					
Banaghat to Bongong	16-10-88	20.50	104.51		
Dum-Dum Cantonment to Patipookar	1-8-04	2.68			
			23.18	127.69	
<b>TOTAL LENGTH OPEN</b>					
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>				512.16	
Lower Ganges bridge—Bhairamara to Junction with Eastern Bengal railway near Gopalpur (sanctioned on 10th December 1908).	...	14.23			
Dum Dum Junction to Canal Junction (sanctioned on 30th June 1910).	...	2.84			
Sara to Santahar (sanctioned on 28th December 1911).	...	48.51			
			65.57	65.57	
<b>TOTAL LENGTH OPEN AND UNDER CONSTRUCTION OR SANCTIONED.</b>				577.73	
<b>DOUBLE LINE EASTERN AND SOUTHERN SECTIONS—</b>					
Calcutta to Naihati	1-8-86 21-3-87	20.10 0.28			
Naihati to Kancharpara	20-4-92	4.69			
Kancharpara to Banaghat	12-11-92	17.56			
Banaghat to Aranghata	7-8-97	5.59			
Aranghata to Bogoola	17-9-97	6.75			
Bogoola to Shibnibash	8-11-97 17-11-88	6.65 0.75			
Shibnibash to Dursuma	22-11-09	0.15			
Dursuma to Poradaha	17-3-97 7-8-97	9.50 27.58			
Canal Junction to Chitpore	27-11-08	0.24			
Canal Junction to Chitpore	18-4-88	1.86			
Kakurgachi to Gobra	1-2-07	2.26			
Sealdah to Ballygunge	20-10-88 19-9-90	8.50 0.88			
Ballygunge to Majherat	20-11-93	4.00			
<b>Total double line</b>	...	...	111.73		
<b>QUADRUPLE LINE—</b>					
Kakurgachi to Dum Dum	1-2-07	3.18	3.18		

\* Excluding the quadruple length.

## Details of construction—

**Permanent-way.**—The double line portion of the Eastern section is laid with steel rails throughout. On both the up and down roads between Calcutta and Naihati including the quadrupled portion below Dum Dum and the Kakurgachi Chord line, the permanent-way consists of 85-lb. bull-headed rails laid on Denham-Olphart's cast iron sleepers, with wooden sleepers at the joints. From Naihati to Banaghat both the roads have been relaid with 90-lb. flat-footed rails on wooden sleepers except a few short lengths on cast iron sleepers. Above Banaghat and up to Poradaha where the double line ends the up road has been relaid with 90-lb. flat-footed rails on timber sleepers; while the down road which consists of 75-lb. double-headed rails on cast iron sleepers is being relaid with 90-lb. flat-footed rails.

On the single line portion of the Eastern section, the Damukdia branch from Bhairamara to Poradaha and the whole of the Faridpur branch have been relaid with 90-lb. flat-footed steel rails on timber

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 3 **EASTERN BENGAL RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (d)**3 (a) Eastern Bengal railway (5' 6" gauge)—contd.**

## Details of construction—contd.

sleepers. The Pattipooker-Chitpore connection line is laid with 90-lb. flat-footed steel rails on wooden sleepers; the Churni branch is laid with second hand 62-lb. flat-footed steel rails and the Murshidabad branch with 75-lb. new pattern flat-footed steel rails on wooden sleepers. The rest of the line is chiefly laid with 75-lb. double-headed steel rails; while a few short branches near the Ghat Stations at Goalundo and Damukdia are still laid with scratch permanent-way.

The double line portion of the Southern section and the Budge-Budge branch are laid with 85-lb. bull-headed steel rails, the greater part on cast iron sleepers; the single line portion of the section including the Canning branch is laid with 73-lb. double-headed steel rails. The line from Sonarpur to Canning is laid with wooden sleepers, but the rest of the section has Denham-Olphert's sleepers.

The main line of the Central section from Dum-Dum Junction station to Khowlna and the Pattipooker branch have been relaid with 90-lb. flat-footed steel rails on wooden sleepers. The Ranaghat branch is still laid with 62-lb. rails, but the relaying of this branch with 90-lb. rails is being taken in hand at once.

**Ballast.**—The main line is ballasted generally with brick ballast. Where 85-lb. bull-headed rails have been laid, brick ballast has been replaced by stone. The ballast on the lengths relaid with 90-lb. rails is also being gradually replaced with stone. The bottom ballast on the Murshidabad branch is brick and the ballasting is being completed with stone. The Canning line and the Faridpur branch are practically unballasted.

**Fencing.**—The whole of the Eastern section is fenced, except between Panchooria Junction and Goalundo, and the Faridpur branch. The Southern section is fenced except the Canning branch. The Central section is fenced throughout.

**Curves.**—The sharpest curve is of 1,000 feet radius.

**Gradients.**—The ruling gradient over the numerous navigation bridges is 1 in 300; elsewhere it is 1 in 1,000.

**Contracts.**

Nil. The line is owned and worked by the State.

**Rates and fares.**—Certain maxima and minima have been fixed by the Government, between the limits of which the Railway Administration can vary the rates and fares for goods and coaching traffic.

Statistics of working (Those for the periods prior to 1888 will be found in Appendix 38 to the Report for 1907.)—

TABLE I											TABLE II	
Includes the Eastern Bengal railway 3' 3½" and 2' 6" gauge sections, 3 (a).												
Calendar year.	Mileage open at end of each year.	Total capital outlay, including unexpended, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Annuity.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.			
1888	673.21	9,36,48,486	1,05,19,210	55,25,424	5.90	28,83,744	20,11,011	+ 6,30,669	268	47.47		
1889	746.40	9,73,16,143	1,11,76,674	61,91,625	6.36	30,18,708	20,48,958	+ 11,28,969	263	46.90		
1890	768.90	10,01,93,109	1,14,78,382	60,70,323	6.04	30,96,150	18,14,110	+ 11,60,068	271	47.18		
1891	776.57	10,19,84,737	1,26,75,440	65,32,100	6.40	32,01,166	19,48,198	+ 13,62,736	294	48.47		
1892	812.35	10,42,66,143	1,18,56,446	62,38,727	5.94	33,53,707	21,86,396	+ 6,93,624	270	46.06		
1893	812.71	10,56,47,715	1,20,51,147	66,35,138	6.28	33,88,241	22,14,254	+ 10,32,643	288	46.94		
1894	812.96	10,61,71,409	1,40,18,726	83,53,559	7.87	34,72,411	25,21,068	+ 23,60,088	314	49.49		
1895	813.65	10,76,16,616	1,45,09,789	89,74,474	8.34	35,12,105	25,10,875	+ 29,51,494	328	50.15		
1896	814.36	11,02,05,096	1,50,81,670	90,02,286	8.17	35,15,387	28,46,998	+ 31,40,001	344	49.81		
1897	817.88	11,51,93,689	1,47,62,238	80,66,993	7.00	37,20,348	22,18,438	+ 21,38,212	336	48.85		
1898	827.37	11,82,79,103	1,47,17,879	83,35,064	7.05	38,62,725	21,01,651	+ 23,70,698	334	49.37		
1899	832.18	12,20,74,261	1,56,12,486	83,01,083	6.90	39,79,188	20,89,584	+ 22,88,416	343	46.83		
1900	843.04	12,82,77,100	1,71,00,460	92,46,424	7.32	41,82,088	20,87,252	+ 29,77,139	376	46.93		
1901	854.39	13,24,19,708	1,65,99,440	83,08,281	6.27	43,55,321	20,93,467	+ 18,59,498	360	49.95		
1902	868.18	14,04,08,263	1,78,93,098	91,48,340	6.52	46,69,423	20,88,418	+ 22,90,504	381	48.37		
1903	897.87	15,21,06,102	1,81,52,429	88,57,094	5.82	50,13,585	20,87,434	+ 17,56,325	375	51.30		
1904	971.31	16,55,23,769	1,94,68,098	88,23,372	5.38	54,62,375	20,87,434	+ 12,89,966	374	54.67		
1905	1,234.98	19,06,98,652	2,03,78,194	96,19,904	5.04	59,28,224	20,87,434	+ 16,08,546	349	58.78		
1906	1,271.29	20,23,66,593	2,46,81,081	1,08,08,661	5.24	68,54,092	20,87,434	+ 16,67,135	360	56.93		
1907	1,378.61	21,54,21,452	2,65,68,569	1,03,15,781	4.79	68,94,610	20,87,434	+ 16,33,737	369	61.17		
1908	1,274.47	22,87,26,095	2,78,15,420	81,99,105	3.58	70,80,092	20,87,434	- 9,18,421	412	69.98		
1909	1,503.09	24,27,44,601	2,77,24,084	97,10,666	4.00	78,15,941	20,87,434	+ 3,07,291	355	64.97		
1910	1,507.78	25,55,91,026	2,83,74,662	1,16,98,257	4.58	75,34,551	20,87,434	+ 20,76,272	366	58.77		
1911	1,509.02	27,11,51,904	3,15,19,683	1,17,58,233	4.33	79,48,531	20,87,434	+ 17,19,268	402	63.70		

## APPENDIX 9—contd.

History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 8</sup> Sub-heads (a) to (d). EASTERN BENGAL RAILWAY SYSTEM—contd.

## 3.(b) Eastern Bengal railway (3' 3½" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
<i>Main line—(Sara to Siliguri).</i>					
Sara to Atrai . . . . .	19-1-78	38-75			
Atrai to Jalpaiguri . . . . .	28-8-77	134-25			
Jalpaiguri to Siliguri . . . . .	10-6-78	29-85		198-85	
<i>Manihari Ghat to Gauhati—</i>					
Manihari Ghat to Katihar . . . . .	1-4-87	18-78			
Junction with the Bengal and North-Western railway at Katihar.	8-3-01	0-00			
Katihar to Rayganj . . . . .	1-7-89	37-40			
Rayganj to Dinagepore . . . . .	15-2-88	32-68			
Dinagepore to Chiriz Bandar . . . . .	16-5-84	8-75			
Chiriz Bandar to Parbatipur Junction . . . . .	1-7-83	10-01			
Parbatipur Junction to Shampur . . . . .	19-5-78	15-74			
Shampur to Rangpore . . . . .	2-7-78	7-50			
Rangpore to Kaunia . . . . .	1-6-79	11-25			
*Kaunia to Mogalhat (including Teesta Bridge)	1-4-01	16-92			
Mogalhat to Gitaldaha Junction . . . . .	2-1-02	1-86			
Gitaldaha to Golakganj . . . . .	23-9-02	24-91			
Golakganj to Kokrajhar . . . . .	1-9-06	35-75			
Kokrajhar to Sorbhog . . . . .	1-5-09	39-73			
Sorbhog to Amingaon (on the right bank of the Brahmaputra).	1-4-09	67-27			
Pandu (on the left bank of the Brahmaputra) to Gauhati.	1-1-10	5-00		334-25	
<i>Loop Line—</i>					
Santahar to Bogra . . . . .	1-4-99	24-50			
Bogra to Mohimaganj . . . . .	5-4-00	23-03			
Mohimaganj to Bonarpara . . . . .	1-8-00	4-60			
Bonarpara to Kaunia . . . . .	1-7-05	44-67		95-89	
<i>Branch lines—</i>					
<i>Kosi branch—</i>					
Katihar to Kasba . . . . .	1-4-87	23-10			
Kasba to Forbaganj . . . . .	1-7-89	37-97			
Forbaganj to Jogbani . . . . .	15-2-09	7-60		67-67	
<i>Godagari extension—</i>					
Katihar to Godagari . . . . .	1-1-09	106-29		106-29	
<i>Kissengunge branch—</i>					
Barsoi to Kissengunge . . . . .	15-12-92	35-11		35-11	
Total carried over . . . . .	...	...	...	835-56	

\*The line between Teesta Junction and Mogalhat was originally opened on the 2' 6" gauge as a part of the Kaunia-Dhubri (2' 6" gauge) branch on 6th February 1883.

APPENDIX 9—*contd.*

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 3 Sub-heads (a) to (d). **EASTERN BENGAL RAILWAY SYSTEM—*contd.*****3 (d) Eastern Bengal railway (3' 3½" gauge)—*contd.***Progress in opening—*contd.*

Sections of railway.	Date of opening.	Mileage.	Total.	Grand total.	Remarks.	
Brought forward . . . . .	—	—	—	835.86		
<b>* SANTRABARI EXTENSION OF THE COOCH BEHAR RAILWAY (BRITISH SECTION)—</b>						
South bank of Kaljani river to Alipur Duar . . . . .	18-1-00	0.64			* This line was originally on the 3' 6" gauge, but was converted to, and opened on, the 3' 3½" gauge up to Raja Bhat Khawa from 18th April and up to Jainti from 1st May 1910.	
Alipur Duar to Raja Bhat Khawa . . . . .	5-4-00	9.97				
Raja Bhat Khawa to Jainti . . . . .	1-9-01	9.18	19.79			
<b>Dhubri branch—</b>						
Golakganj to Dhubri . . . . .	29-9-02	12.25		12.25		
<b>Fulchhari branch—</b>						
Bonarpara to Fulchhari . . . . .	1-9-00	8.25		8.25		
<b>DACCA SECTION—</b>						
<b>Main line—</b>						
Narayanganj to Dacca . . . . .	4-1-85	10.25				
Dacca to Jaydebpur . . . . .	1-8-85	20.10				
Jaydebpur to Gafargan . . . . .	1-8-85	32.50				
Gafargan to Mymensingh . . . . .	1-8-85	35.88	88.73	128.66		
<b>TOTAL LENGTH OPEN . . . . .</b>						
—	—	—	—	968.28		
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>						
Rangiya to Tangla (sanctioned on 14th December 1909).	—	24.30				
Singhiani to Fulchhari (sanctioned on 21st December 1910).	—	27.82				
Raja Bhat Khawa to Dalsingpara (sanctioned on 12th October 1911.)	—	17.48	69.55	69.55		
<b>TOTAL LENGTH OPEN AND UNDER CONSTRUCTION OR SANCTIONED.</b>						
—	—	—	—	1,031.77		

**Details of construction—**

**Permanent-way.**—The permanent-way on the whole of the 3' 3½" gauge section consists of 50-lb. flat-footed steel rails on timber sleepers, with the following exceptions:—

Manihari Ghat to Katihar, Katihar to Jogbani, Golakganj to Dhubri, and the Santrabari extension of the Cooch Behar railway (British section) which are laid with 41½-lb. flat-footed steel rails on timber sleepers; and the Dacca section where it is of second hand 64-lb. double-headed steel rails for about 9 miles and second hand 62-lb. flat-footed steel rails for the remainder with a small portion in certain station yards which are still laid with 41½-lbs. flat-footed steel rails.

**Ballast.**—The whole of the line, except the portion from Golakganj Junction to Dhubri, and Forbesganj to Jogbani is ballasted or shortly to be ballasted. The ballast is brick, stone or shingle.

**Fencing.**—The whole of the 3' 3½" gauge lines are fenced, except the Brahmaputra-Sultanpur, Barsoi-Kissengunge and Kaunia-Bonarpara branches, the Gauhati extension, the Santrabari extension of the Cooch Behar railway (British section) and the portions from Golakganj Junction to Dhubri, Dacca to Mymensingh and Forbesganj to Jogbani.

**Curves.**—The sharpest curve is of 500 feet radius.

**Gradients.**—The ruling gradient on the 3' 3½" gauge is 1 in 200. It occurs at the approaches of large bridges and fairly frequently on the Gauhati extension. On the British section of the Santrabari extension of the Cooch Behar railway the ruling gradient on the last few miles near the Hills is 1 in 100, but there is a small length of 1 in 50 between Buxa road and Jainti.

**Contracts—**

As noted under 3 (a), Eastern Bengal railway (5' 6" gauge).

**Statistics of working—**

Included with 5' 6" gauge section, 3 (a).

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number  $\frac{\text{Main head 8}}{\text{Sub-heads (a) to (d)}}$ . **EASTERN BENGAL RAILWAY SYSTEM—contd.****3 (b) Eastern Bengal railway (2' 6" gauge)—**

The Ranaghat-Krishnagar branch has been amalgamated with the Eastern Bengal railway system from 1st July 1904. The Teesta-Kurigram branch was originally a portion of the 2' 6" gauge lines from Teesta Junction to Mogalhat and Jatrapur, known as the Kaunia-Dharila branch. The line from Teesta Junction to Mogalhat has been converted to the 3' 3½" gauge and now forms part of the "Kaunia-Dhubri section." The line from Kurigram to Jatrapur has been abandoned.

**Progress in opening—**

Sections of railway.	Date of opening.	Miles.	Total.
Ranaghat-Krishnagar branch— Aistala Ghat (right bank of the Churni river) near Ranaghat to Krishnagar	5-4-99	20.25	
Teesta-Kurigram branch— Teesta Junction to Kurigram . . . . .	18-7-81	14.99	35.24

**Details of construction—**

**Permanent-way.**—On the Ranaghat-Krishnagar and Teesta-Kurigram branches the rails are flat-footed steel, 25 lbs. per yard; the sleepers are pynkado and sál.

**Ballast.**—The Ranaghat-Krishnagar branch is brick ballasted and the Teesta-Kurigram branch is not ballasted.

**Fencing.**—No lines on the 2' 6" gauge are fenced.

**Curves.**—The sharpest curve is of 500 feet radius.

**Gradients.**—No grade on the Ranaghat-Krishnagar and Teesta-Kurigram branches exceeds 1 in 200.

**Contracts—**

As noted under 3 (a), Eastern Bengal railway (5' 6" gauge).

**Statistics of working—**

Included with 5' 6" gauge section, 3 (a).

**3.(c) Cooch Behar railway (3' 3½" gauge)—****Progress in opening—**

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	REMARKS.
<b>Main line—</b> Gitaldaha to Manahahi Junction	15-9-98	18.81			This line was originally on the 2' 6" gauge but was converted to, and opened on, the 3' 3½" gauge up to Cooch Behar from 14th February 1910 and up to the end of the Native State section from 1st May 1910.
Manahahi Junction to the town of Cooch Behar	15-12-98	3.22			
Torsa Bridge	16-5-00	0.11	21.64		
<b>Cooch Behar-Santrabari extension (Native State section)—</b> Cooch Behar to temporary Alipur Duar (Kholta)	15-4-99	10.98			
Temporary Alipur Duar (Kholta) to the South Bank of the Kaljani River.	16-1-00	0.49	11.45	33.09	

**Details of construction—**

**Permanent-way.**—The permanent-way consists of flat-footed steel rails, 41½-lb. per yard, laid on sál sleepers.

**Ballast.**—The line is laid without ballast.

**Fencing.**—The line is unfenced.

**Curves.**—The sharpest curve is of 1,300 feet radius.

**Gradients.**—The ruling gradient is 1 in 100.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 3 EASTERN BENGAL RAILWAY SYSTEM—contd.  
Sub-heads (a) to (d)

## 3 (c) Cooch Behar railway (3' 3½" gauge)—contd.

## Agreement—

Dated the 25th February 1907, having effect from the 1st January 1907, between the Secretary of State and His Highness the Maharaja of Cooch Behar, as to the management, maintenance and working of the Cooch Behar railway by the Eastern Bengal railway.

## Main provisions of agreement—

- (i) *Land.*— } The railway is the property of the Cooch Behar Durbar, which provides all  
(ii) *Government aid.*— } funds not contemplated in clause 2 of the agreement required for the  
completion and equipment of the line from time to time, and it is managed, maintained and worked  
by the agency of the Eastern Bengal railway.
- (iii) *Terms of working.*— } For management, maintenance and working, the Eastern Bengal railway  
(iv) *Distribution of profits.*— } retains 40 per cent of the gross earnings: provided that when the  
stock of the Eastern Bengal railway is used for the conveyance of any traffic on the Cooch Behar  
railway, the Eastern Bengal railway retains up to, but not exceeding, 45 per cent of the gross  
earnings obtained from the use of such stock. The remainder, being the net earnings of the  
Branch, is paid over to the Durbar.
- (v) *Rates and fares.*—The Administration of the Eastern Bengal railway has full control over the  
rates and fares on the Cooch Behar railway, subject to the maxima and minima prescribed by the  
Government of India in schedule A. appended to the agreement (certain station to station rates  
applicable after the opening of the Dharla bridge are prescribed in schedule B. to the agreement).
- (vi) *Special obligations as to the conveyance of.*—
- (a) *Mails, troops, police, high Government officials and Government stores.*—Mails are conveyed in  
accordance with rules in force on State railways. There is no special provision in the agreement  
for the carriage of troops, high Government officials and Government stores.
- (b) *Government bullion and coin, and the persons in charge thereof.*—Not specified.
- (vii) *Power of the Government to determine agreement.*— } Terminable on the expiry of six  
(viii) *Power of the Cooch Behar Durbar to determine agreement.*— } months' notice from either side.
- (ix) *Term of agreement.*—Until determined under (vii) and (viii).

Statistics of working (Those for the periods prior to 1902 will be found in appendix 38 to the Report for 1907).—

TABLE I.						TABLE II.		
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	REMARKS.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)
	Miles.	Rs.	Rs.	Rs.		Rs.		
1902	33.60	12,95,776	1,24,741	74,452	5.33	71	40.31	*The increase in 1906 and 1907, and the decrease in 1909, are chiefly due to the cost of repairs of damages caused by floods in 1906, which were originally debited to Revenue in 1906, and 1907, having been written back to capital in 1909. †The increase is due chiefly to the debit to Revenue of the cost of repairs of flood damages.
1903	33.60	14,91,329	1,42,540	83,834	5.42	82	41.19	
1904	33.60	14,71,311	1,47,575	86,996	5.91	84	41.05	
1905	33.60	14,82,993	1,43,488	86,233	5.82	85	41.20	
1906	33.60	14,87,786	1,68,754	77,815	5.23	97	53.80	
1907	33.60	15,20,857	1,79,253	91,484	6.01	103	68.97	
1908	33.60	15,17,033	1,96,254	1,14,833	7.57	112	41.48	
1909	33.60	17,71,853	1,91,077	1,39,144	7.45	109	37.17	
1910	33.27	20,45,687	2,03,510	1,03,039	5.28	118	46.91	
1911	33.09	19,06,477	2,61,711	1,18,300	6.20	153	45.23	

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Main head 3  
Number Sub-heads (a) to (d): EASTERN BENGAL RAILWAY SYSTEM—contd.

## 3 (d) Mymensingh-Jamalpur-Jagannathganj railway (3' 3½' gauge)—

This line, which terminates on the Brahmaputra river, is connected with the Eastern section of the Eastern Bengal railway at Goalundo by the India General Navigation and Railway and River Steam Navigation Companies' steamer services.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Mymensingh to Singhjam	15-10-88	33.38	35.23
Singhjam to Jagannathganj	15-10-89	21.85	

## Details of construction—

**Permanent-way.**—The permanent-way consists of flat-footed steel rails, 50 lbs. to the yard, laid on all sleepers.

**Ballast.**—The line is ballasted throughout with brick.

**Fencing.**—The line is fenced only at stations and through the town of Mymensingh.

**Curves.**—The sharpest curve is of 2,685 feet radius.

**Gradients.**—The ruling gradient is 1 in 300.

## Agreements and contract—

Agreement, dated the 6th January 1897  
(called the preliminary agreement)

Contract, dated the 6th January 1897  
(called the scheduled contract),

} between the Secretary of State and the India General Steam Navigation Company (called the Old Company), as to the construction, management, maintenance, and working of the Mymensingh-Jamalpur-Jagannathganj branch railway.

Agreement, dated the 3rd October 1899, supplemental to the preliminary agreement and scheduled contract of 1897, between the India General Steam Navigation Company (called the Old Company) and Messrs. W. H. Cheetham, C. C. Kilburn, and A. Pointon, merchants, the liquidators thereof, the India General Navigation and Railway Company (called the New Company), and the Secretary of State, as to the substitution, as from the 1st July 1899, of the New Company for the Old Company as a party to the preliminary agreement and the scheduled contract, respectively, and for the transfer of the domicile of the Mymensingh-Jamalpur-Jagannathganj branch railway Head Office from Calcutta to London.

## Main provisions of agreements and contract—

- (i) **Land.**—Provided by the Government free of cost to the Company.
- (ii) **Government aid.**—For the more convenient and economical construction of the railway its execution was undertaken by the Government, who also stock, manage, maintain and work it, through the agency of the Eastern Bengal railway. The Government agrees to allow the Company, in respect of each calendar year, by way of rebate, such a sum not exceeding in any year the net earnings from traffic interchanged between the Eastern Bengal railway system and the Company's railway only, as shall together with the Company's net earnings for the year, make up 3½ per cent per annum, on the actual capital expenditure on the branch. (Mymensingh is to be considered a station on the Eastern Bengal railway system, and cross traffic passing over the Company's line when booked through between stations on the Dacca-Mymensingh section and other stations on the Eastern Bengal railway is not to be taken into account in calculating rebate).
- (iii) **Terms of working.**— } For management, maintenance, working and the use of rolling-stock
- (iv) **Distribution of profits.**— } the Eastern Bengal railway retains 45 per cent of the gross earnings of the branch; the remainder, being the net earnings, is paid over to the Company.
- (v) **Rates and fares.**—To be arranged between the Government and the working agency, subject to the condition that they are to be within the maxima and minima, and that the classification of goods is to be in conformity with that in force on the Eastern Bengal railway.
- (vi) **Special obligations as to the conveyance of—**
  - (a) Mails, Troops, Police, high Government officials and Government stores.—
  - (b) Government bullion and coin, and the persons in charge thereof.—
- (vii) **Power of the Government to determine contract.**—Government may determine the contract on 12 months' notice either on—
  - (a) the 31st December 1919, or at the end of any subsequent period of 10 years, in which case the Government undertake to pay to the Company in rupees a sum equal to 25 times the amount of the average yearly net earnings, not including rebate payments, derived by the Company from the branch railway during the three years immediately preceding the time at which the contract is determined, provided that such sum shall not exceed by more than 20 per cent the total capital expenditure of the Company, nor be less than such total capital expenditure; or



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 3 EASTERN BENGAL RAILWAY SYSTEM—concl'd.  
Sub-heads (a) to (d)

3 (d) Mymensingh-Jamalpur-Jagannathganj railway (3' 3½" gauge)—concl'd.

Main provisions of agreements and contract—concl'd.

(b) on the 31st December 1948, in which case the Government undertake to pay to the Company a sum equal to the total capital expenditure in rupees.

(viii) Power of the Company to surrender contract.—Nil.

(ix) Term of contract.—Until determined under (vii).

Statistics of working—

TABLE I.									TABLE II.		
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from the Eastern Bengal railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	REMARKS.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)	(3)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1898	33-07	10,44,638	7,060	4,218	0.40	—	4,218	0.40	27	45.00	
1899	33-37	16,11,248	66,499	36,575	2.27	—	36,575	2.27	35	45.00	
1900	33-37	18,78,395	1,62,028	89,116	4.74	—	89,116	4.74	58	45.00	
1901	33-37	20,84,346	1,67,756	92,265	4.43	—	92,265	4.43	60	45.00	
1902	33-14	22,35,677	2,05,251	1,12,868	4.94	—	1,12,868	4.94	74	45.00	
1903	33-70	23,28,917	2,22,825	1,19,573	5.13	—	1,19,573	5.13	82	46.34	
1904	34-37	23,51,113	2,21,168	1,16,336	5.03	—	1,16,336	5.03	81	46.49	
1905	30-63	23,86,029	2,16,642	1,18,748	4.98	—	1,18,748	4.98	81	46.19	
1906	33-22	24,15,348	2,72,929	1,50,030	6.21	—	1,50,030	6.21	103	45.03	
1907	33-90	24,34,018	3,31,673	1,82,402	7.50	—	1,82,402	7.50	122	45.00	
1908	33-91	24,50,870	3,94,866	2,17,176	8.86	—	2,17,176	8.86	141	45.00	
1909	34-35	24,84,174	3,90,917	2,09,504	8.43	—	2,09,504	8.43	134	45.00	
1910	35-51	25,31,451	3,78,228	2,08,025	8.22	—	2,08,025	8.22	133	45.00	
1911	35-23	25,72,135	3,96,262	2,17,944	8.47	—	2,17,944	8.47	137	45.00	The increase is due to the addition of charges for expenditure incurred on terminals at Jagannathganj with those for working by the Eastern Bengal railway.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 4</sup> Sub-heads (a) to (d). **EAST INDIAN RAILWAY SYSTEM—**

Chairman.—Sir Frederick R. Upcott, K.C.V.O., C.S.I.

Secretary.—Charles W. Young, Esq.

Offices.—28-30 Nicholas Lane, London, E. C.

Lines comprised in the system.—The East Indian railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) East Indian railway { (5' 6" gauge) 2,261.74 miles } { (3' 3 1/2" gauge) 4.12 miles }	2,265.86	149.50	2,415.36
(b) Delhi-Umballa-Kalka railway (5' 6" gauge)	192.12	..	192.12
(c) South Behar railway (5' 6" gauge).	79.19	..	79.19
(d) Tarkessur railway (5' 6" gauge)	22.21	..	22.21
Total.	2,559.38	149.50	2,708.88

## Running powers—

## Home line over Foreign lines :—

	Miles.
Idgah Agra to Agra Fort, Rajputana-Malwa railway, for goods trains only	1.24
Naihati to Majherat, Eastern Bengal railway	31.25
Canal Junction to Chitpore " } for goods trains only	1.75
Moghal Sarai to Benares Cantonment, Oudh and Rohilkhand railway, for certain passenger trains only	10.00
Idgah Agra to Agra Cantonment, Great Indian Peninsula railway, for goods trains only	1.43
Total	45.70

## Foreign lines over Home line :—

Bengal-Nagpur railway at Katni	} for passenger and goods trains	0.80
" " " at Katraigarh		0.65
" " " at Asansol		0.50
" " " at Howrah for passenger trains only		1.00
Great Indian Peninsula railway at Cawnpore, for passenger trains 0.97 mile and for goods trains 0.52 mile		1.49
" " " at Katni for goods trains only		0.88
" " " at Manikpur	} for passenger and goods trains	0.63
North Western and Oudh and Rohilkhand railways, Ghaziabad to Delhi		13.00
Total		17.86

## 4 (a) East Indian railway (5' 6" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Main line—</b>				
Howrah to Hooghly	15-8-54	23.23		
Hooghly to Pundocah	1-9-54	14.31		
Pundocah to Khana Junction	3-2-55	36.94		
Khana Junction to Raneegunge	3-2-55	45.71		
Raneegunge to Siarsol (near Asansol)	21-7-63	1.70		
Siarsol (near Asansol) to Sitarampur	1-1-65	15.15		
Sitarampur to Luckeesarai Junction	1-1-71	124.64		
Luckeesarai to Dinapore	17-11-62	62.42		
Dinapore to Moghal Sarai	22-12-62	125.92		
Moghal Sarai to Mirzapur	1-1-64	39.23		
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	83.48		
Etawah to Shikohabad	13-11-61	24.39		
Shikohabad to Tundla Junction	1-4-62	22.92		
Tundla Junction to Aligarh	1-3-63	43.56		
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		
			955.06	
<b>Loop line—</b>				
Khana Junction to River Adjai	3-10-63	12.00		
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	33.03		
Jamalpur to Kail	17-11-62	28.00		
			250.39	
				1,205.47
<b>Grand Overt—</b>				
Sitarampur to Barakar	1-1-65	5.42		
Barakar to Dhanbaid	20-5-64	25.75		
Dhanbaid to Paharpur	1-1-67	106.71		
Paharpur to Manpur	15-8-66	17.42		
Gya to Moghal Sarai	1-3-00	126.11		
			278.42	
<b>Branches—</b>				
<b>Bhadreswar branch—</b>				
Bhadreswar Junction to the river bank	6-12-52	2.60	2.60	
				281.02
Carried over				1,486.49

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 4 EAST INDIAN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (d)

## 4 (a) East Indian railway (5' 6" gauge)—contd.

Progress in opening—contd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
Brought forward	...	...	...	1,485.40
<b>Hooghly bridge branch—</b>				
Hooghly Junction to Naihati	15-3-87	4.47	4.47	
<b>Ondal loop—</b>				
Ondal to Baboisoole	1-5-64	2.08		
Baboisoole to Mangalpur	1-1-68	2.74		
Mangalpur to Toposi	2-2-68	2.65		
Toposi to Ikrah Junction	15-4-94	2.42		
Ikrah Junction to Gaurangdi	1-6-95	14.16		
Gaurangdi to Bupnarainpur	20-3-95	7.54		
			31.54	
<b>Ikrah branch—</b>				
Ikrah Junction to Barabani	15-4-94	3.40		
Barabani to Silarampur	15-4-02	7.69		
			16.09	
<b>Katras branch—</b>				
Dhanbaid to Katrasgarh	20-5-94	9.11		
			9.11	
<b>Salampur branch—</b>				
Salampur to Shandi	7-9-94	4.29		
	1-1-97	1.24		
			5.53	
<b>Chanck branch—</b>				
Chanck block hut to mile 197.30	1-2-98	2.89		
	5-8-96	1.00		
			3.89	
<b>Barabani extension—</b>				
Toposi to Barabani	15-6-08	3.79		
			3.79	
<b>Ondal-Sainthia Chord—</b>				
Ondal to Sainthia	1-1-07	42.94		
			42.94	
<b>Shikohabad-Farakhabad branch—</b>				
Shikohabad to Mainpuri	1-3-05	29.71		
Mainpuri to Bhongaon	17-3-05	3.83		
Bhongaon to Farakhabad	1-1-06	27.06		
			65.40	
<b>Hapur branch—</b>				
Khurja to Hapur	15-4-07	33.87		
			33.87	
<b>Pandra branch—</b>				
From Pandra block hut to mile 151.41 on Pandra branch	26-11-00	3.68		
			3.68	
<b>Damuda branch—</b>				
Kusanda station to the Damoodra river	30-6-95	3.00		
	15-7-95	1.77		
			4.77	
<b>Giridih branch—</b>				
Madhupur Junction to Giridih	1-1-71	28.70		
			28.70	
<b>Colliery lines—</b>				
<b>Katras-Khanoodih extension—</b>				
Katrasgarh to Khanoodih	7-3-03	7.17		
<b>Dhanbaid-Jharia Chord—</b>				
Dhanbaid to Jharia	1-5-03	3.75		
<b>Katras-Mulkera cross connection—</b>				
Northern half of connection	15-8-08	0.66		
<b>Kusanda-Totalmari extension (including portion of Chandur branch).</b>	20-4-07	3.15		
			11.62	
			3.15	
<b>Mokameh Ghat branch—</b>				
Tal Junction to Mokameh Junction via Mokameh Ghat	1-5-83	3.70		
			3.70	
<b>Patna-Gya branch—</b>				
Bankipore Junction to Bankipore	2-6-79	0.25		
Bankipore to Jehanabad	21-4-79	28.95		
Jehanabad to Gya	2-6-79	28.43		
			57.63	
<b>Barun-Daltonganj branch—</b>				
Some East Bank (Barun) to Rajhara	8-5-02	67.80		
Rajhara to Daltonganj	15-12-02	10.72		
			78.52	
Carried over	...	...	...	414.88
				1,901.37

## APPENDIX 9—contd.

History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 4 EAST INDIAN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (d)

4 (a) East Indian railway (5' 6" gauge)—contd.

Progress in opening—contd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	REMARKS.
Brought forward		—	—	1,901'37	
<i>Digha Ghat branch—</i> Bankipore Junction to Digha Ghat	2-4-85	5'33	5'33		
<i>Tarighat branch—</i> Dildarnagar Junction to Tarighat	5-10-80	12'00	12'00		
<i>Patna Ghat branch—</i> Patna to Patna Ghat	17-11-62	0'87	0'87		
<i>Benares chord—</i> Dihwa Block hut to Bechupur (Oudh and Rohilkhand railway.)	14-5-10	1'18	1'18		
<i>Jubbulpore branch—</i> Naini Junction to Jubbulpore	1-8-57	224'49	224'49		
<i>Allahabad Fort branch</i>	3-3-59	2'33	2'33		
<i>Cawnpore city branch</i>	15-2-79	0'38	0'38		
<i>Agra branch—</i> Tundla Junction to Jumna bridge	1-4-62	13'35			
Jumna bridge to Agra city (Agra direct access)	1-1-08	1'64	14'99		
<i>Hathras city branch</i>	1-11-98	5'38	5'38		
<i>Branches on the loop line—</i>					
<i>Arimganj branch—</i> Nalhati to Arimganj	15-7-92	27'23	27'23		
<i>Rajmehal branch—</i> Tinpahr Junction to Rajmehal	15-10-60	7'00	7'00		
<i>Sakrigali branch—</i> Sakrigali Junction to the river Ganges	1-1-94	1'45	1'45		
<i>Mirza Chowki branch—</i> Mirza Chowki to river side	1-3-09	0'38	0'38		
<i>Maharajpur branch</i>	30-11-98	1'40	1'40		
<i>Sultangunge branch</i>	6-5-95	1'16	1'16		
<i>Dhulian branch—</i> Batharwa to Dhulian Ganges	19-1-11	16'73	16'73		
<i>Monghyr branch—</i> Jarnalpur Junction to Monghyr	10-4-62	5'68	5'68		
<i>Bausi branch—</i> Bhagalpur to Bausi	1-10-11	31'55	31'55		
<i>Deoghur branch (5' 3 1/4" gauge)—</i> Baidyanath Junction to Deoghur	23-12-82	4'12	4'12	364'49	
TOTAL, OPEN MILEAGE, EAST INDIAN RAILWAY.	...	...	...	2,265'86	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					
Dhulian Ganges to Katwa (sanctioned on 5th March 1906)	...	84'70			
Hooghly to Katwa (sanctioned on 23rd June 1905).	...	64'80	149'50	149'50	
GRAND TOTAL, EAST INDIAN RAILWAY	...	...	...	2,415'36	
DOUBLE LINE—					
<i>On the main line—</i>					
Howrah to Serampore	10-3-57	68'81			
Serampore to Chandernagore	1-2-58	8'88			
Chandernagore to Hooghly	1-5-58	3'11			
Hooghly to Magra	1-10-58	5'49			
Magra to Pandocah	25-2-59	8'83			
Pandocah to Burdwan	1-10-59	126'44			
Burdwan to Khana	1-1-59	8'22			
Khana to Durgapur	1-6-70	31'85			
Durgapur to Raneeogunge	2-8-70	14'38			
Raneeogunge to Sitarampur	19-12-70	15'55			
Sitarampur to Luckeesarai	1-1-71	124'84			
Luckeesarai to Burhee	22-6-80	9'62	254'99		
Carried over	...	...	254'99		

\* Excluding the quadruple and sextuple lengths.

† Excluding the triple lengths.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 4 EAST INDIAN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (d)

4 (a) East Indian railway (5' 6" gauge)—contd.

Progress in opening—contd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	REMARKS.
Brought forward	—	—	254'09		
<b>DOUBLE LINE—contd.</b>					
<i>On the main line—contd.</i>					
Burhee to Barh	22-2-68	27'10			
Barh to Futwah	11-1-68	25'67			
Futwah to Dinapore	20-3-67	19'63			
Dinapore to Bihta	18-6-68	10'33			
Bihta to Arrah	28-3-70	13'50			
Arrah to Buxar	13-6-63	43'67			
Buxar to Dildarnagar	15-4-82	22'46			
Dildarnagar to Zamania	20-5-82	8'59			
Zamania to Sakaldih	20-6-82	16'28			
Sakaldih to Moghal Sarai	10-6-82	11'49			
Moghal Sarai to Ahraura Road	10-6-07	7'92			
Ahraura Road to Kyalahat	8-12-06	4'95			
Kyalahat to Chunar	29-12-08	5'23			
Chunar to Dagnapur	19-2-09	4'91			
Dagnapur to Pahara	27-2-09	4'91			
Pahara to Jhingura	16-1-03	4'61			
Jhingura to Mirzapur	6-6-07	6'76			
Mirzapur to Bindhachal	6-7-11	3'96			
Bindhachal to Birohe	12-7-11	2'54			
Birohe to Gaipura	26-9-11	3'95			
Gaipura to Jigna	10-10-11	4'09			
Jigna to Mandah Road	16-11-11	4'47			
Mandah Road to Unchdih	20-11-11	4'44			
Unchdih to Meja Road	23-11-11	4'56			
Meja Road to Tonsa bridge	25-10-11	2'63			
Tonsa bridge to Bheerpur	10-4-11	4'67			
Bheerpur to Karchana	9-4-11	6'00			
Karchana to Chheoki	6-6-09	5'31			
Chheoki to Naini	31-1-07	1'25			
Naini to Allahabad	15-1-06	3'86			
Allahabad to Subadargunge	27-1-09	3'50			
Ghaziabad to Shahdara	20-2-02	3'13			
Shahdara to east side of Juma bridge near Delhi	1-7-02	2'57			
<i>On the branches—</i>					
Hooghly bridge branch	15-2-87	4'47			
Sitarampur to Barakar	1-7-04	3'89			
Portion of Juxia branch	6-3-01	0'17			
Chanch to Mugma	1-1-04	3'78			
Mugma to Futka	29-9-05	3'16			
Futka to Kaloobathan	29-1-06	5'00			
Kaloobathan to Chhota Ambona	12-1-06	3'38			
Chhota Ambona to Pradhankhunta	21-9-06	3'68			
Pradhankhunta to Dhanbaid	17-10-05	2'76			
Gurpa to Gujhandi (on the Gya-Katrasgarh line).	20-8-06	2'04			
	1-7-06	13'60			
	11-8-07		50'43		
<b>Total double line</b>	—	—	—	609'75	
<b>TRIPLE LINE—</b>					
Debipur to Boinshee	1-1-09	2'29			
Raneegunge to Asansol	22-7-07	11'30			
			13'59		
<b>QUADRUPLER LINE—</b>					
Bengal-Nagpur Railway Junction cabin to Lalooah	1-1-07	2'42	2'42	13'69	
				2'42	
<b>SIXTUPLER LINE—</b>					
Howrah Station to Bengal-Nagpur Railway Junction cabin	1-1-08	0'51	0'51	0'51	

## Details of construction—

**Permanent way.**—The main line from Howrah to Delhi, including the Grand Chord, the Loop line from Khana Junction to Kiul, the Jubbulpore branch, Jharia branch, Ondal loop, Ikrah branch, Giridih branch, Patna-Gya branch, Barua-Daltonganj branch, Agra branch, Shikohabad-Farukhabad, Dhulian and Bansi branches are laid with steel rails throughout. A few short branches are still laid with iron rails, but these are being replaced with second-hand steel rails removed from the main line in the course of relaying operations.

On both the up and down roads of the main line from Howrah to Allahabad, a distance of about 564 miles, the rails are 85-lb. bull-headed with the following exceptions:—

- (a) 15 miles between Gidhaur and Mananpur, 6 miles between Bihta and Koilwar, 16 miles between Behea and Dumraon, and 15 miles between mile 454 and Moghal Sarai aggregating 52 miles of the up line, and 12 miles of the down line, from mile 347 to mile 359, are laid with 75-lb. double-headed rails, but these sections are now being relaid with the heavier rails.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 4</sup> <sub>Sub-heads (a) to (d)</sub> **EAST INDIAN RAILWAY SYSTEM—contd.**

**4 (a) East Indian railway (5' 6" gauge)—contd.**

**Details of construction—contd.**

(b) 40 miles of the down line below Burdwan and 74 miles of the up line and 66 miles of the down line between Bukhtiarpore and Moghal Sarai are laid with 88½-lb. bull-headed rails.

Above Allahabad the main line up to Fatehpur (mile 630) is laid with 85-lb. bull-headed rails and the rest of the main line and branches are laid with 75-lb. double-headed rails.

The Grand Chord line is laid with 85-lb. rails from Sitarampore to Gurpa, with 88½-lb. rails from Gurpa to mile 287 near Manpur, and the remainder with 75-lb. double-headed rails.

The Deoghur branch (3' 3½" gauge) is laid with 80-lb. flat-footed rails.

As at present laid, about thirty per cent of the sleepers are wood and the remainder are iron. The wooden sleepers principally consist of sal and deodar; but of late jarrah and Australian hard wood sleepers have also been put into the road. The chairs are cast iron and vary in weight from 36 to 51½ lbs. The iron sleepers are of the Denham-Olpherts' pattern and weigh about 252 lbs. each.

**Ballast.**—The line is ballasted throughout with stone.

**Fencing.**—The line is fenced throughout, except on the Damoodur, Ikrah, Salanpur, Chanch, Pandra, Azimganj, Barun-Daltonganj, Shikohabad-Farukhabad and Deoghur branches, the Ondal loop, and the Ondal-Sainthia and Dhanbaid-Jharia Chords.

**Curves.**—The sharpest curve is of 1,000 feet radius and situate between Agra (Jumna East Bank) and Belanganj.

**Gradients.**—The ruling gradient of the main line and the Dhulian branch is 1 in 300, except between Raneegunge and Luckeesarai where it is 1 in 200 with a 1 in 100 banking section, between Simultala and Jhajha, and on the Grand Chord the ruling gradient is 1 in 200 (compensated on curves), with a 1 in 80 banking section between Gurpa and Gujhandi. The ruling gradient of the Loop line, the Ondal-Sainthia Chord, the Bausi branch and the Jubbulpore branch is 1 in 200, and of the Deoghur branch 1 in 60.

**Contracts and agreement—**

Contract, dated the 22nd December 1879 (called the principal contract) *between the Secretary of State and the East Indian Railway Company*, as to the maintenance, management and working of the undertaking.

Agreement, dated the 27th July 1882, *between the Secretary of State and the East Indian Railway Company*, as to the working of the Kurhurbaree and Serampore collieries.

Contract, dated the 10th November 1893 (supplemental to the contract of 1879), *between the Secretary of State and the East Indian Railway Company*, as to the incorporation in the undertaking of certain State branch lines.

Contract, dated the 26th February 1896 (supplemental to the contract of 1879), *between the Secretary of State and the East Indian Railway Company*, as to raising capital by debentures.

Contract, dated the 22nd November 1897 (supplemental to the contracts of 1879 and 1896), *between the Secretary of State and the East Indian Railway Company*, as to the construction and working of the Moghal Sarai-Gya railway.

Contract, dated the 4th April 1899 (supplemental to the contract of 1879), *between the Secretary of State and the East Indian Railway Company*, as to creation of debenture stock.

Contract, dated the 14th November 1899 (modifying the contract of the 22nd December 1879 as supplemented by the contracts of 1896 and 1899) *between the Secretary of State and the East Indian Railway Company*.

Contract, dated the 16th April 1903 (supplemental to the contracts of 1899, and to those of 1879, 1896 and 1899 therein referred to), *between the Secretary of State and the East Indian Railway Company*, as to the adoption of 1s. 4d. per rupee as the "prescribed" rate of exchange.

Contract, dated the 10th July 1907 (supplemental to the contracts of 1879, 1899 and 1903), *between the Secretary of State and the East Indian Railway Company*, as to the creation of a 3½ per cent Debenture stock.

Contract, dated the 25th October 1911, *between the Secretary of State, the Deoghur Railway Company and the East Indian Railway Company*, as to the transfer to the Secretary of State of the Deoghur railway and its management, maintenance and working by the East Indian Railway Company as a part of their undertaking.

**Main provisions of contracts and agreement—**

- (i) **Land.**—Provided by the Government at the cost of capital.
- (ii) **Government aid.**—Guarantee of interest in sterling at 4 per cent per annum on £8,550,000, the capital sum representing the deferred portion (one-fifth) of the annuity payable by Government in purchase of the East Indian railway. Also guarantee of principal and interest in respect of debentures and debenture stock issued by the Company.
- (iii) **Distribution of profits.**—The surplus profits in each half year remaining after payment of interest and annuity charges, and the contribution to the Provident Fund, to be divided as follows:—  
Of the first Rs. 25,00,000 of such surplus profits (or of the whole amount when it does not exceed Rs. 25,00,000) the Government to receive four-fifths and the Company one-fifth; of any excess beyond Rs. 25,00,000 the Government to receive fourteen-fifteenths and the Company one-fifteenth.



## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 4</sup> Sub-heads (a) to (d) EAST INDIAN RAILWAY SYSTEM—contd.

## 4 (b) Delhi-Umballa-Kalka railway (5' 6" gauge)—

*Chairman.*—Alexander Izat, Esq., C.I.E.*Secretary.*—J. Lightfoot, Esq.*Offices.*—237, Gresham House, Old Broad Street, London, E.C.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
<i>Main line.</i> — Delhi to Kalka . . . . .	1-3-91	162.36	
<i>Kaithal branch.</i> — Thanesar to Kaithal . . . . .	1-12-10	29.76	
			192.12

## Details of construction—

*Permanent-way.*—The permanent-way consists of double-headed steel rails, 75 lbs. to the yard, laid on Denham-Olipherts' cast-iron plate and wooden sleepers with cast iron chairs. On the Kaithal branch 75-lb. flat-footed steel rails have been used.

*Ballast.*—The line is ballasted throughout with stone.

*Fencing.*—The line is fenced throughout.

*Curves.*—The sharpest curve is of 1,010 feet radius.

*Gradients.*—The ruling gradient is 1 in 200, except for 15 miles from Kalka where it is 1 in 40.

## Contracts—

Dated the 24th January 1889 (called the principal working contract), between the Secretary of State and the East Indian Railway Company, for working and maintenance.

Dated the 12th February 1889 (called the principal contract), between the Secretary of State and the Delhi-Umballa-Kalka Railway Company, for the construction of the railway.

Dated the 19th March 1890 (supplemental to the contract of 1889), between the Secretary of State and the Delhi-Umballa-Kalka Railway Company, as to the raising of additional capital by the issue of debentures.

Dated the 19th December 1895 (supplemental to the contract of 1889), between the Secretary of State and the Delhi-Umballa-Kalka Railway Company, conceding to the Company, from the 1st January 1895, the 2 per cent of gross earnings previously retained by Government.

Dated the 21st July 1896 (supplemental to the contract of 1889), between the Secretary of State and the East Indian Railway Company, as to the provision of funds for further capital works.

Dated the 24th July 1896 (supplemental to the contracts of 1889 and 1890), between the Secretary of State and the Delhi-Umballa-Kalka Railway Company, as to the provision of funds for further capital works.

Dated the 9th June 1897 (supplemental to the contracts of 1889, 1890, and 1895), between the Secretary of State and the Delhi-Umballa-Kalka Railway Company, guaranteeing interest at the rate of 3½ per cent on share capital.

Dated the 27th April 1903 (supplemental to the contract of 1889), between the Secretary of State and the Delhi-Umballa-Kalka Railway Company, as to the adoption of 1s. 4d. per rupee as the "prescribed" rate of exchange.

Dated the 1st July 1909 (supplemental to the contracts of 1889 and 1896), between the Secretary of State and the East Indian Railway Company, } As to the working and

1 Dated the 8th November 1909 (supplemental to the contracts of 1889, 1890, 1895, 1896, 1897 and 1903), between the Secretary of State and the Delhi-Umballa-Kalka Railway Company, } construction, respectively, of the Thanesar-Kaithal branch.

## Main provisions of contracts—

(i) *Land.*—To be provided by the Government free of cost to the Company.

(ii) *Government aid.*— } The Government undertakes (through the agency, in the first instance, of the  
(iii) *Terms of working.*— } East Indian Railway Company) to supply the necessary rolling-stock and to work and maintain the line until the 31st December 1926, taking 48 per cent of the gross receipts of the railway for the working agency and paying 52 per cent to the Company. 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 its share capital.

(iv) *Distribution of profits.*—Surplus profits in any year in excess of 3½ per cent per annum on share capital are divided equally between the Government and the Company until the Government has been repaid amounts advanced by way of subsidy, with interest. Thereafter all surplus profits will belong to the Company.

(v) *Rates and fares.*—To be agreed upon between the Government and the working agency; but between Delhi and Umballa not more than the maximum, nor less than the minimum, in force on the East Indian railway, and between Umballa and Kalka not more than three times such maximum nor less than such minimum.



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 4 EAST INDIAN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (d).

## 4 (b) Delhi-Umballa-Kalka railway (5' 6" gauge)—concl'd.

Main provisions of contracts—concl'd.

(vi) Special obligations as to the conveyance of.—

(a) Mails, troops, high Government officials and Government stores.— } Nil.  
(b) Government bullion and coin, and the persons in charge thereof.— }

(vii) Power of the Government to determine contract.—The 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. Payments by the Government by way of subsidy under the contract of the 9th June 1897 and also the additional 2 per cent of gross earnings conceded to the Company under the contract of the 19th December 1895 are to be excluded from the profits of the Company in calculating the price to be paid by the Government.

(viii) Power of the Company to surrender contract.—Nil.

(ix) Term of contract [if not determined under (vii)].—Not specified.

Statistics of working—

TABLE I.								TABLE II.		
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1891	162-24	1,55,44,692	9,07,697	4,72,002	3-04	---	4,72,002	3-04	128	48-00
1892	161-40	1,58,22,187	10,81,769	5,62,520	3-56	---	5,62,520	3-56	129	48-00
1893	161-40	1,55,24,600	11,93,508	6,23,224	4-01	---	6,23,224	4-01	143	48-00
1894	161-40	1,55,25,547	13,37,528	6,95,514	4-48	---	6,95,514	4-48	159	48-00
1895	161-40	1,55,06,120	14,60,519	7,59,470	4-90	---	7,59,470	4-90	174	48-00
1896	160-47	1,54,49,783	13,18,840	6,85,797	4-44	---	6,85,797	4-44	158	48-00
1897	162-24	1,53,26,585	15,73,319	8,18,126	5-34	---	8,18,126	5-34	186	48-00
1898	162-24	1,53,43,867	16,07,512	8,35,906	5-45	---	8,35,906	5-45	191	48-00
1899	162-24	1,53,01,272	14,49,378	7,53,677	4-93	---	7,53,677	4-93	172	48-00
1900	162-24	1,53,13,467	13,72,523	7,13,712	4-66	---	7,13,712	4-66	163	48-00
1901	162-24	1,52,92,648	13,85,858	7,39,046	6-14	---	9,39,046	6-14	213	48-00
1902	162-24	1,54,23,791	13,66,695	7,70,681	6-29	---	9,70,681	6-29	221	48-00
1903	162-36	1,55,49,998	13,30,960	7,52,099	6-12	---	9,52,099	6-12	216	48-00
1904	162-36	1,55,51,763	13,53,475	7,63,807	6-20	---	9,63,807	6-20	218	48-00
1905	162-36	1,56,07,489	20,16,936	10,43,807	6-72	---	10,43,807	6-72	238	48-00
1906	162-36	1,57,26,893	20,04,218	10,42,194	6-63	---	10,42,194	6-63	237	48-00
1907	162-36	1,58,23,198	23,04,659	11,99,423	7-57	---	11,99,423	7-57	272	48-00
1908	162-36	1,60,07,123	21,09,180	10,96,778	6-85	---	10,96,778	6-85	250	48-00
1909	162-36	1,66,56,398	22,90,710	11,91,169	7-15	---	11,91,169	7-15	271	48-00
1910	192-13	1,75,45,512	26,05,803	13,55,018	7-72	---	13,55,018	7-72	261	48-00
1911	192-12	1,77,78,153	31,33,921	16,33,571	9-22	---	16,33,571	9-22	316	48-00

## 4 (c) South Behar railway (5' 6" gauge)—

Chairman.—Sir Henry S. Cunningham, K.C.I.E.

Secretary.—Lieut.-Col. H. Bonham-Carter.

Offices.—91, York Street, Westminster, S. W.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Luckeeserai to Gya . . . . .	5-7-99	79-19	79-19

Details of construction—

**Permanent-way.**—The permanent-way consists of double-headed steel rails, 75 lbs. to the yard, laid on wooden sleepers and cast-iron chairs, and Denham-Olpherts' cast-iron plate sleepers.**Ballast.**—The line is ballasted throughout with stone.**Fencing.**—The line is fenced only near villages, at stations and for a short distance on each side of level crossings.**Curves.**—The sharpest curve is of 3,000 feet radius.**Gradients.**—The ruling gradient is 1 in 400.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

(For Index see page preceding this appendix.)

Number <sup>Main head 4</sup> Sub-heads (a) to (d), **EAST INDIAN RAILWAY SYSTEM—contd.**

**4 (c) South Behar railway (5' 6" gauge)—contd.****Contracts—**

Dated the 7th August 1895 (called the principal contract), *between the Secretary of State and the South Behar Railway Company*, as to construction.

Dated the 22nd August 1895 (called the contract of 1895), *between the Secretary of State and the East Indian Railway Company*, as to maintenance and working.

Dated the 21st April 1903 (supplemental to the contract of 1895), *between the Secretary of State and the South Behar Railway Company*, as to the adoption of 1s 4d per rupee as the "prescribed" rate of exchange.

Dated the 11th December 1906 (supplemental to the contract of 1895), *between the Secretary of State and the South Behar Railway Company*, as to the lease of the South Behar railway to the Secretary of State and yearly payment to the Company until date of determination of the contract of the 7th August 1895.

Dated the 16th January 1907 *between the Secretary of State and the East Indian Railway Company*, as to working the South Behar railway as part of the Company's undertaking.

**Main provisions of contracts—**

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—  
 (iii) *Terms of working.*—  
 (iv) *Distribution of profits.*— } Government constructed the line, from funds provided by the South Behar Railway Company, and maintained, stocked and worked it through the agency of the East Indian Railway Company up to the 31st December 1905, for a certain proportion of its gross earnings; and, by agreement with the East Indian Railway Company, also allowed to the South Behar Railway Company, by way of rebate, a percentage of the East Indian Railway's share of the receipts from traffic interchanged between the two railways towards making up an amount equal to 4 per cent interest for each half-year on the actual capital expenditure (subject to certain limits) on the South Behar railway.

With effect from the 1st January 1906 the South Behar Railway Company leased their line to the Government for a yearly sum of £30,000, payable by half-yearly payments of £15,000, at the end of each calendar half-year, in substitution of the corresponding provisions of the principal contract of the 7th August 1895.

As between the Government and the East Indian Railway Company the South Behar railway as from 1st January 1906 is worked as part of the undertaking of the Company, who pay to the Government from the net half-yearly revenue of the undertaking the half-yearly sum of £15,000 and also interest for each half-year at 3½ per cent per annum on Rupees 7,63,099-1-11, being the amount of capital advances made by the Government for the purposes of the South Behar railway.

(v) *Rates and fares.*—  
 (vi) *Special obligations as to the conveyance of.*—  
 (a) Mails, troops, high Government officials and Government stores.—  
 (b) Government bullion and coin, and the persons in charge thereof.— } As under 4 (a), East Indian railway (5' 6" gauge).

(vii) *Power of the Government to determine contracts.*—Government may determine the South Behar Railway Company's contracts on the 30th June 1919, or on the 30th June in the last year of any subsequent period of 10 years from that date, by giving twelve months' notice. In case of such determination the Government will pay to the Company in England £684,580, as being the capital expended on the undertaking with the authorisation of the Secretary of State.

The East Indian Railway Company's contracts terminate at the same time as the Company's contract of 1879, for which see 4 (a), East Indian railway (5' 6" gauge).

(viii) *Power of the South Behar Railway Company to surrender contracts.*—Nil.

(ix) *Power of the East Indian Railway Company to surrender contracts.*—As under (vii).

(x) *Term of South Behar Railway Company's contracts if not determined under (vii).*—Not specified.

(xi) *Term of East Indian Railway Company's contracts.*—As under (vii).

APPENDIX 9—contd.

History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 4 EAST INDIAN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (d)

4 (c) South Behar railway (5' 6" gauge)—contd.

Statistics of working—

TABLE I.									TABLE II.		
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (8).	Rebata from the East Indian railway.	Total income.	Percentage of total income on total capital outlay given in column (9).	Earnings per mile per week.	Proportion of expenses to earnings.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)	
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1899 . . .	78-83	1,18,16,730	2,03,328	1,82,168	1-12	33,403	1,65,566	1-40	100	35-00	
1900 . . .	78-76	1,23,15,110	4,67,133	3,03,636	2-47	1,44,404	4,48,040	3-64	114	35-00	
1901 . . .	78-76	1,22,66,538	5,14,970	3,08,822	2-50	1,23,082	4,36,904	3-58	125	40-02	
1902 . . .	78-76	1,19,68,612	4,99,809	2,74,895	2-29	1,35,445	4,10,340	3-42	122	45-00	
1903 . . .	78-76	1,20,01,897	5,24,605	2,88,538	2-40	1,57,708	4,46,241	3-72	128	45-00	
1904 . . .	78-76	1,19,72,914	5,70,358	3,18,697	2-63	1,63,882	4,79,079	4-00	138	45-00	
1905 . . .	78-76	1,19,77,154	5,55,199	3,05,360	2-55	1,72,721	4,78,081	3-99	135	45-00	
1906 . . .	78-76	1,19,74,947	} See "terms of working" above.								
1907 . . .	78-76	1,19,77,154									
1908 . . .	79-19	1,19,77,154									
1909 . . .	79-19	1,19,77,154									
1910 . . .	79-19	1,19,77,154									
1911 . . .	79-19	1,19,77,154									

4 (d) Tarkessur railway (5' 6" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Scoraphuli to Tarkessur . . . . .	1-1-85	22-21	22-21

Details of construction—

*Permanent-way.*—The permanent-way consists of 75-lb. steel rails laid on Denham-Olpherts' cast-iron plate sleepers.

*Ballast.*—The line is ballasted throughout with stone.

*Fencing.*—The line is fenced throughout.

*Curves.*—The sharpest curve is of 2,700 feet radius.

*Gradients.*—The ruling gradient is 1 in 500.

Agreements and contract—

Agreement, dated the 8th September 1883, between the Secretary of State and the Tarkessur Railway Company, as to construction by a syndicate formed for that purpose.

Contract, dated the 15th September 1887, between the Secretary of State and the East Indian Railway Company, working the Tarkessur line by the Company.

Agreement, dated the 1st March 1888, between the Secretary of State and the Tarkessur Railway Company.

As to maintenance and working of the Tarkessur line by the East Indian Railway Company.

Main provisions of agreements and contract—

- (i) *Land.*—To be leased to the Company for 99 years at a peppercorn rent.
- (ii) *Government aid.*—No direct Government aid; but it was agreed by the contract of the 8th September 1883 that the Government would support the conclusion of an arrangement for the working by the East Indian Railway Company of the Tarkessur line [see (iii)].

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 4</sup> <sub>Sub-heads (a) to (d)</sub> EAST INDIAN RAILWAY SYSTEM—contd.

## 4 (d) Tarkessur railway (5' 6" gauge)—contd.

## Main provisions of agreements and contract—contd.

- (iii) *Terms of working.*— } The East Indian Railway Company maintain, stock and work the Tarkessur railway (which is the property of the Tarkessur Railway Company) in consideration of the following half-yearly payments:—
- (iv) *Distribution of profits.*—
- working expenses 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 that Fund (since limited to 1 per cent of the Tarkessur railway earnings, the revised rules of the Institution notwithstanding—the difference between this contribution and the increased contribution admissible under the revised rules being charged against the earnings of the East Indian Railway Company, vide Government of India letter No. 1900-B E., dated the 23rd October 1903),
  - the balance of the receipts [after deducting (a), (b) and (c)] is divided in the proportion of four-fifths to the Tarkessur Railway Company and one-fifth to the East Indian Railway Company.
- (v) *Rates and fares.*—Certain maxima have been fixed, within which the East Indian Railway Company is authorized to charge such rates and fares as may from time to time be mutually agreed upon.
- (vi) *Special obligations as to the conveyance of.*—
- Mails.—To be conveyed free of charge.
  - Troops, police, high Government officials and Government stores.—To be conveyed at special rates.
  - Government bullion and coin, and the persons in charge thereof.—To be conveyed at special rates.
- (vii) *Power of the Government to determine contract and agreements.*—The contract of the 8th September 1883 may be determined by the Government giving 12 months' previous notice after the Tarkessur railway has been opened for 30 years, and thereafter at intervals of 10 years. Upon such determination the Government is to pay the Company a sum equal to the aggregate net profits of the line during the preceding 20 years.
- The contract of the 15th September 1887 and agreement of the 1st March 1888 run concurrently with the East Indian Railway Company's principal contract of the 22nd December 1879 [see 4 (a), East Indian railway, (5' 6" gauge)].
- (viii) *Power of Companies to surrender contracts and agreements.*—Nil.
- (ix) *Term of contract of 1883.*—99 years, i.e., till 7th September 1882.
- (x) *Term of contract of 1887 and of agreement of 1888.*—As under (vii).

Statistics of working. (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902	22-23	17,91,612	3,22,516	1,52,243	8-26	288	53-32
1903	22-23	17,93,985	3,33,924	1,63,741	9-13	289	50-96
1904	22-23	17,97,555	3,30,635	1,63,006	9-07	284	50-70
1905	22-23	17,98,615	3,22,715	1,55,221	8-63	282	52-49
1906	22-23	17,99,166	3,51,598	1,59,999	8-84	304	54-32
1907	22-23	17,99,776	3,56,243	1,68,368	8-80	307	55-55
1908	22-21	18,02,140	3,65,102	1,48,392	8-06	316	60-12
1909	22-21	18,02,130	3,63,681	1,62,007	8-99	315	55-45
1910	22-21	18,02,730	3,25,024	1,78,995	9-63	333	55-07
1911	22-21	18,04,798	3,71,862	1,66,988	9-25	322	55-03

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 5</sup> <sub>Sub-heads (a) to (i)</sub> GREAT INDIAN PENINSULA RAILWAY SYSTEM—*Chairman.*—Colonel F. Firebrace.*Secretary.*—J. I. Berry, Esq.*Offices.*—48, Copthall Avenue, London, E. C.

Lines comprised in the system.—The Great Indian Peninsula railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Great Indian Peninsula railway (5' 6" gauge) . . . . .	2,420'49	188'77	2,609'17
(b) Agra-Delhi Chord railway (5' 6" gauge) . . . . .	125'30	...	125'30
(c) Baran-Kotah railway (5' 6" gauge) . . . . .	40'29	...	40'29
(d) Bhopal-Itarsi railway (5' 6" gauge) . . . . .	56'62	...	56'62
(e) Bhopal-Ujjain railway (5' 6" gauge) . . . . .	118'27	...	118'27
(f) Bina-Gooma-Baran railway (5' 6" gauge) . . . . .	145'61	...	145'61
(g) Gwalior Light railway (3' 0" gauge) . . . . .	249'96	...	249'96
(h) Matheran Light railway (3' 0" gauge) . . . . .	12'61	...	12'61
(i) Murajapur-Klichpur railway (2' 6" gauge) . . . . .	...	47'65	47'65
<b>Total</b> . . . . .	<b>3,164'68</b>	<b>236'42</b>	<b>3,401'08</b>

## Running powers—

*Home line over foreign lines:—*

Dadar junction to Colaba, Bombay, Baroda and Central India railway, for goods trains only . . . . .	7'25
At Agra, Rajputana-Malwa railway, for passenger and goods trains . . . . .	2'39
At Cawnpore, East Indian railway, 0'97 mile for passenger trains and 0'33 mile for goods trains . . . . .	1'49
From Cawnpore to Lucknow, Oudh and Rohilkhand railway, for passenger trains only . . . . .	44'63
From Nagpur Junction to Itwari, Bengal-Nagpur railway, for goods trains only . . . . .	1'78
<b>Total</b> . . . . .	<b>57'99</b>

*Foreign lines over home line:—*

Bombay, Baroda and Central India railway, Dadar Junction to Carnao Bridge, for goods trains only . . . . .	4'39
Bombay, Baroda and Central India railway, Muttra Junction to Delhi Junction, for passenger and goods trains . . . . .	90'08
East Indian railway, Agra Cantonment to Muttra Junction, for passenger trains only . . . . .	31'73
<b>Total</b> . . . . .	<b>126'14</b>

## 5 (a) Great Indian Peninsula railway (5' 6" gauge)—

The Great Indian Peninsula Railway comprises the line formerly owned by the old Guaranteed Company

* Company's stock at date of purchase . . . . .	£ 24,869,218	of that name (now called the Great Indian Peninsula railway proper), in amalgamation with that of the late Indian Midland Railway Company (now known as the Midland section). The Guaranteed Company's railway was purchased by the State in 1900, when all the contracts then subsisting between the Secretary of State and that Company were determined. The purchase price was £40,781,568,* payable
Debentures and debenture stock taken over from the former Guaranteed Company . . . . .	5,922,350	
<b>Total</b> . . . . .	<b>40,781,568</b>	

up to the 17th August 1948, in the form of a terminable annuity of £1,268,516.

The contract between the Secretary of State and the Indian Midland Railway Company, dated the 22nd October 1885, was determined by the Secretary of State on the 31st December 1910. That does not, however, substantially affect the carrying out of the contract, between the Secretary of State and the Great Indian Peninsula Railway Company, dated the 21st December 1900, the effect of which is that the railways formerly known as the "Indian Midland Railway System" are to form part of the undertaking worked by the Company for so long as that contract remains in force.

Nor are the arrangements subsisting at the date of the termination of the Indian Midland Railway Company's contract for working of the Native State branches of that Company's line disturbed in any way by the termination of that Company's contract, the necessary alterations, whereby the Government becomes a party thereto instead of the Indian Midland Railway Company, having been made in the working agreements relating to such branches, and a revised agreement having been made for the working by the Great Indian Peninsula Railway Company, of the Gwalior Light railway.

## APPENDIX 9—contd.

History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 5 GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (i)

5 (a) Great Indian Peninsula railway (5' 6" gauge)—contd.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>GREAT INDIAN PENINSULA RAILWAY PROPER—</b>				
<b>NORTH-EAST LINE—</b>				
<i>Main line—</i>				
Victoria Terminus to Thana	1-1-82 18-4-88	0'19 20'58		
Thana to Kalyan	1-5-84	12'85		
Kalyan to Vasind	1-10-85	16'14		
Vasind to Asangaon	6-2-80	8'75		
Asangaon to Kasara	1-1-61	21'84		
Kasara to Igatpuri (Thull Ghat)	1-1-65	9'69		
Igatpuri to Nasik	28-1-61	31'43		
Nasik to Chalisgaon	1-10-61	87'24		
Chalisgaon to Jalgaon	6-10-63	57'48		
Jalgaon to Bhusaval	20-5-63	15'01		
Bhusaval to Burhanpur	20-11-65	33'91		
Burhanpur to Khandwa	8-9-66	42'76		
Khandwa to Bir	17-2-68	21'15		
Bir to Itarsi	1-1-70	89'27		
Itarsi to Solapur	1-2-70	30'69		
Solapur to Jabulpore	8-3-70	121'65		
			615'65	
<i>Branches—</i>				
<i>Bombay Harbour Branch—</i>				
Point of junction with Bombay Port Trust line to Kurla	12-12-10	8'01		
			8'01	
<i>Chalisgaon-Dhulia branch—</i>				
Chalisgaon to Dhulia	15-10-00	34'95		
			34'95	
<i>Jalgaon-Amalner branch—</i>				
Jalgaon to Erandol Road	20-2-00	18'28		
Erandol Road to Amalner	4-4-00	16'00		
			34'26	
<i>Nagpur branch—</i>				
Bhusaval Junction to Malkapur	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	40'23		
Pulgaon to Sindi	5-11-66	38'27		
Sindi to Nagpur	28-2-67	29'44		
			249'25	
<i>Khamgaon branch—</i>				
Jalamb to Khamgaon	4-3-70	7'97		
			7'97	
<i>Amraoti branch—</i>				
Badnera to Amraoti	16-2-71	5'49		
			5'49	
<i>Wardha Coal branch—</i>				
Wardha to mile 490'20	1-2-79	18'95		
Mile 490'20 to mile 512'64	24-12-75	22'44		
Mile 512'64 to Warora	26-4-76	4'00		
Warora-Chanda-Balharshah extension	1-2-68	37'12		
			82'51	
<i>Mohpani branch—</i>				
Gadarvada to Mohpani	8-9-72	12'47		
Mohpani to Gotitoria	2-11-66	1'07		
Mohpani to new coal-fields	3-6-00	0'14		
			13'68	
<b>SOUTH-EAST LINE—</b>				
<i>Main Line—</i>				
Kalyan to Palasdhari (Karjat)	12-5-58	30'61		
Palasdhari to Khandala (Bhore Ghat)	14-5-68	13'20		
Khandala to Lonavla (Bhore ghat)	14-6-58	2'35		
Lonavla to Poona	14-6-58	29'66		
Poona to Diksal	15-12-58	64'25		
Diksal to Barai Junction	22-10-59	50'60		
Barai Junction to Mohol	21-1-60	23'22		
Mohol to Solapur	6-4-69	20'51		
Solapur to Gulbarga	1-2-70	70'29		
Gulbarga to the Krishna	1-12-70	73'76		
Krishna to Raichur	1-5-71	15'31		
			408'86	
<i>Branches—</i>				
<i>Dhond-Manmad branch—</i>				
Dhond to Ahmednagar	15-3-78	50'41		
Ahmednagar to Manmad	17-4-78	95'03		
			145'44	
<i>Khopoli branch—</i>				
Palasdhari to Khopoli	12-5-56	7'24		
			7'24	
				561'54
				1,007'81
<b>TOTAL LENGTH OPEN, GREAT INDIAN PENINSULA RAILWAY PROPER</b>				
				1,607'31
CARRIED OVER				

## APPENDIX 9—contd.

History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 5 Sub-heads (a) to (f) GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (a) Great Indian Peninsula railway (5' 6" gauge)—contd.

Progress in opening—contd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
Brought forward	---	---	---	1,607.31	
<b>MIDLAND SECTION—</b>					
<i>Main line—</i>					
Bhopal to Jhansi	1-1-89	179.92			
Jhansi to Gwalior	1-3-89	60.39			
Gwalior to Hetampur	20-12-79	32.40			
Hetampur to Dholpur	15-5-81	8.53			
Dholpur to Agra Cantonment	10-1-78	36.05			
Junction with Agra-Delhi Chord railway at Agra to terminal point of Belanganj Goods Depot.	27-2-06	1.75			
Junction with Agra-Delhi Chord railway to Idgah	1-3-05	1.27			
			820.83		
<i>Branches—</i>					
<i>Manikpur branch—</i>					
Jhansi to Mau Ranipur	5-6-89	39.96			
Mau Ranipur to Banda	1-8-89	78.96			
Banda to Manikpur	15-2-89	61.45			
			180.37		
<i>Cawnpore branch—</i>					
Jhansi to Chaurah	1-2-88	94.97			
Chaurah to Cawnpore	1-4-88	40.93			
			135.90		
<i>Moth quarry</i>					
	26-7-07	2.52			
	4-11-08	0.28			
	11-2-09	0.04			
			2.78		
Bina to point of junction with Bina-Goonn-Baran railway.	1-5-95	3.00			
Bhopal to point of junction with Bhopal-Ujjain railway.	11-11-95	0.21			
			2.21		
<i>Bina-Saugor-Katni branch—</i>					
Bina to Saugor	5-6-89	46.34			
Saugor to Damoh	25-3-08	47.83			
Damoh to Katni	1-1-09	67.88			
From centre of Katni-Murwara station to junction with Bengal-Nagpur railway.	1-1-09	0.71			
Connecting link with East Indian railway at Katni-Murwara from points in Indian Midland railway main line to junction with East Indian railway.	1-1-09	0.34			
Ait to Kunch	7-12-03	8.50			
			163.00		
			8.50		
<b>TOTAL LENGTH OPEN, MIDLAND SECTION</b>	---	---	---	813.09	
<b>TOTAL LENGTH OPEN, GREAT INDIAN PENINSULA RAILWAY.</b>	---	---	---	2,420.40	
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>					
Itarsi to Hirdagach (sanctioned on 8th June 1908)	---	115.95			
Hirdagach to Jamai (sanctioned on 8th June 1908)	---	6.89			
Pandhurna to Nagpur (sanctioned on 8th June 1908)	---	64.88			
Revali to Mahim (sanctioned on 17th February 1905)	---	1.30			
			188.77		
<b>TOTAL LENGTH OPEN AND UNDER CONSTRUCTION OR SANCTIONED.</b>	---	---	---	2,609.17	
<b>DOUBLE LINE—</b>					
<b>NORTH-EAST LINE—</b>					
<i>Main line—</i>					
Victoria Terminus to Thana	1-1-83	0.19			
	18-4-88	616.22			
Thana to Kalyan	1-5-84	12.65			
Kalyan to Vasind	22-10-88	10.14			
Vasind to Atgaon	20-2-87	9.65			
Atgaon to Kasara	25-4-87	15.94			
Kasara to Igatpuri	1-1-85	9.99			
Igatpuri to Nasik	10-1-89	31.43			
Nasik to Chalisgaon	10-1-89	87.24			
Chalisgaon to Kajgaon	10-1-89	11.87			
Kajgaon to Pachora	17-8-89	16.05			
Pachora to Maheshi	27-5-89	9.14			
Maheshi to Bhadli	6-2-73	27.59			
Bhadli to Bhuseval	6-6-78	7.84			
Bhuseval to Bhuseval Junction	1-7-92	1.11			
Bhuseval Junction to Khandwa (Abna Junction)	11-1-89	74.58			
Bagra tunnel to Towa viaduct	1-2-70	0.74			
Khandwa to Itarsi	16-10-05	110.42			
			458.76		
<i>Bombay Harbour Branch—</i>					
Point of junction with Bombay Port Trust line to Kuria.	12-12-10	8.01			
			8.01		
<b>Carried over</b>	---	---	---	466.77	

\* Excluding the quadruple length.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 5 GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (f)

## 5 (a) Great Indian Peninsula railway (5' 6" gauge)—contd.

## Progress in opening—contd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
Brought forward	...	...	466.77		
<b>DOUBLE LINE—contd.</b>					
<b>SOUTH-EAST LINE—</b>					
<i>Main line—</i>					
Kalyan to Palasdhari	25-7-70	80.61			
Palasdhari to Khandala	14-5-63	18.20			
Khandala to Lonavla } Bhore Ghat	14-6-58	2.35			
Lonavla to Karla	29-5-07	4.92			
Karla to Talegaon	8-1-08	18.51			
Talegaon to Shelarvadi	22-5-08	7.77			
Shelarvadi to Poona	18-5-08	19.46			
<i>Nagpur Branch—</i>			85.92		
Bhusaval Junction to Nandgaon	11-1-89	17.98			
Nandgaon to Shegaon	1-4-90	44.65			
<b>Total Double line</b>	...	...	68.58		
<b>QUADRUPLER LINE—</b>				615.17	
Victoria Terminus to Currey Road	4-12-05	4.29	4.29	4.29	

## Details of construction—

**Permanent-way.**—On the Great Indian Peninsula railway proper the main line is laid with 100-lb. bull-headed, 82-lb. bull-headed and 69-lb. double-headed steel rails. The sleepers originally laid were chiefly wooden; these have now to a large extent been replaced by iron pots. The whole of the South-East line, except the Ghat sections, is laid with iron pots. On the Midland section whole of the main line, the Manikpur branch, the Cawnpore branch from Jhansi to mile 326.64, and from Bina to Katni, are laid with 80-lb. flat-footed steel rails on cast iron pot sleepers. The Cawnpore branch from mile 351.77 to Hamirpur Road is laid chiefly with 82-lb. bull-headed rails on cast iron pot sleepers. The main line between Bombay and Igatpuri and Kalyan and Lonavla is being relaid with 100-lb. bull-headed rails on wooden sleepers.

**Ballast.**—The line is ballasted with sand, gravel, laterite, kunkur or stone.

**Fencing.**—With the exception of the Mohpani, Chalisgaon-Dhulia, Jalgaon-Amalner and Warora-Balharshah branches, the Great Indian Peninsula railway proper is fully fenced. On the Midland section the main line is fenced throughout and the branches are partially fenced.

**Curves.**—The sharpest curve has a radius of 990 feet on the Bhore Ghat, between miles 75 and 76. The next sharpest curve has a radius of 1056 on the Thull Ghat, between miles 78 and 79.

**Gradients.**—On the Great Indian Peninsula railway proper the ruling gradients on ordinary sections of the main line vary from 1 in 100 to 1 in 200, with 1 in 100 banking sections near Vasing and Asvati; the ruling gradient on the Ghat sections is 1 in 37. On the Midland section the ruling gradient between Bhopal and Jhansi is 1 in 200; between Jhansi and Agra 1 in 150 and between Jhansi and Manikpur 1 in 125. The Jhansi-Cawnpore branch is practically level, except at bridge approaches where the gradients are 1 in 250 and 1 in 300, and between Jhansi and Garhman where it is 1 in 200.

## Contracts—

Dated the 21st December 1900 (called the principal contract), between the Secretary of State and the Great Indian Peninsula Railway Company, as to the maintenance, management and working, by the Company, as one undertaking, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

Dated the 24th April 1903 (supplemental to the contract of 1900), between the Secretary of State and the Great Indian Peninsula Railway Company, as to the adoption of 1s. 4d. per rupee as the "prescribed" rate of exchange.

Dated the 4th August 1903 (supplemental to the contracts of 1900 and 1903), between the Secretary of State and the Great Indian Peninsula Railway Company, as to Debenture stock.

## Main provisions of contracts—

(i) **Land.**—Originally, i.e., up to the 30th June 1900, was provided by the Government free of cost to the Company; that acquired thereafter is provided by the Government to the Company at the cost of capital.

(ii) **Government aid.**—Guarantee of interest at 3 per cent on the new capital of the Company.



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 5</sup> <sub>Sub-heads (a) to (i)</sub> GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

## 5 (a) Great Indian Peninsula railway (5' 6" gauge)—contd.

## Main provisions of contract—contd.

(iii) *Distribution of profits.*—The working expenses of the whole undertaking are divided half-yearly between and attributed to the Great Indian Peninsula and Indian Midland Railway systems, respectively, in proportion to the gross receipts of each (the branch lines in Berar being treated as part of the Great Indian Peninsula Railway system).

From the gross receipts of each of the two systems is deducted the share of its working expenses apportioned as aforesaid; and the gross earnings of each subsidiary line is charged with a share of the working expenses attributed to the system to which it belongs in the ratios which the gross receipts of such subsidiary lines bear to those of that system.

The net earnings of each year ending on a 30th June to be applied:—

- (1) in payment to the Secretary of State of the sum of Rs. 2,00,00,000;
- (2) in repayment to the Secretary of State in rupees of the interest payable on money raised after 30th June 1900 by the Company or by the Indian Midland Railway Company (otherwise than by the issue of shares or capital stock), or provided by the Secretary of State after the same date.

Any surplus to be divided between the Government and the Company in the proportion of  $\frac{1}{10}$ th to the former and  $\frac{9}{10}$ th to the latter. If the Company's share capital is increased by the conversion of further Indian Midland Railway stock, the Company's share of the surplus is to be proportionately increased, but it is never to exceed  $\frac{1}{10}$ th.

(iv) *Rates and fares.*—Maximum and minimum rates and fares and classification of passengers and goods to be as authorised by the Government.

(v) *Special obligations as to the conveyance of.*—

(a) Mails, troops, high Government officials, and Government stores.—To be conveyed on the same general conditions as those in force on State railways, and at rates to be approved by the Government (not being less than the rates in force for similar services on State railways of the same gauge).

(b) Government bullion and coin, and the persons in charge thereof.—At special rates to be approved by the Government.

(vi) *Power of the Government to determine contract.*—

(vii) *Power of Company to surrender contract.*—

On the 30th June 1925 the Company are to give the Secretary of State possession of the undertaking, and the Secretary of State is to pay to the Company the amounts paid up, or credited as paid up, on all shares or stock then existing in the Company's new capital.

(viii) *Term of contract.*—25 years from 1st July 1900.

Statistics of working (Those for the periods prior to 1901 will be found in appendix 38 to the Report for 1907)—

TABLE I.										TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Annuity.	Company's share of surplus profits (based on terms of contract) attributable to each calendar year.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	
1901	1,548.27	30,64,49,134	4,16,57,453	2,16,43,151	7.06	48,96,916	1,90,87,970	1,97,661*	-25,34,396	518	48.08
1902	1,561.63	30,83,53,092	4,24,25,217	2,10,98,968	6.84	49,58,679	1,90,56,765	2,64,702	-31,81,198	523	50.19
1903	1,561.63	31,06,53,055	4,68,81,534	2,38,12,514	7.66	50,67,701	1,90,28,759	3,79,683	-6,63,550	575	49.18
1904	1,561.63	32,00,72,108	4,82,41,344	2,41,79,728	7.55	53,19,948	1,90,28,595	3,84,985	-5,58,750	592	49.88
1905	1,561.63	33,65,20,022	5,22,33,877	2,70,20,162	8.28	57,50,859	1,90,28,535	5,28,418	+17,12,355	641	48.37
1906	1,561.63	33,57,64,972	5,05,23,479	2,53,01,900	7.54	61,23,516	1,90,28,535	4,46,777	-2,96,928	628	49.93
1907	1,561.63	33,23,04,857	5,23,77,202	2,49,15,559	7.07	61,14,099	1,90,28,340	4,28,268	-6,55,748	619	52.68
1908	1,590.41	37,26,87,900	4,66,32,792	1,76,86,213	4.78	68,53,220	1,90,28,340	64,398	-32,59,645	568	62.24
1909	1,590.32	37,23,51,484	5,27,26,707	2,23,43,894	6.08	72,63,545	1,90,28,340	...	-39,47,991	634	57.68
1910	1,606.24	38,67,82,534	5,88,44,781	2,58,06,771	6.67	74,43,102	1,90,28,355	4,60,763	-11,80,449	705	56.14
1911	2,420.40	82,81,05,122	7,21,04,293	3,21,75,319	6.09	1,82,37,381	1,90,21,899	2,11,031	-2,04,992	578	55.88

\* From 1st July 1900 to 31st December 1901.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 5  
Sub-heads (a) to (i). GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

## 5 (b) Agra-Delhi Chord railway (5' 6" gauge)—

This railway has been constructed by the State and is worked by the Great Indian Peninsula Railway Company.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Main line—</b>				
Raja-ki-Mandi (Agra) to Kosi	2-12-04	56.66		
Kosi to Delhi Sadr	15-11-04	62.62		
Delhi Sadr to Delhi	1-3-05	0.43		
Loop line at Delhi	15-10-11	0.24		
			119.95	
<b>Branch—</b>				
Kosi to Sanket	24-2-06	5.95	5.95	
				125.90
<b>DOUBLE LINE—</b>				
Loop line at Delhi	15-10-11	0.24	0.24	

## Details of construction—

**Permanent-way.**—The main line is laid with 85-lb. bull-headed steel rails on 45-lb. cast iron chairs spiked with 3 spikes to deodar sleepers, and the branch is laid with 75-lb. flat-footed steel rails, second hand, on dog-spiked deodar sleepers.

**Ballast.**—The line is ballasted with kunkur soling and stone ballast to bring it up to full section.

**Fencing.**—The line is fully fenced.

**Curves.**—The sharpest curve is of 950 feet radius.

**Gradients.**—The ruling gradient is 1 in 400, except between Raja-ki-Mandi Junction and Bilochpura (Agra) and between Delhi Sadr and Delhi Junction where it is 1 in 200 and 1 in 333, respectively.

## Contracts—

Dated the 21st December 1900 (called the principal contract), between the Secretary of State and the Great Indian Peninsula Railway Company, as to the maintenance, management and working, by the Company, as one undertaking, of the railways known as the Great Indian Peninsula railway system, and the Indian Midland railway system, and the subsidiary lines included therein.

Dated the 5th February 1909, between the Secretary of State and the Great Indian Peninsula Railway Company, as to the maintenance, management and working, by the Company, of the Agra-Delhi Chord railway as part of the Indian Midland railway system of the Company's undertaking.

## Main provisions of contracts—

(i) **Land.**—Provided by the Government at the cost of capital.

(ii) **Government aid.**—The line is the absolute property of the Government, which provides all the funds chargeable to capital, and it is managed, maintained and worked by the Great Indian Peninsula Railway Company as part of the Indian Midland Railway system of the Company's undertaking.

(iii) **Terms of working.**—As noted under 5 (a), Great Indian Peninsula railway (5' 6" gauge), provided that no proportion in excess of 20 per cent of the gross receipts paid to any Railway Administration to whom running powers may be granted over the Agra-Delhi Chord is debited in the General Working Expenses Account of the Company's undertaking, such excess, if any, being directly debited to the Revenue Account of the Agra-Delhi Chord railway as a separate charge against its receipts.

(iv) **Distribution of profits.**—The whole of the net earnings of the railway belong to the Government.

(v) **Rates and fares.**—

(vi) **Special obligations as to the conveyance of.**—

(a) Mails, troops, police, high Government officials and Government stores.—

(b) Government bullion and coin, and the persons in charge thereof.—

(vii) **Power of the Government to determine contract.**—

(viii) **Power of the Company to surrender contract.**—

(ix) **Term of contract.**—

the Company, on the 30th June or 31st December by giving to the other party not less than twelve calendar months' notice.

As noted under Great Indian Peninsula railway proper (5' 6" gauge).

The contract is current from the day on which the line was opened throughout for traffic and is to continue in force until terminated, either by the Government or

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 5 GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (f)

## 5 (b) Agra-Delhi Chord railway (5' 6" gauge)—contd.

Statistics of working—

TABLE I.								TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (8).	Interest.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1904 . . . . .	119.51	1,05,90,556	18,070	9,992	0.09	2,95,164	-2,85,172	22	44.70
1905 . . . . .	119.75	1,22,46,227	8,04,655	4,19,625	5.43	4,20,181	-556	140	47.85
1906 . . . . .	125.99	1,27,90,307	16,46,820	8,15,363	6.37	4,76,283	+3,45,080	254	50.47
1907 . . . . .	125.99	1,28,87,017	16,15,900	7,45,489	5.81	4,09,625	+3,35,864	247	53.87
1908 . . . . .	125.66	1,28,12,755	15,17,793	5,70,112	4.45	4,24,834	+1,35,278	232	62.44
1909 . . . . .	125.66	1,30,68,563	14,74,866	6,22,196	4.78	4,35,293	+1,84,903	226	57.51
1910 . . . . .	125.66	1,34,32,595	17,65,732	7,52,601	5.60	4,45,949	+3,06,652	270	57.28
1911 . . . . .	125.90	1,42,05,868	20,67,879	8,63,294	6.03	4,67,506	+3,95,788	316	58.25

## 5 (c) Baran-Kotah railway (5' 6" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Baran to Antah . . . . .	20-2-07	13.58	
Antah to Kotah . . . . .	1-5-09	28.71	40.29

## Details of construction—

*Permanent-way.*—The permanent-way consists of 87-lb. flat-footed steel rails and Australian or s&il sleepers.*Ballast.*—The ballast consists of broken stone.*Fencing.*—The line is not fenced.*Curves.*—The sharpest curve is of 1,809 feet radius.*Gradients.*—The ruling gradient is 1 in 150.

## Contracts—

Dated the 21st December 1900 (called the principal contract), between the Secretary of State and the Great Indian Peninsula Railway Company, as to the maintenance, management and working, by the Company, as one undertaking, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

Dated the 19th March 1909, between the Secretary of State and the Great Indian Peninsula Railway Company, as to the maintenance, management and working, by the Company, of the Baran-Kotah railway as part of the Indian Midland railway system of the Company's undertaking.

## Main provisions of contracts—

As noted under 5 (b), Agra-Delhi Chord railway (5' 6" gauge), except that the charge for working expenses is not in any half-year to exceed 50 per cent of the entire gross receipts of the Baran-Kotah railway. (Note—These terms had effect from the 1st July 1909, the date on which the Baran-Kotah railway was handed over to the the Great Indian Peninsula Railway Company for working, vide Railway Board's letter to the Engineer-in-Chief, Nagda-Muttra railway, No. 1022-R.T., dated the 7th June 1909. Prior to that date the charge was the same percentage as obtained for working the lines comprised in the Great Indian Peninsula railway undertaking, vide letter from the Agent, Great Indian Peninsula railway, to the Secretary, Railway Board, No. 57-H.-5, dated the 15th April 1912.)

Statistics of working—

TABLE I.								TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (8).	Interest.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1908 . . . . .	13.58	29,28,972	3,536	1,692	0.04	1,29,311	-1,28,229	10	53.28
1909 . . . . .	40.29	45,52,438	48,152	23,181	0.51	1,40,921	-1,28,740	23	51.86
1910 . . . . .	40.29	45,67,295	1,08,829	52,720	1.15	1,51,068	-96,348	50	49.22
1911 . . . . .	40.29	45,65,680	1,56,609	79,405	1.74	1,54,829	-75,424	76	50.00

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 5 **GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (i)**5 (d) Bhopal-Itarsi railway (5' 6" gauge)—****Progress in opening—**

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<i>Main line—</i>				
Itarsi to Hoshangabad . . . . .	1-6-82	10.89		
Hoshangabad to Bhopal . . . . .	18-11-84	45.45	56.34	
<i>Branch—</i>				
Centre of Bhopal station to the joint boundary of the Bhopal-Itarsi and Indian Midland railways at Bhopal . . . . .	11-11-85	0.28	0.28	56.62

**Details of construction—**

**Permanent-way.**—The line is laid with the Indian Midland railway 80-lb. flat-footed steel rails on Indian Midland railway cast iron pot sleepers.

**Ballast.**—The line is fully ballasted throughout with broken stone.

**Fencing.**—The line is fenced throughout.

**Curves.**—There are no curves with a radius of less than 990 feet.

**Gradients.**—The ruling gradient is 1 in 200, except on the Ghat section, 11 miles, where it is 1 in 80.

**Agreements and contract—**

Agreement, dated the 16th September 1880, *between the Government of India and Her Highness the Begum of Bhopal*, as to the construction, management, maintenance and working, by the Government, of the Bhopal-Itarsi railway.

Agreement, dated the 30th June 1887, *between the Government of India and Her Highness the Begum of Bhopal*, supplemental to, and modifying, the agreement of 1880.

Agreement, dated the 2nd December 1890, *between the Government of India and Her Highness the Begum of Bhopal*, supplemental to, and further modifying, the agreement of 1880.

Contract, dated the 21st December 1900 (called the principal contract), *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the maintenance, management and working, by the Company, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

**Main provisions of agreements and contract—**

(i) **Land.**—Land within the Bhopal State was provided free of cost by the Durbar; that within British territory by the Government at the cost of capital.

(ii) **Government aid.**—The Government paid for the portion of the line in British territory, and a moiety of the cost of the bridge over the Nerbudda river; in all about Rupees 15,00,000; the Begum of Bhopal contributed Rupees 50,00,000 for the portion of the line in her dominions.

All additional capital is to be provided by the Government, which undertook to construct, maintain, manage and work the line by State or other agency. At present the line is worked by the Great Indian Peninsula Railway Company as part of its undertaking.

(iii) **Terms of working.**—For working and stocking the Bhopal-Itarsi railway the Great Indian Peninsula Railway Company receive a sum which bears the same proportion to the total working expenses of the Company's undertaking, including the Bhopal-Itarsi railway, as the gross earnings of the Bhopal-Itarsi railway bear to the gross earnings of the undertaking.

(iv) **Distribution of profits.**—The net earnings are divided in perpetuity between the Government and the Ruler of Bhopal in proportion to the capital contributed by each. In the event of the railway being worked at a loss, such loss is borne by the two parties in the same proportion.

(v) **Rates and fares.**—

(vi) **Special obligations as to the conveyance of.—**

(a) Mails, troops, police, high Government officials and Government stores.—

(b) Government bullion and coin, and the persons in charge thereof.—

(vii) **Power of the Government to determine contract.**—

(viii) **Power of the Company to surrender contract.**—

(ix) **Term of contract.**—

As noted under 5 (a), Great Indian Peninsula railway (5' 6" gauge).

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 5 GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (5)

## 5 (d) Bhopal-Itarsi railway (5' 6" gauge)—contd.

Statistics of working (Those for the periods prior to 1889 will be found in Appendix 38 to the Report for 1907)—

TABLE I.													TABLE II.			
BHOPAL-ITARI (BRITISH SECTION).								BHOPAL-ITARI (NATIVE STATE SECTION).					British section.		Native State section.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State pertaining to each calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (10).	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	Miles.	Rs.	Rs.	Rs.	%	Rs.	Rs.	Miles.	Rs.	Rs.	Rs.	%	Rs.	%	Rs.	%
1889.	13-00	12,50,000	79,168	-5,422	...	50,000	-55,422	44-11	48,40,848	2,67,938	-18,351	...	117	106-85	117	106-85
1890.	13-00	12,85,077	87,765	-16,872	...	50,351	-66,923	44-11	50,00,000	2,97,049	-56,098	...	130	118-83	130	118-88
1891.	13-00	15,18,568	1,30,884	48,607	3-21	57,713	- 9,106	44-11	50,00,000	4,60,431	1,73,154	3-46	200	62-50	199	62-50
1892.	13-00	17,46,208	1,33,099	58,897	3-23	69,181	-12,734	44-11	50,00,000	4,47,797	1,65,683	3-32	226	63-16	195	62-96
1893.	13-11	20,25,058	1,69,162	52,038	3-57	78,429	-25,391	44-00	50,00,000	4,24,238	1,30,925	3-62	248	69-17	185	69-17
1894.	13-11	21,71,496	1,61,638	61,455	3-83	83,509	-22,054	44-00	50,00,000	3,80,217	1,44,607	3-89	237	61-98	164	61-97
1895.	13-11	22,47,963	1,42,658	46,114	3-05	89,323	-43,209	44-28	50,00,000	3,16,074	1,02,821	3-06	209	67-63	133	67-67
1896.	13-11	22,71,877	1,63,688	62,744	3-76	90,107	-27,363	44-28	50,00,000	3,61,363	1,38,533	3-77	241	61-75	157	61-63
1897.	13-11	23,97,134	1,52,218	61,135	3-66	91,805	-30,670	44-28	50,00,000	3,31,379	1,33,096	3-68	223	59-24	144	59-04
1898.	13-11	23,24,365	1,93,364	79,435	3-42	92,477	-13,042	44-28	50,00,000	4,17,010	1,71,375	3-43	284	58-81	181	58-90
1899.	13-11	23,61,938	2,09,611	84,008	3-56	93,803	- 9,223	44-28	50,00,000	4,47,225	1,79,444	3-59	307	59-80	194	59-68
1900.	13-11	23,87,339	2,55,120	1,27,832	5-33	95,293	+ 32,039	44-28	50,00,000	5,35,369	2,67,288	5-35	375	50-12	234	50-06
1901.	13-11	25,46,891	2,92,861	1,44,235	5-66	98,989	+ 45,246	44-28	50,00,000	5,85,153	2,88,838	5-78	430	50-75	254	50-64
1902.	13-11	28,02,330	3,46,103	1,71,236	6-11	1,06,632	+ 64,604	44-28	50,00,000	6,37,088	3,16,633	6-33	508	51-51	278	49-74
1903.	13-11	30,92,697	3,77,177	1,91,441	6-19	1,17,285	+ 74,156	44-28	50,00,000	6,31,911	3,21,328	6-48	553	49-48	276	49-84
1904.	13-11	31,52,907	3,95,734	1,98,066	6-28	1,20,127	+ 77,939	44-28	50,00,000	6,43,748	3,22,374	6-45	583	50-14	279	49-81
1905.	13-11	31,76,934	3,25,637	1,67,805	5-27	1,23,241	+ 44,064	44-28	50,00,000	5,31,619	2,67,959	5-36	477	48-37	227	48-63
1906.	13-11	32,57,841	3,60,294	1,78,761	5-49	1,25,079	+ 53,692	44-28	50,00,000	5,66,838	2,81,376	5-63	521	50-37	246	50-36
1907.	13-11	33,98,742	4,83,599	2,27,071	6-68	1,04,145	+ 1,33,938	44-28	50,00,000	7,32,224	3,44,438	6-68	710	53-04	318	52-96
1908.	13-11	35,24,132	4,20,278	1,63,302	4-59	1,19,624	+ 42,678	44-28	50,00,000	6,11,033	2,81,223	4-63	630	62-19	285	62-18
1909.	13-11	36,27,495	4,68,717	1,98,456	5-47	1,20,102	+ 78,354	44-28	50,00,000	6,50,583	2,75,516	5-51	688	57-66	283	57-65
1910.	13-11	37,52,648	5,70,169	2,47,995	6-61	1,23,711	+ 1,24,284	44-28	50,00,000	7,66,802	3,83,889	6-68	836	56-50	333	56-44
1911.	12-13	38,28,934	5,58,428	2,50,159	6-53	1,28,263	+ 1,21,897	44-49	50,00,000	7,34,874	3,29,072	6-58	885	55-20	317	55-19

## 5 (e) Bhopal-Ujjain railway (5' 6" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Bhopal to Ujjain	11-11-05	118-27	118-27

## Details of construction—

**Permanent-way.**—The permanent-way consists of 75-lb. flat-footed steel rails on transverse steel sleepers.**Ballast.**—The line is fully ballasted throughout with broken stone.**Fencing.**—The line is fenced only at, and in the vicinity of, stations, towns and important level crossings.**Curves.**—There are no curves with a radius of less than 990 feet.**Gradients.**—The ruling gradient is 1 in 150.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 5</sup> <sub>Sub-heads (a) to (f)</sub> . GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

## 5 (a) Bhopal-Ujjain railway (5' 6" gauge)—contd.

## Agreements and contract—

Agreement, dated the 4th August 1896 (called the principal contract), between the Government of Her Highness the Begum of Bhopal and the Indian Midland Railway Company, as to the maintenance, management and working, by the Company, of the Bhopal-Parbati section of the Bhopal-Ujjain railway as part of the Company's undertaking.

Agreement, dated the 4th August 1896 (called the principal contract), between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company, as to the maintenance, management and working, by the Company, of the Parbati-Ujjain section of the Bhopal-Ujjain railway as part of the Company's undertaking.

Contract, dated the 21st December 1900, between the Secretary of State and the Great Indian Peninsula Railway Company, as to the maintenance, management and working, by the Company, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

Memorandum No. 2658-L. B., dated the 1st July 1902, from the Government of India in the Foreign Department, to the Government of India in the Public Works Department, intimating the acceptance by Her Highness the Begum of Bhopal of the provisions of clauses 28 and 29 of the contract of the 21st December 1900, between the Secretary of State and the Great Indian Peninsula Railway Company, in lieu of those of clause 15 of the agreement of the 4th August 1896, between Her Highness' Government and the Indian Midland Railway Company, as to the method of arriving at the working expenses of the Bhopal-Parbati section of the Bhopal-Ujjain railway.

Agreement, dated the 31st January 1911 (supplemental to the agreement of 1896), between the Secretary of State and the Government of Her Highness the Begum of Bhopal, as to the substitution of the Secretary of State, in lieu of the Indian Midland Railway Company, as a party to the agreement of 1896.

Agreement, dated the 20th March 1911 (supplemental to the agreement of 1896), between the Secretary of State and the Government of His Highness the Maharaja Scindia of Gwalior, as to the substitution of the Secretary of State, in lieu of the Indian Midland Railway Company, as a party to the agreement of 1896.

## Main provisions of agreements and contract—

- (i) *Land*.—Provided free of cost by the Bhopal and Gwalior Durbars for the portions of the railway in their respective territories.
- (ii) *Government aid*.—The Bhopal-Parbati section is owned by the Bhopal Durbar, and the Parbati-Ujjain section by the Gwalior Durbar, each of which provides the funds for additional works, alterations in existing works not of the nature of repairs, and expenses other than those due to ordinary wear and tear incidental to the use and working of the railway and works and the conveyance of traffic thereon. The line is managed, maintained, stocked and worked by the Great Indian Peninsula Railway Company as part of the Indian Midland system of the Company's undertaking.
- (iii) *Terms of working*.—For the Bhopal-Parbati section the charges against its gross receipts for working are as noted under 5 (a), Great Indian Peninsula railway (5' 6" gauge).  
For working the Parbati-Ujjain section the Great Indian Peninsula Railway Company retains 50 per cent of its gross receipts for each half-year. The gross earnings of the section are also charged with rent for the use of the station and accommodation provided by the Bombay, Baroda and Central India railway at Ujjain Junction station, and with rent for the telegraph lines and instruments when not the property of the section.
- (iv) *Distribution of profits*.—The net earnings of the Bhopal-Parbati section belong to the Bhopal Durbar; those of the Parbati-Ujjain section, to the Gwalior Durbar.
- (v) *Rates and fares*.—
- (vi) *Special obligations as to the conveyance of*.—  
(a) Mails, troops, police, high Government officials and Government stores.—  
(b) Government bullion and coin, and the persons in charge thereof.—
- (vii) *Power of the Government to determine agreements and contract*.—
- (viii) *Powers of the Durbars to determine agreements*.—
- (ix) *Term of agreements and contract*.—Ten years, or as noted under 5 (a), Great Indian Peninsula railway (5' 6" gauge), whichever shall first fall in from the date of opening of the respective sections throughout for all kinds of public traffic.

As noted under 5 (a), Great Indian Peninsula railway (5' 6" gauge).

The agreements are terminable, on the expiry of ten years

from the dates of opening of the respective sections throughout for all kinds of public traffic, on 12 months' notice in writing given by either party to the other on the 30th June or 31st December in any year.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 5</sup> <sub>Sub-heads (a) to (i)</sub> GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

## 5 (e) Bhopal-Ujjain railway (5' 6" gauge)—concl'd.

Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (8).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1895	118-52	69,69,831	1,958	979	0-01	...	50-00
1896	118-52	77,77,604	3,69,114	1,80,219	2-32	63	51-17
1897	118-52	75,36,190	3,72,337	1,84,660	2-45	63	50-46
1898	118-27	75,85,789	4,16,940	2,05,051	2-70	71	50-82
1899	118-27	76,54,290	5,32,341	2,77,911	3-63	99	53-28
1900	118-27	76,83,020	9,46,349	4,65,661	6-06	161	56-79
1901	118-27	77,61,569	5,45,956	2,62,044	3-38	93	53-00
1902	118-27	78,02,855	5,82,063	2,77,292	3-55	99	52-36
1903	118-27	78,11,492	4,44,766	2,14,841	2-75	76	49-65
1904	118-27	78,14,670	4,54,721	2,17,562	2-78	77	49-39
1905	118-27	78,35,712	6,08,240	2,96,639	3-79	103	51-23
1906	118-27	78,51,048	6,86,799	3,31,924	4-23	117	51-67
1907	118-27	78,58,669	7,81,573	3,74,678	4-77	133	52-06
1908	118-27	78,63,969	7,70,525	3,45,421	4-39	121	51-16
1909	118-27	78,72,638	8,22,957	3,82,457	4-86	148	53-58
1910	118-27	78,73,354	8,65,310	4,05,340	5-15	147	53-16
1911	118-27	78,77,058	9,59,356	4,55,954	5-79	163	52-47

## 5 (f) Bina-Goonna-Baran railway (5' 6" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
From the joint boundary of the Indian Midland and Bina-Goonna-Baran railways, a point, 2-00 miles from the centre of Bina station, to Goona	23-9-95	71-71	
From centre of Goona station (mile 216—3,402 feet) to end of Baran station (mile 290—2,850 feet).	15-5-99	78-90	148-61

Details of construction—

*Permanent-way.*—The line is laid with 75-lb. flat-footed steel rails, 59-90 miles on deodar sleepers and 85-73 miles on transverse steel sleepers, State railway pattern.

*Ballast.*—The line is ballasted with broken stone and laterite.

*Fencing.*—The line from Bina to Goona is fenced. The Goona-Baran section is unfenced except at stations.

*Curves.*—There are no curves with a radius of less than 990 feet.

*Gradients.*—The ruling gradient is 1 in 125.

Agreements and contract—

Agreement, dated the 15th July 1896 (called the principal contract), between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company, as to the maintenance, management and working, by the Company, of the Bina-Goonna section of the Bina-Goonna-Baran railway as part of the Company's undertaking, (with clause 13 thereof modified as to maintenance of telegraphs under the authority of the letter from the Government of India to the Honourable the Agent to the Governor General for Central India, No. 596-R. T., dated the 20th June 1899).

Agreement, dated the 20th February 1899 (called the principal contract), between the Government of His Highness the Maharao of Kotah and the Indian Midland Railway Company, as to the maintenance, management and working, by the Company, of the Chabra-Baran section of the Bina-Goonna-Baran railway as part of the Company's undertaking.

Agreement, dated the 27th February 1899 (called the principal contract), between the Government of His Highness the Nawab of Tonk and the Indian Midland Railway Company, as to the management, maintenance and working, by the Company, of the Dharnaoda-Chabra section of the Bina-Goonna-Baran railway as part of the Company's undertaking.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 5.</sup> <sub>sub-heads (a) to (d).</sub> GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

5 (f) Bina-Goonā-Baran railway (5' 6" gauge)—*contd.*Agreements and contract—*concl'd.*

Agreement, dated the 12th May 1899 (called the principal contract), between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company, as to the maintenance, management and working, by the Company, of the Goonā-Dharnaoda section of the Bina-Goonā-Baran railway as part of the Company's undertaking.

Contract, dated the 21st December 1900, between the Secretary of State and the Great Indian Peninsula Railway Company, as to the maintenance, management and working, by the Company, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

Memorandum No. 3529 I. B., dated the 20th September 1901, from the Government of India in the Foreign Department, to the Government of India in the Public Works Department, intimating the acceptance by the Kotah and Tonk Durbars of the provisions of clauses 28 and 29 of the contract of the 21st December 1900, between the Secretary of State and the Great Indian Peninsula Railway Company, in lieu of those of the contracts of the 20th and 27th February 1899, between the Kotah and Tonk States and the Indian Midland Railway Company, as to the method of arriving at the working expenses respectively of the Chabra-Baran and Dharnaoda-Chabra sections of the Bina-Goonā-Baran railway.

Agreements, dated the <sup>16th March</sup> ~~17th April~~ <sup>20th June</sup> 1905, between the Government of His Highness the Maharaja Scindia of Gwalior and the Government of His Highness the Nawab of Tonk, as to the purchase, by the former from the latter, of the Dharnaoda-Chabra section of the Bina-Goonā-Baran railway.

Agreement, dated the 12th January 1911, between the Secretary of State and the Government of His Highness the Maharaja of Kotah, supplemental to the agreement of the 20th February 1899, between the Kotah Durbar and the Indian Midland Railway Company, as to the substitution of the Secretary of State, in lieu of the Indian Midland Railway Company, as a party to the agreement of 1899.

Agreement, dated the 20th March 1911, between the Secretary of State and the Government of His Highness the Maharaja Scindia of Gwalior, supplemental to the agreement of the 15th July 1896, between the Gwalior Durbar and the Indian Midland Railway Company, as to the substitution of the Secretary of State, in lieu of the Indian Midland Railway Company, as a party to the agreement of July 1896.

Agreement, dated the 20th March 1911, between the Secretary of State and the Government of His Highness the Maharaja Scindia of Gwalior, supplemental to the agreement of the 12th May 1899, between the Gwalior Durbar and the Indian Midland Railway Company, as to the substitution of the Secretary of State, in lieu of the Indian Midland Railway Company, as a party to the agreement of 1899.

Agreement, dated the 20th March 1911, between the Secretary of State and the Government of His Highness the Maharaja Scindia of Gwalior, supplemental to the agreement of the 27th February 1899, between the Tonk Durbar and the Indian Midland Railway Company, as to the substitution of the Secretary of State, in lieu of the Indian Midland Railway Company, as a party to the agreement of 1899.

## Main provisions of agreements and contract—

(i) *Land.*—Provided free of cost by the several Native States for the portions of the railway in their respective territories.

(ii) *Government aid.*—The Bina-Goonā, Goonā-Dharnaoda, and Dharnaoda-Chabra sections are owned by the Gwalior Durbar, and the Chabra-Baran section by the Kotah Durbar, each of which provides funds for additional works, alterations in existing works not of the nature of repairs, and expenses other than those due to ordinary wear and tear and incidental to the use and working of the railway and works and the conveyance of traffic thereon. The railway is managed, maintained, stocked and worked by the Great Indian Peninsula Railway Company as part of the Indian Midland system of the Company's undertaking.

(iii) *Terms of working.*—For working the Bina-Goonā section the Great Indian Peninsula Railway Company retains 50 per cent of its gross receipts for each half-year. The gross receipts of the section are also charged with rent for works, etc., in sole and joint use at Bina junction as laid down in clause 10 of the agreement of the 15th July 1896, and with rent for telegraph lines and instruments when not the property of the railway.

For working the Goonā-Dharnaoda section the Great Indian Peninsula Railway Company retains out of its gross receipts a sum which bears the same proportion to the entire gross receipts of the section as the aggregate working expenses of the Indian Midland railway system as a whole (including the Goonā-Dharnaoda section) bears to the gross receipts of that system, for each half-year, subject to a limit of 50 per cent of the gross earnings of the section.



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 5 **GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (c)5 (f) Bina-Goonā-Baran railway (5' 6" gauge)—*concl'd.*Main provisions of agreements and contract—*concl'd.*

For the Dharnaoda-Chabra and Chabra-Baran sections the charges, against the gross receipts of those sections, for working are as noted under 5 (a), Great Indian Peninsula railway (5' 6" gauge).

(iv) *Distribution of profits.*—The net receipts of each section are paid over to the Durbar to which such section belongs.

(v) *Rates and fares.*—

(vi) *Special obligations as to the conveyance of.*—

(a) Mails, troops, police, high Government officials and Government stores.—

(b) Government bullion and coin, and the persons in charge thereof.—

} As noted under 5 (a), Great Indian Peninsula railway (5' 6" gauge).

(vii) *Power of the Government to determine agreements.*—

(viii) *Power of the Darbars to determine agreements.*—

(ix) *Term of agreements.*—

} As noted under 5 (a), Bhopal-Ujjain railway (5' 6" gauge).

## Statistics of working—

TABLE I						TABLE II	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
1895	Miles. 72-18	Rs. 49,81,035	Rs. 48,701	Rs. 24,193	—	Rs. 19	54-42
1896	72-18	54,16,074	91,140	36,821	0-68	24	59-60
1897	71-74	57,78,621	1,02,386	43,446	0-50	27	57-57
1898	71-74	97,66,068	1,30,004	58,040	0-59	35	55-36
1899	145-21	99,31,080	2,67,359	1,24,103	1-27	43	52-63
1900	145-21	1,00,21,603	4,34,847	2,20,490	2-20	57	49-29
1901	145-20	1,00,43,296	2,52,716	1,22,970	1-22	33	51-34
1902	145-63	99,14,443	2,38,825	1,12,945	1-14	32	53-71
1903	145-63	99,62,459	3,21,585	1,55,600	1-58	42	49-49
1904	145-63	99,37,016	3,91,886	1,90,897	1-91	52	51-28
1905	145-63	99,90,394	3,68,669	1,81,269	1-81	49	50-63
1906	145-63	99,94,053	4,90,644	2,41,091	2-41	65	50-72
1907	145-63	99,91,424	5,63,902	2,71,691	2-71	74	51-81
1908	145-63	99,96,263	4,13,370	1,83,397	1-83	55	54-42
1909	145-63	1,00,06,750	2,79,397	1,27,990	1-28	37	54-23
1910	145-61	1,00,18,493	3,23,511	1,53,267	1-53	43	53-34
1911	145-61	1,00,32,563	3,87,036	1,91,473	1-91	51	53-11

## 5 (g) Gwalior Light railway (2' 0" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Gwalior to Sipri	2-12-99	73-81	
Gwalior to Bind	2-12-99	53-83	
Gwalior to Jora Alapur	1-1-04	31-34	
Jora Alapur to Sabalgarh	1-12-04	26-05	
Sabalgarh to Birpur	1-11-08	19-58	
Birpur to Sheopur Kanan	15-6-09	46-88	249-96

## Details of construction—

*Permanent-way.*—The permanent-way consists of 30-lb. flat-footed steel rails, laid on sal and steel trough sleepers.

*Ballast.*—The line is fully ballasted throughout with broken stone, sand and moorum.

*Fencing.*—The line is not fenced.

*Curves.*—The sharpest curve in station yards has a radius of 147 feet. The sharpest curve out of stations has a radius of 287 feet.

*Gradients.*—The ruling gradient is 1 in 60.

## Agreement—

Dated the 1st January 1904, between the Government of His Highness the Maharaja Scindia of Gwalior and the Great Indian Peninsula Railway Company, as to the working by the Company of the trains and traffic of the Gwalior Light railway.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 5</sup> Sub-heads (a) to (i) GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

## 5 (g) Gwalior Light railway (2' 0" gauge)—concl'd.

## Main provisions of agreement.—

- (i) *Land.*—Provided by the Gwalior Durbar free of cost.
- (ii) *Government aid.*—The Gwalior Light railway is the property of the Gwalior Durbar by whom it was constructed and is maintained and stocked. The working of the trains and traffic of line is under the control of the Great Indian Peninsula Railway Company.
- (iii) *Terms of working.*—From the gross receipts (which are collected and treated as receipts of the Great Indian Peninsula Railway Company) are deducted the actual expenditure in the Traffic and Audit departments, for station and train staff, audit clerks, on printing and stationery and stores consumed on the Gwalior Light railway and all other expenses connected therewith, with additional 10 per cent on the total to cover supervision and general charges outside the Accounts, plus 5 per cent per annum as rent for structures, machinery and plant, including furniture, and 7½ per cent for ballast, permanent-way, etc., including their estimated maintenance and renewal for the exclusive use of the Gwalior Light railway, and 1 per cent for the use of joint structures, machinery and plant within the Company's boundary and in the Gwalior station yard.
- (iv) *Distribution of profits.*—The net receipts are paid over to the Gwalior Durbar.
- (v) *Rates and fares.*—
- (vi) *Special obligations as to the conveyance of:—*
- (a) Mails, troops, police, high Government officials and Government stores.—
- (b) Government bullion and coin, and the persons in charge thereof.—
- As noted under 5 (a), Great Indian Peninsula railway (5' 6" gauge), except that no special provision is made for (b), and that no alteration is to be made in the maxima and minima rates without the special sanction of His Highness' Government.
- (vii) *Power of the Durbar to determine agreement.*—
- (viii) *Power of the Company to surrender agreement.*—
- (ix) *Term of agreement.*—
- Either party may terminate the agreement by giving six months' notice.

## Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
1899	126-14	22,78,267	4,094	—4,113	...	6	258-32
1900	126-14	27,10,557	84,617	—157	...	13	100-16
1901	126-14	31,00,762	82,227	—590	...	13	100-63
1902	126-14	39,77,104	1,09,577	9,945	0-23	17	91-47
1903	126-14	41,76,953	1,66,002	53,329	1-63	25	58-90
1904	183-58	46,62,993	1,83,284	51,501	1-13	22	71-36
1905	183-18	54,72,847	1,89,735	39,745	0-96	20	72-30
1906	183-53	57,87,428	2,53,222	1,12,311	1-94	27	56-54
1907	183-53	63,00,513	3,08,791	1,15,709	1-84	32	62-52
1908	203-08	66,13,092	2,61,735	99,363	1-50	25	62-07
1909	249-96	68,19,209	2,52,537	85,083	1-23	20	66-32
1910	249-96	68,57,494	3,69,295	1,74,444	2-54	28	52-76
1911	249-96	67,47,029	4,05,871	1,71,480	2-54	31	57-76

## 5 (A) Matheran Light railway (2' 0" gauge)—

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Neral to Matheran	22-3-07	12-61	12-61

## Details of construction—

- Permanent-way.*—The permanent-way consists of 30-lb. flat-footed steel rails laid on half-round teak and other wood sleepers.
- Ballast.*—Broken stone.
- Fencing.*—Not fenced.
- Curves.*—The sharpest curve is of 80 feet radius.
- Gradients.*—The gradient is 1 in 20 compensated.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 5</sup> <sub>Sub-heads (a) to (i)</sub> GREAT INDIAN PENINSULA RAILWAY SYSTEM—concl'd.

## 5 (A) Matheran Light railway (2' 0" gauge)—concl'd.

## Local Government Order and agreement—

Order by the Government of Bombay, dated 28th July 1904, as to the construction, maintenance and working of the Matheran Tramway by the Promoter.

Agreement, dated the 30th October 1909, between the Matheran Steam Light Tramway Company and the Great Indian Peninsula Railway Company, as to the control of traffic and working, by the latter, of the tramway.

## Main provisions of the order and agreement—

- (i) *Land.*—Government land was provided free of cost. Private land to be acquired by the Government at the expense of the Tramway Company.
- (ii) *Government aid.*—The line is the property of the Matheran Steam Light Tramway Company, who provide all rolling-stock, locomotives, machinery and plant, and maintain the way and works; the working of traffic, train arrangements, and the keeping and auditing of the Revenue Accounts being under the control of the Great Indian Peninsula Railway Company.
- (iii) *Terms of working.*—The gross receipts are treated as those of the Great Indian Peninsula Railway Company, which retains thereout the actual expenditure incurred by it, including the cost of stores consumed on the Matheran tramway, in the Traffic and Audit Departments, and for station and running staff, printing, stationery and all other expenses connected therewith, plus 5 per cent per annum as rent on the actual cost of new structures, machinery, plant and furniture, and 7½ per cent per annum for ballast, permanent-way, etc., including maintenance and renewal, for the sole use of the tramway, with a certain proportion (based on the weight of local and interchanged traffic) of the annual rent, at the rates above noted, for new joint works, etc.
- (iv) *Distribution of profits.*—The net receipts are to be paid over to the Tramway Company.
- (v) *Rates and fares.*—To be within the maxima sanctioned in the Tramway Order, the rules, conditions, etc., in respect thereto being the same as obtain on the Great Indian Peninsula railway.
- (vi) *Special obligations as to the conveyance of.*—
- (a) Mails, troops, police, high Government officials and Government stores.—
- (b) Government bullion and coin, and the persons in charge thereof.— } Not specified.
- (vii) *Power of the Railway Company to determine agreement.*—
- (viii) *Power of the Tramway Company to determine agreement.*— } Terminable on the 30th June or 31st December in any year on six months' notice by either party to the other.
- (ix) *Term of agreement.*—

Government may purchase the Tramway Company's undertaking as a going concern on the 1st January 1940, or at the expiration of any subsequent period of five years, for a sum representing the aggregate of 25 times the average of its net earnings for the three calendar years immediately preceding the date of purchase.

## Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1907	12·61	10,11,300	17,529	—12,783	—	85	178·92
1908	12·61	10,55,007	53,410	8,456	0·80	117	84·17
1909	12·61	11,12,071	64,873	27,612	2·48	144	57·44
1910	12·61	11,34,119	55,951	13,513	1·19	123	75·95
1911	12·61	11,36,567	74,352	39,483	3·47	158	46·90

## 5 (c) Murtajapur-Ellichpur railway (2' 6" gauge)—

In Railway Board's letter No. 1158 R.G., dated 14th December 1910, orders were issued to the Administration of the Great Indian Peninsula railway to proceed with the construction of this line on behalf of Messrs. Killick, Nixon and Company.

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Murtajapur to Ellichpur (sanctioned on 14th December 1910)	..	47·65	47·65

## APPENDIX 9—contd.

History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 6 **MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—**  
Sub-heads (a) to (9).

Chairman.—Colonel Sir William, S. S. Bisset, K.C.I.E.

Secretary.—Lieut-Col. H. Bonham-Carter.

Offices.—91, York Street, Westminster, S.W.

The former Madras Guaranteed Railway Company's contract having expired on the 31st December 1907, the Secretary of State for India, on the 1st January 1908, made over the then existing Madras railway (with the exception of the Jalarpet-Mangalore section), together with the 3' 3½" gauge sections of the South Indian railway from Katpadi to Gudur and Pakala to Dharmavaram, to the Southern Mahratta Railway Company for working, the enlarged Company being styled the Madras and Southern Mahratta Railway Company.

Lines comprised in the system—

The Madras and Southern Mahratta railway system is made up of—

	Miles.
(a) Madras and Southern Mahratta railway (5' 6" gauge)	1,031.73
(b) Kolar Gold-fields railway (5' 6" gauge)	9.88
(c) Madras and Southern Mahratta railway (3' 3½" gauge)	1,520.80
(d) Bezvada-Masulipatam railway (3' 3½" gauge)	51.80
(e) Birur-Shimoga railway (3' 3½" gauge)	37.92
(f) Dharm-Kurnool railway (3' 3½" gauge)	38.00
(g) Hindupur (Yesvantpur-Mysore Frontier) railway (3' 3½" gauge)	51.35
(h) Kolhapur railway (3' 3½" gauge)	29.27
(i) Mysore-Nanjangund railway (3' 3½" gauge)	15.80
(j) Mysore-section (Madras and Southern Mahratta) (3' 3½" gauge)	236.22
(k) Sangli railway (3' 3½" gauge)	4.20
(l) West of India Portuguese railway (3' 3½" gauge)	51.10
<b>Total</b>	<b>3,132.77</b>

Running powers—

Foreign lines over home line—

Bengal-Nagpur railway, Waltair to Vizagapatam (including the wharf and swamp lines)	} for passenger and goods trains.	4.97
Nizam's Guaranteed State railway, outer signal at Bezvada to Bezvada station		0.89
South Indian railway, over whole or any part of the Madras-Bangalore section		219.00
<b>Total</b>		<b>224.86</b>

## 6 (a) Madras and Southern Mahratta railway (5' 6" gauge)—

The Madras and Southern Mahratta 5' 6" gauge railway is defined to be the former Madras railway (with the exception of the Jalarpet-Mangalore section), and the southern section of the former East Coast railway (called the North-East line of the former Madras railway).

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
<b>SOUTH-WEST LINE—</b>					
<b>Main line—</b>					
Madras to Veyasarpaundy	7-4-73	2.16			
Veyasarpaundy to (Arcot), Walajah Road	1-7-56	63.22			
Walajah Road (Arcot) to Katpadi	7-5-57	14.96			
Katpadi to Gudiyattam	19-5-58	15.36			
Gudiyattam to Ambur	16-1-60	17.01			
Ambur to Vaniyambadi	1-2-60	9.98			
Vaniyambadi to Jalarpet.	23-5-60	9.86		132.55	
<b>Branches—</b>					
<b>Rayapuram branch—</b>					
Veyasarpaundy to Rayapuram	1-7-56	2.16			
Rayapuram to Beach	22-1-60	1.05			
Washermenpet to Basin bridge	15-9-67	1.05		4.24	
<b>Ranipet branch—</b>					
Walajah Road (Arcot) to Ranipet	17-4-99	4.17		4.17	
<b>Bangalore branch—</b>					
Jalarpet Junction to Bangalore Cantonment	1-8-64	34.67			
Bangalore Cantonment to Bangalore City	1-7-63	3.05		37.42	
				223.93	
<b>NORTH-WEST LINE—</b>					
<b>Main line—</b>					
Arkonam to Nagari	4-9-61	17.27			
Nagari to Puttur	8-12-61	9.59			
Puttur to Benigunta	15-9-62	14.46			
Benigunta to Reddipalle	1-10-64	38.02			
Reddipalle to Cuddapah	1-9-65	39.59			
Cuddapah to Muddanuru	1-9-66	34.31			
Muddanuru to Tadpatri	1-9-66	23.07			
Tadpatri to Gooty	1-8-69	29.72			
Gooty to the Tungabhadra river	12-12-70	75.33			
Tungabhadra to Raichur	15-3-71	17.92		306.28	
				596.66	
Carried over	...	...	...		

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 6 MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (4).

## 6 (a) Madras and Southern Mahratta railway (5' 6" gauge)—contd.

Progress in opening—contd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
Brought forward	...	...	...	536'68	
<b>NORTH-EAST LINE—</b>					
<b>Main line—</b>					
Basin bridge to Korukkupettai	15-3-07	0'85			
Washermenpet to Ennur	23-2-06	8'25			
Ennur to Gudur	23-2-09	75'25			
Gudur to Nellore	*1-11-88	23'75			
Nellore to Kistna Canal	20-12-08	155'00			
Kistna Canal to Bezwada	15-7-97	3'06			
Bezwada to Kovvur	20-2-03	33'24			
Kovvur to Rajahmundry	6-8-00	4'69			
Rajahmundry to the Junction point near Waltair	15-7-93	119'80			
Simhachalam Junction point near Waltair station to Waltair.	15-7-93	4'25		433'14	
<b>Branches—</b>					
Samalkot Junction to Cocanada port branch	15-7-93	9'75			
Waltair to end of branch near Visagapatam station	15-7-93	2'18	11'93	445'07	
<b>TOTAL, MADRAS AND SOUTHERN MAHRATTA (5' 6" gauge)</b>					
	...	...	...	1,031'73	
<b>DOUBLE LINE—</b>					
Washermenpet to Basin bridge	15-3-07	1'05			
Washermenpet to Veyasarpandy	14-9-01	1'02			
Madras to Veyasarpandy Junction	7-4-73	2'16			
Veyasarpandy Junction to Perambur	7-2-74	1'30			
Perambur to Avadi.	1-3-77	9'54			
Avadi to Tiruvallur.	20-7-77	12'89			
Tiruvallur to Arkonam	23-8-77	16'52			
Bengal-Nasipur railway north outer signal to north facing point at Waltair.	...	0'46		44'94	

\*The date of opening of the original 3' 3½" gauge line, which was converted to, and opened on, the 5' 6" gauge on the 1st November 1882.

## Details of construction—

**Permanent-way.**—The South-West line up to Bangalore and the North-West line up to mile 230 are laid with 80-lb. bull-headed steel rails on cast iron pots each weighing 112 lbs. From mile 230 to Raichur the North-West line is laid with 75-lb. double-headed steel rails. The North-East line is laid with 75-lb. flat-footed steel rails on wooden and pea-pod steel sleepers. The wooden sleepers are gradually being renewed by cast iron pot sleepers.

**Ballast.**—The line is ballasted with stone and sand, chiefly the latter.

**Fencing.**—The line is fenced throughout on the North-West and South-West lines and on the North-East line only in the vicinity of, towns, stations and level crossings.

**Curves.**—The sharpest curve is of 700 feet radius.

**Gradients.**—The ruling gradient between Madras and Jalarpet is 1 in 159; between Jalarpet and Bangalore, 1 in 80 (except at Kuppam Ghat where it is 1 in 68 and between Bangalore cantonment and Bangalore city there is a gradient of 1 in 78); between Walajah Road and Ranipet, 1 in 150; between Arkonam and Raichur, 1 in 80 (except at Ballapalli Ghat where it is 1 in 60); between Madras and Bezwada, 1 in 100; and between Bezwada and Waltair, 1 in 150.

## Contracts—

Dated the 1st June 1882 (called the original contract), between the Secretary of State and the former Southern Mahratta Railway Company, as to the construction and working of a system of railways in the South Mahratta country to be called the Southern Mahratta railway.

Dated the 23rd October 1885, (supplemental to that of 1882), between the Secretary of State and the former Southern Mahratta Railway Company, as to the construction and working of the West Deccan railway.

Dated the 31st August 1887 (supplemental to those of 1882 and 1885), between the Secretary of State and the former Southern Mahratta Railway Company, as to the construction and working of a line from Ranibennur to Harihar and a line from Bellary to Guntakal.

Dated the 31st August 1887 (supplemental to those of 1882, 1885 and 1887), between the Secretary of State and the former Southern Mahratta Railway Company, as to the construction, maintenance and working of the Mysore State railway.

Dated the 27th February 1889 (supplemental to those of 1882, 1885 and 1887), between the Secretary of State and the former Southern Mahratta Railway Company, as to the completion and working of the Bellary-Kistna railway.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 6</sup> Sub-heads (a) to (i) **MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.**  
**6 (a) Madras and Southern Mahratta railway (5' 6" gauge)—contd.**

**Contracts—conold.**

Dated the 21st August 1898 (supplemental to those of 1882, 1885, 1887 and 1889), between the Secretary of State and the former Southern Mahratta Railway Company, as to the working of the British section of the Guntakal-Yesvantpur railway.

Dated the 8th April 1903 (supplemental to those of 1882, 1885, the secondly mentioned contract of 1887, and that of 1889), between the Secretary of State and the former Southern Mahratta Railway Company, as to the adoption of 1s. 4d. as the "prescribed" rate of exchange.

Dated the 26th June 1908 (called the principal contract), between the Secretary of State and the Madras and Southern Mahratta Railway Company, as to the continuance of the existing contracts subject to the variations and modifications thereof as therein set forth.

Dated the 16th March 1911, between the Secretary of State and the Madras and Southern Mahratta Railway Company, supplemental to, and in amendment of certain particulars in, that of 1908.

**Main provisions of contracts—**

(i) **Land.**—Provided by the Government at the cost of capital.

(ii) **Government aid.**—(a) Interest in sterling is guaranteed at 3½ per cent per annum on the nominal amount of capital stock, for the time being, of the Company, and is payable half-yearly by the Secretary of State, the Government being entitled to retain out of the Company's share of surplus profits for the year the rupee-equivalent of this interest. If the Company's share for the year be less than the guaranteed interest, the deficiency is not to be made good out of the Company's share of a subsequent year.

(b) Moneys for capital expenditure are provided at the Secretary of State's option, either by advances made by him, or by the issue of debentures or debenture stock or further capital stock of the Company: such issues can only be made with the Secretary of State's approval.

(c) Debentures falling due are discharged by advances made by the Secretary of State.

[**NOTE.**—The advances made by the Secretary of State under (b) and (c) above are, until repaid, treated as further capital contributed by him. All money raised by the Company on debentures or debenture stock or capital stock are applied, in the first place, to the repayment of these advances.]

(d) Interest due on debentures or debenture stock is paid in sterling by the Secretary of State.

[**NOTE.**—The rupee-equivalent of this interest is repaid to the Secretary of State out of the net earnings of each half-year.]

(iii) **Distribution of profits.**—After deducting, from the gross earnings of the Company's and State lines for the half-year, the working expenses (which include the contributions made under the rules to the Provident Fund and the haulage payable to the South Indian railway), the net earnings are applied:—

(a) in payment of rebate to the South Indian railway and to the Bezwada-Masulipatam railway, if any [see parenthetical note under (c) below];

(b) in repayment to the Secretary of State of the interest paid on debentures [see (ii) (d) above]; and,

(c) the surplus is divided between the Secretary of State and the Company in proportion to the respective shares in which the capital, for the time being, (excluding debenture capital) has been contributed by them. The Secretary of State's capital is taken at a sum of £12½ millions, to which is added the amount up to date of his advances under (i) (b) and (ii) (c) above. The Company's capital is taken at the amount for the time being of their share capital.

[**NOTE.**—25 per cent of the gross earnings derived by the Madras-Bangalore section from traffic carried over that section in South Indian railway trains is payable as haulage to the South Indian railway. In addition, the South Indian railway receive a rebate of 25 per cent of the gross earnings derived by the Madras-Bangalore section from the traffic interchanged between that section and the Jalarpet-Mangalore section, *via* Jalarpet.

The terms of the rebate payable to the Bezwada-Masulipatam railway are given under sub-head 6 (d) Bezwada-Masulipatam railway (3' 3½" gauge), (iii) and (iv).]

(iv) **Rates and fares.**—Maxima and minima for each class and description of passengers and goods are fixed by the Government, who also prescribe the several classes and descriptions. If the Government require the Company to reduce the rates for salt below those in force on the 28th June 1908, the Company are to be compensated for any loss ensuing.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 6</sup> <sub>Sub-heads (a) to (f)</sub> MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

## 6 (a) Madras and Southern Mahratta railway (5' 6" gauge)—contd.

Main provisions of contracts—contd.

## (v) Special obligations as to the conveyance of.—

- (a) Mails, troops, police, high Government officials and Government stores.—  
 (b) Government bullion and coin, and the persons in charge thereof.—
- To be conveyed on the same general conditions and at the rates in force on State railways of similar gauge.

(vi) Power of the Government to determine contract.—The railway and all its appurtenances are absolutely the property of the Government, which may determine the contract on the 31st December 1937, or on the 31st December in any succeeding fifth year reckoning from that date, by giving to the Company in London not less than twelve months' previous notice. Upon the termination of the contract the Company are to give the Government the possession of the railway; and the Government is to pay the Company a sum equal to the nominal amount of its share capital, *vis.*, £5,000,000, and of any additional paid up capital stock that may have been issued for the purpose of the Company's and State lines.

(vii) Power of the Company to surrender contract.—Nil.

(viii) Term of contract.—The contract is determinable only as noted under (vi) above.

Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, <i>i.e.</i> , outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . . . .	1,031.75	16,09,79,297	1,64,22,663	44,96,942	2.69	306	72.02
1909 . . . . .	1,031.75	17,06,51,720	1,79,83,335	72,97,315	4.23	334	59.31
1910 . . . . .	1,031.75	17,37,06,666	1,88,12,095	80,93,571	4.66	351	58.98
1911 . . . . .	1,031.75	17,73,67,663	1,96,36,910	89,15,549	5.03	366	54.60

## 6 (b) Kolar Gold-fields railway (5' 6" gauge)—

The railway was constructed by the Mysore Durbar in order to provide facilities for the gold-fields.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Bowringpet to Marikuppam . . . . .	1-4-04	9.63	9.63

Details of construction—

*Permanent way.*—The line is laid with 76-lb. bull-headed steel rails on cast iron pot sleepers.

*Ballast.*—The line is ballasted with stone and sand, chiefly the former.

*Fencing.*—The line is fenced throughout.

*Curves.*—There are no curves with a radius of less than 1,000 feet.

*Gradients.*—The ruling gradient is 1 in 66.

Agreement and contract—

Agreement, dated the 1st July 1902, between the Mysore Government and the former Madras Railway Company, as to working and maintenance with effect from 1st January 1901.

Contract, dated the 26th June 1903 (called the principal contract), between the Secretary of State and the Madras and Southern Mahratta Railway Company, as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

Main provisions of agreement and contract—

(i) *Land.*—Provided by the Mysore Durbar at the cost of capital.

(ii) *Government aid.*—The line (which is the property of the Mysore Durbar) is maintained, stocked and worked by the Madras and Southern Mahratta Railway Company in all respects (except only as to capital expenditure which is provided by the Durbar) as part of its own undertaking.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 6 MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (f).

## 6 (b) Kolar Gold-fields railway (5' 6" gauge)—contd.

Main provisions of agreement and contract—contd.

(iii) Terms of working.— } Maintenance and working expenses are calculated at the same proportion  
 (iv) Distribution of profits.— } of the gross earnings of the Branch as obtains on the Company's  
 system, as a whole, including the Branch. But in the case of accident or damage caused by extra-ordinary casualty, e.g., by floods, each party bears its own cost of repairs, such cost being eliminated from the Company's revenue account before the percentage of working expenses referred to above is arrived at. The Company work the Branch for the maintenance and working expenses as above, plus 5 per cent of the gross earnings of the Branch for the use of rolling-stock, plus the amount due by the Branch for use of the joint station at Bowringpet. In addition the Company receive  $\frac{1}{4}$ th of the balance which remains after payment of interest on the capital expenditure of the Branch incurred after 31st December 1907. Besides the "ordinary" contribution to the Provident Fund, the Branch is liable, when it earns more than 4 per cent on its capital outlay, for a further contribution amounting to the difference between the "ordinary" contribution and 1 per cent of its net receipts.

(v) Rates and fares.—

(vi) Special obligations as to the conveyance of.—

(a) Mails, troops, police, high Government officials and Government stores.—

(b) Bullion and coin.—

The same as from time to time obtain on the Company's lines.

(vii) Power of the Government to determine agreement.—Nil.

(viii) Power of the Government to determine contract.—As in the case of 6 (a), Madras and Southern Mahratta railway (5' 6" gauge).

(ix) Power of the Durbar to determine agreement.—Subject to six months' notice expiring only on the 30th June or the 31st December of any year.

(x) Power of the Durbar to determine contract.—Nil.

(xi) Power of the Company to determine agreement.—Subject to six months' notice expiring only on the 30th June or the 31st December in any year; and also to withdraw from the agreement if sanction be accorded to the construction of a competing line to the gold-fields.

(xii) Power of the Company to surrender contract.—Nil.

(xiii) Term of agreement.—Not specified.

(xiv) Term of contract.—As in the case of 6 (a), Madras and Southern Mahratta railway (5' 6" gauge).

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on— (i) lines open and (ii) lines partly or wholly under construction. (3)	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902	988	11,98,480	2,16,629	84,864	7.45	422	60.93
1903	988	11,92,504	2,07,257	75,237	6.47	403	63.70
1904	988	11,78,128	2,44,744	89,220	7.61	476	68.54
1905	988	11,87,664	1,88,402	67,600	5.69	367	64.12
1906	988	11,96,520	2,00,400	68,275	5.71	399	65.98
1907	988	12,02,068	2,11,153	55,749	4.64	411	73.60
1908	988	12,07,630	1,98,191	51,035	4.23	386	74.22
1909	988	12,09,199	1,52,004	52,732	4.36	399	68.83
1910	988	12,06,368	1,55,747	54,733	4.54	395	64.83
1911	988	12,06,676	1,74,398	68,937	5.70	389	63.34

## 6 (c) Madras and Southern Mahratta railway (3' 3½" gauge)—

The Madras and Southern Mahratta 3' 3½" gauge railway is the former Southern Mahratta railway in amalgamation with the sections (Pakala to Dharmavaram and Katpadi to Gudur) of the South Indian railway taken over, and the lines formerly known as the Bellary-Rayadrug, Hospet-Kottur and Guntakal-Mysore Frontier railways.



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 6 . MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.  
Sub-head (a) to (d)

6 (c) Madras and Southern Mahratta railway (3' 3½" gauge)—contd.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	REMARKS.	
<b>Main line—</b>						
Frontier to Castle Rock . . . . .	3-9-88	3-68				
Castle Rock to Deuli . . . . .	15-6-87	2-75				
Deuli to Dharwar . . . . .	24-1-87	56-00				
Dharwar to Hospet . . . . .	1-7-85	161-25				
Hospet to Bellary . . . . .	24-3-84	69-51				
Bellary to Guntakal* . . . . .	16-5-87	29-39				
Guntakal to Nandyal . . . . .	11-7-87	80-23				
Nandyal to Cumbum . . . . .	15-6-90	63-18				
Cumbum to Tadepalli . . . . .	8-10-89	122-41				
Tadepalli to Beawada . . . . .	---	2-97				
			512-94			
<b>Branches—</b>						
<b>Harihar branch—</b>						
Hubli to Harihar (temporary station). . . . .	18-10-86	81-00			* This section was opened throughout in 1871 as a 5' 6" gauge branch of the former Madras railway, but was subsequently made over to the former Southern Mahratta Railway Company on 1st February 1887 and converted to 3' 3½" gauge on the 16th May 1887.	
Temporary station to permanent station. . . . .	21-2-89					
			81-00			
<b>Bijapur branch—</b>						
Gadag to Hotgi . . . . .	1-8-84	173-08				
			173-08			
<b>Poona branch—</b>						
Londa to Belgaum . . . . .	21-3-87	33-00				
Belgaum to Miraj . . . . .	23-12-87	85-88				
Miraj to Koregaon . . . . .	2-5-87	76-00				
Koregaon to Ghorpuri . . . . .	18-11-86	83-07				
Ghorpuri to Poona . . . . .	4-10-90	0-91				
			278-86			
<b>Guntakal-Mysore Frontier branch—</b>						
Guntakal to Dharmavaram . . . . .	1-8-92	63-95				
Dharmavaram to Hindupur . . . . .	23-4-88	40-28				
Hindupur to Mysore Frontier . . . . .	17-7-88	7-27				
			119-50			
<b>Bellary-Rayadrug branch—</b>						
Bellary to Rayadrug . . . . .	1-7-05	33-25				
			33-25			
<b>Hospet-Kottur branch—</b>						
Hospet to Kottur . . . . .	1-4-05	43-06				
Ramadrug to Ramanamalai . . . . .	1-12-06	4-97				
Nagalapuram to Fortwall . . . . .	24-5-09	2-84				
Fortwall to Kavivhalli . . . . .	1-10-10	6-79				
			57-66			
<b>Katpadi-Dharmavaram branch—</b>						
Katpadi to Pakala . . . . .	18-3-91	39-48				
Pakala to Vayalpad . . . . .	1-1-92	46-69				
Vayalpad to Dharmavaram . . . . .	20-3-92	34-14				
			120-31			
<b>Pakala-Gudur branch—</b>						
Pakala to Tirupati West . . . . .	18-3-91	25-05				
Tirupati West to Gudur . . . . .	15-9-87	59-05				
			84-10			
<b>Total Madras and Southern Mahratta (3' 3½" gauge).</b>	---	---	---	1,520-80		

## Details of construction—

**Permanent way.**—The rails in use are of 4½-lb., 50-lb., 60-lb., and 62-lb., flat-footed steel. The sleepers are teak, sal, jamba, pine and Australian eucalyptus and steel trough.

**Ballast.**—The line is ballasted with stone, gravel, sand and moorum.

**Fencing.**—The lines from Hospet to Kottur and Bellary to Rayadrug are unfenced, those from Pakala to Dharmavaram and Katpadi to Gudur are fenced only at stations, and the rest are partially fenced.

**Curves.**—The sharpest curve (situated on the section between Bellary and Rayadrug) is of 573 feet radius.

**Gradients.**—The ruling gradient is 1 in 100, except on the Braganza Ghats (between miles 0 and 3 on the main line) where the gradient is 1 in 40, and on the sections between Hospet and Kottur and Bellary and Rayadrug, where it is 1 in 60.

## Contracts—

This line forms part of the Madras and Southern Mahratta projected railway within the meaning of the original contract of the 1st June 1882, as supplemented by the principal contract of the 26th June 1903, the main provisions of which are stated under 6 (a), Madras and Southern Mahratta railway (5' 6" gauge).

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 6 **MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (f)**6 (c) Madras and Southern Mahratta railway (3' 3½" gauge)—contd.**

Statistics of working—

TABLE I.											TABLE II.	
Includes the Madras and Southern Mahratta railway (5' 6" gauge), 6 (a).												
Cal- en- dar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under con- struction.	Gross earnings.	Net earnings.	Percent- age of net earnings on total capital outlay given in column (3).	Interest.	Annuity.	Company's share of surplus profits (based on terms of con- tract) attribu- table to each calendar year.	Gain or loss to the State pertaining to each calendar year.	Earn- ings per mile per week.	Propor- tion of expen- ses to earn- ings.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.		
1908	2,542-85	29,65,72,972	2,82,50,979	97,96,449	3-30	85,17,070	59,81,910	5,84,312	-32,86,852	214	65-82	
1909	2,545-74	30,21,58,743	2,97,72,171	1,19,86,698	3-95	91,55,944	73,25,715	5,58,608	-51,68,474	225	59-91	
1910	2,552-53	30,68,87,664	3,11,30,148	1,36,92,155	4-27	92,69,791	78,25,715	8,19,124	-43,22,475	235	57-94	
1911	2,552-53	31,14,08,289	3,28,29,864	1,41,77,381	4-55	94,61,902	78,25,730	11,05,278	-87,15,527	247	58-83	

**6 (d) Bezwada-Masulipatam railway (3' 3½" gauge)—**

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Bezwada to Masulipatam.	4-2-08	49-47	
Masulipatam to Masulipatam Port (Tidal Lock)	1-1-09	2-88	51-80

—Details of construction—

**Permanent-way.**—The permanent-way consists of 41½-lb. flat-footed steel rails on teak sleepers.**Ballast.**—The line is ballasted 30 miles with stone and the remainder with sand.**Fencing.**—The station yards only are fenced.**Curves.**—The radius of the sharpest curve is 1,146 feet.**Gradients.**—The ruling gradient is 1 in 200.

Agreement and contract—

Agreement, dated the 4th February 1908, between the District Board of Kistna and the Madras and Southern Mahratta Railway Company, as to maintenance and working, having effect from the 4th February 1908, the date of opening of the Branch.

Contract, dated the 26th June 1908 (called the principal contract), between the Secretary of State and the Madras and Southern Mahratta Railway Company, as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

Main provisions of agreement and contract—

(i) **Land.**—Provided by the Government free of cost.(ii) **Government aid.**—(iii) **Terms of working.**—(iv) **Distribution of profits.**—

The line (which is the property of the District Board of Kistna) is maintained and worked as an integral part of the Company's system by the Madras and Southern Mahratta Railway Company, who provide the rolling-stock and other appliances, etc., necessary thereunto.

For these services the Company is to receive half-yearly 45 per cent of the gross earnings of the Branch; the balance, after meeting the cost of new minor works, being handed over to the District Board.

By way of rebate the Company is to pay to the District Board, in respect of and at the end of each calendar year, such a sum not exceeding in any year 10 per cent of the share attributable to the Company's system of the gross earnings from traffic (except stores) interchanged between the Company's system and the Branch railway as shall, together with the net earnings of the Branch for such year, make up an amount equal to interest for the year at the rate of 3½ per cent on the actual expenditure charged in its capital account.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 6 MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (j).

## 6 (a) Bezwada-Masulipatam railway (5' 3½" gauge)—concl'd.

Main provisions of agreement and contract—concl'd.

- (v) Rates and fares.—
- (vi) Special obligations as to the conveyance of—
- (a) Mails, troops, police, high Government officials and Government stores.—
- (b) Government bullion and coin.—
- (vii) Power of the Government to determine agreement.—By purchase of the Branch line at the expiry of 30 years, or at subsequent periods of 10 years, on twelve months' notice given, at a price 25 times the yearly average net earnings, excluding rebate payments, of three years preceding purchase, subject to a maximum price of 120 and a minimum of 100 per cent of cost price on a rupee basis.
- (viii) Power of the Government to determine contract.—As in the case of 6 (a), Madras and Southern Mahratta railway (5' 6" gauge).
- (ix) Power of the Kistna District Board to determine agreement.—
- (x) Power of the Kistna District Board to determine contract.—
- (xi) Power of the Company to determine agreement.—
- (xii) Power of the Company to surrender contract.—
- (xiii) Term of agreement [if not determined under (vi)].—Not specified.
- (xiv) Term of contract [if not determined under (viii)].—As noted under 6 (a), Madras and Southern Mahratta railway (5' 6" gauge).

The same as from time to time obtain on the Madras and Southern Mahratta railway.

Nil.

Nil.

## Statistics of working—

Calendar year.	Mileage open at end of each year.	TABLE I.				TABLE II.		
		Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
	Miles.	Rs.	Rs.	Rs.		Rs.		
1908	49.47	20,02,813	2,72,833	1,49,783	7.48	117	45.00	
1909	51.80	21,94,465	3,29,527	1,80,804	8.51	123	45.18	
1910	51.80	21,56,48	3,07,417	1,66,821	7.78	116	45.78	
1911	51.80	21,82,641	2,89,551	1,57,954	7.24	107	45.45	

## 6 (e) Birur-Shimoga railway (5' 3½" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Birur to Shimoga	1-12-99	87.92	87.92

## Details of construction—

**Permanent-way.**—The permanent-way consists of 41½-lb. flat-footed steel rails on Mysore teak sleepers. The Bhadra bridge is laid with 50-lb. flat-footed steel rails.

**Ballast.**—The line is ballasted throughout with stone and sand.

**Fencing.**—The line is unfenced except for a very short length.

**Curves.**—The sharpest curve is of 1,500 feet radius.

**Gradients.**—The ruling gradient is 1 in 89.

## Agreement and contract—

Agreement, dated the 2nd December 1899, between the Government of His Highness the Maharaja of Mysore and the former Southern Mahratta Railway Company, as to maintenance and working the Shimoga railway, with effect from 1st December 1899, supplementary to the provisions of the (Mysore) contract of the 31st August 1887, between the Secretary of State and the former Southern Mahratta Railway Company.

Contract, dated the 26th June 1908 (called the principal contract), between the Secretary of State and the Madras and Southern Mahratta Railway Company, as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Main head 6  
Number Sub-heads (a) to (f) MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

## 6 (c) Birur-Shimoga railway (3' 3½" gauge)—concl'd.

## Main provisions of agreement and contract—

- (i) *Land*.—Provided by the Mysore Durbar at the cost of capital.
- (ii) *Government aid*.—The line (which is the property of the Mysore Durbar) is maintained, stocked and worked by the Madras and Southern Mahratta Railway Company in all respects (except only as to capital expenditure which is provided by the Durbar) as part of its own undertaking.
- (iii) *Terms of working*.—Maintenance and working expenses are calculated at the same proportion of the gross earnings of the Shimoga railway as (excluding the cost of new minor works attributable to the Mysore State lines and debitable direct to each of those railways to which the works pertain) obtains on the Company's system as a whole, plus 5 per cent\* of the gross earnings of the Shimoga railway for the use of the Company's rolling-stock with effect from 1st July 1908, plus the cost of new minor works, in each half-year. And in addition thereto the Company is, as from the 1st July 1908, entitled to ¼th of the surplus of the net earnings of the Shimoga railway, after payment thereof of the interest payable on any capital expenditure incurred in respect of that line after the 31st
- (iv) *Distribution of profits*.—Maintenance and working expenses are calculated at the same proportion of the gross earnings of the Shimoga railway as (excluding the cost of new minor works attributable to the Mysore State lines and debitable direct to each of those railways to which the works pertain) obtains on the Company's system as a whole, plus 5 per cent\* of the gross earnings of the Shimoga railway for the use of the Company's rolling-stock with effect from 1st July 1908, plus the cost of new minor works, in each half-year. And in addition thereto the Company is, as from the 1st July 1908, entitled to ¼th of the surplus of the net earnings of the Shimoga railway, after payment thereof of the interest payable on any capital expenditure incurred in respect of that line after the 31st

\* For the purpose of assessing this charge the average gross earnings of the Shimoga railway for the first halves of 1909 and 1910 are taken as the basis of calculation in arriving at future charges for each first half-year, and similarly the average gross earnings of the second halves of 1909 and 1910 are taken as the basis of future charges for each second half-year, in both cases for a period of five years, after the expiration of which the basis of calculation is open to reconsideration. [Railway Board's letter No. 363 B.T., dated the 10th March 1911.]

December 1907. The residue is to be paid by the Company to the Durbar.

(v) *Rates and fares*.—

- (vi) *Special obligations as to the conveyance of*.—
- (a) Mails, troops, police, high Government officials and Government stores.—
- (b) Government bullion and coin.—

The same rates as from time to time obtain on the Madras and Southern Mahratta railway. Except when specially sanctioned by Government, no terminal charge is to exceed 3 pies per maund leviable only at stations of origin and destination.

- (vii) *Power of the Government to determine agreement*.—If not determined by the Durbar or the Company sooner, vide (ix) and (xi), then the agreement terminates simultaneously with the principal contract between the Secretary of State and the Company, dated the 28th June 1908.

- (viii) *Power of the Government to determine contract*.—As in the case of 6 (a), Madras and Southern Mahratta railway (5' 6" gauge).

- (ix) *Power of the Durbar to determine agreement*.—On the 1st January or 1st July in any year after the year 1904 on 12 months' notice given.

- (x) *Power of the Durbar to determine contract*.—Nil.

- (xi) *Power of the Company to determine agreement*.—As noted under (ix).

- (xii) *Power of the Company to determine contract*.—As in the case of 6 (a), Madras and Southern Mahratta railway (5' 6" gauge).

- (xiii) *Term of agreement*.—As noted under (vii).

- (xiv) *Term of contract*.—As noted under 6 (a), Madras and Southern Mahratta railway (5' 6" gauge).

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907).—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902	37.92	24,95,667	64,606	22,267	0.97	33	63.83
1903	37.92	24,07,302	61,520	24,206	1.01	31	60.65
1904	37.92	24,06,391	68,224	24,633	1.02	35	63.90
1905	37.92	23,93,543	80,672	31,103	1.30	41	61.45
1906	37.92	23,94,973	1,11,176	44,968	1.83	56	59.53
1907	37.92	23,94,973	1,36,926	57,150	2.39	69	58.26
1908							
1909							
1910							
1911							

Included with the Mysore section (Madras and Southern Mahratta), 6 (f).

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 6</sup> <sub>Sub-heads (a) to (l)</sub> MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

## 6 (f) Dhone-Kurnool railway (3' 3½" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Dronachellam to Kurnool . . . . .	1-1-09	32-00	32-00

## Details of construction—

*Permanent-way.*—The permanent-way consists of 41½ lb. flat-footed steel rails and old pattern second hand steel sleepers.

*Ballast.*—The ballast consists of sand throughout.

*Fencing.*—The station yards only have been fenced.

*Curves.*—The sharpest curve is of 1,146 feet radius.

*Gradients.*—The ruling gradient is 1 in 100.

## Agreement—

Dated the 15th September 1911, between the Secretary of State and the Madras and Southern Mahratta Railway Company, as to maintenance and working with effect from 1st January 1909.

## Main provisions of agreement—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*— } The line was constructed by the agency of the Madras and Southern Mahratta  
(iii) *Terms of working.*— } Railway Company from funds supplied by the Government, whose property it absolutely is and who will provide any land and all moneys that may, at any time, be required for the purposes of capital expenditure on the Dhone-Kurnool railway. Subject to the general control of Government in every respect, the line is maintained, stocked and worked by the Company, for and on behalf of the State, on the following terms and conditions.

The gross receipts of the Dhone-Kurnool railway are charged with—

(a) the actual cost of maintenance of way and works (including revenue new minor works mentioned in clause 18), other than general supervision usually chargeable to Abstract A of the Standard form of Revenue Account prescribed for use on the Company's railway ;

(b) a share of the other half-yearly working expenses of the Company's railway system (excluding the cost of Government supervision and control for which no such charge will be levied against the Company in respect of the working of the Branch, but including the cost of general supervision usually chargeable to Abstract A), calculated at the same proportion of the gross receipts of the Branch as obtains on the Company's system, including the Branch, as a whole ;

(c) 5 per cent of the gross receipts of the Branch for the use of the Company's rolling-stock ;

(d) Rent and maintenance of works, buildings and premises within the limits of Dronachellam Junction station as indicated in clause 12.

(iv) *Distribution of profits.*—After deducting from the gross receipts of the Branch railway the working expenses above mentioned, the balance belongs to the Government.

(v) *Rates and fares.*—

(vi) *Special obligations as to the conveyance of.*—

(a) Mails, troops, police, high Government officials and Government stores.—

(b) Government bullion and coin.—

} Subject to the same maxima and minima, rules, conditions and arrangements as from time to time obtain on the Madras and Southern Mahratta Railway Company's railways.

(vii) *Power of the Government to determine agreement.*—

(viii) *Power of the Company to determine agreement.*— } Determinable by either party on the 30th June or 31st December of any year on six months' notice given.

(ix) *Term of agreement.*—Not specified.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix]

Number Main head 6 **MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.**  
 Sub-heads (a) to (i)  
 6 (f) Dhone-Kurnool railway (3' 3½" gauge)—concl'd.  
 Statistics of working—

TABLE I								TABLE II	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)
1909	Miles. 82'00	Rs. 9,25,342	Rs. 1,29,768	Rs. 47,128	5'09	Rs. 28,229	Rs. +18,989	Rs. 76	63'68
1910	82'00	9,50,928	99,240	33,653	3'54	31,918	+ 1,734	80	63'09
1911	82'00	9,74,171	1,10,927	29,077	2'98	32,650	- 3,573	87	73'79

6 (g) Hindupur (Yesvantpur-Mysore Frontier) railway (3' 3½" gauge)—  
 Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Yesvantpur to Dodballapur	15-12-92	19'38	
Dodballapur to Mysore Frontier	17-9-93	31'49	
			51'35

## Details of construction—

**Permanent-way.**—The rails on the ghat section are 50-lb. flat-footed steel, State railway type, and 41½-lb. flat-footed steel on the remainder of the line. The sleepers are Mysore teak throughout.

**Ballast.**—The line is ballasted throughout with stone.

**Fencing.**—The line is fenced throughout.

**Curves.**—The sharpest curve has a radius of 660 feet.

**Gradients.**—The ruling gradient is 1 in 100 with a 1 in 89 gradient on the ghat section.

## Agreement and contract—

Agreement, dated the 2nd December 1899, between the Government of His Highness the Maharaja of Mysore and the former Southern Mahratta Railway Company, having effect from 17th September 1893, supplementary to the provisions of the (Mysore) contract of the 31st August 1887, between the Secretary of State and the former Southern Mahratta Railway Company, noted under 6 (a), Madras and Southern Mahratta Railway (5' 6" gauge).

Contract, dated the 26th June 1908 (called the principal contract), between the Secretary of State and the Madras and Southern Mahratta Railway Company, as to the continuance of existing agreement subject to the variations and modifications thereof as therein set forth.

## Main provisions of agreement and contract—

As noted under 6 (e), Birur-Shimoga railway (3' 3½" gauge).

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.		
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	
	Miles.	Rs.	Rs.	Rs.		Rs.		
1902	51'35	24,97,811	2,13,486	77,908	3'12	90	63'51	
1903	51'35	24,97,208	2,42,695	96,159	3'85	91	60'38	
1904	51'35	24,88,842	3,67,928	1,33,715	5'57	138	63'66	
1905	51'35	24,88,944	3,73,698	1,54,672	6'22	146	58'59	
1906	51'35	25,00,014	4,08,896	1,63,783	6'55	151	59'40	
1907	51'35	25,00,014	3,58,710	1,55,486	6'22	132	56'04	
1908		Included with the Mysore section (Madras and Southern Mahratta), 6 (f).						
1909		Included with the Mysore section (Madras and Southern Mahratta), 6 (f).						
1910		Included with the Mysore section (Madras and Southern Mahratta), 6 (f).						
1911		Included with the Mysore section (Madras and Southern Mahratta), 6 (f).						

## APPENDIX 9—contd.

—story of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 6 MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.  
Sub-heads (a) to (i)

6 (A) Kolhapur railway (3' 3½" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Kolhapur to Miraj . . . . .	21-4-91	29-27	29-27

## Details of construction—

**Permanent-way.**—The permanent-way consists of 41½-lb. flat-footed steel rails on steel trough sleepers.**Ballast.**—The line is ballasted throughout with gravel and sand.**Fencing.**—The line is unfenced except for a very short length.**Curves.**—There are no curves with a radius of less than 1,000 feet.**Gradient.**—The ruling gradient is 1 in 100.

## Agreement and contract—

**Agreement,** dated the 17th July 1891, between the Kolhapur Durbar and the old Southern Mahratta Railway Company, as to maintenance and working, having effect from 21st April 1891.**Contract,** dated the 26th June 1908 (called the principal contract), between the Secretary of State and the Madras and Southern Mahratta Railway Company, as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

## Main provisions of agreement and contract—

(i) **Land.**—Provided by the Kolhapur Durbar at the cost of capital.(ii) **Government aid.**—The line is the property of, and was constructed by, the Kolhapur Durbar, who supply funds for any necessary additions thereto. It is maintained, stocked and worked by the Madras and Southern Mahratta Railway Company.(iii) **Terms of working.**— } From the total expenses of maintaining and working the Company's  
(iv) **Distribution of pro-** } system, including the Kolhapur railway, as a whole, are deducted charges  
**fits.**— } for new minor works and Government supervision debitable direct to  
each of the railways concerned, and the balance is divided between the two railways in the ratio of the gross earnings of each.

From the gross earnings of the Kolhapur railway are then deducted the charges for new minor works and the proportion of working expenses attributable to that line as noted above, and the remainder, representing its net earnings, is paid half-yearly to the Durbar.

(v) **Rates and fares.**—(vi) **Special obligations as to the conveyance of.**—

(a) Mails, troops, police, high Government officials and Government stores.—

The same as for the time being are in force on the Madras and Southern Mahratta railway.

(b) Government bullion and coin.—

(vii) **Power of the Government to determine agreement.**—Not specified.(viii) **Power of the Durbar to determine agreement.**—

Determinable by either party on six months' notice given 3 years after the 21st April 1891.

(ix) **Power of the Company to determine agreement.**—(x) **Power of the Government to determine contract.**—

As in the case of 6 (a), Madras and Southern Mahratta railway (5' 6" gauge).

(xi) **Power of the Company to determine contract.**—(xii) **Power of the Durbar to determine contract.**—Nil.(xiii) **Term of agreement.**—Three years from 21st April 1891; thereafter as against (viii) and (ix).(xiv) **Term of contract.**—As noted under 6 (a), Madras and Southern Mahratta railway (5' 6" gauge).

Statistics of working. (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

Calendar year.	Mileage open at end of each year.	TABLE I.				TABLE II.	
		Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902 . . . . .	29-27	23,25,587	1,23,918	46,407	2-00	81	62-55
1903 . . . . .	29-27	23,26,188	1,21,957	48,058	2-07	80	60-60
1904 . . . . .	29-27	23,26,251	1,41,676	53,228	2-29	93	62-48
1905 . . . . .	29-27	23,26,251	1,70,404	69,482	2-98	112	59-25
1906 . . . . .	29-27	23,26,251	1,76,284	71,811	3-09	116	59-25
1907 . . . . .	29-27	23,26,251	1,81,986	77,249	3-32	119	57-53
1908 . . . . .	29-27	23,26,251	2,22,260	88,154	3-79	146	60-34
1909 . . . . .	29-27	23,26,251	2,26,772	91,612	3-94	149	59-60
1910 . . . . .	29-27	23,26,251	2,53,953	1,10,098	4-73	167	58-65
1911 . . . . .	29-27	23,26,251	2,79,662	1,23,898	5-30	184	55-89

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 6 **MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (l)

## 6 (c) Mysore-Nanjangud railway (3' 3½" gauge)—

Progress in opening—

Sections of railway	Date of opening	Miles	Total
Mysore to Nanjangud	1-12-91	15.04	
Nanjangud station to Nanjangud town	12-7-99	0.76	15.80

## Details of construction—

**Permanent-way.**—The permanent-way consists of 41½-lb. flat-footed steel rails, mostly on Mysore teak with a mixture of jamba sleepers.

**Ballast.**—The line is ballasted throughout with stone and sand.

**Fencing.**—The line is partially fenced.

**Curves.**—The sharpest curve has a radius of 700 feet.

**Gradients.**—The ruling gradient is 1 in 100.

## Agreement and contract—

Agreement, dated the 14th December 1899, between the Government of His Highness the Maharaja of Mysore and the former Southern Mahratta Railway Company, as to the maintenance and working of the Nanjangud railway, having effect from the 1st December 1891, supplementary to the provisions of the (Mysore) contract of the 31st August 1887, between the Secretary of State and the former Southern Mahratta Railway Company.

Contract, dated the 26th June 1908 (called the principal contract), between the Secretary of State and the Madras and Southern Mahratta Railway Company, as to the continuance of existing agreement subject to the variations and modifications thereof as therein set forth.

## Main provisions of agreement and contract—

As noted under 6 (a), Birur-Shimoga railway (3' 3½" gauge), with the following exception, viz.,—

(ix) **Power of the Durbar to determine agreement.**—On the 1st January or 1st July in any year after the 30th June 1900, on 6 months' notice given.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

Calendar year	Mileage open at end of each year	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings	Net earnings	Percentage of net earnings on total capital outlay given in column (3).	TABLE II	
						Earnings per mile per week	Proportion of expenses to earnings
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902	15.80	6,56,462	29,870	10,988	1.67	36	63.82
1903	15.80	6,56,462	31,923	12,687	1.93	39	60.26
1904	15.80	6,56,462	38,873	14,404	2.19	47	62.95
1905	15.80	6,56,462	44,174	18,015	2.74	54	59.22
1906	15.80	6,56,462	49,946	20,559	3.13	61	58.84
1907	15.80	6,56,462	39,327	18,040	2.44	47	58.69
1908							
1909							
1910							
1911							

## 6(j) Mysore section (Madras and Southern Mahratta) (3' 3½" gauge)—

Progress in opening—

Sections of railway	Date of opening	Miles	Total
Mysore to Mandya	25-2-83	27.97	
Mandya to Channarayana	20-3-81	28.25	
Channarayana to Bangalore	1-2-81	34.75	
Bangalore to Tumkur	11-8-84	45.00	
Tumkur to Gubbi	23-12-84	11.00	
Gubbi to Birur	12-8-89	76.57	
Birur to Harihar	21-2-89	79.68	296.22



APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number. <sup>Main head 6</sup> <sub>Sub-heads (a) to (i).</sub> MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*6(f) Mysore section (Madras and Southern Mahratta) (3' 3½" gauge)—*contd.*

## Details of construction—

*Permanent-way.*—The permanent-way consists of 41½-lb. and 60-lb. flat-footed steel rails, with the exception of about 2.75 miles which are laid with iron rails. The rails are laid on Mysore teak sleepers with a small proportion of jamba and steel trough sleepers.

*Ballast.*—The line is ballasted throughout with stone and sand.

*Fencing.*—The line is only partially fenced.

*Curves.*—The sharpest curve has a radius of 660 feet.

*Gradients.*—The ruling gradient is 1 in 100 between Harihar and Bangalore, and 1 in 70 between Bangalore and Mysore.

## Contracts—

Dated the 31st August 1887, between the Secretary of State and the former Southern Mahratta Railway Company, as to the construction, maintenance and working of the Mysore State railway.

Dated the 26th June 1908 (called the principal contract), between the Secretary of State and the Madras and Southern Mahratta Railway Company, as to the continuance of the existing contract subject to the variations and modifications thereof as therein set forth.

## Main provisions of contracts—

- (i) *Land.*—Provided by the Government on behalf of the Mysore Durbar at the cost of capital.
- (ii) *Government aid.*—The railway, which (as between the Government and the Company, and without prejudice to any arrangements between the former and the Mysore Durbar) is declared to be absolutely the property of the Government, was constructed and equipped with rolling-stock and all other appliances necessary thereunto, and is maintained and worked by the Madras and Southern Mahratta Railway Company, on behalf of the Government. All funds for capital expenditure are provided by the Durbar, under capital expenditure being included the cost of stores.

Government guarantee interest in sterling, payable half-yearly on the 1st April and 1st October, at the rate of 4 per cent per annum on the sum of £1,200,000, the nominal amount of debenture stock issued by the Company.

- (iii) *Terms of working.*—
- (iv) *Distribution of profits.*—
- } From the joint working expenses of the entire system are first deducted certain "direct" charges, viz., on account of new minor works, Government supervision and control, payment for use of rolling-stock and for use of joint stations; these "direct" charges being payable in their entirety by the railways incurring them. The balance of the joint working expenses is then divided as between the whole system and the Mysore section in proportion to gross earnings of each. The share of the Mysore section thus arrived at, added to the "direct" charges incurred on that section, form the working expenses of the Mysore section.

The gross receipts attributable to the Mysore section are applied—

- (a) in discharge of the working expenses arrived at as above, and
- (b) in payment of interest at 4 per cent on capital expenditure incurred on the section since 31st December 1907;
- (c) the surplus being divided between the Government (on behalf of the Durbar) and the Company in the proportion of 19/20 and 1/20, respectively.

(v) *Rates and fares.*—(vi) *Special obligations as to the conveyance of.*—

(a) Mails, troops, police, high Government officials and Government stores.—

(b) Government bullion and coin—

(vii) *Power of the Government to determine contract.*—(viii) *Power of the Company to determine contract.*—(ix) *Term of contract.*—

As in the case of 6 (a), Madras and Southern Mahratta railway (5' 6" gauge).

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 6 MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*  
Sub-heads (a) to (k)6(j) Mysore section (Madras and Southern Mahratta) (3' 3½" gauge)—*contd.*

Statistics of working (Those for the periods prior to 1887 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.

TABLE II.

Includes the Birur-Shimoga, Hindupur (Yesvantpur-Mysore Frontier) and Mysore-Nanjangud railways, 6 (e), (g) and (h), from 1908.

Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) attributable to each calendar year.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	
									(1)	(2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1887	189.75	91,38,498	5,18,299	1,49,723	1.54	6,70,864	35,018	-5,65,159	71	72.58
1888	189.75	1,28,76,692	5,70,657	1,34,031	1.07	6,94,210	33,697	-5,33,786	79	76.51
1889	290.00	1,44,24,093	8,06,373	2,19,813	1.52	7,07,500	54,991	-5,42,678	78	75.47
1890	296.00	1,47,11,610	11,86,818	2,59,084	1.76	6,48,733	64,772	-4,54,421	77	78.16
1891	296.00	1,50,76,285	13,24,535	4,39,280	2.91	6,54,850	1,09,760	-3,25,380	86	66.83
1892	296.00	1,46,36,305	13,39,463	4,43,427	3.03	7,29,624	1,10,863	-3,97,060	91	68.31
1893	296.00	1,46,42,217	16,33,208	6,74,562	4.61	7,70,489	1,68,171	-2,64,048	109	59.92
1894	296.00	1,47,30,233	14,45,412	4,77,149	3.23	8,38,525	1,19,039	-4,80,415	94	66.99
1895	296.00	1,49,22,432	15,76,281	6,23,385	4.22	8,70,947	1,56,931	-3,98,439	108	66.12
1896	296.00	1,51,06,257	15,84,961	6,76,976	4.48	8,21,588	1,69,189	-3,13,901	103	57.29
1897	296.00	1,51,09,757	18,80,019	7,98,285	5.25	7,78,708	2,00,081	-1,77,454	122	57.54
1898	296.00	1,55,07,819	18,92,861	4,13,421	2.67	7,88,461	1,02,680	-4,27,720	90	70.32
1899	296.00	1,56,75,416	10,60,469	3,29,033	2.10	7,21,117	82,076	-4,74,160	69	68.97
1900	296.00	1,58,70,510	13,76,691	4,71,201	2.97	7,18,200	1,16,888	-3,65,887	89	65.77
1901	296.36	1,60,14,879	14,33,240	4,07,791	2.55	7,22,244	1,01,860	-4,16,813	93	71.55
1902	296.22	1,60,76,009	15,87,046	5,58,062	3.47	7,21,062	1,39,538	-3,02,518	104	65.06
1903	296.22	1,63,24,203	15,35,370	5,82,238	3.59	7,30,000	1,44,012	-2,23,714	100	62.07
1904	296.22	1,63,59,794	15,35,324	5,63,667	3.67	7,20,000	1,40,240	-2,97,273	103	64.44
1905	296.22	1,64,73,981	17,30,901	6,98,051	4.24	7,30,000	1,73,663	-1,65,832	116	61.02
1906	296.22	1,65,59,502	18,48,848	7,19,072	4.34	7,20,000	1,79,500	-1,20,423	120	61.10
1907	296.22	1,70,31,855	21,57,686	8,44,427	4.96	7,30,000	2,11,472	-87,045	140	60.86
1908	401.29	2,29,78,788	30,71,949	11,66,353	5.08	8,64,949	1,51,026	+1,50,378	157	62.03
1909	401.29	2,32,36,445	26,71,018	10,67,326	4.58	10,48,538	55,389	-31,656	128	69.04
1910	401.29	2,35,17,199	23,00,696	11,23,684	4.80	10,48,697	57,763	+23,024	134	59.70
1911	401.29	2,36,85,396	23,55,834	12,07,363	5.10	10,60,843	61,457	+85,563	137	57.79

6 (k) Sangli railway (3' 3½" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Miraj Junction to Sangli	1-4-07	4.90	4.90

Details of construction—

*Permanent-way.*—The permanent-way consists of second-hand 4½-lb. flat-footed steel rails on teak sleepers.*Ballast.*—Ballast is chiefly moorum.*Fencing.*—The line is not fully fenced, but only where necessary.*Curves.*—The sharpest curve has a radius of 1,011 feet.*Gradients.*—The ruling gradient is 1 in 50.

Agreements and contract—

Agreement, dated the 17th July 1907, between the Sangli Durbar and the former Southern Mahratta Railway Company, as to the construction of the Sangli railway.

Agreement, dated the 17th July 1907, between the Sangli Durbar and the former Southern Mahratta Railway Company, as to the maintenance and working of the Sangli railway.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 6 **MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (d)**6 (F) Sangli railway (3' 3½" gauge)—contd.****Agreements and contract—contd.**

Contract, dated the 26th June 1908 (called the principal contract), between the Secretary of State and the Madras and Southern Mahratta Railway Company, as to the continuance of the existing agreements subject to the variations and modifications thereof as therein set forth.

**Main provisions of agreements and contract—**

- (i) *Land.*—Provided by the Sangli Durbar free of cost.
- (ii) *Government aid.*—The Sangli railway was constructed by the former Southern Mahratta Railway Company from funds supplied by the Durbar, whose property it is and who will provide all further funds that may be necessary for new works chargeable to Capital. The Branch is maintained stocked and worked by the Company.
- (iii) *Terms of working.*— } From the total expenses of maintaining and working the Company's
- (iv) *Distribution of profits.*— } system, including the Sangli railway, as a whole, are deducted charges for new minor works and Government supervision debitable direct to each of the railways concerned, and the balance is divided between the two railways in the ratio of the gross earnings of each.
- From the gross earnings of the Sangli railway are then deducted the charges for new minor works and the proportion of working expenses attributable to the Branch as noted above, and the remainder, representing its net earnings, is paid half-yearly to the Durbar.
- (v) *Rates and fares.*—
- (vi) *Special obligations as to the conveyance of.*—
- (a) Mails, troops, police, high Government officials and Government stores.—
- (b) Government bullion and coin.—
- (vii) *Power of the Government to determine agreement.*—Not specified.
- (viii) *Power of the Durbar to determine agreement.*—
- (ix) *Power of the Company to determine agreement.*— } Determinable by either party on six months' notice given 3 years after the 1st April 1907.
- (x) *Term of agreement.*—3 years from 1st April 1907; thereafter as against (viii) and (ix).

The same as for the time being are in force on the Madras and Southern Mahratta railway.

**Statistics of working—**

TABLE I					TABLE II		
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(3)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1907 . . . . .	4-30	1,97,770	19,585	8,011	6-27	102	59-10
1908 . . . . .	4-30	1,66,392	33,321	18,402	9-05	131	59-73
1909 . . . . .	4-30	1,69,903	40,783	15,712	9-25	160	61-43
1910 . . . . .	4-30	1,75,091	48,136	16,178	10-36	169	57-86
1911 . . . . .	4-30	1,77,254	43,868	19,276	10-87	172	56-05

**6 (G) West of India Portuguese railway (3' 3½" gauge)—**

*Chairman.*—Major-General Sir Henry Green, K.C.S.I., C.B.

*Secretary.*—George K. Wasey, Esq.

*Offices.*—4 Coleman Street, London, E.C.

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.

**Progress in opening—**

Sections of railway.	Date of opening.	Miles.	Total.
Mormugao Harbour to Bonaulim	17-1-87	41-00	81-70
Bonaulim to the Portuguese frontier	2-2-85	10-10	

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 6</sup> <sub>Sub-heads (a) to (i).</sub> **MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.**

**6 (i) West of India Portuguese railway (3' 3½" gauge)—contd.****Details of construction—**

**Permanent-way.**—The permanent-way consists of 60-lb. and 62-lb. flat-footed steel rails on creosoted pine, sal, teak and jamba sleepers.

**Ballast.**—The line is ballasted throughout with laterite and blue stone.

**Fencing.**—The line is partially fenced.

**Curves.**—The sharpest curve is of 720 feet radius.

**Gradients.**—The ruling gradient is 1 in 100 with a 1 in 40 on the Ghat section.

**Contracts and agreement—**

Contract, dated the 18th April 1881, *between the Portuguese Government and the West of India Portuguese Railway Company*, as to the construction of a harbour at the Port of Mormugao and a railway from Mormugao to the Portuguese Frontier.

Contract, dated the 19th December 1892, *between the Portuguese Government and the West of India Portuguese Railway Company*, providing for the guarantee of interest on the Company's capital in consequence of the cessation of the annual subsidy of Rs. 4,00,000, which was formerly paid by the British to the Portuguese Government and hypothecated by the latter to the Company.

Agreement, dated the 21st August 1902, *between the former Southern Mahratta Railway Company and the West of India Portuguese Railway Company*, as to the maintenance and working of the railway from Mormugao to the Portuguese Frontier and the harbour at the Port of Mormugao.

Contract, dated the 28th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing contracts and agreement, subject to the variations and modifications thereof as therein set forth.

**Main provisions of contracts and agreement—**

(i) **Land.**—Provided by the Portuguese Government free of cost to the West of India Portuguese Railway Company.

(ii) **Government aid.**—Guarantee by the Portuguese Government of interest in sterling at 5 per cent per annum on £800,000, and at 6 per cent per annum on any additional capital. The interest is secured (a) on the annual subsidy of Rs. 4,00,000 payable by the British Government to the Portuguese Government under the Goa Treaty of 1878, or any subsidy payable in lieu thereof, and (b) on the Abkari (excise) duties levied in Goa. Any deficiency is, however, to be made up by the Portuguese Government from other sources.

The line, which is the property of the West of India Portuguese Railway Company, is maintained and worked by the Madras and Southern Mahratta Railway Company as part of the latter's undertaking, except as to further capital expenditure which is provided by the Portuguese Government.

(iii) **Terms of working.**— } *As between the Madras and Southern Mahratta and West of India Portuguese Railway Companies.*—Railway revenue expenses are in the first instance paid by the Madras and Southern Mahratta Railway Company. Separate half-yearly accounts are kept of the gross earnings respectively of the Madras and Southern Mahratta railway and the West of India Portuguese railway. The gross working expenses of the combined railways (excluding revenue expenditure on new minor works which is borne entirely by the railway—whether the Madras and Southern Mahratta or the West of India Portuguese—incurring it and is in either or both cases excluded from the joint working expenses, and interest payable by the Madras and Southern Mahratta Railway Company on the capital cost of telegraph lines equipped and owned by the Government of India) are borne by the two Companies in the proportion of their respective gross earnings for each half-year.

As to *Harbour* receipts and expenses, a separate account is kept of all sources of revenue at the Port of Mormugao. The amount chargeable by the Madras and Southern Mahratta Railway Company for maintenance and working is actuals, plus 10 per cent thereon for superior supervision, subject to the proviso that if in the aggregate they (without the sanction of the West of India Portuguese railway) exceed the mean of the figures which represent the relation of such expenditure to receipts during the years 1895, 1896 and 1899, any such excess is to be annulled, or reduced as much as possible by a corresponding diminution in the charge for supervision.

The profits arising from the West of India Portuguese railway, being the excess of earnings over working expenses so calculated, are to be paid half-yearly by the Madras and Southern Mahratta Railway Company to the West of India Portuguese railway.

(v) **Distribution of profits as between the Portuguese Government and the West of India Portuguese Railway Company.**—The surplus profits in any year, after payment of the guaranteed interest for that year, are to be divided equally between the Portuguese Government and the West of India Portuguese Railway Company.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 6 Sub-heads (a) to (i). **MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.**  
**6 (f) West of India Portuguese railway (3' 3½" gauge)—contd.**

Main provisions of contracts and agreement—contd.

(vi) *Rates and fares.*—The maximum rates and fares to be fixed with the consent of the Portuguese Government, and not to exceed the maxima on the Great Indian Peninsula railway; they are also subject to the maxima and minima prescribed in the contracts between the Secretary of State for India and the Madras and Southern Mahratta Railway Company.

(vii) *Special obligations as to the conveyance of.*—

(a) *Mails, both British and Portuguese.*—To be conveyed on the West of India Portuguese railway upon the terms of the Treaty of 1878.

(b) *Portuguese Government troops, officials, and Government stores.*—To be conveyed on the West of India Portuguese railway on the same conditions as on Indian State railways.

(viii) *Power of the Portuguese Government to determine contract.*—The Portuguese Government may purchase the railway and all other works—

(a) at any time by giving six months' notice;

(b) at any time after the expiration of the first 30 years from the date of opening of the railway or any section thereof, by giving two years' notice.

In the first case the Portuguese Government must pay to the Company in London a sum in sterling not less than the amount actually expended by the Company on the railway and other works, with 10 per cent added, and the value of the rolling-stock, machinery, station appliances, and stores.

In the second case the price to be paid by the Portuguese Government is a sum in sterling equal to the amount of the value of all the shares, debentures and stock of the Company, calculated according to the mean market value in London during the three years immediately preceding the expiration of the two years' notice (such sum not to be less than the amount actually expended by the Company on the railway and other works), plus the value of the rolling-stock, machinery, station appliances and stores.

At the expiration of the term of the contract [99 years, see (xii),] the line becomes the property of the Portuguese Government, but the rolling-stock, machinery, station appliances and stores, and any other movable property or plant, have to be paid for at their fair value.

(ix) *Power of the West of India Portuguese Railway Company to surrender contract.*—The West of India Portuguese Railway Company may make over the railway and works to the Portuguese Government—

(a) in the event of failure on the part of the Portuguese Government to pay the guaranteed interest in full, by giving six months' notice;

(b) at any time after the expiration of the first 30 years from the date of opening of any section of the line without renewal of the Treaty of 1878, by giving two years' notice.

In the first case the West of India Portuguese Railway Company would be entitled to receive from the Portuguese Government, in sterling, the amount actually expended on the railway and works, with 10 per cent added, and the value of the rolling-stock, machinery, station appliances, and stores: in the second case, the same amount, less the additional 10 per cent on the expenditure on the railway and works.

(x) *Power of the Madras and Southern Mahratta Railway Company to determine agreement.*—

(xi) *Power of the West of India Portuguese Railway Company to determine agreement.*— } Determinable by either party at the end of two years from the 1st July 1902 (the date on which it came into force) on 6 months' notice given, reckoned either from the 30th June or the 31st December next after the delivery of such notice.

Upon the determination of the agreement the Madras and Southern Mahratta Railway Company to surrender to the West of India Portuguese Railway Company the railway and harbour and their equipment, etc., and to pay to the latter all money held on account of the railway.

(xii) *Term of contract [if not determined under (ix), (x) or (xi)].*—99 years from date of opening of line.

(xiii) *Term of agreement [if not determined under (x), or (xi)].*—5 years, i.e., until the 30th June 1907.

\* Since extended to 30th June 1912, vide letter from the India Office to the Madras and Southern Mahratta Railway Company, No. P. W. 274, dated the 26th February 1908.

Unless extended with the consent of both parties on or before the 1st June 1907, the West of India Portuguese Railway Company have the right to resume the working of their line and harbour on and from the 1st July 1907.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number— Main head 6  
Sub-heads (a) to (f) MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*concl'd.*6 (2) West of India Portuguese railway (3' 3½" gauge)—*concl'd.*

Statistics of working (Those for the periods prior to 1903 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.				TABLE II.			
<i>Includes the Harbour works.</i>							
Calendar year.	Mileage open at end of each year:	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1903	51.11	1,63,29,813	5,24,871	1,69,485	1.04	197	67.71
1904	51.10	1,64,00,803	6,84,391	2,48,378	1.51	258	63.71
1905	51.10	1,61,71,059	6,22,125	2,20,841	1.37	234	64.50
1906	51.10	1,63,18,911	6,23,616	2,08,948	1.28	234	66.49
1907	51.10	1,63,18,911	11,01,877	4,58,591	2.81	415	58.38
1908	51.10	1,70,71,439	10,64,804	3,92,394	2.30	401	68.15
1909	51.10	1,75,93,058	9,60,285	3,75,092	2.13	361	60.93
1910	51.10	1,76,70,872	12,64,030	5,42,226	3.07	476	57.10
1911	51.10	*1,77,41,327	12,20,715	5,33,083	3.00	459	56.35

\* Original capital up to 31st December 1901, £1,349,058-2-5 @ 1s. 8d. per rupee = Rs. 1,61,88,697  
 Expenditure by Portuguese Government on Improvements of line and harbour up to 31st December 1911. = 15,52,630  
 Total = 1,77,41,327

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 7 **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—**  
Sub-heads (a) to (d).

*Chairman*—Charles Albert Winter, Esq.*Secretary*—M. T. Walker, Esq.*Offices*—Winchester House, 50, Old Broad Street, London, E.C.

Lines comprised in the system.—The Nizam's Guaranteed State railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Nizam's Guaranteed State railway (5' 6" gauge) . . . . .	330·13	—	330·13
(b) Beawada Extension railway (5' 6" gauge) . . . . .	20·58	—	20·58
(c) Hyderabad-Godavari Valley railway (3' 3½" gauge) . . . . .	391·13	—	391·13
(d) Hingoli Branch railway (3' 3½" gauge) . . . . .	—	50·28	50·28
Total . . . . .	741·84	50·28	792·10

**Running powers—***Home line over foreign line :—*

Outer signal at Beawada to Beawada station, Madras and Southern Mahratta railway, for passenger and goods trains 089

Up to the end of 1873 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 Railway agency, and from January 1885 by His Highness the Nizam's Guaranteed State Railways Company.

**7 (a) Nizam's Guaranteed State railway (5' 6" gauge)—****Progress in opening—**

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
<b>Main line—</b>					
Wadi junction to Secunderabad . . . . .	9-10-74	115·45*	310·30		* Of this 5·36 miles, Secunderabad to Hyderabad, are of mixed (5' 6" and 3' 3½") gauge.
Secunderabad to Warangal . . . . .	8-4-88	86·68			
Warangal to Dornakal . . . . .	1-1-89	52·68			
Dornakal to Bona Kalu . . . . .	5-8-88	81·99			
Bona Kalu to the British frontier . . . . .	10-2-89	23·54			
<b>Branches—</b>					
<b>Hyderabad branch—</b>					
Hussain Sagar to Hyderabad . . . . .	9-10-74	3·57	3·57		
<b>Mineral branch—</b>					
Dornakal to Singareni Coal-fields . . . . .	1-1-88	16·28	16·28		
				830·13	

**Details of construction—**

**Permanent-way.**—The first 47 miles from Wadi are laid with 75-lb. bull-headed steel rails on cast iron pot sleepers. The next 9 miles are laid with 68-lb. double-headed steel rails on cast iron pot sleepers and the following 56 miles with 85-lb. flat-footed rails on Jarrah wood sleepers. The remainder of the line is laid with 66½-lb. flat-footed steel rails on steel pea-pod sleepers, with the exception of the mixed (5' 6" and 3' 3½") gauge line from Secunderabad to Hyderabad which has wooden sleepers under the same section of rail.

**Ballast.**—The line is ballasted throughout with stone and sand.

**Fencing.**—The line is fenced from Wadi to Secunderabad, but from Secunderabad to the frontier only the station yards are fenced.

**Curves.**—The sharpest curve is of 1,300 feet radius.

**Gradients.**—The ruling gradient is 1 in 100.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 7</sup> <sub>Sub-heads (a) to (d)</sub> **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—*contd.***

**7 (a) Nizam's Guaranteed State railway (5' 6" gauge)—*contd.*****Agreement—**

Agreement, dated the 27th December 1883, between the Government of His Highness the Nizam of Hyderabad and the Nizam's Guaranteed State Railways Company, Limited, as to the acquisition, management, maintenance and working of the line from Wadi to Hyderabad and Secunderabad, the construction, etc., of certain 5' 6" gauge extensions and the preferential right to construct all new railways in His Highness the Nizam's territories.

Letter No. 257, dated the 7th March 1903, from the Nizam's Government to the Railway Company as to rates and fares.

**Main provisions of agreement—**

- (i) *Land.*—Provided by the Nizam's Government free of cost to the Company.
- (ii) *Government aid.*—Guarantee of interest in sterling, at 5 per cent per annum on the Company's share and debenture capital for 20 years, from the date on which such capital is paid up. (The guarantee in the case of the share capital ceased on the 25th June 1904, but the date of termination of the guarantee in respect of the debenture capital cannot be stated, as the full amount of that capital has not yet been raised. An issue of debentures for £100,000 was made so recently as 1907 and 1908.)
- (iii) *Distribution of profits.*—During the period of the guarantee the repayment of the guaranteed interest for each half-year, and thereafter interest for each year, at the rate of 5 per cent on the share and debenture capital, is to be the first charge against the net earnings of such half-year or year. Of any residue, either before or after the cessation of the guarantee, one half is to be applied in payment to the Nizam's Government of guaranteed interest not previously recouped and in payment of any other sums owing by the Company to the Nizam's Government, and the other half is to be retained by the Company. When the Nizam's Government has been reimbursed all sums paid under the guarantee, together with simple interest thereon at 5 per cent per annum, the Company is to be entitled to the whole of the net earnings.
- (iv) *Rates and fares.*—Not to exceed those from time to time prevailing on the Great Indian Peninsula railway, unless otherwise agreed between the Nizam's Government and the Company. [By letter No. 257, dated the 7th March 1903, from the Secretary to His Highness's Government in the Financial Department to the Agent and Manager of His Highness the Nizam's Guaranteed State Railways Company, the provisions in this respect of the agreement of 1883 have been modified so as to permit the Company to levy such rates and fares as are not in excess of those which obtained on the Great Indian Peninsula railway at the date of that agreement.]
- (v) *Special obligations as to the conveyance of.*—
  - (a) Mails and Post Office servants of both the Nizam's Government and the Government of India.—To be conveyed free of charge.
  - (b) Troops, officials, and Government stores.—Troops and officials of both the Nizam's Government and the Government of India to be conveyed at special rates; stores at the lowest rates ordinarily chargeable.
  - (c) Bullion and coin.—At special rates.
- (vi) *Power of the Government to determine agreement.*—In the event of any breach by the Company of any of the provisions of the agreement, the Nizam's Government may give the Company in London six months' notice of its intention to determine the agreement; and unless the breach shall be remedied within the 6 months, the Nizam's Government may determine the agreement and assume possession of the railway, paying the Company in London in sterling so much of the capital as shall be unredeemed.

The Nizam's Government may also terminate the agreement and purchase the railway, rolling-stock, etc., on the 1st January 1914, 1st January 1934, or 1st January 1954, by giving 12 months' notice in London. On the day on which the railway is thus acquired the Nizam's Government is to pay to the Company, in sterling in London, the amount of the unredeemed capital, plus a bonus of 25 per cent.

At the end of the full term of 99 years, if the agreement continues so long, the land in the possession of the Company, with the railway, buildings, works, and fixed machinery, will revert to the Government free from all debts and charges, but the rolling-stock, plant, movable machinery, and stores must be purchased by the Government at their fair value.



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 7 : NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—contd.  
Sub-heads (a) to (d)

## 7 (a) Nizam's Guaranteed State railway (5' 6" gauge)—contd.

Main provision of agreement—contd.

(vii) Power of the Company to surrender agreement.—Nil.

(viii) Term of agreement [if not determined under (vi) or (vii)].—99 years from the date on which the extension from Hyderabad towards Bezwada was opened throughout, viz., 10th February 1889.

Statistics of working (Those for the periods prior to 1885 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1885	117-10	2,47,70,823	11,13,950	4,67,024	1-97	178	36-23
1886	205-37	2,69,19,499	13,81,077	6,94,524	2-40	143	49-71
1887	205-37	3,27,45,397	15,48,891	5,52,905	1-69	148	64-30
1888	305-71	3,54,69,078	17,76,075	7,57,467	2-13	118	57-35
1889	329-20	3,59,09,630	22,57,463	7,69,208	2-14	129	65-03
1890	329-20	3,76,96,721	25,07,268	10,39,590	2-76	145	68-54
1891	329-20	3,94,61,752	27,76,487	12,57,860	3-10	151	54-70
1892	329-20	3,95,48,395	27,80,648	13,24,959	3-35	161	52-35
1893	330-13	4,01,96,909	30,61,605	14,36,451	3-57	177	58-08
1894	330-13	4,02,33,626	32,56,885	16,22,028	4-03	188	50-20
1895	330-13	4,06,43,818	32,15,541	15,77,140	3-83	185	50-83
1896	330-13	4,08,24,787	33,03,523	17,28,196	4-23	191	47-69
1897	330-13	4,09,60,944	36,10,354	19,38,769	4-73	208	46-30
1898	330-13	4,10,54,449	39,07,612	22,74,550	5-51	225	41-79
1899	330-13	4,15,68,731	41,10,201	25,01,046	6-02	237	39-15
1900	330-13	4,17,49,124	49,12,056	28,41,935	6-81	263	42-14
1901	330-13	4,24,30,543	40,77,927	26,48,120	6-24	286	35-06
1902	330-13	4,28,69,527	44,06,494	26,82,533	6-25	254	39-12
1903	330-13	4,30,13,668	43,18,630	25,38,368	5-90	249	41-23
1904	330-13	4,32,66,412	43,32,440	27,90,690	6-45	250	35-59
1905	330-13	4,35,86,043	42,78,161	28,49,703	6-54	247	38-39
1906	330-13	4,38,45,097	44,84,105	27,98,897	6-41	259	37-53
1907	330-13	4,49,24,824	49,85,081	33,02,905	7-35	286	35-74
1908	330-13	4,56,07,508	46,99,296	35,15,029	6-61	255	38-98
1909	330-13	4,68,62,100	46,92,067	26,43,417	5-67	278	43-66
1910	330-13	4,72,19,094	53,14,905	28,46,520	6-08	309	46-44
1911	330-13	4,63,37,318	57,07,861	27,18,285	5-68	332	52-46

## 7 (b) Bezwada Extension railway (5' 6" gauge)—

This line, which extends from the frontier of His Highness the Nizam's dominions to the north outer signal of the Bezwada station, was a section of the late East Coast State railway and was worked by His Highness the Nizam's Guaranteed State Railways Company as a part of its own system up to December 1897 when it was transferred to the State. It was transferred back to the Company for working from the 1st January 1901.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Hyderabad frontier to Bezwada, . . . . .	10-2-89	20-58	20-58

Details of construction—

*Permanent-way.*—The line is laid with 66½-lb. flat-footed steel rails on Jarrah wood sleepers.*Ballast.*—The line is ballasted throughout with stone and sand.*Fencing.*—The line is fenced at stations only.*Curves.*—There are no curves with a radius of less than 1,900 feet.*Gradients.*—The ruling gradient is 1 in 100.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 7</sup> <sub>Sub-heads (a) to (d)</sub> NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—contd.

## 7 (b) Bezwada Extension railway (5' 6" gauge)—contd.

## Agreement—

Dated the 6th April 1909, between the Railway Board, acting on behalf of the Secretary of State and His Highness the Nizam's Guaranteed State Railways Company, Limited, as to the maintenance, management and working, by the Company, of the Bezwada Extension railway.

## Main provisions of agreement—

- (i) *Land*.—Provided by the Government at the cost of capital.
- (ii) *Government aid*.—The line is the property of the Government, who provide all further funds chargeable to the capital account, and it is managed, maintained, stocked and worked by the Company as if it were part of the Company's broad gauge system.
- (iii) *Terms of working*.—
- (iv) *Distribution of profits*.— } The line is managed, maintained, stocked and worked by His Highness the Nizam's Guaranteed State Railways Company for the same percentage of its gross earnings as that borne by the working expenses of the Company's broad gauge system to its gross earnings, as published in the Company's Revenue Accounts for the same half-year, plus 5 per cent. of the gross earnings of the Bezwada extension railway for the use of rolling-stock. But in addition thereto, any extraordinary maintenance charges due to causes other than ordinary wear and tear shall be charged, with the approval of the Railway Board, to the Bezwada Extension railway. Such extraordinary charges shall be excluded in working out the percentage of ordinary maintenance charges payable by the Bezwada Extension railway. The balance is paid over to the Government of India as the net earnings of the Bezwada extension.
- (v) *Rates and fares*.—
- (vi) *Special obligations as to the conveyance of*.—
- (a) Mails, troops, police, high Government officials and Government stores.—
- (b) Government bullion and coin, and the persons in charge thereof.—
- (vii) *Power of the Government to determine agreement*.—
- (viii) *Power of the Company to surrender agreement*.— } Terminable on the 1st January or the 1st July in any year, on 6 months' notice given by either party to the other. Any breach of the terms of the contract may lead, *ipso facto*, to its determination.
- (ix) *Term of agreement*.—Until terminated under (vii) and (viii).

To be the same as from time to time obtain on the Company's 5' 6" gauge system.

Statistics of working (Those for the periods prior to 1901 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.							TABLE II.		
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings or total capital outlay given in column (5).	Interest.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1901	20-58	11,51,678	2,77,177	1,56,929	13-63	35,500	+1,21,490	243	43-38
1902	20-58	11,60,425	2,89,653	1,40,329	12-09	46,375	+30,254	259	51-55
1903	20-58	11,77,047	3,07,113	1,54,322	13-10	46,617	+1,07,695	275	49-78
1904	20-58	11,75,731	3,20,658	1,78,955	15-23	46,898	+1,32,057	287	44-19
1905	20-58	11,78,648	3,47,490	2,04,239	17-33	47,046	+1,57,193	311	41-22
1906	20-58	12,81,020	3,49,206	1,91,787	16-28	47,182	+1,44,555	313	45-09
1907	20-58	11,81,952	3,15,378	1,83,883	15-56	35,691	+1,48,192	282	41-64
1908	20-58	11,88,798	3,38,623	1,91,624	16-19	40,277	+1,51,347	316	43-41
1909	20-58	12,06,028	3,12,154	1,82,354	12-65	39,884	+1,12,870	280	51-28
1910	20-58	12,01,940	3,42,614	1,58,254	12-17	40,182	+1,18,072	320	53-81
1911	20-58	12,19,120	3,54,265	1,40,815	11-55	41,580	+99,255	331	60-25

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 7 Sub-heads (a) to (d). NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—contd.

## 7 (c) Hyderabad-Godavari Valley railway (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
Manmad to Jalna	21-10-99	109.28		
Jalna to Sailu	7-12-99	44.79		
Sailu to Purbhani	25-4-00	26.40		
Purbhani to Nanded	9-10-00	86.60		
Nanded to Sivunagon	23-8-00	17.61		
Sivunagon to Basar.	25-4-00	32.94		
Basar to Secunderabad	25-4-00	117.63		
Secunderabad to Hyderabad	16-5-01	5.86 <sup>a</sup>	891.13	<sup>a</sup> Laid on a mixed (5' 6" and 3' 3½") gauge.

## Details of construction—

**Permanent way.**—The permanent way consists of 50-lb. flat-footed steel rails on steel pea-pod sleepers between miles 0 and  $\frac{159}{16}$ ,  $\frac{225}{16}$  and  $\frac{251}{16}$ , and  $\frac{227}{16}$  and 384.27 except within station limits, and wooden sleepers for the remainder.

**Ballast.**—The line is ballasted throughout with stone, sand and moorum.

**Fencing.**—The line is fenced from mile 377½ to 381 and at all stations.

**Curves.**—The sharpest curve is of 1,433 feet radius.

**Gradients.**—The ruling gradient is 1 in 133.3.

## Agreements—

Dated the 16th March 1897, between the Government of His Highness the Nizam of Hyderabad and the Nizam's Guaranteed State Railways Company, Limited, as to the construction, management, maintenance and working, by the Company, of the Hyderabad-Godavari Valley railway.

Dated the 1st March 1910, between the Government of His Highness the Nizam of Hyderabad and the Nizam's Guaranteed State Railways Company, Limited, as to the maintenance, management and working of the Hingoli branch, by the Company, as part of the Hyderabad-Godavari Valley railway.

## Main provisions of agreements—

- (i) **Land.**—Provided by the Nizam's Government free of cost to the Company.
- (ii) **Government aid.**—Guarantee in sterling, for 20 years from the date on which the line was completed and opened for traffic throughout (16th May 1901), of the interest payable on the debenture capital (not exceeding £2,500,000) raised for the purposes of the contract, together with an additional one per cent. for a Sinking Fund. (The amount of capital raised to the present time has been £1,935,000, and the rate of interest payable on it is 3½ per cent.)
- (iii) **Distribution of profits.**—During the period of the repayment of the guaranteed interest for each half-year, and thereafter the interest payable on the debenture capital for each year, is to be the first charge against the net earnings for such half-year or year. Any surplus, either before or after the cessation of the guarantee, is to be divided equally between the Nizam's Government and the Company.
- (iv) **Rates and fares.**—Not to be in excess of those prevailing on the main line [7 (a), Nizam's Guaranteed State railway (5' 6" gauge)], unless otherwise agreed.
- (v) **Special obligations as to the conveyance of.—**

(a) Mails.—	}	As noted under 7 (a), Nizam's Guaranteed State railway (5' 6" gauge).
(b) Troops, officials and Government stores.—		
(c) Bullion and coin.—		
- (vi) **Power of the Nizam's Government to determine agreement.**—As noted under 7 (a), Nizam's Guaranteed State railway (5' 6" gauge), with the exception that, in the event of the line being purchased in 1934 or 1954, the price to be paid is to be the amount of the unredeemed capital only, without the bonus of 25 per cent in addition.
- (vii) **Power of the Company to surrender agreement.**—Nil.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 7 Sub-heads (a) to (d) · NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—concl'd.

## 7 (a) Hyderabad-Godavari Valley railway (3' 3½" gauge)—concl'd.

Main provisions of agreements—concl'd.

(viii) *Term of agreement [if not determined under (vi) or (vii)].*—The remainder of the term of the contract relating to the main line [7 (a), Nizam's Guaranteed State railway (5' 6" gauge)] which was unexpired at the date of the present contract.

Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e. outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1899	154·23	2,00,21,971	63,381	36,877	0·18	48	41·82
1900	235·28	2,31,94,817	10,63,023	4,20,826	1·81	70	60·41
1901	291·42	2,46,58,951	20,10,038	8,28,300	3·74	99	84·07
1902	391·42	2,57,75,220	22,88,043	9,67,892	3·76	112	87·70
1903	491·42	2,62,07,241	22,14,752	8,86,291	3·38	109	89·68
1904	591·13	2,64,85,096	22,11,781	7,74,804	2·98	109	84·97
1905	691·13	2,68,15,349	29,64,122	13,29,009	4·98	146	85·16
1906	791·13	2,69,36,746	30,32,503	14,21,747	5·28	149	88·12
1907	891·13	2,71,85,309	32,55,067	17,74,126	6·53	160	45·80
1908	891·13	2,73,97,247	32,41,828	15,61,740	5·70	159	81·82
1909	891·13	2,75,59,090	32,54,724	14,02,129	5·09	160	86·68
1910	891·13	2,79,30,418	32,55,833	18,05,391	6·46	180	88·62
1911	891·13	2,91,82,058	34,97,306	18,12,510	4·50	172	62·48

## 7 (d) Hingoli Branch railway (3' 3½" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Purna to Hingoli (sanctioned on 13th March 1909)	...	50·28	50·28

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number  $\frac{\text{Main head } 8}{\text{Sub-heads (a) to (s)}}$  NORTH WESTERN RAILWAY SYSTEM.

Lines comprised in the system.—The North Western railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) North Western railway (5' 6" gauge)	3,656.90	109.16	3,766.06
(b) Amritsar-Patti railway (5' 6" gauge)	54.26	...	54.26
(c) Jammu and Kashmir (Native State section) (5' 6" gauge)	15.79	...	15.79
(d) Khanpur-Chachran railway (5' 6" gauge)	22.02	...	22.02
(e) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)	78.65	...	78.65
(f) Rajpura-Bhatinda railway (5' 6" gauge)	107.01	...	107.01
(g) Southern Punjab railway (5' 6" gauge)	424.06	...	424.06
(h) Southern Punjab "Ludhiana" Extension railway (5' 6" gauge).	152.04	...	152.04
(i) Sutlej Valley railway (5' 6" gauge)	208.19	...	208.19
(j) Kalka-Simla railway (2' 6" gauge)	59.92	...	59.92
(k) Kohat-Thal railway (2' 6" gauge)	61.75	...	61.75
(l) Nowshera-Durgai railway (2' 6" gauge)	40.25	...	40.25
(m) Jullundur Doab railway (5' 6" gauge)	...	118.08	118.08
(n) Trans Indus (Kalabagh-Bannu) railway (2' 6" gauge)	...	88.66	88.66
Total	4,880.24	310.85	5,191.09

## Running powers—

## Home lines over foreign lines:—

East Indian railway, Ghaziabad to Delhi, for passenger and goods trains . . . . . 1300

## Foreign line over home line:—

Oadh and Rohilkhand railway, Meerut City to Meerut Cantonment, for passenger trains only . . . . . 275

## 8 (a) North Western railway (5' 6" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	REMARKS.
<b>COMMERCIAL SECTION—</b>					
<i>Main Line—</i>					
Ghaziabad to Meerut City . . . . .	18-4-67	27.33			
Meerut City to Ambala Cantonment . . . . .	1-1-69	121.03			
Ambala Cantonment to Ludhiana . . . . .	12-10-69	70.66			
Ludhiana to Phillaur . . . . .	15-10-70	8.22			
Phillaur to Jullundur Cantonment . . . . .	1-4-70	26.12			
Jullundur Cantonment to Beas . . . . .	15-11-69	25.58			
Beas to Amritsar . . . . .	1-11-67	26.30			
Amritsar to Lahore . . . . .	10-4-63	32.33			
Lahore to Jhelum . . . . .	6-10-78	163.12 <sup>a</sup>			
Jhelum to Rawalpindi . . . . .	†	76.38			
Rawalpindi to mile 560.63 (between Lawrencepur and Campbellpur Cantonment).	1-4-61	45.88			
Mile 560.63 to Rumian, mile 572.13 . . . . .	1-4-69	11.50			
Mile 572.13 to Attock Bridge . . . . .	...	5.25			
Attock Bridge to Khairabad . . . . .	31-5-68	2.28			
Khairabad to Peshawar City . . . . .	1-6-62	41.25			
Peshawar City to Peshawar Cantonment . . . . .	1-1-83	2.85			
Lahore to Khanewal . . . . .	24-4-65	177.25			
Khanewal to Lodhran . . . . .	1-4-09	56.42			
Lodhran to Khanpur . . . . .	1-7-78	93.58			
Khanpur to Nara Canal Bridge . . . . .	1-7-78	131.05			
Nara Canal Bridge to Rohri . . . . .	0-0-89	1.00			
Rohri to Shahdadpur . . . . .	15-11-66	139.84			
Shahdadpur to Rahoki . . . . .	15-11-66	39.09			
Rahoki to Hyderabad . . . . .	28-2-10	6.25			
Hyderabad to Kotri . . . . .	25-5-00	5.29			
Kotri to Karachi City . . . . .	12-5-61	104.89			
Karachi City to Kiamat including Napier Mole . . . . .	16-6-89	8.07	1,388.06		
<i>Branches—</i>					
<i>Tawi branch (British section)—</i>					
Wazirabad to Sialkot . . . . .	1-1-84	26.50			
Sialkot to Tawi (Frontier of Kashmir State)	15-2-90	9.08	35.58		
<i>Wazirabad-Khanewal branch—</i>					
Wazirabad to Hafizabad . . . . .	15-3-05	37.37			
Hafizabad to Sangla Hill . . . . .	1-1-06	31.45			
Sangla Hill to Lyallpur . . . . .	15-2-06	27.21			
Lyallpur to Toba Tek Singh . . . . .	22-6-09	49.00			
Toba Tek Singh to Khanewal . . . . .	16-4-00	55.53	200.56		
<i>Phulji branch—</i>					
Phulji to Purandera . . . . .	1-6-82	2.57			
Phulji branch extension . . . . .	31-3-02	0.34	2.91		
<i>Sukkur Bandar branch—</i>					
Sukkur Main to Sukkur Bandar . . . . .	1-10-78	1.25	1.25		
Carried over . . . . .	...	...	1,028.86		

<sup>a</sup> This length was constructed on the 3' 3½" gauge previous to September 1878, but was converted to the 5' 6" gauge on the 6th October 1878.

† The line was opened by sections on the 5' 6" gauge, using temporary diversions near Domeli—thus Jhelum to Ratial, 1st January 1880 (15 miles) and Ratial to Rawalpindi, 1st October 1880 (56 miles). The diversions were abolished on 8th May 1882; and the complete 1/50 graded through line between Jhelum and Rawalpindi, (70.50 miles) was established. But again in 1886, and in subsequent years up to date, various alignments in connection with the improvements of grades to 1/100 have been opened and the present length of line on the 5½" gauge is—Jhelum to Rawalpindi, 76.38 miles.

## APPENDIX 9—contd.

History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 8 NORTH WESTERN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (n)

8 (a) North Western railway (5' 6" gauge)—contd.

Progress in opening—contd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
Brought forward .	...	...	1,623.36		
<i>Kotri Bandar branch—</i> Kotri to Kotri Bandar	1-4-89	1.01		1.01	
<i>Lahore Cantonment Chord branch—</i> Lahore Cantonment East to Lahore Cantonment West.	10-12-91.	2.18		2.18	* This is a military line and is not intended to be used for ordinary public traffic.
<i>Kotri-Rohri (via Ruk) branch—</i> Rohri to Sukkur	27-3-89	2.64			
Sukkur to Radhan <i>via Ruk</i>	7-10-78	79.31			
Radhan to Laki	27-10-78	70.57			
Laki to Kotri	8-10-78	75.48			
<i>Raewind-Bhatinda branch—</i> Raewind to Kasur	15-4-83	16.79		225.00	
Kasur to Ganda Singhwala	10-6-83	7.00			
Ganda Singhwala to Hussainiwala	15-12-83	5.50			
Hussainiwala to Ferozepore City	8-5-87	2.00			
Ferozepore City to Ferozepore Cantonment.	7-10-88	2.00			
Hussainiwala to Ferozepore Cantonment	8-5-87	25.50			
Ferozepore Cantonment to Bhatinda	15-6-89	155.28			† Includes 20.28 miles of mixed (5' 6" and 3' 3½") gauge between Kot Kapura and Bhatinda.
<i>Pathankot branch—</i> Amritsar to Dinanagar	1-1-84	51.22		91.98	
Dinanagar to Pathankot	8-6-84	15.48			
<i>Jech Doab line—</i> Malakwal to Sargodha	1-4-03	46.25		66.70	
Sargodha to Shorkot Road	14-5-06	102.58			
<i>Lower Sind extension—</i> Hyderabad to Badin	15-10-04	62.14		148.81	
<i>Shahdara-Sangla branch—</i> Shahdara to Sangla	30-4-07	54.76		62.14	
<i>Lodhran-Khanewal chord (via Sher Shah)—</i> Khanewal to Multan Cantonment	24-4-65	80.50		54.76	
Multan Cantonment to Muzaffarabad	31-8-70	6.89			
Muzaffarabad to Lodhran	1-7-78	47.61			
<i>Shorkot Road-Chichoki Mallian section—</i> Shorkot Road to Jaranwala	2-5-11	87.70		85.00	
Jaranwala to Chichoki Mallian	8-11-89	48.10		133.80	
TOTAL OPEN MILEAGE (COMMERCIAL SECTION)	...	...	...	2,499.64	
FRONTIER SECTION (MILITARY)—					
<i>Sind-Sagar line—</i> Main line—					
Lala Musa to Baka-ud-din	21-1-80	26.46			
Baka-ud-din to Hariah	11-2-80	10.52			
Hariah to Malakwal	110-4-80	5.99			
Malakwal to Bhakkar (via Kundian).	15-8-87	173.20			
Bhakkar to Chenab West Bank.	29-1-87	119.71			
Chenab West Bank to Chenab East Bank.	1-2-80	2.49			
Chenab East Bank to Sher Shah	1-1-89	2.39			
Branches and sections—				841.76	
<i>Golra-Basal section—</i> Golra Junction to Basal Junction	1-4-81	46.75		46.75	
<i>Kohat section—</i> Jand to Khushalgarh.	16-4-81	7.90			
Khushalgarh to Kohat	22-5-02	33.42			
				40.49	
<i>Bhera branch—</i> Malakwal to Miani	110-4-80	8.99			
Miani to Bhera	22-2-82	9.11			
				18.10	
<i>Bhaganwala branch—</i> Haranpur to Bhaganwala	...	10.84		10.84	
<i>Dandot branch—</i> Chalisa Junction to Khewra salt mines	11-1-83	6.36			
Khewra to Dandot		2.15			
				8.51	
<i>Kundian-Campbellpur section—</i> Kundian to Daud Khel	15-8-82	80.34			
Daud Khel to Jand	1-4-99	54.65			
Jand to Hasal	16-4-81	16.41			
Basal to Campbellpur	1-4-99	18.45			
				118.85	
<i>Mari branch—</i> Daud Khel to Mari	15-8-82	6.25		6.25	
<i>Ghasi Ghat branch—</i> Mahmad Kot to Ghasi Ghat	1-4-87	11.27		11.27	
				608.75	
			608.75	2,499.64	

Carried over

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 8 NORTH WESTERN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (n)

## 8 (a) North Western railway (5' 6" gauge)—contd.

Progress in opening—concd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
Brought forward	---	---	606.75	2,499.64	
<b>FRONTIER SECTION (MILITARY)—concd.</b>					
<i>Sind-Pishin line—</i>					
Buk to Sibi	2-5-80	182.97			
Sibi to Sharigh	20-3-87	74.80			
Sharigh to Bostan	21-8-87	61.13			
Base of Bostan triangle loop	---	0.31			
Bostan to Kila Abdulla	25-1-88	38.14			
Kila Abdulla to Chaman	1-1-92	29.40			
			336.75		
<i>Mushkaf-Bolan line—</i>					
Sibi to Quetta	15-4-97	86.74			
			86.74		
<i>Quetta loop—</i>					
Quetta to Bostan	21-8-87	30.57			
Nari Bank to Bindli	---	13.81			
Bostan chord	1-1-98	1.34			
			35.72		
<i>Quetta-Nushki section—</i>					
Speand Junction to Nushki	15-11-05	82.68			
			82.68		
<i>Peshawar-Jamrud branch—</i>					
Peshawar to Jamrud	1-1-01	11.04			
			11.04		
TOTAL LENGTH OPEN FRONTIER SECTION (MILITARY)	---	---	---	1,156.66	
TOTAL LENGTH OPEN (COMMERCIAL AND MILITARY)	---	---	---	3,656.30	
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION</b>					
Sarai Kala to Havelian (sanctioned on 2nd March 1911)	---	34.50			
Jakhal to Hissar (sanctioned on 9th February 1911)	---	50.63			
Jalandur to Hoshiarpur (sanctioned on 5th May 1911)	---	24.03			
			109.16	109.16	
TOTAL LENGTH OPEN AND UNDER CONSTRUCTION OR SANCTIONED.	---	---	---	3,765.46	
<b>DOUBLE LINE (COMMERCIAL AND MILITARY SECTIONS)—</b>					
Kiamazi to Karachi City	30-6-87	8.07			
Karachi City to Karachi Cantonment	13-5-81	2.30			
Karachi Cantonment to Pipri	20-6-87	20.70			
Pipri to Kotri	8-5-88	81.69			
Lahore Cantonment East to Lahore Cantonment West	10-12-81	2.13			
Gulistan to Chaman	20-8-82	37.58			
Ab-i-Gum to Kolpur		22.78			
Lodhran to Samasata	1-4-09	14.50			
Samasata to Khanpur	2-4-87	76.49			
Khanpur to Beti	2-4-07	62.00			
Beti to Rohri	1-8-07	70.05			
Amritsar to Lahore	15-1-06	32.33			
Lahore to Badami Bagh	19-10-09	1.34			
Badami Bagh to Shahdara	8-1-10	2.88			
Amritsar to Jandiala	23-3-10	11.28			
Jandiala to Botari	12-7-10	7.80			
Botari to Beas	10-12-10	6.85			
Dhulwan to Hamira	12-9-11	6.88			
Hamira to Jullundur Cantonment	12-8-10	15.95			
Jullundur Cantonment to Phagwara	20-4-11	18.22			
Phagwara to Ludhiana	1-6-11	22.15			
Ludhiana to Doraha	10-1-11	14.00			
Doraha to Gobindgarh	15-12-10	17.75			
Gobindgarh to Sirhind	10-1-11	5.00			
Sirhind to Rajpura	15-12-10	15.75			
Rajpura to Ambala	2-12-10	17.25			
TOTAL DOUBLE LINE	---	---	590.67		

## Details of construction—

*Permanent-way.*—The permanent-way is of various types. On the single line, of iron rails there are 60-lb. flat-footed; 60-lb. and 68-lb. double-headed, and 60-lb. bull-headed; of steel rails there are 60-lb., 61-lb., 62-lb., 70-lb., 75-lb., 90-lb., and 100-lb. flat-footed; 64-lb., 68-lb., and 75-lb. double-headed; 68-lb., 73-lb., 77½-lb., 84-lb. and 85-lb. bull-headed and 75-lb. and 87-lb. British standard section. On the double line the steel rails are 68-lb. double-headed, 77½-lb. bull-headed and 75-lb. and 87-lb., 90-lb. and 100-lb. flat-footed. The sleepers used are chiefly of wood, but cast-iron (oval or round) pots and steel transverse sleepers are also extensively used.





## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 8 NORTH WESTERN RAILWAY SYSTEM—contd.

8 (b) Amritsar-Patti railway (5' 6" gauge)—contd.

## Details of construction—

**Permanent-way.**—The permanent-way consists of 60-lb. flat-footed steel rails laid on deodar sleepers.**Ballast.**—The line is ballasted throughout with broken stone.**Fencing.**—Station yards only are fenced.**Curves.**—The sharpest curve is of 1,910 feet radius.**Gradients.**—The ruling gradient is 1 in 200.

## Contracts—

Dated the 22nd May 1905, between the Secretary of State and the Amritsar-Patti Railway Company, as to the construction, maintenance, management and working of the Amritsar-Patti railway.

Dated the 7th May 1909, between the Secretary of State and the Amritsar-Patti Railway Company, as to the construction, maintenance, management and working of the Patti-Kasur extension as an integral part of the Amritsar-Patti railway.

## Main provisions of contracts—

(i) **Land.**—Provided by the Government free of cost to the Company, except for quarrying, ballast, brickfield or other temporary works.(ii) **Government aid.**—The Government constructed the line (from funds supplied by the Company whose property it is), and manages, maintains, stocks and works it, through the agency of the North Western railway.

By way of rebate the Government allow the Company, in respect of each calendar year, such sum up to 45 per cent of the gross earnings from traffic (excluding those derived from the carriage of stores) interchanged between the North Western railway and the Amritsar-Patti railway as shall, together with the net earnings of the Company, make up an amount equal to an interest for the year at a rate of 5 per cent per annum on the actual expenditure charged in the Capital Account, plus Rupees 7,200 on account of office expenses and those of management and direction subject to the same limit.

(iii) **Terms of working.**— } For management, maintenance, working and provision of rolling-stock  
(iv) **Distribution of profits.**— } the Government retain 45 per cent of the gross earnings in each half-year of the Amritsar-Patti railway; the remainder, constituting the net earnings, is paid to the Company.

But should the net earnings of the Company in any year exceed the maximum amount sufficient to pay a dividend of 5 per cent per annum, such excess is to be applied towards the payment of office expenses and expenses of management and direction [referred to under (ii)] up to a limit of Rs. 15,000, the balance being divided equally between the Government and the Company.

(v) **Rates and fares.**—To be arranged between the Government and the working agency within the maximum and minimum in force on, and the classification of goods to be in conformity with that of the working Agency.(vi) **Special obligations as to the conveyance of.—**

(a) Mails, troops, police, high Government officials and Government stores.—

(b) Government bullion and coin, and the persons in charge thereof.—

To be conveyed at the same rates and under the same arrangements as apply to State railways.

(vii) **Power of the Government to determine contract.**—The Government may, by giving twelve months' previous notice in writing of purchase, determine the contract either on the 31st December 1935 or on the 31st December in the last year of any subsequent period of 10 years, by paying to the Company in rupees 25 times the average yearly net earnings of the Company during the last preceding three years, subject to a limit of 20 per cent in excess of, but not less than, the total capital expenditure of the Company.(viii) **Power of the Company to surrender contract.**—Nil.(ix) **Term of contract [if not determined under (vii)].**—None specified.

## Statistics of working—

TABLE I						TABLE II	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	%
1906 . . .	27.49	11,90,964	15,349	8,452	0.71	89	45.00
1907 . . .	27.49	14,19,465	1,61,280	88,704	6.25	118	45.00
1908 . . .	27.49	14,87,400	1,79,181	99,703	6.68	126	45.00
1909 . . .	27.60	17,88,129	2,18,369	1,20,106	6.73	152	45.00
1910 . . .	54.26	26,67,169	3,64,322	2,00,378	7.51	146	45.00
1911 . . .	54.26	22,68,452	4,70,793	2,52,226	9.02	767	45.00

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 8 **NORTH WESTERN RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (n)

**8(a) Jammu and Kashmir (Native State section) (5' 6" gauge)—**  
**Progress in opening—**

Section of railway.	Date of opening.	Miles.	Total.
Frontier of the Kashmir State to the left bank of the Tawi river near Jammu.	15-3-00	15-79	15-79

**Details of construction—**

**Permanent-way.**—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of deodar.

**Ballast.**—The line is ballasted throughout with broken stone.

**Fencing.**—The line is unfenced except at Sialkot station.

**Curves.**—The sharpest curve is of 2,865 feet radius.

**Gradients.**—The ruling gradient is 1 in 200.

**Agreement—**

Dated the 2nd February 1906, having effect from 1st January 1903, between the Government of India and the Kashmir Durbar, as to construction and working.

**Main provisions of agreement—**

- (i) **Land.**—Provided by the Durbar free of cost.
- (ii) **Government aid.**—The section was constructed (from funds supplied by the Kashmir Durbar, whose property it is), and is managed, maintained, stocked and worked by the North Western railway. By way of rebate the Government allow to the Durbar a payment on traffic interchanged with the North Western railway to such extent, as, together with the share of net earnings attributable to the section, will afford a total dividend of 3½ per cent per annum on the actual capital expenditure to end of each half year, subject to the proviso that such rebate in no case exceeds the North Western railway's net earnings from traffic interchanged with the section.
- (iii) **Terms of working.**— } For management, maintenance, provision of rolling-stock and work-
- (iv) **Distribution of profits.**— } ing, the North Western railway retains 55·50 per cent of the gross earnings of the section, the remaining 44·50 per cent being credited to the Durbar, subject to the rebate noted under (ii).
- (v) **Rates and fares.**—To be such as are from time to time in force on the main line of the North Western railway.
- (vi) **Special obligations as to the conveyance of.—**
- (a) Mails, troops, police, high Government officials and Government stores.— } To be conveyed on the same general conditions as those in force on the main line of the North Western railway.
- (b) Government bullion and coin, and the persons in charge thereof.— }
- (c) Services to the Durbar.—As in clauses 15, 16 and 17 of the agreement.
- (vii) **Power of the Government to determine agreement.**— } The agreement is terminable on six months' notice by either side.
- (viii) **Power of the Durbar to surrender agreement.**— }
- (ix) **Term of agreement [if not determined under (vii) or (viii)].**—5 years from 1st January 1903 subject to (vii) and (viii).

Statistics of working (Those for the periods prior to 1903 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, (a) outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1903	15-02	9,62,264	54,821	24,432	2-34	9,258	33,680	3-50	66	55-50
1904	15-09	9,62,208	50,281	25,023	2-69	8,655	33,678	3-50	65	55-50
1905	15-08	9,62,208	66,842	29,745	3-09	4,540	34,265	3-56	80	55-50
1906	15-08	9,78,568	77,488	34,571	3-53	684	35,255	3-60	98	55-50
1907	15-08	9,79,109	80,172	35,677	3-64	—684	34,993	3-57	96	55-50
1908	15-08	9,98,606	85,390	37,999	3-81	...	37,999	3-82	103	55-50
1909	15-08	10,01,019	88,927	37,347	3-70	...	37,347	3-70	101	55-50
1910	15-79	10,10,234	86,918	38,679	3-83	...	38,679	3-82	106	55-50
1911	15-79	10,14,335	98,823	48,977	4-88	...	48,977	4-88	120	55-50

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[ For Index see page preceding this appendix.]

Number <sup>Main head</sup> <sub>Sub-heads (a) to (n)</sub> NORTH WESTERN RAILWAY SYSTEM—*contd.*

## 8(a) Khanpur-Chachran railway (5' 6" gauge)—

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Khanpur to Chachran . . . . .	11-1-11	22-03	22-03

## Details of construction—

*Permanent-way.*—The permanent-way consists of 60-lb. flat-footed steel rails laid on jarrah sleepers.

*Ballast.*—The line is ballasted with broken brick on curves and approaches to large bridges and the remainder with sand.

*Fencing.*—The line is not fenced.

*Curves.*—The sharpest curve is of 1,146 feet radius.

*Gradients.*—The ruling gradient is 1 in 600.

## Agreement—

Under consideration and not yet executed, *between the Secretary of State and the Bahawalpur Durbar*, as to the construction, maintenance and working of the Khanpur-Chachran railway by the North Western railway.

## Main provisions of agreement—

(i) *Land.*—To be provided free of cost by the Bahawalpur Durbar, both during and after construction.

(ii) *Government aid.*—The line was constructed by the Government (from funds supplied by the Bahawalpur Durbar, whose property it is), and is managed, maintained, stocked and worked, through the agency of the North Western railway as if it were part of its system.

By way of rebate Government allow to the Durbar a sum not exceeding in any year the net earnings of the North Western railway from traffic interchanged with the Khanpur-Chachran branch railway as, together with the net earnings of the branch, will be equal to interest at 3 per cent per annum on the actual expenditure charged in the capital account of the branch.

(iii) *Terms of working.*—

(iv) *Distribution of profits* — } For management, maintenance, provision of rolling-stock and working, the North Western railway retains 50 per cent of the gross earnings of the branch, the balance being paid to the Durbar.

(v) *Rates and fares.*—To be the same as may be, from time to time, in force on the North Western railway.

(vi) *Special obligations as to the conveyance of.*—

(a) Mails, troops, police, high Government and Durbar officials and Government stores.— } To be carried on the same general conditions and at the same rates as may for the time being be in force on the North Western railway.

(b) Government bullion and coin, and the persons in charge thereof.—Not specified.

(vii) *Power of the Government to determine agreement.*—

(viii) *Power of the Durbar to surrender agreement.*—

} The agreement is terminable on the 1st January or 1st July in any year after 1935, on six months' notice given by either party to the other. The Government may also determine the agreement at any time, on six months' notice, should either the North Western railway or the Bahawalpur Durbar fail to observe their obligations.

Upon the determination of the agreement the North Western railway shall give to the Bahawalpur Durbar possession of the Khanpur-Chachran railway, together with all its belongings and moneys then payable to it, after which the Bahawalpur Durbar shall indemnify the North Western railway against all debts and liabilities as may have been incurred and then be subsisting on behalf of the Khanpur-Chachran railway.

(ix) *Term of contract.*—From date of opening of the line until 1935, subject to (vii) and (viii).

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 8</sup> Sub-heads (a) to (n) NORTH WESTERN RAILWAY SYSTEM—contd.

§ (d) Khanpur-Chachran railway, (5' 6" gauge)—concl'd.

Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of the year.	Total capital outlay, including suspense, to end of the year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
1911	Miles. 22·02	Rs. 18,95,947	Rs. 12,861	Rs. 6,431	0·46	Rs. 22	50·00

§ (e) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Ludhiana, via Dhuri, to Jakhal	10-4-01	78·65	78·65

Details of construction—

*Permanent-way.*—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of deodar.

*Ballast.*—The line is ballasted throughout with broken brick and kunkur.

*Fencing.*—Only station yards and about 100 feet on each side of level crossings are fenced.

*Curves.*—The sharpest curve is of 1,364 feet radius.

*Gradients.*—The ruling gradient is 1 in 400.

Agreement—

Dated the 6th September 1899, between the Secretary of State and the Maler Kotla and Jhind Durbars, as to the construction, maintenance and working.

Main provisions of agreement—

- (i) *Land.*—Provided free of cost by the Government in the case of British territory and by the Durbars concerned in the case of Native States' territory up to the date of the agreement of 1899; thereafter all land provided by the Maler Kotla and Jhind Durbars is debited to capital.
- (ii) *Government aid.*—The Government constructed the line (from funds supplied in the ratio of  $\frac{4}{7}$ ths and  $\frac{3}{7}$ th, respectively, by the Jhind and Maler Kotla Durbars, whose property it is), and manage, maintain, stock and work it, through the agency of the North Western railway, as part of its system.
- (iii) *Terms of working.*—
- (iv) *Distribution of profits.*— } For management, maintenance, provision of rolling-stock and working, 55 per cent of the gross earnings are retained by the North Western railway, and the balance is paid to the Jhind and Maler Kotla Durbars to be divided between them in the ratio of  $\frac{4}{7}$ ths to the former and  $\frac{3}{7}$ th to the latter.
- (v) *Rates and fares.*—To be the same as may, from time to time, be in force on the North Western railway.
- (vi) *Special obligations as to the conveyance of.*—
- (a) Mails, troops, police, high officials and stores, both of the Government and the Durbars.—
- (b) Government and Durbar bullion and coin, and the persons in charge thereof.— } To be carried on the same general conditions and at the same rates as may for the time being be in force on the North Western railway.
- (vii) *Power of the Government to determine agreement.*—
- (viii) *Power of the Durbars to surrender agreement.*— } On the 31st December 1904, or the 1st January or 1st July in any year thereafter, on six months' notice given by either party to the other. Upon the determination of the agreement the North Western railway will give to the Maler Kotla and Jhind Durbars possession of the railway, all its belongings and moneys then payable to them, after which the Durbars will indemnify the North Western railway against all debts and liabilities as may have been incurred and then be subsisting on behalf of the Ludhiana-Dhuri-Jakhal railway. The Government may also determine the contract at any time on six months' notice in writing should either the North Western railway or the Durbars fail to observe their obligations.
- (ix) *Term of contract.*—From the 6th September 1899 to the 31st December 1904 subject to (vii) and (viii).

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 8</sup> <sub>Sub-heads (a) to (n)</sub> NORTH WESTERN RAILWAY SYSTEM—*contd.*8 (e) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)—*concl'd.*

Statistics of working (Those for 1901 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.							TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Remarks.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.			Rs.	
1902	78.66	48,24,799	4,05,005	1,82,252	4.21	The decrease in capital outlay in 1903 was due to credits.	99	55.00
1903	78.66	41,19,964	3,15,036	1,41,762	3.44		77	55.00
1904	78.66	41,19,634	3,46,059	1,55,737	3.78		85	55.00
1905	78.66	41,22,517	5,15,007	2,31,758	5.62		126	55.00
1906	78.65	41,70,006	6,44,063	2,89,829	6.95		157	55.00
1907	78.65	41,81,658	6,45,356	2,90,410	6.94		153	55.00
1908	78.65	41,86,647	6,24,593	2,81,067	6.71		152	55.00
1909	78.65	41,89,138	6,13,430	2,76,079	6.59		150	55.00
1910	78.65	41,83,239	3,30,707	3,73,818	8.92		203	55.00
1911	78.65	41,92,181	6,55,098	2,94,792	7.03		160	55.00

## 8 (f) Rajpura-Bhatinda railway (5' 6" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Rajpura to Patiala . . . . .	1-11-84	16.00	107.01
Patiala to Bhatinda . . . . .	13-10-89	91.01	

## Details of construction—

**Permanent-way.**—The line from Rajpura to Patiala is laid with 68-lb. bull-headed steel rails on deodar sleepers, and from Patiala to Bhatinda with 75-lb. flat-footed steel rails on deodar sleepers.

**Ballast.**—The line is ballasted throughout with broken brick.

**Fencing.**—The line is fenced between Rajpura and Patiala at station yards, and 100 feet on each side of level crossings between Patiala and Bhatinda.

**Curves.**—The sharpest curve is of 1,146 feet radius.

**Gradients.**—The ruling gradient is 1 in 250.

## Agreement—

Dated the 30th January 1893, between the Secretary of State and the Patiala Durbar, as to management, maintenance and working.

## Main provisions of agreement—

(i) **Land.**—For original construction was provided free of cost by the Patiala Durbar; the cost of that provided after 13th October 1889 (the date on which the agreement came into force) is debited to capital.

(ii) **Government aid.**—The line, which is the property of the Patiala Durbar, is managed, maintained, stocked and worked by the Government through the agency of the North Western railway as part of its system as from the 13th October 1889.

(iii) **Terms of working.**—

(iv) **Distribution of profits.**— } For management, maintenance, provision of rolling-stock and working 55 per cent of the gross earnings (reduced to 52 per cent from 1st January 1904 in accordance with the Government of India, Public Works Department, No. 817 B.T., dated the 5th October 1903, to the address of the Government of the Punjab Manager, North Western railway) are retained by the North Western railway, and the balance is paid to the Patiala Durbar.

(v) **Rates and fares.**—To be the same as may, from time to time, be in force on the North Western railway.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 8 NORTH WESTERN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (vi)

## 8 (f) Rajpura-Bhatinda railway (5' 6" gauge)—contd.

Main provisions of agreement—contd.

## (vi) Special obligations as to the conveyance of.—

- (a) Mails, troops, police, high officials and stores both of the Government and of the Durbar.— To be carried on the same general conditions and at the same rates as may for the time being be in force on the North Western railway.
- (b) Government and Durbar bullion and coin, and the persons in charge thereof.—

## (vii) Power of the Government to determine agreement.—

- (viii) Power of the Durbar to surrender agreement.— On the 31st December 1892 or on the 1st January or 1st July in any year thereafter, on six months' notice given by either party to the other. The Government may also determine the contract at any time on six months' notice in writing, should either the North Western railway or the Patiala Durbar fail to observe their obligations. Upon the determination of the agreement the North Western railway will give to the Patiala Durbar possession of the railway, all its belongings and moneys then payable to it, after which the Patiala Durbar will indemnify the North Western railway against all debts and liabilities as may have been incurred and then be subsisting on behalf of the Rajpura-Bhatinda railway.

## (ix) Term of agreement.—From 13th October 1889 to the 31st December 1892, subject to (vii) and (viii).

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(3)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902 . . . . .	107'05	67,12,977	8,40,947	3,78,428	5'64	161	55'00
1903 . . . . .	107'05	67,18,890	9,64,002	4,33,801	6'46	173	55'00
1904 . . . . .	107'05	67,25,431	10,87,925	5,12,604	7'62	192	52'00
1905 . . . . .	107'05	67,18,831	12,53,390	6,01,626	8'95	225	52'00
1906 . . . . .	107'05	68,02,580	11,97,184	5,69,825	8'33	213	52'00
1907 . . . . .	107'05	68,14,790	14,80,997	7,10,878	10'43	266	52'00
1908 . . . . .	107'05	68,52,951	13,74,351	6,59,889	9'63	247	52'00
1909 . . . . .	106'45	68,69,482	13,15,293	6,31,388	9'19	237	52'00
1910 . . . . .	106'45	68,92,208	13,91,108	6,67,731	9'66	261	52'00
1911 . . . . .	107'01	69,89,254	16,30,470	7,82,635	11'20	298	52'00

## 8 (g) Southern Punjab railway (5' 6" gauge)—

Chairman.—Sir Bradford Leslie, K.C.I.E.

Secretary.—Urban Broughton, Esq.

Offices.—Egypt House, 36, New Broad Street, London, E.C.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Main line—</b>				
Delhi <i>via</i> Bhatinda to Samanata	10-11-97	399'69		
Independent entrance from Delhi Brewery to Delhi	20-12-99	0'79	400'68	
<b>Branch—</b>				
Narwana to Kaithal	1-2-99	68'38	23'78	424'06

## Details of construction—

**Permanent-way.**—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of creosoted pine, deodar and jarra.

**Ballast.**—The line is ballasted throughout with broken brick and stone.

**Fencing.**—Only the station yards are fenced.

**Curves.**—The sharpest curve is of 2,100 feet radius.

**Gradients.**—The ruling gradient is 1 in 333.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 8</sup> <sub>Sub-heads (a) to (n)</sub> NORTH WESTERN RAILWAY SYSTEM—contd.

## 8 (g) Southern Punjab railway (5' 6" gauge)—contd.

## Contracts—

- Dated the 13th August 1895 (called the principal contract), between the Secretary of State and the Southern Punjab Railway Company, as to construction, management, maintenance and working.
- Dated the 4th May 1899 (supplemental to the contract of 1895), between the Secretary of State and the Southern Punjab Railway Company, as to the construction, management, maintenance and working of the Narwana-Kaithal branch.
- Dated the 4th June 1903 (supplemental to the contract of 1895), between the Secretary of State and the Southern Punjab Railway Company, as to the adoption of 1s. 4d. per rupee as the "prescribed" rate of exchange.
- Dated the 4th October 1905 (supplemental to the contracts of 1895, 1899, and 1903); between the Secretary of State and the Southern Punjab Railway Company, as to the construction, management, maintenance and working of the Southern Punjab "Ludhiana" Extension, 8 (A).
- Dated the 14th May 1908 (supplemental to the contracts of 1895, 1899, 1903, and 1905), between the Secretary of State and the Southern Punjab Railway Company, for the purpose of defining the position of the Ludhiana-Dhuri-Jakhal railway in relation to the Southern Punjab railway.
- Dated the 24th June 1909 (supplemental to the contracts of 1895, 1899, 1903, 1905, and 1908), between the Secretary of State and the Southern Punjab Railway Company, as to the construction, management, maintenance and working of the Sutlej Valley railway, 8 (i).

## Main provisions of contracts—

- (i) *Land.*—In British territory provided by the Government free of cost to the Company. As to that in the territories of any Native State, the Government undertake to use their influence to acquire it for the Company, as far as possible, on the same terms.
- (ii) *Government aid.*—The Government manage, maintain, stock and work the railway in all respects as far as practicable as part of the North Western railway system.  
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  $3\frac{1}{2}$  per cent. on the actual expenditure, charged in the Capital account.
- (iii) *Terms of working.*—For management, maintenance, provision of rolling-stock and working, the Government retain 52 per cent. of the gross earnings, the remainder being the net earnings of the Company. Such net earnings, together with the rebate referred to under (ii), constitute the Company's net receipts.
- (iv) *Distribution of profits.*—Surplus profits in excess of  $3\frac{1}{2}$  per cent per annum on the total expenditure of the Company in sterling are divisible equally at the close of each year between the Government and the Company, provided that, after the completion of the Ludhiana Extension, a sum of £5,000 per annum is deducted from the net receipts of the Company's existing lines for administrative expenses in England and India before division of profits.
- (v) *Rates and fares.*—To be fixed by the Government within the maxima and minima for the time being in force on the North Western railway.
- (vi) *Special obligations as to the conveyance of.*—
- |  |  |
|--|--|
| (a) Mails, troops, police, high Government officials and Government stores.— | } To be conveyed at the same rates and under the same arrangements as may be in force on State railways. |
| (b) Government bullion and coin, and the persons in charge thereof.—         |  |
- (vii) *Power of the Government to determine contract.*—Government may, by giving twelve months' notice, determine the contract and acquire the line on the 31st December 1929, or on the 31st December 1934 or on the 31st December of the last year of any subsequent period of ten years, paying to the Company in sterling a sum equal to 25 times the yearly average of the Company's share of the net earnings of the railway 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 in sterling nor be less than such capital expenditure. Government may also determine the contract on the 31st December 1954 by paying to the Company in sterling a sum equal to the total capital expenditure in sterling.
- (viii) *Power of the Company to surrender contract.*—Nil.
- (ix) *Term of contract [if not determined under (vii) or (viii)].*—None specified.

## APPENDIX 9—contd.

story of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 8 Sub-heads (a) to (n) **NORTH WESTERN RAILWAY SYSTEM—contd.**

**8 (g) Southern Punjab railway (5' 6" gauge)—contd.**

Statistics of working—

TABLE I.										TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from N. W. Ry., (+), or share of surplus profits payable to the Secretary of State in England, (—).	Total income.	Percentage of total income on total capital outlay given in column (3).	Remarks.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.			Rs.	
1897	399.80	1,99,08,812	1,61,038	77,298	0.89	+19,948	97,240	0.54		82	52.00
1898	399.80	2,23,62,921	16,29,122	7,81,978	3.49	...	7,81,978	3.49	Adjustments under the	74	52.00
1899	423.18	2,26,68,262	16,11,010	7,73,265	3.41	+17,818	7,90,608	3.48	Cripps' award were	73	52.00
1900	428.98	2,26,57,063	16,36,280	7,89,360	3.48	+ 3,562	7,92,922	3.50	brought into account in	74	52.00
1901	428.46	2,25,70,734	24,66,333	11,98,240	5.31	-1,73,858	10,24,587	4.54	1901, but in	118	52.00
1902	424.72	2,27,93,660	19,41,541	9,81,940	4.09	-41,523	8,90,418	3.90	these statistics	88	52.00
1903	425.33	2,28,37,905	21,59,158	10,86,396	4.74	-90,808	9,46,088	4.14	they have been	98	52.00
1904	425.33	2,29,43,454	27,47,442	13,18,772	5.74	-2,30,673	10,83,094	4.74	adjusted and	124	52.00
1905	425.33	2,30,13,695	36,40,372	17,47,379	7.59	-4,68,110	13,04,269	5.68	allocated to the proper	165	52.00
1906	425.33	2,31,80,148	41,67,059	20,00,188	8.65	-5,67,842	14,32,346	6.19	years.	188	52.00
1907	423.75	2,31,79,761	50,97,456	24,17,978	10.43	-7,75,023	16,42,855	7.09		228	52.00
1908	423.75	2,33,23,905	44,44,158	21,33,194	9.14	-6,47,045	14,86,149	6.37		202	52.00
1909	424.06	2,35,69,938	33,15,733	15,91,551	6.75	-3,56,280	12,35,271	5.24		180	52.00
1910	424.06	2,36,18,571	48,21,330	20,74,234	8.67	-5,55,991	15,19,143	6.35		196	52.00
1911	424.06	2,43,04,411	50,29,057	24,13,963	9.95	-7,57,754	16,56,208	6.81		228	52.00

**8 (k) Southern Punjab "Ludhiana" Extension (5' 6" gauge)—**

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Ludhiana to Ferozepore	10-6-05	75.68	
Ferozepore to MacLeod Ganj	10-2-06	75.26	150.94

Details of construction—

**Permanent-way.**—The permanent-way consists of 75-lb. flat-footed steel rails on Australian jarrah wood sleepers.

**Ballast.**—The line is ballasted with brick.

**Fencing.**—Only station yards, and short lengths on either side of all level crossings where gates and gate-edges have been provided, are being fenced.

**Curves.**—The sharpest curve is of 1,910 feet radius.

**Gradients.**—The ruling gradient is 1 in 400.

Main provisions of contract—

This extension is worked by the Government, through the agency of the North Western railway as a part of the Southern Punjab railway under the provisions of the contracts noted under 8 (g), Southern Punjab railway (5' 6" gauge), except 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 or sent over any part of the Company's lines including the Ludhiana Extension, such a sum (not exceeding the amount of such net earnings of the North Western railway) as, together with the net earnings of the Company in respect of the Ludhiana Extension, will make up interest at the rate of 5 per cent per annum on the capital expenditure of the Company on the Extension as charged in the capital account.
- (ii) **Distribution of profits.**—Surplus net receipts in excess of 5 per cent per annum on the Company's total capital expenditure in respect of the extension are divisible at the close of each year in the proportion of  $\frac{1}{4}$ th to the Company and  $\frac{3}{4}$ ths to the Government.



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 8</sup> <sub>Sub-heads (a) to (g)</sub> NORTH WESTERN RAILWAY SYSTEM—contd.

## 8 (A) Southern Punjab "Ludhiana" Extension (5' 6" gauge)—contd.

Statistics of working—

TABLE I.							TABLE II.			
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., onlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western railway, (+), or share of surplus profits payable to the Secretary of State in England, (—)	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(3)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1905	77.05	70,09,669	78,332	35,900	0.50	+10,500	45,700	0.65	83	52.00
1906	155.05	79,33,781	6,99,557	3,92,167	5.81	+33,316	3,35,505	4.23	83	53.00
1907	152.04	83,43,814	8,98,143	4,31,108	5.17	+31,163	4,62,271	5.54	112	52.00
1908	153.04	87,92,087	8,31,931	3,99,337	4.54	+16,826	4,16,153	4.73	105	52.00
1909	153.04	89,14,112	7,88,693	3,78,573	4.25	+35,203	4,13,776	4.64	100	52.00
1910	152.04	89,40,892	10,03,716	4,81,784	5.39	+2,352	4,84,136	5.41	127	52.00
1911	153.04	89,83,703	10,90,618	5,23,497	5.82	-56,165	4,67,332	5.20	136	52.00

## 8 (a) Sutlej Valley railway (5' 6" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total
Kasur to Ludhiana	6-7-10.	208.19	208.19

Details of construction—

**Permanent-way.**—The permanent-way consists of 75-lb. flat-footed steel rails on Australian jarrah wood sleepers for main line and main loops and 60-lb. flat-footed rails on jarrah and deodar sleepers for other sidings.

**Ballast.**—The line is ballasted with broken brick.

**Fencing.**—Only station yards and short lengths on each side of level crossings provided with gates are being fenced.

**Curves.**—The sharpest curve is of 1,910 feet radius.

**Gradients.**—The ruling gradient is 1 in 400.

Main provisions of contract—

This railway is worked by the Government, through the agency of the North Western railway, as a part of the Southern Punjab railway under the provisions of the contracts noted under 8 (g), Southern Punjab railway (5' 6" gauge), except as follows:—

(i) **Government aid.**—Government allow the Southern Punjab Railway Company, for each half-year, by way of rebate on the net earnings of the North Western railway, such a sum (not exceeding the amount of such net earnings of the North Western railway) as, together with the net earnings of the Company in respect of this railway, will be equal to interest at 4½ per cent per annum on the Company's total capital expenditure on the Sutlej Valley railway, provided that if in any year the rebate so ascertained shall exceed the aggregate of the—

(a) net earnings of the North Western railway from interchanged traffic and from traffic originating and terminating at stations on the North Western railway (including the stations at Delhi, Samasatta, Ferozepore, Ludhiana, Kasur and Ludhiana, but not including stations of the Patiala railway), and sent over the Sutlej Valley railway, other than that which is subject to rebate under either or both clause 23 of the contract of the 13th August 1895 and clause 12 of the contract of the 4th October 1905, and

(b) such surplus of net earnings of the North Western railway in respect of traffic which is subject to rebate under either or both clause 23 of the contract of the 13th August 1895 or clause 12 of the contract of the 4th October 1905 as shall remain after satisfying claims under such clauses or either of them (if any), then the rebate for such year shall be reduced to an amount equal to the aggregate of the two said sums.

(ii) **Distribution of profits.**—Surplus net receipts in excess of 4½ per cent per annum on the Company's total capital expenditure on the Sutlej Valley railway are divisible at the close of each year in the proportion of ¼th to the Company and ¾ths to the Government.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 8</sup> <sub>Sub-heads (a) to (n)</sub> NORTH WESTERN RAILWAY SYSTEM—contd.8 (c) Sutlej Valley railway (5' 6" gauge)—contd.  
Statistics of working—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western railway, (+), or share of surplus profits payable to the Secretary of State in England, (—).	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1910	209-46	1,54,94,559	2,89,068	1,39,041	0-90		1,39,041	0-90	54	52-00
1911	208-19	1,52,17,748	5,66,486	2,71,914	1-79	+4,13,820	6,85,734	4-50	52	52-00

## 8 (f) Kalka-Simla railway (2' 6" gauge)—

The railway was constructed by, and at the cost of, the Delhi-Umballa-Kalka Railway Company. On the representation of the Company it was decided to purchase the Company's interest in the line. This was effected by the payment of £300,000; the Secretary of State waiving all claim to arrears of unpaid interest on the advances, viz., Rs. 1,16,47,512, made to the Company. The purchase of the line by the State was effected from 1st January 1906; but the Company continued to work it under the direct orders of the Railway Board up to the 31st December 1906. It was made over to the North Western railway administration with effect from the 1st January 1907.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Kalka to Simla station	9-11-08	59-44	
Simla station to Old Ballock Train Office	27-6-09	0-48	59-92

## Details of construction—

**Permanent-way.**—The permanent-way consists of 41½-lb. flat-footed steel rails on wooden sleepers. The 40½-lb. rails are being renewed with 60-lb. flat-footed rails.

**Ballast.**—The line is ballasted with stone.

**Fencing.**—The line is fenced only along the Kalka camping ground and through the outskirts of the town of Kalka.

**Curves.**—Most of the curves are compound, the limiting radius being 120 feet.

**Gradients.**—The ruling gradient is 1 in 33.

## Contract—

As noted under 8 (a), North Western railway (5' 6" gauge).

**Rates and fares.**—May be varied within the limits of certain fixed maxima and minima subject to certain special conditions regarding charges for tunnels.

Statistics of working (Those for the periods prior to 1906 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State pertaining to each calendar year.	Remarks.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1906	59-44	1,77,95,588	7,64,322	3,07,125	1-73	5,90,655	-2,83,530	The decrease in net earnings in 1910 is mainly due to renewals of permanent-way with 60-lb. rails and charges for special renewals amounting to Rs. 2,04,056.	247	59-62
1907	59-44	1,76,82,568	9,25,979	4,05,368	2-29	5,83,663	-1,78,295		300	56-22
1908	59-44	1,83,44,085	9,64,628	2,90,131	1-58	5,67,129	-2,76,998		312	68-92
1909	59-92	1,85,14,819	9,81,389	2,89,679	1-27	5,81,632	-3,41,953		316	75-58
1910	59-92	1,94,24,591	10,80,947	36,042	0-18	6,03,907	-5,67,865		331	96-50
1911	59-92	1,96,91,570	11,54,432	3,87,867	1-71	6,22,427	-2,84,560		370	70-73

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 8 NORTH WESTERN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (n)

## 8 (k) Kohat-Thal railway (2' 6" gauge)—

Originally the line was on the 2' 6" gauge from Khushalgarh, from which place to Kohat it was converted into 5' 6" gauge and merged in the North Western railway proper in 1903.

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Kohat to Thal . . . . .	1-4-03	61.75	61.75

## Details of construction—

*Permanent-way.*—The line is laid partly with 25-lb. and partly with 21-lb. rails, partly on wooden and partly on steel sleepers.*Ballast.*—The line is ballasted throughout with broken stone.*Fencing.*—The line is unfenced.*Curves.*—The sharpest curve is of 239 feet radius.*Gradients.*—The ruling gradient is 1 in 100.

## Contract—

As noted under 8 (a), North Western railway (5' 6" gauge).

## Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902 . . . . .	29.79	49,49,378	29,225	9,888	0.19	31	67.88
1903 . . . . .	31.73	56,70,709	1,33,532	—89,560	...	34	174.56
1904 . . . . .	31.73	60,16,204	1,61,437	—1,97,563	...	34	222.36
1905 . . . . .	31.73	61,62,394	1,89,445	—1,25,715	...	33	166.36
1906 . . . . .	31.73	61,72,723	2,39,257	—1,04,516	...	50	143.68
1907 . . . . .	31.73	61,72,701	2,28,199	—1,69,984	...	43	174.49
1908 . . . . .	61.75	42,64,510	1,06,963	—3,50,398	...	33	427.59
1909 . . . . .	61.75	42,68,969	1,04,952	—2,34,978	...	33	393.69
1910 . . . . .	61.75	42,77,931	1,03,605	—1,36,316	...	32	251.57
1911 . . . . .	61.75	42,18,828	1,14,485	—1,67,680	...	36	246.64

## 8 (l) Nowshera-Durgai railway (2' 6" gauge)—

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Nowshera to Durgai . . . . .	1-1-01	40.25	40.25

## Details of construction—

*Permanent-way.*—The permanent-way consists of 35-lb. flat-footed steel rails laid partly on wooden and partly on steel sleepers.*Ballast.*—The line is ballasted throughout with broken stone.*Fencing.*—The line is unfenced.*Curves.*—The sharpest curve has a radius of 250 feet.*Gradients.*—The ruling gradient is 1 in 100.

## Contract—

As noted under 8 (a), North Western railway (5' 6" gauge).

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this Appendix.]

Number Main head 8  
Sub-heads (a) to (n) **NORTH WESTERN RAILWAY SYSTEM—concl'd.****8(l) Nowshera-Durgai railway (2' 6" gauge)—concl'd.**

Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (b) lines open and (c) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
1901 . . .	Miles. 40·25	Rs. 17,97,886	Rs. 95,087	Rs. —60,702	...	Rs. 45	163·87
1902 . . .	40·25	24,92,716	1,06,949	—55,905	...	51	152·27
1903 . . .	40·25	24,19,651	1,10,722	—1,848	...	53	101·67
1904 . . .	40·25	25,08,059	1,45,118	3,963	0·16	69	97·29
1905 . . .	40·25	25,53,071	1,41,656	—11,574	...	68	108·17
1906 . . .	40·25	25,70,096	1,50,872	11,371	0·44	72	92·46
1907 . . .	40·25	25,76,543	1,73,232	9,924	0·39	83	94·37
1908 . . .	40·25	25,99,122	1,98,567	28,729	1·10	95	85·53
1909 . . .	40·25	25,92,909	2,04,475	5,747	0·23	98	97·19
1910 . . .	40·25	25,93,397	2,25,044	29,291	1·12	107	88·98
1911 . . .	40·25	26,01,859	2,29,148	37,586	1·44	109	83·62

**8(m) Jullundur Doab railway (5' 6" gauge)—**

This line was sanctioned for construction by the Southern Punjab Railway Company as an extension of the Southern Punjab railway.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
<b>Main Line—</b> Ferozepur Cantonment to Jullundur City (sanctioned on 2nd June 1911)	...	73·14	
<b>Branch—</b> Lohian to Phillaur (sanctioned on 2nd June 1911)	...	39·89	
			113·03

**8(n) Trans Indus (Kalabagh-Bannu) railway (2' 6" gauge)—**

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Kalabagh to Bannu (sanctioned on 30th December 1909)	...	88·66	88·66

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this Appendix.]

Number Main head 9 **ODDH AND ROHILKHAND RAILWAY SYSTEM—**  
Sub-heads (a) to (c)

Lines comprised in the system.—The Oudh and Rohilkhand railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Oudh and Rohilkhand railway { 5' 6" gauge) 1,431.99 } { 3' 3 1/2" gauge) 2.18 }	1,434.17	235.26	1,669.43
(b) Hardwar-Dabra railway (5' 6" gauge)	32.04	...	32.04
(c) Cawnpore-Burhwal link (3' 3 1/2" gauge)	79.60	...	79.60
<b>Total</b>	<b>1,545.81</b>	<b>235.26</b>	<b>1,781.07</b>

## Running powers—

## Home lines over Foreign lines:—

Ghaziabad to Delhi, East Indian railway, granted for passenger and goods trains but exercised for the former only. 18.00

Meerut City to Meerut Cantonment, North Western railway, for passenger trains only . . . . . 2.75

**Total . . . . . 15.75**

## Foreign lines over Home lines:—

Great Indian Peninsula railway at Cawnpore, for passenger and goods trains . . . . . 0.86

" " " " Cawnpore to Lucknow, for passenger trains only . . . . . 44.63

East Indian railway, Moghal Sarai to Benares Cantonment, for certain passenger trains only . . . . . 10.00

**. . . . . 55.49**

Bengal and North-Western railway, Cawnpore to Aishbagh, 45.03 miles, and Daliganj to Burhwal, 34.57 miles (Cawnpore-Burhwal link, 3' 3 1/2" gauge) } 79.60

" " " " Benares Cantonment to Benares City . . . . . } for passenger and goods trains. 2.18

Rohilkhand and Kumaon railway, over Ramganga bridge between Bareilly and Basharatganj. } 0.52

" " " " " " Dalpatpur and Moradabad } 0.40

**. . . . . 82.70**

## 9 (a) Oudh and Rohilkhand railway (5' 6" gauge)—

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 and Company connects the Rosa Sugar factory with Rosa station on the Oudh and Rohilkhand railway. This tramway is 3.25 miles long and is worked by cattle power. It is used for goods traffic only.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
<b>Main line—</b>					
Moghal Sarai to mile 8.55	22-12-62	3.55			
Mile 8.55, south of the Dufferin bridge, to Kasbi (Benares Ganges) station.	1-10-87	4.25			
Kasbi (Benares Ganges) station to Benares Cantonment.	18-6-83	1.50			
Benares Cantonment to Rae Bareilly	4-4-93	136.36			
Rae Bareilly to Lucknow	18-10-93	49.56			
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 Pitambarpur	8-8-73	32.00			
Pitambarpur to Bareilly	1-11-73	13.00			
Bareilly to Moradabad (chord line via Rampur).	8-8-94	56.07			
Moradabad to Nagina	8-10-84	47.25			
Nagina to Najibabad	1-4-85	18.74			
Najibabad to Saharanpur	1-1-86	58.25			
			<b>518.49</b>		
<b>Benares-Lucknow loop—</b>					
Benares Cantonment to Shahganj	5-1-74	56.08			
Shahganj to Bilwai	1-5-74	7.00			
Bilwai to Malipur	17-4-74	9.00			
Malipur to Akbarpur	2-8-74	12.00			
Akbarpur to Fyzabad	10-6-78	37.85			
Fyzabad to Barsa Banki	23-11-72	62.00			
Barsa Banki to Lucknow	1-1-72	17.00			
			<b>300.88</b>		
<b>Bareilly-Moradabad loop—</b>					
Bareilly to mile 5	22-12-73	5.00			
Mile 5 to Aonla	1-11-73	11.00			
Aonla to Chandausi	10-6-73	27.00			
Chandausi to Moradabad	28-10-72	27.50			
			<b>70.50</b>		
<b>CARRIED OVER</b>				<b>789.87</b>	

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this Appendix.]

## Number Main head 9 OUDH AND ROHILKHAND RAILWAY SYSTEM—contd.

Sub-heads (a) to (c)

## 9 (a) Oudh and Rohilkhand railway (5' 6" gauge)—contd.

Progress in opening—concl'd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	REMARKS.
Brought forward				789.87	
<b>Branches on the main line—</b>					
<b>Cawnpore branch—</b>					
Lucknow to Cawnpore	23-4-87	42.00			
Left bank of the Ganges to junction with the East Indian railway at Cawnpore	15-7-75	8.23			
Passenger approach to the East Indian railway at Cawnpore	21-2-88	0.23		45.45	
<b>Balawan-Madhoganj branch—</b>					
Balawan to Madhoganj	20-12-03	14.50		14.50	
<b>Madhoganj-Sandi extension—</b>					
Madhoganj to Bilgram	15-11-09	7.09			
Bilgram to Sandi	9-3-10	9.38		17.05	
<b>Balawan Sitapur branch—</b>					
Balawan to Mirrikh	9-2-10	22.44			
Mirrikh to Sitapur	5-4-10	14.84		37.28	
<b>Rosa-Sitapur branch—</b>					
Rosa to Sitapur City	18-6-10	49.28			
Sitapur City to Sitapur Cantonment	2-2-11	2.28		51.50	
<b>Moradabad-Ghaziabad branch—</b>					
Moradabad to Gajroula	1-4-00	38.40			
Gajroula to Ghaziabad	25-11-00	58.37		86.77	
<b>Hapur-Meerut branch—</b>					
Hapur to Meerut	7-11-04	18.09		18.09	
<b>Kotdwara branch—</b>					
Najibabad Junction to the right bank of the Koh river opposite Kotdwara	24-12-96	15.19		15.19	
<b>Hardwar branch—</b>					
Lhakar Junction to the left bank of the Ganges Canal near Jawalapur	1-1-86	18.58			
Left bank of the Ganges Canal near Jawalapur to Hardwar	20-8-86	8.58		17.06	
<b>Branches on Benares-Lucknow loop—</b>					
<b>Allahabad-Fyzabad branch—</b>					
Fyzabad to Sultanpur	1-2-04	35.50			
Sultanpur to Siwait <sup>a</sup>	1-7-03	47.05			
Siwait to Phaphaman	20-1-04	3.27			
Phaphaman to Allahabad	1-1-05	7.00		92.82	<sup>a</sup> Excluding 2.45 miles, between Paritabgarh and Chibila, which is a part of the main line.
<b>Allahabad-Jaunpur branch—</b>					
Phaphaman to Mariahu	18-6-06	47.51			
Mariahu to Zafarabad	1-1-07	10.37		58.18	
<b>Bahramghat branch—</b>					
Bara Banki to Bahramghat	20-11-72	21.52†		21.52	†Of this the length from Bahawal to Bara Banki, 16.79 miles, is mixed (5' 6" and 3' 3½" gauge).
<b>Branches on the Bareilly-Moradabad loop—</b>					
<b>Aligarh branch—</b>					
Chandauli to Rajhat Narora	28-10-72	30.48			
Rajhat Narora to Aligarh	1-2-72	30.12		60.60	
<b>Allahabad-Ras Bareilly Cawnpore branch—</b>					
Phaphaman to Ras Bareilly	2-11-11	68.90			
Daryapur to Dalman	2-11-11	15.38		84.28	
<b>Gajroula-Chandpur branch—</b>					
Gajroula to Chandpur	7-6-11	21.88		21.88	
<b>3' 3½" gauge—Benares City branch—</b>					
Benares Cantonment (Oudh and Rohilkhand) to Benares City (Bengal and North-Western)	1-4-99	2.18		2.18	
<b>TOTAL LENGTH OPEN</b>				1,434.17	
<b>Under construction or sanctioned for construction—</b>					
<b>Allahabad-Ras Bareilly-Cawnpore railway—</b>					
Unahar to Unah	1-2-12	69.08			
Akbarpur to Tanda (sanctioned on 20th September 1910)		11.07			
Dhaki to Sambal (sanctioned on 12th October 1910)		14.64		94.79	
<b>Cawnpore-Banda railway—</b>					
Cawnpore to Khirada (sanctioned on 8th February 1911)		75.93			
Sumerpore to Belatal (sanctioned on 8th February 1911)		64.55		140.47	235.26
<b>Total length open and under construction or sanctioned</b>				1,669.43	
<b>DOUBLE LINE—</b>					
Lucknow to Kakori	11-10-09	8.33		8.33	

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this Appendix.]

Number <sup>Main head 9</sup> <sub>Sub-heads (a) to (c)</sub> OUDH AND ROHILKHAND RAILWAY SYSTEM—contd.

9 (a) Oudh and Rohilkhand railway (5' 6" gauge)—contd.

## Details of construction—

**Permanent-way.**—The main line, which was laid with 75-lb. flat-footed steel rails on cast-iron pot sleepers, is being relaid with 90-lb. flat-footed steel rails, British Standard, on wooden sleepers and about 230 miles are practically complete. The pot sleepers in the main line have all been replaced by wooden sleepers. The Benares-Lucknow loop is laid throughout with 75-lb. flat-footed steel rails on cast-iron pot sleepers. On most of the branches the rails are 75-lb. flat-footed steel. The Bahramghat branch is laid with 60-lb. steel rails, and Madhoganj-Sandi extension partly with 60-lb. flat-footed iron and partly with 60-lb. steel rails.

The Allahabad-Rae Bareli-Cawnpore branch is laid with 90-lb. flat-footed steel rails, British Standard, on wooden sleepers.

The sleepers are of the following types:—Stamped steel bowls, cast-iron pots (Fowler's patent box, Walton's, Kederstedts and M.C.), steel trough and wood (sal, deodar and Australian hard wood). There are a few wrought-iron saddle back sleepers still in the Kotdwara branch.

**Ballast.**—The main line is ballasted throughout with kunkur, stone, shingle and broken brick. The branches are ballasted as follows:—the Bahramghat, Chandausi and Hapur-Meerut branches, with sand covered with shingle, kunkur or broken brick; the Allahabad-Jaunpur branch, with sand covered with kunkur, stone or brick; loop line, with stone and sand covered with kunkur and brick; the Allahabad-Fyzabad and Allahabad-Rae Bareli-Cawnpore branches, with stone and kunkur; the Gajroula-Chandpur branch, with sand; the Kotdwara and Aligarh branches, with shingle; the Hardwar branch, with stone; the Ghaziabad-Moradabad branch, with shingle, stone and brick; the Sandi branch, with earth and sand and the Cawnpore branch, with kunkur.

**Fencing.**—The line is fenced throughout with the exception of the Balamau-Sandi, Rosa-Sitapur, Gajroula-Chandpur, Hapur-Meerut and Kotdwara branches and a portion of the Allahabad-Jaunpur branch.

**Curves.**—The sharpest curve on the line is of 1,000 feet radius.

**Gradients.**—The ruling gradient of the railway is 1 in 400, except for the Kotdwara branch where it is 1 in 100 and for the Lhaksar-Saharanpur section of the main line where it is 1 in 150.

## Contracts—

Nil. The railway is owned and worked by the State.

**Rates and fares.**—Certain maxima and minima have been fixed by the Government, between the limits of which the Railway Administration can vary the rates and fares quoted for goods and coaching traffic.

Statistics of working (Those for the periods prior to 1889 will be found in Appendix 38 to the Report for 1907).—

TABLE I.						TABLE II.			
Includes the Cawnpore-Buzwal (5' 3 1/2" gauge) Link, 9 (c).									
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1889	692.55	9,22,32,226	75,39,693	42,04,076	4.56	49,71,808	-7,67,622	209	44.24
1890	692.55	9,27,59,280	78,81,396	37,54,478	4.05	44,23,109	-6,68,681	205	49.14
1891	692.55	9,28,38,358	83,64,209	49,42,458	5.82	47,25,668	+2,16,792	238	42.29
1892	692.55	9,51,44,770	85,42,836	50,16,829	5.27	52,79,411	-2,63,082	237	41.23
1893	741.11	10,09,17,292	87,15,926	50,17,053	4.97	55,01,058	-4,84,005	239	43.44
1894	796.64	10,28,87,184	1,05,18,838	57,36,188	5.58	63,11,201	-5,75,068	262	45.47
1895	797.18	10,65,05,148	1,02,94,880	52,55,948	4.98	64,26,370	-11,70,422	248	48.95
1896	830.15	10,92,69,483	86,97,078	43,50,907	3.98	61,30,729	-17,79,822	209	49.97
1897	891.97	11,44,19,239	85,18,858	36,98,778	3.23	59,77,486	-22,80,708	186	56.59
1898	1,020.36	11,66,56,000	98,51,590	58,07,727	4.55	59,76,247	-5,68,520	190	46.12
1899	1,030.36	12,23,50,210	1,11,38,990	60,76,595	4.97	59,75,292	+1,01,398	208	46.45
1900	1,101.56	12,57,60,656	1,15,16,182	55,91,727	4.45	62,32,185	-6,86,458	309	51.44
1901	1,118.94	12,89,85,161	1,32,54,991	72,20,007	5.60	68,12,044	+9,07,963	331	45.63
1902	1,119.24	13,66,82,842	1,31,65,792	64,11,836	4.89	64,79,108	-67,767	230	51.39
1903	1,180.79	14,54,28,164	1,39,49,922	73,81,862	4.97	68,40,958	+3,90,909	232	48.16
1904	1,237.65	14,96,63,929	1,52,98,306	71,33,117	4.76	70,54,120	+78,997	241	53.37
1905	1,244.65	15,87,92,910	1,53,85,918	68,48,667	4.52	71,68,481	-8,24,764	238	53.77
1906	1,292.16	15,71,99,781	1,64,97,929	78,15,781	4.97	75,66,010	+2,49,721	249	52.54
1907	1,302.83	16,40,20,116	1,81,93,069	65,62,413	4.00	70,99,564	-5,87,151	209	63.95
1908	1,302.83	17,17,49,978	1,61,51,543	50,29,158	2.93	74,78,210	-24,44,057	239	63.86
1909	1,310.52	17,78,51,571	1,61,86,594	45,93,282	2.88	76,42,849	-30,49,567	238	72.76
1910	1,406.75	18,58,11,961	1,83,08,844	88,80,833	4.78	78,84,486	+10,46,346	258	51.48
1911	1,513.77	19,51,23,398	2,08,89,454	1,04,83,468	5.08	80,09,993	+24,78,696	266	49.56

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 9</sup> <sub>Sub-heads (a) to (c)</sub> OUDH AND ROHILKHAND RAILWAY SYSTEM—contd.

## 9 (b) Hardwar-Dehra railway (5' 6" gauge)—

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Hardwar to Dehra . . . . .	1-9-00	32-04	32-04

## Details of construction—

*Permanent-way.*—The permanent-way consists of 75-lb. flat-footed I. S. R. steel rails on deodar, hard wood and Australian sleepers.

*Ballast.*—The line is ballasted throughout with stone.

*Fencing.*—The line is fenced throughout.

*Curves.*—There are no curves with a radius of less than 1,000 feet.

*Gradients.*—The ruling gradient is 1 in 75.

## Agreement and contract—

Agreement, dated the 6th January 1897, between the Secretary of State and Messrs. Gillanders, Arbuthnot and Company of Calcutta (called "the Promoters"), as to the grant of a provisional concession for the construction of the Hardwar-Dehra Branch railway.

Contract, dated the 26th March 1897 (called the scheduled contract), between the Secretary of State and the Hardwar-Dehra Railway Company, as to the construction, maintenance and working of the Hardwar-Dehra Branch railway.

## Main provisions of agreement and contract—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—The line is the property of the Hardwar-Dehra Branch Railway Company, and was constructed, from funds supplied by the Company, by the Government, who maintain, stock and work it through the agency of the Oudh and Rohilkhand railway.

The Government guarantees interest at 3 per cent per annum on the capital expenditure, and also undertakes to allow the Company, in any year in which it does not receive the minimum dividend of 3 per cent from the earnings of the line, the sum of Rs. 3,600 for such year for or towards management and office expenses.

(iii) *Terms of working.*—For maintenance, provision of rolling-stock and working the Oudh and Rohilkhand Railway Administration retains 50 per cent of the gross earnings of the Branch line.

(iv) *Distribution of profits.*—The surplus profits in each calendar year remaining after repayment to the Government of the amount of the guaranteed interest for the year are to be divided equally between the Government and the Company.

(v) *Rates and fares.*—To be agreed upon from time to time between the Government and the working agency, provided that they shall be within one and a half times the maximum and minimum rates and fares for the time being in force on the Oudh and Rohilkhand railway. The classification of goods to be in conformity with that from time to time in force on the Oudh and Rohilkhand railway.

(vi) *Special obligations as to the conveyance of.*—

- (a) Mails, troops, high Government officials and Government stores.— } NIL  
 (b) Government bullion and coin, and the persons in charge thereof.— }

(vii) *Power of the Government to determine contract.*—The Government may determine the contract, on twelve months' notice, either on the 31st December 1919 or on the 31st December in the last year of any subsequent period of ten years, by paying to the Company a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years, provided that such sum shall not exceed by more than 20 per cent, nor is less than, the total capital expenditure.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—None specified.



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 9</sup> <sub>Sub-heads (a) to (c)</sub> OUDH AND ROHILKHAND RAILWAY SYSTEM—concl'd.

## 9 (b) Hardwar-Dehra railway (5' 6" gauge)—concl'd.

## Statistics of working—

TABLE I.										TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Per centage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) attributable to each calendar year.	Gain or loss to the State pertaining to each calendar year.	REMARKS.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(1)	(2)
	Miles	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	
1900.	32-04	25,67,093	1,60,485	80,243	3-13	—	—	—	Interest up to 1900 was charged to capital and net earnings of 1900 were credited to capital in reduction of interest charges.	115	50-00
1901.	32-04	23,12,301	2,18,456	1,06,728	3-30	84,220	11,254	+11,254		128	50-00
1902.	32-04	23,36,486	2,52,495	1,26,248	4-45	85,048	20,597	+20,597		152	50-00
1903.	32-04	28,44,541	2,62,719	1,31,360	4-62	85,260	23,050	+23,050		158	50-00
1904.	32-04	29,12,992	2,63,612	1,31,806	4-58	86,777	22,515	+22,514		158	50-00
1905.	32-04	29,30,650	3,13,476	1,56,738	5-37	87,590	34,574	+34,574		188	50-00
1906.	32-04	29,24,224	3,34,110	1,67,055	5-71	87,688	39,693	+39,684		201	50-00
1907.	32-04	29,27,942	3,86,565	1,93,283	6-60	87,822	52,730	+52,731		232	50-00
1908.	32-04	29,44,092	3,76,334	1,88,167	6-39	88,165	49,991	+49,991		226	50-00
1909.	32-04	29,65,357	3,68,624	1,84,312	6-21	88,734	47,789	+47,789		221	50-00
1910.	32-04	29,85,633	4,04,443	2,02,221	6-77	89,548	56,337	+56,336		243	50-00
1911.	32-04	30,10,716	4,31,161	2,15,181	7-16	90,017	62,783	+62,783		259	50-00

## 9 (c) Cawnpore-Burhwal (3' 3½" gauge) link—

The construction of the Cawnpore-Burhwal (3' 3½" gauge) link was sanctioned as a part of the project for linking up the 3' 3½" gauge systems of Northern India.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	REMARKS.
Burhwal to Daliganj . . . . .	24-11-96	36-57		*Including the length Burhwal to Bara Banki, 16-73 miles, laid on a mixed (5' 6" and 3' 3½") gauge.
Aishbagh to Cawnpore . . . . .	25-4-97	45-03	79-60	

## Details of construction—

*Permanent way.*—Where the line is not mixed gauge it is laid with new 50-lb. steel rails on sal and deodar sleepers.

*Ballast.*—The line is ballasted throughout with kunkur, stone or shingle.

*Fencing.*—The line is fenced throughout.

*Curves.*—The sharpest curve has a radius of 573 feet.

*Gradients.*—The ruling gradient is 1 in 400.

## Contract—

The line is owned by the State. The Bengal and North-Western Railway Company exercises running powers over it under an agreement with the Oudh and Rohilkhand railway, dated the 21st February 1902, which provides that the Company will haul its trains and traffic over the link and pay to the Oudh and Rohilkhand railway 80 per cent, which has, with effect from the 1st July 1905, in pursuance of Railway Board's letter No. R. T. 178, dated the 30th June 1905, been reduced to 75 per cent of the gross receipts arising therefrom.

## Statistics of working—

Included with the Oudh and Rohilkhand railway [9 (a)].

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 10</sup> <sub>Sub-heads (a) to (k)</sub> SOUTH INDIAN RAILWAY SYSTEM—

Chairman.—Sir Henry Kimber, Bart., M.P.

Managing Director.—N. G. Priestley, Esq.

Offices.—91, York Street, Westminster, S.W.

With effect from the 1st January 1908 the Jalarpet-Mangalore section of the former Madras railway including the Tirupattur-Krishnagiri, Morappur-Dharmapuri and the Nilgiri railways was incorporated in the undertaking of the South Indian Railway Company, who, from the same date, relinquished and made over to the amalgamated Madras and Southern Mahratta Railway Company the 3' 3½" gauge lines from Katpadi to Dharmavaram and from Pakala to Gudur, and obtained running powers over the Madras-Bangalore section of the Madras and Southern Mahratta railway. The Shoranur-Cochin Native State line was, on the same date, also transferred from the former Madras Railway Company to the South Indian Railway Company for working.

Lines comprised in the system.—The South Indian railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) South Indian railway (5' 6" gauge)	445.94	—	445.94
(b) South Indian railway (3' 3½" gauge)	376.80	3.19	379.99
(c) Nilgiri railway (3' 3½" gauge)	28.96	—	28.96
(d) Peralam-Karaikkal railway (3' 3½" gauge)	14.65	—	14.65
(e) Pondicherry railway (3' 3½" gauge)	7.85	—	7.85
(f) Shoranur-Cochin railway (3' 3½" gauge)	64.75	—	64.75
(g) Tanjore District Board railway (3' 3½" gauge)	103.38	—	103.38
(h) Tinnevely-Quilon (Travancore) railway (British section) (3' 3½" gauge)	50.41	—	50.41
(i) Tinnevely-Quilon (Travancore) railway (Native State section) (3' 3½" gauge)	58.05	—	58.05
(j) Morappur-Dharmapuri railway (2' 6" gauge)	18.58	51.87	70.45
(k) Tirupattur-Krishnagiri railway (2' 6" gauge)	25.38	—	25.38
Total	1,684.68	58.06	1,752.74

Running powers—

*Home line over foreign line.*

Madras to Bangalore, Madras and Southern Mahratta railway, for passenger and goods trains

219.00

## 10 (a) South Indian railway (5' 6" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<i>Main line—</i>				
West outer signal at Jalarpet to Tirupattur	23-5-60	4.65		
Tirupattur to Salem	1-2-61	69.98		
Salem to Sankaridrug	1-12-61	23.68		
Sankaridrug to Podanur	12-5-62	71.18		
Podanur to Pattambi	14-4-62	64.96		
Pattambi to Kuttippuram	23-9-61	11.50		
Kuttippuram to Tirur	1-5-61	9.39		
Tirur to Kadalundi	12-8-61	16.31		
Kadalundi to Calicut	2-1-68	9.25		
Calicut to Badagara	1-10-01	28.95		
Badagara to Tellicherry	1-5-02	13.50		
Tellicherry to Cannanore	20-5-03	15.00		
Cannanore to Azhikal	15-3-04	4.10		
Azhikal to Hosdrug	21-8-06	34.52		
Hosdrug to Kasaragod	1-10-06	14.22		
Kasaragod to Kumbala	17-11-06	7.62		
Kumbala to Mangalore	3-7-07	20.91	417.72	
<i>Nilgiri branch—</i>				
Podanur to Coimbatore	1-2-73	3.78		
Coimbatore to Mettupalaiyam	31-8-73	31.97	35.75	
<i>Palghat branch—</i>				
Olavakkot to Palghat	2-1-88	2.47	2.47	445.94

Details of construction—

*Permanent way.*—The rails are 75-lb. and 80-lb. bull-headed, 75-lb. double-headed and 75-lb. and 60-lb. flat-footed steel and 75-lb. double-headed iron. The sleepers are cast iron pots, pynkado, sál and jarrah wood.

*Ballast.*—The line is ballasted with stone and sand, chiefly the former.

*Fencing.*—The line is fenced throughout.

*Curves.*—The sharpest curve is of 700 feet radius.

*Gradients.*—The ruling gradient of the greater part of the line is about 1 in 100, except on Mallapuram Ghat where it is 1 in 74 with a 1 in 100 banking; on the Walayar Ghat where it is 1 in 66 with a 1 in 62 banking; on the Azhikal-Mangalore section where it is 1 in 90; and on the Podanur-Mettupalaiyam section where it is 1 in 80.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 10 SOUTH INDIAN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (k)

## 10 (a) South Indian railway (5' 6" gauge)—contd.

## Contract—

Up to and including the 31st December 1907 the line formed an integral part of the former Madras railway. With effect from the 1st January 1908 it was, in terms of the contract of the 2nd March 1909, between the Secretary of State and the South Indian Railway Company, made over to the Company to be worked and maintained as an integral part of the undertaking referred to in the principal contract of the 24th November 1890, the main provisions of which are noted under 10 (b), South Indian railway, 3' 3½" gauge.

## Statistics of working—

Calendar year.	TABLE I.					TABLE II.	
	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	445.94	6,42,27,971	57,25,148	25,25,034	3.93	247	55.90
1909	445.94	6,43,58,255	62,30,385	28,18,753	4.38	269	54.76
1910	445.94	6,61,74,064	63,39,154	24,95,538	3.77	273	60.38
1911	445.94	6,57,73,175	69,56,156	38,13,140	5.30	300	45.26

## 10 (b) South Indian railway (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>MADRAS-TUTICORIN SECTION—</b>				
<i>Main line—</i>				
Madras Beach Junction to Madras Beach	15-1-00	0.11		
Madras Beach old to Park	1-1-79	1.82		
Madras (Park) to Tindivanam	1-9-76	76.05		
Tindivanam to Cuddalore (Old town)	1-1-77	52.01		
Cuddalore (Old town) to Porto Novo	1-7-77	17.15		
Porto Novo to Chidambaram	1-10-78	6.78		
Chidambaram to Coleroon	1-7-79	4.57		
Coleroon to Shiyali	1-1-78	6.06		
Shiyali to Mayavaram	1-7-77	12.24		
Mayavaram to Tanjore	15-2-77	48.76		
Tanjore to Trichinopoly Junction	11-3-62	31.14		
Trichinopoly Junction to Madura	1-9-75	96.04		
Madura to Tuticorin	1-1-76	96.71		
Tuticorin to Ereshore	7-8-99	0.41		
			446.39	
<i>Branches—</i>				
<i>Arkonam branch—</i>				
Chingleput to Walajabad	1-8-80	13.66		
Walajabad to Conjeevaram	1-1-81	7.94		
Conjeevaram to Arkonam	8-5-65	17.65		
			39.25	
<i>Pondicherry branch—</i>				
Villuparam to the Gingee river, inclusive of the bridge over the river	15-12-79	16.47		
			16.47	
<i>Nagore branch—</i>				
Tanjore to Tiruvallur	2-12-61	33.33		
Tiruvallur to Negapatam	15-7-61	14.33		
Negapatam to Nagore	1-12-99	4.67		
			52.33	
<i>Pulliarpati Quarry branch—</i>				
Tanjore to Pulliarpati quarry (buffer end)	1-7-98	4.57		
			4.57	
<i>Erode branch—</i>				
Trichinopoly Junction to Fort	11-3-62	2.52		
Trichinopoly Fort to Karur	3-12-66	44.65		
Karur to Kodumudi	1-7-67	16.71		
Kodumudi to Erode	1-1-68	23.83		
			87.71	
<i>Pamban branch—</i>				
Madura to Mandapam	1-8-62	69.50		
Pamban to Rameswaram	1-9-66	6.96		
Rameswaram to Dhanushkodi	10-12-68	11.30		
			107.75	
<i>Tinnevely branch—</i>				
Maniyachi to Tinnevely	1-1-78	18.00		
			18.00	
<i>Wharf branch—</i>				
Cuddalore (Old town) to Wharf	7-8-99	1.54		
			1.54	
<i>Copper Quarry branch—</i>				
Junction with main line to Copper Quarry	15-4-00	0.86		
			0.86	
	Carried over	...	775.48	

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 10</sup> <sub>Sub-heads (a) to (k)</sub> SOUTH INDIAN RAILWAY SYSTEM—contd.

10 (A) South Indian railway (3' 3½" gauge)—contd.

## Progress in opening—contd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<i>Salt branch—</i> Tuticorin to buffer end of Livingepuram	...	...	775.48	
<i>Brought forward</i>	12-11-99	2.39	2.39	777.87
<i>VILLUPURAM-KATPADI SECTION—</i> <i>Main line—</i> Villupuram to Tiruvannamalai Tiruvannamalai to Katpadi	17-11-99 18-3-91	41.80 37.13	98.93	98.93
<b>TOTAL LENGTH OPEN</b>	...	...	...	876.80
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b> Mandapam to Pamban (sanctioned on 16th September 1904)	...	3.19	3.19	3.19
<b>TOTAL LENGTH OPEN AND UNDER CONSTRUCTION OR SANCTIONED</b>	...	...	...	879.99

## Details of construction—

*Permanent-way.*—The rails in use are 50-lb. and 52-lb. bull-headed steel, 56-lb. and 41½-lb. flat-footed steel, 40-8-lb. flat-footed and 68-lb. double-headed iron. The sleepers are cast iron pot, steel transverse, and sál, pynkado, west coast teak, jarrah and irul wood.

*Ballast.*—The line is ballasted throughout, partly with broken stone and partly with laterite and gravel interspersed.

*Fencing.*—The line is fenced, with the exception of the Villupuram-Katpadi, Madura-Mandapam and Pamban-Dhanushkodi sections which are fenced only at stations.

*Curves.*—The sharpest curve is of 500 feet radius.

*Gradients.*—The ruling gradient is 1 in 200, except on the length between Madras Beach and Fort and on the Villupuram-Katpadi, Trichinopoly-Madura and Karur-Erode sections where it is 1 in 100.

## Contracts—

Dated the 24th November 1890 (called the principal contract), between the Secretary of State and the South Indian Railway Company, for maintaining and working from the 1st January 1891, the railways which on the 31st December 1890 formed the undertaking of the former Company and completing and working the Villupuram-Guntakal railway.

Dated the 27th June 1901 (supplemental to the principal contract), between the Secretary of State and the South Indian Railway Company, relating to the construction and working of Pamban and Travancore branches.

Dated the 8th April 1908 (supplemental to the contract of 1890), between the Secretary of State and the South Indian Railway Company, as to the adoption of 1s. 4d. per rupee as the "prescribed" rate of exchange.

Dated the 2nd March 1909 (supplemental to the principal contract), between the Secretary of State and the South Indian Railway Company, providing for the relinquishment from 1st January 1908 of the section of the Company's line north of Katpadi and the transfer to the Company from the same date of the Jalarpet-Mangalore section of the former Madras railway.

Dated the 26th October 1909 (supplemental to the principal contract), between the Secretary of State and the South Indian Railway Company, for the construction and working as an integral part of the undertaking of the Dharmapuri-Hosur extension of the Morappur-Dharmapuri railway.

Dated the 31st December 1910, between the Secretary of State and the South Indian Railway Company, supplemental to and continuing with further modifications, with effect from 1st January 1911, the principal contract of the 24th November 1890 as modified by previous supplemental contracts.

## Main provisions of contracts—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*—Guarantee of 3½ per cent in sterling on the Company's share capital of £1,000,000, and on any paid up stock or share (other than preference) capital thereafter issued by the Company with the sanction of the Government (not including premia paid thereon).

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number 

Main head 10
Sub-heads (a) to (k)

 SOUTH INDIAN RAILWAY SYSTEM—*contd.*10 (b) South Indian railway (3' 3½" gauge)—*contd.*Main provisions of contract—*contd.*

(iii) *Distribution of profits.*—Under section 60 of the principal contract of the 24th November 1890 as amended by section 25 of the supplemental contract of the 21st December 1910, the net revenue receipts of each half-year are applied, in the following manner and order:—

In payment to Government—

(a) of interest at the rate of 3½ per cent per annum for such half-year, paid by Government under section 41 of the principal contract, *i.e.*, under (ii) above;

(b) of the amount paid by Government in respect of interest for such half-year, upon the sum of £125,000 irredeemable debenture stock of the former Company; upon the debentures for £375,000 and £73,000 respectively issued for the purposes of the Pamban Branch; and upon any debenture stock or debentures or preference stock or shares issued by the Company after the 31st December 1910;

(c) of interest for such half-year at the rate of 3½ per cent per annum on the amount of the Government capital as shown in the Government capital account for the division of such receipts;

and

(d) the residue, if any, is divisible between Government and the Company in the ratio of the average amounts, calculated as prescribed, of the capital contributed by the Government and the Company, the Government capital being the amount shown in the Government Capital Account for division of net revenue receipts and the Company's capital the amounts of its stock and share capital (other than preference capital) paid up or credited as paid up, excluding any premia received, subject to the proviso that if the amount of the Company's share so arrived at should in the combined halves of any of the years 1911, 1912 and 1913 be less than interest for such year at the rate of 10 shillings per cent on its capital, the Government shall make up the deficiency.

(iv) *Rates and fares.*—The Government will from time to time authorise maxima and minima rates, and prescribe the several classes and descriptions of passengers and goods to which such rates shall be respectively applicable, as well as the extent to which, within the authorised maxima and minima, the Company may vary the said rates.

The Company have power to quote through rates and fares for both goods and passengers from the Jalarpet-Mangalore section to the Madras-Bangalore section of the Madras and Southern Mahratta railway system (but not in the reverse direction), divisible between the two companies in mileage proportion without deduction of terminals or other special charges, except for traffic to and from the Nilgiri line the mileage over which is reckoned at twice its actual mileage in the division of such rates. No rate or fare to Madras so quoted should, without the prior sanction of the Government, be higher than that which, for the same class or description of traffic, was in force on the 1st January 1910.

(v) *Special obligations as to the conveyance of.*—

(a) Mails, troops, police, high Government officials and Government stores.—To be conveyed on the same general conditions as on State railways of the same gauge.

(b) Government bullion and coin, and the persons in charge thereof.—To be conveyed at special rates to be approved by Government.

(vi) *Services for any Department of the Travancore Durbar.*—On such portion of the Travancore Branch as runs through the Native State of Travancore, to be performed on the same general conditions as on other 3' 3½" gauge State railways and at rates approved by the Government.

(vii) *Power of Government to determine contract.*—The railway and all its appurtenances are absolutely the property of Government, who may terminate the contract on the 31st December 1945, or at the end of any succeeding fifth year, by giving to the Company in England not less than 12 calendar months' previous notice; also at any time on 6 months' notice should the Company fail to observe its obligations or the undertaking be worked at a loss for not less than three half-years continuously.

On the expiration or determination of the contract the Government is to take possession of the railway and all its appliances, etc., repaying the Company at par its capital of £1,000,000 and any further capital raised by it and paid to Government but excluding any premia paid thereon, and receiving from the Company any unexpended balance of the capital advanced by Government for the purposes of the undertaking as well as for the Travancore Branch.

(viii) *Power of Company to surrender contract.*—Nil.

(ix) *Term of contract.*—55 years, *i.e.*, from 1st January 1891 to 31st December 1945, subject to (vii).

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 10</sup> <sub>Sub-heads (a) to (k)</sub> SOUTH INDIAN RAILWAY SYSTEM—contd.

## 10 (b) South Indian railway (3' 3½" gauge)—concl'd.

Statistics of working (Those for the periods prior to 1891 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.							TABLE II.			
Includes the South Indian (3' 6" gauge), Nilgiri, Morappur-Dharmapuri and Tirupattur-Krishnagiri railways, 10 (a), (c), (j) and (k) from 1908.										
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) attributable to each calendar year.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1891	900.76	7,72,11,806	70,56,756	24,29,625	3.15	85,89,798	70,901	-12,31,012	154	65.47
1892	1,105.19	7,82,83,761	77,14,986	28,58,591	3.65	89,51,093	76,588	-11,74,088	187	63.01
1893	1,041.51	7,63,81,943	80,92,415	31,15,918	4.08	88,53,152	1,41,676	-3,38,310	149	61.50
1894	1,041.51	7,64,13,362	80,46,559	32,83,865	4.30	42,91,812	1,88,099	-11,53,006	148	59.19
1895	1,041.59	7,68,86,604	89,14,647	38,96,987	5.07	42,77,578	2,60,699	-6,41,190	165	56.29
1896	1,041.59	7,67,63,325	89,45,581	40,27,489	5.25	40,60,677	2,96,156	-3,19,344	165	54.93
1897	1,041.59	7,66,46,858	91,81,409	42,96,757	5.61	38,76,142	3,37,792	+ 82,823	170	53.20
1898	1,017.38	7,45,21,878	94,67,581	38,35,537	5.15	37,49,821	2,66,184	-1,80,178	157	54.79
1899	1,030.53	7,53,12,929	94,74,441	39,88,540	5.29	35,56,395	3,01,776	+ 43,371	159	52.99
1900	1,033.63	7,91,95,528	89,04,825	43,97,916	5.76	36,62,984	3,68,699	+ 3,66,223	166	50.61
1901	1,033.63	8,04,49,712	1,01,44,657	54,15,176	6.78	37,23,786	5,43,690	+ 11,47,550	188	46.62
1902	1,123.13	8,18,31,571	1,05,51,072	56,87,510	6.95	34,18,409	5,33,246	+ 13,36,055	189	46.10
1903	1,123.13	8,31,40,803	1,22,14,158	72,76,216	8.75	39,06,079	7,69,547	+ 25,80,590	209	40.43
1904	1,123.13	8,45,16,652	1,25,12,321	69,62,790	8.24	40,55,602	7,16,725	+ 21,90,463	214	44.35
1905	1,123.05	8,63,95,191	1,30,34,476	65,77,320	7.62	40,03,713	6,30,608	+ 19,41,014	221	49.15
1906	1,130.00	8,91,97,645	1,32,75,295	59,92,976	6.61	40,92,723	4,91,261	+ 15,05,973	227	55.61
1907	1,129.85	9,06,35,408	1,41,19,421	71,69,818	7.91	38,76,608	6,71,618	+ 25,21,387	240	49.22
1908	1,395.61	15,07,19,862	2,04,61,326	94,20,016	6.25	46,89,556	6,98,690	+ 40,31,600	232	53.96
1909	1,395.61	15,87,78,715	2,17,41,647	1,01,90,046	6.54	49,53,436	7,41,882	+ 44,93,048	309	53.13
1910	1,395.61	16,06,95,637	2,24,56,591	1,02,34,257	6.36	51,05,888	7,18,217	+ 44,14,952	309	54.43
1911	1,395.61	16,26,91,154	2,40,91,786	1,24,16,673	7.62	53,77,315	8,20,623	+ 63,16,736	344	50.32

## 10 (c) Nilgiri railway (3' 3½" gauge)—

The original Nilgiri Railway Company was registered on the 30th September 1885 with a nominal capital of Rs. 25,00,000, and a contract was executed between the Secretary of State and that Company on the 26th February 1886. The original Company went into liquidation in April 1894, and a new Company was formed in February 1896 to purchase the line from the former Company and supply the capital required to complete it and to construct the proposed extension to Ootacamund. The line from Mettupalaiyam to Coonoor was completed by the new Company and opened for traffic on the 15th June 1899. On the offer of the new Company to sell the line it was purchased by the Government for £235,000 on the 1st January 1903. The extension to Ootacamund was constructed by the Government.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Mettupalaiyam to Coonoor	15-6-99	16.99	
Coonoor to Fernhill	15-9-03	10.86	
Fernhill to Ootacamund	15-10-08	1.11	28.96

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 10</sup> <sub>Sub-heads (a) to (k)</sub> SOUTH INDIAN RAILWAY SYSTEM—contd.

## 10 (c) Nilgiri railway (3' 3½" gauge)—contd.

## Details of construction—

**Permanent-way.**—The permanent-way consists of flat-footed steel rails, 50 lbs. to the yard, laid on pykado sleepers. Between Kallar and Coonoor (12 miles) there is also a central rack rail.

**Ballast.**—Rack section is ballasted with clean broken granite and the Adhesion section with hard gneiss.

**Fencing.**—The line is unfenced throughout.

**Curves.**—The sharpest curve is of 318 feet radius.

**Gradients.**—The ruling gradient is 1 in 12½ on the Rack section and 1 in 25 on the Adhesion section.

## Contract—

The railway was worked by the former Madras Railway Company up to the 31st December 1907 on behalf of the Government. With effect from 1st January 1908 it was made over to the South Indian Railway Company as a part of the Jalarpet-Mangalore section for working as an integral part of their undertaking in terms of the contract of 2nd March 1909 between the Secretary of State and the Company, with the condition that the South Indian Railway Company are not to pay interest on the capital cost of the Coonoor-Ootacamund railway incurred either before or after 1st January 1908.

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	28·96	67,82,028	3,86,030	43,391	0·63	223	87·21
1909	28·96	70,33,241	4,08,791	53,657	0·76	271	86·87
1910	28·96	75,94,023	4,57,097	72,441	0·95	304	83·15
1911	28·96	77,29,506	4,94,851	1,24,632	1·61	329	74·61

## 10 (d) Peralam-Karaikkal railway (3' 3½" gauge)—

The line is partly in British and partly in French territory and was constructed (by the agency of the South Indian Railway Company) with the object of placing the town and port of Karaikkal in communication with the railway system of Southern India.

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Peralam to Karaikkal . . . . .	14-3-98	14·65	14·65

## Details of construction—

**Permanent-way.**—The permanent-way consists of 41½-lb. flat-footed steel rails laid on wooden and steel transverse sleepers.

**Ballast.**—The line is ballasted with laterite.

**Fencing.**—The line is fenced only at stations.

**Curves.**—There are no curves with a radius of less than 1,000 feet.

**Gradients.**—The ruling gradient is 1 in 200.

## Contract—

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

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number  $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (h)}}$  SOUTH INDIAN RAILWAY SYSTEM—contd.

## 10 (d) Peralam-Karaikkal railway (3' 3½" gauge)—contd.

## Main provisions of contract—

- (i) *Land*.—In French territory provided by the Colonial (French) Government free of cost but subject to a land tax as private property; in British territory by the British Government free of cost on condition that the proprietary rights remain vested in the British Government.
- (ii) *Government aid*.—The railway was constructed at cost price by the South Indian Railway Company at the request and on behalf of the Colonial (French) Government, and is worked and maintained by the Company who provide the rolling-stock required for the traffic of the Peralam-Karaikkal-railway.
- (iii) *Terms of working*.—
- (iv) *Distribution of profits*.— } Direction, maintenance and working expenses, excluding the cost of repairing damages due to any extraordinary casualty and new minor works not costing more than Rs. 1,000 on the system, are calculated at the same proportion of the gross receipts of the Peralam-Karaikkal railway as obtains half-yearly on the Company's system, including worked lines, as a whole, plus the cost of repairing damages due to any extraordinary casualty on the branch, 5 per cent of the gross receipts of the Branch for the use of the Company's rolling-stock and 5 per cent per annum for interest on Rs. 30,000 which is taken as representing the Branch line's share of the Company's outlay on revenue and other stores and workshop buildings and machinery.
- From the "net earnings" so arrived at are deducted such sums as according to the rules of the Company's Provident Institution are payable thereto; the balance, being the "net receipts", are paid every half-year to the Colonial (French) Government:
- Provided always that if, at any time, the working of the Peralam-Karaikkal railway involves an actual loss to the Company, the Colonial (French) Government shall make good such loss.
- (v) *Rates and fares*.—To be agreed to between the Company and the Colonial (French) Government, but should not be less than the minima actually in force on the Company's undertaking.
- (vi) *Special obligations as to the conveyance of*.—
- (a) Mails, troops, police, high Government officials and Government stores.— } Not specified.
- (b) Government bullion and coin, and the persons in charge thereof.— }
- (vii) *Power of Colonial (French) Government to determine contract*.— } Determinable by either party
- (viii) *Power of Company to determine contract*.— } on giving to the other 12 months' previous notice expiring on the 30th June or 31st December in any year.
- (ix) *Term of contract, if not determined under (vii) or (viii)*.—Not specified.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (5).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902	14'85	7,23,786	32,736	14,619	2'02	48	55'34
1903	14'85	7,23,786	38,933	19,364	2'74	51	48'98
1904	14'85	7,23,786	36,945	—29,433	...	48	179'68
1905	14'85	7,23,786	36,922	4,406	0'61	48	38'07
1906	14'85	7,23,786	39,035	—4,420	...	51	111'33
1907	14'85	7,23,786	41,168	3,408	1'30	54	77'11
1908	14'85	7,23,786	43,943	14,351	1'38	58	67'32
1909	14'85	7,23,786	46,125	13,590	1'38	61	70'54
1910	14'85	7,23,786	44,070	—517	...	58	101'78
1911	14'85	7,23,786	51,162	17,519	3'43	67	65'76

## 10 (e) Pondicherry railway (3' 3½" gauge)—

The line is in the French territory and was constructed (by the Pondicherry Railway Company under the supervision of the South Indian railway) with the object of placing the town and port of Pondicherry in communication with the railway system of Southern India and of developing the resources of the French territory.

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
East bank of the Gingee river to Pondicherry . . . . .	15-12-79	7'85	7'85



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 10 SOUTH INDIAN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (k)

## 10 (c) Pondicherry railway (3' 3½" gauge)—contd.

## Details of construction—

*Permanent-way.*—The line is laid principally with 41½-lb. flat-footed steel rails on wooden sleepers.*Ballast.*—The line is ballasted with stone.*Fencing.*—The line is fenced.*Curves.*—The sharpest curve is of 495 feet radius.*Gradients.*—The ruling gradient is 1 in 200.

## Agreement—

Agreement, dated the 30th December 1890, between the South Indian Railway Company and the Pondicherry Railway Company, for maintenance and working.

Despatch from the Secretary of State, No. 19-Ry., dated the 17th March 1895, intimating the renewal of the agreement by the parties thereto.

## Main provisions of agreement—

- (i) *Land.*—Not specified.
- (ii) *Government aid.*—The railway (which was constructed by the Pondicherry Railway Company) is maintained, worked and provided with rolling-stock by the South Indian Railway Company as an integral part of their undertaking—except only as to such works required for the accommodation and extension of traffic on the Pondicherry line which the Pondicherry Railway Company would have had to construct had they been themselves working their own line, which the latter undertake to make at their own cost to the satisfaction of the South Indian Railway Company.
- (iii) *Terms of working.*— } Maintenance and working expenses are charged for at the same percentage of the gross receipts of the Pondicherry railway as obtains on the South Indian Railway Company's undertaking including the Pondicherry line—duty, if any, payable to the Colonial (French) Government and direction and office expenses in England being excluded from the calculation. The balance is payable half-yearly to the Pondicherry Railway Company.
- (iv) *Distribution of profits.*— }
- (v) *Rates and fares.*— }
- (vi) *Special obligations as to the conveyance of.*— } To correspond with those for the time being in force on the South Indian Railway Company's undertaking.
- (a) Mails, troops, police, high Government officials, and Government stores.—
- (b) Government bullion and coin, and the persons in charge thereof.—
- (vii) *Power of Government to determine agreement.*—The agreement terminates upon the determination by Government of the South Indian Railway Company's principal contract with the Secretary of State dated the 24th November 1890, *vide* (vii) under 10 (b) South Indian railway (3' 3½" gauge).
- (viii) *Power of the South Indian Railway Company to determine agreement.*— } on 6 months' notice
- (ix) *Power of the Pondicherry Railway Company to determine agreement.*— } given expiring on the 31st December in any year, subject to (vii).
- (x) *Term of agreement.*—The agreement was originally for a term of 3 years, but it has since been renewed subject only to (vii), (viii) and (ix).

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 36 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
1902	Miles 7-85	Rs. 5,68,548	Rs. 70,478	Rs. 37,960	6-68	Rs. 178	46-14
1903	7-85	5,68,548	73,416	44,258	7-78	182	39-73
1904	7-85	5,68,548	60,119	33,662	5-92	247	44-91
1905	7-85	5,68,548	58,414	29,827	5-23	168	48-94
1906	7-85	5,68,548	55,026	24,586	4-39	135	55-41
1907	7-85	5,68,548	66,210	38,966	6-87	162	48-70
1908	7-85	5,68,548	77,018	35,680	6-31	189	53-41
1909	7-85	5,68,548	88,078	39,168	6-89	211	54-59
1910	7-85	5,68,548	97,447	48,611	7-07	239	55-25
1911	7-85	5,68,548	1,09,628	54,088	9-50	269	50-71

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 10</sup> <sub>Sub heads (a) to (h)</sub> SOUTH INDIAN RAILWAY SYSTEM—*contd.*

## 10 (f) Shoranur-Cochin railway (3' 3½" gauge)—

The Shoranur-Cochin railway is the property of the Cochin Durbar and was worked by the former Madras Railway Company up to the 31st December 1907. With effect from the 1st January 1908, it was made over to the South Indian Railway Company to be maintained and worked as part of its undertaking.

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Shoranur to Ernakulam.	18-7-08	64.75	64.75

## Details of construction—

*Permanent-way.*—The permanent-way consists of 41½-lb. flat-footed steel rails on wooden sleepers.

*Ballast.*—The line is ballasted throughout with stone and sand, chiefly the former.

*Fencing.*—The line is fenced in the vicinity of towns, stations and level crossings.

*Curves.*—The sharpest curve is of 818.57 feet radius.

*Gradients.*—The ruling gradient is 1 in 80.

## Agreement—

Dated the 1st January 1908, between His Highness the Raja of Cochin and the South Indian Railway Company, for maintenance and working.

## Main provisions of agreement—

(i) *Land.*—Provided by the Cochin Durbar free of cost.

(ii) *Government aid.*—The railway (which is the property of the Cochin Durbar) is maintained and worked by the South Indian Railway Company in all respects as part of their own undertaking, except only as to the provision of funds for capital expenditure which are provided by the Durbar.

(iii) *Terms of working.*—For maintenance and working the Shoranur-Cochin railway the Durbar pays to the Company in each calendar half-year—

(a) All expenditure on renewals, as distinguished from maintenance expenses, incurred on the Durbar's line;

(b) the Durbar's railway share of working expenses arrived at by deducting from the total working expenses of the combined system the expenditure incurred on the combined system for renewals as distinguished from maintenance, and dividing the balance between the Company and the Durbar's railway in the proportion that the gross receipts of the latter bear to those of the combined system;

(c) One per cent of net earnings of the Durbar's line as a second contribution to the Company's Provident Institution; and

(d) the sum payable under the agreement as rent for the use of the Shoranur Junction station based on the total cost of the junction station.

(iv) *Distribution of profits.*—Any difference between the gross receipts of the Shoranur-Cochin railway and the payment for working under (iii) which may exceed 2 per cent on the booked capital expenditure of the Durbar's line including land are deemed "surplus profits," divisible between the Durbar and the Company in the proportion of four-fifths to the former and one-fifth to the latter.

(v) *Rates and fares.*—Those generally applicable to the South Indian railway system; *vide* (iv) under 10 (b), South Indian railway, (3' 3½" gauge).

(vi) *Special obligations as to the conveyance of.*—

(a) Mails, troops, police, high Government officials, and Government stores.—

(b) Government bullion and coin, and the persons in charge thereof.—

} As on Indian State railways.

(vii) *Power of Government to determine agreement.*—The agreement terminates upon the determination by Government of the South Indian Railway Company's principal contract with the Secretary of State dated the 24th November 1890, *vide* (vii) under 10 (b), South Indian railway, (3' 3½" gauge).

(viii) *Power of the Cochin Durbar to determine agreement.*— } On giving 12 months' notice expiring on the 30th June or before the 31st December in any year.

(ix) *Power of the Company to determine agreement.*—

(x) *Term of agreement.*—Subject to (vii), (viii) and (ix).

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 10 SOUTH INDIAN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (k)

10 (J) Shoranur-Cochin railway (3' 3½" gauge)—concl'd.

Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.			
1903	64.75	63,66,901	1,81,645	73,299	1.15	69	45.64
1903	64.75	64,41,300	3,52,964	1,98,023	3.07	105	43.90
1904	64.75	67,88,610	3,92,782	1,94,244	2.86	117	50.55
1905	64.75	68,30,214	3,66,945	1,61,305	2.36	115	56.59
1906	64.75	68,59,949	3,91,378	1,55,689	2.27	116	60.22
1907	64.75	69,34,602	4,17,179	1,35,752	1.96	124	67.48
1908	64.75	69,44,148	4,44,076	2,00,852	2.89	122	54.82
1909	64.75	69,86,248	5,16,290	2,60,923	3.73	153	49.46
1910	64.75	69,48,970	5,62,461	2,56,954	3.69	167	54.93
1911	64.75	69,56,785	6,00,932	2,99,925	4.17	178	51.75

10 (g) Tanjore District Board railway (3' 3½" gauge)—

This railway originally extended from Mayavaram to Mutupet and was constructed by the South Indian railway from funds of which half were provided by the Government of Madras from Provincial resources, and the other half by the Tanjore District Board from its Railway Guarantee Fund which was constituted by enhancing by 3 pies, i.e., from 9 pies to the maximum rate of twelve pies per rupee, the Local Land Cess raised in the district. From the 1st January 1900 the property of the Government in the Mayavaram-Mutupet line was made over to the Tanjore District Board at the cost price of Rs. 12,34,720. The construction of the extension from Mutupet to Avadiyaroil was then undertaken by the South Indian Railway Company at the cost of the Tanjore District Board from the available balances at the disposal of the Board and further funds raised by debentures, bearing interest at 4 per cent per annum, running for a term of 20 years ending with the 31st December 1920, on the security of the Mayavaram-Mutupet railway and of the receipts from their Railway Guarantee Fund—the Government reserving the right to take over the extension at any time on twelve months' notice by assuming any liabilities undertaken by the Board in the form of debentures to raise the money and repaying any further amounts spent by the Board out of the balances at their disposal.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Mayavaram to Tiruvallur	} 2-4-04	54.08	108.36
Tiruvallur to Mutupet			
Mutupet to Pattukkottai			
Pattukkottai to Arantangi			
Arantangi to Quarry	29-10-02	17.03	
	31-12-03	28.35	
	23-8-06	8.90	

Details of construction—

**Permanent-way.**—The line is laid with first-class 41½-lb. flat-footed steel and 40.3-lb. flat-footed second-class iron rails on sal, pynkado, west coast teak and jarrah sleepers.

**Ballast.**—The Mayavaram-Mutupet section is ballasted with laterite and the Mutupet-Arantangi section is being ballasted with laterite over sand.

**Fencing.**—The line is fenced only at stations.

**Curves.**—The sharpest curve is of 1,146 feet radius.

**Gradients.**—The ruling gradient is 1 in 200, except between Adirampatnam and Pattukkottai where it is 1 in 160.

Contract—

Dated the 22nd July 1897, between the Secretary of State and the South Indian Railway Company, as to maintenance and working.

Main provisions of contract—

(i) **Land.**—Provided by the Government free of cost to the Company.

(ii) **Government aid.**—The railway (which is the property of the Tanjore District Board) was constructed, and is maintained and worked by the South Indian Railway Company, who provide the rolling-stock required for the traffic of the Branch line.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 10 SOUTH INDIAN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (k).

10 (g) Tanjore District Board (3' 3½" gauge)—conold.

Main provisions of contract—conold.

(iii) *Terms of working.*— } The line is maintained and worked at the same percentage of its gross receipts as obtains half-yearly on the South Indian Railway Company's undertaking as a whole, including the Tanjore District Board's line, plus the cost of making good any damage affecting the Branch, plus 5 per cent of gross receipts for the use of the Company's rolling-stock, plus interest on the Company's capital outlay at joint stations provided for in clause 12 of the agreement.

(iv) *Distribution of profits.*— }

(v) *Rates and fares.*—(vi) *Special obligations as to the conveyance of—*

(a) Mails, troops, police, high Government officials and Government stores.—

(b) Government bullion and coin, and the persons in charge thereof.—

As noted under 10 (b), South Indian railway (3' 3½" gauge).

(vii) *Power of the Government to determine contract.*— } On 12 months' notice expiring on the 31st December in any year.(viii) *Power of the Company to determine contract.*— }(ix) *Term of contract.*—As in (vii) and (viii) above.

Statistics of working (Those for the periods prior to 1900 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
1900	Miles 54.08	Rs. 26,50,776	Rs. 2,32,280	Rs. 97,782	3.69	Rs. 83	57.20
1901	54.08	32,17,511	2,90,637	1,85,765	4.23	106	53.29
1902	71.11	38,18,202	3,08,879	1,86,764	3.84	103	53.42
1903	89.46	45,70,190	3,90,747	2,09,167	4.58	106	46.47
1904	89.46	46,32,763	5,24,490	2,61,304	5.64	101	50.17
1905	89.46	47,33,030	5,86,680	2,65,302	5.61	113	54.78
1906	103.36	47,68,375	6,01,066	2,92,938	4.85	116	61.26
1907	103.36	47,88,554	6,33,181	2,86,189	5.98	118	54.80
1908	103.36	48,05,785	6,87,571	2,77,134	5.77	128	59.69
1909	103.36	48,08,937	6,84,734	2,70,086	5.62	127	60.58
1910	103.36	48,45,390	7,59,296	2,98,545	6.12	141	60.94
1911	103.36	48,56,652	8,36,516	3,63,851	7.49	156	56.50

10 (h) Tinnevely-Quilon (Travancore) railway (British section) (3' 3½" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Tinnevely to Kallidaikurichi.	1-6-03	19.13	
Kallidaikurichi to the British frontier near Shencottah	1-8-03	31.28	50.41

Details of construction—

*Permanent-way.*—The line is laid with 50-lb. bull-headed steel rails on cast iron pot sleepers.*Ballast.*—The line is ballasted throughout with broken stone.*Fencing.*—The line is fenced at stations, and at a few places where it runs close to villages and public roads.*Curves.*—The sharpest curve is of 1,432.5 feet radius.*Gradients.*—The ruling gradient is 1 in 100.

Contract—

Dated the 27th June 1901, between the Secretary of State and the South Indian Railway Company, as to the construction, maintenance and working of the Travancore Branch.

Main provisions of contract—

(i) *Land.*—(ii) *Government aid.*—

As under 10 (b), South Indian railway (3' 3½" gauge).

APPENDIX 9—contd.

History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 10 SOUTH INDIAN RAILWAY SYSTEM—contd.  
Sub-heads (a) to (k)

10 (h) Tinnevely-Quilon (Travancore) railway (British section) (3' 3½" gauge)—contd.

Main provisions of contract—contd.

- (iii) Terms of working.—
  - (iv) Distribution of profits.—
- The line is worked by the South Indian Railway Company at the same proportion of its gross earnings of each half-year as obtains on the whole of the Company's undertaking including the Travancore Branch, plus the usual contribution to the Provident Institution. The "net revenue receipts" of a half-year so arrived at of the Travancore Branch are then applied, in the following manner and order, in payment to the Government of interest—
- (a) on debentures and debenture stock, and
  - (b) due on any capital advanced by the Government } for the purpose of the Branch;
  - (c) the surplus, if any, is divisible between the Government and the Company in the proportions in which the residue of net receipts of the undertaking is divisible as noted against (iii) (d) under 10 (b), South Indian railway (3' 3½" gauge).

If the net receipts of the Branch fall short of the interest charges, the deficiency is first to be divided between the Native State and British sections of the line in proportion to the capital cost of the sections, and as between the Secretary of State and the Company so much of the deficiency as is attributable to the Native State section is to be borne by the Secretary of State, and so much as is attributable to the British section is to be borne by the Secretary of State and the Company in the proportions in which any surplus of net receipts over interest charges would have been divisible. The Company's share of any such deficiency may be deducted by the Secretary of State from its share of any surplus profits due under the principal contract for the same half-year or under this contract or the principal contract for the next succeeding half-year.

As between the Government and the Travancore Durbar, the latter has under-written the guarantee of interest to the extent of the capital cost of the portion of the line in its territory; and it has been agreed that any surplus retained by the Government in accordance with the foregoing shall be divided between them in proportion to the respective lengths of the British and Native State sections of the line, and that the share of any deficiency attributable to the latter shall be borne by the Travancore Durbar.

- (v) Rates and fares.—
  - (vi) Special obligations as to the conveyance of—
    - (a) Mails, troops, police, high Government officials and Government stores.—
    - (b) Government bullion and coin, and the persons in charge thereof.—
  - (vii) Services for any Department of the Travancore Durbar.—
  - (viii) Power of the Government to determine contract.—
  - (ix) Power of the Company to surrender contract.—
  - (x) Term of contract.—
- As under 10 (b), South Indian railway (3' 3½" gauge).

Statistics of working—

TABLE I.													TABLE II.		
Calendar year.	MILEAGE OPEN AT END OF EACH YEAR.		TOTAL CAPITAL OUTLAY, INCLUDING SUSPENSE, TO END OF EACH YEAR, I.E., OUTLAY ON (I) LINES OPEN AND (II) LINES PARTLY OR WHOLLY UNDER CONSTRUCTION.		GROSS EARNINGS.	NET EARNINGS.	PERCENTAGE OF NET EARNINGS ON TOTAL CAPITAL OUTLAY GIVEN IN COLUMN (4) AND (5).	INTEREST CHARGES.		GAIN OR LOSS pertaining to each calendar year.			(INCLUDING THE NATIVE STATE SECTION.)		
	British section.	Native State section.	British section.	Native State section.				British section.	Native State section.	South Indian Railway Company.	State.	Native State section.	Earnings per mile per week.	Proportion of expenses to earnings.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)			(13)
	Miles.	Miles.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1902	19'05	...	31,64,055	75,81,838	47,210	26,030	0'24	1,15,208	2,30,014	...	-89,207	-2,30,014	81	44'84	
1903	49'50	0'42	36,46,099	1,01,18,578	1,08,379	99,038	0'71	1,21,950	3,14,967	-15,596	-80,817	-2,41,505	101	41'16	
1904	50'40	57'28	40,40,486	1,15,36,693	3,05,764	1,40,690	0'96	1,39,046	3,95,455	-18,148	-61,408	-2,78,157	85	51'04	
1905	50'48	57'28	43,40,325	1,17,84,076	4,80,787	2,49,307	1'55	1,44,178	3,32,113	-18,284	+5,038	-2,19,787	86	48'78	
1906	50'48	57'28	43,02,235	1,18,26,747	4,97,043	2,22,470	1'97	1,45,163	3,66,240	-13,039	-59,715	-2,38,270	88	55'29	
1907	50'48	57'28	43,66,636	1,18,07,091	5,37,098	3,04,860	1'89	1,50,313	3,97,953	-10,209	-54,916	-1,78,131	100	48'04	
1908	50'48	57'28	43,89,979	1,17,96,853	9,43,077	2,93,350	1'81	1,51,508	3,09,755	-10,481	-69,438	-1,69,055	114	54'31	
1909	50'41	58'05	43,93,309	1,17,97,348	6,50,949	2,95,629	1'83	1,44,329	3,65,580	-9,084	-54,609	-1,70,972	116	54'00	
1910	50'41	58'05	44,22,418	1,18,26,000	6,80,080	3,04,058	1'88	1,46,069	3,66,343	-8,351	-53,459	-1,65,568	121	55'29	
1911	50'41	58'05	44,40,594	1,18,24,580	7,66,515	3,47,453	2'14	1,49,395	3,99,802	-8,004	-50,915	-1,46,098	130	54'07	

\* Due to abnormal increase in net earnings.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 10</sup> <sub>Sub-heads (a) to (k)</sub> SOUTH INDIAN RAILWAY SYSTEM—*contd.*10 (i) Tinnevelly-Quilon (Travancore) railway (Native State section) (3' 3½" gauge)—  
Progress in opening—

Sections of railway.	Date of opening	Miles.	Total.
Quilon to Punalur	1-6-04	28.28	
Punalur to the Frontier of the Travancore State near Shencottah	26-11-04	29.77	
			58.05

## Details of construction—

**Permanent-way.**—The line is laid with 50-lb. bull-headed steel rails on cast iron pot sleepers, except for a length of 24.56 miles, between Punalur and Shencottah, where there are wooden sleepers of jarrah, iron and teak.

**Ballast.**—The line is ballasted throughout with broken stone.

**Fencing.**—The line is fenced only at stations and at a few places where it runs close to villages and public roads.

**Curves.**—The sharpest curve is of 477 feet radius.

**Gradients.**—The ruling gradient between Quilon and Punalur is 1 in 100 and between Punalur and Shencottah 1 in 50.

## Contract—

The line is worked on the same terms as apply to the Tinnevelly-Quilon (Travancore) railway (British section) [10 (k)].

## Statistics of working—

See under British section [10 (k)].

## 10 (j) Morappur-Dharmapuri railway (2' 6" gauge)—

The line is the property of the Government, on whose behalf it was worked by the former Madras Railway Company up to the 31st December 1907. With effect from the 1st January 1908 it was made over to the South Indian Railway Company for working as an integral part of their undertaking.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Morappur to Dharmapuri	18-1-06	18.53	
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>			
Dharmapuri to Hosur (sanctioned on 3rd March 1909).	...	54.87	
			73.40

## Details of construction—

**Permanent-way.**—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of pynkado.

**Ballast.**—The line is ballasted with stone in cuttings and moorum in banks with a stone covering broken to 2" gauge.

**Fencing.**—The line is unfenced.

**Curves.**—The sharpest curve is of 955 feet radius.

**Gradients.**—The ruling gradient is 1 in 67.

## Contracts—

Dated the 2nd March 1909 (supplemental to the principal contract of 1890 as modified by previous supplemental contracts), between the Secretary of State and the South Indian Railway Company, providing for the relinquishment from 1st January 1908 of the section of the Company's line north of Katpadi and the transfer to the Company from the same date of the Jalarpet-Mangalore section of the former Madras railway.

Dated the 26th October 1909 (supplemental to the principal contract of 1890 as modified by previous supplemental contracts), between the Secretary of State and the South Indian Railway Company, for the construction and working as an integral part of the undertaking of the Dharmapuri-Hosur extension of the Morappur-Dharmapuri railway.

Dated the 21st December 1910, between the Secretary of State and the South Indian Railway Company, supplemental to and continuing with further modifications, with effect from the 1st January 1911, the principal contract of the 24th November 1890 as modified by previous supplemental contracts.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

(For Index see page preceding this appendix.)

Number <sup>Main head 10</sup> <sub>Sub-heads (c) to (k)</sub> SOUTH INDIAN RAILWAY SYSTEM—*concl'd.*10 (c) Morappur-Dharmapuri railway (2' 6" gauge)—*concl'd.*

Main provisions of contract—

As in the case of 10 (b), South Indian railway (3' 3½" gauge).

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	18'53	8,39,999	37,145	3,789	0'45	39	89'85
1909	18'53	9,22,100	39,270	—6,883	—	41	117'53
1910	18'53	12,56,128	45,796	9,627	0'77	43	78'98
1911	18'53	20,37,233	41,315	36	—	43	92'31

## 10 (k) Tirupattur-Krishnagiri railway (2' 6" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Tirupattur to Krishnagiri . . . . .	18-9-05	25'38	25'38

Details of construction—

*Permanent-way.*—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of Malabar teak.*Ballast.*—The line is ballasted with stone in cuttings and moorum in banks with a stone covering broken to 2" gauge.*Fencing.*—The line is unfenced.*Curves.*—The sharpest curve is of 955 feet radius.*Gradients.*—The ruling gradient is 1 in 67.

Contracts—

Dated the 2nd March 1909 (supplemental to the principal contract of 1890 as modified by previous supplemental contracts), *between the Secretary of State and the South Indian Railway Company*, providing for the relinquishment from 1st January 1908 of the section of the Company's line north of Katpadi and the transfer to the Company from the same date of the Jalarpet-Mangalore section of the former Madras railway.Dated the 26th October 1909 (supplemental to the principal contract of 1890 as modified by previous supplemental contracts), *between the Secretary of State and the South Indian Railway Company*, for the construction and working as an integral part of the undertaking of the Dharmapuri-Hosur extension of the Morappur-Dharmapuri railway.Dated the 21st December 1910, *between the Secretary of State and the South Indian Railway Company*, supplemental to and continuing with further modifications, with effect from the 1st January 1911 the principal contract of the 24th November 1890 as modified by previous supplemental contracts.

Main provisions of contract—

As in the case of 10 (b), South Indian railway, (3' 3½" gauge).

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	25'38	10,87,205	56,652	1,233	0'11	41	97'70
1909	25'38	10,86,838	45,692	312	0'08	35	99'32
1910	25'38	11,14,660	57,179	10,081	0'90	43	82'40
1911	25'38	11,01,519	65,298	18,179	1'65	49	72'16

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number—Main head 11  
Sub-head (a). ASSAM-BENGAL RAILWAY (3' 3½" gauge).—

Chairman.—Sir Frederick B. Upcott, K.C.V.O., C.S.I.

Managing Director.—James Meadows Rendel, Esq.

Offices.—Bishopsgate House, 80, Bishopsgate, London, E. C.

The construction of the Assam-Bengal railway as a State line was sanctioned in May 1891. The Assam-Bengal Railway Company was formed in England in April 1892 and took over the works commenced by the State. The late Noakhali (Bengal) railway, which was worked by the Assam-Bengal Railway Company up to the end of 1905, was purchased by Government and amalgamated with the Assam-Bengal railway from the 1st January 1906.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Main line—</b>				
Chittagong Port to Chittagong	8-11-95	1-78		
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 Dámohara	23-4-99	18-53		
Dámohara to Lumding	1-12-03	96-70		
Lumding to Nazira	1-1-01	141-27		
Nazira to Lakwá	15-11-01	10-71		
Lakwá to Bhojo	1-2-03	12-78		
Bhojo to Tinsukia	1-3-03	41-94		
			578-61	
<b>Branches—</b>				
<i>Chandpur branch—</i>				
Láksám to Chandpur	1-7-95	31-62		
<i>Silchar branch—</i>				
Badarpur to Katakhal	13-4-98	6-27		
Katakhal to Silchar	9-11-98	12-35		
			18-62	
<i>Gauhati branch—</i>				
Gauhati Ghát to Gauhati	1-1-97	1-82		
Gauhati to Jamuna mukh	1-1-97	74-11		
Jamuna mukh to Lanka	3-1-99	19-11		
Lanka to Lumding (temporary station)	1-3-99	15-55		
Lumding (temporary station) to Lumding	20-2-00	8-44		
			118-58	
<i>Noakhali branch—</i>				
Láksám to Noakhali	15-5-05	30-46		
			30-46	
<i>Bhairab Basar branch—</i>				
Akhaura to Ashuganj	1-4-10	19-05		
			19-05	
<b>TOTAL LENGTH OPEN</b>				<b>789-89</b>
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>				
Kalaura to Fenchuganj (sanctioned on 28th March 1906)		15-07		
Bhairab Basar to Tangi (sanctioned on 17th August 1910)		39-46		
			54-53	54-53
<b>TOTAL LENGTH OPEN AND UNDER CONSTRUCTION OR SANCTIONED</b>				<b>844-42</b>

## Details of construction—

**Permanent-way.**—The line is laid with 50-lb. flat-footed steel rails, partly on sál and pyñkado, and partly on bastard sál, nageshur, jarrah wood and ironbark sleepers. The Noakhali branch is laid with 41½-lb. steel rails on sál sleepers.

**Ballast.**—The ballast consists of broken brick, stone and laterite. The whole line has not yet been ballasted.

**Fencing.**—The line is fenced between Chittagong Port and Silchar, Láksám and Chandpur, Gauhati Ghát and Gauhati, and half a mile from Gauhati towards Lumding, and at some stations on the hill section.

**Curves.**—The sharpest curve is of 358 feet radius.

**Gradients.**—The ruling gradient between Chittagong and Badarpur is 1 in 150; between Badarpur and Lumding, 1 in 60, with a 1 in 87 banking section, 8.54 miles long; between Gauhati and Tinsukia, 1 in 100; between Láksám and Noakhali, 1 in 200; between Láksám and Chandpur, 1 in 300; between Badarpur and Silchar, 1 in 150; and between Akhaura and Ashuganj, 1 in 200.

## Contracts—

Dated the 26th April 1892 (called the principal contract), between the Secretary of State and the Assam-Bengal Railway Company, as to the construction, management, maintenance and working, by the Company, of their undertaking.

Dated the 6th December 1899, between the Secretary of State and the Assam-Bengal Railway Company, as to the extension of time for the completion of the railway.

Dated the 11th April 1906, (supplemental to the contract of 1892), between the Secretary of State and the Assam-Bengal Railway Company, as to the acquisition by the Company of the Noakhali (Bengal) railway for the purpose, and as a part, of their undertaking, as from 1st January 1906.



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 11 . ASSAM-BENGAL RAILWAY (3' 3½" gauge)—contd.  
Sub-head (a)

## Main provisions of contracts.—

- (i) *Land*.—Provided by the Government free of cost to the Company.
- (ii) *Government aid*.—Government guarantee interest in sterling at 3 per cent on the Company's share capital of £ 1,500,000. (Up to 30th June 1898 interest was allowed at 3½ per cent).
- (iii) *Distribution of profits*.—The net earnings to be applied in payment to the Government of—
- The equivalent in rupees of interest paid on debenture capital; provided that, if the Company's share capital is not less than  $\frac{2}{3}$ ths of the total capital expenditure, the rate of interest recovered under this sub-head (on debentures issued previous to 30th June 1898) shall not exceed the rate for the time being applicable to the Company's share capital;
  - the equivalent in rupees of the guaranteed interest paid to the Company in respect of share capital; and
  - interest on the capital contributed, or deemed to be contributed, by the Government, at the same rate as the guarantee for the time being on the Company's capital. But if the capital advanced by Government exceed  $\frac{2}{3}$ 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.
- "Surplus profits," after interest charges have been met, are divided between the Company and the Government in the ratio of the respective amounts of capital expended by them on the undertaking.
- (iv) *Rates and fares*.—To be approved by the Government.
- (v) *Special obligations as to the conveyance of*.—
- Mails, troops, police, high Government officials and Government stores.—To be conveyed on the same general conditions as obtain on State railways of the same gauge, and at rates to be approved by the Government.
  - Government bullion and coin, and the persons in charge thereof.—To be conveyed at special rates to be approved by the Government.
- (vi) *Power of the Government to determine contract*.—The railway and its appurtenances are absolutely the property of the Government, who may determine the contract on the 31st December 1921, or at the end of any succeeding tenth year by giving 12 months' previous notice. The Government may also determine the contract at any time on six months' previous notice, if the Company fail to fulfil its obligations, or if the line be worked at a loss for three consecutive half-years. On the determination of the contract, the Company is to hand over to the Government the railway and all its belongings of every description, on repayment by the Government of the amount in sterling, at the par value, of the share capital paid by the Company to the Government.
- (vii) *Power of the Company to surrender contract*.—Nil.
- (viii) *Term of contract*.—Not specified.

## Statistics of working—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (5).	Interest.	Gain or loss to the State pertaining to each calendar year.	Remarks.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1895	129.49	4,27,47,293	2,14,426	—8,047	...	13,95,636	—14,03,683	* The decrease in net earnings is due to heavy expenditure of an extraordinary character, e.g., heavier renewals of sleepers, repairs to jetty shed destroyed by fire in 1907 and commission on debentures renewed in 1908.	64	103.75
1896	285.90	5,59,03,217	6,18,785	33,238	0.06	23,73,034	—23,89,796		71	94.68
1897	360.63	6,94,23,486	9,90,640	72,214	0.10	22,56,279	—21,84,065		68	92.71
1898	379.25	8,32,11,758	12,08,124	54,551	0.07	24,45,275	—23,90,724		83	95.83
1899	434.66	9,45,26,278	16,19,546	3,22,704	0.37	26,63,064	—25,40,380		75	80.08
1900	436.26	10,31,71,809	17,09,955	3,64,364	0.38	33,31,390	—29,67,026		75	78.69
1901	589.21	11,17,19,504	21,24,252	4,56,654	0.44	35,08,252	—30,49,598		70	78.60
1902	589.21	11,87,04,959	20,96,058	2,54,418	0.23	39,08,387	—35,53,969		68	87.66
1903	740.38	12,40,28,548	23,97,658	4,43,963	0.35	40,71,450	—36,27,487		71	81.48
1904	740.38	12,60,09,689	29,53,962	1,05,390	0.08	41,66,585	—40,61,145		77	96.48
1905	740.38	12,78,56,722	34,14,295	1,25,615	0.10	42,61,306	—41,35,691		86	96.82
1906	775.28	13,25,20,704	42,20,061	4,27,358	0.30	44,53,682	—40,25,824		104	89.86
1907	775.28	13,49,91,242	46,96,137	6,40,254	0.47	37,92,277	—31,52,023		123	86.91
1908	775.28	13,91,59,050	46,96,729	* 53,300	0.04	41,64,794	—41,11,485		117	98.87
1908	770.84	14,31,45,488	49,14,893	4,47,481	0.31	43,64,911	—39,17,450		122	90.90
1910	789.89	14,45,68,076	51,70,052	7,84,033	0.54	44,08,219	—36,24,236		126	84.89
1911	789.89	14,79,47,989	55,76,145	11,37,710	0.77	45,96,403	—34,48,696		136	79.59

## APPENDIX 9—contd.

History of railways constructed and in progress.

[ For Index see page preceding this appendix.]

Number Main head 12 **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—**  
Sub-heads (a) & (b).

Chairman.—Colonel T. Gracey, C.S.I.

Managing Director.—Alexander Izat, Esq., C.I.E.

Offices.—237, Gresham House, Old Broad Street, London, E.C.

Lines comprised in the system—The Bengal and North-Western railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Bengal and North-Western railway (3' 3½" gauge)	1,175.84	78.98	1,254.82
(b) Tirhoot railway (3' 3½" gauge)	769.04	59.14	828.18
Total	1,944.88	138.12	2,083.00

## Running powers—

## Home line over Foreign lines—

	Miles.
Cawnpore to Aishbagh, Cawnpore-Burhwal (3' 3½" gauge) link, Oudh and Rohilkhand railway	45.08
Aishbagh to Daliganj, Lucknow-Bareilly (3' 3½" gauge) railway	3.40
Daliganj to Burhwal, Cawnpore-Burhwal (3' 3½" gauge) link, Oudh and Rohilkhand railway.	34.57
Benares Cantonment to Benares City, and Benares Cantonment to enter signal on the Benares-Allahabad extension, Oudh and Rohilkhand railway (3' 3½" gauge).	2.18
Total	85.18

## 12 (a) Bengal and North-Western railway (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Main line—</b>				
Sonepore to Mankapur	15-1-85	217.25		
Mankapur to Nawabganj	2-4-84	14.00		
Nawabganj to Ajodhya.	1-12-84	4.82		
			236.07	
<b>Loop line—</b>				
Sonepore to Banwarbhak.	15-1-85	9.54		
			9.54	
<b>Branches—</b>				
<b>Uska Bazar branch—</b>				
Gorakhpur to Uska Bazar	15-12-86	39.58		
Uska Bazar to Barhni	15-1-05	21.00		
Barhni to Tulsipur	15-1-06	22.54		
			93.12	
<b>Jarwa branch—</b>				
Gainsari to Jarwa	12-4-06	9.47		
			9.47	
<b>Bagaha branch—</b>				
Gorakhpur to Bagaha	7-2-07	60.17		
			60.17	
<b>Gopalganj branch—</b>				
Sevan to Thawe	1-4-07	17.62		
			17.62	
<b>Maharajganj branch—</b>				
Daronda to Maharajganj	1-4-07	3.90		
			3.90	
<b>Naipalganj Road branch—</b>				
Mankapur to Bahraich	2-4-84	55.16		
Bahraich to Naipalganj Road	15-12-86	33.44		
			88.60	
<b>Revelganj branch—</b>				
Chupra to Revelganj	15-4-91	7.24		
Revelganj to Manjhi Ghat	1-4-99	3.71		
			11.05	
<b>Bahramghat branch—</b>				
Gonda to Colonelganj	29-10-91	17.75		
Colonelganj to Jarwal Road.	1-2-92	10.80		
			28.55	
<b>Burhwal branch—</b>				
Jarwal Road to the West bank of the Gogra river	18-12-96	2.63		
Gogra Ghat to Chowka Ghat	24-12-98	3.27		
Chowka Ghat to Burhwal	24-11-98	4.12		
Burhwal to Sitapur	12-3-11	59.76		
			69.78	
<b>Tulsipur branch—</b>				
Gonda to Balrampur	15-12-96	22.95		
Balrampur to Tulsipur.	1-8-98	19.09		
			41.95	
<b>Katarnian Ghat branch—</b>				
Nanpara to Mihirpurwa	15-12-96	14.99		
Mihirpurwa to Katarnian Ghat	25-3-98	27.03		
			42.07	
<b>Turtipur branch—</b>				
Bhatni to Turtipur	15-12-96	17.60		
Salimpur to Barhaj	1-12-97	12.77		
			30.37	
<b>Mashrak branch—</b>				
Chupra to Mashrak	20-3-10	26.32		
			26.32	768.28
Carried over	...	...	...	768.28

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 12 **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—contd.**  
Sub-heads (a) & (b)

12 (a) Bengal and North-Western railway (3' 3½" gauge)—contd.

Progress in opening—contd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
Brought forward				768.28
<i>Gogra-Ganges Doab lines—</i>				
Turtipar to Mau	8-6-88	23.19		
Mau to Benares	15-3-89	53.06		
Mau to Azamgarh	8-6-88	27.15		
Kopaganj Road to Ballia	15-8-89	37.61		
Ballia to Chand-Deera Ghat	12-5-89	27.96		
Aunrihar to Ghazipur Ghat	15-3-89	28.37		
Azamgarh to Shahganj	14-2-03	34.81		
Ghazipur Ghat to Phephna	11-8-03	31.16		
Aunrihar to Jaunpur	21-3-04	38.14		
Kopaganj to Dohrihat	21-3-04	21.70		
Benares to Madhosingh	1-3-09	29.08		
Madhosingh to Mirzapur Ghat.	1-3-09	6.70		
Madhosingh to Jhual	21-4-09	40.68		
			407.58	
				407.58
TOTAL OPEN MILEAGE, B. & N.-W. RAILWAY				1,175.84
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Thawa to Captainganj (sanctioned on 21st July 1910)	...	59.75		
Gogra bridge at Manjhi Ghat and approaches (sanctioned on 9th May 1908)	...	4.81		
Gundak bridge at Bagaha and approaches (sanctioned on 4th October 1906)	...	5.48		
Jhual to Allahabad (sanctioned on 26th January 1909)	...	3.99		
			73.98	73.98
Grand total B. & N. W. railway				1,249.82

## Details of construction—

**Permanent-way.**—The main line between Sonapore and Burhwal is laid with 50-lb. steel rails on s&l sleepers. The rest of the line north of the Gogra is laid with 41½-lb. steel rails mostly on s&l sleepers. The Gogra-Ganges Doab main lines from Turtipar to Benares and Chand-Deera Ghat to Aunrihar Junction are laid with 50-lb. steel rails on s&l sleepers, and their branches with 41½-lb steel rails on s&l sleepers.

**Ballast.**—The whole line, except quite new constructions, is ballasted with kunkur or broken brick.

**Fencing.**—The main line is fenced.

**Curves.**—The sharpest curve is of 900 feet radius.

**Gradients.**—The ruling gradient is 1 in 300. On the various river ghat lines the gradients are steeper.

## Contracts—

Dated the 12th December 1882 (called the original contract), between the Secretary of State and the Bengal and North-Western Railway Company, as to the construction and working by the Company of the Bengal and North-Western railway.

Dated the 22nd February 1886 (supplemental to and modifying in some respects the contract of 1882), between the Secretary of State and the Bengal and North-Western Railway Company.

Dated the 18th July 1890, between the Secretary of State and the Bengal and North-Western Railway Company, as to the taking over and working by the Company of the State railways known as the Tirhoot railway in conjunction with the Company's railway.

Dated the 19th December 1894 (supplemental to the contracts of 1882, 1886 and 1890), between the Secretary of State and the Bengal and North-Western Railway Company, providing for certain extensions of the Company's railway and for the exercise by the Company of running powers for through traffic over the Cawnpore-Burhwal 3' 3½" gauge link of the Oudh and Rohilkhand railway.

Dated the 12th December 1895 (supplemental to the contracts of 1890 and 1894), between the Secretary of State and the Bengal and North-Western Railway Company, modifying in some respects the contract of 1890 relating to the Tirhoot railway.

Dated the 23rd July 1896 (supplemental to the contracts of 1882, 1886, 1890, 1894 and 1895), between the Secretary of State and the Bengal and North-Western Railway Company, providing for further extensions of the Company's railway and of the Tirhoot railway.

Dated the 15th January 1903 (supplemental to the contracts of 1882, 1886, 1894 and 1896), between the Secretary of State and the Bengal and North-Western Railway Company, providing for further extensions of the Company's railway.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 12</sup> <sub>Sub-heads (a) & (b)</sub> . BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*12 (a) Bengal and North-Western railway (3' 3½" gauge)—*contd.*Contracts—*consolid.*

Dated the 24th April 1903 (supplemental to the contracts of 1882, 1890 and 1895), *between the Secretary of State and the Bengal and North-Western Railway Company*, as to the adoption of 1s. 4d. per rupee as the "prescribed" rate of exchange.

Dated the 14th December 1905 (supplemental to the contracts of 1882, 1890, 1895, 1896, and 1903), *between the Secretary of State and the Bengal and North-Western Railway Company* continuing with modifications the contract of 1890 relating to the Tirhoot railway and modifying in some respects the contract of 1882 relating to the Company's railway.

Dated the 7th October 1907 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1908, and 1905), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for further extensions of the Company's railway.

Dated the 1st October 1908 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1908, 1905 and 1907), *between the Secretary of State and the Bengal and North-Western Railway Company*, for providing for a further extension of the Company's railway from Chupra to Mushrak.

Dated the 9th July 1909 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1908, 1905, 1907 and 1908), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for a further extension of the Company's railway from Burhwal to Sitapur.

Dated the 13th October 1910 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1908, 1905, 1907, 1908 and 1909), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for extensions of the Company's railway connecting the Company's Main lines with the Company's Doab lines and with the Tirhoot railway respectively by bridges over the Gogra and Gundak rivers.

Dated the 7th December 1910 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1908, 1905, 1907, 1908, 1909 and 13th October 1910), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for a further extension of the Company's railway from Thawe to Captainganj.

## Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost for the Company's railway; and at the cost of capital for the Tirhoot railway undertaking.

(ii) *Government aid.*—Nil.

(iii) *Terms of working.*—The Company's railway and the Tirhoot railway undertaking are worked conjointly; but the accounts of each are kept separate and distinct, except those relating to working expenses.

In addition to the ordinary working expenses and usual contributions to the State Railway and Company's Provident Institutions, the working expenses for each half-year include interest at 4 per cent per annum on all outlay up to the 31st December 1904 expended on "rolling-stock," "steamers and barges and landing stages," "stores," and "stations and offices, station machinery, staff quarters and all other works including permanent-way at Sonopore" for joint use, and on all outlay subsequent to that date up to the close of each half-year incurred on the same matters and on "workshops and store buildings, etc." or any other works used for joint purposes. The interest so charged is to be credited to the respective revenue accounts of the Company's railway and the Tirhoot railway undertaking in the ratio of the contributions of capital made to the joint accounts by each.

The working expenses of the open system, exclusive of the charges for maintenance of way, works and stations, other than those for general supervision, are divided between the Company's railway and the Tirhoot railway undertaking in proportion to their respective gross earnings.

The charges for maintenance of way, works and stations, other than the charges for general supervision are appropriated and allotted to the Company's railway or the undertaking on the basis of the actual expenditure incurred by each.

(iv) *Distribution of profits.*—As to the Company's railway, under the original contract of 1882 any surplus over 6 per cent was to be equally divided between the Government and the Company; but this provision was rescinded by the contract of the 22nd February 1886, which leaves the profits entirely in the hands of the Company.

As to the open system, after deducting half-yearly from the gross earnings of the Company's railway and of the undertaking, respectively, the working expenses noted under (iii), the balance of the gross earnings (termed net revenue) in the case of the Company's line belongs to the Company, and in the case of the Tirhoot railway undertaking is applied in the following manner and order:—

(a) in payment to the Company of interest accruing in each half-year at 4 per cent per annum on one half of the capital raised and expended by the Company for the purposes of the railway,

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 13  
Sub-heads (a) & (b) **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*****12 (a) Bengal and North-Western railway (3' 3½" gauge)—*contd.*****Main provisions of contracts—*contd.***

crossing the Gundak river by a bridge, from Bagaha to Chhitauni; including interest paid out of capital during construction ;

- (b) in payment to the Government from the aggregate net revenue for the entire year of interest accruing in such year at 5 per cent per annum on all money advanced or expended by the Government for the purposes of the open lines of the undertaking which have not been repaid to the Government ;
- (c) the residue if not in excess of 10 lakhs going to Government and the Company in the proportion of  $\frac{4}{5}$ ths to the former and  $\frac{1}{5}$ th to the latter ; if in excess of 10 lakhs, then as to 10 lakhs in the aforesaid proportion and as to the balance in the proportion of  $\frac{1}{12}$ ths to the Government and  $\frac{11}{12}$ th to the Company.

The difference between the net revenue of the Company's railway belonging and payable to the Company and the aggregate advances made to the Company, in any half-year, is to be adjusted as soon as known by payments in India between the Government and the Company as the case may require.

- (v) *Rates and fares.*—As to the Company's line—to be approved by the Government, who may require the charge for salt, coal and food grains carried not less than 100 miles to be reduced to any rate not below  $\frac{1}{4}$ th pie per maund per mile. The minimum for passengers is 2 pies per mile.

As to the open system—for the carriage of through passengers and goods over the Company's railway, of all through and local passengers and goods over the Tirhoot railway undertaking, and of all passengers and goods from and to the undertaking or any connected railway carried over the Company's railway or any foreign railway connected therewith, the Government have the power to fix and vary the classification for passengers and goods and the maxima and minima fares and rates for the several classes of passengers and goods, respectively. Until otherwise fixed no rate for goods is to be higher than one pie or lower than  $\frac{1}{16}$ th pie per maund per mile.

**(vi) Special obligations as to the conveyance of.—**

(a) Mails, troops, police, high Government officials and Government stores.—As to the Company's railway, to be conveyed on the same general conditions as those in force on State railways, and at rates to be approved by the Government. As to the Tirhoot railway undertaking, to be conveyed on the same general conditions and at the same rates as may be in force on State railways of the metre gauge.

(b) Government bullion and coin, and the persons in charge thereof.—To be conveyed at special rates approved from time to time by the Secretary of State.

- (vii) *Power of the Government to determine the contracts relating to the Company's railway.*—The line and all its appurtenances become the property of Government on the termination of the contracts. If the contracts terminate by the efflux of time the Government is to pay to the Company the value of rolling-stock, movable machinery, stores, etc. The Government may determine the contract after 50 years (*i.e.*, on the 31st December 1932), on one year's previous notice of intention to purchase, paying 25 times the average yearly net earnings, less the share of surplus profits belonging to the Government on the assumption that section 39 (5) of the contract of 1882 had been in actual operation for the five years immediately preceding the purchase. And at any time prior to the 31st December 1912, the Government have the right and option to elect that, upon the determination of the contract of 1882 by notice of purchase on the 31st December 1932, they will in lieu of making the aforesaid payment, pay to the Company a sum of money equal to 25 times the average yearly net earnings, less the share of surplus profits belonging to the Government on the assumption that section 39 (5) of the contract of 1882 had been in actual operation during the five years immediately preceding the 31st December 1912. These terms do not apply to the Doab lines referred to in the contracts of 1896, 1907 and 1910, in respect of which the Government undertake to pay to the Company, in the event of purchase, a sum equal to the capital raised and expended thereon with their sanction, including interest paid out of capital during construction. One-half of the capital raised and expended by the Company for the Manjhi Ghat-Baklaha section, including interest paid out of capital during construction, is to be treated as capital attributable to the Doab lines ; the other half, and the whole of the capital for the Bagaha-Chhitauni section, including interest paid out of capital during construction, is to be treated as capital attributable to the Company's main lines. The Government may also determine the contract at any time, at six months' notice, if the Company fail to observe its obligations, on paying the value of rolling-stock, stores, etc., and fair value of the line, less the value of the same treated as a reversionary sum absolutely payable on the 31st December 1931.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number  $\frac{\text{Main head 12}}{\text{Sub-heads (a) \& (b)}}$  BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—contd.

## 12 (a) Bengal and North-Western railway (3' 3½" gauge)—contd.

Main provisions of contracts.—contd.

## (viii) Power of the Government to determine the contracts relating to the Tirhoot railway undertaking.—

If the original contract with the Company, dated the 12th December 1882, terminate for any reason prior to the expiry of the term of the contracts relating to the Tirhoot railway undertaking, then the latter also, *ipso facto*, terminate at the same time. The Government may also terminate the Tirhoot railway contracts at any time, on 6 months' notice, if the Company fail to observe its obligations. The Government may also terminate the Tirhoot railway contracts on the 31st December 1919, on 6 months' notice: or, at the same date and by the like notice, the Government may modify or alter the terms with the approval of the Company as from the 31st December 1919; but if the Company do not agree to the proposed modifications or alterations then the contracts will terminate on the 31st December 1919. On the determination of the Tirhoot railway contracts the Government will resume possession of the undertaking, and any capital sums which may have been raised by the Government and expended on the Company's lines, or raised and expended by the Company on the undertaking, are to be considered as debts due from the Company and the Government respectively.

## (ix) Power of the Company to surrender contracts.—Nil.

(x) Term of contracts relating to the Company's railway.—99 years, *i.e.*, until the 31st December 1981, subject to (vii).(xi) Term of contracts relating to the Tirhoot railway undertaking.—23 years, *i.e.*, from 1st January 1905 to the 31st December 1932, subject to (vii).

## Statistics of working—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, <i>i.e.</i> , outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Interest divided between the Government and the Company, in the ratio of gross earnings.	Payments received for working the Tirhoot railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	
1884	75·00	1,52,47,428	77,870	—26,221	...	...	—26,221	...	29	183·76
1885	308·00	2,01,86,980	12,05,541	5,89,206	...	...	5,89,206	2·92	72	51·18
1886	376·00	2,82,16,102	18,54,074	8,09,189	...	...	8,09,189	3·49	108	58·86
1887	376·00	2,56,22,684	19,44,002	8,37,004	...	...	8,37,004	3·27	90	56·94
1888	376·00	2,61,51,598	23,09,543	9,88,844	...	...	9,88,844	3·78	102	55·25
1889	376·00	2,68,41,872	22,11,824	10,53,964	...	...	10,53,964	4·00	103	52·35
1890	376·00	2,68,84,918	22,08,788	12,21,020	...	*24,245	12,45,265	4·63	101	44·72
1891	401·00	2,78,69,842	24,76,909	15,48,590	...	69,494	16,18,074	5·85	111	37·48
1892	414·50	2,88,88,821	29,39,077	16,20,567	...	67,090	16,87,657	5·94	125	44·86
1893	414·50	2,84,84,284	26,14,546	15,75,636	...	66,842	16,42,478	5·79	114	39·74
1894	414·50	2,87,24,887	26,17,242	16,87,399	...	72,358	17,60,257	6·13	115	35·51
1895	414·50	3,12,95,704	25,71,036	16,82,766	...	72,909	17,55,675	5·61	112	34·55
1896	478·63	3,49,36,114	26,26,033	16,70,172	...	71,614	17,41,786	5·07	113	36·40
1897	485·55	4,10,32,207	27,55,718	17,24,277	...	72,905	17,97,182	4·38	105	37·43
1898	536·25	4,66,78,822	33,31,890	19,74,920	...	75,885	20,50,305	4·39	112	40·73
1899	743·00	5,16,06,753	43,44,961	26,79,911	...	61,940	27,32,851	5·29	113	38·53
1900	743·00	5,24,78,019	43,64,006	24,79,433	...	49,563	25,23,996	4·82	109	43·18
1901	743·00	5,50,91,860	53,66,794	30,97,372	...	76,853	31,74,225	5·76	124	42·29
1902	747·75	5,84,62,525	55,60,238	29,72,183	...	78,671	30,46,854	5·22	139	46·55
1903	812·96	6,21,09,547	61,98,433	38,53,972	...	1,04,369	39,58,341	6·37	145	37·82
1904	870·80	6,43,92,188	67,16,933	43,23,496	...	1,16,834	44,45,330	6·90	147	35·56
1905	901·32	6,77,55,566	61,79,116	34,34,390	+ 37,637	1,69,446	35,41,463	5·37	117	43·81
1906	932·18	7,18,66,623	77,02,976	40,92,699	—9,023	2,01,060	42,84,731	6·00	142	46·99
1907	1,014·90	7,50,01,758	89,59,804	49,72,741	—25,044	2,04,275	51,51,972	6·87	154	44·78
1908	1,016·73	7,91,18,230	79,80,293	43,74,935	+ 45,015	1,58,989	45,78,889	5·79	162	44·78
1909	1,031·56	8,44,52,801	80,65,853	43,59,479	+ 31,817	85,411	44,49,707	5·27	142	45·95
1910	1,117·14	8,92,16,995	84,58,233	48,35,946	+ 58,810	2,01,276	51,48,032	5·77	146	42·23
1911	1,175·84	9,31,90,852	89,29,872	57,59,938	+ 41,140	2,35,109	60,36,187	6·48	162	42·01

\* For the second-half of 1890 only as the line was taken over for working from the 1st July 1890.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 12. **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—contd.**  
Sub-heads (a) & (b)

## 12 (b) Tirhoot railway (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Main line—</b>				
Semaria Ghat to Dalsing Sarai . . . . .	1-5-83	22'90		
Dalsing Sarai to Samastipur . . . . .	1-11-75	14'75		
Samastipur to Muzafferpur . . . . .	24-2-77	29'79		
Muzafferpur to Motihari . . . . .	1-2-83	49'57		
Motihari to Bettiah . . . . .	20-12-83	27'00		
Samastipur to Darbhanga . . . . .	1-11-75	23'00		
Darbhanga to Jhanjharpur . . . . .	1-2-83	24'00		
Jhanjharpur to Ghoghardiha . . . . .	8-4-86	13'00		
Ghoghardiha to Nirmali . . . . .	8-4-86	6'92		
Nirmali to Bhaptiahi . . . . .	15-11-87	10'00		
Bhaptiahi to Raghurpur . . . . .	1-10-88	8'98		
			223'91	
<b>Branches—</b>				
<b>Bairagnia branch—</b>				
Darbhanga to Sitamarhi . . . . .	1-7-80	43'00		
Sitamarhi to Riga . . . . .	1-1-81	6'00		
Riga to Dhang . . . . .	1-7-81	9'00		
Dhang to Bairagnia (fair weather line) . . . . .	1-8-82	3'51		
Bairagnia to Narkatiaganj . . . . .	20-12-07	57'63		
			118'13	
<b>Sonepore branch—</b>				
Muzafferpur to Hajipur . . . . .	26-10-84	81'23		
Hajipur to Sonepore . . . . .	1-8-87	3'86		
			34'61	
<b>Hajipur branch—</b>				
Hajipur to Hajipur Ghat . . . . .	26-10-84	1'89		
Hajipur branch loop line . . . . .	2-11-00	3'31		
			5'20	
<b>Hajipur-Katihar extension—</b>				
Hajipur to Bachhwara . . . . .	1-4-00	44'46		
Baranni Junction to Thana Bihpur . . . . .	1-3-00	66'17		
Thana Bihpur to Katarah . . . . .	7-3-01	18'00		
Katarah to Kursela (Kosi Bridge and approaches) . . . . .	10-7-02	4'00		
Kursela to Katihar . . . . .	7-3-01	24'00		
			156'63	
<b>Bhagalpur branch—</b>				
Thana Bihpur to Barzi . . . . .	16-12-01	11'36		
Barzi to Bhagalpur Kachery . . . . .	15-3-06	4'29		
Bhagalpur Kachery to Bhagalpur station, E. I. By. . . . .	23-12-19	1'44		
			17'09	
<b>Monghyr branch—</b>				
Sahabpur Kamal to Monghyr Ghat . . . . .	7-3-00	7'00		
			7'00	
<b>Jaynagar extension—</b>				
Sakri to Jaynagar . . . . .	14-1-05	30'97		
			30'97	
<b>Bettiah-Bhikna Thores extension—</b>				
Bettiah to Narkatiaganj . . . . .	17-1-08	23'73		
Narkatiaganj to Bhikna Thores . . . . .	17-2-08	22'00		
			45'73	
<b>Mansi-Bhaptiahi branch—</b>				
Bhaptiahi to Makhana Bazar . . . . .	1-3-07	44'33		
Makhana Bazar to Mansi . . . . .	15-12-07	16'04		
			60'37	
<b>Murliganj branch—</b>				
Saharsa to Budham Ghat . . . . .	15-3-08	18'32		
			18'32	
<b>Raxaul branch—</b>				
Saganli to Raxaul . . . . .	1-3-99	18'09		
			18'09	
<b>Bagaha branch—</b>				
Narkatiaganj to Bagaha . . . . .	1-5-07	26'99		
			26'99	
				769'04
<b>TOTAL OPEN MILEAGE TIRHOOT RAILWAY</b>				
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>				
Bagnati bridge at Dhang and approaches (sanctioned on 16th February 1909) . . . . .	...	4'94		
Samastipur to Roserah (sanctioned on 17th December 1909) . . . . .	...	17'20		
Roserah to Khagaria (sanctioned on 9th February 1911) . . . . .	...	37'00		
			59'14	59'14
				828'18
<b>GRAND TOTAL, TIRHOOT RAILWAY</b>				
<b>DOUBLE LINE—</b>				
Baranni Junction to Bachhwara . . . . .	22-9-08	10'05	10'05	

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 12 BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*concl'd.*  
Sub-heads (a) & (b)12 (b) Tirhoot railway (3' 3½" gauge)—*concl'd.*

## Details of construction—

*Permanent-way.*—The following types of rails are in use :—50-lb. flat-footed steel, 4½-lb. flat-footed steel and 60-lb. iron. The sleepers are of sal, pynkado, jarrah and cast iron of Denham-Olpherts' pattern.

*Ballast.*—The line, except quite new constructions, is ballasted with kunkur or broken brick.

*Fencing.*—The main line is fenced with stone posts and 4 wires.

*Curves.*—The sharpest curve, which is on the main line, is of 1,500 feet radius.

*Gradients.*—The ruling gradient is 1 in 300, except between Sainastipur and Pertabganj, on which 3.42 miles are on a gradient of 1 in 200. On various river ghat lines the gradients are steeper.

## Contracts—

See under Bengal and North-Western railway, 12 (a).

Statistics of working (Those for the periods prior to 1905 will be found in Appendix 38 to the Report for 1907)—

TABLE I.											TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Interest divided in the ratio of gross earnings.	Payment made to the Bengal and North-Western Railway Company for working the line.	Total income.	Percentage of total income on total capital outlay given in column (8).	Interest.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1905.	565.45	6,21,36,962	61,81,754	35,95,050	-37,627	1,65,446	33,87,977	5.45	23,54,569	+10,33,414	190	43.45
1906.	614.30	6,78,40,939	66,80,324	38,97,810	+9,028	2,01,060	37,05,278	5.50	23,17,307	+13,87,971	189	41.52
1907.	763.54	7,19,99,253	75,39,249	42,21,002	+25,044	2,04,276	40,41,771	5.61	23,30,669	+16,61,103	192	43.68
1908.	774.69	7,38,81,580	81,68,253	44,81,501	-45,015	1,88,932	42,77,547	5.83	24,68,465	+18,09,068	204	45.14
1909.	774.69	7,42,61,057	75,53,878	40,09,582	-31,817	58,411	39,19,354	5.28	24,73,136	+14,46,218	193	46.92
1910.	776.13	7,48,12,530	83,14,066	48,01,820	-58,810	2,01,276	45,41,734	6.09	24,92,047	+20,49,687	206	42.24
1911.	769.04	7,56,16,732	89,15,376	52,63,260	-41,140	2,35,109	49,98,011	6.60	25,53,319	+24,93,692	223	40.91



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 13 . BENGAL DOOARS RAILWAY SYSTEM.  
Sub-heads (a) & (b)

Chairman—Robert Miller, Esq.

Offices—210-216 Gresham House, Old Broad Street, London, E. C.

Lines comprised in the system—The Bengal Dooars railway system is made up of—

	Open line. Miles.
(a) Bengal Dooars railway (3' 3½" gauge) . . . . .	33'40
(b) Bengal Dooars railway extensions (3' 3½" gauge) . . . . .	116'56
Total . . . . .	<u>152'96</u>

The lines were constructed for opening out the Western Dooars and for the development of the tea industry.

## 13 (a) Bengal Dooars railway (3' 3½" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
Main line— East Bank of the Teesta to Dam Dim . . . . .	15-1-93	31'00	31'00	
Branch— Jalpaiguri to Kamahai . . . . .	11-6-93	5'40	5'40	36'40

## Details of construction—

*Permanent-way.*—The line is laid with 4½-lb. flat-footed steel rails on sál sleepers.

*Ballast.*—The line is ballasted throughout with stone.

*Fencing.*—The line is unfenced.

*Curves.*—The sharpest curve is of 1,432 feet radius.

*Gradients.*—The ruling gradient is 1 in 150.

## Agreements and contracts—

Agreement, dated the 27th April 1891 (called the principal contract), between the Secretary of State and Messrs. Octavius Steel and Company, Promoters, Bengal Dooars Railway Company, as to the construction, maintenance, management and working of the Bengal Dooars Railway Company's original line, including the ferries connected therewith.

Agreement, dated the 27th April 1891, between the District Board of Jalpaiguri and Messrs. Octavius Steel and Company, Promoters, Bengal Dooars Railway Company, as to the payment of a subsidy by the Board to the Company.

Contract, dated the 2nd March 1893 (supplemental to the contract of 1891), between the Secretary of State and the Bengal Dooars Railway Company, as to the construction, management, maintenance, and working of certain extensions of the Company's then existing railways.

Contract, dated the 27th September 1900 (supplemental to that of 1893), between the Secretary of State and the Bengal Dooars Railway Company, as to the extension of time for the completion of the line to Hantupara.

Contract, dated the 7th November 1901 (supplemental to those of 1893 and 1900), between the Secretary of State and the Bengal Dooars Railway Company, as to the extension of time for the completion of the line to Bagrakote.

Contract, dated the 16th April 1903 (supplemental to the contract of 1893), between the Secretary of State and the Bengal Dooars Railway Company, as to the adoption of 1s. 4d. per rupee as the "prescribed" rate of exchange.

## Main provisions of agreements and contracts—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—Original line: The District Board of Jalpaiguri pay to the Company, out of the District Fund, an annual subsidy of such amount, not exceeding Rs. 4,000, as may be required to make up the net profits in each year to 5 per cent on the capital sum expended.

Original line and Extensions: Nil. (It is, however, provided that, on the request of the Company, the Government shall take over the original line and extensions, and shall work and maintain them through the agency of the Eastern Bengal railway, at 40 per cent of the gross receipts in each half-year, paying the remaining 60 per cent over to the Company.)

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 13 Sub-heads (a) & (b). **BENGAL DOOARS RAILWAY SYSTEM—contd.**

13 (a) Bengal Dooars railway (3' 3½" gauge)—contd.

Main provisions of agreements and contracts—contd.

(iii) *Terms of working.*—(iv) *Distribution of profits.*—

The whole of the profits go to the Company. (If, on a request made by the Company, the lines be worked by the Eastern Bengal railway the Government retain in each half-year 40 per cent of the gross earnings, the remaining 60 per cent being paid to the Company after deduction of the income tax payable to Government).

(v) *Rates and fares.*—Original line, and extensions from (a) Mal Bazar to Hantupara and (b) Dam Dim to Bagrakote: Certain maxima and minima have been fixed. If the gross receipts of the original line and the extensions to Hantupara and Bagrakote, and the Daling coal-fields, shall in one year have reached 12 per cent on the combined capital outlay of those lines, Government may reduce maxima by a figure up to 25 per cent, except in the case of certain special rates for food grains, salt, coal for construction, working or maintenance, and construction and revenue stores (excluding coal), and fares chargeable for third class passengers.

Extension from Barnes Junction to Lalmanirhat: Certain maxima and minima have been fixed within which rates may be varied.

(vi) *Special obligations as to the conveyance of.*—

(a) Mails, troops, police, high Government officials and Government stores.—Mails to be carried under the same terms and conditions as mails were at the date of contract of 1891 being carried on the Eastern Bengal railway, the Government having power to fix the timing of one train each way daily for the carriage of mails. Postal officials travelling on duty to be given free passes.

(b) Government bullion and coin, and the persons in charge thereof. — Not specified.

(vii) *Power of the Government to determine contract.*—If the Company fail to work the Original line and the Extensions for six consecutive months, the Government may determine the contract by paying to the Company a sum equal to their actual expenditure up to the date of notice.

The Secretary of State has the right to purchase the Original line and the Extensions on the 31st December 1919, and at the end of any succeeding seventh year, by giving 12 months' previous notice. In the event of such purchase the price to be paid for the Original line is to be a cash payment of one and two-fifths of the amount of the invested capital liabilities of the Company; while the price for the Extensions is to be a cash payment in England in sterling of a sum equal to 25 years' purchase of the average of the net earnings of the Extensions during the last preceding 5 years, provided that such sum shall not exceed by more than 20 per cent, nor be less than, the total capital expenditure and capital liabilities of the Company in sterling as expended on the Extensions or incurred with the sanction of the Government.

(viii) *Power of the Company to surrender contract.*—Nil.(ix) *Term of contract.*—None specified.

Statistics of working—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1893	36.40	18,49,091	1,14,312	57,639	5.12	...	57,639	3.12	69	49.70
1894	36.40	22,64,723	2,05,266	1,04,291	4.57	4,000	1,08,291	4.74	109	49.20
1895	36.40	26,26,476	2,55,537	1,27,459	5.43	4,000	1,31,459	5.65	125	49.73
1896	36.40	24,33,213	2,70,451	1,31,814	5.43	...	1,31,814	5.42	136	51.26
1897	36.40	25,78,562	2,86,407	1,45,289	5.63	...	1,45,289	5.63	145	49.47
1898	36.40	26,63,050	2,94,089	1,14,620	4.30	4,000	1,18,620	4.45	135	57.40
1899	36.40	26,26,748	2,73,038	1,18,417	4.51	4,000	1,22,417	4.66	137	56.83
1900	36.40	26,42,695	2,32,730	1,39,460	7.17	...	1,39,460	7.17	168	43.06
1901	36.40	26,44,373	3,10,920	1,76,399	6.67	...	1,76,399	6.67	156	43.27
1902	36.40	26,50,627	2,73,340	1,71,455	6.47	...	1,71,455	6.47	144	37.37
1903	36.40	26,95,547	3,11,131	2,24,933	8.35	...	2,24,933	8.35	154	27.70
1904	36.40	26,64,642	3,46,277	2,56,051	9.63	...	2,56,051	9.63	175	25.83
1905	36.40	27,26,891	3,70,349	2,49,598	9.15	...	2,49,598	9.15	198	32.60
1906	36.40	27,39,098	4,08,623	2,36,703	10.86	...	2,36,703	10.86	216	27.30
1907	36.40	27,56,535	4,20,705	2,34,722	10.83	...	2,34,722	10.83	222	32.32
1908	36.40	27,79,347	4,37,253	3,34,102	19.02	...	3,34,102	12.02	231	23.59
1909	36.40	28,40,534	4,46,811	3,54,527	13.48	...	3,54,527	12.41	238	20.65
1910	36.40	29,73,769	4,36,375	3,73,343	12.55	...	3,73,343	12.55	257	23.24
1911	36.40	31,12,394	4,94,336	3,86,765	12.40	...	3,86,765	12.40	261	21.76

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 13 BENGAL DOOARS RAILWAY SYSTEM—concl'd.  
Sub-heads (a) & (b)

## 13 (b) Bengal Dooars railway extensions (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Eastern extension—</b>				
Mal to Chalsa . . . . .	1-4-01	5.40		
Chalsa to Chengmari . . . . .	1-1-03	18.45		
Chengmari to Dalgaon . . . . .	23-3-03	18.84		
Dalgaon to Madarihah . . . . .	14-6-03	9.31		
			44.00	
<b>Southern extension—</b>				
Barnes Junction to Baura . . . . .	20-4-00	23.30		
Baura to Bhotemari . . . . .	21-10-00	16.70		
Bhotemari to Lalmanirhat . . . . .	20-11-00	20.80		
			65.80	
<b>Western extension—</b>				
Dam Dim to Oodlabari . . . . .	1-5-01	3.30		
Oodlabari to Bagrakote . . . . .	1-1-02	3.46		
			6.76	
				116.56

## Details of construction—

**Permanent-way.**—The line has been laid with 41½-lb. flat-footed steel rails on sal sleepers.

**Ballast.**—The line is ballasted throughout with stone.

**Fencing.**—The line is unfenced.

**Curves.**—The sharpest curve is of 955 feet radius.

**Gradients.**—The ruling gradient of the Southern extension is 1 in 200 and of the Eastern and Western extensions, 1 in 100.

## Contracts—

As noted under 13 (a), Bengal Dooars railway (3' 3½" gauge).

## Statistics of working—

TABLE I							TABLE II	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Remarks.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.	(3)		Rs.	
1900 . . . . .	66.00	47,11,632	16,191	...	...	The net earnings for 1900, 1901, 1902 and 1st half of 1903 were credited to interest on capital during construction.	14	72.82
1901 . . . . .	74.30	62,26,954	1,76,789	...	...		47	60.22
1902 . . . . .	77.76	72,66,165	2,68,634	...	...		63	65.99
1903 . . . . .	116.56	94,10,365	3,46,666	79,199	0.99		61	69.78
1904 . . . . .	116.56	84,97,572	4,15,179	1,08,660	1.28		68	73.85
1905 . . . . .	116.56	87,92,090	5,12,348	1,97,824	2.25		85	61.83
1906 . . . . .	116.56	89,99,516	5,83,852	2,91,258	3.24		96	50.10
1907 . . . . .	116.56	90,70,828	6,04,133	1,48,585	1.58		99	76.23
1908 . . . . .	116.56	90,68,637	6,19,972	3,14,228	3.46		102	49.81
1909 . . . . .	116.56	91,86,143	6,08,419	3,14,641	3.44		100	48.28
1910 . . . . .	116.56	93,06,724	6,58,433	3,45,725	3.75	109	47.49	
1911 . . . . .	116.56	93,48,461	7,07,730	3,60,021	3.85	117	49.18	

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 14 **BHAVNAGAR RAILWAY SYSTEM—**  
Sub-heads (a) and (b)

Lines comprised in the system.—The Bhavnagar railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
(a) Bhavnagar railway (3' 3½" gauge)	Miles. 157.95	Miles. 14.61	Miles. 172.56
(b) Dhrangadra railway (3' 3½" gauge)	20.83	...	20.83
Total	178.78	14.61	193.39

14 (a) Bhavnagar railway (3' 3½" gauge)—  
Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
<b>Main line—</b> Bhavnagar Docks to Wadhwan Junction	20-12-80	105.03	105.03		
<b>Branches—</b> <b>Dhasa branch—</b> Dhasa to Dhasa	19-1-81	15.20			*Includes 1.08 miles of Dock estate line which is worked for goods traffic only.
Dhasa to Liliamota	1-10-11	20.80	36.00		
<b>Palitana branch—</b> Sihor to Palitana	16-11-10	16.92	16.92	157.95	
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>					
Liliamota to Savar Kundla (sanctioned on 23rd February 1910).	...	14.61	14.61	14.61	
				172.56	

## Details of construction—

**Permanent-way.**—The permanent-way consists of 41½-lb. flat-footed steel rails on creosoted pine, deodar and jodka teak sleepers. During the year 1910, 40 miles of the Bhavnagar-Wadhwan section have been renewed with 50-lb. rails from Bhavnagar Terminus to mile 41.

**Ballast.**—The line is ballasted with broken stone, with the exception of the length between Chuda and Wadhwan, which is ballasted with kunkur.

**Fencing.**—The line is practically unfenced.

**Curves.**—The sharpest curve is of 1,000 feet radius.

**Gradients.**—On the main line the ruling gradient is 1 in 200, except for about 10 chains near the Rampur Bhogawa bridge where it is 1 in 100. Between Sihor and Palitana and Dhasa and Liliamota it is 1 in 100.

## Agreement—

This line was constructed by Government Agency for the Native State of Bhavnagar (after which it is named). It was worked up to the 31st March 1911 by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway. The Coalition ceased to exist on the 1st April 1911, on and from which date the line is being worked independently as a separate and distinct railway.

## Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1911	157.95	99,85,784	14,58,871	9,07,486	10.18	178	37.79

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 14</sup> <sub>Sub-heads (a) and (b)</sub> BHAVNAGAR RAILWAY SYSTEM—*concl'd.*

## 14 (b) Dhrangadra railway (3' 3½" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Wadhwan Junction to Dhrangadra . . . . .	1-8-98	20-83	20-83

## Details of construction—

*Permanent-way.*—The permanent-way consists of 41½-lb. flat-footed steel rails laid on deodar sleepers.*Ballast.*—The ballast used is of broken sandstone.*Fencing.*—The line is unfenced.*Curves.*—The sharpest curve is of 1,400 feet radius.*Gradients.*—The ruling gradient is 1 in 175.

## Agreement—

This line was constructed for the Native State of Dhrangadra (after which it is named). It was worked up to the 31st March 1911 by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway. The Coalition ceased to exist on the 1st April 1911, on and from which date the line is being worked by the Bhavnagar railway under a provisional agreement, dated the 22nd February 1911, *between the Bhavnagar and Dhrangadra States*, as to the maintenance, management and working of the Dhrangadra railway.

## Main provisions of agreement—

- (i) *Land.*—Provided by the Dhrangadra Durbar free of cost.
- (ii) *Government aid.*—Nil.
- (iii) *Terms of working.*—
- (iv) *Distribution of profits.*— } Forty per cent of gross earnings (subject to a biennial revision), *plus* 5 per cent for hire of rolling-stock and, in addition, actual expenditure on the maintenance of way, works and stations. The forty per cent is subject to reduction to 35 per cent when the earnings per mile per week exceed Ra. 50.
- (v) *Rates and fares.*—
- (vi) *Special obligations as to the conveyance of.*— } The same as for the time being in force on the Bhavnagar railway.  
 (a) Mails, troops, police, officials and Government stores.—  
 (b) Bullion and coin.—
- (vii) *Power of Government to determine agreement.*—Not specified.
- (viii) *Power of Durbar to determine agreement.*—
- (ix) *Power of Bhavnagar railway to determine agreement.*— } Not specified pending new agreement.
- (x) *Term of agreement.*—To be fixed hereafter.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907).—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902 . . . . .	20-83	5,85,911	37,731	8,075	1-38	35	78-80
1903 . . . . .	20-83	5,86,639	43,058	11,718	2-00	40	72-80
1904 . . . . .	20-83	5,87,117	43,516	15,446	2-63	44	67-49
1905 . . . . .	20-83	5,86,895	49,042	18,375	2-28	45	72-73
1906 . . . . .	20-83	5,86,791	65,121	25,707	4-39	60	60-52
1907 . . . . .	20-83	5,87,610	86,614	24,958	4-25	61	62-54
1908 . . . . .	20-83	5,85,164	53,131	17,756	3-03	49	56-53
1909 . . . . .	20-83	5,85,705	60,202	18,584	3-17	56	67-50
1910 . . . . .	20-83	5,86,796	83,692	24,208	3-23	77	59-13
1911 . . . . .	20-83	5,85,335	93,689	43,546	7-44	86	53-51

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 15  
Sub-heads (a) to (c) **BURMA RAILWAYS SYSTEM—***Chairman.*—Lieut.-Colonel Alfred Glynn Begbie.*Managing Director.*—Walter Home, Esq., C.I.E.*Offices.*—199, Gresham House, Old Broad Street, London, E.C.

Lines comprised in the system.—The Burma railways system is made up of—

	Open line. Miles.	Under construction or sanctioned for construction. Miles.	Total. Miles.
(a) Burma railways (3' 3½" gauge)	1,341·85	—	1,341·85
(b) Burma railways extensions (3' 3½" gauge)	186·93	66·25	253·18
(c) Southern Shan States railway (3' 3½" gauge)	—	100·00	100·00
Total	1,528·78	166·25	1,695·03

## 15 (a) Burma railways (3' 3½" gauge)—

The Burma Railways Company was formed in 1896 for the purpose of taking over the working of the then existing system of State railways (3' 3½" 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 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.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	REMARKS.
<b>IRRAWADDY SECTION—</b>					
Rangoon to Prome	2-5-77	161·00	161·00		
<b>SITTANG SECTION—</b>					
<i>Main Line—</i>					
Rangoon to Pegu	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	78·00	165·00		
<i>Branches—</i>					
<i>Suburban lines</i>	{ 1-8-80	6·00			
	{ 15-7-80	3·00			
Malagon to Bankaw	25-8-11	1·70	10·70		
<b>MANDALAY SECTION—</b>					
<i>Main Line—</i>					
Toungoo to Pynnana	1-5-88	89·00			
Pynnana to Yamethin	15-11-88	49·00			
Yamethin to Mandalay	1-8-89	112·00	220·00		
<i>Branches—</i>					
<i>Myingyan branch—</i>					
Thasi to Meiktila	10-5-88	12·80			
Meiktila to Myingyan	15-11-89	57·21	70·10		
<i>Mandalay Shore branch—</i>					
Mandalay to Mandalay shore	13-4-89	2·50	2·50		*Worked for goods traffic only.
<b>MU VALLEY SECTION—</b>					
<i>Main line—</i>					
Sagaing to Shwebo	1-7-91	53·05			
Shwebo to Wuntho	4-4-92	39·46			
Wuntho to Nankan	1-11-94	15·46			
Nankan to Mohnyin	21-10-95	74·35			
Mohnyin to Mogaung	1-8-96	82·74			
Mogaung to Myitkyina	1-1-98	56·68	331·29		
<i>Branches—</i>					
<i>Alon branch—</i>					
Sagaing to Alon	15-4-00	70·46	70·46		
<i>Myohaung branch—</i>					
Myohaung to Amarapura shore	22-11-91	6·00	6·00		
<i>Katha branch—</i>					
Naba to Katha	2-10-95	15·00	15·00		
<b>MANDALAY-KUNLONG SECTION—</b>					
Myohaung to Sedaw	1-1-98	13·45			
Sedaw to Maymyo	1-4-00	23·10			
Maymyo to Nawngkio	20-5-00	34·10			
Nawngkio to Haipaw	1-6-01	53·25			
Haipaw to Lashio	1-8-03	50·94	177·84		
Carried over	...	...	...	1,930·89	

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 15 BURMA RAILWAYS SYSTEM—contd.  
Sub-heads (a) to (c)15 (a) Burma railways (3' 3 $\frac{3}{4}$ " gauge)—contd.

## Progress in opening—concl'd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	REMARKS.
Brought forward					1,230.89
<b>BASSEIN-HENZADA-LETPADAN SECTION—</b>					
Suburban line at Bassein	15-1-04	3.18			
Bassein to Hensada	15-12-03	82.25			
Hensada to Hensada shore	20-8-03	2.46			
<b>Tharawaw branch—</b>					
Letpadan (on Irrawaddy line) to Tharawaw on the east bank of the Irrawaddy river	20-8-03	23.07	110.96	110.96	
<b>TOTAL, OPEN MILEAGE</b>				1,341.85	
<b>DOUBLE LINE—MAIN LINE AND BRANCHES—</b>					
<b>Rangoon to Wanetchaung—</b>					
Rangoon to Kemmendinge	30-10-89	3.50			
Kemmendinge to Insein	10-1-90	1.50			
Insein to Hlawga	25-8-05	7.92			
Hlawga to Mogyobyt	1-10-07	3.25			
Mogyobyt to Hmawbi	23-11-07	4.13			
Hmawbi to Wanetchaung	14-2-08	5.00	29.30		
<b>Rangoon to Pegu—</b>					
Rangoon to Pasundaung	1-6-01	0.70			
Pasundaung to Thingangyun	19-4-05	3.40			
Thingangyun to Togyangale	2-1-10	2.71			
Togyangale to Tewaingyi	30-11-07	4.08			
Tewaingyi to Ledaunggan	23-11-07	4.71			
Ledaunggan to Dabein	10-1-08	6.69			
Dabein to Tongyi	8-1-10	7.75			
Tongyi to Kyauktan	4-1-09	4.06			
Kyauktan to Payathonzu	15-2-09	8.26			
Payathonzu to Pegu	4-1-09	3.51	45.87		
<b>Pegu to Pyuntaza—</b>					
Pegu to Shwehle	10-8-11	5.57			
Shwehle to Payagi	26-5-11	4.91			
Payagi to Pyinbongyi	22-5-11	7.83			
Pyinbongyi to Kadok	1-8-11	6.25			
Kadok to Panngdawthi	2-10-11	4.73			
Panngdawthi to Deika	26-5-11	5.30			
Deika to Pyuntaza	3-8-11	6.73	41.32		
Myohaung to Mandalay	3-10-99	2.45	2.45		
<b>TOTAL DOUBLE LINE</b>				118.94	

## Details of construction—

**Permanent-way.**—The rails in use on the system are 60-lb., 50-lb. and 41 $\frac{1}{2}$ -lb. flat-footed steel. The sleepers throughout are of teak, Tasmanian, and Australian jarrah and pynkado, the last named largely predominating.

**Ballast.**—The ballast used is either shingle or broken stone.

**Fencing.**—The main line, the Irrawaddy line and the Bassein-Henzada line are fenced. The Mu Valley line is generally unfenced, except at a few stations. The Lashio, Myingyan and the Sagaing-Alon branches are unfenced.

**Curves.**—On the main line (Rangoon to Mandalay), the sharpest curve has a radius of 573 feet, on the Rangoon-Prome section, of 1,146 feet. The sharpest curves on the Bassein-Henzada, Letpadan-Tharawaw, Thazi-Myingyan and Sagaing-Alon branches have radii of 955, 1,432, 1,273 and 2,865 feet, respectively; on the Lashio branch, of 337 feet; on the Mu Valley line, the Katha branch and the Nankan-Mohnyin section, of 573 feet.

**Gradients.**—The ruling gradient on the main line from Prome to Mandalay is 1 in 200 uncompensated; on the Mu Valley section, from Sagaing to Gyodaung 1 in 200 uncompensated and from Gyodaung to Myitkyina, 1 in 100 uncompensated, except on the section, from Mawhan to Mohnyin where the grade is 1 in 60 uncompensated. On the Lashio branch it is 1 in 25 compensated between Sedaw and Maymyo, and 1 in 40 compensated, between Maymyo and Lashio; on the Myingyan branch, 1 in 100 uncompensated; on the Sagaing-Alon branch 1 in 150 uncompensated; and on the Katha branch 1 in 50 uncompensated.

## Contracts—

Dated the 9th March 1897 (called the principal contract), between the Secretary of State and the Burma Railways Company, as to taking over the Burma railways, the construction of other railways, and their maintenance, management and working.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 15 **BURMA RAILWAYS SYSTEM—contd.**  
Sub-heads (a) to (c)**15 (a) Burma railways (3' 3½" gauge)—contd.****Contracts—contd.**

- Dated the 6th February 1902 (supplemental to the contract of 1897), between the Secretary of State and the Burma Railways Company, as to the issue of debenture stock of £1,250,000.
- Dated the 5th May 1903 (supplemental to the contract of 1897), between the Secretary of State and the Burma Railways Company, as to the adoption of *l. 4d.* as the "prescribed" rate of exchange.
- Dated the 22nd February, 1907 (supplemental to the contract of 1897), between the Secretary of State and the Burma Railways Company, as to the construction, maintenance, management and working of the Pegu-Moulmein and Henzada-Kyangin extensions and the Daga loop line.
- Dated the 23rd February 1907 (supplemental to the contracts of 1897, 1902 and 1903), between the Secretary of State and the Burma Railways Company, regarding advances of capital amounting to Rs. 85 lakhs in 1903 to 1906.
- Dated the 21st March 1907 (supplemental to the contracts of 1897, 1902, 1903 and the 22nd and 23rd February 1907), between the Secretary of State and the Burma Railways Company, as to the issue of further debenture stock of £1,000,000 and determination of the principal contract of 1897 (superseded by the contract of 9th June 1909).
- Dated the 9th June 1909 (supplemental to the contracts of 1897, 1902, 1903 and the 22nd and 23rd February 1907 and 21st March 1907), between the Secretary of State and the Burma Railways Company, as to the conditions on which the Company was authorised to increase its share capital by £1,000,000, and other matters.

**Main provisions of contracts—**

- (i) *Land.*—To be provided by Government at the cost of capital, subject, as regards land outside British territory, to the condition that it can be acquired on reasonable terms.
- (ii) *Government aid.*—The Government undertakes to pay interest—
- at 2½ per cent per annum on the Company's share capital of £2,000,000 raised under the contract of the 9th March 1897 (with an additional ½ per cent per annum up to and inclusive of the 1st July 1901);
  - at 3 per cent per annum on £1,250,000 raised by the Company by the issue of debenture stock under the contract of the 6th February 1902; and
  - at 2½ per cent per annum on the Company's additional share capital of £1,000,000 (excluding the premium thereon which realized £20,000) raised under the contract of the 9th June 1909.
- (iii) *Distribution of profits.*—The net receipts of each year are applied in payment to Government of—
- interest at 3 per cent per annum on the Company's debenture stock of £1,250,000;
  - interest at 2½ per cent per annum on the Company's share capital of £3,000,000 and
  - interest at 2½ per cent per annum on the Government capital.
- The surplus profits, after allowing for interest in any year ending on a 30th June, are to be divided in the ratio of the Government and Company's capital, which, for the purpose of this division, has been stated at £5,750,000 and £3,000,000, respectively, and works out to  $\frac{23}{25}$ ths to the former and  $\frac{12}{25}$ ths to the latter.
- (iv) *Rates and fares.*—Maxima and minima for the different classes and descriptions of services and terminals to be approved by the Government.
- (v) *Special obligations as to the conveyance of—*
- Mails, troops, police, high Government officials and Government stores.—To be conveyed on the same general conditions as on other metre gauge State railways, and at rates to be approved by the Government.
  - Government bullion and coin, and the persons in charge thereof.—To be conveyed at special rates approved by the Government.
- (vi) *Power of the Government to determine contract.*—The Government may, by giving 12 months' previous notice, determine the contract as to the Company's undertaking on the 31st December 1928, or on the 31st December 1935, or on the 31st December 1941, or on the 31st December of any succeeding tenth year. On the determination of the contract from any cause, the Government is to repay to the Company in sterling at par the capital raised by the latter, and also to take over the liability of the Company in respect of the debenture stock.
- As to the determination of the contract of the 22nd February 1907, as to the construction and working of new branches, see 15 (b), Burma railways extensions (3' 3½" gauge).
- (vii) *Power of the Company to surrender contract.*—Nil.
- (viii) *Term of contract [if not determined under (vi) or (vii)].*—None specified.



## APPENDIX 9—contd..

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 15 BURMA RAILWAYS SYSTEM—contd.  
Sub-heads (a) to (c)

## 15 (a) Burma railways (3' 3½" gauge)—contd.

Statistics of working (Those for the periods prior to 1897 will be found in Appendix 38 to the Report for 1907)—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) attributable to each calendar year.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1897.	886.50	8,73,31,890	86,76,403	38,82,673	4.45	38,31,674	1,13,696*	-62,697	188	55.25
1898.	936.18	9,24,93,509	89,91,451	37,88,523	4.10	39,49,899	1,94,988	-3,56,364	185	57.87
1899.	988.34	10,11,17,647	88,28,724	35,78,407	3.54	38,35,208	1,67,985	-4,24,737	179	59.45
1900.	1,124.00	11,03,96,635	1,10,29,947	48,94,824	4.43	38,49,028	4,22,884	+6,23,414	196	55.62
1901.	1,177.70	11,99,22,408	1,18,85,329	49,69,656	4.16	40,41,108	4,38,924	+5,09,624	198	58.02
1902.	1,269.59	12,70,23,590	1,25,02,671	52,72,683	4.15	43,94,823	6,49,065	+4,28,755	208	57.63
1903.	1,336.97	13,01,31,876	1,36,14,478	52,19,322	4.01	44,06,500	6,37,976	+3,74,946	198	61.86
1904.	1,340.15	13,34,32,891	1,51,02,418	65,70,760	4.92	44,71,268	6,90,759	+14,08,793	217	56.49
1905.	1,340.15	13,55,91,056	1,57,75,957	61,81,063	4.56	45,35,974	6,02,907	+10,42,182	226	60.62
1906.	1,340.15	13,97,87,368	1,57,82,208	58,61,913	4.19	46,13,499	5,28,858	+7,19,556	226	62.74
1907.	1,340.15	14,50,55,112	1,66,16,416	59,31,463	4.09	43,49,484	5,21,925	+10,60,154	238	64.80
1908.	1,340.15	15,13,95,482	1,79,07,641	71,74,075	4.74	46,94,333	7,61,052	+17,18,690	257	59.94
1909.	1,340.15	15,50,28,745	1,83,49,589	66,59,920	4.30	44,55,997	9,70,207	+12,33,718	263	63.70
1910.	1,340.15	16,04,60,604	1,85,32,674	71,60,233	4.46	49,89,611	11,89,494	+10,61,128	266	61.86
1911.	1,341.83	16,48,65,768	1,92,44,880	66,72,090	4.05	49,91,981	9,71,526	+7,08,583	276	65.83

\* From 1st September 1896 to 31st December 1897.

## 15 (b) Burma railways extensions (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<i>Pegu-Moulmein extension—</i> Pegu to Moulmein . . . . .	25-9-07	121.27		
<i>Henzada-Kyangin extension—</i> Henzada to Danbi . . . . . Danbi to Kyangin . . . . .	1-7-07 14-12-08	18.50 52.16	121.27	
			65.66	
TOTAL OPEN LINES . . . . .	...	...	...	186.93
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Neikban to Begayet (sanctioned on 1st June 1906) . . . . .	...	66.25		
			66.25	66.25
GRAND TOTAL . . . . .	...	...	...	253.18

## Details of construction—

*Permanent-way.*—The permanent-way consists of 50-lb. flat-footed steel rails laid principally on pynkado and Tasmanian sleepers.

*Ballast.*—The ballast consists chiefly of broken stone and shingle.

*Fencing.*—The Pegu-Moulmein extension is fenced but not the Henzada-Kyangin extension. Level crossings are provided with either gates or chains and posts.

*Curves.*—The radius of the sharpest curve on the Pegu-Moulmein section is 1,058 feet and that on the Henzada-Kyangin section is 1,432 feet.

*Gradients.*—The ruling gradient is 1 in 300 uncompensated.

## Contract—

Dated the 22nd February 1907 (supplemental to the contracts of 1897, 1902 and 1903, noted under 15 (a), Burma railways proper), between the Secretary of State and the Burma Railways Company, as to the construction, maintenance, management and working of the Pegu-Moulmein and Henzada-Kyangin extensions and the Daga loop line.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 15  
Sub-heads (a) to (c). BURMA RAILWAYS SYSTEM—concl'd.

## 15 (b) Burma railways extensions (3' 3½" gauge)—concl'd.

## Main provisions of contract—

- (i) *Land*.—As under 15(a), Burma railways (3' 3½" gauge).  
 (ii) *Government aid*.—All moneys required for the purposes of the extensions shall be supplied by the Secretary of State according to such arrangements as shall from time to time be made between the Secretary of State and the Company.  
 (iii) *Terms of working*.—

Separate half-yearly accounts are kept for (a) the whole of the Company's system and (b) for each of the extensions, except in regard to the Revenue Abstracts B to G inclusive and sub-head 1 of Abstract A which are for the system as a whole. The total working expenses of the whole system, including the first bonus of 50 per cent payable on deposits in the Railway Provident Fund, are divided between each of the extensions and the rest of the Company's system in the ratio of their respective gross earnings, and the share of expenses so attributed, together with the maintenance expenditure relating exclusively thereto under sub-heads II to VII of Abstract A, are deemed to be the actual working expenses of each. After deducting from the gross earnings the working expenses so arrived at, the balance forms the net earnings. From the net earnings are deducted such sums as may under the rules be payable to the Company's Provident Institution as a second bonus, and the remainder constitutes the "net revenue receipts".

The net revenue receipts for each complete year running from the 1st July to the 30th June are applied in payment of interest at 3½ per cent per annum on the total capital outlay on each extension (including the value of land), and the mileage share of interest on the main line stores and stores suspense balances; and the residue, if any, is divided between the Government and the Company in the proportion of ⅔ths to the former and ⅓th to the latter.

- (v) *Rates and fares*.—As under 15(a), Burma railways (3' 3½" gauge).  
 (vi) *Special obligations as to the conveyance of*.—

(a) Mails, troops, police, high Government officials and Government stores.—

(b) Bullion, coin and the persons in charge thereof.—

As under 15(a), Burma railways (3' 3½" gauge).

- (vii) *Power of the Government to determine contract*.—  
 (viii) *Power of the Company to surrender contract*.—
- The contract may be determined on twelve months' notice given by either party to the other on the 30th June next following the expiration of the period of five years from the date of opening of the last section of the extensions, or on the 30th June of any subsequent fifth year. If the principal contract [noted under 15(a), Burma railways (3' 3½" gauge)] shall at any time be determined by virtue of its provisions, then this contract shall also thereupon cease and determine. On the failure by the Company effectually to remedy any breach of this contract or of its stipulations or provisions within six months after due notice shall have been given by the Secretary of State in England, he may, on the expiration of six months or later, determine the contract by giving to the Company in England notice of such determination.

Upon the determination of the contract the Company shall give possession to the Government of the new lines, all property belonging thereto and all moneys then payable, after which the Government shall indemnify the Company against all debts and liabilities as may have been incurred and be then subsisting on account of the new lines.

- (ix) *Term of contract [if not determined under (vii) and (viii)]*.—Not specified.

## Statistics of working—

TABLE I.							TABLE II.			
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) attributable to each calendar year.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1907	184.77	1,64,71,238	1,68,518	70,441	0.45	2,10,268	...	-1,39,822	82	58.20
1908	186.93	1,99,85,700	9,01,008	4,55,558	2.23	6,96,054	...	-2,40,496	98	49.44
1909	186.93	2,11,46,631	11,19,992	4,27,510	2.02	6,97,884	...	-2,70,574	115	61.38
1910	186.93	2,13,87,184	12,92,969	4,75,061	2.22	7,10,276	...	-2,35,215	133	63.26
1911	186.93	2,15,43,179	14,26,979	5,23,234	2.43	7,33,480	...	-2,05,246	147	63.33

## 15 (c) Southern Shan States railway (3' 3½" gauge)—

This is a State line and has been sanctioned for construction by the Burma Railways Company.

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Thazi to Yawngkho (sanctioned on 23rd July 1909)	...	100.00	100.00

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 16 **DIBRU-SADIYA RAILWAY SYSTEM—**  
Sub-heads (a) and (b)

**Chairman.**—The Lord Ribblesdale.**Secretary.**—S. Maclean Jack, Esq.**Offices.**—Blomfield House, 85, London Wall, London, E.C.

Lines comprised in the system.—The Dibru-Sadiya railway system is made up of—

(a) Dibru-Sadiya railway (3' 3½" gauge)	:	:	:	:	:	:	:	Miles.
(b) Ledo and Tikak-Margherita Colliery railway (3' 3½" gauge)	:	:	:	:	:	:	:	86·02
	:	:	:	:	:	:	:	5·50
<b>Total</b>								<b>91·52</b>

## 16 (a) Dibru-Sadiya railway (3' 3½" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Main line—</b>				
Lower steamer ghat on the left bank of the Brahmaputra river, near Dibrugarh Bazar, eastward as far as the Dinjan stream	15-8-83	13·00		
Dinjan stream to Makum Junction	16-7-83	23·50		
Makum Junction to Dihing bridge	2-5-84	23·00	61·50	
<b>Saikhoa Ghat branch—</b>				
Makum Junction to Dum-Duma	2-5-84	10·00		
Dum-Duma to Talap	5-2-85	6·00		
Talap to Saikhoa Ghat	1-5-10	8·52	24·52	86·02

## Details of construction—

**Permanent-way.**—The main line is laid for 5 miles with 60-lb. and for the remainder of its length with 50-lb. flat-footed steel rails on s&l and uriam sleepers and cast iron plates of the Denham-Olpherts' type. The Dum-Duma-Talap section of the Saikhoa Ghat branch is laid with 41½-lb. flat-footed steel rails on uriam sleepers and the Talap-Saikhoa Ghat section is laid for 3½ miles with 50-lb. rails and for the remainder with 41½-lb. rails, all on uriam sleepers.

**Ballast.**—The line is partially ballasted with broken stone.

**Fencing.**—The line is unfenced, with the exception of a short length at Dibrugarh.

**Curves.**—The sharpest curve is of 700 feet radius.

**Gradients.**—The ruling gradient is 1 in 150 on the main line and 1 in 100 on the Saikhoa Ghat branch.

## Contracts—

Dated the 26th May 1880, between the Secretary of State and the Assam Railway Company, subsequently called the Assam Railways and Trading Company, as to the construction, maintenance, management and working of the Dibru-Sadiya railway with branches, as modified by—

Letter from the India Office to the Company's London Board, No. 2193, dated the 13th December 1898, and

Letter from the India Office to the Company's London Board, No. 2781, dated the 23rd December 1901.

Dated the 25th July 1881, between the Secretary of State and the Assam Railways and Trading Company, modifying the contract of 1880 and providing that the Company shall have the preferential option for the construction and working of any other line(s), in the Luckimpore District—an option which has since been surrendered in consideration of an undertaking by the Secretary of State that the Government right of purchase shall not be exercised until after 1910, vide letter from the India Office to the Company's London Board, No. 2193, dated the 13th December 1898.

Letter No. <sup>228</sup>/<sub>1758</sub> P.W., dated the 31st March 1905, from the Honourable the Chief Commissioner of Assam to the Government of India in the Department of Commerce and Industry.

Telegram No. R. P. 5, dated the 11th May 1905, from the Railway Board to the Honourable the Chief Commissioner of Assam.

As to the construction of the extension from Talap to Saikhoa Ghat.

## Main provisions of contracts—

(i) **Land.**—Provided by the Government free of cost to the Company.

(ii) **Government aid.**—Annual subsidy for 20 years from date of opening, not exceeding Rs. 80,000 in any one year, or such smaller sum as, added to net earnings, will make up 5 per cent on paid-up capital (exclusive of cost of Makum Branch).

Annual subsidy on Makum Branch for 20 years from date of opening, not exceeding Rs. 20,000 in any one year, or such smaller sum as, added to the net earnings of the branch, will make up 5 per cent on the capital cost.

Annual subsidy on the Talap-Saikhoa Ghat extension for 10 years from date of opening at the rate of Rs. 600 per mile.

The subsidies are subject to deduction if the Company fail to keep the line in good order and properly equipped, and to work it.

(Note.—The period of subsidy, for the whole line, terminated as from the 30th June 1903, vide letter from the Chief Commissioner of Assam in the Public Works Department, to the Examiner of Public Works Accounts, Assam, No. 1789-P. W./2898, dated the 11th June 1894.)

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 18</sup> <sub>Sub-heads (a) and (b)</sub> DIBRU-SADIYA RAILWAY SYSTEM—contd.

## 16 (a) Dibru-Sadiya railway (3' 3½" gauge)—contd.

## Main provisions of contracts—contd.

- (iii) *Distribution of profits.*—All the profits go to the Company.
- (iv) *Rates and fares.*—To be approved by the Government. If, after five years from the date of opening of the main line, the net profits of the Company exceed 12 per cent of their paid-up capital, the Government may require the Company to make such reduction in their rates and fares as shall not lead to a diminution of the net profits below 12 per cent.
- (v) *Special obligations as to the conveyance of.*—
- (a) Mails, troops, high Government officials and Government stores.—To be conveyed at rates to be agreed upon from time to time, not exceeding those now paid in the district concerned.
- (b) Government bullion and coin, and the persons in charge thereof.—Not specified.
- (vi) *Power of the Government to determine contract.*—If the Company fail, for a period extending over six months, to observe its obligations, the Government may determine the contract and call upon the Company to restore the land, &c., made over to it.
- Under the contract the Government has the option of purchasing the railway, and its rolling-stock and other equipments and property of the Company, at intervals of five years commencing with the expiration of the first five years from the date of opening, on giving one year's notice and paying 20 per cent in excess of the value of the property as a dividend-paying investment.
- Notes.*—It has been agreed, however, that the right of purchase shall not be exercised before 1921, and that the subsequent opportunities of purchase shall recur at intervals of ten years instead of five—vide India Office letter to the Company's London Board, No. 2731, dated the 23rd December 1901.
- (vii) *Power of the Company to surrender contract.*—Nil.
- (viii) *Term of contract [if not determined under (vi) or (vii)].*—None specified.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907).—

TABLE I.								TABLE II.		
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e. outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from local Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.	%	Rs.	Rs.	%	Rs.	%
1902	77.50	82,00,694	8,51,890	4,11,167	5.01	—	4,11,167	5.01	311	51.73
1903	77.50	82,83,314	9,16,778	4,57,974	5.56	—	4,57,974	5.56	237	50.05
1904	77.50	87,01,368	9,48,478	4,21,317	4.84	—	4,21,317	4.84	235	55.56
1905	77.50	87,31,147	9,54,298	4,32,053	4.95	—	4,32,053	4.95	237	54.78
1906	77.50	88,18,873	10,08,281	4,05,634	4.63	—	4,05,634	4.63	250	59.47
1907	77.50	89,99,076	10,39,442	3,90,987	4.34	—	3,90,987	4.34	258	62.39
1908	77.50	93,24,388	10,24,770	4,47,121	4.80	—	4,47,121	4.80	254	56.87
1909	77.50	95,64,804	11,09,879	4,84,171	5.06	—	4,84,171	5.06	275	56.87
1910	83.02	97,10,846	11,20,604	4,46,417	4.59	—	4,46,417	4.59	278	60.16
1911	86.02	1,08,06,044	11,88,878	4,30,708	4.18	5,112	4,35,820	4.23	266	63.77

## 16 (b) Ledo and Tikak-Margherita Colliery railway (3' 3½" gauge)—

The line was used originally only for the purposes of bringing coal from the mines on the south bank of the Dihing river to the Dibru-Sadiya railway. It was constituted a railway and its working was taken over by the Dibru-Sadiya railway from the 1st January 1897.

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Dihing Bridge to Ledo . . . . .	17-2-94	5.50	5.10

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 16</sup> <sub>Sub-heads (a) and (b)</sub> **DIBRU-SADIYA RAILWAY SYSTEM—concl'd.**

**16 (b) Ledo and Tikak-Margherita Colliery railway (3' 3½" gauge)—concl'd.**

## Details of construction—

*Permanent-way.*—The line is laid with 50-lb. flat-footed steel rails on uriam sleepers.

*Ballast.*—The line is ballasted with broken stone.

*Fencing.*—The line is unfenced.

*Curves.*—The sharpest curve is of 800 feet radius.

*Gradients.*—The ruling gradient is 1 in 100.

## Contract—

Dated the 30th July 1881, between the Secretary of State and the Assam Railways and Trading Company, as to rights for coal and iron mining in the Makum coal-fields and the construction of a railway or tramway to the Makum coal-fields or other coal-pits so as to effect a junction with the railways which may be constructed to the bank of the Dihing river, as supplemented by the letter from the Government of India in the Public Works Department, No. 623-R.T., dated the 6th August 1896, as to the carriage of goods over the Company's Colliery line and for the through booking of the same with stations on the Dibru-Sadiya railway.

## Main provisions of contract—

- (i) *Land.*—Leased to the Company at a fixed half-yearly rental, or in lieu of such rent a certain royalty on the out-put of coal and iron ore.
- (ii) *Government aid.*—Nil.
- (iii) *Terms of working.*— } The colliery railway to be charged with 5 per cent of its gross  
(iv) *Distribution of profits.*— } earnings for the use of rolling-stock. All charges for working the  
open line system are divided between the Dibru-Sadiya railway and the Colliery Branch in proportion to their respective gross earnings.
- (v) *Rates and fares.*—Certain station to station goods rates have been approved in the Government of India letter noted above.
- (vi) *Special obligations as to the conveyance of.*—  
(a) Mails, troops, police, high Government officials and Government stores.— } Not specified.  
(b) Government bullion and coin, and the persons in charge thereof.— }
- (vii) *Power of the Government to determine contract.*—The coal concession, within an area of 30 square miles, is for a term of 20 years from 30th July 1881, and within an area of at least 4 square miles for a further term of 30 years thereafter if the Company fulfil their obligations.
- (viii) *Power of the Company to surrender contract.*—Nil.
- (ix) *Term of contract.*—None specified.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907).—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902 . . . . .	11·00	16,58,446	58,259	498	0·08	102	299·25
1903 . . . . .	11·00	16,62,082	59,077	—8,208	...	108	118·89
1904 . . . . .	8·50	16,62,082	66,108	18,158	0·79	127	76·55
1905 . . . . .	8·50	16,78,156	59,499	27,210	1·62	184	54·22
1906 . . . . .	8·50	16,83,081	65,115	25,052	1·49	147	61·53
1907 . . . . .	8·50	16,94,069	60,036	22,782	1·84	136	62·09
1908 . . . . .	8·50	16,94,069	69,175	30,486	1·80	156	55·98
1909 . . . . .	8·50	16,94,069	79,205	34,891	2·06	219	56·63
1910 . . . . .	8·50	16,94,069	80,298	32,441	1·91	231	59·61
1911 . . . . .	8·50	16,94,069	83,118	30,429	1·80	291	68·39

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 17 **GONDAL-PORBANDAR RAILWAY SYSTEM—**  
Sub-heads (a) and (b)

Lines comprised in the system.—The Gondal-Porbandar railway system is made up of—

	Miles.
(a) Gondal-Porbandar railway (3' 3½" gauge)	148·01
(b) Jetalsar-Rajkot railway (3' 3½" gauge)	46·21
Total	<u>194·22</u>

## 17 (a) Gondal-Porbandar railway (3' 3½" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
<b>Main line—</b>					
Dhase to Dhoraji	19-1-81	73·69			*Is worked for goods traffic only.
Dhoraji to Porbandar	17-12-89	69·07			
Porbandar to Porbandar Bandar	15-8-90	*1·55	144·31		
<b>Quarry branch—</b>					
Ranawao to quarry	17-12-89	*3·70	3·70	148·01	

## Details of construction—

**Permanent way.**—The permanent-way consists of 41½-lb. flat-footed steel rails on creosoted pine, deodar, jodka, teak and steel pea-pod sleepers.

**Ballast.**—The line is ballasted with broken stone.

**Fencing.**—The line is practically unfenced.

**Curves.**—The sharpest curve is of 716 feet radius.

**Gradients.**—The ruling gradient is 1 in 200, except on Ranawao quarry line where it is 1 in 150.

## Agreement—

This line was constructed by Government agency for the Native States of Gondal and Porbandar (after which it is named). It was worked up to the 31st March 1911 by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway system. The Coalition ceased to exist on the 1st April 1911, on and from which date the line is being worked independently as a separate railway by the Coalition of the Gondal and Porbandar States.

## Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of the year.	Total capital outlay, including expenses, to end of the year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(3)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1911	148·01	66,86,311	3,27,950	5,15,341	77·1	120	44·43

## 17 (b) Jetalsar-Rajkot railway (3' 3½" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Jetalsar to Rajkot Junction	12-4-93	46·21	46·21

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 17</sup> <sub>Sub-heads (a) and (b)</sub> GONDAL-PORBANDAR RAILWAY SYSTEM—*concl'd.*17 (b) Jetalsar-Rajkot railway (3' 3½" gauge)—*concl'd.*

## Details of construction—

*Permanent-way.*—The permanent-way consists of 41½-lb. flat-footed steel rails on creosoted pine, deodar and jodka teak sleepers, except for five miles, where the rails are laid on steel trough sleepers.

*Ballast.*—The ballast used is of broken stone.

*Fencing.*—The line is unfenced except between Rajkot Para and Rajkot Junction.

*Curves.*—The sharpest curve is of 955 feet radius.

*Gradients.*—The ruling gradient is 1 in 200.

## Agreement—

This line was constructed and was, up to the 31st March 1911, worked by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway system. The Coalition ceased to exist on the 1st April 1911, on and from which date the line is being worked by the Administration of the Gondal-Porbandar railway under the terms previously subsisting with the late Bhavnagar-Gondal-Junagad-Porbandar railway system, subject to such alterations as may subsequently be agreed to and embodied in an agreement *between the Proprietors of the Gondal-Porbandar railway and the Syndicate of the Jetalsar-Rajkot railway*, as to the maintenance, management and working of the Jetalsar-Rajkot railway.

## Main provisions of agreement—

- (i) *Land.*—Provided, at the cost of capital, by the Native States through whose territories the line passes.
- (ii) *Government aid.*—Nil. The line is the property of the States of Junagad, Gondal, Rajkot and Jetpur, who supply funds for any necessary additions thereto chargeable to the capital account. It is maintained and worked by the agency of the Gondal-Porbandar railway, who provide the rolling-stock and other appliances, etc., necessary thereunto.
- (iii) *Terms of working.*— } 40\* per cent. of gross earnings (subject to a biennial revision) are retained by the working agency, plus actual expenditure on maintenance of way and works and stations, police and magisterial charges, and 5 per cent of gross earnings for hire of rolling-stock supplied by the working agency.
- (iv) *Distribution of profits.*— } \* 35 per cent in those half-years in which the gross earnings per mile per week exceed Rs. 50.
- (v) *Rates and fares.*—
- (vi) *Special obligations as to the conveyance of.*— } The same as those in force on Gondal-Porbandar railway.
- (a) Troops, police, high Government officials and stores.—
- (b) Bullion and coin.—
- (vii) *Power of the Government to determine agreement.*— } Not specified.
- (viii) *Power of the Proprietors to determine agreement.*— }
- (ix) *Term of agreement.*—7 years from the 27th July 1911.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907).—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902	46-21	15,78,583	1,44,817	54,485	3-45	60	62-25
1903	46-21	15,78,638	1,66,400	63,230	4-01	69	62-00
1904	46-21	15,78,655	1,88,339	69,248	4-39	78	63-25
1905	46-21	15,80,207	1,91,155	74,682	4-74	80	60-88
1906	46-21	15,82,472	1,83,261	65,658	4-15	76	64-18
1907	46-21	15,86,904	2,33,823	1,07,094	6-89	99	55-16
1908	46-21	16,00,937	2,49,937	1,11,178	6-94	104	55-52
1909	46-21	16,03,140	2,44,104	1,01,803	6-35	102	58-29
1910	46-21	16,13,863	2,74,868	1,24,701	7-78	114	54-68
1911	46-21	16,13,888	2,93,252	1,30,086	8-06	123	55-64

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 18 JAMNAGAR RAILWAY (3' 8½" gauge)—  
Sub-head (a)

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
Bejkot Junction to Jamnagar . . . . .	8-4-97	50.29		
Jamnagar to Bedi Bandar . . . . .	8-4-97	63.93		
			54.28	* Is worked for goods traffic only.

## Details of construction—

**Permanent-way.**—The permanent-way consists of 41½-lbs. flat-footed steel rails on creosoted pine, deodar and jodka teak sleepers.

**Ballast.**—The ballast used is of broken stone.

**Fencing.**—The line is unfenced except at the approaches to the Victoria bridge near Jamnagar and to the south of the Jamnagar station yard.

**Curves.**—The sharpest curve is of 1,000 feet radius.

**Gradients.**—The ruling gradient is 1 in 200.

## Agreement—

This line was constructed for the Navanagar State and was, up to the 31st March 1911, worked by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways, which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway. The Coalition ceased to exist on the 1st April 1911, on and from which date the line is being worked independently as a separate railway.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

Calendar year.	TABLE I.					TABLE II.	
	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (5).	Earnings per mile per week.	Proportion of expenses to earnings.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902 . . . . .	54.22	23,58,240	1,31,104	53,731	2.23	46	59.00
1903 . . . . .	54.22	23,58,338	1,39,786	60,123	2.55	50	56.98
1904 . . . . .	54.22	23,27,231	1,41,030	56,731	2.44	50	59.76
1905 . . . . .	54.22	23,27,105	1,48,341	62,008	2.68	53	58.20
1906 . . . . .	54.22	23,26,336	1,51,335	60,976	2.58	54	59.39
1907 . . . . .	54.22	23,26,953	2,14,653	1,02,785	4.42	76	52.12
1908 . . . . .	54.22	23,26,945	2,35,715	1,24,911	5.37	84	47.25
1909 . . . . .	54.22	23,24,854	2,37,240	1,15,995	4.99	84	51.11
1910 . . . . .	54.22	23,32,069	2,44,148	1,20,318	5.16	87	50.72
1911 . . . . .	54.22	23,27,124	2,45,850	1,17,260	5.04	87	52.30



## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 19 . JODHPUR-BIKANER RAILWAY SYSTEM.  
Sub-heads (a) to (e)

Lines comprised in the system.—The Jodhpur-Bikaner railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Jodhpur-Bikaner (Jodhpur section) (3' 3½" gauge)	525·00	...	525·00
(b) Jodhpur-Bikaner (Bikaner section) (3' 3½" gauge)	385·40	85·00	470·40
(c) Jodhpur-Hyderabad railway (British section) (3' 3½" gauge)	128·98	...	128·98
(d) Mirpur Khas-Jhudo (3' 3½" gauge)	50·48	...	50·48
(e) Mirpur Khas-Khadro (3' 3½" gauge)	...	49·50	49·50
Total	1,034·81	134·50	1,219·31

## 19 (a) Jodhpur-Bikaner (Jodhpur section) (3' 3½" gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Main line—</b>				
Kuchaman Road to Merta Road	13-3-83	73·00		
Merta Road to Jodhpur	8-4-91	64·00		
Jodhpur to Luni Junction	9-3-85	29·00		
Luni Junction to Balotra	22-3-87	50·00		
Balotra to Barmer	15-5-99	60·00		
Barmer to the Jodhpur Frontier	22-12-00	74·00	341·44	
<b>Branches and extensions—</b>				
<i>Pachpadra branch—</i>				
Balotra to Pachpadra	22-3-87	10·00	10·00	
<i>Marwar Railway Junction extension—</i>				
Luni Junction to Marwar Pali	17-6-84	25·00		
Marwar Pali to Marwar Railway Junction	24-6-82	19·00	44·00	
<i>Merta City branch—</i>				
Merta Road to Merta City	17-1-05	8·95	8·95	
<i>Bhagu extension—</i>				
Merta Road to Nagaur	16-10-91	35·00		
Nagaur to Bhagu	9-12-91	24·50	59·50	
<i>Marwar Frontier extension—</i>				
Degana to Marwar Frontier	16-9-99	61·11	61·11	
				325·00

## Details of construction—

*Permanent way.*—About 10 miles of line are laid with 36-lb. flat-footed iron rails, 200 miles with 36-lb., 29 miles with 41½-lb. and 286 miles with 50-lb. flat-footed steel rails. The sleepers are steel trough, deodar, pine and sal.

*Ballast.*—On the greater portion of the line the ballast consists of coarse sand, kunkur and broken stone.

*Fencing.*—With the exception of a few stations, the line is unfenced.

*Curves.*—There are no curves with a radius of less than 1,000 feet.

*Gradients.*—The ruling gradient is 1 in 150.

## Agreements—

Dated the 13th July 1889, between the Government of India and the Jodhpur and Bikaner Durbars, Dated the 30th July 1889 } respectively, as to the construction (at the cost of the two Durbars for the portions in their respective territories), management, maintenance and working of the Jodhpur-Bikaner railway.

Dated the 22nd December 1900, between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner, as to the construction (at the cost of the Jodhpur Durbar and of the Government of India for the portions in their respective territories), of a railway from Balotra to Hyderabad, and for the management, maintenance and working thereof by the Jodhpur-Bikaner railway, as modified by—

Letter from the Government of India in the Public Works Department, to the Agent to the Governor General for Rajputana, No. 255 R.S., dated the 6th March 1900, and the reply thereto;

Letter from the Railway Board to the Agent to the Governor General for Rajputana, No. 1537 B.T., dated the 20th August 1908; and

Letter from the Railway Board to the Agent to the Governor General for Rajputana, No. 2197 R.S., dated the 26th October 1908, and the reply thereto.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 19 **JODHPUR-BIKANER RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (e)

19 (a) Jodhpur-Bikaner (Jodhpur section) (3' 3½" gauge)—contd.

## Main provisions of agreements—

- (i) *Land.*—Provided free of cost—that in Jodhpur territory by the Jodhpur Durbar, that in Bikaner territory by the Bikaner Durbar.
- (ii) *Government aid.*—Nil. The Jodhpur-Bikaner railway is the exclusive property of the two Native States—the portion in Jodhpur territory belonging to the Jodhpur Durbar, that in Bikaner territory to the Bikaner Durbar—each of which provides the funds requisite for its own line.
- (iii) *Distribution of profits.*—Each of the two Durbars receives all the profits derived from the working of the portion of the line situate in its territories.
- (iv) *Rates and fares.*—
- (v) *Special obligations as to the conveyance of.*—
- (a) Mails, police, troops, high Government officials and Government stores.—
- (b) Government bullion and coin, and the persons in charge thereof.—
- (vi) *Power of the Government to determine agreements.*—
- (vii) *Power of the Durbars to determine agreements.*—
- (viii) *Term of agreements.*—

} Not specified; but certain rates and fares were approved by executive order of the Durbars.

} Not specified.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902	454.94	1,18,69,424	16,76,216	8,35,202	7.04	71	50.17
1903	454.94	1,19,31,439	16,34,708	8,91,196	7.47	69	45.48
1904	454.94	1,21,90,804	16,87,624	9,58,365	7.88	71	43.21
1905	463.89	1,22,63,774	19,16,254	11,01,284	8.98	81	42.53
1906	463.89	1,22,77,015	20,91,368	12,23,531	9.97	87	41.50
1907	463.89	1,27,43,482	21,40,652	11,64,748	9.14	89	45.29
1908	463.89	1,42,85,467	19,28,235	8,65,022	6.06	60	55.14
1909	525.00	1,43,08,908	21,10,217	10,19,529	7.13	77	51.69
1910	525.00	1,44,92,738	26,90,468	15,49,708	10.69	89	42.40
1911	525.00	1,47,54,392	35,12,004	20,39,445	13.82	129	41.93

19 (b) Jodhpur-Bikaner (Bikaner section) (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Main line—</b>				
Bhagu to Bikaner	9-12-91	47.60		
Bikaner to Dulmera	2-6-98	42.00		
Dulmera to Lunransar	1-1-01	8.32		
Lunransar to Suratgarh		63.53		
Suratgarh to Bhatinda	9-3-02	88.00	249.45	
<b>Hisar Extension—</b>				
Marwar Frontier to Sujangarh	16-9-09	1.42		
Sujangarh to Batangarh	2-2-10	28.56		
Batangarh to Churu	23-5-10	26.61		
Churu to Hisar	8-7-11	79.36	135.95	385.40
<b>Under construction or sanctioned for construction—</b>				
Bikaner to Batangarh (sanctioned on 26th February 1911).	...	85.00	85.00	85.00
<b>Total length open and under construction or sanctioned</b>				470.40

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 19</sup> Sub-heads (a) to (c). JODHPUR-BIKANER RAILWAY SYSTEM—contd.

## 19 (b) Jodhpur-Bikaner (Bikaner section) (3' 3½" gauge)—concl'd.

## Details of construction—

*Permanent-way.*—The permanent-way consists of flat-footed steel rails of 50 lbs. per yard for about 142 miles and 36 lbs. per yard for 243 miles laid on steel trough, deodar, sal and maiyang sleepers.

*Ballast.*—The ballast consists of coarse sand and small kunkur, except on the Suratgarh-Bhatinda section where it is broken brick and kunkur.

*Fencing.*—The line is unfenced, except at a few stations.

*Curves.*—There are no curves with a radius of less than 1,000 feet.

*Gradients.*—The ruling gradient is 1 in 150.

## Agreements—

As noted under 18 (a), Jodhpur-Bikaner (Jodhpur section) (3' 3½" gauge).

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902 . . . . .	245-35	52,49,339	3,22,022	1,42,580	3-72	34	55-72
1903 . . . . .	245-35	51,30,925	5,25,329	2,66,197	5-19	41	49-35
1904 . . . . .	245-35	50,93,549	7,23,902	4,05,673	7-96	57	43-95
1905 . . . . .	245-35	51,72,406	8,53,432	5,62,363	10-67	69	36-34
1906 . . . . .	245-35	52,70,205	10,92,839	4,74,514	9-00	86	56-53
1907 . . . . .	245-35	55,15,481	8,22,608	3,38,372	6-13	69	61-66
1908 . . . . .	245-35	75,07,922	7,74,735	3,49,859	4-66	61	54-84
1909 . . . . .	251-35	75,36,367	7,82,156	3,16,844	4-20	60	59-49
1910 . . . . .	306-04	82,04,896	10,51,570	6,07,372	7-40	67	42-79
1911 . . . . .	385-40	97,82,232	14,03,926	8,18,468	8-37	70	41-70

## 19 (c) Jodhpur-Hyderabad (British section) (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	REMARKS
Hyderabad to Shadipalli . . . . .	18-8-92	55-49	123-98	The line from Hyderabad to Shadipalli was originally on the 5' 6" gauge, but was converted to, and opened on, the 3' 3½" gauge on the 10th October 1901.
Shadipalli to the Jodhpur Frontier . . . . .	23-12-00	68-49		

## Details of construction—

*Permanent-way.*—The section is laid with 50-lb. flat-footed steel rails on deodar, pine and maiyang sleepers.

*Ballast.*—The ballast is of kunkur, stone and broken brick.

*Fencing.*—With the exception of a few stations and about 9 miles between Shadipalli and Pithoro the line is unfenced.

*Curves.*—There are no curves with a radius of less than 1,000 feet.

*Gradients.*—The ruling gradient is 1 in 150.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 19</sup> <sub>Sub-heads (a) to (e)</sub> JODHPUR-BIKANER RAILWAY SYSTEM—*contd.*19 (c) Jodhpur-Hyderabad (British section) (3' 3½" gauge)—*contd.*

## Agreement and contracts—

Agreement, dated the 22nd December 1900, between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner, as to the construction (at the cost of the Jodhpur Durbar and of the Government of India for the portions in their respective territories), of a railway from Balotra to Hyderabad, and for the management, maintenance and working thereof by the Jodhpur-Bikaner Railway Administration, as modified by—

Letter from the Government of India in the Public Works Department, to the Agent to the Governor General for Rajputana, No. 255 R.S., dated the 6th March 1900, and the reply thereto;

Letter from the Railway Board to the Agent to the Governor General for Rajputana, No. 1587 R.T., dated the 20th August 1908; and

Letter from the Railway Board to the Agent to the Governor General for Rajputana, No. 2197 R.S., dated the 26th October 1908, and the reply thereto.

Contract, dated the 13th July 1911, between the Secretary of State and the Sind Light Railways, Limited, as to the construction, management, maintenance and working, by the Administration of the Jodhpur-Bikaner railway (or any State, or other, agency), of the Mirpur Khas-Jhudo railway.

Contract, under consideration and not yet executed, between the Secretary of State and Their Highnesses the Maharajas of Jodhpur and Bikaner as to the management, maintenance and working, by the Administration of the Jodhpur-Bikaner railway, of the Mirpur Khas-Jhudo railway.

## Main provisions of agreement and contracts—

- (i) *Land.*—Provided by the Government at the cost of capital.
  - (ii) *Government aid.*—The line is the property of the Government, who provide all expenditure for capital, and it is managed, maintained, stocked and worked by the Administration of the Jodhpur-Bikaner railway as part of that system.
  - (iii) *Terms of working.*—The working expenses of the amalgamated undertaking, excluding the cost of maintenance (but including rent of joint works and interest at 4½ per cent on funds provided for the purchase of stores required for the maintenance and working of the combined undertaking) are divided, in the ratio of the gross earnings of each, between the British and Native State sections. Maintenance charges are the actual expenditure on each section for *direct* charges; and for *joint* charges such as the salary, allowances and other expenses of the Chief Engineer, the proportion due in the ratio of the gross earnings. In addition to the working expenses mentioned above, the Government pay to the Jodhpur and Bikaner Durbars in each half-year for the provision of rolling-stock a sum equal to 5 per cent of the share of the cost of the whole of the joint stock of the system which is attributable to the Jodhpur-Hyderabad railway—the book value of the stock being divided between the several sections of the system in proportion to the gross earnings of each for the period, for the purpose of determining the amount on which the percentage shall be made.
  - (iv) *Distribution of profits.*—After payment of the working expenses indicated under (iii), the balance of the gross earnings, if any, is paid to the British Government.
  - (v) *Rates and fares.*—The schedules of maxima and minima rates and fares, and the classification of goods, in force on the North Western railway are to apply. (As a temporary arrangement, until in the opinion of the Government it is considered desirable to enforce the provisions of the agreement, the classification of goods at that time in force on the Bombay, Baroda and Central India railway, and which was the same as that at the time obtaining on the Jodhpur-Bikaner railway, applies.)
  - (vi) *Special obligations as to the conveyance of.*—
 

<ol style="list-style-type: none"> <li>(a) Mails, police, troops, high Government officials and Government stores.—</li> <li>(b) Government bullion and coin, and the persons in charge thereof.—</li> </ol>	}	To be conveyed on the same conditions and at the same rates as may be in force from time to time on other railways of the same gauge belonging to the Government of India.
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  - (vii) *Power of the Government to determine agreement.*—
  - (viii) *Power of the Durbars to surrender agreement.*—
- } The agreement is terminable, only on the 1st January or the 1st June in any year, on 12 months' notice given by either party to the other.
- (ix) *Term of agreement.*—

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 19</sup> Sub-heads (a) to (e). JODHPUR-BIKANER RAILWAY SYSTEM—contd.

## 19 (c) Jodhpur-Hyderabad (British section) (3' 3½" gauge)—contd.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.							TABLE II.		
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1902 . . .	123-98	40,45,972	5,04,007	2,18,814	5-41	1,59,771	+59,043	78	56-59
1903 . . .	123-98	40,43,888	5,84,094	2,62,379	6-49	1,60,179	+1,02,200	91	55-08
1904 . . .	123-98	39,59,081	6,48,728	3,45,007	8-72	1,54,846	+1,90,161	101	46-62
1905 . . .	123-98	39,67,948	7,23,939	3,69,002	9-30	1,58,622	+2,10,380	112	49-08
1906 . . .	123-98	40,70,635	8,91,456	5,11,938	12-58	1,57,778	+3,54,160	138	42-57
1907 . . .	123-98	40,33,073	8,05,916	3,57,918	8-90	1,21,968	+2,35,950	125	55-54
1908 . . .	123-98	42,81,148	7,59,479	3,34,028	7-80	1,49,707	+1,84,221	118	56-02
1909 . . .	123-98	42,93,099	8,19,444	2,69,617	6-28	1,41,400	+1,22,217	127	67-10
1910 . . .	123-98	42,32,763	9,00,091	3,80,517	8-99	1,42,724	+2,37,793	140	57-72
1911 . . .	123-98	42,01,757	12,02,632	6,94,934	16-34	1,42,970	+3,51,964	167	42-23

## 19 (d) Mirpur Khas-Jhudo railway (3' 3½" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Jamrao Junction to Jhudo . . . . .	19-4-09	50-48	50-48

## Details of construction—

*Permanent-way.*—The permanent-way consists of about 34 miles of 36-lb. and about 16-43 miles of 41½-lb. flat-footed steel rails laid on deodar sleepers of good quality.

*Ballast.*—The line is not ballasted.

*Fencing.*—The line is unfenced.

*Curves.*—The sharpest curve is of 1,206 feet radius.

*Gradients.*—The ruling gradient is 1 in 150.

## Agreement and contracts.—

Agreement, dated the 22nd December 1900, between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner, as to the construction (at the cost of the Jodhpur Durbar and of the Government of India for the portions in their respective territories) of a railway from Balotra to Hyderabad, and for the management, maintenance and working thereof by the Jodhpur-Bikaner Railway Administration, as modified by—

Letter from the Government of India in the Public Works Department, to the Agent to the Governor General for Rajputana, No. 255 R.S., dated the 6th March 1900, and the reply thereto;

Letter from the Railway Board to the Agent to the Governor General for Rajputana, No. 1537 R.T., dated the 20th August 1908; and

Letter from the Railway Board to the Agent to the Governor General for Rajputana, No. 2197 R.S., dated the 26th October 1908, and the reply thereto.

Contract, dated the 13th July 1911, between the Secretary of State and the Sind Light Railways, Limited, as to the construction, management, maintenance and working, by the Administration of the Jodhpur-Bikaner railway (or any State, or other, agency), of the Mirpur Khas-Jhudo railway.

Contract, under consideration and not yet executed, between the Secretary of State and Their Highnesses the Maharajas of Jodhpur and Bikaner, as to the management, maintenance and working, by the Administration of the Jodhpur-Bikaner railway, of the Mirpur Khas-Jhudo railway.

## Main provisions of agreement and contracts.—

(i) *Land.*—Provided by the Government free of cost to the Company, except that the bank constructed by the Jamrao Canal Department, parallel to and alongside of the Jamrao Canal, upon which the railway runs for a distance of about 16 miles, remains the property of the Canal Department, subject to the right of the Company to have the said railway running thereon and other provisions relating to the canal and bridges thereover, etc.

(ii) *Government aid.*—The railway is the property of the Sind Light Railways, Limited, at whose cost it was constructed by the Administration of the Jodhpur-Bikaner railway, who manage, maintain, stock and work it, under agreement with the Government, in conjunction with and as part of the British section of the Jodhpur-Hyderabad railway.

(iii) *Terms of working.*— } As between the Government and the Sind Light Railways, Limited,  
(iv) *Distribution of profits.*— } the Government undertake the management, maintenance, provision of rolling-stock and working, through State, or other, agency (that at present employed being the Administration of the Jodhpur-Bikaner railway), for 40 per cent of the gross earnings

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 19 **JODHPUR-BIKANER RAILWAY SYSTEM—concl'd.**  
Sub-heads (a) to (e)

## 19 (d) Mirpur Khas-Jhudo railway (3' 3½" gauge)—concl'd.

**Main provisions of agreement and contracts—concl'd.**

of the Mirpur Khas-Jhudo railway; the remainder, being the net earnings of the branch, is paid by the working agency to the Company.

As between the Government and the Administration of the Jodhpur-Bikaner railway, the Company's line as managed, maintained, stocked and worked by the Jodhpur-Bikaner Railway Administration in conjunction with, and as if it had originally been a part of, the British section of the Jodhpur-Hyderabad railway, and were subject to the provisions of the agreement of the 22nd December 1900 so far as they are not inconsistent with the contract of 1911 between the Government and the Company; provided that the difference (if any) between the following sums, viz. :—

- (a) the proportion (viz., 60 per cent) of the gross earnings of the Mirpur Khas-Jhudo railway in each half-year payable, under the combined effect of the two agreements of 1911, by the working agency to the Company, and
- (b) the sum which would have been payable to the Government as the excess of the gross earnings, over working expenses, of the Mirpur Khas-Jhudo railway in terms of the agreement of the 22nd December 1900, if that railway had been originally subject thereto as part of the British section of the Jodhpur-Hyderabad railway and if the gross earnings thereof, ascertained by separate accounts, had been treated as separate from those of the other portion of the Jodhpur-Hyderabad railway so as to bear its own share of working expenses under that agreement in the same half-year,

is adjusted by payment of such difference by the Government to the Jodhpur-Bikaner Railway Administration or *vice versa*, as the case may be, according as the sum payable by the Railway Administration to the Company is greater or less than that which would have been payable by the Railway Administration to the Government as stated under (b) above.

(v) *Rates and fares.*—(vi) *Special obligations in respect of the conveyance of.*—

- (a) Mails, police, troops, high Government officials, and Government stores.—
- (b) Government bullion and coin, and the persons in charge thereof.—

} As noted under 18 (c), Jodhpur-Hyderabad railway (British section), (3' 3½" gauge).

(vii) *Power of the Government to determine contract.*—Government may determine the contract by "Notice of purchase" either on the 31st December 1928, or on the 31st December in the last year in any subsequent period of ten years, on giving twelve months' notice.

On the termination of the contract Government takes possession of the railway and all its appurtenances on the payment to the Company of a sum equal to 25 times the amount of the average net earnings of the railway during the three years immediately preceding the date of that event provided that such sum shall not exceed by more than 20 per cent, nor be less than, the total capital expenditure.

(viii) *Power of the Company to surrender contract.*—Nil.(ix) *Term of contract.*—Until determined under (vii).**Statistics of working—**

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1909 . . . . .	50-49	7,57,931	43,585	26,121	8-54	25	40-00
1910 . . . . .	50-43	7,20,900	36,463	39,078	8-20	38	40-00
1911 . . . . .	50-43	7,20,329	36,223	57,757	8-02	57	40-00

## 19 (e) Mirpur Khas-Khadro railway (3' 3½" gauge)—

This railway was sanctioned for construction by the agency of the Jodhpur-Bikaner railway for the Sind Light Railways, Limited, on exactly the same terms as those agreed to for the Mirpur Khas-Jhudo railway.

**Progress in opening—**

Section of railway.	Date of opening.	Miles.	Total.
Mirpur Khas to Khadro . . . . .	1-1-12	49-50	49-50

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 90. JUNAGAD RAILWAY (3' 3½" gauge)—  
Sub-head (a)

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	REMARKS.
<i>Main line—</i>					
Jetalpur to Junagad . . . . .	1-9-88	16'00			
Junagad to Veraval Docks . . . . .	1-2-89	51'30	67'30		
<i>Branches—</i>					
<i>Kutiyana branch—</i>					
Shapur to Manavadar . . . . .	15-2-10	15'86			
Manavadar to Bantva . . . . .	25-12-10	3'45	19'31		
Junagad quarry line . . . . .	1-2-89	2'35	2'35		* Is worked for goods traffic only.
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>					
Junagad to Visavadar † (sanctioned on 11-11-11)	...	26'56†	26'56	88'96	† Earthwork alone has been sanctioned at present.
				26'56	
				115'52	

## Details of construction—

*Permanent-way.*—The permanent-way consists of 41½-lb. flat-footed steel rails on creosoted pine, deodar and jodka teak sleepers.

*Ballast.*—The line is ballasted with broken stone.

*Fencing.*—The line is practically unfenced.

*Curves.*—The sharpest curve is of 1,200 feet radius.

*Gradients.*—The ruling gradient is 1 in 150.

## Agreement—

This line was constructed by Government agency for the Native State of Junagad (after which it is named). It was, up to the 31st March 1911, worked by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working, as one undertaking, the railways which prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway. The Coalition ceased to exist on the 1st April 1911, on and from which date the line is being worked independently as a separate and distinct railway.

## Statistics of working—

TABLE I						TABLE II	
Calendar year.	Mileage open at end of the year.	Total capital outlay, including suspense, to end of the year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (5).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1911 . . . . .	88'96	48,05,266	4,45,926	2,06,461	4'80	96	88'70

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 21 MORVI RAILWAY (3' 3½" and 2' 6" gauges)—  
Sub-head (a)

The whole line was originally on the 2' 6" gauge. In 1905 the length between Wadhwan and Rajkot was converted to the 3' 3½" gauge—from Wadhwan to Than Road, 31.84 miles, on a new alignment and onwards to Rajkot, 42.60 miles, on the original alignment with a few unimportant diversions. The line between Vankaner and Morvi was retained on the 2' 6" gauge.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
3' 3½" gauge— Wadhwan to Rajkot Junction.	4-3-05	73.94	73.94	
2' 6" gauge— Vankaner to Morvi	24-3-07	15.70		
Quarry branch	23-12-05	3.19	18.89	92.83

## Details of construction—

**Permanent-way.**—The permanent-way on the 3' 3½" gauge section consists of 41½-lb. flat-footed steel rails on half round teak and creosoted pine sleepers; and that on the 2' 6" gauge section consists of 29-lb. flat-footed steel rails on creosoted pine sleepers.

**Ballast.**—The line is ballasted with moorum (disintegrated trap).

**Fencing.**—The line is unfenced.

**Curves.**—The sharpest curve on the 3' 3½" gauge is of 950 feet radius; and that on the 2' 6" gauge is of 500 feet radius.

**Gradients.**—The ruling gradient of the greater part of the railway is about 1 in 200 with a 1 in 150 banking section.

## Contract—

**Nil.**—The line was constructed by His Highness the Thakore Sahib of Morvi, at his own expense, and is maintained and worked by him.

**Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907).**—

Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Earnings.		Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
			Gross earnings.	Net earnings.			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902	94.36	27,32,748	3,05,058	1,13,299	4.14	63	63.86
1903	94.36	37,35,452	2,98,086	1,44,767	5.19	61	51.43
1904	94.36	34,06,196	3,54,636	1,83,909	5.55	75	46.73
1905	89.64	43,90,817	4,23,640	1,74,476	3.97	69	46.09
	94.64	44,90,459	3,07,560	1,59,534	3.55	62	46.11
1906	94.64	45,73,551	4,11,781	2,35,763	5.39	84	37.39
1907	94.64	46,43,725	5,03,333	2,62,464	6.08	105	44.43
1908	92.83	47,35,497	4,71,330	2,12,900	4.44	93	54.33
1909	92.83	49,91,030	5,23,105	2,96,236	5.94	109	44.99
1910	92.83						
1911	92.83	49,91,236	6,33,062	4,32,520	3.47	133	33.57



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 22 **ROHILKUND AND KUMAON RAILWAY SYSTEM—**  
Sub-heads (a) to (c)*Chairman.*—Colonel T. Gracey, C.S.I.*Managing Director.*—Alexander Izat, Esq., C.I.E.*Offices.*—237, Gresham House, Old Broad Street, London, E.C.

Lines comprised in the system.—The Rohilkund and Kumaon railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Rohilkund and Kumaon railway (3' 3½" gauge)	235·20	33·68	268·88
(b) Lucknow-Bareilly railway (3' 3½" gauge)	257·57	54·64	312·21
(c) Powsayn Light railway (2' 6" gauge)	39·50	...	39·50
<b>Total</b>	<b>532·27</b>	<b>88·32</b>	<b>620·59</b>

## Running powers—

*Home line over foreign line:—*

Over Ramganga bridge, between Bareilly and Baharatganj, Oudh and Rohilkhand railway.

Over Ramganga bridge, between Dalpatpur and Moradabad, Oudh and Rohilkhand railway.

} for passenger and goods trains. {

0·52

0·40

0·92

*Foreign line over home line:—*

Bengal and North-Western railway, Daliganj to Alahbagh, for passenger and goods trains

3·40

## 22 (a) Rohilkund and Kumaon railway (3' 3½" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
<b>Main line—</b>					
Bhojseepura to Kathgodam	12-10-94	53·22			
			53·22		
<b>Extensions—</b>					
<b>Kasganj extension—</b>					
Bareilly to Soron	29-1-06	54·95			
Soron to Kasganj	4-1-06	9·00			
			63·95		
<b>Ramnagar extension—</b>					
Moradabad to Got	10-5-08	4·19			
Got to Ramnagar	11-1-08	44·00			
			48·19		
<b>Kashipur extension—</b>					
Lalkua to Kashipur	11-1-08	36·00			
			36·00		
<b>Shahjahanpur extension—</b>					
Pilibhit to Bawalpur	24-2-11	23·14			
			23·14 <sup>a</sup>		
<b>TOTAL LENGTH OPEN</b>	...	...	...	235·20	
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION.</b>					
Bawalpur to Carewganj	18-1-12	31·12			
Shahbaznagar to Shahjahanpur (sanctioned on 17th June 1909).	...	2·56			
			33·68	33·68	
<b>TOTAL LENGTH OPEN AND UNDER CONSTRUCTION OR SANCTIONED.</b>	...	...	...	268·88	

<sup>a</sup> Opened only in a restricted sense, and did not form part of the open mileage earning revenue.

## Details of construction—

*Permanent-way.*—The permanent-way consists of 4½ and 50-lb. steel rails on sal, Australian and deodar sleepers. The lines from Lalkua to Ramnagar, Moradabad to Kashipur, Pilibhit to Carewganj, and Shahbaznagar to Shahjahanpur are laid with 4½-lb. steel rails on sal and deodar sleepers.*Ballast.*—The ballast consists of broken brick and shingle.*Fencing.*—The line is partially fenced.*Curves.*—There are no curves with a radius of less than 716 feet.*Gradients.*—The ruling gradient between Bhojseepura and Kathgodam is 1 in 280, except near the hills where it is 1 in 70; between Bareilly and Kasganj, 1 in 400; between Moradabad and Ramnagar, 1 in 400, except near the hills where it is 1 in 125; between Lalkua and Kashipur, 1 in 200, except for a short distance near Lalkua where it is 1 in 100; and between Pilibhit and Carewganj, 1 in 400.

## Contracts—

Dated the 12th October 1882 (called the original contract), between the Secretary of State and the Rohilkund and Kumaon Railway Company, as to the construction, maintenance, management and working of the railway from Bareilly (Bhojseepura) to Kathgodam.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 22  
Sub-heads (a) to (c) **ROHILKUND AND KUMAON RAILWAY SYSTEM—contd.**

**22 (a) Rohilkund and Kumaon railway (3' 3½" gauge)—contd.****Contracts—contd.**

Dated the 8th September 1890 (called the principal contract), between the Secretary of State and the Rohilkund and Kumaon Railway Company as to the working of the Company's line and the construction, maintenance, management and working of certain State lines.

Dated the 31st December 1892 (supplemental to the contract of 1890), between the Secretary of State and the Rohilkund and Kumaon Railway Company, for the advance of capital for the state line and as to debentures.

Dated the 5th February 1901 (supplemental to the contracts of 1882, 1890 and 1892), between the Secretary of State and the Rohilkund and Kumaon Railway Company, prolonging and continuing the contract of 1890, subject to certain modifications thereof and of the contracts of 1882 and 1892.

Dated the 24th April 1903 (supplemental to the contracts of 1882 and 1890), between the Secretary of State and the Rohilkund and Kumaon Railway Company, as to the adoption of 1s. 4d. per rupee as the "prescribed" rate of exchange.

Dated the 15th July 1904 (supplemental to the contracts of 1882, 1890, 1901 and 1903), between the Secretary of State and the Rohilkund and Kumaon Railway Company, as to the construction, maintenance, management and working of certain Branch railways and the purchase of existing Branch lines.

Dated the 13th July 1906, between the Secretary of State and the Rohilkund and Kumaon Railway Company, as to the provision of moneys for capital expenditure on the Powayan Steam Tramway, and the acquisition by the Company of interests in that Tramway, and other matters.

Dated the 24th March 1909 (supplemental to and in modification of the contracts of 1882, 1890, 1892, 1901, 1903, 1904 and 1906), between the Secretary of State and the Rohilkund and Kumaon Railway Company, as to the raising of capital for the purposes both of the Company's lines and of the Lucknow-Bareilly railway, and for the construction, maintenance, management and working of the Pilibhit-Barddeo railway, extensions of the Dudhwa branch with a permanent bridge over the Sarda river, and the Pilibhit-Shahjahanpur railway.

**Main provisions of contracts—**

(i) *Land.*—Land for the Company's railway constructed in pursuance of the original contract was provided by the Government free of cost to the Company, subject to the condition that the Company pays, on demand, to Government the cost price of land purchased by Government for the purposes of the Company's railway. Land for the railway from Gokaran Nath to Pilibhit, and for all the other State lines provided by the Government after the 1st January 1891, is charged to capital subsequent to the date of the principal contract. Land for Branch railways and Branch line works is provided free, except and excluding land required for quarrying, ballast, brickfields or kindred purposes.

(ii) *Government aid.*—Government guaranteed interest, at 4 per cent per annum in sterling, on the capital up to £200,000 expended on the Company's original railway, until its opening throughout for public traffic but for no longer than and including 1st January 1885; thereafter a subsidy of Rs. 20,000 half-yearly for ten years from the date of opening, which ceased on the 31st December 1894.

In the case of the Lucknow-Bareilly railway the Government guarantee the principal and interest in respect of debentures for the nominal amount of £147,000 issued by the Company in order to raise the sum of £160,000 (the sum actually realised being £160,837).

The Company reimburses the Government any amount by which the interest payable under the guarantee may exceed Rs. 96,000 in any one year.

All sums advanced by the Government after the 31st December 1900 bear interest at the rate of 3½ per cent per annum.

(iii) *Terms of working.*—The Lucknow-Bareilly railway is worked in conjunction with the Company's own line, a joint account of working expenses being kept. Joint working expenses account includes—

(1) any item of capital expenditure not exceeding Rs. 1,000 classed as "minor work" subject to a maximum charge on such account of Rs. 15 per mile open of railway per half-year, and

(2) a payment to Government of Rs. 20 per mile of railway open to traffic per half-year for audit and supervision.

The joint working expenses of the open system are divided between—

(a) the Company's original line and "the Additional Main Line Works,"

(b) the Lucknow-Bareilly railway and "the State Line Works" and

(c) "the Branch Railways" and "the Branch Line Works"

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 22</sup> <sub>Sub-heads (a) to (c)</sub> ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*22 (a) Rohilkund and Kumaon railway (3' 3½" gauge)—*contd.*Main provisions of contracts—*contd.*

in proportion to the respective gross earnings of those three classes.

(iv) *Distribution of profits.*—The earnings of the Company's original line and "the Additional Main Line Works," after payment of all working expenses, are applied in the following order :—

- (a) in payment of contribution to Provident Fund contingent on net earnings,
- (b) in payment of interest on the Company's Main Line Stock (being part of the Joint Debenture Stock),
- (c) in payment of interest on borrowed capital, and
- (d) in payment of interest at 6 per cent per annum on the *bona fide* paid up share capital of the Company.

The surplus is divided equally between the Government and the Company.

The net earnings of "the Branch Railways" and of "the Branch Line Works" belong absolutely to the Company, without any right of the Secretary of State to participate therein, subject only to the payment thereof of contribution to Provident Fund contingent on net earnings and interest on the Company's Branch Line Stock (being part of the Joint Debenture Stock).

The net earnings of the Lucknow-Bareilly railway and "the State Works", *i.e.*, of the undertaking, are applied in the following order :—

- (a) In payment of contribution to Provident Fund contingent on net earnings,
- (b) in payment of the interest at 4 per cent per annum on the State Stock (being part of the Joint Debenture Stock), except interest on such portion of the State Stock as may for the time being be appropriated for lines under construction, which latter is charged to capital till the close of the half year next after the opening of lines to traffic,
- (c) in payment of the interest on the debentures of £147,000 issued by the Company in 1890, and of interest at 4 per cent per annum on any further capital supplied by the Company or advanced by the Government for the purposes of the undertaking (3½ per cent per annum on Government advances subsequent to the 31st December 1900),
- (d) in payment to the Government of interest at 4 per cent per annum on the value at cost price of the railways, rolling-stock, plant, machinery and land handed over to or retained by the Company on the 1st January 1891 (standing to debit of Part I of the Capital Account), and
- (e) the residue is divided between the Government and the Company in the ratio of their respective shares of capital in the undertaking.

[*Note.*—The State Stock (part of Joint Debenture Stock), excluding and except so much of it as is appropriated for the construction of the Pilibhit-Bardmoor railway, does not participate in profits either as Government capital or as Company's capital.](v) *Rates and fares*—

Maxima :—

Company's lines :—

*Passengers* :—*Goods* :—1st class, 3 annas per mile.  
Lower class, 4½ pies per mile.Edible grains, ½rd pie per maund per mile.  
Other goods, 2 pies per maund per mile.

Luggage, 2 pies per maund per mile.

Parcels and live-stock at rates not exceeding 50 per cent over rates on the East Indian railway.

On the Branch railways food grains and salt are to be carried at rates, not less than the minimum for goods, as the Government may fix; and fuel for distances exceeding 100 miles on the Branch railways, or on any part thereof together with any part of the other railways belonging to or worked by the Company at a rate not exceeding ½th pie per maund per mile.

## Lucknow-Bareilly railway and branches :—

The Government to authorise, from time to time, maximum and minimum rates, and to prescribe the classification of passengers and goods, as well as the extent to which, within the maxima and minima, the Company vary such rates.

For traffic between the joint line (Bareilly-Bhojseepura) and the Company's own line, the rates in force on the latter may be levied, except in the case of food-grains and salt, and of fuel carried for

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 22</sup> <sub>Sub-heads (a) to (c).</sub> **ROHILKUND AND KUMAON RAILWAY SYSTEM—contd.****22 (a) Rohilkund and Kumaon railway (3' 3½" gauge)—contd.**

Main provisions of contracts—contd.

distances exceeding 100 miles; for the former the rates will not be less than the minimum for goods fixed by Government, and for the latter the rates will not exceed ¼th pie per maund per mile.

**(vi) Special obligations as to the conveyance of.—****(a) Mails.**—On the Company's original line, to be conveyed on payment of Rs. 5,000 half-yearly.

On the extensions of the Company's original line (Additional Main Line Works), the Company is to receive a reasonable remuneration in lieu of the sum of Rs. 5,000 above noted.

On the Lucknow-Bareilly railway and branches, on the same general conditions as are for the time being in force on other metre gauge State railways, and at rates to be approved by the Government.

**(b) Troops, police, high Government officials and Government stores —**

On the Company's lines, at the ordinary tariff rates charged to the public.

On the Lucknow-Bareilly railway and branches, on the same general conditions as are for the time being in force on other metre gauge State railways, and at rates to be approved by the Government.

**(c) Government bullion and coin, and the persons in charge thereof.—**

On the Company's lines at special rates to be from time to time agreed upon between the Government and the Company.

On the Lucknow-Bareilly railway and branches, at special rates to be approved by the Government.

**(vii) Power of the Government to determine contract.—**

Contract of 1832: The Government may terminate the contract at the end of the 50th year, i.e., on the 31st December 1882, by giving 12 months' notice. If the contract terminate by such notice, or by the efflux of time, the Government is to pay to the Company 25 times the average net earnings, less the Government share of surplus profits, during the 5 years immediately preceding either the date of the termination or (at the option of the Government) the 31st December 1912.

[Note.—The cost of making good any shortcomings which render the value of the line not commensurate with the capital expended may be deducted from the purchase price payable.]

The Government may also determine the contract at any time on 6 months' notice (called the "Notice of Determination") if the Company fail to observe their obligations, on payment of the value of the permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment, in which latter case the Company must remove their property within 9 months from the termination of the contract, otherwise it becomes the property of the Government.

Contract of 1890: If the original contract with the Company, dated the 12th October 1882, terminate for any reason, then the contract for the working of the Lucknow-Bareilly railway *ipso facto* terminates at the same time. The Government may terminate the contract on the 31st December 1882, or on the 31st December in any subsequent year, by giving 12 months' notice. The Government may also determine the contract on 6 months' notice (called the "Notice of Determination") if the Company fail to observe their obligations.

On the determination of the contract the Government will resume possession of the State railway, and at its option will either repay the capital that has been received from the Company for the purposes of the undertaking, or will take over the liability of the Company in respect of such capital. If the capital is repaid, the payment may, at the option of the Government, be made either in England or in India.

Contract of 1904: If the original contract with the Company, dated the 12th October 1882, terminate either by "Notice of Purchase" or by the efflux of time, then the contract of 1904 terminates at the same time, in which case the Government is to pay to the Company 25 times the average net earnings of the Lalkua-Kashipur-Moradabad-Ramnagar branches during the 5 years immediately preceding the termination, provided such sum does not exceed by more than 20 per cent, nor be less than, the capital expenditure on those railways.

[Note.—The cost of making good any shortcomings which render the value of the line not commensurate with the capital expended may be deducted from the purchase price payable.]

The Government may also determine the contract at any time on 6 months' notice (called the "Notice of Determination") if the Company fail to observe their obligations, on payment of the value of the permanent-way, stock and plant or may call upon the Company to accept the same in lieu of payment, in which latter case the Company must remove their property within 9 months from the termination of the contract, otherwise it becomes the property of the Government.

Contract of 1909: By clause 18 of the contract of the 24th March 1909, if either the contract of 1890 be determined from any cause or that of 1904 be determined by "Notice of Purchase" as far as each relates to "the State lines", but not further or otherwise, then the other of the two contracts *ipso facto* terminates at the same time.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 23</sup> <sub>Sub-heads (a) to (c)</sub> ROHILKUND AND KUMAON RAILWAY SYSTEM—contd.

## 22 (a) Rohilkund and Kumaon railway (3' 3½" gauge)—contd.

## Main provisions of contracts—contd.

By clause 19 of the contract of the 24th March 1909, that contract so far as relates to "the Company's Works" (the Pilibhit-Shahjahanpur line), in common with the contract terminates *ipso facto* with the determination by "Notice of Purchase" of the original contract of the 12th October 1882, the Government, however, only having to purchase "the Company's original line", "the Branch railways" and "the Company's Works" collectively, not any of them separately from the other or others.

By clause 20 of the contract of the 24th March 1909—

(a) the contract of 1909 so far as relates to "the Additional Main Line Works" terminates *ipso facto* with the determination by "Notice of Determination" of the Company's contract of the 12th October 1882,

(b) the contract of 1909 so far as relates to "the Branch Line Works" terminates *ipso facto* with the determination by "Notice of Determination" of the contract of 1904, except as provided above against clauses 18 and 20 of the contract of 1909 and also except as provided in clause 77 of the contract of 1890, the several powers of the Government to determine by "Notice of Determination" the contracts respectively of 1892, 1890 and 1904, and also the powers of the Government to determine by "Notice of Determination" the contract so far as relates to "the State Works", to "the Additional Main Line Works" and "the Branch Line Works", remain separate and unaffected, and are exercisable as to the whole or parts thereof independently and without prejudice as to the continuance of the whole or parts thereof, in the event of the Company failing to observe their obligations in the contract or part of the contract which it is sought to determine: provided that the powers of the Government to determine, by "Notice of Determination", the contract so far as relates to "the Additional Main Line Works" and to "the Branch Line Works" are exercisable separately in respect of any line or branch forming an independent system of such works, if the Company fail to observe their obligations in regard thereto.

(viii) Power of the Company to surrender contract.—Nil.

(ix) Term of contract.—Those of 1882, 1904 and 1909, up to the 31st December 1931; that of 1890 up to the 31st December 1932.

## Statistics of working—

TABLE I						TABLE II		
Calendar year.	Mileage open at end of each year	Total capital outlay, including suspense, to end of each year, & c., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	REMARKS.	Earnings per mile per week.	Part of
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.			Rs.	
1884 . . . . .	55 00	19,40,266	36,543	1,733	0·09	Net earnings from 1885 to 1894 include an annual subsidy of Rs. 40,000.	51	
1885 . . . . .	55 00	21,71,124	2,38,572	80,153	3·69		68	
1886 . . . . .	55 00	23,52,962	3,00,191	1,23,832	5·50		86	
1887 . . . . .	55 00	22,91,619	3,19,274	1,16,800	5·10		92	
1888 . . . . .	55 00	23,40,100	3,34,022	1,42,120	6·07		96	
1889 . . . . .	55 00	23,96,624	3,72,270	1,60,135	6·68		107	
1890 . . . . .	55 00	24,17,032	3,14,834	1,51,003	6·25		90	
1891 . . . . .	53 92	20,40,458	3,85,084	1,60,081	7·81		112	
1892 . . . . .	53 92	20,58,575	4,33,648	1,97,790	9·61		127	
1893 . . . . .	53 92	20,82,280	4,28,909	1,83,180	8·80		124	
1894 . . . . .	53 92	20,80,440	4,50,313	2,15,191	10·34	134		
1895 . . . . .	53 92	20,78,251	4,04,504	1,52,209	7·32	118		
1896 . . . . .	53 92	20,79,868	4,26,005	1,58,821	7·40	125		
1897 . . . . .	53 92	21,20,428	4,23,720	1,72,319	8·13	124		
1898 . . . . .	53 92	21,42,552	4,62,308	2,20,785	10·30	135		
1899 . . . . .	53 92	21,48,813	4,85,623	2,34,020	10·89	136		
1900 . . . . .	53 92	21,53,125	4,37,572	2,28,048	10·59	128		
1901 . . . . .	53 92	22,09,428	3,84,314	2,09,895	9·50	112		
1902 . . . . .	53 92	22,36,911	4,10,626	2,18,317	9·84	120		
1903 . . . . .	53 92	25,89,790	4,18,147	2,20,405	8·51	121		
1904 . . . . .	53 92	43,55,575	4,18,787	2,24,403	5·15	122		
1905 . . . . .	53 92	93,34,589	4,40,604	1,54,128	1·65	129	The decrease in net earnings in 1905 is due to the heavy out-	
1906 . . . . .	117 87	1,16,53,319	8,08,607	3,65,161	3·13	124		
1907 . . . . .	117 87	1,28,55,065	10,67,928	5,69,508	4·43	158		

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 22 **ROHILKUND AND KUMAON RAILWAY SYSTEM—contd.**  
Sub-heads (a) to (c)**22 (b) Lucknow-Bareilly railway (3' 3½" gauge) —****Progress in opening—**

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Main line—</b>				
Lucknow to Sitapur . . . . .	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 . . . . .	1-4-91	57-55		
Pilibhit to Bhojsepara . . . . .	15-11-84	24-00		
Bhojsepara to Bareilly . . . . .	12-10-84	12-00		
			198-55	
<b>Branches and extensions—</b>				
Bareilly grain siding . . . . .	1-4-94	1-75		
			1-75	
<b>Sonaripur extension—</b>				
Mailani to Sarda . . . . .	1-1-88			
Sarda to Sohela . . . . .	10-3-93	30-78		
Sohela to Sonaripur . . . . .	18-3-94		30-78	
			30-78	
<b>Chandan Choki extension—</b>				
Dudhwa to Chandan Choki . . . . .	4-4-03	5-87		
			5-87	
<b>Sonaripur-Ramnagar Ghat extension—</b>				
Sonaripur to Kaurialaghat . . . . .	2-1-11	20-62		
			20-62	
				257-57
<b>TOTAL LENGTH OPEN . . . . .</b>				
	...	...	...	257-57
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>				
Sarota Phanta to Garwazi Ghat (sanctioned on 23rd September 1910). . . . .	...	15-89		
Pilibhit to Baradeo (sanctioned on 24th May 1908) . . . . .	...	38-75		
			54-64	54-64
				312-21
<b>TOTAL LENGTH OPEN AND UNDER CONSTRUCTION OR SANCTIONED . . . . .</b>				
	...	...	...	312-21

**Details of construction—****Permanent-way.**—The permanent-way consists of 41½-lb. and 50-lb. steel rails on s&sl sleepers.**Ballast.**—The ballast consists of broken bricks, kunkur and shingle.**Fencing.**—The line is partially fenced.**Curves.**—There is only one curve with a radius of less than 1,000 feet.**Gradients.**—The ruling gradient between Lucknow and Bareilly is 1 in 500, except near Lucknow and Bareilly, where it is 1 in 200; between Mailani and Kaurialaghat, 1 in 400 and between Dudhwa and Chandan Choki, 1 in 100.**Contracts—****Main provisions of contracts—** } As noted under 20 (a), Rohilkund and Kumaon railway (3' 3½" gauge).

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 22</sup> <sub>Sub-heads (a) to (c)</sub> ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*22 (b) Lucknow-Bareilly railway (3' 3½" gauge)—*contd.*

Statistics of working. (Those for the periods prior to 1891 will be found in Appendix 38 to the Report for 1907)—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) attributable to each calendar year.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1891	198-38	79,17,846	4,95,068	1,72,145	2-17	2,72,055	—	—89,910	56	65-23
1892	198-33	81,66,804	6,82,836	2,74,601	3-36	3,07,651	10,636	—43,686	66	59-79
1893	222-05	83,89,362	7,22,678	2,73,541	3-26	3,26,770	3,495	—56,721	67	62-47
1894	231-17	85,98,158	9,72,269	3,91,340	4-59	3,45,323	24,180	+24,737	88	59-45
1895	231-17	87,32,466	8,25,934	3,13,116	3-59	3,56,596	15,684	—59,314	74	62-09
1896	231-17	89,63,620	8,27,599	3,02,071	3-37	3,46,885	18,415	—60,229	75	63-60
1897	231-17	93,02,715	8,27,371	3,35,776	3-81	3,61,550	11,570	—37,344	75	59-42
1898	231-17	94,90,476	10,34,088	3,40,200	5-27	3,64,852	68,058	+67,290	94	51-68
1899	231-17	94,97,485	12,72,160	6,33,355	6-67	3,65,537	1,35,640	+1,42,178	114	50-21
1900	231-17	99,21,432	12,53,801	6,51,957	6-57	3,78,097	1,34,915	+1,43,945	107	48-00
1901	231-17	1,01,83,243	13,72,520	7,38,124	7-44	3,91,798	75,769	+2,90,559	123	44-78
1902	231-17	1,12,96,019	14,53,329	7,69,568	6-21	4,23,538	67,704	+2,78,336	122	47-85
1903	237-04	1,15,01,911	14,03,266	7,48,669	6-51	4,53,835	53,222	+2,41,642	126	46-38
1904	237-04	1,17,14,505	14,96,120	7,97,671	6-81	4,48,328	61,426	+2,87,917	133	46-68
1905	237-04	1,17,99,857	15,47,488	8,20,992	6-96	4,50,448	65,048	+3,05,496	139	46-93
1906	237-04	1,20,09,658	16,55,250	8,36,782	6-97	4,57,568	63,252	+3,13,942	148	49-45
1907	237-04	1,24,59,395	16,97,182	9,07,863	7-29	4,18,611	78,229	+4,16,023	150	46-31
1908	237-04	1,27,50,545	16,15,542	7,80,747	6-12	4,50,365	48,511	+2,81,871	131	51-67
1909	237-04	1,43,82,316	17,17,491	7,84,749	5-46	4,11,131	44,700	+2,28,918	189	54-31
1910	237-04	1,60,60,757	18,25,185	10,15,746	6-32	4,75,558	80,364	+4,59,824	148	44-35
1911	257-57	1,72,62,079	19,40,488	10,44,604	6-07	5,07,263	74,720	+4,62,621	152	46-17

## 22 (c) Powayan Light railway (2' 6" gauge)—

The line was constructed originally by the Powayan Steam Tramway Company and the maintenance and working were taken over by the Rohilkund and Kumaon Railway Company from 17th December 1900.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Shahjahanpur to Powayan	17-6-90	17-00	
Powayan to Khotar	19-5-91	14-00	
Khotar to Mailani	22-12-94	8-50	
			39-50

## Details of construction—

**Permanent-way.**—The permanent-way consists of flat-footed steel rails, weighing 24-lb. to the yard, laid on *sâl* sleepers.**Ballast.**—The line is ballasted with earth.**Fencing.**—The line is unfenced except at Shahjahanpur station.**Curves.**—There are no curves with a radius of less than 300 feet.**Gradients.**—The line is not graded.

## Local Government orders and contracts—

Powayan Steam Tramway Company Order, 1889, published under Notification by the Government of the North-Western Provinces and Oudh, No. 1808-W.R., dated the 18th December 1889, authorising the construction of a steam tramway from Shahjahanpur railway station on the Oudh and Rohilkhand railway to Khotar.

"Further Order" of the Powayan Steam Tramway Company, 1894, published under Notification by the Government of the North-Western Provinces and Oudh, No. 148—17-W. R., dated the 23rd April 1904, authorising the construction of an extension of the Powayan Steam Tramway from Khotar to Mailani on the Lucknow-Bareilly railway.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 22</sup> <sub>Sub-heads (a) to (c).</sub> ROHILKUND AND KUMAON RAILWAY SYSTEM—concl'd.

22 (a) Powayan Light railway (2' 6" gauge)—concl'd.

## Local Government orders and contracts—concl'd.

Contract, dated the 1st July 1901 (called the Tramway Company's contract), between the Secretary of State and the Powayan Steam Tramway Company, as to handing over to the former, or to the Working Agency appointed by him, the Tramway for maintenance, management and working.

Contract, dated the 6th November 1902, (supplemental to the contracts of 1882, 1890, 1892 and 1901, noted under 20 (a), Rohilkund and Kumaon railway), between the Secretary of State and the Rohilkund and Kumaon Railway Company, as to the maintenance, management and working of the Powayan Steam Tramway.

Contract, dated the 13th July 1906, between the Secretary of State and the Rohilkund and Kumaon Railway Company, as to the provision of moneys for capital expenditure, and acquisition by the Railway Company of interest in the Powayan Steam Tramway Company.

Contract, dated the 16th January 1912 (supplemental, or to be read as an annexure, to the contract of 1901), between the Secretary of State and the Powayan Steam Tramway Company, as to certain alterations and modifications in the provisions of clauses 2 and 18 of the contract of 1901 in regard to its determination.

## Main provisions of Local Government orders and contracts—

(i) *Land.*—Provided at the cost of the Company, other than the portion of the provincial road which the Company is authorised to use.

(ii) *Government aid.*—The line, subject to interests acquired therein by the Rohilkund and Kumaon Railway Company, is the property of the Powayan Steam Tramway Company, and is managed, maintained and worked by the Rohilkund and Kumaon Railway Company on behalf of the Government.

(iii) *Terms of working.*—The working agency retains 70 per cent of the gross earnings of the Tramway, until the line is fully equipped, and thereafter the same percentage as that at which the Rohilkund and Kumaon Railway Company's "open system" is worked, subject to a minimum of 60 per cent.

[Note.—The percentage so retained by the working agency is in full satisfaction of the cost of petty works, rolling-stock, plant and machinery costing not more than Rs. 200, subject to the limit of Rs. 20 per mile per half-year. The cost of petty works, rolling-stock, plant and machinery exceeding these limits is to be borne by the Capital Account of the Tramway Company.]

(iv) *Distribution of profits.*—After payment of working expenses as above noted and contributions to the Working Agency's Provident Fund, the balance of the gross earnings, if any, are paid over to the Tramway Company.

(v) *Rates and fares.*—To be those from time to time applicable to the Lucknow-Bareilly railway.

(vi) *Special obligations as to the conveyance of—*

(a) Mails, police, troops, high Government officials and Government stores.— } Not specified.

(b) Government bullion and coin, and the persons in charge thereof.— }

(vii) *Power of the Government to determine contract.*—Government may terminate the contract on the 31st December 1932, or on the 31st December in any subsequent year but not earlier, on 12 months' notice given. Government may also terminate the contracts at any time, on 6 months' notice, if the Company fail to observe their obligations.

Government also has the option, on giving 12 months' notice to the Tramway Company, after the Shahjahanpur Khotar section has been open for public traffic for 15 years and the Khotar-Mailani section for 10 years, and thereafter at terms of 7 years each, to take over the Tramway on paying the Tramway Company the value of the property as a dividend-earning investment at the date of giving such notice, with an additional bonus of 20 per cent over and above such value.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract [if not determined under (vii)].*—Up to the 31st December 1932.

## Statistics of working—

Calendar year.	Mileage open at end of each year.	TABLE I.				TABLE II.	
		Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (5).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1901	39.50	8,41,038	66,262	24,059	2.89	83	70.00
1902	39.50	8,08,456	75,675	22,521	2.52	87	70.24
1903	39.50	8,94,619	71,815	28,482	3.15	85	60.84
1904	39.50	8,94,751	78,015	30,937	3.46	88	60.84
1905	39.50	8,94,751	92,614	36,707	4.10	45	60.87
1906	39.50	8,94,751	92,566	39,491	4.41	48	60.84
1907	39.50	8,94,751	87,302	34,626	3.87	42	60.84
1908	39.50	8,94,801	81,450	32,222	3.80	40	60.85
1909	39.50	8,94,801	91,687	36,352	4.06	45	60.85
1910	39.50	8,94,801	95,236	37,799	4.22	46	60.81
1911	39.50	8,94,801	1,02,692	40,737	4.51	50	60.82



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 23 UDAIPUR-CHITORGARH RAILWAY (3' 3½" gauge)—  
Sub-head (a)

## Running powers—

Home line over Foreign line :—

Rajputana-Malwa railway, Berach Signal station to Chitorgarh

Miles.  
1.42

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Berach near Chitorgarh to Debari near Udaipur . . . . .	1-8-95	60.39	
Separate station at Chitorgarh . . . . .	15-8-96	0.47	
Debari to Udaipur . . . . .	25-8-99	6.44	
			67.30

## Details of construction—

*Permanent-way.*—The permanent-way consists of 41½-lb flat-footed steel rails laid on deodar sleepers.*Ballast.*—The ballast consists of broken stone.*Fencing.*—The line is fenced round stations only.*Curves.*—On the Berach-Debari section the sharpest curve is of 1,146 feet radius; 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.*Gradients.*—The ruling gradient is 1 in 120, except on the section Debari to Udaipur where it is 1 in 100.

## Contract—

Nil.—The line was constructed at the expense of the Mewar Darbar, and was maintained and worked by the Bombay, Baroda and Central India Railway Company up to the 31st December 1897. With effect from 1st January 1898 the line is maintained and worked by the Darbar.

Statistics of working (These for the periods prior to 1902 will be found in Appendix 36 to the Report for 1907).—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902 . . . . .	67.30	20,65,630	2,17,388	97,181	4.70	62	55.32
1903 . . . . .	67.30	20,66,171	1,77,817	66,446	3.21	51	62.63
1904 . . . . .	67.30	20,65,093	1,51,293	83,175	2.57	42	64.86
1905 . . . . .	67.30	20,97,464	2,07,927	1,03,552	5.00	58	50.19
1906 . . . . .	67.30	20,75,567	2,47,818	1,25,467	6.52	60	48.33
1907 . . . . .	67.30	20,75,702	2,50,515	1,26,695	6.58	70	48.43
1908 . . . . .	67.30	20,77,554	2,38,916	1,18,044	5.68	68	50.59
1909 . . . . .	67.30	20,96,388	2,43,050	1,24,755	5.95	69	48.62
1910 . . . . .	67.30	20,97,410	2,52,090	1,28,470	6.36	72	47.05
1911 . . . . .	67.30	21,15,951	2,64,208	1,38,802	7.24	81	46.07

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 24</sup> <sub>Sub-head (a)</sub> AMBAJI-TARANGA LIGHT RAILWAY (2' 6" gauge)—

The construction of this line by the agency of the Ambaji-Taranga Light Railway Company was sanctioned by the Railway Board under their Notification No. 205, dated the 4th August 1911.

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Baroda Frontier to Semaia (sanctioned on 4th August 1911)	...	18'00	18'00

Number <sup>Main head 25</sup> <sub>Sub-head (a)</sub> ARRAB-SASARAM LIGHT RAILWAY (2' 6" gauge)—

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Arrah to Sasaram	6-8-11	60'50	60'50

## Details of construction—

*Permanent-way.*—The permanent-way consists of 30-lb. flat-footed steel rails on sal sleepers.

*Ballast.*—The line is ballasted with broken stone.

*Fencing.*—The line is unfenced.

*Curves.*—The sharpest curve is of 573 feet radius.

*Gradients.*—The ruling gradient is 1 in 250.

## Local Government order and agreement—

Arrah-Sasaram Tramway Company order published under the Bengal Government, Railway Department, Notification No. 39-R., dated the 12th October 1909, authorising the construction of a line of tramway from Arrah to Sasaram in the district of Shahabad.

Agreement, dated the 15th October 1909, between the District Board of Shahabad and Messrs. Martin and Company of Calcutta (called "the Promoters") by and on behalf of the Arrah-Sasaram Light Railway Company, as to the grant of a concession to the Company of the right to construct and work the tramway.

## Main provisions of Local Government order and agreement—

- (i) *Land.*—Provided at the cost of the Company, except one side of the district road the free use of which is authorised.
- (ii) *Aid by the Local authority.*—The District Board of Shahabad recommend and apply to the Local Government to exempt the Company from the tax on account of road cess, or to exact only a nominal tax, for a period of 21 years from the date when the line is opened for traffic, with power of renewal. The Board also guarantee to supplement the net earnings of the Company by such annual subsidy as may be necessary to allow of it paying a dividend of 4 per cent per annum on their share capital, provided that the total liability of the Board on this account in any one year shall not exceed Rs. 88,000 or the sum of 4 per cent on the Company's share capital whichever is less.
- (iii) *Distribution of profits.*—Surplus profits in excess of 4 per cent on the share capital of the company are divided equally between the District Board of Shahabad and the Company.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 23</sup> <sub>Sub-head (a)</sub> **ARRAH-SASARAM LIGHT RAILWAY (2' 6" gauge)—*concl.***Main provisions of Local Government order and agreement—*concl.*(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods, with the East Indian railway classification of goods, have been fixed. Full control over charges of all kinds is reserved to the Local Government.(v) *Special obligations as to the conveyance of.*—

(a) Mails, postal officers and servants on duty.—To be conveyed at the rates and on the conditions in force from time to time on State railways.

(b) Troops, police, high Government officials and Government stores.—

(c) Government bullion and coin, and the persons in charge thereof.—

} Nil.

(vi) *Power of the Local authority to determine agreement.*—Upon the expiration of 21 years from the date of the Local Government order authorising the construction of the line, and at the end of every 7 years thereafter, the District Board have, by giving six months' previous notice, the right of purchasing the line by paying to the Company 25 times the yearly average net earnings of the 3 years preceding the purchase, subject to a maximum of 120 and a minimum of 100 per cent of the capital cost.(vii) *Power of the Company to surrender agreement.*—Nil.(viii) *Term of agreement [if not determined under (vi)].*—Not specified.

Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of the year.	Total capital outlay, including suspense, to end of the year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1911.	60.50	20,25,772	1,38,386	44,286	2.13	45	66.79

Number <sup>Main head 26</sup> <sub>Sub-head (a)</sub> **BANGALORE-CHICKBALLAPUR LIGHT RAILWAY (2' 6" gauge)—**

This railway is to be financed by an Indian Company floated for the purpose under a guarantee from the Mysore Durbar of 4 per cent per annum on the subscribed capital. It was sanctioned for construction by the Secretary of State for India in his Despatch No. 75 Railway, dated the 10th September 1909.

During the year under report the Company were engaged in raising the total capital required for the construction of the line. An application to begin the work before the whole capital is raised was sanctioned by the Mysore Durbar at the close of the year.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Bangalore to Chickballapur (sanctioned on 10th September 1909)	...	2 87.95	87.95

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 27 . BARASET-BASIRHAT LIGHT RAILWAY (2' 6" gauge)—  
Sub-head (a)

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Main line—</b>				
Baraset to Basirhat . . . . .	1-2-05	26-00	34-50	
Basirhat to Chingrighata . . . . .	2-8-09	8-50		
<b>Pattipooker branch—</b>				
Beliaghata Bridge to Pattipooker . . . . .	16-2-10	16-62	16-62	51-12

## Details of construction—

**Permanent-way.**—The permanent-way consists of 30-lb. flat-footed steel rails on pynkado, sāl and Australian jarrah wood sleepers.

**Ballast.**—The line is ballasted with broken brick.

**Fencing.**—The line is unfenced.

**Curves.**—The sharpest curve has a radius of 400 feet.

**Gradients.**—The ruling gradient is 1 in 250.

## Agreements and Local Government orders—

Agreement, dated the 14th December 1897 (called the principal agreement), between the District Board of the 24 Parganas and Messrs. Martin and Company on behalf of the Baraset-Basirhat Tramway Company, Limited, as to the grant of a concession to the Tramway Company by the District Board;

Agreement, dated the 15th May 1902 (supplemental to the agreement of 1897), between the District Board of the 24 Parganas and Messrs. Martin and Company on behalf of the Baraset-Basirhat Tramway Company, Limited, modifying clause 4 of the agreement of 1897.

The Baraset-Basirhat Tramway Company order, published under the Bengal Government, Railway Department, Notification No. 86 B., dated the 15th May 1903;

Agreement, dated the 3rd August 1903, between the District Board of the 24 Parganas, Messrs. Martin and Company and the Baraset-Basirhat Light Railway Company, Limited, as to the adoption as between the Board and the new Railway Company of the agreement of 1897 as modified by the agreement of 1902, and as to the discharge of the Promoters from all liability thereunder or in respect thereof.

Agreement, dated the 6th November 1907 (supplemental to the agreements of 1897, 1902 and 1903), between the District Board of the 24 Parganas and the Baraset-Basirhat Light Railway Company, Limited;

The Baraset-Basirhat-Taki Extension order, published under the Bengal Government, Railway Department, Notification No. 22 B., dated the 23rd November 1907;

Agreement, dated the 21st December 1908 (supplemental to the agreements of 1897, 1902, 1903 and 1907), between the District Board of the 24 Parganas and the Baraset-Basirhat Light Railway Company, Limited;

The Baraset-Basirhat-Pattipooker Extension order, published under the Bengal Government, Railway Department, Notification No. 9 B., dated the 19th February 1909;

as to the construction, maintenance and working of the line from Baraset to Basirhat.

as to the construction, maintenance and working of the extension from Basirhat to Taki and Hosana-had as a part of the Baraset-Basirhat Light railway.

as to the construction, maintenance and working of an extension from Beliaghata bridge to Pattipooker, as part of the Baraset-Basirhat Light Railway.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 27 **BARASET-BASIRHAT LIGHT RAILWAY (2' 6" gauge)—*concl'd.***  
Sub-head (a)

## Main provisions of agreements and Local Government orders—

- (i) *Land*.—Land, other than portions of the District Road between Baraset and Basirhat the free use of which in perpetuity is authorised by the District Board, provided at the cost of Company's capital.
- (ii) *Aid by the District Board*.—The District Board recommend and apply to the Local Government either to exempt the Company from the road cess or to exact only a nominal tax for a period of 21 years from the date when the line is opened for traffic, with power of renewal. The District Board also guarantee such an annual subsidy as may be necessary to make the net profits of the Company equal to Rs. 1,500 per mile of line open, provided that the total contribution by the Board does not exceed Rs. 38,000 per annum, being 4 per cent on the amount of the Company's share capital.
- (iii) *Distribution of profits*.—Surplus profits in excess of 4 per cent on the Company's share capital are divisible equally between the District Board and the Company.
- (iv) *Rates and fares*.—Certain maxima fares for passengers, and a tariff of charges for goods have been fixed. Full control over charges of all kinds is reserved to the Local Government.
- (v) *Special obligations as to the conveyance of*.—
- (a) Mails and postal officers and servants on duty.—At the rates and on the conditions in force from time to time on State railways.
- (b) Troops, police, high Government officials and Government stores.—
- (c) Government bullion and coin, and the persons in charge thereof.—
- } Nil.
- (vi) *Power of the District Board to determine agreement*.—Upon the expiration of 21 years from the date of the Local Government order authorising the construction of the line, or at intervals of 7 years thereafter, the District Board, by giving 6 months' notice, can purchase the undertaking by paying to the Company 20 times the average net annual profits of the 4 years preceding the transaction, together with a bonus of 20 per cent thereon.
- (vii) *Power of the Company to surrender agreement*.—Nil.
- (viii) *Term of agreement [if not determined under (vi)]*.—Not specified.

## Statistics of working—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1905	26·06	9,07,751	1,11,201	55,682	6·13	—5,894	50,288	5·54	90	49·33
1906	26·06	9,52,958	1,50,731	79,536	8·35	—12,669	66,807	7·02	111	47·23
1907	26·06	10,06,570	1,72,574	85,830	8·53	—16,096	69,734	6·93	127	50·26
1908	26·06	10,52,939	1,49,043	58,588	5·56	—5,943	52,644	5·00	110	60·69
1909	34·50	14,20,827	1,73,715	69,303	4·88	—6,478	62,825	4·42	97	60·45
1910	51·12	21,80,962	2,85,676	73,810	3·36	—674	72,636	3·33	88	68·89
1911	51·12	22,12,771	2,78,247	1,12,198	5·07	—6,856	1,05,842	4·78	105	59·67

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 28</sup> <sub>Sub-head (a)</sub> BARSİ LIGHT RAILWAY. (2' 6" gauge)—*Chairman.*—F. M. Halliday, Esq.*Secretaries.*—W. A. Browne & Co.*Offices.*—Winchester House, Old Broad Street, London, E.C.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
Barsi Road Junction to Barsi Town	1-8-97	21.89		
Barsi Road Junction to Pandharpur	2-12-96	30.56		
Barsi Town to Kuslamb	15-6-05	6.24		
Kuslamb to Tadwale	1-5-08	20.36		
Tadwale to Latur	1-5-11	38.93		
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Pandharpur to Pandharpur town (sanctioned on 21st November 1909)	...	1.36	1.36	117.20

## Details of construction—

*Permanent-way.*—The permanent-way consists of 85-lb. flat-footed steel rails on steel sleepers.*Ballast.*—The line is ballasted with stone and moorum.*Fencing.*—The line is unfenced, except for a short distance on either side of level crossings and at bridges. Barsi Road Junction and Barsi Town stations and all stations on the Tadwale and Pandharpur extensions are also fenced.*Curves.*—The sharpest curve is of 450 feet radius.*Gradients.*—The ruling gradient is 1 in 100. There are, however, two steeper gradients on the original line (from Barsi Road Junction to Barsi Town) one of 1 in 89 and one of 1 in 90; and two on the Tadwale Extension—one of 1 in 50 and the other of 1 in 70.

## Contracts and agreements—

Contract, dated the 1st August 1895, between the Secretary of State and the Barsi Light Railway Company, as to the construction, maintenance and working the line from Barsi Road Junction to Barsi Town (called "the Barsi Town railway").

Contract, dated the 26th August 1902, between the Secretary of State and the Barsi Light Railway Company, as to the construction, maintenance and working of "the Pandharpur extension" and "the Tadwale extension", as modified by letter from the India Office to the London Board of the Barsi Light Railway Company, No. P.W. 1020, dated the 22nd June 1904, extending to 1944 the term at the end of which the option of purchase of the Company's undertaking may be exercised by the Government under clause 59 of the contract.

Contract, dated the 28th May 1903 (supplemental to those of 1895 and 1902), between the Secretary of State and the Barsi Light Railway Company, as to the adoption of 1s. 4d. as the "prescribed" rate of exchange.

Contract, dated the 4th December 1905 (supplemental to that of 1902), between the Secretary of State and the Barsi Light Railway Company, as to the construction, maintenance and working of the Pandharpur and Tadwale Extensions, and for the issue of Debenture Stock.

Contract, dated the 31st March 1909 (supplemental to the contracts of 1902, 1903 and 1905), between the Secretary of State and the Barsi Light Railway Company, as to the construction, maintenance and working, and the inclusion in "the Tadwale Extension", of the railway from Tadwale to the frontier of the Hyderabad State (called "the Hyderabad Frontier Extension"), near Latur in that State.

Agreement, dated the 21st April 1909, between the Government of His Highness the Nizam of Hyderabad and the Barsi Light Railway Company, as to the construction, maintenance and working of a railway from the frontier of the Hyderabad State to Latur in that State, known as the Latur extension.

Agreement, dated the 4th May 1909, between His Highness the Nizam's Guaranteed State Railways Company and the Barsi Light Railway Company, as to the former waiving, in favour of the latter, its preferential right to construct and work the railway from the frontier of the Hyderabad State to Latur in that State, known as the Latur extension.

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number  $\frac{\text{Main head 28}}{\text{sub-head (e)}}$ : BARSII LIGHT RAILWAY (2' 6" gauge)—contd.

## Main provisions of contracts and agreements—

- (i) *Land.*—In the case of the original Barsii railway the Company is allowed the use of part of the road between Barsii Town and Barsii Road Junction station, any land required outside the road being acquired, at its own expense, by the Company. For the extensions, land in British territory has been provided by the British Government; that in the Hyderabad State by the Government of His Highness the Nizam, free of cost to the Company.
- (ii) *Government aid.*—Nil.
- (iii) *Distribution of profits.*—The whole to go to the Company.
- (iv) *Rates and fares.*—Certain maxima have been fixed, within which the Company is permitted to vary its rates. On the Extensions the goods classification in force on the Great Indian Peninsula railway is to be adopted.
- (v) *Special obligations as to the conveyance of.*—
- (a) Mails, troops, police, high Government officials and Government stores.— } To be conveyed upon the whole of the Company's system at the same rates and fares, and on the same general conditions, as may be in force on State railways. On the Latur extension bullion and coin belonging to His Highness the Nizam's Government or the Government of India, and the persons in charge thereof are carried at special rates.
- (b) Government bullion and coin, and the persons in charge thereof.— }
- (vi) *Power of the Government to determine contract.*—The Government may determine the contract on the 1st January 1944, or at the expiration of any subsequent period of 10 years, by giving 12 months' notice. If the contract is so determined, the Government to pay the Company in England in sterling a sum such as, when added to any unspent capital, shall amount to the total paid up capital expended with the authority of the Government. His Highness the Nizam's Guaranteed State Railways Company have the option of purchasing the length of line (excluding rolling-stock, workshop machines and stores) from the frontier of the Hyderabad State to Latur in that State, subject in all respects to the rights of the Nizam's Government under the agreement between His Highness' Government and the Barsii Light Railway Company and also under the several contracts between His Highness' Government and the Nizam's Guaranteed State Railways Company, after the expiration of 20 years from the date of its opening throughout for traffic, on giving 12 months' notice, at a price which shall be 5 per cent in excess of the actual capital expenditure. In the event of His Highness the Nizam's Guaranteed State Railways Company not exercising this right, His Highness the Nizam's Government have the right, on giving 12 months' notice, to purchase the same line at any time after the expiration of twenty years from the date of its opening, at a price which shall be 5 per cent in excess of the actual capital expenditure.
- (vii) *Power of the Company to surrender contract.*—Nil.
- (viii) *Term of contract [if not determined under (vi)].*—Not specified.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907.)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expense to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902	21.59	18,18,242	1,50,275	52,879	4.01	134	64.81
1903	21.59	13,18,289	1,30,694	53,423	4.05	116	59.12
1904	21.59	13,43,391	1,06,984	64,952	4.83	149	61.09
1905	27.93	27,88,002	2,19,478	1,39,518	5.01	168	36.39
1906	78.50	41,11,374	2,19,284	1,09,893	2.67	96	49.90
1907	78.50	47,47,966	5,43,330	2,34,080	4.72	183	58.76
1908	78.50	4,29,237	4,31,002	1,73,063	3.36	105	30.03
1909	78.50	57,13,236	6,44,775	3,09,578	6.52	158	39.58
1 10	78.50	61,73,032	6,97,540	3,39,437	6.52	174	44.18
1911	115.84	67,93,846	7,44,783	3,98,877	5.87	124	46.44

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 29 . BUKHTIARPORE-BIHAR LIGHT RAILWAY (2' 6" gauge)—  
Sub-head (a)

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Bukhtiarpore on the East Indian railway to Bihar . . . . .	1-7-03	18-50	
Bihar to Silao . . . . .	17-7-09	9-50	
Silao to Rajgir . . . . .	1-11-11	5-00	
			33-00

## Details of construction—

**Permanent-way.**—The permanent-way consists of 30-lb. flat-footed steel rails laid on pynkado sleepers.

**Ballast.**—The ballast consists of broken stone, except in the first few miles where a portion of the packing has been done with broken brick.

**Fencing.**—The line is unfenced.

**Curves.**—The sharpest curve has a radius of 260 feet.

**Gradients.**—The grades are easy, except at bridge approaches and up through the villages of Chero and Rajgir where the grade is 1 in 100.

## Agreements and Local Government orders—

Agreement, dated the 21st August 1899, between the District Board of Patna and Messrs. Martin and Company of Calcutta, the Promoters, on behalf of the Bukhtiarpore-Bihar Light Railway Company, scheduled to the above order;

The Bukhtiarpore-Bihar Tramway Company order published under the Bengal Government, Railway Department, Notification No. 100-R., dated the 25th June 1901;

Agreement, dated the 16th August 1901, between Messrs. Martin and Company of Calcutta and the Bukhtiarpore-Bihar Light Railway Company;

Agreement, dated the 17th February 1904, between the District Board of Patna and the Bukhtiarpore-Bihar Light Railway Company, as to the use of land for a siding at Bihar.

Agreement, dated the 2nd June 1908 (supplemental to the agreements of 1899 and 1901), between the District Board of Patna and the Bukhtiarpore-Bihar Light Railway Company;

The Bukhtiarpore-Bihar Extension order published under the Bengal Government, Railway Department, Notification No. 11-R., dated the 15th June 1908;

The Bukhtiarpore-Bihar-Rajgir extension order published under the Bengal Government, Railway Department, Notification No. 20-L., dated the 14th November 1911;

Agreement, dated the 28th November 1911 (supplemental to the agreements of 21st August 1899, 16th August 1901 and 2nd June 1908), between the District Board of Patna and the Bukhtiarpore-Bihar Light Railway Company;

as to the construction, maintenance and working of the Bukhtiarpore-Bihar Light railway.

as to the construction, maintenance and working of the extension of the Bukhtiarpore-Bihar Light railway from Bihar to Silao.

as to the construction, maintenance and working of the extension of the Bukhtiarpore-Bihar Light railway from Silao to Rajgir.

## Main provisions of agreements and Local Government orders—

- (i) **Land.**—The District Board of Patna grant to the Bukhtiarpore-Bihar Light Railway Company in perpetuity, subject to their right of purchasing the line [as in (vi) below], the free use of so much of the side portion of the District Board road between Bukhtiarpore and Bihar as is necessary, but not exceeding a width of eight feet, for the purpose of the railway; and promote the acquisition of any additional land required outside the boundary of the said road at the cost of the Company.
- (ii) **Aid by the Local Authority.**—The District Board of Patna will recommend and apply to the Local Government either to exempt the Bukhtiarpore-Bihar Light Railway Company from the tax on account of road cess or to exact only a nominal tax for a period of twenty-one years from the date when the line is opened for traffic, with power of renewal. The Board also guarantee to supplement the net earnings of the Company by such annual subsidy as may be necessary to allow of the Company paying a dividend of 4 per cent per annum on their share capital, provided that the total liability of the Board on this account in any one year shall not exceed Rs. 32,000 or the sum of 4 per cent on the Company's share capital.
- (iii) **Distribution of profits.**—Any surplus profits in excess of 4 per cent on the share capital of the Railway Company is to be equally divided between the District Board of Patna and the Company.



## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main Head 29 BUKHTIARPORE-BIHAR LIGHT RAILWAY (2' 6" gauge)—*concl'd.*  
Sub-head (a)Main provisions of agreements and Local Government orders—*concl'd.*(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods have been fixed. Full control over charges of all kinds is reserved to the Local Government.(v) *Special obligations as to the conveyance of—*

(a) Mails, troops, police, high Government officials and Government stores.—

(b) Government bullion and coin, and the persons in charge thereof.—

} Nil.

(vi) *Power of the Local Authority to determine agreement.*—Upon the expiration of 21 years, from the date of the Local Government order authorising the construction of the line, and at the end of every seven years thereafter, the District Board of Patna have, by giving six months' previous notice, the right of purchasing the line by paying to the Company the value calculated at twenty years' purchase of the average net annual profits of the Company during the four years preceding the transaction together with a bonus of 20 per cent thereon.(vii) *Power of Company to surrender agreement.*—Nil.(viii) *Term of agreement.*—None specified.

Statistics of working—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1903 . . . . .	18'50	7,48,851	35,800	15,117	2'02	—	15,117	2'02	74	57'77
1904 . . . . .	18'50	8,11,233	1,13,923	66,571	8'21	—10,616	53,955	6'60	118	41'57
1905 . . . . .	18'50	8,25,210	88,848	35,681	4'32	—90	35,591	4'31	92	59'84
1906 . . . . .	18'50	8,48,827	1,11,409	48,163	5'71	—5,674	42,489	5'04	116	56'77
1907 . . . . .	18'50	8,72,221	1,10,888	46,073	5'18	—4,501	41,572	4'68	115	58'45
1908 . . . . .	18'50	9,00,878	1,10,152	45,122	5'01	—1,915	43,207	4'80	114	59'04
1909 . . . . .	28'00	11,96,973	1,52,322	58,331	4'87	—3,198	55,133	4'44	128	61'70
1910 . . . . .	28'00	12,01,403	1,23,986	54,564	4'54	—3,421	51,143	4'25	85	55'29
1911 . . . . .	33'00	12,38,725	1,34,135	62,361	5'04	—4,827	57,534	4'64	78	53'38

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number **Main head 30.** **CHAMPANER-SHIVRAJPUR LIGHT RAILWAY (2' 6" gauge)—**  
 Sub-head (a) **Progress in opening—**

Sections of railway.	Date of opening.	Miles.	Total.
Champaner Road Junction to Champaner City . . . . .	2-2-11	11-00	
Champaner City to Shivrajpur . . . . .	10-11-11	6-00	
Shivrajpur to Bamankua mines . . . . .	1-1-11	1-44	
Shivrajpur to Shivrajpur mines . . . . .	24-1-11	1-80	
			20-24

## Details of construction—

*Permanent-way.*—The permanent-way consists of 29½-lb. steel rails on wooden sleepers.

*Ballast.*—The line is ballasted with heavy stone ballast.

*Fencing.*—The line is unfenced except at station yards.

*Curves.*—The sharpest curve is of 800 feet radius.

*Gradients.*—The ruling gradient is 1 in 100.

## Local Government order—

The Shivrajpur Tramway order published under the Bombay Government, Public Works Department, Notification No. 5-Ry., dated the 1st September 1909, as to the construction, maintenance and working of a steam tramway from Champaner Road to Shivrajpur.

## Main provisions of Local Government order—

- (i) *Land.*— } For the purposes of the tramway and not for the purposes of any building or  
 (ii) *Government aid.*— } erection connected therewith, the free use of the side of the provincial road between Champaner Road and Shivrajpur is authorised. Any additional land which may be in the possession of Government and considered necessary for the purposes of the undertaking shall be provided by the Local Government free of cost. When the cost of the acquisition of land in private occupation exceeds the rate of Rs. 150 per acre, so much of such rate as is in excess of Rs. 150 shall be borne by the promoters; but in any other case the whole cost of acquisition shall be borne by Government.
- (iii) *Distribution of profits.*—The whole of the profits belong to the Shivrajpur Syndicate, Limited, of Bombay.
- (iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods have been fixed. Full control over charges of all kinds is reserved to the Local Government.
- (v) *Special obligations as to the conveyance of—*
- (a) Mails, troops, police, high Government officials and Government stores.— } Nil  
 (b) Government bullion and coin, and the persons in charge thereof.— }
- (vi) *Power of the Government to determine contract.*—At the expiration of 81 years from the date of opening of the line, or at the end of any subsequent period of 10 years, the Local Government may, by giving to the promoters not less than 12 calendar months' notice, determine their order and purchase the undertaking at 25 times the average annual net earnings for the three calendar years immediately preceding the purchase, subject to a maximum of 120 and a minimum of 100 per cent of the capital cost.
- (vii) *Power of the Company to surrender contract.*—Nil.
- (viii) *Term of contract.*—[if not determined under (vi)].—None specified.

## Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of the year.	Total capital outlay, including suspense, to end of the year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1911 . . . . .	20-24	9,02,929	64,061	15,545	1-72	61	75-74

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 31 . **CUTCH RAILWAY (2' 6" gauge)—**  
Sub-head (a)

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Tuna to Anjar . . . . .	18-5-05	11·67	30·78
Anjar to Bhuj . . . . .	1-11-08	25·11	

## Details of construction—

*Permanent-way.*—The permanent-way consists of 30-lb. flat-footed steel rails on half-round teak sleepers.

*Ballast.*—The line is ballasted with stone.

*Fencing.*—The line is unfenced.

*Curves.*—The sharpest curve is of 359 feet radius.

*Gradients.*—The ruling gradient is 1 in 200 between Tuna and Anjar and 1 in 100 between Anjar and Bhuj.

## Contract—

Nil. This line was sanctioned for construction at the cost of His Highness the Maharaja Rao Sahib of Cutch, under the Government of India, Public Works Department, Notification No. 329, dated the 4th September 1903, and the Railway Board Notification No. 86, dated the 1st June 1905, and is maintained and worked by the Cutch Durbar.

## Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including expense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
1905 . . . . .	Miles. 11·67	Rs. 4,25,731	Rs. 28,496	Rs. 20,908	4·91	Rs. 75	26·63
1906 . . . . .	11·67	7,18,668	40,273	19,919	2·77	66	50·54
1907 . . . . .	11·67	8,17,815	43,321	24,070	2·94	71	44·31
1908 . . . . .	36·78	8,74,980	40,006	15,337	2·07	20	54·41
1909 . . . . .	33·78	9,42,842	84,864	47,851	5·07	44	43·61
1910 . . . . .	33·78	9,42,842	93,639	55,958	5·93	49	40·24
1911 . . . . .	36·78	9,42,711	1,01,687	53,876	6·17	53	42·85

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 32. DEHRI-ROHTAS LIGHT RAILWAY (2' 6" gauge)—  
Sub-head (a)

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Dehri-on-Sone to Rohtas.	6-3-11	28-83	28-83

## Details of construction—

*Permanent way.*—The permanent way consists of 30-lb. steel rails on s&l sleepers.*Ballast.*—The line for a distance of 5 miles has been ballasted and this work is still in progress.*Fencing.*—The line is unfenced.*Curves.*—The sharpest curve is of 240 feet radius.*Gradients.*—The ruling gradient is 1 in 200, uncompensated.

## Agreement and Local Government order—

Agreement, dated the 18th October 1907, between the District Board of Shahabad and Messrs. Octavius Steel and Company of Calcutta (called "the Promoters") for and on behalf of the Dehri-Rohtas Tramway Company, scheduled to the order quoted below;

as to the construction, maintenance and working of a steam tramway from Dehri-on-Sone to Rohtas.

The Dehri-Rohtas Tramway Company order published under the Bengal Government, Railway Department, Notification No. 24-B., dated the 10th November 1908;

## Main provisions of agreement and Local Government order—

- (i) *Land.*—The line runs partly on Government land in charge of the Public Works Department and partly along the district road to Akbarpur. The District Board of Shahabad have granted to the Dehri-Rohtas Tramway Company in perpetuity, subject to their right of purchasing the line [as in (vi) below], the free use of so much of the side of the District Board road between Dehri and Rohtas as is necessary, but not exceeding a width of eight feet leaving a clear roadway of fourteen feet intact for ordinary wheeled traffic, for the purpose of the tramway, and have promoted the acquisition of any additional land required outside the boundary of the said road at the cost of the company.
- (ii) *Aid by the Local Authority.*—The District Board of Shahabad will recommend and apply to the Local Government to exempt the Dehri-Rohtas Tramway Company from the tax on account of road cess, or to exact only a nominal tax, for a period of twenty-one years from the date when the line is opened for traffic, with power of renewal.
- (iii) *Distribution of profits.*—The profits go to the Company.
- (iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods and the East Indian railway classification of goods, have been fixed. Full control over charges of all kinds is reserved to the Local Government.
- (v) *Special obligations as to the conveyance of.*—
- (a) Mails, troops, police, high Government officials and Government stores.—
- (b) Government bullion and coin, and the persons in charge thereof.— } Nil.
- (vi) *Power of the Local Authority to determine agreement.*—Upon the expiration of 21 years, from the date of the Local Government order authorising the construction of the line, and at the end of every seven years thereafter, the District Board of Shahabad have, by giving six months' previous notice, the right of purchasing the line by paying to the company the value calculated at twenty years' purchase of the average net annual profits of the company during the four years preceding the transaction together with a bonus of 20 per cent thereon.
- (vii) *Power of the company to surrender agreement.*—Nil.
- (viii) *Term of agreement [if not determined under (vi)].*—None specified.

## Statistics of working—

TABLE I						TABLE II	
Calendar year.	Mileage open at end of the year.	Total capital outlay, including expenses, to end of the year, &c., (i) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Miles.	Rs.	Rs.	Rs.	...	Rs.	
1911	28-83	5,82,474	24,066	-12,291	...	21	151-07

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix]

Number <sup>Main head 33</sup> <sub>Sub-head (a)</sub> DHOLPUR-BARI RAILWAY (2' 6" gauge)—

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Dholpur on the Indian Midland section of the Great Indian Peninsula railway to Bari .	24-2-08	19.62	19.62

## Details of construction—

**Permanent way.**—Five miles are laid with 35-lb. old steel rails on Indian State railway pattern steel trough sleepers; the remainder is laid with 35-lb. new steel rails on Indian State railway pattern steel sleepers.

**Ballast.**—The line is ballasted throughout with stone.

**Fencing.**—The line is not fenced.

**Curves.**—The radius of the sharpest curve is 1,910 feet.

**Gradients.**—The ruling gradient is 1 in 200.

## Contract—

Nil. This railway was sanctioned for construction at the cost of His Highness the Rana of Dholpur, under Railway Board's Notification No. 267, dated the 13th December 1905, and is maintained and worked by the Dholpur Durbar.

## Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . . . . .	19.62	7,23,502	21,352	—11,261	—	25	15.74
1909 . . . . .	19.62	6,91,940	37,226	5,773	0.88	35	51.06
1910 . . . . .	19.62	6,96,601	48,377	19,835	2.85	47	58.99
1911 . . . . .	19.62	7,41,111	41,566	14,338	1.98	41	65.50

Number <sup>Main head 24</sup> <sub>Sub-head (a)</sub> DWARA-THERRIA LIGHT RAILWAY (2' 6" gauge)—

The line is under construction by Messrs H. V. Low and Company of Calcutta, to whom the property and rights which were vested in the Dwara-Therria Light Railway Company, " Limited ", under the Dwara-Therria Steam Tramway Order published by the Chief Commissioner of Assam under Notification No. 44, dated the 4th August 1902, have been transferred.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Dwara to Maolong (sanctioned on 15th May 1902) . . . . .	...	13.50	
Maolong to Therria Ghat (sanctioned on 15th May 1902, but commencement of work not authorized).	...	3.00	16.50

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 35  
Sub-head (a) JESSORE-JHENIDAH LIGHT RAILWAY (2' 6" gauge)—

\* \* The sanction accorded by the Government of Bengal to the construction, by a private company, of this line under the Indian Railways Act, IX of 1890, was approved by the Government of India in their letter No. 275 R.P., dated the 2nd December 1910.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
<i>Main line</i> —			
Jessore to Jhenidah (sanctioned on 2nd December 1910)	—	28-00	
<i>Branch</i> —			
Kaliganj to Kot Chandpur (sanctioned on 2nd December 1910)	—	7-00	35-00

Number Main head 36  
Sub-head (a) MADAYA LIGHT RAILWAY (2' 6" gauge)—

Construction of this line by a private company under the Indian Tramways Act, 1886 (XI of 1886), was sanctioned by Burma Government Notification No. 2z, dated the 13th February 1906.

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Madaya to the Zegyo quarter of Mandalay town (sanctioned on 13th February 1906)	—	16-00	16-00

Number Main head 37  
Sub-head (a) MAUNGDAW-BUTHIDAUNG LIGHT RAILWAY (2' 6" gauge)—

In letter No. 102 R.P., dated the 6th June 1911, sanction of the Government of India was accorded to the issue by the Government of Burma, under section 6 (3) of the Indian Tramways Act, XI of 1886, of the draft order authorising the construction of this line by the Arakan Flotilla Company, Limited, of Akyab.

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Maungdaw to Buthidaung (sanctioned on 6th June 1911)	—	17-25	17-25

Number Main head 38  
Sub-head (a) NADIAD-KAPADVANJ RAILWAY (2' 6" gauge)—

The construction of this line by Messrs. Killick, Nixon and Company was sanctioned by the Railway Board in their letter No. 546 R.C., dated the 28th February 1911.

## Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
A point near Nadiad station to Kapadvanj (sanctioned on 28th February 1911)	—	27-98	27-98

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 39.</sup> **SHAHDARA (DELHI)-SAHARANPUR LIGHT RAILWAY (2' 6" gauge)**—  
Sub-head (a)**Progress in opening—**

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	
Shahdara to Saharanpur . . . . .	15-10-07	92'50	92'50	122'50	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					
Baraut to Meerut (sanctioned on 4th January 1903, but commencement of work not authorised).	...	30'00	30'00		

**Details of construction—**

*Permanent-way.*—The permanent-way consists of 35-lb. flat-footed steel rails laid on s&il sleepers.  
*Ballast.*—The line is ballasted with stone and broken brick.  
*Fencing.*—The line is partially fenced.  
*Curves.*—The sharpest curve is of 1,910 feet radius.  
*Gradients.*—The ruling gradient is 1 in 1,000.

**Local Government order and agreement—**

The Shahdara-Saharanpur Tramway Company order published under the Government of the United Provinces of Agra and Oudh, Public Works Department, Railway Branch, Notification No. 339-187-B., dated 18th April 1904; } as to the construction, maintenance and working of a steam tramway from Shahdara to Saharanpur with a branch from Baraut to Meerut.

Agreement, dated the 11th October 1905, between the Government of the United Provinces of Agra and Oudh and Messrs. Martin & Co. of Calcutta (called "the Promoters") for and on behalf of the Shahdara (Delhi)-Saharanpur Light Railway Company, published under the Government of the United Provinces of Agra and Oudh, Public Works Department, Railway Branch, Notification No. 1363-B.-187, dated the 22nd November 1905; }

**Main provisions of Local Government order and agreement—**

- (i) *Land.*— } The Local Government provide free of charge for the purposes of the  
(ii) *Government aid.*— } railway sufficient land for a single 5' 6" gauge line, together with land for all conveniences and works approved under clause 8 of the agreement. In addition to this the company is authorised to use for the purpose of the railway, but not for the purpose of any building or erection connected therewith, portions not exceeding six feet in width of the local roads passing between Shahdara and Saharanpur and Baraut and Meerut.
- (iii) *Distribution of profits.*—Surplus profits in any year in excess of 4 per cent upon the paid-up capital of the Railway Company shall be divided equally between the Government and the Railway Company. Payments on account but subject to adjustment being made at close of first half-year.
- (iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods with the East Indian railway classification of goods, have been fixed. Full control over charges of all kinds is reserved to the Local Government.
- (v) *Special obligations as to the conveyance of.*—
- (a) Mails, troops, police, high Government officials and Government stores.— } Nil.  
(b) Government bullion and coin, and the persons in charge thereof.— }

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 89 SHAHDARA (DELHI)-SAHARANPUR LIGHT RAILWAY (2' 6" gauge)—  
Sub-head (a) *concl'd.*

\*Main provisions of Local Government order and agreement—*concl'd.*

(vi) *Power of the Government to determine agreement.*—Upon the expiration of 21 years after the date of opening, or 23 years from the date of the Local Government order sanctioning the construction of the line, whichever is earlier, or at the end of successive periods of seven years thereafter, the Local Government have, by giving 12 months' previous notice, the right of terminating the agreement by paying to the Company the value calculated at 25 years' purchase of the average annual profits of the Company for the preceding three years, subject to a minimum of the capital expended and a maximum of 25 per cent in excess of that sum. In the event of its being determined to construct a railway on a different gauge in place of the tramway, and if the Government and the Company fail to agree that the alteration shall be made by the Company, then and in such case, the Government have the right to acquire the tramway at any time on giving 12 months' notice in writing and paying to the Company a sum 25 per cent in excess of its capital expenditure.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement.*—None specified.

## Statistics of working—

Calendar year.	TABLE I.				TABLE II.		
	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year; i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1907 . . . . .	93.02	33,02,296	1,91,146	29,788	0.90	45	70.55
1908 . . . . .	92.63	41,35,292	3,35,593	1,41,823	3.43	70	57.78
1909 . . . . .	92.68	41,56,390	4,05,856	1,96,014	4.71	84	51.70
1910 . . . . .	92.50	41,67,317	5,04,283	2,78,330	6.67	105	44.80
1911 . . . . .	92.50	43,16,557	5,33,283	3,10,744	7.87	110	41.61



## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number  $\frac{\text{Main head } \textcircled{a}}{\text{Sub-head } (a)}$  TARKESSUR-MAGRA LIGHT RAILWAY (2' 6" gauge)—

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Tarkessur to Budramt . . . . .	7-11-94	12.50	
Budramt to Magra . . . . .	8-9-95	18.62	
Magra to Tribeni . . . . .	14-4-04	2.15	33.27

## Details of construction—

**Permanent-way.**—The permanent-way of the main line consists of 30-lb. flat-footed steel rails laid for 10 miles on steel transverse sleepers and for the remainder on pynkado sleepers. The Tribeni extension is laid on s&l sleepers.

**Ballast.**—Sand and broken brick.

**Fencing.**—The line is partially fenced.

**Curves.**—The sharpest curve is of 716.25 feet radius.

**Gradients.**—The ruling gradient on the main line is 1 in 1,000; there are short gradients of 1 in 500 to 1 in 700 at bridge approaches; from the bridge under the East Indian railway to Magraganj station, the line is on a gradient of 1 in 350. The ruling gradient on the Tribeni extension is 1 in 500.

## Agreements and Local Government order—

Agreement, dated the 16th October 1890, between the District Board of Hooghly and the Promoters of the Bengal Provincial Railway Company, scheduled to the order quoted below;

The Bengal Provincial Railway Company order published under the Bengal Government, Railway Department, Notification No. 1, dated the 4th January 1896;

as to the construction, maintenance and working of the Tarkessur-Magra Light railway.

Agreement, dated the 12th March 1904, between the Secretary of State and the Bengal Provincial Railway Company, as to the construction, maintenance and working of the extension of the Tarkessur-Magra Light railway from Magra station to Tribeni bathing ghat on the Hooghly river.

## Main provisions of agreements and Local Government order—

- (i) **Land.**— } Land required for the purposes of the main line, from Tarkessur to Magra, acquired by the Government of Bengal at the cost of the Company; and that
- (ii) **Government aid.**— } for the extension from Magra station to Tribeni ghat on the Hooghly river provided by Government free from rent or other charge.
- (iii) **Distribution of profits.**—The profits go to the Company.
- (iv) **Rates and fares.**—Certain maximum rates of fare for passengers and tariff of charges for goods, with the East Indian railway classification of goods, have been fixed. Full control over charges of all kinds is reserved to the Local Government.
- (v) **Special obligations as to the conveyance of—**
- (a) Mails, Postal Officers and servants on duty.—To be conveyed at the rates and on the conditions in force from time to time on State railways.
- (b) Troops, police, high Government officials and Government stores.—
- (c) Government bullion and coin, and the persons in charge thereof.— } NIL.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 40 TARKESSUR-MAGRA LIGHT RAILWAY (2' 6" gauge)—*concl'd.*  
Sub-head (a).Main provisions of agreements and Local Government order—*concl'd.*

(vi) *Power of the Local Authority to determine agreement.*—In the event of the District Board of Hooghly wishing to purchase the railway at the end of 21 years after the date of the Government order sanctioning the construction of the railway, *viz.*, on the 4th January 1917, the promoters bind themselves to make it over at a price two-fifths in excess of the original capital outlay.

(vii) *Power of the Company to surrender agreement.*—None.

(viii) *Term of agreement [if not determined under (vi)].*—None specified.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907)—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, <i>i.e.</i> , outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1902 . . . . .	31.12	9,73,282	84,272	24,242	2.55	53	70.53
1903 . . . . .	31.12	10,15,735	85,548	25,350	2.50	53	70.37
1904 . . . . .	33.27	10,43,715	89,735	27,564	2.64	52	69.25
1905 . . . . .	33.27	10,47,028	84,838	21,871	2.09	50	71.81
1906 . . . . .	33.27	10,73,037	1,00,072	32,762	3.05	58	67.26
1907 . . . . .	33.27	10,92,158	1,10,338	34,500	3.16	64	65.70
1908 . . . . .	33.27	10,93,192	1,13,074	30,488	2.79	65	73.04
1909 . . . . .	33.27	11,06,707	1,34,182	37,915	3.43	72	60.46
1910 . . . . .	33.27	11,32,454	1,24,378	43,085	3.80	72	65.36
1911 . . . . .	33.27	11,32,072	1,26,287	42,866	3.79	73	66.05

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 41</sup> <sub>Sub-head (a)</sub> **TEZPORE-BALIPARA LIGHT RAILWAY (2' 6" gauge)—**

On the 3rd May 1893, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

A tramway, 2 miles long, was constructed at the expense of the Borjuli Tea Company connecting the Borjuli Tea Factory with Rangapara station on the Tezpore-Balipara Light railway. It was worked by the Tezpore-Balipara Light railway but from February 1908 has been closed to public traffic.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Tezpore Ghat to Bindukuri	9-8-94	8-10	20-10
Bindukuri to Balipara	1-9-95	12-00	

## Details of construction—

**Permanent-way.**—The permanent-way consists of 30-lb. flat-footed steel rails on Nahor or Gonserei sleepers.

**Ballast.**—The line is unballasted.

**Fencing.**—The line is fenced only at stations.

**Curves.**—In the first mile there are two curves with radii of 500 feet.

**Gradients.**—The ruling gradient between Tezpore and Rangapara is 1 in 125 and between Rangapara and Balipara 1 in 100.

## Local Government order—

Tezpore-Balipara Steam Tramway Company order published under the Notification by the Chief Commissioner of Assam, No. 83, dated the 1st June 1895, as to the construction, maintenance and working of the line.

## Main provisions of Local Government order—

(i) **Land.**—Provided at the cost of the Company, other than that which is not held under decennial *puttas* or where the holders have not acquired land-holder's rights, provided free of cost. Free use of one side of a provincial or local road is authorised for the purpose of laying the line only.

(ii) **Government aid.\***—Supply, free of royalty, of timber for sleepers from Government forests for the first construction of the line only, and a payment by the Tezpore Local Board, of a subsidy of Rs. 5,000 per annum up to the end of March 1914.

\* Letter from the Chief Commissioner of Assam, No. 3720, dated the 10th November 1903.

Government of India, Public Works Department letter No. 139 B.C., dated the 2nd February 1894.

Railway Board's letter No. 342 B.T., dated the 22nd February 1909.

(iii) **Distribution of profits.**—The whole of the profits belong to the Company.

(iv) **Rates and fares.**—Certain rates for carriage of passengers and goods have been fixed, but the full control over charges of all kinds is reserved by the Chief Commissioner.

(v) **Special obligations as to the conveyance of—**

(a) **Mails, Postal Officers and servants on duty.**—Conveyed at the rates and on the conditions in force from time to time on State railways.

(b) **Troops, police, high Government officials and Government stores.**—

(c) **Government bullion and coin, and the persons in charge thereof.**—

} Nil.

(vi) **Power of the Government to determine contract.**—After the line has been opened for 15 years and thereafter at terms of 7 years each, the Government, by giving 12 months' previous notice, have the right to terminate the contract and take over the line by paying to the Company the value of the property as a dividend-earning investment together with a bonus of 20 per cent over and above such value.

It has since been decided not to give notice of purchase to the Company on the 1st September 1909 and to defer purchase.

[Telegram from the Government of Eastern Bengal and Assam, No. 804-B., dated the 22nd July 1909.]

(vii) **Power of the Company to surrender contract.**—Nil.

(viii) **Term of contract [if not determined under (vi)].**—None specified.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 41 **TEZPORE-BALIPARA LIGHT RAILWAY (2' 6" gauge)—*contd.***  
Sub-head (a)

Statistics of working. (Those for the periods prior to 1902 will be found in Appendix 36 to the Report for 1907.)—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1902	20·10	4,87,240	85,012	21,651	4·44	5,000	26,651	5·47	81	74·53
1903	20·10	4,87,240	94,742	27,739	5·69	5,000	32,739	6·71	91	70·72
1904	20·10	4,87,240	88,463	17,291	3·55	5,000	22,291	4·57	85	80·45
1905	20·10	4,87,240	1,03,880	27,082	5·56	5,000	32,082	6·58	99	78·80
1906	20·10	4,87,240	1,14,740	34,976	7·18	5,000	39,976	8·20	110	69·51
1907	20·10	4,87,240	1,11,559	28,951	5·94	5,000	33,951	6·97	107	74·05
1908	20·10	4,87,240	88,900	20,972	4·30	5,000	25,972	5·33	86	76·43
1909	20·10	4,87,240	85,964	23,618	4·84	5,000	28,618	5·87	84	72·32
1910	20·10	4,87,240	94,015	25,945	5·32	5,000	30,945	6·35	90	72·40
1911	20·10	4,87,240	1,14,875	31,893	6·54	5,000	36,893	7·57	110	72·23

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number <sup>Main head 42</sup> <sub>Sub-head (a)</sub> **DARJEELING-HIMALAYAN RAILWAY (2' 0" gauge)**—**Progress in opening—**

Sections of railway.	Date of opening.	Miles.	Total.
Siliguri to Kurseong . . . . .	23-8-80	51.75	
Kurseong to Sonada . . . . .	1-2-81	2.50	
Sonada to Ghum . . . . .	4-4-81	5.57	
Ghum to Darjeeling . . . . .	4-7-81	2.63	
Darjeeling to Darjeeling Basar . . . . .	16-8-85	0.25	
			51.00

**Details of construction—**

**Permanent-way.**—The line is laid throughout with 41½-lb. flat-footed steel rails on wooden sleepers. These are being renewed with a special section steel rail, 41½ lbs. to the yard as required.

**Ballast.**—For 9 miles from Siliguri the line has been ballasted with gravel or broken stone, except near Siliguri, where sand has been used. On the hill section, where necessary, broken stone ballast has been and is being put in.

**Fencing.**—The line is unfenced.

**Curves.**—The sharpest curve has a radius of 60 feet.

**Gradients.**—The ruling gradient of the greater part of the line is about 1 in 25; from Sukhna to Ghum (summit) and thence to Darjeeling there is a length of about three-fourths of a mile on grades of 1 in 22½ to 1 in 23.

**Contract—**

Dated the 8th April 1879, between the Secretary of State and the late Mr. Franklin Prestage, as to the construction, maintenance, management and working of the railway.

**Main provisions of contract—**

- (i) **Land.**—Government land, and the right to use the existing cart road, to be granted to the Company free of cost. Other land necessary, if any, to be acquired by the Government and transferred to the Company at cost price.
- (ii) **Government aid.**—The Government undertakes to pay to the Company any sum required to make up its gross receipts to two lakhs of rupees annually.
- (iii) **Distribution of profits.**—After the first five years half the net profits of any year in excess of 5 per cent on the paid up capital to be applied in repayment to the 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.
- (iv) **Rates and fares.**—Certain maxima have been fixed within which the Company is permitted to vary rates and fares.
- (v) **Special obligations as to the conveyance of—**
  - (a) **Mails, troops, police, high Government officials and Government stores.**—Mails and Post Office servants to be carried by the Company in consideration of a payment by the Government of Rs. 10,260 yearly. [No special provision exists as to troops, police, high Government officials and Government stores.]
  - (b) **Government bullion and coin, and the persons in charge thereof.**—Not specified.
- (vi) **Power of the Government to determine contract.**—
- (vii) **Power of the Company to surrender contract.**— } If the railway should not be completed within 18 months, or if at any period it should not be worked for six consecutive months, the Company is to surrender the road and land acquired from Government, receiving any sum due to it 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, the Government has 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.

**Note.**—Government relinquished the right to terminate the contract at the end of the 25th year, and decided to allow the terms and conditions of the contract of the 8th April 1879 to continue for a further period of 10 years, viz., to May 1919 vide Railway Board's letter No. 1412 B. T., dated the 1st August 1905, to the Secretary to the Government of Bengal, Railway Department.

- (viii) **Term of contract.**—None specified.

## APPENDIX 9—contd.

History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number Main head 42 **DARJEELING-HIMALAYAN RAILWAY (2' 0" gauge)—contd.**  
Sub-head (a)

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 36 to the Report for 1907.)—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Government share of surplus profits.	Total income. (column 5—column 7.)	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1902	51·00	34,96,507	8,50,280	3,78,005	10·81	67,704	3,10,801	8·87	321	55·54
1903	51·00	36,13,058	9,61,862	4,16,752	11·54	79,328	3,37,526	9·34	368	56·65
1904	51·00	37,38,486	10,45,187	4,75,227	12·71	97,200	3,78,027	10·11	394	54·33
1905	51·00	37,51,562	9,72,844	4,09,514	10·91	77,021	3,31,898	8·83	367	57·20
1906	51·00	37,43,284	9,50,851	4,01,239	10·72	75,126	3,26,113	8·71	370	59·07
1907	51·00	37,53,304	9,48,717	4,29,129	11·48	83,471	3,45,658	9·21	358	54·81
1908	51·00	37,47,327	9,44,452	4,21,454	11·24	68,162	3,55,392	9·48	356	55·28
1909	51·00	37,72,667	9,89,125	4,39,395	11·66	83,395	3,51,500	9·31	373	55·92
1910	51·00	37,94,440	10,08,569	4,41,931	11·65	90,663	3,51,378	9·26	378	55·96
1911	51·00	38,51,682	10,29,892	4,44,396	11·53	91,435	3,52,801	9·16	388	56·06

## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 43 HOWRAH-AMTA LIGHT RAILWAY (2' 0" gauge)—  
Sub-head (a)

## Running powers—

*Foreign line over home line:—*

Howrah-Sheakhala Light railway, Telkul Ghât to Kadamtala (for passenger and goods trains), 2·00 miles.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<b>Main line—</b>				
Telkul Ghât (Howrah) to Damjer . . . . .	1-7-97	9·20		
Damjer to Bargachia . . . . .	2-10-97	5·87		
Bargachia to Maju . . . . .	4-5-98	5·50		
Maju to Amta . . . . .	1-6-98	6·62		
			27·19	
<b>Champadanga branch—</b>				
Bargachia to Jagatbalabpur . . . . .	2-10-97	1·50		
Jagatbalabpur to Autpur . . . . .	1-6-04	5·50		
Autpur to Champadanga . . . . .	24-8-08	6·68		
			16·68	
<b>TOTAL-OPEN MILEAGE</b> . . . . .	...	...		43·87
<b>UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—</b>				
Autpur to Rajbulhat (sanctioned on 20th March 1902, but commencement of work not yet authorised).	...	3·50	3·50	3·50
<b>TOTAL LENGTH OPEN AND UNDER CONSTRUCTION OR SANCTIONED.</b>	...	...	...	47·37

## —Details of construction—

*Permanent-way.*—The permanent-way consists of flat-footed steel rails, 25 lbs. to the yard, on cross sleepers of pynkado. A portion of the line has been relaid with steel rails 30 lbs. to the yard.

*Ballast.*—The line is ballasted throughout.

*Fencing.*—The line is unfenced.

*Curves.*—The sharpest curve, sanctioned specially for the town of Howrah, has a radius of 144 feet.

*Gradients.*—The line is practically level throughout.

## Agreements and Local Government orders—

Agreement, dated the 12th June 1889, between the District Board of Howrah and Messrs. Walsh, Lovett and Company on behalf of the Bengal District Road Tramways Company, as to the grant of a concession to the Company of the right to construct and work a tramway over a portion of the road within the jurisdiction of the Board.

Agreement, dated the 27th September 1889, between the Municipal Commissioners of Howrah and Messrs. Walsh, Lovett and Company on behalf of the Bengal District Road Tramways Company, as to the grant of a concession to the Tramways Company of the right to construct and work a tramway over a portion of the road within the jurisdiction of the Commissioners.

Bengal District Road Tramways Company order published under the Bengal Government, Public Works Department, Notification No. 111, dated the 26th March 1895, authorising the construction of a tramway from Howrah to Amta.

Agreement, dated the 3rd May 1897, between the District Board of Howrah and the Bengal District Road Tramways Company (Howrah-Amta), in amendment of the agreement of 12th June 1889.

Agreement, dated the 16th August 1901 (supplemental to the agreements of 1889 and 1897), between the District Board of Howrah and the Howrah-Amta Light Railway Company, as to the construction and working of an extension from Jagatbalabpur to Autpur.

Howrah-Amta Extension order published under the Bengal Government, Railway Department, Notification No. 75-R., dated the 7th April 1902, authorising the construction of the extension from Jagatbalabpur to Autpur.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 43 **HOWRAH-AMTA LIGHT RAILWAY (2' 0" gauge)—*concl'd.***  
Sub-head (a)**Main provisions of agreements and Local Government orders—*concl'd.***

- (i) *Land.*—Provided at the cost of Company, other than one side of portions of the road between Howrah and Amta the free use of which is authorised for the purpose of laying the line only.
- (ii) *Aid by the District Board.*—The District Board of Howrah either exempt the Company from the tax on account of road cess, or exact only a nominal tax for a period of 21 years, with power of renewal. The Municipal Commissioners reserve the power to levy a fair and equitable rate of rent at the expiration of 20 years.

The District Board also pay to the Company, by way of interest on the capital expended, such sum of money as may be required to make the net profits of the Company equivalent to a dividend at the rate of 4 per cent per annum, provided that the Board is not involved on this account in a greater liability than Rs. 1,100 per annum per mile constructed and opened with a maximum of Rs. 28,000 per annum.

- (iii) *Distribution of profits.*—Net profits in excess of 4 per cent upon the capital for the time being of the Company is divisible in equal proportions between the District Board of Howrah and the Company.

- (iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods have been fixed. Full control over charges of all kinds is reserved to Local Government.

- (v) *Special obligations as to the conveyance of.*—

- (a) Mails, troops, police, high Government officials and Government stores.— } Nil.  
(b) Government bullion and coin, and the persons in charge thereof.— }

- (vi) *Power of the Local Authority to determine agreement.*—Upon the expiration of 21 years from the date of the Local Government order authorising the construction of the line, or at the end of every 7 years thereafter, the District Board of Howrah, in conjunction with the District Board of Hooghly and the Municipality of Howrah, have by giving 6 months' notice, the right of purchasing the line by paying to the Company its value as a dividend-earning investment, together with a bonus of 20 per cent thereon.

- (vii) *Power of the Company to surrender agreement.*—Nil.

- (viii) *Term of agreement [if not determined under (vi)].*—Not specified.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907)—

TABLE I.									TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1902	28-68	12,91,191	2,65,497	1,33,120	10-31	— 29,708	1,03,417	8-01	178	49-26
1903	28-68	13,15,237	2,77,451	1,35,876	10-33	— 30,921	1,04,955	7-98	186	51-13
1904	37-19	16,16,304	2,97,790	1,55,718	9-63	— 35,715	1,20,003	7-42	170	47-71
1905	37-19	16,41,552	3,28,722	1,79,439	10-33	— 39,563	1,39,876	8-52	170	45-42
1906	37-19	18,23,741	3,51,462	1,77,670	9-74	— 38,681	1,38,989	7-62	182	49-45
1907	37-19	18,88,829	3,70,554	2,03,338	10-79	— 40,536	1,62,802	8-64	192	45-13
1908	43-87	21,57,189	3,98,181	1,98,412	9-10	— 38,678	1,57,734	7-31	193	50-67
1909	43-87	21,80,734	4,37,024	2,10,668	9-66	— 40,935	1,69,733	7-75	191	51-79
1910	43-87	22,24,379	4,83,490	2,15,239	9-67	— 45,732	1,69,507	7-63	212	55-48
1911	43-87	23,03,904	4,98,121	2,52,728	10-97	— 53,751	1,98,977	8-63	219	49-30



## APPENDIX 9—contd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Mian head 44 HOWRAH-SHEAKHALA LIGHT RAILWAY (2' 0" gauge)—  
Sub-head (a).

## Running powers—

*Home line over foreign line:—*

Talkal Ghat to Kadamtala, Howrah-Amta Light railway, for passenger and goods trains, 2·00 miles.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<i>Main line—</i>				
Kadamtala to Chanditala . . . . .	2-8-97	8·88		
Chanditala to Kistrampur . . . . .	10-9-97	8·75		
Kistrampur to Sheakhala . . . . .	7-11-97	4·75	17·38	
<i>Janai branch—</i>				
Chanditala to Janai . . . . .	5-5-98	2·37	2·37	19·75

## Details of construction—

*Permanent-way.*—The permanent-way consists of flat-footed steel rails, 25-lb. to the yard, laid on cross sleepers of pykado.

*Ballast.*—The line is ballasted throughout.

*Fencing.*—The line is unfenced.

*Curves.*—The sharpest curve is of 144 feet radius at Howrah town.

*Gradients.*—The line is practically level throughout.

## Agreements and Local Government order—

- Agreement dated the 12th June 1889, between the District Board of Howrah and Messrs. Walsh, Lovett and Company of Calcutta (the Promoters), for and on behalf of the Bengal District Road Tramways Company ;
- Agreement dated the 16th July 1889, between the District Board of Hooghly and Messrs. Walsh, Lovett and Company of Calcutta (the Promoters), for and on behalf of the Bengal District Road Tramways Company ;
- Agreement dated the 27th September 1889, between the Municipal Commissioners of Howrah and Messrs. Walsh, Lovett and Company of Calcutta (the Promoters), for and on behalf of the Bengal District Road Tramways Company ;

as to the grant of a concession of the right to construct, maintain and work a tramway from Howrah to Sheakhala.

The Bengal District Road Tramways Company order published under the Bengal Government, Public Works Department, Notification No. 112, dated the 26th March 1895, authorising the construction of the line from Howrah to Sheakhala.

Agreement dated the 10th January 1898, between the District Board of Hooghly and the Bengal District Road Tramways Company (Howrah-Sheakhala), providing for an increase in the amount of subsidy guaranteed to be paid by the District Board.

## Main provisions of agreements and Local Government order—

- (i) *Land.*—Provided at the cost of the Company, other than one side of portions of the road between Howrah and Sheakhala, the free use of which is authorised for the purpose of laying the line, subject to the reservation in the case of the Municipal Commissioners of Howrah of the power of levying a fair and equitable rate of rent per mile of line for the use of the roads within their jurisdiction after the expiration of 20 years from date of agreement.
- (ii) *Aid by the local authority.*—The District Board of Howrah, for 21 years, with power of renewal, exempt the company from the tax on account of road cess, or exact only a nominal tax; and the District Board of Hooghly guarantees to make up the net profit of the Company equivalent to a dividend of 4 per cent per annum on the capital actually paid up and expended, subject to a maximum of Rs. 950 per annum per mile of line constructed and open.
- (iii) *Distribution of profits.*—Net profits in excess of 4 per cent upon the capital outlay are divisible between the District Board of Hooghly and the Company in proportion of 1-3rd to the former and 2-3rds to the latter.

## APPENDIX 9—contd.

## History of railways constructed and in progress.

[For Index see page preceding this appendix.]

Number <sup>Main head 44</sup> <sub>Sub-head (a)</sub> HOWRAH-SHEAKHALA LIGHT RAILWAY (3' 0" gauge)—conold.

Main provisions of agreements and Local Government order—conold.

(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods have been fixed. Full control over charges of all kinds is reserved to the Local Government.(v) *Special obligations as to the conveyance of.*—(a) *Mails, troops, police, high Government officials and Government stores.*—(b) *Government bullion and coin, and the persons in charge thereof.*—

} Not specified.

(vi) *Power of the Local authority to determine agreement.*—The District Board of Howrah or that of Hooghly, each in conjunction with the other and with the Municipal Commissioners of Howrah, have the right of determining the agreement and purchasing the line after 21 years from the date of the Local Government order authorising its construction. If purchased by the District Board of Howrah the price will be equal to the value of the whole line, plus a bonus of 20 per cent thereon; if purchased by the District Board of Hooghly the price will be the value of the whole line, plus a bonus of 15 per cent thereon.(vii) *Power of the Company to surrender agreement.*—Nil.(viii) *Term of agreement [if not determined under (vi)].*—None specified.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 36 to the Report for 1907)—

TABLE I.								TABLE II.		
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1902 . . . . .	19-75	6,16,373	83,019	31,789	5-15	—550	31,169	5-06	78	61-30
1903 . . . . .	19-75	6,22,091	87,049	33,337	5-37	—1,037	31,350	5-20	77	61-65
1904 . . . . .	19-75	6,17,126	86,257	34,139	5-54	—2,747	36,393	5-90	76	64-63
1905 . . . . .	19-75	6,19,894	88,266	33,123	5-35	—2,419	35,709	5-76	76	56-99
1906 . . . . .	19-75	6,23,896	90,595	37,047	5-94	—3,548	34,499	5-53	80	59-11
1907 . . . . .	19-75	6,24,966	95,232	39,225	6-26	—2,728	36,498	5-84	84	58-61
1908 . . . . .	19-75	6,33,239	1,01,051	34,303	5-42	—2,987	31,316	4-94	89	66-05
1909 . . . . .	19-75	6,50,453	1,07,476	33,522	5-12	—3,595	34,927	5-37	104	64-16
1910 . . . . .	19-75	6,56,173	1,19,792	63,350	9-65	—5,032	58,318	8-88	116	47-11
1911 . . . . .	19-75	6,56,138	1,26,090	62,171	9-48	—4,666	57,505	8-76	123	50-63

Number <sup>Main head 45</sup> <sub>Sub-head (a)</sub> JAGADHRI LIGHT RAILWAY (2' 0" gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
Jagadhri station to Jagadhri city . . . . .	11-3-11	3-31	3-31

Details of construction—

*Permanent-way.*—The permanent-way consists of 24-lb. flat-footed steel rails laid on sal and deodar sleepers.*Ballast.*—The line is ballasted for about a furlong in one place only, and the remainder is being ballasted gradually with brick bats.*Fencing.*—The line is unfenced.*Curves.*—The sharpest curve is of 573 feet radius.*Gradients.*—The ruling gradient is 1 in 300.

Local Government order—

The Jagadhri Light Railway Company order of 1908, published under the Punjab Government Notification No. 754, dated the 15th December 1909, as to the construction, maintenance and working of a steam tramway from Jagadhri station to Jagadhri city.

APPENDIX 9—*contd.**History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 47. JAGADHRI LIGHT RAILWAY (2' 0" gauge)—*concl'd.*  
Sub-head (a)

## Main provisions of Local Government order—

- (i) *Land.*—Except the portions of the District Board and provincial roads in the district of Ambala which the line is authorised to cross, all land for the purpose of the undertaking is provided at the cost of capital.
- (ii) *Government aid.*—Nil.
- (iii) *Distribution of profits.*—The whole of the profits belong to the Company.
- (iv) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Local Government.
- (v) *Special obligations as to the conveyance of.*—
- (a) Mails, troops, police, high Government officials and Government stores.— } Not  
(b) Government bullion and coin.— } specified.
- (vi) *Power of the Government to determine contract.*—At the expiry of 21 years after first opening throughout for traffic, or at subsequent intervals of 10 years, the local authority, by giving 12 months' notice, has the right to terminate the contract and purchase the undertaking, with the previous sanction of the Local Government, by paying to the Company 25 times the yearly average net earnings of the line during the 3 years preceding the purchase with a maximum of 120 and minimum of 100 per cent of the cost price.
- (vii) *Power of the Company to surrender contract.*—Nil.
- (viii) *Term of contract [if not determined under (vi)].*—None specified.

## Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of the year.	Total capital outlay, including suspense, to end of the year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3)	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
1911	Miles. 531	Rs. 1,05,500	Rs. 7,908	Rs. 508	0.47	Rs. 9	23.44

Number Main head 48 : JORHAT (PROVINCIAL) RAILWAY (2' 0" gauge)—  
Sub-head (a)

This line, originally known as the "Kokila Mookh tramway" or the "Kokila Mookh State railway," was constructed for the convenience of the numerous tea-gardens in the neighbourhood of Jorhat.

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
<i>Main line—</i>				
Gosaigaon to Jorhat . . . . .	15-12-84	7.00		
Jorhat to Dhali river . . . . .	15-12-84	9.50		
Dhali river to Titabar . . . . .	16-7-87	1.75		
Extension of line from Gosaigaon to Borghop (cold weather line) . . . . .	22-1-01	4.75		
Borghop to a point further down the river . . . . .	3-12-11	2.00	25.00	
<i>Mariani branch—</i>				
Chenumara Junction to Mariani . . . . .	7-1-85	7.00	7.00	32.00

## Details of construction—

*Permanent way.*—Excepting 2.51 miles of the line between Jorhat and Gosaigaon, which is laid with steel rails, 30 lbs. to the yard, and about a mile between Jorhat and Chenumara, which is laid with steel rails, 25 lbs. to the yard, the rest of the line, including the section from Gosaigaon to Borghop and the alternative cold weather section across Gosaigaon channel, is laid with steel rails, 18 lbs. to the yard.

*Ballast.*—The line is unballasted.

*Fencing.*—The line is not fenced.

*Curves.*—The sharpest curve is of 480 feet radius.

*Gradients.*—The ruling gradient is about 1 in 800, except on the Jorhat-Chenumara section where it is 1 in 400.

## APPENDIX 9—concl'd.

*History of railways constructed and in progress.*

[For Index see page preceding this appendix.]

Number Main head 46 JORHAT (PROVINCIAL) RAILWAY (2' 0" gauge)—concl'd.  
Sub-head (a)

## Contract—

Nil.—The construction of the line out of Provincial revenues by the Administration of Assam was approved by the Government of India in their letter No. 691 R. C., dated the 11th August 1882. The maintenance and working of the line are carried on by the Provincial Government.

Statistics of working (Those for the periods prior to 1902 will be found in Appendix 38 to the Report for 1907).—

TABLE I.							TABLE II.		
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State pertaining to each calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1902	30.00	8,95,693	86,641	—3,655	—	36,237	—59,892	57	104.32
1903	30.25	9,03,943	90,710	18,594	1.50	36,408	—22,814	58	85.01
1904	30.25	9,03,781	74,293	—3,840	—	36,268	—40,160	47	105.17
1905	30.25	9,08,441	78,600	2,458	0.27	35,430	—34,022	48	96.67
1906	31.75	9,09,185	92,540	12,995	1.43	32,515	—19,520	59	85.96
1907	31.75	9,29,798	91,667	528	0.06	31,728	—31,200	55	99.43
1908	31.75	9,29,930	1,01,098	11,258	1.21	31,681	—20,423	62	88.88
1 09	31.65	9,53,593	99,533	11,388	1.18	31,748	—20,465	60	88.66
1910	30.00	9,68,204	95,976	7,529	0.78	31,959	—24,430	59	92.16
1911	32.00	9,72,295	1,09,457	31,354	3.23	32,895	—1,531	70	71.35

Number Main head 47 PIPAR ROAD-BHAVI LIGHT RAILWAY (2' 0" gauge)—  
Sub-head (a)

## Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
Pipar Road to Bhavi	25-11-10	19.00	19.00		
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					
Bhavi to Bilara (sanctioned on 7th March 1912)*	...	6.00	6.00	25.00	* Construction commenced in 1911, in anticipation of sanction.

## Details of construction—

*Permanent-way*—The permanent-way consists of 24-lb. steel rails on deodar and sál sleepers.

*Ballast*—The line is ballasted with earth.

*Fencing*—The line is not fenced.

*Curves*—The radius of the sharpest curve is 478 feet.

*Gradients*—The ruling gradient is 1 in 600—except in the section from mile 6.38 to mile 6.76 and from mile 7 to mile 7.53, where the gradient is 1 in 100 in cuttings.

## Agreement—

Nil.—The line was constructed and is owned and worked by the Jodhpur Durbar.

## Statistics of working—

TABLE I.						TABLE II.	
Calendar year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
	Miles.	Rs.	Rs.	Rs.		Rs.	
1910	19.00	1,95,787	1,732	632	0.32	17	63.51
1911	19.00	2,51,555	15,996	5,246	2.08	16	67.20



DIX 10.

earnings therefrom during the calendar year 1911.

and is therefore not the same as the total production and imports.]

Table with columns for Cotton (Manufactured, Piece-goods, Others) and Drugs (1. Intoxicating, 2. Non-intoxicating) across multiple rows, including sub-columns for Quantity and Earnings in Tons and Rs. It includes a 'Total' column for each category and a 'Main head' column on the right.









DIX 10—contd.

Earnings therefrom during the calendar year 1911.

and is therefore not the same as the total production and imports.]

Table with columns for AND SKINS, XI, XII, XIII, and XIV, including sub-headers like (1) OF CATTLE, (2) Raw, and (3) Dressed or tanned, with multiple columns for Quantity and Earnings in Tons and Rs.









Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over each railway in India

XX—(continued)

CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 3).		Railway system.	(1) Castor.		(2) Earthnuts.	
Main-head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.
1	2		4	5	6	7
<b>5' 6" gauge.</b>			Tons.	Rs.	Tons.	Rs.
1	(a) to (c), (d), (e) & (f)	Bengal-Nagpur	1,446	7,242	6,434	78,040
2	(a), (c) to (g) & (v) and (p)	Bombay, Baroda and Central India	9,708	65,705	3,686	37,519
3	—	Eastern Bengal*	159	428	—	—
4	—	East Indian*	33,381	1,89,743	743	4,681
5	—	Great-Indian Peninsula*	101,750	6,28,602	74,545	7,14,046
6	—	Madras and Southern Mahratta*	48,737	1,87,051	30,945	5,58,212
7	(a) & (b)	Nizam's Guaranteed State	128,219	7,24,520	130	907
8	(a) to (d)	North Western*	139	1,073	1,555	10,087
9	(a) & (b)	Oudh and Rohilkhand	4,737	28,755	319	2,740
10	—	South Indian*	7,961	37,034	153,113	6,11,829
<b>3' 3 1/2" gauge.</b>						
11	—	Assam-Bengal	60	130	5	58
12	—	Bengal and North-Western	16,447	29,704	124	939
13	—	Bengal Doonars	—	—	—	—
14	(a) & (b)	Bhavnagar	2,078	7,852	363	1,462
15	(a) & (b)	Burma	29	281	1,777	18,086
16	—	Dibroo-Sadiya	—	—	—	—
17	(a) & (b)	Gondal-Forbandas	2,316	7,027	139	618
18	(c)	Hyderabad-Godavari Valley	721	5,034	41	283
19	(a) to (d)	Jamnagar	1,373	1,202	28	121
20	—	Jodhpur-Bikaner	25	165	124	615
21	—	Junagad	1,020	4,784	33	141
22	(b) & (k)	Morvi	148	504	20	64
23	to (m)	Rajputana-Malwa	7,375	20,228	2,401	12,993
24	(a) & (n)	Rohilkhand and Kumaon	5,867	22,240	65	402
25	—	Udaipur-Ghitorgarh	11	33	4	19
<b>2' 6" gauge.</b>						
26	—	Arrah-Sacaram Light	—	—	—	—
27	—	Baraset-Basirhat Light	—	—	—	—
28	—	Bard Light	154	371	20,198	49,878
29	—	Bakhtiarpore-Bihar Light	—	—	—	—
30	—	Champaner-Shivrajpur Light	11	20	1	2
31	—	Cutch	55	71	48	164
32	—	Dehri-Rehtas Light	—	—	—	—
33	—	Deolpur-Bari	163	279	2	2
34	(d)	Murbhanj	14	24	1	2
35	(f)	Parlakmedhi Light	30	34	47	87
36	(e)	Powayan Light	—	—	—	—
37	—	Shahdara (Delhi)-Saharanpur Light	24	74	6	36
38	—	Tarakesur-Magra Light	—	—	—	—
39	—	Tezpur-Balipara Light	—	—	—	—
<b>2' 0" gauge.</b>						
40	—	Darjeeling-Himalayan	—	—	28	014
41	—	Howrah-Amra Light	—	—	—	—
42	—	Howrah-Sheshkhala Light	—	—	—	—
43	—	Jagadhri Light	—	—	—	—
44	—	Jorhat (Provincial)	—	—	—	—
45	—	Pipar Road-Bhavi Light	—	—	—	—
<b>TOTAL 1911</b>			<b>370,045</b>	<b>19,80,170</b>	<b>353,895</b>	<b>21,05,784</b>
<b>TOTAL 1910</b>			<b>248,671</b>	<b>13,45,240</b>	<b>278,666</b>	<b>15,15,770</b>
<b>INCREASE</b>			<b>121,374</b>	<b>6,34,930</b>	<b>80,229</b>	<b>5,90,014</b>
<b>DECREASE</b>			—	—	—	—

\* Including 3' 3 1/2" and 2' 6" gauge railways.

DIX. 10—contd.

the earnings therefrom during the calendar year 1911.

and is therefore not the same as the total production and imports.]

on following page).

BENDES								NUMBER
(3) Linseed.		(4) Poppy.		(5) Rape and mustard.		(6) Tilt or flax.		Main head.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
8	9	10	11	12	13	14	15	16
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
42,196	2,72,184	605	2,088	19,534	1,48,958	42,006	3,29,683	1
39,446	3,32,538	15,003	1,24,550	24,079	2,26,734	21,440	1,41,027	2
30,327	84,139			37,730	1,51,848	388	1,788	3
273,781	17,30,864	19,162	64,235	202,944	16,53,988	14,499	83,938	4
210,978	24,62,913	15,955	1,02,365	45,885	4,99,719	109,113	11,10,468	5
10,551	1,29,010	331	5,601	3,330	23,667	53,779	3,74,004	6
6,275	15,605	114	763	190	923	33,497	2,29,034	7
3,853	22,814	2199	6,489	211,673	21,29,733	20,504	1,26,007	8
48,477	3,16,551	11,110	49,391	37,103	1,34,632	8,029	22,989	9
14	122	181	1,179	2,021	10,716	43,244	2,51,633	10
206	598		5	4,122	19,612	1,503	4,008	11
142,162	8,27,852	4,105	12,019	83,935	3,00,500	2,316	11,621	12
				1,633	3,602			13
				43	301		12,374	14
46	127	4	25	5	60	6,033	30,237	15
								16
								17
			11		93		7,786	18
33,291	2,45,706	65	593	81	497	2,784	41,103	19
	1		1	6	21	300	1,822	20
6	52	19	84	32,948	1,11,089	6,923	27,398	21
								22
								23
								24
								25
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								47
308,882	64,91,611	91,319	6,42,282	763,761	50,61,697	409,911	20,26,751	
514,099	41,29,406	98,810	6,59,362	760,225	51,66,991	470,429	37,71,298	
284,260	39,92,395				4,96,548			
		17,106	1,14,000	15,274		72,619	7,45,517	



Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over each railway

CLASSIFICATION No. OF RAILWAY (Detailed in "INDEX" to APPENDIX 9).		Railway system.	XX—concid.				XXI.		XXII.		XXIII			
Main line.	Sub-head.		OIL SEEDS—concid.				Opium.		Paper and pasteboard.		(1) Dried fruits and nuts.		(2) Ghee.	
			Others.		Total.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
1	2	3	4.	5	6	7	8	9	10	11	12	13	14	15
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
<b>5' 6" gauge.</b>														
1	(a) to (c), (d), (e), (f), (g) & (h).	Bengal-Nagpur . . . .	27,040	1,19,910	134,351	10,53,916	176	6,674	1,379	10,369	14,979	1,53,363	4,443	66,000
2	(a), (c) to (g) & (p).	Bombay, Baroda and Central India . . . .	92,848	5,34,494	206,798	14,05,507	1,210	42,142	3,808	59,822	25,392	2,43,987	4,476	57,431
3	—	Eastern Bengal* . . . .	325	1,310	66,834	2,49,031	31	348	12,749	35,001	1,370	7,943	1,532	19,038
4	—	East Indian* . . . .	51,698	3,32,865	586,182	41,16,347	2,956	97,143	14,311	241,914	8,328	1,10,703	19,850	4,07,871
5	—	Great Indian Peninsula* . . . .	241,812	24,80,679	799,609	50,98,579	240	6,419	4,631	71,368	41,916	6,23,693	14,684	2,13,604
6	—	Madras and Southern Mahratta* . . . .	141,689	13,06,234	349,470	25,90,940	61	1,632	3,313	29,631	52,933	4,21,544	8,136	90,433
7	(a) & (b)	Nizam's Guaranteed State . . . .	12,857	42,000	180,983	10,14,108	—	1	738	8,120	9,079	46,397	543	8,994
8	(a) to (f)	North Western . . . .	19,629	62,823	255,636	24,57,934	117	2,849	5,709	1,02,661	33,793	5,57,203	11,290	1,42,464
9	(a) & (b)	Oudh and Rohilkhand . . . .	19,963	86,372	126,737	5,31,871	612	14,618	5,799	44,660	2,373	20,027	2,700	10,454
10	—	South Indian* . . . .	633	4,463	207,297	9,16,414	—	—	5,181	83,946	3,508	20,169	2,196	24,686
<b>3' 3½" gauge.</b>														
11	—	Assam-Bengal . . . .	69	347	8,029	25,048	4	62	450	3,901	941	8,413	291	3,663
12	—	Bengal and North-Western . . . .	7,763	35,614	232,067	9,99,639	3,417	47,639	5,516	14,366	1,740	20,348	4,066	46,617
13	—	Bengal Doonars . . . .	161	1,081	1,784	4,699	—	—	66	294	56	160	21	175
14	(a) & (b)	Bhavnagar . . . .	10,378	30,691	16,232	61,199	9	61	176	771	1,480	6,205	1,927	6,415
15	(a) & (b)	Burma . . . .	899	4,937	8,782	46,453	16	234	865	11,994	769	6,445	735	11,220
16	—	Dibro-Sadiya . . . .	—	—	—	—	—	—	—	—	—	—	—	—
17	(a) & (b)	Gondal-Portbandar . . . .	12,850	37,473	16,117	62,644	3	25	69	375	1,037	4,166	1,563	6,151
18	(c)	Hyderabad-Sodavari Valley . . . .	27,142	2,20,165	66,671	5,18,353	—	—	330	4,603	3,293	35,982	411	4,954
19	(a) to (d)	Jamnagar . . . .	2,843	4,120	4,760	7,292	7	24	30	61	329	865	109	696
20	(a) to (d)	Jodhpur-Bikaner . . . .	10,728	41,877	58,373	1,81,267	9	116	263	2,235	4,004	19,348	5,636	60,000
21	—	Junagadh . . . .	6,990	19,762	9,996	29,175	—	—	67	268	861	2,694	332	3,699
22	—	Norvi . . . .	5,411	18,369	6,572	23,397	—	—	44	239	248	1,080	65	339
23	(b) & (c) to (n).	Rajputana-Kalwa . . . .	63,214	4,71,769	239,960	10,79,217	1,693	25,999	2,793	26,702	17,679	1,76,301	7,229	61,461
24	(a) & (b)	Rohilkhand and Kumaon . . . .	3,312	7,517	34,872	99,737	139	1,951	309	1,866	935	5,636	334	1,077
25	—	Udaipur-Chitorgarh . . . .	768	2,365	1,620	4,867	14	110	41	263	476	3,161	169	1,101
<b>2' 6" gauge.</b>														
26	—	Arrah-Sasaram Light . . . .	—	—	—	—	—	—	—	—	—	—	—	—
27	—	Baraset-Basirhat Light . . . .	—	—	—	—	—	—	—	—	—	—	—	—
28	—	Barvi Light . . . .	11,776	42,210	46,490	1,36,030	3	11	102	463	1,480	4,689	89	343
29	—	Buxtiarpore-Bihar Light . . . .	—	—	—	—	—	—	—	—	—	—	—	—
30	—	Champaran-Shivrajpur Light . . . .	183	260	185	811	—	—	1	3	42	74	10	31
31	—	Cutech . . . .	304	963	469	1,268	1	4	8	25	379	2,665	22	94
32	—	Dhri-Rohas Light . . . .	—	—	18	39	—	—	—	—	16	16	8	19
33	—	Dholpur-Baril . . . .	271	470	644	942	—	—	—	—	12	26	239	591
34	(d)	Mourbhanj . . . .	973	2,070	1,663	3,413	—	—	10	42	7	10	25	64
35	(f)	Parlakimedi Light . . . .	66	61	254	239	—	—	3	5	13	20	—	—
36	(e)	Powayan Light . . . .	1,628	2,785	1,626	2,785	—	—	—	—	—	—	—	—
37	—	Shahdara (Delhi)-Saharanpur Light . . . .	2,173	4,149	5,326	9,498	—	—	6	38	167	743	120	526
38	—	Tarapur-Marya Light . . . .	1	1	105	136	—	—	4	8	1	2	11	29
39	—	Tezpur-Balipara Light . . . .	26	162	26	162	—	—	—	—	—	—	—	—
<b>2' 0" gauge.</b>														
40	—	Darjeeling-Himalayan . . . .	—	—	23	750	—	—	68	1,626	1	45	57	1,008
41	—	Howrah-Amta Light . . . .	—	—	—	—	—	—	—	—	—	—	—	—
42	—	Howrah-Sheakhali Light . . . .	—	—	—	—	—	—	—	—	—	—	—	—
43	—	Jugadri Light . . . .	24	19	290	206	—	—	—	—	—	—	2	3
44	—	Jorhat (Provincial) . . . .	—	—	—	—	—	—	—	—	—	—	—	—
45	—	Khar Road-Bhavi Light . . . .	—	—	40	50	—	—	1	2	26	63	41	106
46	—	—	—	—	—	—	—	—	—	—	—	—	—	—
47	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>TOTAL 1911</b>			<b>7,63,669</b>	<b>69,46,866</b>	<b>3,672,007</b>	<b>2,57,58,611</b>	<b>10,788</b>	<b>2,16,091</b>	<b>69,707</b>	<b>7,76,879</b>	<b>239,648</b>	<b>25,40,729</b>	<b>92,686</b>	<b>19,97,060</b>
<b>TOTAL 1910</b>			<b>1,022,407</b>	<b>64,90,000</b>	<b>3,610,704</b>	<b>2,60,85,467</b>	<b>16,436</b>	<b>3,16,367</b>	<b>69,634</b>	<b>7,41,703</b>	<b>239,637</b>	<b>26,23,617</b>	<b>94,198</b>	<b>19,28,760</b>
<b>INCREASE</b>			<b>—</b>	<b>—</b>	<b>1,02,293</b>	<b>6,73,164</b>	<b>—</b>	<b>—</b>	<b>9,073</b>	<b>34,177</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>8,289</b>
<b>DECREASE</b>			<b>2,28,738</b>	<b>35,50,634</b>	<b>—</b>	<b>—</b>	<b>4,650</b>	<b>68,276</b>	<b>—</b>	<b>—</b>	<b>8,989</b>	<b>74,068</b>	<b>1,512</b>	<b>—</b>

\* Including 3' 3½" and 2' 6" gauge railways.



Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over each railway in India.

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX TO APPENDIX B").		Railway system.	XXVI.						XXVII.											
			SALTPETRE AND OTHER SALINE SUBSTANCES.						SALT.											
			(1) Saltpetre.		(2) Other saline substances.		TOTAL.		(1) Raw.		(2) Piece-goods.				Total.					
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	(a) Foreign.	(b) Indian.	(a) Foreign.	(b) Indian.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		
1	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
1	(a) to (e) & (f)	Bengal-Nagpur . . . . .	314	2,680	1,334	0,386	1,548	13,316	...	...	425	7,387	...	...	...	83	425	7,420		
2	(a), (c) to (e) & (f)	Bombay, Baroda and Central India . . . . .	2,064	14,001	1,568	20,685	3,630	34,666	295	5,489	74	860	31	1,795	66	1,795	408	10,940		
3	...	Eastern Bengal* . . . . .	58	483	6,908	24,240	6,263	24,733	...	...	337	2,718	...	...	...	1	337	2,714		
4	...	East Indian* . . . . .	18,207	1,85,779	18,991	1,82,237	37,198	3,18,066	...	...	329	4,085	...	...	65	2,618	414	6,884		
5	...	Great Indian Peninsula* . . . . .	1,438	11,638	3,101	39,077	4,539	50,835	115	1,600	28	845	56	2,479	12	161	211	6,235		
6	...	Madras and Southern Mahratta* . . . . .	613	5,033	446	4,749	1,069	9,781	114	2,224	173	3,008	2	37	3	46	292	5,405		
7	(a) & (b)	Nizam's Guaranteed State . . . . .	150	1,137	708	4,933	855	6,070	...	6	...	4	1	17	...	1	1	28		
8	(a) to (f)	North Western* . . . . .	7,011	41,875	9,213	78,397	16,224	1,15,672	175	2,945	267	17,404	27	674	29	574	498	21,697		
9	(a) & (b)	Odish and Rohilkhand . . . . .	1,332	6,299	580	2,683	1,862	3,633	...	...	1	3	3	10	1	4	4	14		
10	...	South Indian* . . . . .	663	4,116	32	199	695	4,315	4	31	16	323	...	...	8	116	28	370		
		3' 3 1/2" gauge.																		
11	...	Assam-Bengal . . . . .	...	...	299	1,332	299	1,332	...	...	46	494	...	...	7	71	53	585		
12	...	Bengal and North-Western . . . . .	10,674	41,010	6,005	23,402	16,679	64,412	...	...	1	8	1	17	10	81	12	109		
13	...	Bengal Dooms . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
14	(a) & (b)	Bhavnagar . . . . .	48	199	5	13	53	212	...	...	...	...	...	...	...	1	5	23		
15	(a) & (b)	Burma . . . . .	...	5	26	407	36	412	73	1,739	13	253	17	528	...	4	102	2,523		
16	...	Dibru-Sadiya . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
17	(a) & (b)	Gondal-Forbandar . . . . .	66	128	...	3	66	124	1	2	...	1	...	...	...	...	1	5		
18	(c)	Hyderabad-Godavari Valley . . . . .	68	474	121	1,038	167	1,712	2	33	2	28	...	...	...	2	4	63		
19	...	Jamnagar . . . . .	9	28	...	1	9	28	2	4	3	6	...	...	...	3	5	19		
20	(c) to (d)	Jodhpur-Bikaner . . . . .	339	1,663	1,351	6,456	1,690	7,820	17	76	...	3	...	...	...	...	17	85		
21	...	Jamshed . . . . .	14	53	1	4	15	57	...	1	...	...	...	...	...	...	...	3		
22	(b) & (d)	Morni . . . . .	14	49	14	49	28	58	...	...	...	...	...	...	...	...	...	...		
23	(a), (b), (c) & (d)	Rajputana-Malwa . . . . .	5,820	39,663	2,539	19,261	3,368	69,123	195	7,635	16	795	31	614	27	616	221	9,669		
24	(a) & (b)	Rohilkhand and Kumaon . . . . .	298	551	3,089	4,714	2,387	5,265	...	...	...	...	...	...	...	...	...	...		
25	...	Udaipur-Chitorgarh . . . . .	28	163	87	450	115	412	...	...	...	...	...	...	...	...	...	...		
		2' 6" gauge.																		
26	...	Arrah-Sasaram Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
27	...	Bansel-Banshat Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
28	...	Barsi Light . . . . .	33	97	28	143	71	240	...	...	1	4	...	...	1	7	5	11		
29	...	Bukhtnarpore-Bihar Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
30	...	Champaner-Shivrajpur Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
31	...	Cutch . . . . .	3	7	3	7	6	14	...	...	...	...	...	...	...	...	...	...		
32	...	Dehri-Rohas Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
33	...	Dholpur-Bari . . . . .	1	3	4	10	5	13	...	...	...	...	...	...	...	...	...	...		
34	(d)	Mourbhanj . . . . .	...	...	2	6	2	6	...	...	3	7	...	...	...	...	...	7		
35	(f)	Parlakmedi Light . . . . .	6	6	...	1	6	7	...	...	...	...	...	...	...	...	...	...		
36	(f)	Powayan Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
37	(f)	Shabdara (Delhi)-Sabhapur Light . . . . .	117	343	20	71	147	214	...	...	...	...	...	...	...	...	...	...		
38	...	Tarkepur-Magra Light . . . . .	...	...	23	32	22	33	...	...	2	6	...	...	...	...	...	2	6	
39	...	Tempore-Balipara Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
		2' 0" gauge.																		
40	...	Darjeeling-Himalayan . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
41	...	Howrah-Amta Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
42	...	Howrah-Shekhala Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
43	...	Jagadhri Light . . . . .	...	...	212	90	212	90	...	...	...	...	...	...	...	...	...	...		
44	...	Jorhat (Provincial) . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
45	...	Pipat Road-Bhavi Light . . . . .	1	3	4	7	5	9	...	...	...	...	...	...	...	...	...	...		
		TOTAL 1911 . . . . .	49,567	3,59,058	55,454	3,69,154	1,05,041	7,28,210	994	22,662	1,739	36,217	189	6,184	240	6,225	3,142	78,668		
		TOTAL 1910 . . . . .	49,497	3,52,981	72,867	4,84,819	121,854	8,37,600	1,214	25,288	2,121	40,046	154	10,230	181	6,286	3,070	81,663		
		INCREASE . . . . .	1,090	6,076	...	...	...	...	...	...	...	...	...	15	...	59	...	...		
		DECREASE . . . . .	...	...	17,408	1,15,665	10,313	1,09,590	220	2,926	883	1,829	...	4,046	...	78	528	8,274		

\* Including 3' 3 1/2" and 3' 6" gauge railways.

DIX 10—contd.

the earnings therefrom during the calendar year 1911.

and is therefore not the same as the total production and imports.]

XXVIII.														Kuzns.
Spices.														
(1) Betel-nuts.		(2) Cardamoms.		(3) Chillies.		(4) Ginger.		(5) Pepper.		(6) Others.		Total.		Main head.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
3,752	1,20,398	25	571	5,823	55,137	143	2,618	647	6,504	8,855	67,375	30,944	2,32,787	1
1,800	32,727	45	1,094	4,374	34,120	801	12,011	558	11,663	13,833	1,46,318	21,400	2,41,873	2
18,057	1,55,309	726	15,945	5,839	43,021	1,318	17,081	767	13,358	7,137	43,171	33,803	2,86,588	3
12,120	2,70,701	689	34,833	9,839	1,45,153	1,048	12,341	2,263	45,518	18,018	2,20,197	43,976	7,92,794	4
12,829	2,50,457	89	2,146	11,072	1,03,097	683	13,697	685	19,177	17,310	2,52,511	42,668	6,17,083	5
16,145	2,11,141	111	1,309	25,201	2,07,485	472	5,333	1,480	17,671	20,049	1,70,323	63,488	6,13,731	6
1,091	12,405	5	47	4,978	26,020	36	381	60	570	2,374	19,860	6,444	58,513	7
1,063	9,717	329	6,759	6,102	69,157	2,078	23,135	1,083	19,398	6,180	58,713	16,336	1,90,783	8
2,455	34,383	83	808	1,153	11,774	615	5,076	239	2,125	3,533	19,545	8,070	73,731	9
21,169	1,80,716	590	5,397	20,762	1,83,029	1,357	12,867	5,233	33,298	905	5,891	49,316	3,90,319	10
3,175	21,667		1	1,185	9,724	3	14	39	440	289	3,130	4,071	33,883	11
4,371	31,956	179	2,131	8,760	49,455	1,633	20,293	681	7,339	4,830	39,850	20,433	1,60,300	12
385	1,574	95	1,213	36	308	39	97	91	467	27	181	672	4,145	13
234	1,359	...	2	320	1,044	11	70	2	10	404	1,793	671	2,181	14
6,703	70,205	2	26	7,767	1,19,361	2,374	29,842	23	480	370	2,701	17,210	2,19,015	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
338	1,326	...	3	376	1,366	5	33	1	5	572	2,328	1,168	4,040	17
841	9,323	3	85	1,756	16,408	36	606	29	399	893	9,096	3,885	36,367	7
28	112	...	...	24	147	3	15	...	15	1,143	2,990	1,193	3,154	18
200	2,020	7	67	1,139	8,669	53	514	43	393	1,317	6,430	2,919	18,003	19
216	880	...	3	188	787	4	21	1	6	231	1,220	719	2,008	20
17	59	...	...	128	514	4	24	...	3	443	1,545	580	2,144	21
1,457	15,296	47	1,103	5,635	48,978	631	12,515	457	11,003	19,574	1,43,691	23,601	2,32,494	22
311	1,988	20	110	1,370	9,235	87	424	36	190	608	2,935	2,832	14,831	23
9	81	...	1	110	601	23	148	2	10	127	481	271	1,397	24
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567	3,094	...	...	231	729	12	43	10	38	419	1,630	1,539	5,436	27
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...	...	...	...	4	8	...	1	...	...	1	9	5	12	30
51	138	...	...	35	92	4	10	1	4	173	129	283	300	31
1	3	...	...	5	18	...	...	...	...	337	698	343	618	32
32	90	...	...	2	4	...	...	1	3	23	61	57	158	33
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114,975	14,43,230	3,409	69,481	126,148	11,10,970	13,024	1,09,770	14,438	2,00,161	137,107	12,56,339	397,005	41,42,936	49
110,657	13,66,564	2,604	50,794	126,200	11,01,993	13,306	1,53,733	16,241	2,36,544	104,635	21,54,289	378,643	41,42,936	50
4,318	83,716	605	19,697	...	...	318	15,037	...	...	22,472	1,01,970	23,952	1,06,905	51
...	...	...	...	2,058	81,133	...	...	1,893	36,988	...	...	...	...	52

## Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed]

CLASSIFICATION No. OF RAILWAY (DEFERRED IN INDEX TO APPENDIX 9).		Railway system.	XXIX.							
Main head.	Sub-head.		SUGAR.							
			(1) Refined or crystallized including sugarcandy.		(2) Unrefined.				Total.	
		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
1	2	3	4	5	6	7	8	9	10	11
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
<b>5' 6" gauge.</b>										
1	(a) to (e), (e), (g) & (h)	Bengal-Nagpur . . . . .	16,907	1,37,934	3,302	30,026	18,863	1,25,596	28,972	3,00,158
2	(a), (c) to (g) & (e) & (f)	Bombay, Baroda, and Central India.	43,893	5,60,661	4,152	46,087	42,000	3,44,419	90,753	9,52,067
3	---	Eastern Bengal*	22,939	1,79,215	18,787	1,01,574	42,241	2,00,710	84,027	4,61,499
4	---	East Indian*	72,614	8,44,621	103,155	8,90,803	174,321	7,41,357	346,091	26,76,871
5	---	Great Indian Peninsula*	81,698	9,09,051	7,166	82,090	103,782	9,44,357	193,845	19,65,008
6	---	Madras and Southern Mahratta*	22,148	1,63,268	7,980	66,010	65,263	6,69,456	115,346	6,39,484
7	(a) & (b)	Nizam's Guaranteed State	2,405	23,772	635	3,963	6,189	47,379	10,139	37,813
8	(a), (c)	North Western*	114,840	29,20,900	49,333	2,88,365	140,362	7,87,864	304,555	24,05,129
9	(e) & (b)	Oudh and Rohilkhand . . . . .	28,012	1,91,527	53,059	2,69,876	62,833	2,56,823	142,704	7,05,626
10	---	South Indian*	31,500	1,17,087	5,213	23,320	50,645	3,12,086	77,358	4,61,693
<b>3' 3 1/2" gauge.</b>										
11	---	Assam-Bengal	1,687	11,548	2,670	13,109	2,481	16,480	7,639	41,162
12	---	Bengal and North-Western	12,922	72,953	43,553	2,78,401	93,374	4,06,534	150,274	2,65,048
13	---	Bengal Nagpur	1,780	8,560	255	1,400	948	3,274	2,953	12,331
14	(a) & (b)	Bhavnagar . . . . .	5,081	21,097	---	---	2,223	10,773	8,304	31,860
15	(a) & (b)	Burus . . . . .	407	4,109	5,509	47,032	23,076	1,48,170	28,992	2,00,217
16	---	Dibru-Sadiya . . . . .	---	---	---	---	1,048	7,001	1,068	7,001
17	(a) & (b)	Gondal-Portbandar . . . . .	3,840	12,867	---	---	1,627	5,276	5,467	18,143
18	(c)	Hyderabad-Godavari Valley	3,065	26,241	860	8,408	2,975	23,245	6,800	67,892
19	(a) to (d)	Jamnagar . . . . .	746	2,123	6	17	184	442	946	2,582
20	---	Jodhpur-Bikaner . . . . .	14,139	69,753	2,552	15,419	13,541	80,716	30,232	1,65,929
20	---	Junagad . . . . .	1,834	6,227	---	---	813	2,192	2,647	8,519
21	---	Morvi . . . . .	446	1,171	---	2	1,321	4,868	1,707	6,041
22	(b) & (h) to (a)	Rajputana-Malwa . . . . .	34,916	2,40,207	57,630	4,63,364	93,637	9,08,331	191,143	17,92,162
23	(a) & (b)	Rohilkhand and Kumaon . . . . .	8,104	25,701	9,638	39,442	17,895	79,385	35,637	1,38,528
23	---	Uchlipur-Chitorgarh . . . . .	751	3,448	426	3,015	466	2,198	1,663	7,659
<b>2' 6" gauge.</b>										
25	---	Arrah-Saranam Light . . . . .	---	---	---	---	---	---	---	---
27	---	Wazir-Bihar Light . . . . .	---	---	---	---	---	---	---	---
28	---	Barsi Light . . . . .	1,214	3,925	3	9	560	1,962	1,697	5,738
29	---	Bakhtiar-pore-Bihar Light . . . . .	---	---	---	---	---	---	---	---
30	---	Champaner-Shivrajpur Light . . . . .	18	27	1	3	3	4	21	33
31	---	Cutch . . . . .	229	708	628	2,089	1,969	6,459	2,819	9,316
32	---	Dehri-Rohas Light . . . . .	---	---	30	22	8	2	38	24
33	---	Dholpur-Bari . . . . .	223	402	146	253	400	833	859	1,488
34	(d)	Mourbhauj . . . . .	60	103	1	2	50	137	117	322
35	---	...	---	---	---	---	---	---	---	---
36	(f)	Pavlekimedi Light . . . . .	185	203	---	---	3	2	187	105
37	(c)	Powayan Light . . . . .	---	---	---	---	573	509	573	509
39	---	Shahdara (Delhi)-Sabaranpur Light . . . . .	99	245	10,212	27,079	14,950	40,369	25,261	67,698
40	---	Tarkapur-Magra Light . . . . .	19	25	35	50	50	64	104	139
41	---	Tespore-Balipara Light . . . . .	---	---	17	78	---	---	17	78
<b>2' 0" gauge.</b>										
42	---	Darjeeling-Himalayan . . . . .	75	1,524	838	14,088	49	823	363	16,420
43	---	Howrah-Amra Light . . . . .	---	---	---	---	---	---	---	---
44	---	Howrah-Sheekhala Light . . . . .	---	---	---	---	---	---	---	---
45	---	Jagadri Light . . . . .	---	---	34	21	19	15	53	36
46	---	Jorhat (Provincial) . . . . .	---	---	---	---	---	---	---	---
47	---	Pipar Road-Bhavi Light . . . . .	---	1	330	189	350	205	639	395
<b>TOTAL 1911</b>			<b>520,241</b>	<b>50,49,982</b>	<b>357,260</b>	<b>27,78,034</b>	<b>1,004,572</b>	<b>68,48,894</b>	<b>1,912,082</b>	<b>1,50,73,810</b>
<b>TOTAL 1910</b>			<b>526,827</b>	<b>61,53,105</b>	<b>374,002</b>	<b>35,20,187</b>	<b>1,012,793</b>	<b>64,23,832</b>	<b>1,918,921</b>	<b>1,51,00,174</b>
<b>INCREASE</b>			<b>---</b>	<b>---</b>	<b>16,742</b>	<b>2,48,997</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>DECREASE</b>			<b>6,586</b>	<b>2,03,223</b>	<b>---</b>	<b>---</b>	<b>8,220</b>	<b>78,038</b>	<b>1,530</b>	<b>32,364</b>

\* Including 3' 3 1/2" and 2' 6" gauge railways.

**DIX-10—contd.**

*the earnings therefrom during the calendar year 1911.*

[over each railway in India and is therefore not the same as the total production and imports.]

XXX.						XXXI.									NUMBERS.
TEA.						TOBACCO.									
(1) Foreign.		(2) Indian.		Total.		(3) Unmanufactured.		(4) Manufactured.				Total.		Main head.	
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	(a) Cigars.		(b) Other sorts.		Quantity.	Earnings.		
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.		
...	...	434	10,336	434	10,336	13,557	1,47,747	...	...	1,825	35,320	15,383	1,53,070	1	
1,487	21,636	451	7,195	1,938	28,721	19,713	1,49,984	54	963	668	7,339	30,429	1,53,316	2	
...	...	31,338	6,18,620	31,338	6,18,620	44,633	4,07,043	...	...	3,308	29,029	47,001	4,36,859	3	
...	...	2,359	52,553	2,359	52,553	43,539	4,53,550	23	504	684	1,50,313	50,425	6,24,533	4	
251	4,581	1,662	36,047	1,913	40,628	12,771	1,29,063	406	19,638	1,294	31,410	14,971	1,99,049	5	
76	1,895	403	7,020	479	8,915	34,799	2,29,085	598	13,531	1,083	20,477	37,359	2,65,113	6	
13	350	58	901	71	1,251	2,705	33,234	88	1,165	144	2,639	2,035	37,738	7	
1,610	24,590	3,068	47,076	4,678	71,666	24,948	2,11,518	86	1,299	2,992	34,699	37,935	3,97,798	8	
13	145	1,568	12,337	1,713	13,782	9,616	80,112	58	612	1,747	15,163	10,621	84,598	9	
1	10	7,661	56,236	7,662	56,246	27,241	1,51,394	1,653	35,437	1,781	16,674	36,594	1,86,604	10	
...	...	39,328	4,98,793	39,328	4,98,793	2,749	17,923	...	...	370	2,073	2,919	29,995	11	
...	...	46	932	46	932	40,660	4,01,605	...	...	923	9,309	47,613	4,10,954	12	
...	...	17,426	3,55,940	17,426	3,55,940	7,973	21,757	...	...	358	3,090	6,291	24,917	13	
...	...	75	530	75	530	1,192	6,290	...	...	142	704	1,344	7,146	14	
2,933	22,538	801	14,840	3,734	37,378	7,610	64,339	323	6,923	1,198	12,793	9,088	83,054	15	
...	...	11,553	1,00,607	11,553	1,00,607	...	...	...	...	...	...	...	...	16	
...	...	61	823	61	823	389	2,016	...	...	489	1,843	...	3,573	17	
12	187	30	581	42	768	591	16,307	...	...	65	1,049	1,033	17,351	17	
1	1	8	32	9	33	107	559	...	...	43	270	155	635	18	
2	29	5	63	7	92	3,986	21,339	...	...	239	2,304	3,390	29,963	19	
...	...	35	268	37	370	302	1,008	...	...	47	263	240	1,372	20	
...	...	4	28	4	32	337	2,440	...	...	33	201	803	3,594	21	
1,185	33,187	445	6,366	1,640	40,552	19,214	1,90,653	68	1,764	735	11,449	19,039	2,03,663	22	
...	...	152	1,242	152	1,242	2,749	18,793	...	...	11	75	2,775	19,033	23	
...	...	2	35	2	35	465	2,940	...	...	1	7	473	2,967	24	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	25	
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...	...	4,795	23,123	4,795	23,123	...	...	...	...	...	...	...	...	41	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	42	
...	...	4,395	63,395	4,395	63,395	75	1,299	...	...	...	...	...	...	43	
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...	...	...	...	...	...	...	...	...	...	...	...	...	...	47	
7,618	1,18,026	129,206	19,31,378	190,826	20,89,304	375,495	28,00,990	3,832	77,497	28,790	4,51,798	367,117	23,30,315		
2,411	55,598	129,955	19,30,255	182,366	19,75,843	317,906	27,01,345	4,373	86,190	23,905	3,73,900	345,285	21,89,895		
5,207	62,436	...	1,023	4,480	63,461	3,880	99,615	...	...	3,484	79,468	11,332	1,70,380		
...	...	742	...	...	...	...	...	541	8,723	...	...	...	...		

APPENDIX  
Principal commodities carried by railways and  
[The total quantity of each commodity represents the total weight conveyed]

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		Railway system.	XXXII.					
Main head.	Sub-head.		(1) Timber, unwrought.		(2) Manufactured.		Total.	
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
1.	2.	3.	4.	5.	6.	7.	8.	9.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
<b>5' 6" gauge.</b>								
1	(a) to (g) & (h)	Bengal-Nagpur . . . . .	78,137	3,14,183	2,875	23,700	80,812	3,36,802
2	(a) & (c) to (g) & (p)	Bombay, Baroda and Central India . . . . .	90,536	3,52,365	7,079	64,349	97,615	4,16,714
3	...	Eastern Bengal* . . . . .	99,746	1,08,164	10,601	90,878	110,347	2,97,042
4	...	East Indian* . . . . .	74,537	2,67,337	10,878	1,13,233	85,415	3,80,570
5	...	Great Indian Peninsula* . . . . .	172,591	8,14,720	9,860	1,27,200	182,451	9,42,010
6	...	Madras and Southern Mahratta* . . . . .	243,936	7,12,121	16,907	1,12,796	260,843	8,25,917
7	(a) & (b)	Nizam's Guaranteed State . . . . .	68,724	1,50,773	1,981	11,991	70,705	1,62,764
8	(a) to (d)	North Western* . . . . .	85,086	3,01,426	13,347	1,35,648	98,433	4,37,074
9	(a) & (b)	Oudh and Kohlkhand . . . . .	110,238	3,41,423	8,347	50,637	118,585	3,92,060
10	...	South Indian* . . . . .	239,832	8,06,635	12,239	93,153	312,108	8,99,788
<b>3' 3 1/2" gauge.</b>								
11	...	Assam-Bengal . . . . .	7,928	25,085	7,183	47,470	15,110	72,555
12	...	Bengal and North-Western . . . . .	69,539	1,85,867	6,348	46,218	75,887	2,32,085
13	...	Bengal Decare . . . . .	6,391	18,368	2,597	35,117	7,988	53,485
14	(a) & (c)	Bhavnagar . . . . .	12,299	47,758	1,329	6,417	13,628	54,175
15	(a) & (b)	Burma . . . . .	123,739	4,45,670	2,913	19,016	126,652	4,64,686
16	...	Dibru-Sadiya . . . . .	5,696	21,593	...	...	5,696	21,593
17	(a) & (b)	Gondal-Porbandar . . . . .	10,769	31,170	720	2,818	11,509	33,988
18	(c)	Hyderabad-Godavari Valley . . . . .	11,048	37,368	932	5,603	12,010	48,000
19	(a) to (d)	Jamnagar . . . . .	429	1,767	108	505	535	2,272
20	...	Jodhpur-Bikaner . . . . .	21,842	72,801	914	5,912	22,756	78,713
21	...	Junagad . . . . .	2,509	7,736	300	977	2,789	8,713
22	...	Morvi . . . . .	2,102	6,057	96	330	2,198	6,387
23	(b) & (h) to (e)	Rajputana-Malwa . . . . .	49,397	1,59,883	5,872	40,682	55,269	2,00,565
24	(a) & (b)	Rohilkhand and Kumaon . . . . .	46,393	1,46,183	1,707	7,218	48,100	1,53,401
25	...	Udaipur-Chitorgarh . . . . .	113	403	19	136	131	539
<b>2' 6" gauge.</b>								
26	...	Arrah-Sasaram Light . . . . .	...	...	...	...	...	...
27	...	Baraset-Basirhat Light . . . . .	...	...	...	...	...	...
28	...	Barru Light . . . . .	2,002	3,064	388	1,211	1,370	4,365
29	...	Bekhtiarpur-Bihar Light . . . . .	...	...	...	...	...	...
30	...	Champamer-Shivrajpur Light . . . . .	522	316	19	33	532	349
31	...	Cutch . . . . .	1,033	1,390	17	35	1,050	1,395
32	...	Dehri-Bohtas Light . . . . .	...	...	...	...	...	...
33	...	Dholpur-Bari . . . . .	80	85	7	17	87	102
34	(d)	Mourbhanj . . . . .	968	2,125	67	131	1,035	2,256
35	...	Parlakimedi Light . . . . .	266	276	49	72	314	348
36	...	Powayan Light . . . . .	11,833	10,691	...	...	11,833	10,691
37	...	Shahdara (Delhi)-Saharanpur Light . . . . .	1,215	3,890	213	787	1,428	4,677
38	...	Tarkessur-Magra Light . . . . .	401	317	61	132	462	449
39	...	Texpore-Balipara Light . . . . .	...	...	...	...	...	...
<b>2' 0" gauge.</b>								
40	...	Darjeeling-Himalayan . . . . .	602	2,113	296	4,357	898	6,470
41	...	Howrah-Amra Light . . . . .	...	...	...	...	...	...
42	...	Howrah-Sheakhala Light . . . . .	...	...	...	...	...	...
43	...	Jagadhri Light . . . . .	11	10	35	30	46	40
44	...	Jorhat (Provincial) . . . . .	...	...	...	...	...	...
45	...	Pipar Road-Bhavi Light . . . . .	8	12	23	61	31	73
<b>TOTAL 1911</b>			<b>1,021,426</b>	<b>53,97,110</b>	<b>125,366</b>	<b>10,49,946</b>	<b>1,807,899</b>	<b>64,48,998</b>
<b>TOTAL 1910</b>			<b>1,474,678</b>	<b>47,27,328</b>	<b>134,317</b>	<b>9,73,181</b>	<b>1,698,995</b>	<b>58,99,399</b>
<b>INCREASE</b>			<b>206,807</b>	<b>6,09,882</b>	<b>1,347</b>	<b>77,065</b>	<b>208,904</b>	<b>7,47,647</b>
<b>DECREASE</b>			...	...	...	...	...	...

\* Including 3' 3 1/2" and 2' 6" gauge railways.





Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed

CLASSIFICATION No. OF RAILWAY (DETAINED IN "INDEX" TO APPENDIX 9).		Railway system.	XXXIII— <i>consold.</i>				XXXIV.		GRAND TOTAL.	
Main head.	Sub-head.		(3) Manufactured— <i>consold.</i>		TOTAL.		All other articles of merchandise.			
			(4) Other sorts of manufactures.							
1	2		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		
		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
<b>5' 6" gauge.</b>										
1	(a) to (e), (e), (g) & (h)	Bengal-Nagpur . . . . .	908	3,302	215	9,501	231,193	10,35,366	5,138,569	2,01,64,565
2	(a), (e) to (g) & (e) & (g)	Bombay, Baroda and Central India	475	2,734	8,028	1,70,247	304,988	26,50,309	2,691,864	1,72,93,515
3	...	Eastern Bengal* . . . . .	339	4,949	1,321	32,918	58,371	5,19,827	3,658,908	1,49,23,890
4	...	East Indian* . . . . .	1,162	25,398	4,177	90,498	444,378	84,30,983	12,771,980	5,97,85,189
5	...	Great Indian Peninsula* . . . . .	1,417	28,018	2,742	56,026	410,445	82,98,925	5,328,142	4,94,75,893
6	...	Madras and Southern Mahratta* . . . . .	1,156	14,864	4,083	54,754	172,351	11,97,050	3,061,739	2,08,93,930
7	(a) & (b)	Nizam's Guaranteed State	...	...	545	5,997	11,400	80,313	913,844	43,01,982
8	(a) to (f)	North Western* . . . . .	2,133	39,495	33,945	7,60,364	884,787	53,14,324	5,587,740	4,99,78,798
9	(a) & (b)	Oudh and Rohilkhand . . . . .	413	5,198	1,382	13,254	232,732	11,83,470	1,839,914	79,66,704
10	...	South Indian* . . . . .	181	1,630	1,066	13,081	303,045	14,94,310	2,650,760	1,19,96,310
<b>3' 3 1/2" gauge.</b>										
11	...	Assam-Bengal . . . . .	53	852	56	691	17,284	1,33,200	480,082	23,38,925
12	...	Bengal and North-Western . . . . .	11	43	712	7,957	1,04,321	3,88,435	2,010,907	1,68,90,567
13	...	Bengal Doonars . . . . .	...	...	37	529	3,016	26,521	116,779	5,18,445
14	(a) & (b)	Bhavnagar . . . . .	1	9	546	4,062	8,193	29,923	194,923	6,23,019
15	(a) & (b)	Burma . . . . .	2	44	138	3,809	167,185	3,27,884	1,498,166	90,61,794
16	...	Dibroo-Sadiya . . . . .	...	...	491	3,399	54,417	78,133	682,492	9,64,981
17	(a) & (b)	Gondal-Porbandar . . . . .	22	118	134	1,598	6,899	81,117	201,347	4,51,200
18	(a)	Hyderabad-Godavari Valley . . . . .	...	...	338	913	1,151	7,471	25,494	60,857
19	(a) to (d)	Jamnagar . . . . .	269	2,541	5,828	53,985	33,067	1,63,174	849,070	21,88,431
20	...	Junagad . . . . .	...	1	67	632	3,929	14,799	69,434	1,70,758
21	...	Norvi . . . . .	...	4	445	2,901	2,579	9,663	69,515	2,07,589
22	(b) & (d) to (n)	Rajputana-Malwa . . . . .	366	5,044	19,942	1,61,083	260,854	18,24,513	2,774,925	1,78,21,146
23	(a) & (b)	Rohilkhand and Kumaon . . . . .	119	716	468	2,140	144,073	2,38,990	564,939	15,45,783
24	...	Udaipur-Chitorgarh . . . . .	2	17	145	1,103	903	8,776	20,966	91,670
<b>2' 6" gauge.</b>										
25	...	Arrah-Sasaram Light . . . . .	...	...	...	...	18,330	130,717	8,330	20,717
26	...	Baraset-Basirhat Light . . . . .	...	...	...	...	216,615	135,027	16,615	35,027
27	...	Barai Light . . . . .	169	553	168	610	4,407	11,173	106,784	228,574
28	...	Bakhtiarpore-Bihar Light . . . . .	...	...	...	...	126,582	142,861	26,583	42,861
29	...	Champaner-Shivrajpur Light . . . . .	...	...	...	...	1,586	1,738	47,084	45,986
30	...	Cutch . . . . .	...	...	178	127	689	1,391	19,128	41,927
31	...	Dehri-Rohtas Light . . . . .	...	...	...	...	372	1,167	9,890	16,984
32	...	Dholpur-Bari . . . . .	...	...	1	1	573	4,109	21,112	20,890
33	...	Mourbbanj . . . . .	...	2	...	3	7,389	9,656	19,559	24,287
34	(d)	Parlakimedi Light . . . . .	...	...	...	...	566	687	6,049	5,197
35	(c)	Powayan Light . . . . .	...	...	...	...	7,036	9,472	33,118	37,199
36	...	Shabdara (Delhi)-Sahasranpur Light . . . . .	3	14	27	162	6,972	18,828	79,892	2,01,641
37	...	Tarkessur-Magra Light . . . . .	1	1	2	2	48,913	27,935	53,228	85,444
38	...	Tespore-Balipara Light . . . . .	...	...	...	...	1,391	7,768	14,485	61,658
<b>2' 0" gauge.</b>										
42	...	Darjeeling-Himalayan . . . . .	2	59	19	584	5,622	59,297	41,399	5,42,418
43	...	Howrah-Amta Light . . . . .	...	...	...	...	129,225	145,977	28,325	45,977
44	...	Howrah-Shabbaha Light . . . . .	...	...	...	...	19,068	111,146	9,069	11,146
45	...	Jagadhri Light . . . . .	...	1	2	2	349	373	3,151	2,467
46	...	Jorhat (Provincial) . . . . .	...	...	...	...	320,792	270,576	20,762	70,676
47	...	Pipar Road-Bhavi Light . . . . .	317	359	230	406	...	...	2,727	4,101
		TOTAL 1911 . . . . .	9,717	1,34,939	79,570	14,40,891	9,928,640	2,40,97,373	54,232,872	30,67,93,492
		TOTAL 1910 . . . . .	7,013	1,13,513	76,343	13,94,510	3,799,169	2,17,19,395	50,331,992	28,40,53,530
		INCREASE . . . . .	1,706	21,326	3,227	63,371	127,471	23,77,978	3,900,880	2,17,39,962
		DECREASE . . . . .	...	...	...	...	...	...	...	...

\* Including 3' 3 1/2" and 2' 6" gauge railways.  
† Including Rs. 7,69,074 in respect of ferries and steam-boats which are included in the details. The tonnage and earnings of the Cawnpore-Bachul (3' 3 1/2" gauge link) railway are included throughout with the Bengal and North-Western railway.  
‡ Represents total articles of merchandise and earnings therefrom.

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the earnings therefrom during the calendar year 1911.

over each railway in India and is therefore not the same as the total production and imports.]

XXXV.										NUMBER.	
ANIMALS.											
(1) Horses.		(2) Cattle.		(3) Sheep, etc.		(4) Elephants.		TOTAL.		Main head.	REMARKS.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		
12	13	14	15	16	17	18	19	20	21	22	23
* Tons.	Rs.	* Tons.	Rs.	* Tons.	Rs.	* Tons.	Rs.	* Tons.	Rs.		
108	4,294	11,645	52,964	3,850	47,663	10	337	15,903	1,06,267	1	
747	12,827	31,391	3,21,592	19,570	4,21,786	—	—	51,708	7,57,206	2	
173	2,637	7,506	61,484	574	6,425	3	442	2,253	71,017	3	
5,443	1,19,402	11,399	2,25,277	9,847	1,72,070	3	160	22,637	5,16,918	4	
1,745	65,779	9,348	1,31,884	4,600	1,07,451	24	844	15,978	3,06,038	5	
676	15,724	3,411	39,792	7,096	97,748	—	—	11,182	1,52,261	6	
391	4,293	43	872	41	519	—	—	394	2,264	7	
7,025	1,22,550	16,011	2,14,039	922	19,519	31	63	24,069	3,62,201	8	
1,403	37,788	1,636	20,180	109	3,651	—	—	3,049	61,617	9	
215	2,524	4,992	33,221	14,004	78,267	82	225	19,193	1,14,430	10	
12	840	207	2,325	170	2,879	—	—	380	6,044	11	
532	6,663	6,769	1,05,452	835	6,578	—	—	9,636	1,12,594	12	
50	533	3,206	9,710	13	93	—	—	2,206	10,830	13	
795	29,226	5,938	1,70,071	2,559	94,577	—	—	9,521	2,93,916	14	
28	207	88	507	15	298	—	—	88	507	15	
67	1,938	43	5,940	27	578	—	—	2,080	8,543	16	
3	28	19	150	—	—	—	—	136	8,638	17	
373	4,652	687	5,469	60	1,056	—	—	23	208	18	
5	66	161	563	2	17	—	—	1,009	11,177	19	
102	840	190	1,542	17	17	—	—	108	640	20	
1,026	21,063	14,327	1,72,273	19,369	1,65,236	—	—	291	2,322	21	
104	629	274	2,029	10	200	—	—	27,712	3,52,764	22	
16	169	10	65	11	33	—	—	886	2,819	23	
								87	297	24	
										25	
										26	
										27	
										28	
										29	
										30	
										31	
										32	
										33	
										1	
										1	
10	38							10	38	23	
										39	
										40	
										41	
										42	
		290	1,674					290	1,674	43	
										44	
						1			1	45	
										46	
										47	
20,973	4,55,928	132,261	15,90,536	72,893	12,22,858	152	2,109	226,020	22,64,465		
16,398	3,59,329	106,873	11,95,683	67,767	10,94,897	91	2,936	190,093	26,82,503		
4,610	56,639	26,469	3,64,565	5,636	1,41,969	62	—	56,827	5,82,963		
—	—	—	—	—	—	—	—	—	—		
							530				

\* Live stock has been converted into tons at —  
 A head of cattle, or a pony or horse = 0.25 ton.  
 A sheep, goat, etc. = 0.025 ton.  
 An elephant = 2.50 tons.

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway (Detailed in "Index" to Appendix 9).		Serial num- ber.	DESCRIPTION OF RAILWAY					
Main head.	Sub-head.		Railway system.	1	2	3	4	
			Gauge of rail- way.	Mean mileage worked.  Miles.	Number of sta- tions.  No.	Total length of the under-		
						(a) to and less.	(b) to and.	(c) to and.
						Miles.	Miles.	Miles.
			<b>5' 6" GAUGE.</b>					
1	(a)		5' 6"	1,950.23	286	...	0.15	119.84
2	(a) to (g)		5' 6"	1,173.60	189	...	1.32	0.31
3	(a)		5' 6"	511.82	141	...	...	...
4	(a) to (d)		5' 6"	2,604.19	445	6.05	18.63	49.88
5	(a) to (f)		5' 6"	2,950.70	454	19.31	2.82	72.30
6	(a) and (b)		5' 6"	1,041.61	210	...	18.69	34.48
7	(a) and (b)		5' 6"	354.70	45	...	...	79.19
8	(a) to (e)		5' 6"	4,638.04	748	32.62	93.23	153.28
9	(a) and (b)		5' 6"	1,899.10	258	...	9.30	6.41
10	(a)		5' 6"	577.94	83	...	9.26	15.00
			<b>3' 3 1/2" GAUGE.</b>					
11	(a)		3' 3 1/2"	739.89	183	10.11	35.53	26.27
12	(a) and (b)		3' 3 1/2"	2,021.33	346	...	...	0.63
14	(a) and (b)		3' 3 1/2"	163.21	27	...	0.29	1.34
15	(a) and (b)		3' 3 1/2"	1,527.68	299	64.52	31.83	47.78
3	(b) to (d)		3' 3 1/2"	1,083.87	189	0.34	0.52	3.84
17	(a) and (b)		3' 3 1/2"	...	...	...	...	...
7	(c)		3' 3 1/2"	391.13	53	...	...	...
18	(a)		3' 3 1/2"	54.22	7	...	...	0.17
19	(a) to (d)		3' 3 1/2"	1,043.93	110	...	...	...
20	(a)		3' 3 1/2"	80.97	13	...	0.17	1.35
6	(c) to (i)		3' 3 1/2"	2,091.16	321	16.25	31.55	692.29
10	(c)		3' 3 1/2"	28.96	13	22.95	1.61	0.27
2	(h) to (n)		3' 3 1/2"	2,190.69	313	3.40	0.23	18.75
22	(a) and (b)		3' 3 1/2"	466.28	75	...	6.41	8.69
10	(f)		3' 3 1/2"	64.75	15	...	13.75	9.14
10	(b), (d), (e) and (g) to (i)		3' 3 1/2"	1,111.12	261	10.04	14.64	180.82
23	(a)		3' 3 1/2"	68.73	11	...	...	1.10
			<b>2' 6" GAUGE.</b>					
1	(b), (c) and (e)		2' 6"	506.66	66	...	34.24	37.33
3	(f)		2' 6"	59.92	20	6.60	2.33	9.94
3	(k) and (l)		2' 6"	102.00	17	0.06	...	27.57
10	(f)		2' 6"	18.53	3	...	5.33	2.73
7	(g)		2' 6"	72.68	12	...	9.57	23.74
1	(h)		2' 6"	56.94	14	0.51	...	...
10	(k)		2' 6"	25.33	5	...	8.21	2.29

\* Information for 2nd half of 1911 not furnished.

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during each half of the calendar year 1911.

[prepare these statistics.]

5		6		7		8		9		10		NUM- BER.		
WORKED.		FINANCIAL RESULTS.				OUTLAY, EARNINGS AND EXPENSES. (Exclusive of Steam-boat Service).								
noted gradients.		Steepest gradient worked.		Percentage of net earnings (including steam boat traffic) on lines open and partly open, i.e., on the mileage earning revenue.		Percentage of net earnings on paid up capital.		Capital outlay per mile open.		Total earnings per mile open per week.		Total working expenses per mile open per week.		Main head.
(d) 1st to 1st.	(e) 1st to 1st.	(a) Length.	(b) In- clina- tion.	Per cent.		Per cent.		Rs.		Rs.		Rs.		
Miles.	Miles.	Miles.		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
611-90	148-77	0-15	1/8	2-80	3-38	2-80	2-38	1,62,882	1,64,048	356	306	169	149	1
256-49	98-12	1-32	1/8	4-41	3-40	...	...	1,77,762	1,77,645	560	498	271	256	2
...	7-69	3-72	3/8	1-44	3-30	...	...	2,52,079	2,57,223	544	818	399	461	3
214-07	168-42	14-26	1/8	4-63	4-43	...	...	2,46,400	2,45,482	732	696	282	269	4
809-62	279-52	5-99	1/8	3-56	2-72	...	...	2,05,910	2,07,989	537	468	287	266	5
184-96	113-28	0-80	1/8	2-66	2-37	2-84	2-16	1,64,598	1,65,500	378	339	197	202	6
110-99	18-22	2-32	1/8	4-24	4-22	4-52	4-51	1,38,072	1,38,229	356	308	194	154	7
149-32	115-46	5-00	1/8	2-27	2-27	...	...	1,59,452	1,60,122	362	355	216	200	8
19-15	22-56	2-35	1/8	3-30	2-27	...	...	1,27,093	1,26,204	303	280	136	133	9
86-75	39-19	1-42	1/8	2-75	3-05	...	...	1,41,894	1,44,952	294	307	198	194	10
104-11	307-74	4-34	1/8	0-32	0-51	...	...	1,71,684	1,72,184	132	140	112	105	11
4-03	3-68	0-63	1/8	4-10	2-96	...	...	77,242	78,026	195	163	71	73	12
38-25	13-27	0-36	1/8	6-18	3-81	...	...	59,032	52,410	215	138	72	69	13
158-52	142-80	9-31	1/8	2-72	1-17	...	...	1,16,200	1,17,552	297	321	169	164	14
41-58	35-77	0-32	1/8	1-43	3-20	...	...	1,01,335	1,02,264	206	249	151	124	15
...	...	...	...	4-08	...	...	...	44,047	...	132	...	62	...	17
221-73	13-95	5-41	1/8	3-43	1-09	3-51	1-11	70,773	78,349	194	180	96	118	7
3-54	6-88	6-19	1/8	3-10	1-39	...	...	46,413	46,056	94	86	42	40	18
190-08	91-69	2-31	1/8	6-76	6-35	...	...	25,617	25,487	115	115	45	50	19
20-00	11-85	0-17	1/8	2-57	1-91	...	...	64,407	52,064	122	89	60	51	20
335-36	117-58	16-25	1/8	2-57	1-60	2-84	2-16	77,891	78,456	174	180	96	90	6
0-18	...	0-27	1/8	0-95	0-07	...	...	2,58,286	2,59,600	332	325	235	257	10
364-36	228-89	3-40	1/8	3-99	3-69	...	...	82,631	82,516	263	257	130	135	2
14-61	14-64	3-44	1/8	3-69	2-75	...	...	61,198	61,947	154	181	68	64	22
7-45	3-83	13-73	1/8	2-27	1-91	...	...	1,06,602	1,06,702	176	181	88	102	10
244-55	103-73	0-04	1/8	4-63	4-05	...	...	92,508	92,519	335	323	164	176	10
39-75	-6-92	0-46	1/8	3-74	3-51	...	...	31,336	31,441	81	78	37	37	23
113-41	32-25	0-08	1/8	0-89	0-38	0-89	0-32	58,040	58,679	65	54	45	46	1
3-40	...	1-33	1/8	0-77	0-25	...	...	3,26,415	3,24,604	331	410	284	290	8
30-07	22-77	3-68	1/8	1-06	0-83	...	...	67,166	67,559	62	68	39	39	3
3-38	...	4-53	1/8	0-13	0-13	...	...	44,982	44,982	38	47	40	45	10
13-24	3-94	9-57	1/8	2-29	1-71	2-19	1-71	67,193	67,587	103	80	44	44	11
17-83	2-55	0-51	1/8	2-94	1-64	2-94	1-64	24,941	24,974	56	44	23	23	1
4-15	0-21	7-18	1/8	0-72	0-93	...	...	42,376	42,412	46	58	34	38	10

\* For both 5' 6" and 3' 3 1/2" gauges.  
 † For Nizam's Guaranteed State railway only.

**APPEN**  
*Analysis of working of each railway system*

[Note.—Railways not shown do not

Classification No. of Railway (Detailed in "Index" to Appendix 9).		Serial num- ber.	11	12	13			
Main head.	Sub-head.	Railway system.	OUTLAY, EARNINGS AND EXPENSES.					
			Total earnings per train- mile.		Total working expenses per train-mile.		Net earnings per train- mile.	
			Rs.		Rs.		Rs.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur	4.82	3.88	2.05	1.90	2.27	1.98
2	(a) to (g)	Bombay, Baroda and Central India	5.65	4.97	2.64	2.51	3.01	2.36
3	(a)	Eastern Bengal	3.68	4.30	2.64	2.71	1.04	2.00
4	(a) to (d)	East Indian	4.58	4.39	1.79	1.72	2.80	2.67
5	(a) to (f)	Great Indian Peninsula	4.66	3.62	2.17	2.08	1.90	1.54
6	(a) and (b)	Madras and Southern Mahratta	4.52	4.57	2.40	2.58	2.12	1.99
7	(a) and (b)	Nizam's Guaranteed State	4.43	3.97	2.46	1.98	1.97	1.79
8	(a) to (i)	North Western	4.09	4.16	2.44	2.45	1.65	1.71
9	(a) and (b)	Oudh and Rohilkhand	3.92	3.35	1.75	1.78	2.17	1.57
10	(a)	South Indian	3.79	3.81	1.78	1.66	2.01	2.15
<b>3' 3 1/2" GAUGE.</b>								
11	(a)	Assam-Bengal	2.92	3.12	2.45	2.94	0.47	0.78
12	(a) and (b)	Bengal and North-Western	3.31	2.98	1.20	1.32	2.11	1.66
14	(a) and (b)	Bhavnagar	3.89	3.31	1.80	1.51	2.59	1.80
15	(a) and (b)	Burma	3.55	2.83	2.02	2.10	1.53	0.72
3	(b) to (d)	Eastern Bengal	2.95	3.61	2.16	1.80	0.79	1.81
17	(a) and (b)	Gondal-Forbandar*	2.94	...	1.38	...	1.56	...
7	(c)	Hyderabad-Godavari Valley	3.16	2.68	1.57	2.09	1.59	0.58
18	(a)	Jamnagar	3.49	2.98	1.56	1.79	1.93	1.14
19	(a) to (d)	Jodhpur-Bikaner	3.09	3.13	1.22	1.38	1.87	1.75
20	(a)	Junagad	3.14	2.95	1.54	1.69	1.60	1.26
6	(c) to (l)	Madras and Southern Mahratta	2.99	2.63	1.60	1.74	1.39	0.89
10	(c)	Nilgiri	5.07	5.11	3.58	4.04	1.49	1.07
2	(h) to (n)	Rajputana-Malwa	3.60	3.48	1.78	1.82	1.82	1.64
22	(a) and (b)	Rohilkund and Kumaon	3.55	3.41	1.56	1.65	1.98	1.76
10	(f)	Shoranur-Cochin	2.60	2.82	1.22	1.42	1.38	1.10
10	(b), (d), (e) and (g) to (i)	South Indian	3.38	3.05	1.65	1.63	1.73	1.42
23	(a)	Udaipur-Chitorgash	4.97	2.90	2.25	1.86	2.71	1.54
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Chhindwara Extensions.	3.56	2.19	1.77	1.90	0.79	0.29
3	(f)	Kalka-Simla	3.94	4.48	2.79	3.13	1.15	1.30
3	(k) and (l)	Kohat-Thal and Nowshera-Durgai	0.88	1.06	1.24	1.39	-0.33	-0.33
10	(f)	Morappur-Dharmapuri	0.89	1.06	0.94	1.01	-0.05	0.05
1	(g)	Purulia-Ranchi	3.28	2.76	1.39	1.38	1.87	1.38
1	(h)	Raipur-Dhamtari	2.40	2.13	1.20	1.36	1.20	0.77
10	(k)	Tirupattur-Krishnagiri	1.61	1.82	1.19	1.29	0.42	0.53

\* Information for 2nd half of 1911 not furnished.

**DIX 11—continued.**

*During each half of the calendar year 1911.*

**[prepare these statistics.]**

14		15		16		17		18		19		20		Num- ber.
(Exclusive of Steam-boat Service)— <i>concl.</i>								Division of expenditure between coaching and goods traffic.						
Cost per 1,000 gross ton miles moved (freight and dead weight).		Percentage of total working expenses on total earnings.		Percentage of total working expenses on total earnings, excluding from both sides of the account the charges for carriage of revenue stores.		Inclusive of Steam-boat service.		Total working expenses for both coaching and goods traffic excluding steam-boat expenses, and after deducting telegraph and sundry receipts (in thousands of rupees).		Proportions, dividing expenditure in ratio of gross ton-milage (freight and dead load)—				
Rs.		Per cent.		Per cent.		Per cent.		Rs.		Coaching (in thousands of rupees).		Goods (in thousands of rupees).		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
4-18	3-31	47-45	48-86	45-57	47-20	48-49	50-04	76-28	67-75	19-64	18-94	56-64	48-81	1
5-91	5-92	46-77	51-51	46-02	50-74	46-77	51-51	50-31	78-29	31-53	35-36	48-78	41-06	2
6-86	6-28	71-66	56-35	72-77	56-06	71-66	56-35	49-01	58-52	22-16	22-77	25-85	35-75	3
3-14	3-14	89-02	89-14	87-89	87-40	89-14	89-24	1,85-63	1,77-73	48-77	50-10	1,36-86	1,27-03	4
5-33	5-40	53-36	57-55	52-09	56-45	53-36	57-55	2,16-29	2,61-31	70-38	75-93	1,45-91	1,25-33	5
6-19	6-51	52-97	56-44	52-04	55-64	52-97	56-44	51-41	52-48	20-53	21-87	30-88	30-61	6
6-30	5-24	55-49	49-99	55-13	49-26	55-49	49-99	16-98	13-35	4-39	3-70	12-54	9-85	7
5-77	5-87	59-56	58-87	57-77	56-86	59-57	58-88	2,53-56	2,51-90	82-56	92-89	1,71-00	1,59-91	8
4-30	4-72	44-67	53-19	43-09	51-50	44-67	53-19	43-10	45-43	19-23	23-08	23-87	22-37	9
5-22	4-48	46-98	43-62	46-45	49-09	46-98	43-62	13-15	12-37	5-63	5-29	7-47	7-08	10
10-72	9-54	83-93	75-08	83-17	74-51	83-97	75-48	21-12	19-81	8-02	7-58	12-50	12-23	11
4-50	5-30	36-17	44-49	34-71	42-39	37-07	45-98	34-84	36-69	14-40	17-54	20-44	19-16	12
6-98	8-78	33-36	45-52	33-12	45-42	33-36	45-52	2-68	2-37	1-41	1-54	1-97	1-33	14
8-20	9-34	56-86	74-39	56-21	73-77	57-62	75-36	65-04	63-80	21-73	25-24	43-31	38-56	15
9-10	7-61	73-05	49-82	70-09	48-49	74-72	52-27	42-16	34-55	17-46	14-85	24-70	19-70	16
8-35	...	46-86	...	46-41	...	46-86	...	2-93	...	1-53	...	1-15	...	17
7-93	10-33	49-70	73-94	48-08	77-29	49-70	73-04	9-32	11-38	3-89	5-55	5-43	5-83	18
9-99	12-21	44-59	61-31	43-82	61-30	44-59	61-31	56	67	41	51	15	16	19
5-20	5-30	39-64	44-01	38-82	43-24	39-64	44-01	11-11	13-70	4-05	4-95	7-06	8-75	20
8-88	9-28	50-62	57-27	48-25	56-72	50-62	57-27	1-15	1-13	61	60	54	58	21
7-64	8-60	53-53	66-14	52-70	64-95	53-53	66-14	49-66	52-56	15-21	18-71	33-85	33-85	22
4-31	4-03	70-70	73-01	69-86	78-03	70-70	73-01	1-75	1-93	1-12	1-23	63	71	23
7-17	7-32	49-56	52-18	49-80	51-82	49-56	52-53	71-26	74-98	29-12	31-97	42-14	43-01	24
5-65	6-38	44-06	46-34	43-58	48-07	43-66	47-83	7-89	7-10	2-76	3-10	5-13	4-00	25
7-27	8-47	47-05	56-36	46-61	56-12	47-05	56-36	1-88	1-70	72	77	68	93	26
7-61	7-24	48-85	53-53	48-22	52-93	48-85	53-53	46-14	49-52	22-54	23-98	23-60	25-59	27
10-56	8-37	45-27	48-37	45-26	46-82	45-27	46-87	63	64	45	48	18	16	28
8-48	8-33	69-17	66-54	67-95	65-36	69-17	66-54	5-93	6-05	2-32	2-73	3-61	3-33	29
33-15	39-44	70-88	70-62	70-67	70-33	70-88	70-62	3-60	4-44	1-65	1-95	1-95	2-49	30
21-40	23-33	144-61	131-83	146-07	132-12	144-61	131-83	2-35	2-35	1-29	1-39	1-08	1-02	31
10-77	10-36	105-71	95-24	105-72	95-23	105-71	95-24	19	23	14	14	5	8	32
6-57	6-34	42-71	50-00	42-70	49-65	42-71	50-00	33	33	55	53	26	30	33
11-06	13-37	49-31	68-92	49-75	62-59	49-31	63-22	41	41	21	14	30	27	34
11-72	12-32	73-62	70-89	73-62	70-89	73-62	70-89	22	25	14	17	8	8	35

## Analysis of working of each railway system

[Note—Railways not shown do not

Classification No. of Railway (Detailed in "Index" to Appendix 9).		Serial num- ber.	21	22	23			
Main head.	Sub-head.	Railway system.	COACHING					
			GROSS RECEIPTS AND TRAIN-MILEAGE—					
			Receipts from coaching traffic (in thousands of rupees).		Coaching train- miles run (in thousands).		Average coach- ing receipts per train-mile.	
Rs.		No.		Rs.				
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.			
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal Nagpur . . . . .	50,97	49,86	1,609	1,654	3.17	3.01
2	(a) to (g)	Bombay, Baroda and Central India . . . . .	55,86	58,94	1,784	1,968	3.18	3.00
3	(a)	Eastern Bengal . . . . .	34,10	37,74	1,236	1,279	2.76	2.95
4	(a) to (d)	East Indian . . . . .	1,48,58	1,58,07	4,431	4,717	3.35	3.35
5	(a) to (f)	Great Indian Peninsula . . . . .	1,17,54	1,26,48	4,628	5,035	2.54	2.51
6	(a) and (b)	Madras and Southern Mahratta . . . . .	40,96	40,80	1,248	1,270	3.25	3.21
7	(a) and (b)	Nizam's Guaranteed State . . . . .	6,98	6,85	296	306	2.38	2.24
8	(a) to (i)	North Western . . . . .	1,48,84	1,66,85	5,069	5,443	2.92	3.06
9	(a) and (b)	Oudh and Rohilkhand . . . . .	53,48	48,82	1,592	1,710	3.36	2.83
10	(a)	South Indian . . . . .	18,46	18,31	501	510	2.69	2.61
<b>3' 3½" GAUGE.</b>								
11	(a)	Assam-Bengal . . . . .	18,80	12,40	432	431	3.19	2.88
12	(a) and (b)	Bengal and North-Western . . . . .	46,42	43,83	1,508	1,582	3.08	2.75
14	(a) and (b)	Bhavnagar . . . . .	4,46	3,78	147	126	3.04	3.01
15	(a) and (b)	Burma . . . . .	49,27	48,18	1,216	1,309	4.05	3.29
3	(b) to (d)	Eastern Bengal . . . . .	29,15	31,06	1,059	1,150	2.75	2.79
17	(a) and (b)	Gondal-Porbandar* . . . . .	3,77	...	155	...	2.44	...
7	(c)	Hyderabad-Godavari Valley . . . . .	6,86	6,86	341	347	2.01	1.84
18	(a)	Jamnagar . . . . .	94	88	30	31	3.15	3.71
19	(a) to (d)	Jodhpur-Bikaner . . . . .	18,42	18,85	402	435	3.34	3.18
20	(a)	Junagad . . . . .	1,23	1,24	45	40	2.84	3.09
6	(c) to (l)	Madras and Southern Mahratta . . . . .	88,81	91,45	1,158	1,198	2.92	2.62
10	(c)	Nilgiri . . . . .	1,34	1,16	31	31	4.32	3.70
2	(h) to (n)	Rajputana-Malwa . . . . .	62,88	62,91	2,032	2,169	3.14	2.90
22	(a) and (b)	Rohilkund and Kumaon . . . . .	7,92	7,88	284	286	3.39	3.10
10	(f)	Shoranur-Cochin . . . . .	1,88	1,88	71	72	2.64	2.88
16	(b), (d), (e) and (g) to (i)	South Indian . . . . .	53,10	52,62	1,561	1,669	3.40	3.15
23	(a)	Udaipur-Chitorgarh . . . . .	90	93	20	34	4.62	2.78
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Chhindwara Extensions. . . . .	3,73	3,39	142	167	2.63	2.08
8	(f)	Kalka-Simla . . . . .	2,78	3,60	67	70	4.12	5.18
8	(k) and (l)	Kohat-Thal and Nowshera Durgai . . . . .	1,19	1,80	104	99	1.14	1.31
10	(f)	Morappur-Dharmapuri . . . . .	10	15	14	18	0.72	1.14
1	(g)	Purnia-Banchi . . . . .	1,24	95	42	41	2.97	2.93
1	(h)	Raipur-Dhantari . . . . .	44	34	13	15	3.28	2.28
10	(k)	Tirupattur-Krishnagiri . . . . .	18	24	12	13	1.52	1.87

\* Information for 2nd half of 1911 not furnished.

DIX 11—continued.  
 during each half of the calendar year 1911.  
 prepare these statistics.]

24		25		26		27		28		29		30		NUM- BER.
TRAFFIC.														
UNITS AND UNIT-MILEAGE.														
Number of units carried one mile (in thousands).												Average sum received for carrying a unit one mile.		Main- head.
1st class. Unit miles.		2nd class. Unit-miles.		3rd or inter- mediate class. Unit-miles.		4th or lowest class. Unit-miles.		Total passenger unit-mileage. Unit-miles.		Other coaching traffic. Ton-miles.		1st class. Ptes.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
2,171	2,001	4,783	5,113	7,416	9,743	336,898	323,527	351,203	340,334	2,296	2,337	12'95	12'94	1
2,203	2,953	13,008	12,300	18,273	*25,098	379,620	333,557	413,104	423,903	4,496	5,209	12'77	13'37	2
1,649	1,598	3,731	3,915	22,377	23,418	133,236	198,799	216,748	232,780	1,355	2,252	13'36	13'46	3
6,848	8,872	14,559	20,013	63,708	75,606	942,244	951,447	1,032,360	1,055,938	11,073	13,939	14'32	13'74	4
8,610	12,121	19,811	20,326	*59,977	*73,333	633,654	597,841	722,052	709,621	10,765	13,820	13'41	13'54	5
1,327	2,104	5,399	5,336	1,323	1,135	259,492	262,110	268,041	171,017	2,973	3,097	15'54	14'59	6
330	441	1,935	1,931	*9,046	*12,271	33,430	26,493	44,771	41,136	435	542	14'10	14'13	7
5,641	6,143	16,538	18,060	53,139	61,932	993,864	1,050,190	1,074,232	1,136,375	7,239	12,723	13'33	13'54	8
1,897	1,375	5,593	6,322	27,473	26,511	320,130	237,021	355,103	321,729	2,393	1,923	15'64	15'39	9
736	761	3,300	3,144	...	...	59,812	97,232	94,393	101,157	375	379	11'66	11'04	10
543	513	970	639	1,213	1,524	32,333	65,491	35,374	63,367	511	676	15'13	14'09	11
461	404	1,523	1,477	5,917	5,396	402,023	376,962	410,923	334,679	1,247	1,463	12'39	12'73	12
74	59	313	423	333	292	26,316	21,819	23,026	22,603	111	103	12'00	12'00	13
2,051	1,838	4,114	3,392	...	...	275,335	241,900	232,000	247,630	1,369	1,419	15'41	15'13	14
514	547	1,564	2,450	14,634	19,144	176,119	179,396	192,331	201,537	1,443	1,397	15'06	14'63	15
75	...	472	...	713	...	23,231	...	23,546	...	93	...	12'00	...	17
313	323	1,933	1,796	...	...	46,360	42,600	49,126	44,309	319	372	10'30	10'33	7
20	23	127	133	302	129	5,301	4,413	5,750	4,733	23	35	12'00	12'00	18
249	272	1,097	1,033	3,933	3,919	104,166	100,916	109,495	106,193	549	643	15'36	15'39	19
22	21	150	139	242	136	7,323	7,049	3,039	7,335	31	33	12'00	12'00	20
1,070	1,031	3,719	3,733	...	46	256,233	236,519	261,022	241,379	1,609	1,555	15'39	15'23	6
325	226	...	...	...	...	2,042	1,323	2,337	2,049	34	30	13'70	13'43	10
1,653	1,731	4,538	3,510	10,503	13,029	533,096	500,703	552,370	522,932	3,600	4,303	13'43	15'21	2
155	174	731	633	637	433	57,325	51,632	59,143	53,323	211	209	27'02	27'70	22
79	71	433	311	...	...	15,394	11,044	16,393	11,426	35	39	12'12	12'09	10
1,662	1,550	3,214	7,035	...	...	453,633	421,393	462,503	430,523	1,639	1,617	11'27	11'21	13
41	43	45	30	45	42	7,373	7,567	7,509	7,722	40	33	13'00	17'09	23
50	67	139	143	203	202	31,931	23,617	32,402	29,022	112	120	15'01	15'74	1
169	233	232	419	...	...	2,276	2,722	2,737	3,330	71	93	16'20	17'33	3
37	43	70	85	235	249	3,757	2,611	3,149	2,967	22	27	13'33	13'46	3
...	1	39	13	...	...	309	1,037	343	1,100	2	2	12'02	11'30	10
35	39	94	112	142	133	6,337	4,522	7,133	5,166	33	33	15'13	15'00	1
...	3	15	14	34	27	2,569	1,997	2,622	2,034	9	6	16'33	15'77	1
1	1	63	21	...	...	1,353	1,717	1,417	1,742	...	5	11'39	11'57	10

\* Third class by mail.



## APPEN

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway (Detailed in "Index" to Appendix 9).		Serial num- ber	31		32		33	
Main head.	Sub-head.		COACHING					
Railway system.			UNITS AND UNIT-					
			Average sum received for carrying					
			2nd class.		3rd or inter- mediate class.		4th or lowest class.	
			Pies.		Pies.		Pies.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur . . . . .	6.57	6.58	3.13	3.24	2.39	2.39
2	(a) to (g)	Bombay, Baroda and Central India . . . . .	5.28	5.98	2.80	2.79	2.08	2.08
3	(a)	Eastern Bengal . . . . .	7.02	6.69	2.94	2.88	2.49	2.49
4	(a) to (d)	East Indian . . . . .	7.02	6.18	3.21	3.13	2.22	2.22
5	(a) to (f)	Great Indian Peninsula . . . . .	6.39	6.23	*3.00	*2.97	2.31	2.34
6	(a) and (b)	Madras and Southern Mahratta . . . . .	6.98	6.33	4.50	4.50	2.28	2.28
7	(a) and (b)	Nizam's Guaranteed State . . . . .	5.38	5.42	*2.77	*2.68	2.30	2.31
8	(a) to (i)	North Western . . . . .	5.54	5.79	3.34	3.35	2.25	2.27
9	(a) and (b)	Oudh and Rohilkhand . . . . .	6.75	6.30	3.04	3.04	2.48	2.44
10	(a)	South Indian . . . . .	4.61	5.44	...	...	2.23	2.04
<b>3' 8 1/2" GAUGE.</b>								
11	(a)	Assam-Bengal . . . . .	6.39	7.33	3.39	3.79	2.70	2.89
12	(a) and (b)	Bengal and North-Western . . . . .	6.05	6.04	3.06	3.15	2.00	1.99
14	(a) and (b)	Bhavnagar . . . . .	6.00	6.00	4.00	4.00	2.75	2.89
15	(a) and (b)	Burma . . . . .	7.99	8.01	...	...	3.02	2.98
3	(b) to (d)	Eastern Bengal . . . . .	7.20	6.76	2.90	2.84	2.50	2.50
17	(a) and (b)	Gondal-Porbandar† . . . . .	6.00	...	4.00	...	2.75	...
7	(c)	Hyderabad-Godavari Valley . . . . .	5.48	5.58	...	...	2.22	2.21
18	(a)	Jamnagar . . . . .	6.00	6.00	4.00	4.00	2.75	2.85
19	(a) to (d)	Jodhpur-Bikaner . . . . .	6.79	6.79	2.86	2.86	2.04	2.16
20	(a)	Junagad . . . . .	6.00	6.00	4.00	4.00	2.75	2.88
6	(c) to (l)	Madras and Southern Mahratta . . . . .	7.56	7.08	...	4.50	2.08	2.08
10	(c)	Nilgiri . . . . .	...	...	...	...	4.79	5.05
2	(h) to (n)	Rajputana-Malwa . . . . .	7.21	6.86	2.73	2.73	1.92	1.93
22	(a) and (b)	Rohilkhand and Kumaon . . . . .	11.41	10.18	4.50	4.45	2.15	2.17
10	(f)	Shoranur-Cochin . . . . .	4.90	5.23	...	...	1.97	2.50
10	(b), (d), (e) and (g) to (i)	South Indian . . . . .	4.92	5.69	...	...	1.98	2.11
23	(a)	Udaipur-Chitorgarh . . . . .	8.90	8.98	3.00	3.00	1.99	1.99
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur-Chhindwara Extensions . . . . .	7.74	7.94	4.10	3.84	2.00	2.00
8	(j)	Kalka-Simla . . . . .	23.77	23.37	...	...	10.50	10.50
8	(k) and (l)	Kohat-Thal and Nowshera-Durgai . . . . .	6.93	6.29	3.30	3.31	2.25	2.25
10	(j)	Morappur-Dharmapuri . . . . .	1.49	5.98	...	...	2.27	2.50
1	(g)	Purnia-Ranchi . . . . .	7.68	7.40	4.39	3.85	3.00	3.00
1	(h)	Raipur-Dhamtari . . . . .	7.86	7.69	4.43	4.47	3.00	3.00
10	(k)	Tirupattur-Krishnagiri . . . . .	1.97	5.98	...	...	2.30	2.50

\* Third class by mail.

† Information for 2nd half of 1911 not furnished.

**DIX 11—continued.**

during each half of the calendar year 1911.

[prepare these statistics.]

34		35		36		37		38		39		40		Num-ber.
TRAFFIC—contd.														
MILEAGE—contd.														
a unit one mile—contd.				Average number of units in a train.										
Average for all classes.		Other coaching traffic per ton-mile.		1st class.		2nd class.		3rd or intermediate class.		4th or lowest class.		Total passenger units.		Main head.
Pies.		Pies.		No.		No.		No.		No.		No.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
2-53	2-54	38-84	39-17	1-35	1-21	2-07	3-09	4-61	5-89	209-39	195-38	218-82	205-77	1
2-27	2-32	23-72	23-70	1-23	1-51	7-24	6-27	10-25	*12-78	212-04	195-10	231-06	215-96	2
2-72	2-03	42-35	44-57	1-49	1-25	3-02	3-06	13-51	23-21	152-37	155-40	173-09	181-92	3
2-43	2-45	30-92	31-99	1-54	1-38	3-28	4-24	15-50	16-03	212-48	201-71	232-80	223-86	4
2-61	2-74	34-34	35-12	1-36	2-41	4-23	5-23	*12-93	*14-56	133-90	118-74	150-00	140-94	5
2-48	2-47	36-95	37-20	1-55	1-35	4-23	4-36	1-08	1-00	208-71	206-83	215-58	213-84	6
2-61	2-69	35-05	33-65	0-98	1-37	5-70	6-00	...	...	123-09	120-50	123-75	127-87	7
2-43	2-45	33-14	32-40	1-11	1-13	3-26	3-32	11-44	11-33	195-30	192-94	211-11	208-77	8
2-61	2-64	40-92	40-98	1-19	1-09	3-52	3-70	17-26	15-50	201-07	167-84	223-04	183-13	9
2-40	2-21	36-43	35-75	1-57	1-49	7-59	6-16	...	...	179-23	190-03	183-44	198-27	10
2-34	2-06	42-73	43-72	1-27	1-19	2-25	1-95	2-32	3-54	191-77	152-01	198-11	158-09	11
2-04	2-04	41-27	35-40	0-31	0-26	1-01	0-33	3-38	3-69	267-70	238-20	272-95	243-03	12
2-37	2-36	47-47	49-02	0-50	0-47	3-50	3-43	5-61	2-33	181-35	173-57	190-36	179-85	14
3-13	3-14	36-15	34-79	1-69	1-40	5-33	2-97	...	...	223-36	184-73	231-33	189-10	15
2-61	2-62	39-11	40-04	0-49	0-43	1-47	2-13	13-37	16-65	169-23	130-00	162-11	175-26	8
2-33	...	47-54	...	0-49	...	3-05	...	4-64	...	144-06	...	153-24	...	17
2-41	2-40	42-37	39-05	0-31	0-31	5-06	4-51	...	...	121-45	107-10	127-32	112-42	7
2-02	3-03	43-50	45-10	0-67	0-74	4-25	4-34	10-05	6-13	176-33	143-21	191-30	154-42	13
2-14	2-26	42-28	40-02	0-62	0-62	2-73	2-51	9-31	9-00	259-16	231-77	272-42	243-10	19
2-33	3-01	47-50	49-56	0-43	0-52	3-23	4-70	5-36	3-14	169-13	175-26	173-35	163-02	20
2-21	2-21	44-63	44-57	0-22	0-26	3-21	3-16	...	0-01	221-31	197-42	225-44	201-43	6
6-70	6-63	239-53	235-13	10-46	7-17	...	...	...	...	65-68	57-93	75-14	65-10	10
2-02	2-05	30-53	23-44	0-33	0-30	2-26	2-54	5-17	6-03	233-32	230-30	272-03	241-07	2
2-37	2-41	57-74	63-67	0-66	0-73	3-24	3-62	2-34	2-73	24-60	216-63	231-54	223-79	22
2-10	2-08	49-31	49-30	1-10	0-93	6-03	4-32	...	...	222-77	153-29	229-95	153-59	10
2-06	2-20	33-73	33-30	1-06	0-33	5-26	4-24	...	...	230-04	252-75	236-36	257-92	10
2-13	2-16	32-39	35-06	2-11	1-25	2-27	2-24	2-31	1-24	377-63	221-39	324-32	223-72	23
2-07	2-07	41-35	40-29	0-42	0-40	1-12	0-37	1-43	1-21	225-71	171-21	226-63	173-09	1
14-24	14-22	198-47	200-62	2-51	3-70	4-36	5-30	...	...	33-32	39-16	40-79	43-76	3
2-37	2-36	51-31	49-23	0-36	0-42	0-67	0-33	2-73	2-53	63-97	97-47	67-73	101-23	3
2-24	2-55	53-72	53-33	0-01	0-05	2-67	0-32	...	...	55-31	31-35	53-49	32-32	10
3-14	3-21	42-49	42-26	0-33	0-36	2-24	2-75	3-41	4-72	164-43	116-22	170-31	126-75	1
3-07	3-07	43-74	43-63	0-31	0-13	1-12	0-31	2-55	1-32	192-13	133-54	193-13	123-47	1
2-29	2-56	45-36	44-65	0-03	0-09	5-33	1-37	...	...	114-66	131-95	120-07	133-91	10

\* Third class by mail.

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway (Detailed in "Index" to Appendix 9).		Serial num- ber.	41	42	43			
Main head.	Sub-head.	Railway system.	COACHING					
			UNITS AND UNIT MILEAGE— concl.		VEHICLES AND VEHICLE			
			Average number of units in a train—concl.		Number of coaching vehicles			
			Other coaching traffic.	1st class.	2nd class.			
		Tons.	Vehicle miles.	Vehicle miles.				
		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
		<b>5' 6" GAUGE.</b>						
1	(a)	Pengal-Nagpur . . . . .	1.43	1.41	1,935	2,099	1,795	1,928
2	(a) to (g)	Bombay, Baroda and Central India . . . . .	2.52	2.65	1,685	2,182	3,703	3,972
3	(a)	Eastern Bengal . . . . .	1.26	1.76	1,300	1,494	1,201	1,347
4	(a) to (d)	East Indian . . . . .	2.50	2.96	5,339	5,657	7,380	7,680
5	(a) to (f)	Great Indian Peninsula . . . . .	2.33	2.74	7,254	8,530	6,882	7,315
6	(a) and (b)	Madras and Southern Mahratta . . . . .	2.39	2.44	1,200	1,193	1,404	1,446
7	(a) and (b)	Nizam's Guaranteed State . . . . .	1.41	1.68	399	364	502	478
8	(a) to (i)	North Western . . . . .	1.42	2.34	6,049	6,991	5,658	6,425
9	(a) and (b)	Oudh and Rohilkhand . . . . .	1.50	1.18	1,920	2,058	1,829	1,884
10	(a)	South Indian . . . . .	1.75	1.72	480	402	625	648
		<b>3' 8½" GAUGE.</b>						
11	(a)	Arsam-Bengal . . . . .	1.18	1.57	593	625	584	611
12	(a) and (b)	Bengal and North-Western . . . . .	0.83	0.98	3,007	3,103	2,674	2,723
14	(a) and (b)	Bhavnagar . . . . .	0.75	0.82	213	184	243	217
15	(a) and (b)	Burma . . . . .	1.13	1.08	1,721	1,701	1,949	1,958
3	(b) to (d)	Eastern Bengal . . . . .	1.37	1.48	1,417	1,417	1,090	1,103
17	(a) and (b)	Gondal-Forbandar* . . . . .	0.62	...	209	...	251	...
7	(c)	Hyderabad-Godavari Valley . . . . .	0.83	0.98	487	482	542	543
18	(a)	Jamnagar . . . . .	0.93	1.14	37	40	49	54
19	(a) to (d)	Jodhpur-Bikaner. . . . .	1.36	1.49	498	531	505	547
20	(a)	Junagad . . . . .	0.68	0.63	63	55	80	74
6	(c) to (l)	Madras and Southern Mahratta . . . . .	1.39	1.80	1,668	1,720	1,642	1,617
10	(c)	Nilgiri . . . . .	1.10	0.95	57	58	...	...
2	(h) to (n)	Rajputana-Malwa . . . . .	1.77	2.22	2,727	2,683	2,662	2,585
22	(a) and (b)	Rohilkhand and Kumaon . . . . .	0.90	0.88	383	348	357	341
10	(f)	Sboranur-Cochin . . . . .	0.49	0.54	79	88	77	83
10	(b), (d), (e) and (g) to (i)	South Indian . . . . .	1.08	0.97	1,874	1,760	1,941	1,878
23	(a)	Udaipur-Chitorgach . . . . .	2.06	0.98	39	38	24	36
		<b>2' 6" GAUGE.</b>						
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Chhindwara Extensions . . . . .	0.79	0.72	228	238	228	226
8	(f)	Kalka-Simla . . . . .	1.06	1.33	94	102	86	99
8	(k) and (l)	Kohat-Thal and Nowshera-Durgai . . . . .	0.21	0.27	63	49	43	47
10	(f)	Morappur-Dharmapuri . . . . .	0.13	0.15	21	21	21	21
1	(g)	Purulia-Banchi . . . . .	0.79	0.94	64	67	86	80
1	(h)	Raipur-Dhamtari . . . . .	0.66	0.41	12	14	12	13
10	(k)	Tirupattur-Krishnagiri . . . . .	0.85	0.39	19	19	19	19

\* Information for 2nd half of 1911 not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

prepare these statistics.]

														44	45	46	47	48	49	50	Num- ber.
TRAFFIC—contd.														MILEAGE.							
hailed one mile (in thousands).														Average number of vehicles in a coaching train.							
3rd or inter- mediate class.		4th or lowest class.		Other vehicles.		Brake-vans.		Total.		1st Class.		2nd Class.		Main head.							
Vehicle miles.		Vehicle miles.		Vehicle miles.		Vehicle miles.		Vehicle miles.		No.		No.									
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.								
1,585	2,144	16,354	16,825	1,184	1,252	2,850	2,037	25,208	26,275	1'20	1'27	1'12	1'16	1							
1,831	...	15,555	17,789	2,572	3,440	2,794	3,171	27,291	29,554	0'22	1'11	2'06	2'08	2							
2,525	2,653	8,191	10,726	2,198	2,053	1,264	1,400	16,674	19,678	1'05	1'17	0'97	1'05	3							
7,845	8,021	40,696	40,631	3,686	2,745	4,993	5,105	75,641	77,019	1'32	1'24	1'06	1'03	4							
4,163	4,814	30,376	31,103	6,331	7,904	7,698	8,196	63,199	67,911	1'57	1'70	1'48	1'45	5							
398	402	9,507	10,049	1,653	1,559	2,642	2,706	16,804	17,359	0'97	0'94	1'13	1'13	6							
...	...	1,963	1,317	209	247	606	611	3,579	3,512	1'16	1'13	1'45	1'47	7							
6,912	7,990	44,557	47,741	4,597	6,116	9,725	10,015	77,498	85,278	1'19	1'28	1'11	1'18	8							
2,757	2,965	11,098	12,520	1,990	2,203	2,581	2,536	22,175	24,171	1'21	1'21	1'15	1'10	9							
...	...	2,927	3,400	437	427	856	881	5,275	5,758	0'36	0'79	1'25	1'27	10							
318	821	4,946	4,852	400	322	377	411	7,218	7,142	1'37	1'45	1'35	1'42	11							
2,881	2,950	29,895	30,368	479	476	3,776	4,074	42,512	43,684	2'00	1'96	1'77	1'73	12							
136	44	1,482	1,413	41	50	243	257	2,306	2,145	1'45	1'46	1'05	1'72	14							
...	...	18,301	19,503	1,569	1,593	1,679	1,991	25,219	26,661	1'42	1'30	1'09	1'50	15							
2,219	2,143	10,334	10,575	2,178	2,294	1,128	1,173	18,426	15,618	1'34	1'28	1'06	0'36	3							
200	...	1,410	...	69	...	318	...	2,457	...	1'35	...	1'03	...	17							
...	...	2,977	3,145	227	245	646	651	4,879	5,066	1'28	1'21	1'40	1'36	7							
85	18	283	296	12	9	70	73	486	490	1'24	1'31	1'04	1'74	13							
598	533	5,593	6,053	457	500	304	576	7,897	8,789	1'24	1'22	1'25	1'26	19							
63	37	494	505	22	17	103	100	823	783	1'43	1'36	1'76	1'34	20							
...	18	14,876	15,684	1,359	1,608	1,777	1,837	21,322	21,544	1'44	1'44	1'42	1'35	6							
...	...	97	100	40	42	5	5	199	200	1'32	1'08	...	...	10							
1,523	774	26,898	29,957	2,634	3,204	5,616	5,992	42,061	45,255	1'34	1'24	1'31	1'19	2							
213	277	3,423	3,294	169	159	662	657	5,207	5,076	1'04	1'46	1'53	1'43	22							
...	...	565	503	41	49	144	145	906	863	1'11	1'16	1'09	1'14	10							
...	...	22,444	23,376	2,619	2,774	683	659	29,100	30,447	1'20	1'05	1'24	1'13	10							
17	4	307	414	23	16	55	83	455	591	1'55	1'11	1'20	1'06	23							
182	127	2,551	2,794	216	222	85	263	3,440	3,630	1'01	1'42	1'01	1'41	1							
...	...	207	251	31	33	61	61	479	546	1'40	1'46	1'29	1'43	8							
75	55	645	646	98	79	69	63	993	939	0'61	0'50	0'41	0'47	8							
...	...	115	196	27	28	10	9	191	202	1'43	1'18	1'43	1'52	10							
49	39	673	620	120	115	26	23	1,018	944	1'53	1'03	2'05	1'36	1							
...	...	191	176	12	5	4	7	231	217	0'91	0'90	0'91	0'90	1							
...	...	131	148	25	17	8	6	202	209	1'02	1'47	1'02	1'47	10							

\* Third class by mail.

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway (Detailed in "Index" to Appendix 9).		Serial num- ber.	51		52		53	
Main head.	Sub-head.		COACHING					
			VEHICLES AND VEHICLES					
			Average number of vehicles in a coaching					
			3rd or intermediate class.		4th or lowest class.		Other vehicles.	
			No.		No.		No.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur	0.98	1.30	10.17	10.17	0.74	0.76
2	(a) to (g)	Bombay, Baroda and Central India	0.74	---	8.72	9.08	1.44	1.75
3	(a)	Eastern Bengal	2.05	2.08	6.62	8.38	1.78	1.00
4	(a) to (d)	East Indian	1.77	1.70	9.18	8.61	2.00	2.07
5	(a) to (f)	Great Indian Peninsula	0.90	0.96	6.67	6.18	1.37	1.57
6	(a) and (b)	Madras and Southern Mahratta	0.32	0.32	7.65	7.91	1.33	1.23
7	(a) and (b)	Nizam's Guaranteed State	---	---	5.40	5.65	0.60	0.77
8	(a) to (e)	North Western	1.36	1.47	8.76	8.77	0.90	1.13
9	(a) and (b)	Oudh and Rohilkhand	1.73	1.73	6.97	7.32	1.25	1.29
10	(a)	South Indian	---	---	5.84	6.66	0.87	0.84
<b>3' 3 3/4" GAUGE.</b>								
11	(a)	Assam-Bengal	0.74	0.74	11.45	11.26	0.93	0.75
12	(a) and (b)	Bengal and North-Western	1.78	1.36	19.86	19.18	0.32	0.30
14	(a) and (b)	Rhavnagar	0.33	0.35	9.74	11.24	0.28	0.40
15	(a) and (b)	Burma	---	---	15.05	14.90	1.29	1.22
3	(b) to (d)	Eastern Bengal	2.10	1.87	9.76	9.19	2.05	1.91
17	(a) and (b)	Gondal-Forbandar†	1.29	---	9.12	---	0.44	---
7	(c)	Hyderabad-Godavari Valley	---	---	7.72	7.29	0.59	0.63
18	(a)	Jamnagar	1.17	0.60	9.44	9.59	0.38	0.30
19	(a) to (d)	Jodhpur-Bikaner	1.34	1.22	13.92	13.90	1.14	1.15
20	(a)	Junagad	1.52	0.93	10.73	12.56	0.50	0.49
6	(c) to (l)	Madras and Southern Mahratta	---	0.02	12.85	13.09	1.17	1.39
10	(c)	Nilgiri	---	---	3.12	3.16	1.30	1.33
2	(h) to (n)	Rajputana-Malwa	0.75	0.36	13.24	13.81	1.30	1.30
22	(a) and (b)	Rohilkhand and Kumaon	0.91	1.16	14.64	13.23	0.72	0.67
10	(f)	Shoranur-Cochin	---	---	7.92	6.98	0.57	0.69
10	(b), (d), (e) and (g) to (i)	South Indian	---	---	14.12	14.00	1.63	1.66
23	(a)	Udaipur-Chitorgarh	0.87	0.18	15.70	12.13	1.13	0.47
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur-Chhindwara Extensions.	0.93	0.76	18.00	16.72	1.53	1.33
3	(f)	Kalka-Simla	---	---	3.09	3.61	0.43	0.43
3	(k) and (l)	Kohat-Thal and Nowshera-Durgai	0.72	0.55	6.18	6.55	0.94	0.81
10	(j)	Korappur-Dharmapuri	---	---	7.97	9.20	1.90	2.10
1	(g)	Purulia-Banchi	1.17	0.96	16.12	15.22	2.67	2.32
1	(h)	Raipur-Dhamtari	---	---	14.25	11.94	0.90	0.36
10	(k)	Tirupattur-Krishnagiri	---	---	11.10	11.39	2.10	1.30

\* Third class by mail.

† Information for 2nd half of 1911 not furnished.

**DIX 11—continued.**  
*during each half of the calendar year 1911.*  
 prepare these statistics.]

54		55		56		57		58		59		60		Num- ber.
TRAFFIC—contd.														
MILEAGE—contd.														
train—contd.														
Average earnings per coaching vehicle per mile.														
Brake-vans.		Total.		1st class.		2nd class.		3rd or intermediate class.		4th or lowest class.		Other vehicles.		Main head.
No.		No.		Pies.		Pies.		Pies.		Pies.		Pies.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
1-46	1-22	15-67	15-68	14-53	12-34	17-51	17-45	14-66	14-78	49-33	46-04	75-37	73-11	1
1-57	1-62	15-47	15-57	17-20	18-09	18-69	18-53	38-41	...	50-31	48-36	51-95	49-46	2
1-02	1-16	18-49	15-38	19-29	14-40	21-30	19-45	26-61	30-73	57-43	46-14	36-02	46-39	3
1-13	1-08	17-06	16-33	16-79	20-31	13-34	16-01	26-11	29-49	51-34	51-68	36-53	45-76	4
1-66	1-63	13-65	13-49	15-92	19-13	18-40	23-41	43-22	44-21	47-45	44-33	53-39	61-40	5
2-12	2-13	13-52	13-66	24-25	26-31	26-33	26-53	14-25	14-18	62-29	59-97	66-68	75-96	6
1-76	1-90	10-37	10-22	11-67	17-17	21-08	23-13	...	...	54-65	51-70	31-56	34-90	7
1-91	1-84	15-23	15-67	13-94	11-69	16-23	16-29	28-08	26-01	50-36	49-98	53-18	67-42	8
1-62	1-48	13-33	14-13	15-46	13-38	20-64	21-15	30-27	27-15	70-06	55-68	49-21	35-86	9
1-71	1-73	10-53	11-29	21-31	20-37	28-05	26-40	...	...	68-30	58-40	72-31	73-57	10
0-87	0-95	16-71	16-57	13-93	12-31	10-63	10-06	14-97	13-00	45-25	39-03	54-61	60-65	11
2-51	2-53	23-24	27-30	1-90	1-63	3-44	3-28	6-76	6-24	20-09	24-75	107-39	103-08	12
1-66	1-39	15-71	17-06	4-15	3-23	12-66	12-12	24-44	26-73	51-20	44-55	128-03	103-05	14
1-38	1-45	20-74	20-37	13-37	16-35	16-37	15-94	...	...	45-46	36-33	31-55	30-91	15
1-12	1-02	17-46	16-19	5-46	5-66	10-33	15-62	19-20	25-33	42-71	42-41	26-00	31-29	3
2-06	...	15-39	...	4-31	...	11-25	...	14-26	...	43-45	...	66-79	...	17
1-63	1-63	13-65	12-71	6-38	7-13	19-77	18-43	...	...	35-00	29-98	59-51	60-22	7
2-32	2-37	16-19	15-31	6-54	6-76	15-43	14-90	34-40	40-36	51-54	42-61	117-35	179-03	13
0-76	1-32	19-65	20-07	6-33	7-12	14-75	13-55	21-21	21-05	37-91	35-34	50-72	51-35	19
2-28	2-49	18-24	19-60	4-01	4-55	11-24	13-36	14-10	13-56	43-54	40-16	63-31	93-41	20
1-54	1-53	18-42	18-32	9-37	9-12	17-14	16-56	...	11-57	35-31	31-36	52-34	41-54	6
0-18	0-17	6-42	6-34	107-22	83-17	...	...	...	...	100-74	92-20	246-54	209-39	10
2-76	2-76	20-70	20-36	9-52	9-31	12-42	14-62	19-19	14-10	38-13	32-22	41-79	41-67	2
2-33	2-76	22-27	21-30	10-90	13-35	24-03	25-73	14-52	10-34	36-15	33-97	72-29	63-02	22
2-02	2-01	12-71	11-98	12-01	10-25	27-46	22-29	...	...	55-33	54-97	42-72	39-27	10
0-44	0-40	16-68	16-34	9-39	9-33	20-33	21-43	...	...	40-39	38-10	25-01	22-33	10
2-32	2-43	23-27	17-33	24-33	20-37	16-39	19-71	7-90	29-31	47-93	36-49	60-37	73-34	23
0-60	1-57	24-28	23-21	4-13	4-39	5-40	4-31	6-23	6-09	25-03	20-49	21-77	21-63	1
0-90	0-83	7-14	7-06	36-53	121-50	30-32	97-33	...	...	115-25	113-73	459-66	537-13	3
0-66	0-64	9-52	9-52	8-13	11-39	11-39	11-51	12-53	15-09	30-54	33-49	11-97	16-91	3
0-67	0-67	18-40	15-13	0-11	0-37	2-73	3-50	...	...	15-98	23-14	4-13	4-13	10
0-63	0-57	24-37	23-16	8-29	8-79	8-40	10-40	12-71	13-92	30-57	23-23	11-72	14-11	1
0-28	0-49	17-25	14-39	5-66	3-29	9-71	7-79	...	...	41-23	34-22	31-78	50-10	1
0-66	0-44	17-10	16-07	0-60	0-66	6-51	7-61	...	...	23-75	23-01	7-61	13-29	10

\* Third class by mail.

## APPEN

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway (Detailed in "Index" to Appendix 9).		Serial num- ber.	61		62		63	
Main head.	Sub-head.		COACHING					
			VEHICLES AND VEHICLE					
			Carrying capacity hauled one mile					
			1st class.		2nd class.		3rd or intermediate class.	
			Seats.		Seats.		Seats.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur	25,694	25,377	35,725	33,298	58,767	77,979
2	(a) to (g)	Bombay, Baroda and Central India	35,642	43,363	118,503	127,109	68,018	...
3	(a)	Eastern Bengal	26,761	32,473	28,427	33,297	110,008	85,353
4	(a) to (d)	East Indian	91,093	93,470	151,935	149,598	342,074	343,672
5	(a) to (f)	Great Indian Peninsula	105,247	128,454	201,783	211,798	*282,414	*263,248
6	(a) and (b)	Madras and Southern Mahratta	14,308	14,488	21,020	21,720	15,532	15,663
7	(a) and (b)	Nizam's Guaranteed State	5,250	4,860	11,894	11,378	...	...
8	(a) to (i)	North Western	115,807	131,969	119,633	133,769	279,957	320,116
9	(a) and (b)	Oudh and Rohilkhand.	43,125	46,991	43,845	46,994	73,450	73,184
10	(a)	South Indian	3,894	4,051	11,149	11,910	...	...
<b>3' 3 3/4" GAUGE.</b>								
11	(a)	Assam-Bengal	6,836	7,123	6,763	7,040	7,183	6,780
12	(a) and (b)	Bengal and North-Western	26,525	26,944	32,752	33,594	55,144	61,052
14	(a) and (b)	Bhavnagar	1,002	910	1,344	1,691	1,948	561
15	(a) and (b)	Burma	15,635	15,603	33,484	33,384	...	...
3	(b) to (d)	Eastern Bengal	15,671	15,282	12,981	13,244	42,717	44,074
17	(a) and (b)	Gondal-Forbhandar†	1,048	...	1,448	...	2,924	...
7	(c)	Hyderabad-Godavari Valley	5,613	5,255	3,780	3,063	...	...
18	(a)	Jamnagar	259	282	346	376	631	332
19	(a) to (d)	Jodhpur-Bikaner	6,615	7,598	6,897	8,045	18,839	13,739
20	(a)	Junagad	701	834	966	589	1,174	519
6	(c) to (l)	Madras and Southern Mahratta	13,645	16,696	20,142	17,333	...	325
10	(c)	Nilgiri	809	755	...	...	...	...
2	(h) to (n)	Rajputana-Malwa	27,602	25,626	31,945	31,023	39,252	19,946
22	(a) and (b)	Rohilkhand and Kumaon	2,968	1,815	2,741	2,433	2,590	2,421
10	(f)	Shoranur-Cochin	625	664	619	661	...	...
10	(b), (d), (e) and (g) to (i)	South Indian	14,335	12,954	19,120	18,194	...	...
23	(a)	Udaipur-Chitorgarh	308	412	281	437	463	117
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Ohhindwara Extensions.	2,051	2,126	2,051	2,124	2,139	2,051
3	(f)	Kalka-Simla	938	1,052	944	1,055	...	...
3	(h) and (l)	Kohat-Thal and Nowshera-Durgai	764	586	599	650	1,769	1,311
10	(j)	Morappur-Dharmapuri	166	169	249	254	...	...
1	(g)	Purulia-Banchi	572	579	914	857	1,031	823
1	(h)	Raipur-Dhamtari	146	160	146	160	...	...
10	(k)	Tirupattur-Krishnagiri	158	153	229	230	...	...

\* Third class by mail.

† Information for 2nd half of 1911 not furnished.

**DIX 11—continued.**

during each half of the calendar year 1911.

prepare these statistics.]

64		65		66		67		68		69		70		Num- ber.
TRAFFIC—contd.														
MILEAGE—concl'd.														
(excluding brakes)—(in thousands).				Percentage of freight upon capacity hauled—										Main head.
4th or lowest class.		Other vehicles.		1st class.		2nd class.		3rd or intermediate class.		4th or lowest class.		Other vehicles.		
Seats.		Tons.		Per cent.		Per cent.		Per cent.		Per cent.		Per cent.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
827,737	835,137	7,489	7,449	843	7-05	13-39	13-33	12-63	12-51	40-63	33-74	30-66	31-37	1
625,502	623,087	12,965	16,168	618	6-31	11-05	9-68	20-00	...	45-99	41-89	31-68	32-22	2
446,967	534,473	23,873	21,416	6-91	4-92	13-13	11-76	20-30	33-29	42-13	34-01	6-57	10-51	3
2,263,416	2,233,743	51,070	76,677	7-52	9-49	9-53	13-33	20-09	21-63	41-63	42-50	21-68	18-18	4
1,657,041	1,675,244	37,044	42,680	8-18	9-44	9-62	12-43	25-81	27-34	38-24	33-69	23-08	32-33	5
503,694	525,221	11,305	10,654	13-56	14-52	25-21	25-50	8-52	8-03	51-52	49-30	26-29	20-07	6
105,837	103,414	2,312	3,633	6-29	9-03	16-52	16-37	...	...	40-13	37-43	17-26	14-70	7
2,423,353	2,574,773	59,976	99,432	6-37	4-66	13-37	13-33	20-79	19-33	40-33	40-73	12-07	12-30	8
490,978	533,973	32,691	36,266	4-40	3-99	12-77	13-45	37-41	33-91	65-20	43-74	7-33	5-93	9
170,931	192,336	1,946	1,880	20-13	13-70	34-08	23-63	...	...	52-51	50-41	44-95	43-77	10
170,679	167,334	1,134	813	3-02	7-21	14-34	11-92	16-95	22-65	43-53	30-01	45-09	33-05	11
825,722	841,771	1,211	1,193	1-74	1-50	4-65	4-40	10-73	9-53	43-81	44-73	103-00	122-47	12
33,744	34,003	197	135	7-36	6-43	27-34	25-39	42-27	50-35	73-87	64-16	103-39	70-43	14
563,100	602,324	6,304	7,011	13-10	11-73	12-29	11-50	...	...	43-99	40-13	19-34	20-21	13
312,237	314,239	16,497	17,609	3-23	3-56	12-05	13-30	34-33	43-44	53-35	57-03	8-73	9-64	3
37,435	...	263	...	7-15	...	32-56	...	24-53	...	50-32	...	33-35	...	17
107,391	113,396	1,319	1,119	5-53	6-15	22-25	19-32	...	...	43-63	36-33	24-16	33-23	7
9,052	9,162	29	23	7-73	3-05	36-35	35-51	47-45	53-19	53-53	43-17	90-31	150-79	13
191,935	200,332	7,543	7,933	3-76	3-53	15-00	13-39	23-73	23-33	54-27	53-37	7-27	3-12	19
13,211	14,373	93	66	3-03	6-19	10-33	32-03	20-37	24-33	57-72	43-02	33-35	50-24	20
469,063	494,225	5,164	5,049	7-31	6-17	13-46	21-32	...	14-20	54-33	47-33	31-13	30-30	6
2,123	2,132	139	133	40-19	29-30	...	...	...	...	93-16	33-30	13-10	15-07	10
333,033	1,039,333	14,642	16,423	6-10	6-75	14-33	17-73	23-73	75-35	57-27	43-35	24-33	29-25	2
103,513	93,344	330	314	5-21	9-53	23-50	35-44	23-51	27-16	55-37	32-24	53-33	66-33	22
13,207	17,033	122	144	12-32	13-64	60-34	47-09	...	...	32-70	64-61	23-51	27-14	13
724,323	750,137	6,330	6,923	11-59	11-97	42-36	33-34	...	...	62-45	55-57	23-47	23-33	10
3,927	12,134	33	64	13-56	10-37	15-31	13-27	9-76	33-19	32-34	32-33	45-74	52-23	23
63,432	69,703	373	424	3-39	3-12	7-76	6-37	9-43	9-35	50-43	41-05	30-10	23-22	1
4,333	5,643	130	136	17-13	24-50	30-29	33-33	...	...	47-09	43-25	23-47	47-39	3
17,221	17,374	303	217	4-37	7-13	11-75	13-07	10-10	19-01	50-35	33-77	7-12	12-33	3
1,327	2,050	59	50	0-13	0-39	15-56	4-33	...	...	42-00	53-02	3-31	3-34	10
15,076	13,303	139	200	6-09	6-73	10-23	13-07	13-79	23-40	45-55	34-92	16-63	19-22	1
6,239	5,333	13	13	3-30	1-74	10-30	3-45	...	...	41-53	34-33	35-39	45-93	1
2,131	2,457	45	30	0-63	0-71	27-49	10-61	...	...	62-04	60-33	9-33	13-54	10

\* Third class by mail.



## Analysis of working of each railway system.

[Note.—Railways not shown do not prepare

Classification No. of Railway (Detailed in "Index" to Appendix B).		Serial num- ber.	71.	73.	COACHING	
Main head.	Sub-head.	Railway system.	WEIGHT OF TRAIN			
			Gross ton-mileage of (in			
			Freight. Ton-miles.		Dead-weight. Ton-miles.	
			1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>						
1	(a)	Bengal-Nagpur	23,551	22,942	446,263	473,898
2	(a) to (g)	Bombay, Baroda and Central India	29,638	31,007	504,173	564,369
3	(a)	Eastern Bengal	14,708	16,358	306,548	346,268
4	(a) to (d)	East Indian	73,530	73,051	1,478,677	1,517,052
5	(a) to (f)	Great Indian Peninsula	54,829	57,408	1,265,474	1,349,566
6	(a) and (b)	Madras and Southern Mahratta	19,238	19,553	312,328	316,573
7	(a) and (b)	Nizam's Guaranteed State	3,224	3,066	66,426	67,576
8	(a) to (i)	North Western	72,253	31,516	1,358,759	1,493,900
9	(a) and (b)	Oudh and Rohilkhand	23,837	21,433	423,118	467,600
10	(a)	South Indian	7,377	7,815	101,456	110,159
<b>3' 3 1/2" GAUGE.</b>						
11	(a)	Assam-Bengal	5,637	4,815	74,675	74,637
12	(a) and (b)	Bengal and North-Western	25,952	24,594	293,722	306,711
14	(a) and (b)	Bhavnagar	1,805	1,471	18,308	16,204
15	(a) and (b)	Burma	18,454	16,429	246,479	253,746
3	(b) to (d)	Eastern Bengal	13,073	13,361	173,796	181,428
17	(a) and (b)	Gondal-Porbandar*	1,522	...	19,871	...
7	(c)	Hyderabad-Godavari Valley	3,318	3,110	45,708	48,078
18	(a)	Jamnagar	376	324	3,720	3,875
19	(a) to (d)	Jodhpur-Bikaner	7,150	7,053	70,769	78,406
20	(a)	Junagad	517	481	6,384	5,957
6	(c) to (l)	Madras and Southern Mahratta	17,337	16,154	189,515	201,412
10	(c)	Nilgiri	189	162	2,309	2,327
2	(h) to (n)	Rajputana-Malwa	36,931	36,364	389,442	409,957
22	(a) and (b)	Rohilkhand and Kumaon	3,732	3,433	45,172	45,077
10	(f)	Shoranur-Cochin	1,030	784	8,575	8,341
10	(b), (d), (e) and (g) to (i)	South Indian	29,670	27,653	266,362	285,614
23	(a)	Udaipur-Chittorgarh	493	501	3,740	5,194
<b>2' 6" GAUGE.</b>						
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Chhindwara Extensions.	2,062	1,867	23,316	23,982
8	(f)	Kalka-Simla	248	315	4,714	4,636
8	(k) and (l)	Kohat-Thal and Nowshera-Durgai	574	630	5,444	5,055
10	(j)	Morappur-Dharmapuri	54	69	1,235	1,235
1	(g)	Purnia-Ranchi	465	352	7,827	7,446
1	(h)	Raipur-Dhamtari	167	128	877	861
10	(b)	Tirupattur-Krishnagiri	90	110	1,110	1,171

\* Information for 2nd half of 1911 not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

[these statistics.]

73		74		75		76		77		78		79		Num- ber.	
TRAFFIC—contd.															
AND TON-MILEAGE.								COST OF WORKING AND PROFITS—							Main head.
All coaching trains, thousands—		Average weight of a coaching train.						Average cost of hauling a coaching train one mile.		Average cost of hauling a coaching vehicle with its load one mile.		Average cost of hauling a coach- ing unit one mile.			
Total Ton-miles.		Freight. Tons.		Dead-weight. Tons.		Total. Tons.		Rs.		Pies.		Pies.			
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.		
469,834	496,840	14-64	18-87	277-43	236-49	393-07	300-96	1-23	1-14	16-10	14-99	1-03	1-01	1	
638,811	595,376	16-61	18-79	282-67	287-52	299-28	308-31	1-77	1-80	24-41	24-72	1-33	1-43	2	
323,256	362,626	11-90	12-78	249-69	270-68	261-59	283-46	1-79	1-78	27-61	28-92	1-76	1-60	3	
1,532,257	1,595,108	16-59	16-55	333-45	331-62	350-04	338-17	1-10	1-06	12-26	13-38	0-79	0-79	4	
1,320,303	1,406,374	11-85	11-40	273-41	268-04	285-26	279-44	1-52	1-51	24-35	24-43	1-07	1-01	5	
831,566	836,132	15-47	15-39	251-21	249-21	266-68	264-60	1-65	1-72	27-84	28-66	1-33	1-41	6	
69,650	70,642	9-34	9-18	204-06	214-05	213-40	223-58	1-43	1-31	23-34	24-49	1-75	1-59	7	
1,430,992	1,575,316	14-20	14-98	267-01	274-43	281-21	289-41	1-62	1-70	23-39	23-57	1-39	1-45	8	
447,005	499,083	15-09	15-54	265-76	273-43	280-76	283-97	1-21	1-35	18-34	20-43	0-95	1-26	9	
108,833	117,974	14-72	15-32	202-53	215-91	217-25	231-23	1-13	1-04	24-69	20-62	1-06	0-93	10	
80,362	79,443	18-17	11-18	172-88	173-23	183-05	184-40	2-00	1-76	24-16	21-63	1-38	2-02	11	
319,674	331,306	17-24	15-54	195-10	193-82	212-34	209-36	0-86	1-11	7-14	8-50	0-69	0-86	12	
20,113	17,875	12-30	11-70	124-75	126-90	137-05	140-80	0-96	1-23	13-06	15-53	0-94	1-26	14	
264,333	270,175	15-18	12-54	202-72	193-79	217-90	206-32	1-79	1-93	17-72	19-57	1-39	1-33	15	
191,669	195,289	12-34	12-05	168-31	157-77	181-15	169-32	1-65	1-29	19-45	16-24	1-56	1-20	3	
21,395	...	9-34	...	138-43	...	133-32	...	1-15	...	16-08	...	1-40	...	17	
49,024	51,188	8-60	7-80	123-40	126-17	132-00	133-97	1-14	1-60	17-64	24-13	1-43	2-23	7	
4,036	4,199	12-55	10-53	124-03	125-74	136-63	136-26	1-37	1-66	18-69	23-53	1-31	1-99	13	
77,919	85,459	17-79	16-20	176-07	180-07	193-86	196-27	1-01	1-14	16-25	11-35	0-97	0-84	18	
6,901	6,438	11-47	11-36	141-54	143-19	153-11	160-06	1-36	1-49	16-34	16-67	1-43	1-51	20	
206,962	217,566	15-02	13-43	163-68	163-12	178-70	181-60	1-37	1-33	15-54	17-35	1-06	1-36	6	
2,498	2,489	6-09	5-14	74-26	73-93	80-35	79-07	3-60	3-33	110-79	120-63	7-20	9-09	10	
406,373	436,421	18-17	16-76	181-31	184-41	199-98	201-17	1-43	1-47	15-34	15-63	0-93	1-06	2	
48,954	48,510	16-17	14-41	193-19	189-16	209-36	209-57	1-13	1-20	11-63	13-45	0-86	1-06	22	
9,605	9,076	14-45	10-18	120-23	115-78	134-71	123-96	1-01	1-07	18-13	20-54	0-30	1-20	10	
296,032	313,267	19-01	16-37	170-63	171-11	189-62	187-63	1-44	1-43	15-20	15-42	0-85	0-97	10	
4,233	5,695	25-25	14-68	191-41	152-29	216-66	163-97	2-23	1-39	21-43	18-01	1-07	1-14	23	
27,378	30,849	14-55	11-17	178-67	173-40	193-22	184-57	1-64	1-63	13-29	14-46	1-29	1-69	1	
4,962	4,951	3-70	4-53	70-26	66-68	73-96	71-21	2-45	2-31	75-44	77-20	10-47	10-04	8	
6,018	5,633	5-59	6-39	52-21	51-26	57-71	57-65	1-24	1-33	23-76	23-15	2-62	2-34	6	
1,289	1,294	3-70	3-11	85-23	91-49	83-93	86-60	0-96	1-05	14-44	13-95	2-69	2-12	10	
8,362	7,798	11-13	8-64	189-09	162-69	200-22	191-33	1-33	1-31	10-64	11-12	1-31	1-74	1	
1,044	989	12-46	8-63	65-65	57-75	73-11	63-33	0-36	0-32	9-77	12-54	0-30	1-25	1	
1,200	1,281	4-67	8-46	94-02	90-00	101-69	98-46	1-19	1-26	13-91	15-51	1-67	1-66	10	

## Analysis of working of each railway system

[Note—Railways not shown do not]

Classification No. of Railway (Detailed in "Index" to Appendix 9),		Serial num- ber.	80	81	82	COACHING							
Main head.	Sub-head.	Railway system.	Cost of										
			Average cost of hauling a coach- ing unit one mile.		Average profit on working a coach- ing train one mile.		Average profit						
			Other traffic per ton.		Rs.		1st class.						
			Pies.		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.			
<b>5' 6" GAUGE.</b>													
1	(a)	Bengal-Nagpur . . . . .	8'05	7'24	1'35	1'37	-1'37	-8'05					
2	(a) to (g)	Bombay, Baroda and Central India . . . . .	12'07	13'33	1'36	1'20	-7'21	-6'63					
3	(a)	Eastern Bengal . . . . .	23'36	23'02	0'97	1'17	-8'32	-9'33					
4	(a) to (d)	East Indian . . . . .	10'79	9'48	2'25	2'29	3'53	7'42					
5	(a) to (f)	Great Indian Peninsula . . . . .	13'31	13'43	1'02	1'00	-8'43	-5'30					
6	(a) and (b)	Madras and Southern Mahratta . . . . .	13'09	12'31	1'60	1'49	-8'39	-8'35					
7	(a) and (b)	Nizam's Guaranteed State . . . . .	11'82	10'06	0'88	1'03	-16'67	-7'32					
8	(a) to (c)	North Western . . . . .	12'28	9'95	1'80	1'36	-10'45	-11'68					
9	(a) and (b)	Oudh and Rohilkhand . . . . .	13'28	19'22	2'15	1'48	-3'38	-6'50					
10	(a)	South Indian . . . . .	10'72	8'70	1'66	1'57	-3'38	0'05					
<b>3' 3½" GAUGE.</b>													
11	(a)	Assam-Bengal . . . . .	16'92	10'91	1'19	1'12	-10'20	-9'32					
12	(a) and (b)	Bengal and North-Western . . . . .	8'54	8'78	2'12	1'64	-5'24	-7'07					
14	(a) and (b)	Bhavnagar . . . . .	6'35	10'05	2'08	1'78	-8'01	-11'70					
15	(a) and (b)	Burma . . . . .	19'19	21'43	2'26	1'36	0'65	-3'22					
3	(b) to (d)	Eastern Bengal . . . . .	25'65	25'63	1'10	1'41	-13'09	-10'68					
17	(a) and (b)	Gondal-Porbandar . . . . .	12'39	...	1'29	...	-11'72	...					
7	(c)	Hyderabad-Godavari Valley . . . . .	13'94	17'55	0'87	0'24	-10'78	-16'29					
18	(a)	Jamnagar . . . . .	11'41	10'39	1'78	1'05	-13'35	-16'82					
19	(a) to (d)	Kohpur-Bikaner . . . . .	9'00	9'46	2'38	2'04	-8'32	-4'53					
20	(a)	Junagad . . . . .	8'34	10'09	1'46	1'60	-12'33	-12'12					
6	(c) to (b)	Madras and Southern Mahratta . . . . .	13'20	19'00	1'55	1'06	-5'67	-5'23					
10	(c)	Nilgiri . . . . .	123'77	161'65	0'72	-0'18	-8'58	-37'46					
2	(k) to (n)	Rajputana-Malwa . . . . .	12'07	11'94	1'71	1'48	-5'82	-5'82					
22	(a) and (b)	Rohilkund and Kumaon . . . . .	11'85	13'95	2'21	1'80	-0'78	0'40					
19	(f)	Shoranur-Cochin . . . . .	20'22	26'36	1'63	1'26	-6'12	-10'29					
10	(b), (d), (e) and (g) to (i)	South Indian . . . . .	22'44	25'19	1'96	1'72	-5'21	-5'54					
23	(a)	Udaipur-Chitorgarh . . . . .	12'50	9'75	2'24	1'34	2'30	3'26					
<b>2' 6" GAUGE.</b>													
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Ohhindwara Extensions . . . . .	24'81	26'59	0'99	0'40	-9'16	-10'07					
8	(f)	Kalka-Simla . . . . .	41'11	37'30	1'67	2'37	11'14	44'30					
8	(k) and (l)	Kohat-Thal and Nowshera-Durgai . . . . .	119'71	81'85	-0'10	-0'04	-18'63	-17'78					
10	(f)	Morappur-Dharmapuri . . . . .	196'55	186'01	-0'24	0'09	-14'33	-13'58					
1	(g)	Purnia-Banohi . . . . .	36'08	31'90	1'65	1'02	-2'35	-2'33					
1	(k)	Raipur-Dhamtari . . . . .	14'51	18'55	2'42	1'86	-4'11	-9'25					
10	(k)	Tirupattur-Krishnagiri . . . . .	78'57	50'49	0'53	0'61	-13'31	-14'85					

Information for 2nd half of 1911 not furnished.

**DIX 11—continued.**

during each half of the calendar year 1911.

[prepare these statistics.]

TRAFFIC—concl.														GOODS TRAFFIC.		NUM. SER.
WORKING AND PROFITS. on working a coaching vehicle one mile.														GROSS RECEIPTS AND TRAIN MILEAGE.		
TRAFFIC—concl.								Average profit on working a coaching unit one mile.						Receipts from goods traffic 'in thousands.'		Main head.
2nd class.		3rd or inter- mediate class.		4th or lowest class.		Other vehicles.		Per passenger unit.		Other traffic per ton.		Receipts from goods traffic 'in thousands.'		Main head.		
Pics.		Pics.		Pics.		Pics.		Pics.		Pics.		Rs.				
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.			
1-01	2-46	1-84	0-26	32-88	31-05	58-87	58-12	1-51	1-58	30-79	31-43	1,13,88	93,00	1		
2-57	0-19	14-00	...	28-40	24-14	27-54	18-74	0-84	0-89	17-85	14-87	1,18,86	90,76	2		
5-81	4-37	1-00	6-81	29-82	22-22	2-41	24-97	0-96	1-08	18-42	18-53	34,40	68,22	3		
0-58	2-88	14-85	18-11	38-08	28-50	25-27	32-38	1-84	1-68	20-13	22-56	3,84,69	3,00,88	4		
5-95	2-02	18-87	20-78	23-10	20-50	34-04	36-97	0-94	0-98	21-03	22-69	2,91,88	2,28,00	5		
1-51	2-13	12-89	14-48	34-48	30-31	38-64	45-29	1-15	1-06	23-87	24-89	57,89	58,99	6		
7-31	2-38	...	...	28-31	27-21	53-22	60-41	0-86	1-10	23-43	23-57	23,91	20,09	7		
7-16	7-28	4-69	2-44	26-97	26-41	23-79	43-35	1-04	1-00	20-86	22-45	2,91,88	2,68,94	8		
1-30	0-87	11-43	6-67	51-22	35-40	30-37	15-38	1-66	1-38	27-84	21-76	49,51	80,52	9		
3-36	5-58	...	...	42-61	37-58	48-12	52-75	1-34	1-23	25-71	26-36	17,76	19,12	10		
13-59	11-57	0-31	3-63	21-07	17-45	30-43	68-02	1-01	1-04	25-81	31-81	11,77	14,41	11		
3-70	5-22	0-88	2-28	19-85	16-25	100-25	100-58	1-33	1-18	37-73	31-62	58,67	40,60	12		
0-40	3-21	11-08	11-20	38-14	29-02	118-02	86-52	1-33	1-72	41-13	33-97	3,95	2,58	14		
0-65	3-63	...	...	27-74	16-81	13-83	11-24	1-79	1-81	18-98	18-27	68,70	43,17	15		
9-23	1-32	0-25	8-39	23-26	26-07	6-55	14-95	1-05	1-42	13-45	14-96	23,69	38,72	3		
4-78	...	1-67	...	27-42	...	50-67	...	1-43	...	34-55	...	2,62	...	17		
2-13	5-64	...	...	17-36	5-86	41-87	36-10	0-93	0-17	23-43	23-10	12,99	8,19	7		
3-41	8-63	15-51	17-38	52-65	19-03	38-46	143-45	1-61	1-04	37-09	34-71	85	27	13		
4-50	1-30	10-36	9-40	27-83	24-29	40-27	40-28	1-42	1-42	33-23	30-53	15,78	17,89	13		
5-10	1-31	2-24	3-12	27-20	23-49	48-97	31-74	1-45	1-50	33-98	39-47	1,05	77	20		
1-60	0-79	...	5-78	20-27	14-01	37-30	24-19	1-13	0-65	30-63	24-67	59,59	46,27	6		
...	...	...	...	10-04	26-43	135-76	88-76	0-59	2-47	165-76	133-48	1,14	1,23	10		
3-88	1-01	3-85	23-47	22-84	16-59	23-45	23-24	1-69	0-30	18-81	16-50	81,72	80,96	2		
12-28	12-23	2-84	2-81	24-47	20-52	60-61	79-17	1-51	1-35	46-08	59-72	9,45	6,76	22		
9-33	4-75	...	...	37-25	34-43	24-59	18-73	1-30	1-43	29-29	23-52	1,08	1,35	10		
5-63	6-06	...	...	25-39	22-68	9-81	6-91	1-21	1-23	16-34	13-11	43,67	40,92	10		
4-59	1-70	12-53	11-30	25-93	18-43	38-69	55-33	1-06	1-03	20-49	25-81	49	45	23		
7-89	9-55	7-01	8-37	11-79	6-06	8-48	7-22	0-78	0-38	17-04	13-70	4,62	3,69	1		
4-88	20-13	...	...	39-81	36-53	383-62	479-98	3-77	4-88	157-26	163-32	2,33	2,71	8		
15-37	17-62	14-21	14-06	3-78	4-34	15-29	12-24	0-05	0-03	63-40	31-92	44	42	8		
11-66	10-45	...	...	1-49	3-19	10-21	9-77	0-45	0-43	127-63	127-03	8	3	10		
3-24	0-72	2-07	7-30	19-33	12-16	1-08	2-99	1-83	1-47	6-41	10-36	71	72	1		
0-08	4-75	...	...	31-46	21-69	22-01	37-56	2-37	1-83	23-23	20-03	39	31	1		
7-40	7-90	...	...	9-34	13-50	6-30	2-22	0-62	0-30	33-21	5-84	13	11	10		

\* Third class by mail.

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway (Detailed in "Index" to Appendix 9).		Railway system.	Serial num- ber.	90	91	92	GOODS.			
Main head.	Sub-head.		GROSS RECEIPTS AND TRAIN-MILE- AGE—concd.				UNITS AND			
			Goods train-miles run (in thousands).		Average goods re- ceipts per train-mile.		Tons of goods carried one mile (in thousands).			
		No.		Rs.		Ton-miles.				
		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.			
<b>5' 6" GAUGE.</b>										
1	(a)	Bengal-Nagpur	2,345	2,140	4.85	4.34	588,957	587,004		
2	(a) to (g)	Bombay, Baroda and Central India	1,337	1,142	8.85	7.94	849,560	254,193		
3	(a)	Eastern Bengal	790	969	4.71	6.91	161,871	201,149		
4	(a) to (d)	East Indian	6,312	5,925	5.39	5.08	1,955,746	1,821,792		
5	(a) to (f)	Great Indian Peninsula	5,547	4,904	5.26	4.79	1,086,718	886,642		
6	(a) and (b)	Madras and Southern Mahratta	939	853	5.85	6.33	179,959	183,259		
7	(a) and (b)	Nizam's Guaranteed State	431	409	5.54	5.06	80,841	72,640		
8	(a) to (i)	North Western	5,605	5,072	5.02	5.23	1,168,597	1,064,152		
9	(a) and (b)	Oudh and Rohilkhand	1,274	1,148	3.88	3.44	180,914	157,947		
10	(a)	South Indian	399	425	4.45	4.50	50,467	59,575		
<b>3' 3 1/2" GAUGE.</b>										
11	(a)	Assam-Bengal	493	491	2.39	2.93	53,869	58,703		
12	(a) and (b)	Bengal and North-Western	1,585	1,313	3.39	3.11	195,187	149,423		
14	(a) and (b)	Bhavnagar	30	75	4.93	3.42	6,907	4,879		
15	(a) and (b)	Burma	2,113	1,801	3.16	2.49	192,044	147,245		
3	(b) to (d)	Eastern Bengal	910	795	3.15	4.37	106,390	95,984		
17	(a) and (b)	Gondal-Porbandar*	72	...	3.64	...	4,851	...		
7	(c)	Hyderabad-Godavari Valley	283	227	4.33	3.60	28,368	20,446		
18	(a)	Jamnagar*	8	8	4.33	3.41	537	362		
19	(a) to (d)	Jodhpur-Bikaner	537	595	2.78	3.01	46,320	51,215		
20	(a)	Junagad	39	30	3.67	2.58	2,000	1,707		
6	(c) to (l)	Madras and Southern Mahratta	2,017	1,898	2.95	2.55	175,016	144,537		
10	(c)	Nilgiri	13	16	6.23	7.76	343	433		
2	(h) to (n)	Rajputana-Malwa	2,090	2,082	3.91	3.89	253,188	251,648		
22	(a) and (b)	Rohilkund and Kumaon	297	211	3.18	3.21	33,616	22,699		
10	(f)	Shoranur-Cochin	43	43	2.51	2.73	3,019	4,054		
10	(b), (d), (e) and (g) to (i)	South Indian	1,312	1,444	3.25	2.83	120,165	121,561		
23	(a)	Udaipur-Chitorgarh	9	14	3.11	3.21	432	527		
<b>2' 6" GAUGE.</b>										
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Ohhindwara Extensions.	193	157	2.40	2.29	12,762	13,232		
8	(f)	Kalka-Simla	64	75	3.66	3.63	1,292	1,544		
8	(h) and (l)	Kohat-Thal and Nowshera-Durgai	37	72	0.50	0.37	1,190	7,123		
10	(f)	Morappur-Dharmapuri	6	8	1.28	0.92	132	178		
1	(g)	Purulia-Banohi	13	20	3.90	3.62	1,598	1,565		
1	(h)	Raipur-Dhamtari	21	15	1.34	1.99	1,157	878		
10	(k)	Tirupattur-Krishnagiri	7	6	1.75	1.70	193	188		

\* Information for 2nd half of 1911 not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

[prepare these statistics.]

98		94		95		96		97		98		99		Num- ber.
TRAFFIC—contd.														
UNIT MILEAGE.				VEHICLES AND VEHICLE MILEAGE.										
Average num received for carrying a ton one mile.		Average number of tons in a train.		Number of goods vehicles hauled one mile (in thousands.)								Average number of vehicles in a goods train.		Main head.
Pics.		Tons.		Loaded.		Empty.		Brake vans.		Total.		Freight Vehicles.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
3-74	3-32	249-08	250-00	46,704	45,955	25,767	25,118	3,335	3,071	75,806	74,144	30-91	32-21	1
6-20	6-26	261-51	228-51	34,044	29,251	10,808	12,268	1,635	1,510	46,574	43,636	33-63	36-67	2
5-01	6-52	180-62	208-44	18,641	24,941	4,168	10,298	735	907	23,544	36,146	31-24	35-61	3
3-29	3-17	314-82	307-43	156,295	142,080	83,220	80,654	6,727	6,436	246,242	229,170	38-56	37-59	4
5-15	4-28	195-91	194-97	102,685	87,845	88,706	29,596	9,898	8,490	151,889	125,781	28-49	24-40	5
6-18	5-66	181-92	214-74	20,213	18,737	8,094	5,980	1,938	1,614	30,240	26,331	28-62	28-00	6
5-63	5-47	176-40	175-83	6,681	6,182	3,670	3,658	834	779	11,185	10,560	22-59	23-70	7
4-02	4-78	283-50	300-80	133,597	114,887	44,112	33,650	4,774	4,881	172,483	157,868	30-22	30-17	8
5-25	4-80	141-95	137-59	22,593	19,882	9,696	7,111	1,219	973	32,513	28,965	24-55	22-64	9
6-78	6-16	126-39	140-34	6,134	6,632	1,862	1,862	658	665	8,654	9,159	20-02	20-01	10
4-19	4-71	109-30	119-62	5,764	6,624	1,956	2,203	409	454	8,129	9,281	15-66	17-99	11
5-36	5-24	116-84	118-82	35,173	27,429	13,712	10,288	2,625	2,266	51,520	39,953	30-25	28-69	12
10-23	10-16	86-20	84-60	1,595	1,246	589	765	65	51	2,248	2,063	27-24	26-63	13
6-27	5-63	90-88	81-75	32,103	26,633	14,669	10,986	2,836	2,623	40,808	40,247	32-22	28-63	14
5-49	7-75	110-30	130-78	18,538	19,162	5,751	5,213	932	793	25,221	25,168	30-69	30-67	15
10-40	...	67-18	...	1,186	...	444	...	43	...	1,673	...	22-57	...	17
3-29	7-69	91-82	79-22	4,594	3,677	1,262	1,338	545	413	6,401	5,428	18-85	19-43	7
2-27	14-39	67-23	43-32	124	91	24	45	...	...	148	137	18-53	17-20	18
6-26	6-34	85-18	91-07	9,221	10,377	5,057	5,850	1,104	1,071	16,082	17,798	26-40	28-10	19
10-15	8-64	69-59	37-28	596	470	296	310	24	12	896	822	30-42	27-17	20
6-34	6-41	86-75	76-34	33,849	30,060	8,812	9,453	2,763	2,679	45,454	42,197	31-16	29-87	6
6-00	56-57	18-84	26-34	86	90	26	12	1	1	110	103	3-09	6-21	10
6-20	6-18	121-15	120-85	46,634	45,168	16,919	17,128	1,316	1,397	64,769	64,193	30-12	29-22	2
5-37	5-67	113-75	106-74	5,495	3,853	2,771	1,693	454	364	8,720	5,915	37-80	26-30	22
6-25	6-38	70-34	83-81	707	796	229	334	62	74	998	1,204	21-81	23-36	10
6-22	6-46	91-37	84-21	21,564	22,806	8,967	10,079	1,895	1,969	32,426	34,635	23-26	22-63	10
12-23	16-50	50-20	37-38	153	154	76	99	...	...	227	253	23-69	17-22	23
6-44	5-18	71-32	84-99	3,021	2,603	1,354	1,352	396	228	4,771	4,178	22-74	25-22	1
24-62	33-72	20-28	20-67	295	463	160	137	57	63	322	668	7-45	8-03	8
7-03	8-19	13-71	15-70	598	537	212	176	122	114	912	837	9-36	9-96	5
11-39	8-16	21-33	21-58	36	59	18	21	4	5	53	76	7-97	8-63	19
8-43	8-22	28-25	78-79	391	371	99	118	8	13	489	501	26-39	24-59	1
6-49	6-73	54-34	56-64	302	236	166	96	7	10	475	242	22-02	21-44	1
12-23	10-75	27-54	30-41	67	66	11	10	5	3	83	79	11-20	12-24	10

## Analysis of working of each railway system

[Note.—Railways not-shown do not

Classification No. of Railway (Detailed in "Index" to Appendix 9.)		Serial num- ber.	100	101	102	GOODS		
Main head.	Sub-head.	Railway system.	Average number of vehicles in a goods train.—concl'd.				Average earn- ings per goods vehicle per mile % (excluding brakes).	
			Brake-vans.		Total.		Pies.	
			No.		No.		Pies.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur	1.42	1.43	32.33	34.64	20.11	25.13
2	(a) to (g)	Bombay, Baroda and Central India	1.23	1.33	34.84	38.20	54.37	41.37
3	(a)	Eastern Bengal	1.01	0.92	32.25	36.56	28.96	37.23
4	(a) to (d)	East Indian	1.09	1.09	39.64	38.63	26.53	25.94
5	(a) to (f)	Great-Indian Peninsula	1.78	1.77	27.27	26.17	39.60	37.01
6	(a) and (b)	Madras and Southern Mahratta	1.95	1.89	30.57	30.85	39.26	41.95
7	(a) and (b)	Nizam's Guaranteed State	1.82	1.88	24.41	25.58	44.35	49.58
8	(a) to (i)	North Western	0.85	0.85	30.77	31.12	32.21	33.25
9	(a) and (b)	Oudh and Rohilkhand	0.96	0.85	25.51	23.49	30.38	29.19
10	(a)	South Indian	1.03	1.57	21.67	21.58	42.66	43.22
<b>3' 3 1/2" GAUGE.</b>								
11	(a)	Assam-Bengal	0.89	0.92	16.49	18.91	29.20	31.34
12	(a) and (b)	Bengal and North-Western	1.66	1.74	32.51	20.43	21.07	20.80
14	(a) and (b)	Bhavnagar	0.82	0.68	28.06	27.96	34.74	24.62
15	(a) and (b)	Burma	1.34	1.46	23.57	22.34	27.26	22.05
3	(b) to (d)	Eastern Bengal	1.02	1.00	27.71	31.67	22.68	30.50
17	(a) and (b)	Gondal-Forbandar*	0.59	...	23.16	...	30.96	...
7	(c)	Hyderabad-Godavari Valley	1.75	1.60	20.60	21.03	40.62	31.14
18	(a)	Jamnagar	...	...	18.53	17.20	41.87	38.08
19	(a) to (d)	Jodhpur-Bikaner	1.95	1.80	28.35	29.90	20.20	20.54
20	(a)	Junagad	0.85	0.40	31.27	27.57	23.15	18.21
6	(c) to (l)	Madras and Southern Mahratta	1.37	1.42	22.53	22.29	26.60	23.45
10	(c)	Nilgiri	0.08	0.04	6.02	6.25	201.18	239.89
2	(h) to (n)	Rajputana-Malwa	0.87	0.91	30.99	30.83	24.92	24.95
22	(a) and (b)	Rohilkund and Kumaon	1.59	1.73	29.33	28.09	21.98	23.38
10	(f)	Shoranur-Cochin	1.45	1.58	23.26	24.89	23.11	22.83
10	(b), (d), (e) and (g) to (i)	South Indian	1.44	1.36	24.70	23.99	26.83	24.04
23	(a)	Udaipur-Chitorgarh	...	...	23.89	17.92	41.09	34.43
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Chhindwara Extensions.	2.08	1.42	24.80	26.64	20.26	17.46
8	(j)	Kalka-Simla	0.90	0.84	8.35	8.37	94.28	86.80
8	(k) and (l)	Kohat-Thal and Nowshera-Durgai	1.32	1.60	10.88	11.56	10.33	12.90
10	(j)	Morappur-Dharmapuri	0.67	0.62	8.64	9.25	30.83	20.41
1	(g)	Purnia-Banohi	0.43	0.61	27.02	25.20	28.14	28.27
1	(h)	Raipur-Dhamtari	0.36	0.61	22.88	22.05	18.08	17.78
10	(k)	Tirupattur-Krishnagiri	0.66	0.44	11.86	12.68	30.07	26.70

\* Information for 2nd half of 1911 not furnished.

**DIX 11—continued.**  
*during each half of the calendar year 1911.*  
 [prepare these statistics.]

108		104		108		108		107		108		100		NUM- BER.	
TRAFFIC—continued.															Main head.
VEHICLE MILEAGE—concluded.								WEIGHT OF TRAIN AND TON-MILEAGE.							
Carrying capacity hauled one mile (excluding brakes) (in thousands). Tons.		Percentage of freight upon capacity hauled. Per cent.		Average load of a goods vehicle (including both loaded and empty). Tons.		Average load of a loaded goods vehicle. Tons.		Gross ton-mileage of all goods trains (in thousands).							
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	Freight. Ton-Miles.		Dead-weight. Ton-Miles.		Total. Ton Miles.			
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.		
1,182,964	1,182,716	49.89	48.59	8.08	7.58	12.50	11.69	533,957	537,004	771,042	743,850	1,354,999	1,280,854	1	
723,329	686,014	48.38	37.05	7.79	6.04	10.27	8.32	349,560	254,193	476,377	433,713	825,937	692,908	2	
338,218	384,625	38.99	37.62	5.78	5.71	7.07	8.07	181,871	201,149	248,192	268,032	377,003	569,501	3	
3,888,721	3,623,724	50.29	50.27	8.17	8.18	12.51	12.32	1,955,746	1,621,732	2,399,751	2,241,783	4,365,496	4,063,575	4	
2,164,636	1,976,908	50.20	47.36	7.69	7.58	10.78	10.14	1,036,718	883,642	1,659,535	1,432,398	2,737,358	2,331,040	5	
434,575	379,843	41.41	43.35	6.36	7.41	8.90	9.78	179,959	163,259	316,636	267,026	493,597	470,237	6	
172,654	162,096	46.82	44.57	7.81	7.42	12.10	11.85	80,841	72,040	118,203	111,704	199,104	184,944	7	
2,929,393	2,727,312	39.89	39.02	6.97	6.95	9.46	9.90	1,168,697	1,064,132	1,795,281	1,650,497	2,963,878	2,714,640	8	
476,526	397,033	37.97	39.78	5.78	6.08	8.01	8.36	180,914	157,047	374,123	316,114	555,036	474,001	9	
119,733	127,425	42.73	46.75	6.31	7.01	8.23	8.98	50,483	59,575	92,610	96,231	143,073	157,826	10	
78,258	88,216	68.75	66.54	6.98	6.65	9.35	8.66	53,869	53,708	62,769	69,398	116,638	126,101	11	
498,178	384,516	37.17	38.66	3.79	3.97	5.27	5.45	185,187	149,423	206,733	211,960	453,950	361,383	12	
17,504	16,413	39.46	29.67	3.16	2.42	4.33	3.91	6,907	4,870	11,686	10,864	18,843	15,231	14	
419,928	322,500	45.78	45.66	4.09	3.91	5.98	5.53	192,044	147,245	336,173	265,495	528,217	412,740	15	
233,315	249,969	42.12	39.83	4.13	3.94	5.41	5.01	100,390	95,984	170,952	162,578	271,532	256,562	16	
13,519	...	35.89	...	2.98	...	4.09	...	4,853	...	8,896	...	12,748	...	17	
64,213	53,936	44.18	37.91	4.84	4.08	6.18	5.56	28,368	20,446	40,024	33,404	68,392	53,850	18	
1,074	1,001	49.98	36.91	3.63	2.65	4.33	3.98	536	363	941	899	1,477	1,292	19	
131,577	149,198	36.72	36.34	3.23	3.24	4.67	4.93	48,920	54,215	87,326	96,731	135,646	160,966	20	
6,660	6,123	30.02	27.88	2.29	2.11	3.41	3.63	2,000	1,797	4,067	4,067	6,067	5,714	21	
331,301	306,706	52.83	47.13	4.10	3.66	5.17	4.81	175,018	144,537	287,781	249,109	442,799	393,646	22	
1,099	1,027	31.25	42.15	3.14	4.24	3.98	4.83	343	433	1,074	1,004	1,417	1,437	23	
563,429	560,180	44.94	44.92	4.03	4.04	5.43	5.57	253,198	251,648	334,955	335,601	538,148	537,249	24	
103,456	70,724	32.69	32.38	4.09	4.13	6.15	6.94	33,816	22,899	57,037	39,782	80,853	63,682	25	
8,662	10,623	34.86	38.17	3.23	3.59	4.27	5.09	3,020	4,054	5,845	6,964	8,855	11,018	26	
243,295	274,444	48.40	44.29	3.94	3.72	5.57	5.38	120,166	121,561	189,797	213,897	309,068	334,958	27	
1,985	2,063	24.26	25.55	2.12	2.03	3.16	3.43	433	523	1,261	1,449	1,74	1,977	28	
35,699	32,256	38.55	41.33	3.15	3.87	4.55	5.12	13,763	13,332	28,818	24,365	42,530	37,717	29	
4,684	5,313	31.64	29.07	2.73	2.57	4.33	3.34	1,232	1,544	4,322	4,757	5,835	6,301	30	
3,628	3,186	32.84	35.25	1.47	1.58	1.99	2.09	1,190	1,123	3,789	3,290	4,979	4,353	31	
299	346	53.50	51.29	2.71	2.50	3.71	3.55	133	178	330	325	513	703	32	
4,159	4,218	38.43	37.11	3.33	3.20	4.09	4.22	1,598	1,565	2,650	2,791	4,248	4,356	33	
2,552	1,815	46.35	46.38	2.46	2.64	3.34	3.72	1,157	873	1,533	1,169	2,690	1,987	34	
383	370	50.45	50.95	2.46	2.48	2.87	2.88	193	188	504	460	697	643	35	



## APPEN

### Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9).		Serial num- ber.	110		111		112	
Main head.	Sub-head.		GOODS					
Railway system.			WEIGHT OF TRAIN AND TON-MILEAGE— <i>condd.</i>					
			Average weight of a goods train.					
			Freight.		Dead-weight.		Total.	
			Tons.		Tons.		Tons.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>								
1	(n)	Bengal-Nagpur	249.02	250.90	328.79	347.54	577.81	598.44
2	(a) to (g)	Bombay, Baroda and Central India	261.51	222.51	356.39	384.03	617.90	606.54
3	(a)	Eastern Bengal	180.63	203.44	335.84	372.24	516.46	575.68
4	(a) to (d)	East Indian	314.82	307.43	386.30	373.35	701.12	685.78
5	(a) to (f)	Great Indian Peninsula	195.91	184.97	297.56	298.15	493.47	483.13
6	(a) and (b)	Madras and Southern Mahratta	181.02	214.74	322.12	336.34	504.04	551.08
7	(a) and (b)	Nizam's Guaranteed State	178.40	175.88	262.70	271.21	430.10	447.04
8	(a) to (i)	North Western	203.50	209.80	320.32	325.40	528.82	535.20
9	(a) and (b)	Oudh and Rohilkhand	141.95	137.58	293.54	275.35	435.49	412.93
10	(a)	South Indian	126.39	140.84	231.94	231.45	358.33	371.79
<b>3' 3 1/2" GAUGE.</b>								
11	(n)	Assam-Bengal	109.30	119.62	127.36	141.41	236.66	261.03
12	(a) and (b)	Bengal and North-Western	116.84	118.82	169.55	161.46	286.39	275.28
14	(a) and (b)	Bhavnagar	86.21	64.60	141.49	187.48	227.70	203.08
15	(a) and (b)	Burma	90.33	81.75	159.09	147.49	249.97	220.15
3	(b) to (d)	Eastern Bengal	110.30	120.79	187.81	204.57	295.14	325.36
17	(a) and (b)	Gondal-Porbandar*	67.18	...	123.19	...	190.37	...
7	(c)	Hyderabad Godavari Valley	91.32	79.23	132.69	131.57	224.01	213.60
18	(a)	Jamnagar	67.23	45.53	117.86	112.96	195.09	153.43
19	(a) to (d)	Jodhpur-Bikaner	85.18	91.07	133.93	162.51	239.11	253.53
20	(a)	Junagad	69.59	57.28	141.56	131.41	211.15	191.69
6	(c) to (i)	Madras and Southern Mahratta.	86.75	76.34	132.74	131.57	219.49	207.91
10	(c)	Nilgiri	13.84	26.34	58.97	61.12	77.81	87.46
2	(h) to (n)	Rajputana-Malwa	121.15	120.85	160.27	161.17	281.42	282.03
22	(a) and (b)	Rohilkund and Kumaon	113.75	108.74	191.86	188.91	305.61	297.65
10	(f)	Shoranur-Cochin.	70.31	83.81	136.65	142.96	206.99	227.77
10	(b), (d), (e) and (g) to (i)	South Indian	91.37	84.21	144.63	147.33	236.19	233.04
23	(a)	Udaipur-Chitorgarh	50.36	37.43	132.33	102.76	183.84	146.19
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Chhindwara Extensions	71.52	84.99	149.77	155.45	231.29	240.44
8	(j)	Kalka-Simla	20.23	20.67	72.07	63.67	92.35	81.34
3	(k) and (l)	Kohat-Thal and Nowshera-Durgai	13.74	15.70	43.74	45.13	57.48	60.33
10	(j)	Morapur-Dharmapuri	21.33	21.53	61.96	63.33	83.54	85.41
1	(g)	Purulia-Banchi	83.25	73.79	143.23	140.48	234.53	219.27
1	(h)	Baipur-Dhantari	54.54	53.64	72.23	71.56	126.77	123.20
10	(k)	Tirupattur-Krishnagiri	27.34	30.41	71.73	71.21	99.32	104.65

\* Information for 2nd half of 1911 not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

[prepare these statistics.]

113		114		115		115 A		116		117		118		Num- BER.	
TRAFFIC—concluded.															
COST OF WORKING AND PROFITS.															
Average cost of hauling a goods train one mile.		Average cost of hauling a goods vehicle with its load one mile.		Average cost of hauling a goods unit (viz., one ton) one mile.		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.		Average profit on working a goods train one mile.		Average profit on working a goods vehicle with its load one mile.		Average profit on working a goods unit, (viz., one ton) one mile.		Main head.	
Rs.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Rs.	Pies.	Pies.	Pies.	Pies.	Pies.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
2.42	2.28	15.01	13.19	1.86	1.75	3.70	3.70	2.43	2.06	15.10	11.93	1.68	1.87	1	
3.65	3.59	20.84	18.71	2.63	3.10	4.46	5.29	5.20	4.85	29.73	22.66	3.62	3.76	2	
3.54	3.61	21.76	19.48	3.76	3.41	6.30	5.72	1.17	3.30	7.20	17.74	1.25	3.11	3	
2.20	2.15	10.97	11.00	1.34	1.35	2.49	2.56	3.19	2.93	15.86	14.94	1.95	1.82	4	
2.63	2.61	19.31	20.53	2.53	2.71	4.23	4.60	2.63	2.09	19.79	16.49	3.57	2.17	5	
3.12	3.59	20.94	23.77	3.29	3.21	6.15	5.93	2.73	2.74	18.32	16.13	2.89	2.45	6	
2.91	2.38	23.27	18.98	2.98	2.55	5.07	4.82	2.68	2.70	21.08	21.65	2.70	2.92	7	
3.05	3.14	19.53	19.93	2.81	2.87	4.95	5.12	1.97	2.09	12.63	13.27	1.61	1.91	8	
1.87	1.95	14.65	16.83	2.53	2.72	5.30	5.67	2.01	1.49	15.73	12.66	2.72	2.03	9	
1.87	1.87	17.94	18.99	2.84	2.28	6.89	5.31	2.53	2.93	24.72	27.23	3.92	3.83	10	
3.54	2.49	31.10	28.59	4.46	4.00	8.30	3.17	-0.15	0.44	-1.34	4.75	-0.27	0.71	11	
1.33	1.46	3.03	9.76	2.12	2.46	4.45	5.03	2.10	1.65	13.04	11.04	3.44	2.73	12	
1.59	1.76	11.20	12.70	3.54	3.24	6.63	9.59	3.34	1.68	23.54	11.92	7.44	4.92	14	
2.05	2.14	17.70	19.63	4.33	5.03	7.37	8.66	1.11	0.28	9.56	2.35	2.34	0.60	15	
2.71	2.48	19.52	18.51	4.72	3.94	7.31	7.09	0.44	3.39	3.16	14.99	0.77	3.31	8	
1.59	...	13.53	...	4.54	...	7.32	...	2.05	...	17.44	...	5.83	...	17	
1.92	2.56	17.79	23.33	3.67	5.43	6.55	8.99	2.46	1.04	22.33	3.31	4.72	2.21	7	
1.85	1.93	19.16	21.59	5.23	6.16	10.31	15.23	2.43	1.43	25.71	16.49	7.09	6.23	13	
1.24	1.47	9.04	10.04	2.30	3.10	4.49	4.70	1.54	1.34	11.16	10.50	3.46	3.24	19	
1.87	1.73	11.63	12.57	5.17	5.96	10.27	11.94	1.30	0.30	11.32	5.64	4.25	2.63	20	
1.68	1.79	15.22	16.45	3.71	4.50	6.77	7.99	1.27	0.76	11.53	7.00	2.63	1.91	6	
3.49	4.29	111.72	132.57	35.54	31.23	74.63	62.64	2.79	3.47	69.46	107.32	26.46	25.31	10	
2.02	2.07	12.85	13.26	3.20	3.23	5.30	5.35	1.39	1.32	12.07	11.69	3.00	2.90	2	
1.73	1.30	11.91	13.34	2.21	3.33	5.57	6.79	1.45	1.31	16.65	9.54	2.46	2.32	22	
1.55	1.93	13.65	15.85	4.23	4.42	5.53	3.94	0.96	0.35	3.43	7.03	2.62	1.36	10	
1.30	1.77	14.34	15.03	3.77	4.04	5.96	6.23	1.45	1.06	11.99	9.01	3.05	2.42	10	
1.94	1.17	15.60	12.57	7.34	6.03	23.34	25.29	3.17	2.04	25.49	21.86	11.99	10.47	23	
1.88	2.12	15.25	16.16	5.04	4.30	21.29	10.69	0.52	0.17	4.41	1.30	1.40	0.33	1	
3.06	3.33	73.94	79.54	23.99	30.90	63.41	65.17	0.60	0.30	15.24	7.26	5.63	2.32	3	
1.23	1.42	25.24	27.41	17.19	17.40	29.71	30.17	-0.73	-0.75	-14.91	-14.51	-10.16	-9.21	3	
0.90	0.93	21.66	20.63	3.00	3.23	16.66	16.27	0.33	-0.01	2.17	-0.23	3.29	-0.09	10	
1.54	1.50	11.13	11.71	3.35	3.65	3.29	3.05	2.36	2.12	17.01	16.56	5.13	5.17	1	
1.40	1.73	12.22	13.93	4.93	6.03	9.13	11.22	0.44	0.21	3.36	1.33	1.56	0.70	1	
1.16	1.34	19.95	21.04	3.11	3.47	13.24	17.90	0.59	0.33	10.12	5.66	4.12	2.23	10	

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway (Detailed in "Index" to Appendix 9.)		Serial num- ber.	119	120	121	DETAILED		
Main head.	Sub-head.	Railway system.	Percentage to total					
			Coaching traffic.		Goods traffic.		Sundries in- cluding tele- graph.	
			Per cent.		Per cent.		Per cent.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur	29.78	33.74	66.41	62.92	3.54	3.07
2	(a) to (g)	Bombay, Baroda and Central India	31.66	38.94	67.10	59.95	1.24	1.11
3	(a)	Eastern Bengal	47.16	34.65	47.58	62.72	5.26	2.63
4	(a) to (d)	East Indian	30.33	33.74	68.43	64.22	0.98	1.35
5	(a) to (f)	Great Indian Peninsula	28.42	35.52	70.52	63.46	1.06	1.02
6	(a) and (b)	Madras and Southern Mahratta	39.93	42.00	57.34	55.57	2.68	2.43
7	(a) and (b)	Nizam's Guaranteed State	21.66	24.14	74.17	73.90	4.17	2.96
8	(a) to (c)	North Western	33.92	38.06	64.34	60.64	1.74	1.30
9	(a) and (b)	Oudh and Rohilkhand	47.52	50.49	44.01	41.30	8.47	8.21
10	(a)	South Indian	39.50	37.40	52.12	53.74	8.33	8.86
<b>3' 3 1/2" GAUGE.</b>								
11	(a)	Assam-Bengal	51.01	43.19	43.50	50.13	5.40	6.63
12	(a) and (b)	Bengal and North-Western	43.40	46.33	43.18	43.02	2.09	2.16
14	(a) and (b)	Bhavnagar	50.00	56.67	44.76	38.68	4.64	4.65
15	(a) and (b)	Burma	41.59	43.87	56.30	43.92	1.76	1.77
3	(b) to (d)	Eastern Bengal	45.67	40.48	44.95	50.60	0.52	0.56
17	(a) and (b)	Gondal-Forbandar*	56.52	...	39.36	...	4.12	...
7	(c)	Hyderabad-Godavari Valley	34.73	41.93	62.72	53.79	2.53	4.23
13	(a)	Jamnagar	71.37	73.50	26.10	23.95	2.53	2.55
19	(a) to (d)	Jodhpur-Bikaner	44.22	43.23	52.65	55.54	2.53	1.43
20	(a)	Junagadh	53.43	60.12	44.02	37.21	2.55	2.67
6	(c) to (b)	Madras and Southern Mahratta	35.66	36.65	62.84	59.34	1.50	2.01
10	(c)	Nilgiri	53.75	47.52	45.79	52.06	0.46	0.42
2	(h) to (n)	Rajputana-Malwa	43.00	42.71	55.06	54.97	1.94	2.32
22	(a) and (b)	Rohilkhand and Kumaon	42.06	43.22	50.21	44.15	7.73	7.63
10	(f)	Shoranur-Cochin	63.29	55.33	36.29	44.32	0.42	0.35
10	(b), (d), (e) and (g) to (i)	South Indian	54.72	55.43	43.93	43.14	1.30	1.33
23	(a)	Udaipur-Chitorgarh	62.63	63.65	33.64	32.40	3.73	0.95
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabalpur-Gondia and Nagpur- Chhindwara Extensions.	43.65	47.74	53.99	50.69	2.36	1.57
3	(f)	Kalka-Simla	53.69	56.33	45.22	42.43	1.09	1.19
3	(h) and (i)	Kohat-Thal and Nowshera-Durgai	72.29	72.16	26.57	26.66	1.14	1.13
10	(f)	Morappur-Dharmapuri	56.86	66.54	42.60	33.01	0.54	0.45
1	(g)	Purnia-Ranohi	63.57	56.69	36.13	42.94	0.30	0.37
1	(h)	Raipur-Dhantari	52.76	52.29	47.03	47.43	0.16	0.23
10	(k)	Tirupattur-Krishnagiri	59.13	69.64	40.64	30.12	0.23	0.24

\* Information for 2nd half of 1911 not furnished.

**DIX 11—continued.**

during each half of the calendar year 1911.

[prepare these statistics.]

122		...		123		124		125		126		127		NUM- BER.
PERCENTAGES OF EARNINGS AND EXPENDITURE.														
Earnings.				Percentage of working expenses on total earnings.										Main head.
Steam-boat earnings.		Total.		Maintenance.		Locomotive expenses.		Carriage and wagon expenses.		Traffic expenses.		General charges.		
Per cent.		Per cent.		Per cent.		Per cent.		Per cent.		Per cent.		Per cent.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
0-27	0-27	100-00	100-00	9-20	10-16	16-60	14-69	5-09	5-62	8-23	9-31	4-73	5-14	1
...	...	100-00	100-00	12-02	11-38	18-36	19-72	3-74	4-36	6-62	7-77	3-53	3-99	2
...	...	100-00	100-00	20-31	18-89	13-41	11-39	4-31	5-16	18-02	13-24	6-30	4-13	3
0-21	0-19	100-00	100-00	8-75	7-54	11-43	12-55	4-93	3-87	8-62	9-45	3-22	3-59	4
...	...	100-00	100-00	12-18	12-54	22-29	24-03	4-06	4-58	8-17	9-41	3-50	4-10	5
...	...	100-00	100-00	10-66	12-19	21-61	21-36	7-29	6-30	6-33	7-41	4-78	5-10	6
...	...	100-00	100-00	23-15	14-76	11-97	16-10	2-53	4-43	5-82	6-45	4-33	5-27	7
...	...	100-00	100-00	18-29	12-65	20-79	22-93	6-40	6-33	9-33	9-93	3-22	3-06	8
...	...	100-00	100-00	10-41	13-27	12-91	15-89	5-71	6-15	9-09	11-06	4-03	4-70	9
...	...	100-00	100-00	8-87	8-9	21-22	19-23	3-46	3-77	6-79	6-81	5-19	4-60	10
...	...	100-00	100-00	28-63	21-94	21-43	19-03	5-44	5-19	14-31	16-02	10-95	10-33	11
6-33	6-19	100-00	100-00	10-44	14-54	9-79	11-31	3-26	3-34	6-44	7-50	3-87	4-03	12
...	...	100-00	100-00	8-26	11-36	10-33	12-29	1-40	2-74	6-87	10-02	5-50	7-65	14
0-25	0-24	100-00	100-00	18-53	22-27	17-51	22-42	5-22	3-23	7-39	10-53	5-50	7-40	15
8-86	8-36	100-00	100-00	16-43	13-23	20-37	12-70	10-86	3-99	10-91	9-96	5-40	3-99	3
...	...	100-00	...	10-83	...	16-23	...	1-99	...	6-99	...	8-70	...	17
...	...	100-00	100-00	17-25	34-52	13-10	17-05	2-41	3-20	8-21	11-41	7-64	10-40	7
...	...	100-00	100-00	10-33	14-97	16-23	16-43	3-24	4-87	5-64	10-72	7-68	11-39	13
...	...	100-00	100-00	7-93	9-03	15-45	17-37	2-73	3-60	5-62	5-21	3-57	3-39	19
...	...	100-00	100-00	12-31	11-05	14-33	15-69	2-26	1-22	7-61	9-20	7-92	14-17	20
...	...	100-00	100-00	11-52	16-77	21-90	24-69	3-43	6-80	7-09	8-39	5-99	6-73	6
...	...	100-00	100-00	13-95	13-24	39-26	46-89	3-71	3-41	7-75	6-78	4-86	4-95	10
...	...	100-00	100-00	10-43	10-85	19-32	19-39	4-87	5-15	8-55	9-36	4-74	5-02	2
...	...	100-00	100-00	12-50	11-71	12-43	13-26	4-25	4-62	7-65	9-63	5-62	7-80	22
...	...	100-00	100-00	8-23	16-32	19-14	20-27	3-59	4-02	7-73	7-89	5-56	5-49	10
...	...	100-00	100-00	9-19	11-83	17-93	19-32	6-10	5-49	7-85	8-05	5-56	5-68	10
...	...	100-00	100-00	12-34	13-97	12-13	13-61	3-85	3-12	7-32	8-02	5-92	5-39	23
...	...	100-00	100-00	19-31	24-36	21-55	26-53	4-90	5-26	12-08	14-72	9-37	12-85	1
...	...	100-00	100-00	5-55	21-04	20-74	20-89	24-62	13-27	13-04	10-11	4-59	3-39	3
...	...	100-00	100-00	29-92	54-53	51-89	35-21	5-32	5-67	32-22	13-69	17-33	13-73	3
...	...	100-00	100-00	31-60	29-73	48-63	45-61	3-97	5-73	8-77	7-22	5-06	5-55	10
...	...	100-00	100-00	11-53	13-71	13-42	15-61	3-39	3-02	3-23	7-06	3-49	7-53	1
...	...	100-00	100-00	10-35	19-43	19-09	13-02	4-22	5-73	6-64	8-13	3-62	11-73	1
...	...	100-00	100-00	23-69	29-13	23-69	28-87	2-43	3-14	6-31	5-71	4-41	4-39	10

\* Includes 3-02 per cent in the 1st half and 3-87 per cent in the 2nd half, on account of Jetty expenses.

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway (Detailed in "Index" to Appendix 9.)		Serial num- ber.	128		129		130	
Main head.	Sub-head.		RAILWAY SYSTEM.					
			DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE—concl'd.					
			Percentage of working expenses on total earnings—concl'd.					
			Miscellaneous expenses.		Steam-boat expenses.		Total working expenses.	
			Per cent.		Per cent.		Per cent.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur . . . . .	8.47	8.51	1.16	1.31	48.48	50.04
2	(a) to (g)	Bombay, Baroda and Central India . . . . .	2.30	4.29	...	...	46.77	51.51
3	(a)	Eastern Bengal . . . . .	3.81	2.95	...	...	71.68	56.25
4	(a) to (d)	East Indian . . . . .	1.98	2.07	0.21	0.17	39.14	39.24
5	(a) to (f)	Great Indian Peninsula . . . . .	3.16	2.69	...	...	53.86	57.55
6	(a) and (b)	Madras and Southern Mahratta . . . . .	2.10	3.85	...	...	52.97	56.44
7	(a) and (b)	Nizam's Guaranteed State . . . . .	2.64	2.98	...	...	55.48	49.39
8	(a) to (i)	North-Western . . . . .	1.53	2.32	0.01	0.01	59.57	58.88
9	(a) and (b)	Oudh and Rohilkhand . . . . .	2.47	3.12	...	...	44.67	53.19
10	(a)	South Indian . . . . .	1.45	0.24	...	...	46.98	49.62
<b>3' 3 1/2" GAUGE.</b>								
11	(a)	Assam-Bengal . . . . .	2.60	2.47	0.03	0.49	83.97	75.48
12	(a) and (b)	Bengal and North-Western . . . . .	1.09	1.90	2.18	2.76	37.07	45.98
14	(a) and (b)	Bhavnagar . . . . .	1.01	1.46	...	...	33.86	45.52
15	(a) and (b)	Burma . . . . .	1.95	2.18	0.96	1.30	57.62	75.26
3	(b) to (d)	Eastern Bengal . . . . .	2.37	1.72	3.13	6.68	74.72	52.27
17	(a) and (b)	Gondal-Forbander* . . . . .	2.05	...	...	...	46.86	...
7	(c)	Hyderabad-Godavari Valley . . . . .	1.09	2.37	...	...	49.70	79.04
18	(a)	Jamnagar . . . . .	2.39	3.08	...	...	44.59	61.31
19	(a) to (d)	Jodhpur-Bikaner . . . . .	4.24	4.51	...	...	39.64	44.01
20	(a)	Junagad . . . . .	5.56	5.97	...	...	50.62	57.27
6	(c) to (i)	Madras and Southern Mahratta . . . . .	1.60	3.24	...	...	58.53	68.14
10	(c)	Nilgiri . . . . .	1.17	2.22	...	...	70.70	79.01
2	(h) to (n)	Rajputana-Malwa . . . . .	1.60	2.76	...	...	49.56	52.53
22	(a) and (b)	Rohilkhand and Kumaon . . . . .	0.66	0.81	...	...	43.66	47.63
10	(f)	Shoranur-Cochin . . . . .	2.78	2.38	...	...	47.03	56.36
10	(b), (d), (e) and (g) to (i)	South Indian . . . . .	2.33	2.66	...	...	48.85	53.53
23	(a)	Udaipur-Chitorgarh . . . . .	3.36	2.76	...	...	45.27	46.87
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Ohhindwara Extensions . . . . .	1.46	2.32	...	...	69.17	86.54
3	(f)	Kalka-Simla . . . . .	2.34	1.92	...	...	70.83	70.62
3	(k) and (l)	Kohat-Thal and Nowshera-Durgai . . . . .	3.94	3.90	...	...	144.61	131.33
10	(f)	Morappur-Dharmapuri . . . . .	1.63	0.75	...	...	105.71	95.24
1	(g)	Purnia-Ranohi . . . . .	0.61	0.89	...	...	42.71	50.06
1	(h)	Rajpur-Dhamtari . . . . .	0.49	0.78	...	...	49.81	63.92
10	(k)	Tirupattur-Krishnagiri . . . . .	0.93	0.65	...	...	73.62	70.89

\* Information for 2nd half of 1911 not furnished.

**DIX 11—continued.**

during each half of the calendar year 1911.

prepare these statistics.]

181a		182a		183a		184a		185a		185Aa		186a		187a		Number.	Main head.
TABLE A.—MAINTENANCE OF WAY, WORKS AND STATIONS.																	
PER MILE OF LINE MAINTAINED.																	
General Superintendence (including office expenses.)		Maintenance and renewal of permanent-way.		Repairs of bridges, etc.		Conservancy of rivers.		Repairs of stations and buildings.		Electricity and repairs and renewals of electric plant.		Other charges (net).		Total Maintenance, etc.			
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.			
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.		
192-04	178-88	306-72	231-06	156-04	214-51	...	...	197-43	122-42	4-37	...	69-48	64-98	355-08	310-75	1	
181-78	192-20	1,023-07	937-36	414-85	159-56	...	...	183-84	142-40	0-28	1-11	48-69	40-10	1,512-59	1,472-73	2	
418-02	413-53	1,542-17	2,271-40	191-44	485-47	1-22	0-49	509-60	538-17	...	...	216-86	338-91	2,871-31	4,017-99	3	
240-54	248-42	817-44	567-49	150-62	160-71	...	...	329-75	234-37	...	...	160-28	165-97	1,696-68	1,392-46	4	
203-62	206-60	780-16	819-62	358-08	215-08	...	...	240-95	207-91	...	...	125-23	92-48	1,737-99	1,341-64	5	
201-75	195-01	490-68	557-06	167-96	181-45	...	...	116-57	151-54	...	...	56-74	51-40	1,038-79	1,186-55	6	
196-61	209-61	2,184-39	774-63	45-27	13-45	...	...	60-27	46-39	...	...	102-39	159-22	2,587-06	1,194-35	7	
178-63	176-08	691-51	488-29	238-33	77-12	7-83	6-64	261-12	251-83	...	...	203-28	208-02	1,827-70	1,207-98	8	
137-15	152-38	824-21	453-01	130-52	55-48	16-02	21-54	93-02	81-59	...	...	100-21	96-55	921-13	802-55	9	
151-36	144-54	330-00	398-17	67-61	67-71	...	...	59-75	49-66	...	...	49-16	64-57	67-68	715-65	10	
165-60	165-57	526-25	420-32	158-28	72-59	...	...	114-59	76-17	...	...	45-60	61-15	990-21	797-71	11	
78-15	89-35	267-53	276-78	130-04	119-81	0-23	2-33	29-21	48-30	...	...	42-60	126-67	567-76	663-43	12	
101-98	45-92	305-85	328-76	9-42	11-95	...	...	22-36	22-56	...	...	21-63	40-59	461-21	449-78	13	
172-36	173-62	595-06	701-11	209-38	121-49	1-26	1-31	333-69	170-12	...	...	68-26	118-10	1,441-29	1,385-75	14	
150-33	126-77	395-78	432-38	164-98	144-37	0-93	...	192-84	124-79	...	...	122-94	113-61	967-89	936-62	15	
91-91	...	284-75	...	3-82	...	...	...	18-78	...	...	...	22-49	...	378-15	...	16	
139-53	157-76	595-80	944-93	39-81	125-25	...	...	51-47	48-03	...	...	53-26	72-16	871-57	1,343-18	17	
30-31	53-52	181-40	162-78	1-25	2-64	...	...	4-98	12-94	...	...	15-68	31-38	258-60	318-26	18	
21-97	21-52	197-45	209-04	1-76	3-28	...	...	7-68	21-67	...	...	7-26	18-10	266-23	269-79	19	
88-78	67-74	278-83	183-40	6-27	3-47	...	...	11-24	4-14	...	...	21-10	7-72	405-07	258-47	20	
36-84	39-78	233-39	401-68	20-59	69-15	...	...	61-73	50-39	...	...	39-23	41-20	322-34	652-80	21	
229-21	274-14	677-62	592-61	148-75	127-14	...	...	124-28	115-02	...	...	25-76	10-26	1,268-88	1,119-89	22	
104-66	104-68	434-55	458-75	60-60	21-95	...	...	76-43	81-99	0-71	...	39-51	57-43	716-46	724-83	23	
39-24	92-90	254-06	178-07	113-28	94-49	2-52	0-01	36-73	23-71	...	...	13-21	22-28	513-03	411-80	24	
Included with the South Indian railway, S's gauge.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10.
182-39	172-22	409-03	550-76	92-91	148-92	...	...	59-15	55-31	...	...	35-68	79-19	779-41	1,000-40	25	
40-49	37-64	190-76	215-87	7-31	15-38	...	...	30-98	12-78	...	...	6-63	9-42	275-17	200-49	26	
95-09	103-37	153-83	155-42	39-51	53-77	...	...	33-91	20-54	...	...	9-07	14-48	336-35	347-58	1	
379-59	368-27	520-26	762-35	871-46	512-01	...	0-01	228-32	579-73	...	...	326-26	233-63	477-06	2,243-97	2	
137-61	152-94	77-51	639-02	74-36	71-67	...	0-02	97-28	50-49	...	...	73-74	46-25	481-00	961-25	3	
99-68	96-80	184-89	242-04	1-56	14-20	...	...	7-88	6-53	...	...	20-56	7-44	314-57	367-51	10	
81-84	94-06	147-63	158-52	34-93	14-65	...	...	31-29	26-47	...	...	14-01	23-21	349-70	315-91	1	
28-16	19-67	67-51	187-33	46-26	22-95	...	...	13-38	7-26	...	...	2-79	33-03	159-54	221-79	1	
79-91	77-94	178-68	168-04	31-26	121-71	...	...	8-11	18-75	...	...	0-63	6-54	319-59	367-93	10	

**APPEN**  
*Analysis of working of each railway system*  
 [Note—Railways not shown do not

Classification No of Railway. (Detailed in "Index" to Appendix B).		Serial num- ber.	TABLE A.— PER MILE							
Main head.	Sub-head.		Railway system.		General Super- tendence (including office expenses).		Maintenance and renewal of permanent-way.		Repairs of bridges, etc.	
			Rs.		Rs.		Rs.			
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>										
1	(a)		Bengal-Nagpur	144.26	140.83	243.06	182.42	123.65	109.26	
2	(a) to (g)		Bombay, Baroda and Central India	135.78	135.71	724.33	661.36	293.71	112.67	
3	(a)		Eastern Bengal	241.92	236.49	390.27	1,298.94	104.75	240.02	
4	(a) to (d)		East Indian	148.24	149.47	303.78	349.46	92.82	93.69	
5	(a) to (f)		Great Indian Peninsula	140.69	141.94	539.03	563.10	269.09	147.76	
6	(a) and (b)		Madras and Southern Mahratta	151.66	156.24	393.18	446.29	194.59	145.37	
7	(a) and (b)		Nizam's Guaranteed State	171.73	185.92	1,937.99	667.16	40.16	11.93	
8	(a) to (i)		North Western	126.66	125.74	693.15	348.71	202.64	55.07	
9	(a) and (b)		Oudh and Rohilkhand	131.89	127.43	272.10	378.19	109.54	46.40	
10	(a)		South Indian	131.84	125.40	303.70	315.49	58.66	58.74	
<b>3' 3½" GAUGE.</b>										
11	(a)		Assam-Bengal	141.53	143.10	450.04	383.28	119.61	62.66	
12	(a) and (b)		Bengal and North-Western	66.31	75.82	243.97	294.85	110.34	101.66	
14	(a) and (b)		Bhavnagar	87.97	89.72	263.86	234.36	8.13	10.34	
15	(a) and (b)		Burma	135.81	134.00	467.19	542.33	164.40	93.98	
3	(b) to (d)		Eastern Bengal	125.02	99.56	329.13	356.42	137.20	119.37	
17	(a) and (b)		Gondal-Porbandar*	83.54	...	212.18	...	5.26	...	
7	(c)		Hyderabad-Godavari Valley.	116.29	141.23	533.54	345.06	35.66	112.14	
13	(a)		Jamnagar.	47.06	50.06	169.68	170.96	1.17	2.47	
16	(a) to (d)		Jodhpur-Bikaner	20.74	20.34	186.89	197.53	1.65	3.09	
20	(a)		Junagad	80.47	82.46	252.41	166.63	5.69	3.15	
6	(c) to (l)		Madras and Southern Mahratta	78.11	80.66	264.34	361.20	36.51	62.18	
10	(c)		Nilgiri	202.31	241.97	593.11	523.07	128.65	112.22	
2	(h) to (n)		Rajputana-Malwa	83.35	88.31	366.84	337.15	51.16	13.53	
22	(a) and (b)		Rohilkhand and Kumaon	77.83	81.02	221.53	155.49	100.53	82.46	
10	(f)		Shoranur-Cochin	Includ.	with the South Indian railway,	3' 3½"				
16	(b), (d), (e) and (g) to (i)		South Indian	137.57	143.75	353.43	475.70	80.27	123.63	
23	(a)		Udaipur-Chitorgarh	87.87	34.55	177.50	201.36	6.83	14.35	
<b>2' 6" GAUGE.</b>										
1	(b), (c) and (e)		Gondia-Chanda, Jabalpur-Gondia and Nagpur- Chhindwara Extensions.	37.22	93.75	145.78	140.95	36.27	43.76	
3	(f)		Kalka-Simla	335.21	323.21	-732.30	672.71	323.03	451.39	
3	(k) and (l)		Kohat-Thal and Nowshera-Durgai	145.16	140.86	71.39	588.54	68.95	68.20	
10	(f)		Morappur-Dharmapuri	89.18	86.06	165.48	215.63	1.40	13.27	
1	(g)		Purnia-Banohi	73.32	84.63	132.63	142.97	31.39	13.23	
1	(h) 1.		Raipur-Dhamtari	26.47	13.33	63.60	129.57	43.86	21.62	
10	(k)		Tirupattur-Krishnagiri	73.69	70.89	162.55	153.37	46.63	110.72	

\* Information for 2nd half of 1911 not furnished.

DIX II—continued.

during each half of the calendar year 1911.

[prepare these statistics.]

1910		1911		1911		1911		1911		1911		1911		Num- ber.
MAINTENANCE OF WAY, WORKS AND STATIONS—contd.														
OF TRACK, INCLUDING SIDINGS.										PER TOTAL TRAIN-MILE.				
Conservancy of rivers.		Repairs of stations and buildings.		Electricity and repairs and renewals of electric plant.		Other charges (net).		Total Maintenance, etc.		General Superintendence (including office expenses).		Maintenance and renewal of permanent-way.		Main head.
Rs.		Rs.		Rs.		Rs.		Rs.		As.		As.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
...	...	108-91	96-64	5-46	...	54-26	50-83	677-60	640-06	1-36	1-39	2-29	1-30	1
...	...	94-28	100-55	0-18	0-79	34-47	28-31	1,233-30	1,039-89	1-15	1-16	6-14	5-65	2
0-70	0-30	294-18	307-76	...	...	126-33	205-25	1,657-54	2,397-76	1-74	1-49	6-41	8-21	3
...	...	203-23	144-23	...	...	95-78	114-20	1,016-85	855-05	0-91	0-88	3-10	3-13	4
...	...	168-48	142-84	...	...	88-32	63-51	1,200-81	1,059-15	0-93	0-07	8-58	8-80	5
...	...	93-41	121-40	...	...	45-47	41-25	838-81	910-55	1-51	1-38	3-66	4-37	6
...	...	53-46	41-33	...	...	91-35	138-24	2,394-09	1,059-58	1-50	1-64	16-87	6-08	7
3-56	4-74	185-45	179-84	...	...	144-37	148-55	1,338-08	882-65	1-17	1-28	5-83	3-40	8
18-44	18-01	78-07	68-24	...	...	84-10	92-48	699-14	721-42	1-25	1-26	2-58	3-78	9
...	...	51-84	35-28	...	...	42-65	56-00	538-19	620-85	1-20	1-10	2-77	3-04	10
...	...	99-05	67-55	...	...	37-72	52-85	847-95	689-42	2-24	2-27	7-11	5-78	11
0-19	1-89	24-79	41-08	...	...	86-15	107-65	491-75	562-98	0-80	0-08	2-95	3-04	12
...	...	19-27	19-51	...	...	18-68	35-11	397-89	389-04	1-14	0-08	3-41	4-41	14
0-89	1-01	309-11	191-60	...	...	54-14	91-36	1,181-64	994-58	1-27	1-36	4-37	5-51	15
0-77	...	110-48	102-82	...	...	102-23	93-61	304-83	771-72	1-32	1-08	3-49	3-85	16
...	...	16-93	...	...	...	20-33	...	397-38	...	1-25	...	3-21	...	17
...	...	48-09	38-52	...	...	43-33	64-60	780-50	1,203-57	1-31	1-72	5-97	10-23	18
...	...	4-64	40-16	...	...	14-66	29-35	237-21	293-00	1-15	1-30	4-14	4-09	19
...	...	7-25	20-48	...	...	6-95	12-38	222-98	254-05	0-37	0-36	3-28	3-51	20
...	...	30-20	3-76	...	...	19-14	7-02	367-91	333-02	1-40	1-17	4-40	3-78	21
...	...	53-52	45-22	...	...	35-38	37-03	463-81	536-34	0-91	0-07	3-10	4-35	22
...	...	109-69	101-52	...	...	23-62	9-69	1,06-38	388-47	2-15	2-65	6-37	5-78	23
...	...	64-33	69-20	0-60	...	33-35	48-50	604-82	611-72	0-88	0-87	3-66	3-81	24
2-20	0-01	33-77	20-71	...	...	11-47	19-45	437-33	359-14	1-24	1-44	3-51	2-77	25
gauge	...	...	...	...	...	...	...	...	...	...	...	...	...	26
...	...	51-11	67-77	...	...	31-01	63-22	673-39	364-07	1-15	1-09	2-58	3-21	27
...	...	23-28	11-23	...	...	6-20	3-79	257-33	270-97	1-50	0-83	7-04	4-32	28
...	...	31-12	18-67	...	...	8-22	13-13	308-71	315-22	2-29	2-59	3-83	3-90	29
—0-01	...	201-62	227-14	...	...	233-74	205-27	421-30	1,980-12	2-78	2-44	—0-08	5-07	30
—0-02	...	39-61	46-50	...	...	67-92	43-24	448-08	835-3*	1-35	1-47	0-66	6-18	31
...	...	7-05	5-81	...	...	18-39	6-63	281-45	327-40	1-43	1-33	2-66	3-22	32
...	...	23-11	23-33	...	...	13-59	20-03	273-23	234-93	1-59	1-30	2-66	3-04	33
...	...	12-79	7-50	...	...	2-63	31-73	149-35	208-95	0-74	0-59	1-78	4-12	34
...	...	7-33	12-51	...	...	0-57	5-95	289-32	352-94	1-72	1-65	3-86	3-55	35



**APPEN**  
*Analysis of working of each railway system*  
 [Note.—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9.)		Serial num- ber.	TABLE A.—MAINTENANCE OF					
Main head.	Sub-head.		PER TOTAL					
Railway system.		Repairs of bridges, etc.		Conservancy of rivers.		Repairs of sta- tions and buildings.		
		As.		As.		As.		
		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
		<b>5' 6" GAUGE.</b>						
1	(a)	Bengal-Nagpur	1.16	1.68	...	...	1.02	0.96
2	(a) to (g)	Bombay, Baroda and Central India	2.49	0.96	...	...	0.80	0.88
3	(a)	Eastern Bengal	0.75	1.87	0.01	0.01	2.12	1.95
4	(a) to (d)	East Indian	0.57	0.61	...	...	1.25	0.90
5	(a) to (f)	Great Indian Peninsula	1.77	1.01	...	...	1.10	0.98
6	(a) and (b)	Madras and Southern Mahratta	1.26	1.42	...	...	0.87	1.19
7	(a) and (b)	Nizam's Guaranteed State	0.84	0.11	...	...	0.47	0.87
8	(a) to (i)	North Western	1.86	0.54	0.06	0.05	1.71	1.75
9	(a) and (b)	Oudh and Rohilkhand	1.04	0.46	0.13	0.18	0.74	0.87
10	(a)	South Indian	0.54	0.52	...	...	0.47	0.81
		<b>3' 3 1/2" GAUGE.</b>						
11	(a)	Assam-Bengal	1.89	1.00	...	...	1.56	1.07
12	(a) and (b)	Bengal and North-Western	1.33	1.32	...	0.02	0.39	0.83
14	(a) and (b)	Bhavnagar	0.10	0.18	...	...	0.25	0.80
15	(a) and (b)	Burma	1.54	0.98	0.01	0.01	2.89	1.84
8	(b) to (d)	Eastern Bengal	1.45	1.29	0.01	...	1.17	1.11
17	(a) and (b)	Gondal-Forbandar*	0.08	...	...	...	0.26	...
7	(c)	Hyderabad-Godavari Valley	0.40	1.86	...	...	0.51	0.47
18	(a)	Jamnagar	0.03	0.06	...	...	0.11	0.96
19	(a) to (d)	Jodhpur-Bikaner	0.03	0.06	...	...	0.13	0.86
20	(a)	Junagad	0.10	0.07	...	...	0.18	0.08
6	(c) to (d)	Madras and Southern Mahratta	0.43	0.75	...	...	0.65	0.54
10	(c)	Nilgiri	1.87	1.23	...	...	1.17	1.11
2	(h) to (i)	Rajputana-Malwa	0.51	0.18	...	...	0.65	0.68
22	(a) and (b)	Rohilkhand and Kumaon	1.59	1.46	0.03	...	0.53	0.87
10	(f)	Shoranur-Cochin	Include	d with the South	Indian railway,	3' 3 1/2"		
19	(b), (d), (e) and (g) to (i)	South Indian	0.59	0.87	...	...	0.37	0.82
23	(a)	Udaipur-Chitorgarh	0.27	0.85	...	...	1.15	0.28
		<b>2' 6" GAUGE.</b>						
1	(b), (c) and (e)	Gondia-Ghanda, Jabulpore-Gondia and Nagpur- Chhindwara Extensions.	0.95	1.85	...	...	0.83	0.51
8	(f)	Kalka-Simla	2.72	3.40	...	...	1.67	2.46
8	(a) and (b)	Kohat-Thal and Nowshera-Durgai	0.64	0.69	...	...	0.83	0.48
10	(f)	Morappur-Dharmapuri	0.02	0.20	...	...	0.11	0.09
1	(g)	Purulia-Banchi	0.68	0.28	...	...	0.61	0.51
1	(h)	Raipur-Dhamtari	1.23	0.69	...	...	0.86	0.24
10	(k)	Tirupattur-Krishnagiri	1.11	2.57	...	...	0.17	0.29

\* Information for 2nd half of 1911 not furnished.

**DIX 11—continued.**  
**during each half of the calendar year 1911.**  
**prepare these statistics.]**

185 A c		186 c		187 c		181 d		182 d		183 d		184 d		Num- ber.	
WAY, WORKS AND STATIONS—contd.															
TRAIN-MILE.—contd.						PER 1,000 GROSS TON-MILES.								Main head.	
Electricity and repairs and renewals of elec- tric plant.		Other charges (net).		Total Mainte- nance, etc.		General superin- tendence (includ- ing office ex- penses.)		Maintenance and renewal of permanent- way.		Repairs of bridges, etc.		Conservancy of rivers.			
As.	As.	As.	As.	As.	As.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
0'08	...	0'51	0'50	6'37	6'33	0'18	0'18	0'31	0'24	0'16	0'23	...	...	1	
...	...	0'29	0'24	10'87	9'87	0'16	0'17	0'88	0'85	0'36	0'14	...	...	2	
...	...	0'92	1'30	11'95	14'58	0'31	0'23	1'18	1'25	0'18	0'24	...	...	3	
...	...	0'60	0'71	6'43	5'31	0'10	0'10	0'85	0'35	0'06	0'07	...	...	4	
...	...	0'57	0'44	7'93	7'26	0'14	0'16	0'56	0'64	0'28	0'17	...	...	5	
...	...	0'42	0'41	7'72	8'92	0'25	0'25	0'62	0'72	0'21	0'23	...	...	6	
...	...	0'79	1'18	12'97	9'26	0'25	0'29	2'85	1'06	0'06	0'03	...	...	7	
...	...	1'35	1'44	11'96	8'41	0'18	0'19	0'89	0'52	0'28	0'08	0'01	0'01	8	
...	...	0'80	0'81	6'54	7'11	0'22	0'23	0'46	0'69	0'19	0'09	0'02	0'03	9	
...	...	0'89	0'49	5'37	5'46	0'27	0'23	0'62	0'64	0'12	0'11	...	...	10	
...	...	0'60	0'81	13'40	10'94	0'35	0'63	2'09	1'60	0'56	0'37	...	...	11	
...	...	0'44	1'39	5'32	7'28	0'20	0'25	0'72	0'76	0'33	0'34	...	...	12	
...	...	0'24	0'34	5'14	6'08	0'42	0'23	1'26	1'68	0'04	0'08	...	...	13	
...	...	0'30	0'28	10'53	10'11	0'33	0'39	1'15	1'57	0'40	0'37	...	...	14	
...	...	1'09	1'02	8'53	8'35	0'35	0'29	0'93	1'03	0'39	0'34	...	...	15	
...	...	0'81	...	5'11	...	0'51	...	1'80	...	0'08	...	...	...	16	
...	...	0'54	0'79	8'73	14'63	0'44	0'59	1'98	8'52	0'18	0'46	...	...	17	
...	...	0'36	0'70	5'39	7'01	0'49	0'53	1'76	1'81	0'01	0'08	...	...	18	
...	...	0'11	0'22	3'92	4'51	0'11	0'10	0'93	0'98	...	0'01	...	...	19	
...	...	0'33	0'16	6'41	5'21	0'50	0'42	1'56	1'34	0'04	0'03	...	...	20	
...	...	0'41	0'45	5'50	7'06	0'28	0'31	0'95	1'37	0'13	0'24	...	...	21	
...	...	0'25	0'11	11'31	10'93	1'70	2'02	5'01	4'37	1'07	0'34	...	...	22	
0'01	...	0'83	0'47	6'04	6'01	0'22	0'23	0'94	0'99	0'13	0'04	...	...	23	
...	...	0'18	0'35	2'708	6'39	0'29	0'36	0'83	0'70	0'33	0'37	0'01	...	24	
Range.	...	...	...	...	...	...	...	...	...	...	...	...	...	25	
...	...	0'22	0'42	4'91	5'82	0'34	0'30	0'77	0'97	0'18	0'26	...	...	26	
...	...	0'23	0'21	10'21	6'49	0'46	0'33	2'13	1'29	0'06	0'13	...	...	27	
...	...	0'22	0'36	8'11	8'71	0'68	0'77	1'14	1'15	0'29	0'40	...	...	28	
...	...	2'40	1'35	3'49	14'92	2'10	1'95	4'59	4'06	2'05	2'73	...	...	29	
...	...	0'63	0'45	4'11	9'23	1'44	1'56	0'72	6'49	0'70	0'73	...	...	30	
...	...	0'30	0'10	4'52	5'04	1'03	0'90	1'90	2'25	0'02	0'13	...	...	31	
...	...	0'27	0'48	6'9	6'06	0'48	0'56	0'85	0'95	0'20	0'09	...	...	32	
...	...	0'07	1'01	4'13	6'65	0'43	0'38	1'03	2'63	0'71	0'44	...	...	33	
...	...	0'01	0'14	6'37	8'20	1'06	1'02	2'39	2'31	0'69	1'60	...	...	34	

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9).		Serial num- ber.	185-d	185 A d	186 d			
Main head.	Sub-head.	Railway system.	TABLE A.—MAINTENANCE OF WAY, WORKS					
			PER 1,000 GROSS TON.					
			Repairs of stations and buildings.		Electricity and repairs and renewals of electric plant.		Other charges (net).	
		Rs.		Rs.		Rs.		
		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur	0.14	0.13	...	...	0.07	0.07
2	(a) to (g)	Bombay, Baroda and Central India	0.12	0.13	...	0.01	0.04	0.03
3	(a)	Eastern Bengal	0.37	0.30	...	...	0.16	0.19
4	(a) to (d)	East Indian	0.14	0.11	...	...	0.07	0.09
5	(a) to (f)	Great Indian Peninsula	0.17	0.16	...	...	0.09	0.07
6	(a) and (b)	Madras and Southern Mahratta	0.15	0.20	...	...	0.07	0.12
7	(a) and (b)	Nizam's Guaranteed State	0.08	0.08	...	...	0.14	0.21
8	(a) to (i)	North Western	0.28	0.27	...	...	0.20	0.22
9	(a) and (b)	Oudh and Rohilkhand	0.13	0.13	...	...	0.14	0.15
10	(a)	South Indian	0.10	0.07	...	...	0.09	0.10
<b>3' 3½" GAUGE.</b>								
11	(a)	Assam-Bengal	0.46	0.30	...	...	0.17	0.24
12	(a) and (b)	Bengal and North-Western	0.07	0.14	...	...	0.11	0.08
14	(a) and (b)	Bhavnagar	0.09	0.12	...	...	0.09	0.21
15	(a) and (b)	Burma	0.76	0.68	...	...	0.13	0.27
3	(b) to (d)	Eastern Bengal	0.31	0.30	...	...	0.29	0.28
17	(a) and (b)	Gondal-Portbandar*	0.10	...	...	...	0.12	...
7	(c)	Hyderabad-Godavari Valley	0.17	0.16	...	...	0.18	0.27
18	(a)	Jamnagar	0.05	0.43	...	...	0.16	0.31
19	(a) to (d)	Jodhpur-Bikaner	0.03	0.10	...	...	0.04	0.06
20	(a)	Junnagad	0.04	0.08	...	...	0.12	0.06
6	(c) to (l)	Madras and Southern Mahratta	0.20	0.17	...	...	0.12	0.14
10	(c)	Nilgiri	0.92	0.85	...	...	0.20	0.08
2	(h) to (n)	Rajputana-Malwa	0.17	0.18	...	...	0.09	0.13
10	(a) and (b)	Rohilkund and Kumaon	0.13	0.10	...	...	0.04	0.08
10	(f)	Shoranur-Cochin	Includ	ded with	the South Indian railway, 3' 3½"	...	...	...
10	(b), (d), (e) and (g) to (i)	South Indiaa	0.11	0.10	...	...	0.06	0.13
20	(a)	Udaipur-Chitorgarh	0.35	0.11	...	...	0.08	0.08
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabalpur-Gondia and Nagpur-Chhindwara Extensions.	0.24	0.15	...	...	0.07	0.11
8	(f)	Kalka-Simla	1.26	1.27	...	...	1.31	1.24
8	(k) and (l)	Kohat-Thal and Nowshera-Durgai	0.90	0.51	...	...	0.68	0.48
10	(f)	Morappur-Dharmapuri	0.08	0.08	...	...	0.21	0.07
7	(g)	Furulia-Banchi	0.18	0.16	...	...	0.08	0.13
1	(h)	Raipur-Dhamtari	0.21	0.15	...	...	0.04	0.04
10	(k)	Tirupattur-Krishnagiri	0.11	0.13	...	...	0.01	0.09

\* Information for 2nd half of 1911 not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

prepare these statistics ]

137 a		138 a.		139 a.		139 A a		140 a		141 a		142 a		Num- BER.	
TABLE B.—LOCOMOTIVE EXPENSES.															
PER TOTAL TRAIN MILE.															
AND STATIONS —concl'd.															
MILES—concl'd.															
Total Mainte- ance, etc.		General super- intendence— (including office expenses).		Running expen- ses.		All charges con- nected with working of Rail Motors.		Fuel. (average cost.)		Water.		Oil, tallow and other stores.		Main head.	
Rs.		Annas.		Annas.		Annas.		Annas.		Annas.		Annas.			
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.		
0-36	0-34	0-35	0-90	2-23	2-52	...	...	2-35	1-67	0-20	0-18	0-23	0-30	1	
1-56	1-33	0-61	0-63	2-63	2-62	...	...	7-30	7-50	0-48	0-48	0-30	0-67	2	
2-10	2-21	0-48	0-45	2-21	2-07	...	...	3-27	3-25	0-22	0-17	0-34	0-29	3	
0-72	0-62	0-32	0-30	2-11	2-20	1-36	2-35	1-45	1-49	0-14	0-16	0-42	0-48	4	
4-24	1-20	0-68	0-72	2-79	2-34	5-07	...	5-06	5-30	0-26	0-22	0-33	0-26	5	
1-30	1-47	0-31	0-33	2-25	2-33	2-56	2-36	5-31	6-16	0-26	0-27	0-29	0-31	6	
3-38	1-64	0-69	0-66	1-67	1-32	...	...	2-43	2-45	0-23	0-23	0-25	0-24	7	
1-33	1-29	0-30	0-33	1-36	2-07	...	...	6-15	5-33	0-30	0-32	0-32	0-29	8	
1-17	1-32	0-30	0-36	1-38	1-46	...	...	2-32	2-78	0-14	0-15	0-31	0-31	9	
1-20	1-15	0-33	0-47	2-00	2-17	5-27	4-36	5-33	5-36	0-15	0-16	0-37	0-33	10	
3-33	3-04	1-09	1-15	1-72	1-71	...	...	3-34	3-50	0-25	0-25	0-30	0-34	11	
1-42	1-37	0-40	0-42	0-76	0-73	...	...	2-07	1-33	0-15	0-15	0-16	0-13	12	
1-30	2-20	0-49	0-79	0-31	1-01	...	...	3-31	3-30	0-14	0-16	0-23	0-24	13	
2-17	2-38	0-35	0-32	2-53	2-49	1-35	6-15	3-50	3-12	0-31	0-32	0-26	0-27	14	
2-27	2-24	0-55	0-51	1-45	1-33	...	...	2-56	2-55	0-17	0-16	0-23	0-23	15	
2-06	...	0-53	...	1-03	...	...	...	4-35	...	0-12	...	0-29	...	16	
2-30	5-30	0-30	0-37	1-53	1-33	...	...	1-71	1-73	0-19	0-19	0-17	0-13	17	
2-47	3-11	0-36	0-30	1-39	0-35	...	...	4-53	5-03	0-16	0-12	0-36	0-29	18	
1-11	1-23	0-34	0-33	0-64	0-33	...	...	3-30	3-37	0-44	0-44	0-36	0-41	19	
2-28	1-33	0-32	0-72	1-14	1-35	...	0-07	4-43	3-31	0-14	0-16	0-33	0-30	20	
1-68	2-23	0-37	0-69	2-09	2-12	...	...	4-01	4-10	0-28	0-18	0-19	0-21	21	
3-30	3-26	1-01	1-29	6-64	7-03	...	...	15-91	13-32	0-31	0-27	1-23	1-23	22	
1-53	1-56	0-32	0-73	2-00	1-97	...	...	4-37	4-23	0-23	0-25	0-35	0-34	23	
1-68	1-61	0-61	0-74	0-32	0-36	...	...	3-06	3-23	0-19	0-23	0-20	0-21	24	
gauge.	...	...	...	...	...	...	...	...	...	...	...	...	...	25	
1-46	1-76	0-62	0-54	1-35	1-37	...	...	4-25	4-35	0-21	0-19	0-29	0-23	26	
3-10	2-54	1-70	0-39	0-75	0-52	...	...	3-42	2-33	0-13	0-23	0-26	0-21	27	
2-42	2-33	1-03	1-07	1-15	1-23	...	...	3-19	3-06	0-25	0-23	0-13	0-20	28	
2-64	11-35	1-25	0-37	3-52	3-42	...	...	5-34	5-21	0-23	0-24	0-30	0-33	29	
4-46	3-77	0-63	0-67	1-01	1-00	...	...	1-75	1-55	0-24	0-21	0-19	0-15	30	
3-24	3-41	0-03	0-10	0-77	0-34	...	...	3-34	3-33	0-53	0-35	0-19	0-17	31	
1-79	1-39	1-24	1-22	1-53	1-35	...	...	2-13	1-54	0-46	0-49	0-31	0-37	32	
2-42	4-24	0-37	0-34	1-15	1-21	...	...	1-22	1-04	0-35	0-33	0-09	0-13	33	
4-26	5-10	0-14	0-15	0-37	0-37	...	...	4-74	5-29	0-30	0-30	0-24	0-19	34	

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9.)		Serial num- ber.	143A	143Aa	143Ba	TABLE B.— PER. TOTAL			
Main head.	Sub-head.	Railway system.	Maintenance and renewal of locomotives.  Annas.		Maintenance and renewal of motor cars.  Annas.		Maintenance and renewal of machinery, tools and plant.  Annas.		
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
<b>5' 6" GAUGE.</b>									
1	(a)	Bengal-Nagpur	3-09	1-97	..	..	0-15	0-31	
2	(a) to (g)	Bombay, Baroda and Central India	2-63	2-20	..	..	0-34	0-27	
3	(a)	Eastern Bengal	3-65	1-98	..	..	0-32	0-29	
4	(a) to (d)	East Indian	2-08	2-30	0-47	0-59	0-19	0-20	
5	(a) to (f)	Great Indian Peninsula	2-95	2-74	8-53	..	0-18	0-31	
6	(a) and (b)	Madras and Southern Mahratta	5-09	4-31	9-09	7-09	0-36	0-48	
7	(a) and (b)	Nizam's Guaranteed State	2-55	4-18	..	..	0-03	0-12	
8	(a) to (s)	North Western	2-88	4-85	..	..	0-32	0-34	
9	(a) and (b)	Oudh and Rohilkhand	1-44	1-55	..	..	0-18	0-27	
10	(a)	South Indian	8-16	2-64	13-51	1-44	0-19	0-15	
<b>3' 3½" GAUGE.</b>									
11	(a)	Assam-Bengal	1-78	1-99	..	..	0-04	0-04	
12	(a) and (b)	Bengal and North-Western	1-07	1-18	..	..	0-05	0-06	
14	(a) and (b)	Bhavnagar	0-69	0-23	..	..	0-05	0-17	
15	(a) and (b)	Burma	1-82	2-24	0-74	0-64	0-14	0-23	
3	(b) to (d)	Eastern Bengal	3-14	1-35	..	..	0-45	0-04	
17	(a) and (b)	Gondal-Forbandar*	0-63	..	..	..	0-09	..	
7	(c)	Hyderabad-Godavari Valley	1-08	1-30	..	..	0-03	0-07	
18	(a)	Jamnagar	0-91	0-48	..	0-61	0-29	0-28	
19	(a) to (d)	Jodhpur-Bikaner	1-34	2-53	..	..	0-11	0-13	
20	(a)	Junagad	0-67	0-11	..	..	0-15	0-56	
6	(c) to (l)	Madras and Southern Mahratta	2-30	1-63	..	..	0-29	0-24	
10	(c)	Nilgiri	4-71	6-71	..	..	0-15	0-10	
9	(h) to (n)	Rajputana-Malwa	2-29	2-31	..	..	0-41	0-39	
22	(a) and (b)	Rohilkund and Kumaon	1-59	1-55	..	..	0-17	0-23	
19	(f)	Shoranur-Cochin	Included with the South Indian railway,				3' 3½"		
10	(b), (d), (e) and (g) to (i)	South Indian	1-72	1-92	..	..	0-20	0-14	
23	(a)	Udaipur-Chitorgarh	2-76	1-49	..	..	0-53	0-19	
<b>2' 6" GAUGE.</b>									
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Chhindwara Extensions.	1-87	1-88	..	..	0-05	0-05	
8	(f)	Kalka-Simla	1-15	3-23	..	..	0-31	0-28	
8	(h) and (l)	Kohat-Thal and Nowshera-Durgai	2-22	1-47	..	..	0-13	0-13	
10	(f)	Morappur-Dharmapuri	1-68	2-54	..	..	0-01	0-01	
1	(g)	Purnia-Banahi	0-85	0-83	..	..	..	..	
1	(h)	Raipur-Dhamtari	2-07	1-63	..	..	0-01	..	
16	(k)	Tirupattur-Krishnagiri	1-81	1-11	..	..	0-08	0-01	

\* Information for 2nd half of 1911, not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

prepare these statistics.]

MS Co.		144 a.		145 a.		153 b.		159 b.		159A b.		140 b.		Num- ber.
LOCOMOTIVE EXPENSES—contd.														
TRAIN MILE—consolid.														
PER ENGINE MILE.														
Electricity and repairs and renewals of electric plant.		Other charges (net).		Total locomotive expenses.		General Superintendence (including office expenses).		Running expenses.		All charges connected with the working of Rail Motors.		Fuel (average cost).		Main head.
Annas.		Annas.		Annas.		Annas.		Annas.		Annas.		Annas.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
0.04	...	2.05	1.50	11.49	9.15	0.70	0.74	2.03	2.07	...	...	1.02	1.21	1
...	...	1.07	0.39	16.55	15.34	0.51	0.54	2.19	2.22	...	...	6.53	8.38	2
...	...	0.30	0.63	10.79	9.13	0.38	0.32	1.53	1.49	...	...	2.28	2.33	3
...	...	1.24	1.23	9.43	9.28	0.62	0.69	1.60	1.67	1.79	2.24	1.19	1.12	4
...	...	1.32	1.20	14.57	13.99	0.53	0.62	2.38	2.44	5.07	...	5.17	4.98	5
...	...	0.28	0.28	15.76	15.62	0.56	0.72	1.85	1.91	9.56	9.95	4.73	5.06	6
...	...	0.44	0.52	8.49	10.23	0.60	0.59	1.04	1.59	...	...	2.12	2.15	7
...	...	1.57	1.58	12.60	15.91	0.49	0.51	1.61	1.68	8.79	13.09	5.04	4.73	8
...	...	1.22	1.32	8.09	8.50	0.52	0.57	1.19	1.25	...	...	5.42	2.99	9
...	...	0.50	0.42	12.83	11.78	0.83	0.49	1.77	1.94	5.87	4.95	4.89	4.77	10
...	...	1.53	0.53	10.05	9.51	0.39	0.92	1.41	1.38	...	...	2.73	2.80	11
...	...	0.87	1.00	5.53	5.70	0.38	0.35	0.63	0.64	...	...	1.72	1.61	12
...	...	0.11	0.02	6.42	8.52	0.44	0.70	0.82	0.90	...	...	3.43	3.48	14
...	...	0.60	0.62	10.02	10.20	0.68	0.74	2.02	2.01	1.25	6.15	2.60	2.32	15
...	...	2.11	1.59	10.66	8.01	0.48	0.29	1.12	1.20	...	...	1.09	1.96	3
...	...	0.22	...	7.66	...	0.54	...	0.95	...	...	...	4.30	...	17
...	...	0.97	1.15	6.03	7.22	0.80	0.87	1.40	1.40	...	...	1.51	1.58	7
...	...	0.42	...	3.07	7.65	0.83	0.51	1.22	0.82	...	...	4.04	4.23	18
...	...	0.50	0.58	7.63	8.78	0.31	0.30	0.60	0.63	...	...	3.61	3.38	19
...	...	0.28	0.51	7.76	7.82	0.87	0.61	1.05	1.45	...	0.08	4.09	2.90	20
...	...	0.03	1.11	10.48	10.39	0.58	0.59	1.81	1.83	...	...	3.47	3.53	6
...	...	1.86	2.39	21.82	27.94	0.88	1.12	5.83	6.14	...	...	13.97	16.39	10
...	...	0.61	0.49	11.13	10.75	0.70	0.68	1.73	1.74	...	...	3.76	3.75	2
...	...	0.41	0.14	7.07	7.24	0.46	0.57	0.61	0.69	...	...	2.33	2.09	22
gauge	...	...	...	...	...	...	...	...	...	...	...	...	...	19
...	...	0.70	0.30	9.53	9.59	0.56	0.48	1.72	1.66	...	...	3.60	3.87	10
...	...	...	0.01	9.65	6.30	1.57	0.32	0.69	0.49	...	...	3.15	2.51	23
...	...	1.21	1.52	8.63	9.29	0.82	0.85	0.92	0.97	...	...	2.55	2.43	1
...	...	0.85	1.08	12.96	14.67	0.97	0.77	2.75	2.72	0.84	4.24	4.17	4.16	8
...	...	1.02	0.46	7.54	5.95	0.61	0.62	0.92	0.93	...	...	1.58	1.43	3
...	...	...	...	8.96	7.73	0.66	0.10	0.77	0.93	...	...	3.62	3.20	10
...	...	0.40	0.81	7.03	6.91	1.03	1.02	1.31	1.26	...	...	1.81	1.28	1
...	...	1.88	1.07	7.34	8.15	0.27	0.58	0.95	1.10	...	...	1.01	0.94	17
...	...	...	...	8.68	8.42	0.14	0.14	0.87	0.87	...	...	4.78	5.28	10

\* Excludes expenditure attributable to motors.

## APPEN

### Analysis of working of each railway system

[Note—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 2.)		Serial num- ber.	141 £.		142 £.		143 £.		
Main head.	Sub-head.		TABLE B.— PER ENGINE						
Railway system.			Water.		Oil, tallow and other stores.		Maintenance and renewal of locomotives.		
			Annas.		Annas.		Annas.		
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
<b>5' 6" GAUGE.</b>									
1	(a)	Bengal-Nagpur	0.16	0.15	0.23	0.23	2.52	1.62	
2	(a) to (g)	Bombay, Baroda and Central India	0.40	0.39	0.75	0.56	2.18	1.97	
3	(a)	Eastern Bengal	0.15	0.13	0.24	0.21	2.52	1.41	
4	(a) to (d)	East Indian	0.11	0.12	0.32	0.36	1.56	1.74	
5	(a) to (f)	Great Indian Peninsula	0.22	0.19	0.28	0.22	2.51	2.35	
6	(a) and (b)	Madras and Southern Mahratta	0.21	0.22	0.24	0.25	4.19	3.54	
7	(a) and (b)	Nizam's Guaranteed State	0.20	0.21	0.22	0.21	2.23	2.05	
8	(a) to (e)	North Western	0.25	0.26	0.26	0.24	1.95	1.96	
9	(a) and (b)	Oudh and Rohilkhand	0.12	0.13	0.26	0.26	1.23	1.34	
10	(a)	South Indian	0.13	0.14	0.33	0.32	2.79	2.35	
<b>3' 3 1/2" GAUGE.</b>									
11	(a)	Assam-Bengal	0.20	0.20	0.25	0.27	1.45	1.39	
12	(a) and (b)	Bengal and North-Western	0.13	0.13	0.18	0.15	0.89	0.94	
14	(a) and (b)	Bhavnagar	0.12	0.14	0.20	0.22	0.63	0.21	
15	(a) and (b)	Burma	0.25	0.26	0.22	0.22	1.46	1.31	
3	(b) to (d)	Eastern Bengal	0.13	0.12	0.18	0.18	2.43	1.04	
17	(a) and (b)	Gondal-Porbandar*	0.11	...	0.27	...	0.63	...	
7	(c)	Hyderabad-Godavari Valley	0.17	0.17	0.15	0.16	0.96	1.15	
18	(a)	Jamnagar	0.15	0.10	0.32	0.25	0.81	0.36	
19	(a) to (d)	Jodhpur-Bikaner	0.40	0.40	0.33	0.38	1.24	2.33	
20	(a)	Junagad	0.13	0.14	0.30	0.26	0.62	0.69	
6	(c) to (i)	Madras and Southern Mahratta	0.24	0.24	0.17	0.18	1.99	1.40	
10	(c)	Nilgiri	0.28	0.23	1.08	1.11	4.14	5.32	
2	(h) to (r)	Rajputana-Malwa	0.23	0.22	0.30	0.30	1.93	2.03	
22	(a) and (b)	Rohilkund and Kumaon	0.14	0.16	0.15	0.17	1.20	1.22	
16	(f)	Shoranur-Cochin	Included with the South Indian railway.						3' 3 1/2"
10	(b), (d), (e) and (g) to (s)	South Indian	0.18	0.17	0.26	0.25	1.54	1.70	
23	(a)	Udaipur-Chitorgarh	0.12	0.20	0.33	0.30	2.55	1.32	
<b>2' 6" GAUGE.</b>									
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur-Chhindwara Extensions	0.20	0.22	0.14	0.16	1.49	1.49	
3	(f)	Kalka-Simla	0.18	0.19	0.23	0.24	0.90	2.56	
3	(k) and (l)	Kohat-Thal and Nowshera-Durgai	0.43	0.47	0.18	0.15	2.01	1.36	
10	(f)	Morappur-Dharmapuri	0.59	0.65	0.19	0.17	1.63	2.53	
1	(g)	Puralia-Ranohi	0.33	0.41	0.23	0.31	0.70	0.63	
1	(h)	Raipur-Dhantari	0.23	0.35	0.08	0.16	1.70	1.49	
10	(k)	Tirupattur-Krishnagiri	0.30	0.30	0.23	0.19	1.80	1.11	

\* Information for 2nd half of 1911 not furnished.

**DIX 11—continued.**

during each half of the calendar year 1911.  
prepare these statistics.]

143-A b.		143-B b.		143-C b.		144 b.		145 b.		158 c.		159 c.		Num- ber.
LOCOMOTIVE EXPENSES—contd.														
MILE—concl.										PER 1,000 GROSS TON-MILES.				
Maintenance and renewal of motor cars.		Maintenance and renewal of machinery, tools and plant.		Electricity and repairs and renewals of electric plant.		Other charges (net).		Total Locomotive expenses.		General Superintendence (including office expenses).		Running expenses.		Main head.
Annas.		Annas.		Annas.		Annas.		Annas.		Rs.		Rs.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
...	...	0.12	0.23	0.03	...	1.68	1.23	9.39	7.52	0.11	0.12	0.33	0.34	1
...	...	0.26	0.23	...	...	0.89	0.84	13.78	13.03	0.09	0.10	0.37	0.39	2
...	...	0.22	0.20	...	...	0.20	0.44	7.45	6.53	0.03	0.07	0.39	0.32	3
0.43	0.43	0.13	0.16	...	...	0.32	0.33	6.33	6.70	0.09	0.09	0.24	0.26	4
3.53	...	0.15	0.18	...	...	1.13	1.03	12.43	12.01	0.10	0.12	0.44	0.47	5
3.09	7.09	0.39	0.40	...	...	0.73	0.73	12.36	12.33	0.13	0.15	0.33	0.33	6
...	...	0.03	0.10	...	...	0.39	0.45	7.43	8.24	0.12	0.12	0.32	0.32	7
0.19	5.39	0.26	0.27	...	...	1.29	1.28	11.15	12.30	0.09	0.10	0.30	0.32	8
...	...	0.16	0.23	...	...	1.05	1.12	6.95	7.30	0.11	0.12	0.25	0.27	9
12.31	1.44	0.16	0.13	...	...	0.44	0.37	11.34	12.44	0.21	0.16	0.45	0.47	10
...	...	0.06	0.02	...	...	1.25	0.43	8.21	7.61	0.22	0.22	0.51	0.47	11
...	...	0.04	0.04	...	...	0.72	0.33	4.59	4.72	0.10	0.11	0.12	0.21	12
...	...	0.05	0.16	...	...	0.10	0.01	5.79	5.82	0.13	0.20	0.34	0.33	13
0.74	0.64	0.11	0.18	...	...	0.43	0.51	8.02	8.25	0.22	0.26	0.66	0.70	14
...	...	0.35	0.03	...	...	1.64	1.22	3.23	6.14	0.15	0.15	0.33	0.42	15
...	...	0.09	...	...	...	0.20	...	7.09	...	0.23	...	0.42	...	16
...	...	0.02	0.06	...	...	0.36	1.02	5.37	6.41	0.30	0.34	0.53	0.54	17
...	0.01	0.26	0.20	...	...	0.37	...	3.07	6.52	0.43	0.26	0.52	0.42	18
...	...	0.10	0.12	...	...	0.46	0.54	7.05	8.08	0.10	0.09	0.13	0.19	19
...	...	0.14	0.50	...	...	0.26	0.44	7.16	8.42	0.22	0.23	0.40	0.30	20
...	...	0.23	0.21	...	...	0.55	0.35	9.06	3.23	0.21	0.23	0.64	0.37	21
...	...	0.13	0.09	...	...	1.63	2.03	27.94	32.32	0.79	0.39	3.23	3.40	22
...	...	0.35	0.29	...	...	0.53	0.42	9.33	9.43	0.21	0.20	0.52	0.51	23
...	...	0.13	0.13	...	...	0.31	0.11	5.23	5.72	0.14	0.19	0.20	0.22	24
gauge.	...	...	...	...	...	...	...	...	...	...	...	...	...	25
...	...	0.13	0.13	...	...	0.27	0.27	3.51	3.53	0.19	0.16	0.33	0.35	26
...	...	0.49	0.17	...	...	...	0.01	3.90	5.93	0.51	0.33	0.22	0.21	27
...	...	0.04	0.04	...	...	0.37	1.21	7.05	7.37	0.31	0.22	0.21	0.36	1
3.64	4.37	0.24	0.22	...	...	0.69	0.32	10.12	11.03	0.34	0.23	2.65	2.74	2
...	...	0.12	0.12	...	...	0.33	0.43	6.63	5.51	0.74	0.71	1.10	1.06	3
...	...	0.01	0.01	...	...	...	...	3.24	2.69	0.06	0.07	0.55	0.63	10
...	...	...	...	...	...	0.33	0.07	5.32	5.73	0.37	0.23	0.47	0.51	1
...	...	...	...	...	...	1.55	0.33	0.64	5.30	0.33	0.41	0.37	0.77	2
...	...	0.03	0.01	...	...	...	...	3.35	3.40	0.06	0.09	0.54	0.54	10

\* Excludes expenditure attributable to motors.



## Analysis of working of each railway system

[Note—Railways not shown do not

Classification No of Railway. (Detailed in "Index" to Appendix 9).		Serial num- ber.	189-Ac.	190c.	191c.	TABLE B— PER 1,000 GROSS			
Main head	Sub-head.	Railway system.	All charges connected with the working of Rail Motors.		Fuel. (average cost).		Water.		
			Rs.		Rs.		Rs.		
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
<b>5' 6" GAUGE.</b>									
1	(a)	Bengal-Nagpur	...	...	0'82	0'20	0'03	0'02	
2	(a) to (g)	Bombay, Beroda and Central India	...	...	1'13	1'13	0'07	0'07	
3	(a)	Eastern Bengal	...	...	0'57	0'49	0'04	0'03	
4	(a) to (d)	East Indian	2'56	3'25	0'16	0'17	0'02	0'02	
5	(a) to (f)	Great Indian Peninsula	3'88	...	0'95	0'95	0'04	0'04	
6	(a) and (b)	Madras and Southern Mahratta	6'26	6'51	0'98	1'01	0'04	0'04	
7	(a) and (b)	Nizam's Guaranteed State	...	...	0'41	0'43	0'04	0'04	
8	(a) to (c)	North Western	...	...	0'94	0'29	0'94	0'05	
9	(a) and (b)	Oudh and Rohilkhand	...	...	0'50	0'52	0'06	0'03	
10	(a)	South Indian	5'36	4'39	1'23	1'13	0'03	0'03	
<b>3' 3 1/2" GAUGE.</b>									
11	(a)	Assam-Bengal	...	...	0'98	0'97	0'07	0'07	
12	(a) and (b)	Bengal and North-Western	...	...	0'52	0'52	0'04	0'04	
14	(a) and (b)	Bhavnagar	...	...	1'40	1'49	0'05	0'05	
15	(a) and (b)	Burma	3'05	3'20	0'91	0'83	0'03	0'03	
3	(b) to (d)	Eastern Bengal	...	...	0'68	0'69	0'04	0'04	
17	(a) and (b)	Gondal-Forbandar	...	...	1'87	...	0'05	...	
7	(c)	Hyderabad-Godavari Valley	...	...	0'57	0'61	0'06	0'07	
18	(a)	Jamnagar	...	...	1'93	2'23	0'07	0'05	
19	(a) to (d)	Jodhpur-Bikaner	...	...	1'11	1'08	0'12	0'12	
20	(a)	Junagad	...	0'02	1'58	1'19	0'05	0'06	
6	(c) to (b)	Madras and Southern Mahratta	...	...	1'22	1'30	0'09	0'09	
10	(c)	Nilgiri	...	...	12'52	14'35	0'25	0'20	
2	(h) to (n)	Rajputana-Malwa	...	...	1'13	1'11	0'07	0'06	
22	(a) and (b)	Rohilkhand and Kumaon	...	...	0'73	0'53	0'05	0'06	
10	(f)	Sheranur-Cochin	...	...	Included with	the South Indian railway, 3' 3 1/2"			
10	(b), (d), (e) and (g) to (i)	South Indian	...	...	1'27	1'33	0'06	0'06	
23	(a)	Udaipur-Chitorgarh	...	...	1'04	1'05	0'04	0'03	
<b>2' 6" GAUGE.</b>									
1	(b), (c) and (d)	Gondia-Chanda, Jabulpore-Gondia and Nagpur-Chhindwara Extensions.	...	...	0'95	0'90	0'07	0'08	
3	(f)	Kalka-Simla	...	...	4'03	4'13	0'18	0'19	
3	(k) and (l)	Kohat-Thal and Nowshera-Durgai	...	...	1'90	1'64	0'53	0'54	
10	(f)	Morappur-Dharmapuri	...	...	2'60	2'24	0'42	0'44	
1	(g)	Furulia-Banchi	...	...	0'64	0'43	0'14	0'16	
1	(h)	Raipur-Dhantari	...	...	0'71	0'66	0'20	0'25	
10	(k)	Tirupattur-Krishnagiri	...	...	2'94	3'39	0'50	0'50	

\* Information for 2nd half of 1911 not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

prepare these statistics.]

142 c.		143 c.		143 A c.		143 B c.		143 C c.		144 c.		145 c.		Num- ber.
LOCOMOTIVE EXPENSES—concl.														
TON-MILES—concl.														
Oil, tallow and other stores.		Maintenance and renewal of locomotives.		Maintenance and renewal of motor cars.		Maintenance and renewal of machinery, tools and plant.		Electricity and repairs and renewals of electric plant.		Other charges (net).		Total Locomotive expenses.		Main head.
Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
0.04	0.04	0.42	0.26	...	...	0.02	0.04	0.01	...	0.28	0.20	1.56	1.22	1
0.12	0.10	0.38	0.33	...	...	0.05	0.04	...	...	0.18	0.18	2.57	2.31	2
0.07	0.05	0.64	0.30	...	...	0.05	0.04	...	...	0.05	0.02	1.39	1.39	3
0.05	0.06	0.23	0.27	0.64	0.70	0.02	0.03	...	...	0.14	0.14	0.94	0.104	4
0.05	0.04	0.46	0.45	6.54	...	0.03	0.03	...	...	0.21	0.20	2.28	2.30	5
0.05	0.05	0.85	0.71	5.95	4.64	0.06	0.03	...	...	0.15	0.15	2.64	2.57	6
0.04	0.04	0.43	0.73	...	...	...	0.02	...	...	0.08	0.09	1.44	1.79	7
0.05	0.04	0.36	0.74	...	...	0.05	0.05	...	...	0.24	0.24	2.07	2.43	8
0.05	0.06	0.26	0.29	...	...	0.03	0.05	...	...	0.23	0.24	1.45	1.53	9
0.08	0.08	0.71	0.56	12.04	1.27	0.04	0.03	...	...	0.11	0.09	2.86	2.49	10
0.09	0.09	0.52	0.55	...	...	0.01	0.02	...	...	0.45	0.15	2.35	2.64	11
0.04	0.05	0.27	0.29	...	...	0.01	0.01	...	...	0.22	0.26	1.38	1.49	12
0.06	0.09	0.26	0.09	...	...	0.02	0.07	...	...	0.04	0.01	2.37	2.49	14
0.07	0.08	0.47	0.63	1.15	0.36	0.04	0.05	...	...	0.16	0.18	2.61	2.38	15
0.06	0.06	0.33	0.36	...	...	0.12	0.01	...	...	0.36	0.42	2.83	2.15	3
0.12	...	0.27	...	...	...	0.04	...	...	...	0.09	...	2.02	...	17
0.05	0.06	0.36	0.44	...	...	0.01	0.02	...	...	0.32	0.29	2.20	2.47	7
0.15	0.13	0.39	0.19	...	...	0.13	0.11	...	...	0.13	0.01	2.36	2.40	13
0.10	0.11	0.33	0.69	...	...	0.03	0.03	...	...	0.14	0.16	2.16	2.39	19
0.12	0.11	0.24	0.04	...	...	0.05	0.20	...	...	0.10	0.18	2.76	2.64	20
0.06	0.08	0.70	0.51	...	...	0.09	0.08	...	...	0.19	0.35	2.20	2.28	6
0.97	0.98	3.72	5.11	...	...	0.11	0.08	...	...	1.46	1.83	25.05	28.94	10
0.09	0.09	0.60	0.60	...	...	0.10	0.09	...	...	0.16	0.13	2.63	2.79	2
0.05	0.05	0.37	0.40	...	...	0.04	0.05	...	...	0.10	0.03	1.63	1.83	22
gauga.	...	...	...	...	...	...	...	...	...	...	...	...	...	10
0.09	0.09	0.51	0.33	...	...	0.05	0.04	...	...	0.09	0.09	2.35	2.90	10
0.11	0.12	0.24	0.55	...	...	0.13	0.07	...	...	...	...	2.32	2.47	23
0.05	0.06	0.56	0.56	...	...	0.01	0.02	...	...	0.33	0.45	2.63	2.75	1
0.22	0.24	0.37	2.53	...	...	0.24	0.22	...	...	0.64	0.23	9.77	11.76	3
0.21	0.17	2.41	1.53	...	...	0.14	0.14	...	...	1.11	0.40	3.19	6.30	3
0.14	0.12	1.21	1.72	...	...	...	...	...	...	...	...	4.93	5.22	10
0.09	0.12	0.25	0.26	...	...	...	...	...	...	0.12	0.25	2.08	2.16	1
0.05	0.11	1.20	1.04	...	...	...	...	...	...	1.09	0.69	4.25	3.93	1
0.15	0.12	1.12	0.69	...	...	0.05	0.01	...	...	...	...	5.32	5.24	10

\* Excludes expenditure attributable to motors.

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9.)		Serial num- ber.	146 a.	147 a.	148 a.			
Main head.	Sub-head.	Railway system.	TABLE C.—CARRIAGE AND					
			PER TOTAL					
			General Superintendence (including office expenses). Annas.		Repairs and renewals of coaching vehicles. Annas.		Repairs and renewals of goods vehi- cles. Annas.	
		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur	0.20	0.22	1.23	1.37	1.50	1.30
2	(a) to (g)	Bombay, Baroda and Central India	0.29	0.28	1.34	1.20	1.13	1.36
3	(a)	Eastern Bengal	0.22	0.23	1.85	0.78	0.19	2.41
4	(a) to (d)	East Indian	0.19	0.20	1.05	0.68	2.14	1.56
5	(a) to (f)	Great Indian Peninsula	0.25	0.28	1.11	1.07	0.83	0.80
6	(a) and (b)	Madras and Southern Mahratta	0.39	0.40	1.81	1.69	2.70	2.16
7	(a) and (b)	Nizam's Guaranteed State	0.15	0.17	0.75	0.80	0.66	1.56
8	(a) to (s)	North Western	0.28	0.27	2.02	2.10	1.12	1.19
9	(a) and (b)	Oudh and Rohilkhand	0.80	0.33	2.17	1.89	0.57	0.52
10	(a)	South Indian	0.28	0.15	0.69	0.68	0.68	1.00
<b>3' 3½" GAUGE.</b>								
11	(a)	Assam-Bengal	0.39	0.41	0.87	0.81	0.89	0.97
12	(a) and (b)	Bengal and North-Western	0.14	0.15	0.61	0.53	0.71	0.65
14	(a) and (b)	Bhavnagar	0.15	0.24	0.32	0.53	0.15	0.27
15	(a) and (b)	Burma	0.33	0.26	0.89	1.39	1.43	2.18
3	(b) to (d)	Eastern Bengal	0.35	0.27	3.17	1.07	1.61	0.71
17	(a) and (b)	Gondal-Forbandar*	0.17	...	0.31	...	0.15	...
7	(c)	Hyderabad-Godavari Valley	0.16	0.18	0.52	0.67	0.36	0.34
18	(a)	Jamnagar	0.25	0.28	0.52	0.57	0.03	0.44
19	(a) to (d)	Jodhpur-Bikaner	0.12	0.12	0.42	0.30	0.59	0.46
20	(a)	Junagad	0.19	0.24	0.52	0.05	0.14	0.09
6	(c) to (l)	Madras and Southern Mahratta	0.25	0.28	0.67	0.91	1.42	1.24
10	(c)	Nilgiri	0.34	0.43	0.81	0.87	0.56	0.40
2	(h) to (n)	Rajputana-Malwa	0.30	0.27	0.91	1.16	1.09	0.93
22	(a) and (b)	Rohilkund and Kumaon	0.27	0.33	0.62	0.72	1.24	1.06
10	(f)	Sheranur-Cochin	Included	with the	South	Indian	railway	
10	(b), (d), (e) and (g) to (i)	South Indian	0.20	0.18	1.38	0.96	0.62	1.13
23	(a)	Udaipur-Chitorgarh	0.37	0.24	1.81	0.73	0.25	0.14
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabalpur-Gondia and Nagpur- Chhindwara Extensions.	0.21	0.23	0.48	0.62	0.81	0.51
8	(f)	Kalka-Simla	0.45	0.44	4.76	6.84	9.87	1.57
8	(k) and (l)	Kohat-Thal and Nowshera Durgai	0.12	0.13	0.18	0.26	0.20	0.22
10	(f)	Morappur-Dharmapuri	0.08	0.08	0.64	0.25	0.11	0.08
1	(g)	Parulla-Ranchi	0.29	0.30	0.41	0.82	0.40	0.43
1	(h)	Rajpur-Dhamtari	0.08	0.09	0.49	0.61	0.29	0.40
10	(k)	Tirupattur-Krishnagiri	0.05	0.05	0.10	0.58	0.11	...

\* Information for 2nd half of 1911 not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

prepare these statistics.]

148 A a.		149 a.		149 A a.		150 a.		151 a.		146 b.		147 b.		Nov- BER.
WAGON EXPENSES.														
TRAIN—MILE.										PER 1,000, VEHICLE MILES RUN BY HOME VEHICLES.				Main head.
Repairs and renewals of machinery, tools and plant.		Cleaning and oiling.		Electricity and repairs and renewals of electric plant.		Other charges (net).		Total Carriage and Wagon expenses.		General Superintendence (including office expenses).		Repairs and renewals of coaching vehicles calculated on coaching vehicle mileage.		
Annas.		Annas.		Annas.		Annas.		Annas.		Rs.		Rs.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
0.03	0.06	0.53	0.53	0.01	...	0.02	0.03	3.32	3.51	0.45	0.43	11.99	12.23	1
0.23	0.17	0.37	0.37	...	...	0.02	0.02	3.33	3.40	0.79	0.74	9.10	7.37	2
0.17	0.01	0.88	0.87	...	...	0.02	0.06	2.83	3.98	0.65	0.68	13.61	5.08	3
0.08	0.09	0.18	0.21	...	...	...	...	3.64	2.74	0.40	0.43	9.07	5.63	4
0.08	0.12	0.36	0.37	...	...	0.02	0.03	3.65	2.67	0.35	0.36	11.30	10.08	5
0.08	0.16	0.33	0.36	...	...	0.02	...	5.29	4.77	1.22	1.13	14.17	11.95	6
...	0.01	0.24	0.25	...	...	...	0.02	1.30	2.81	0.44	0.54	8.84	9.37	7
0.12	0.11	0.47	0.57	...	...	0.13	0.37	4.19	4.61	0.76	0.77	16.07	15.13	8
0.13	0.19	0.34	0.37	...	...	0.03	...	3.59	3.36	0.71	0.94	13.14	14.34	9
0.04	0.04	0.33	0.42	...	...	0.03	0.02	2.10	2.31	1.29	0.63	7.12	6.33	10
0.02	...	0.34	0.33	...	...	0.03	0.02	2.54	2.39	1.51	1.35	6.31	5.33	11
0.03	0.05	0.29	0.23	...	...	0.02	0.06	1.39	1.65	0.29	0.23	3.04	2.33	12
0.03	0.09	0.22	0.30	...	...	...	0.02	0.37	1.45	0.54	0.95	2.23	3.31	14
0.04	0.07	0.29	0.31	...	...	0.02	0.02	3.00	4.24	0.33	1.01	7.21	3.72	15
0.12	0.03	0.34	0.34	...	...	0.04	0.05	5.63	2.53	1.01	0.73	21.33	7.03	3
0.05	...	0.26	...	...	...	...	...	0.34	...	0.69	...	1.34	...	17
0.02	0.01	0.15	0.15	...	...	0.01	0.01	1.22	1.36	0.55	0.61	4.11	4.63	7
0.15	0.54	0.29	0.40	...	...	...	...	1.24	2.13	1.12	1.13	3.31	4.06	13
0.04	0.06	0.20	0.23	...	...	0.02	0.03	1.25	1.30	0.42	0.40	3.23	3.32	19
0.06	0.01	0.23	0.23	...	...	...	...	1.17	0.53	0.71	0.73	1.33	3.17	20
0.09	0.04	0.19	0.19	...	...	0.02	0.03	2.60	2.66	0.71	0.63	6.03	7.70	6
0.05	0.03	1.24	1.23	...	...	0.01	...	3.01	2.31	3.35	4.23	12.69	10.11	10
0.10	0.10	0.33	0.33	...	...	0.03	0.04	2.31	2.35	0.72	0.62	5.51	6.94	2
0.06	0.05	0.27	0.35	...	...	0.01	0.01	2.47	2.52	0.52	0.72	4.13	4.14	22
3 3/4 gauge.	...	...	...	...	...	...	...	...	...	...	...	...	...	10
0.07	0.03	0.35	0.32	...	...	0.01	0.02	3.23	2.64	0.63	0.59	12.12	6.11	13
...	...	0.47	0.35	...	...	...	...	2.30	1.43	0.37	0.35	7.67	3.33	23
0.01	0.02	0.43	0.45	...	...	0.01	0.01	2.00	1.34	0.53	0.37	2.35	3.29	1
0.01	...	0.41	0.50	...	...	0.01	0.06	15.51	2.41	3.30	3.24	71.49	99.25	3
0.03	...	0.26	0.35	...	...	0.01	...	0.30	0.36	0.77	0.77	1.33	2.61	3
...	...	0.35	0.31	...	...	...	...	1.43	0.37	0.14	0.17	4.74	1.33	10
0.03	0.01	0.34	0.35	...	...	...	0.01	1.77	3.23	0.72	0.77	1.43	3.21	1
...	...	0.75	0.35	...	...	0.01	0.01	1.62	1.33	0.24	0.31	4.34	5.33	1
0.02	...	0.35	0.34	...	...	...	...	0.63	0.34	0.19	0.20	0.63	3.21	10

## Analysis of working of each railway system

[ Note.—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9.)		Serial Num- ber.	1485.	149-A.B.	149 B.				
Main and.	Sub-head.	Railway system.	TABLE C—CARRIAGE AND						
			Per 1,000						
			Repairs and renewals of goods vehicles cal- culated on goods vehicle mile- age.		Repairs and re- newals of machinery, tools and plant.		Cleaning and oil- ing.		
Rs.		Rs.		Rs.					
		1st half.		2nd half.		1st half.		2nd half.	
<b>5' 6" GAUGE.</b>									
1	(a)	Bengal-Nagpur	3.81	3.42	0.06	0.18	1.07	1.08	
2	(a) to (g)	Bombay, Baroda and Central India	5.27	6.25	0.63	0.44	1.01	0.95	
3	(a)	Eastern Bengal	0.90	16.89	0.51	0.04	1.10	0.98	
4	(a) to (d)	East Indian	5.73	4.84	0.17	0.18	0.87	0.44	
5	(a) to (f)	Great Indian Peninsula	4.18	4.55	0.27	0.43	1.22	1.32	
6	(a) and (b)	Madras and Southern Mahratta	14.31	10.69	0.24	0.46	1.04	1.04	
7	(a) and (b)	Nizam's Guaranteed State	2.67	6.66	0.02	0.03	0.73	0.73	
8	(a) to (f)	North Western	4.79	5.43	0.34	0.39	1.29	1.60	
9	(a) and (b)	Oudh and Rohilkhand	1.91	2.33	0.43	0.53	0.68	1.06	
10	(a)	South Indian	5.50	8.24	0.19	0.19	1.74	1.86	
<b>3' 3½" GAUGE.</b>									
11	(a)	Assam-Bengal	7.47	7.42	0.04	—	1.32	1.42	
12	(a) and (b)	Bengal and North-Western	2.35	2.46	0.05	0.07	0.55	0.59	
14	(a) and (b)	Bhavnagar	1.13	2.27	0.10	0.36	0.79	1.18	
15	(a) and (b)	Burma	5.77	6.22	0.11	0.19	0.78	0.87	
3	(b) to (d)	Eastern Bengal	10.85	3.78	0.35	0.21	0.99	1.02	
17	(a) and (b)	Gondal-Porbandar*	1.73	—	0.21	—	1.09	—	
7	(c)	Hyderabad-Godavari Valley	2.15	2.21	0.06	0.06	0.32	0.39	
18	(a)	Jamnagar	0.77	8.49	0.66	2.83	1.30	2.11	
19	(a) to (d)	Jodhpur-Bikaner	3.98	2.86	0.18	0.21	0.71	0.76	
20	(a)	Junagad	0.52	0.11	0.23	0.05	0.96	0.77	
6	(c) to (i)	Madras and Southern Mahratta	5.84	4.95	0.25	0.11	0.53	0.52	
10	(c)	Nilgiri	15.27	11.98	0.48	0.33	12.33	12.66	
2	(h) to (n)	Rajputana-Malwa	4.24	3.37	0.22	0.22	0.79	0.76	
22	(a) and (b)	Rohilkhand and Kumaon	3.33	6.05	0.12	0.10	0.58	0.77	
10	(f)	Shoranur-Cochin			Included with the South Indian				
10	(b), (d), (e) and (g) to (i)	South Indian	3.74	7.67	0.20	0.11	1.05	1.05	
23	(a)	Udaipur-Chitorgarh	1.27	2.59	—	0.02	1.07	1.49	
<b>3' 6" GAUGE.</b>									
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nag- pur-Chhindwara Extensions.	3.54	2.49	0.03	0.04	1.21	1.13	
8	(f)	Kalka-Simla	170.10	23.51	0.07	0.02	3.33	3.71	
8	(h) & (i)	Kohat-Thal and Nowshera-Durgai	2.89	2.30	0.19	—	1.64	2.10	
19	(g)	Morappur-Dharmapuri	1.94	1.02	0.01	0.01	3.37	2.93	
1	(g)	Purulia-Ranchi	3.08	3.85	0.06	0.03	1.55	1.70	
1	(h)	Raipur-Dhamtari	1.27	2.21	—	—	2.29	2.83	
10	(k)	Tirupattur-Krishnagiri	1.21	0.03	0.09	0.01	1.45	1.41	

\* Information for 2nd half of 1911 not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

[prepare these statistics.]

149-A b.		150 b.		151 b.		152 a.		153 a.		154 a.		155 a.		Num-ber.
WAGON EXPENSES—concl'd.						TABLE D.—TRAFFIC EXPENSES.								
VEHICLE MILES RUN BY HOME VEHICLES—concl'd.						PER TOTAL TRAIN-MILE.								Main head.
Electricity and repairs and renewals of electric plant.		Other charges (net).		Total Carriage and Wagon expenses.		General Superintendence (including office expenses).		Station staff.		Train staff.		Fuel, lighting water and general stores.		
Rs.		Rs.		Rs.		Annas.		Annas.		Annas.		Annas.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
0-02	...	0-04	0-06	7-12	7-12	0-87	0-90	2-54	2-53	0-88	0-89	0-82	0-58	1
...	...	0-06	0-05	9-31	8-87	0-64	0-61	3-43	3-23	0-71	0-74	0-88	0-87	2
...	...	0-05	0-16	8-27	10-38	1-14	1-02	6-41	5-96	1-30	1-26	1-18	1-12	3
...	...	0-09	0-01	7-45	5-76	0-93	0-96	3-01	3-12	1-25	1-20	0-69	0-78	4
...	...	0-08	0-09	8-96	9-46	0-87	0-58	2-26	2-31	1-31	1-22	0-72	0-77	5
...	...	0-05	0-01	16-71	18-91	0-70	0-78	2-22	2-25	0-81	0-87	0-49	0-48	6
...	...	...	0-06	5-45	6-80	0-74	0-77	1-52	1-53	0-93	0-85	0-43	0-40	7
...	...	0-43	1-04	11-49	12-97	0-71	0-79	3-02	3-45	1-06	1-12	0-72	0-76	8
...	...	0-08	0-01	8-63	9-37	0-94	0-93	2-55	2-70	1-18	1-09	0-47	0-43	9
...	...	0-13	0-09	9-56	10-12	0-90	0-83	1-96	2-00	0-71	0-63	0-63	0-88	10
...	...	0-12	0-09	9-84	9-68	1-14	1-21	2-35	3-11	0-69	0-70	0-48	0-72	11
...	...	0-08	0-05	3-59	3-46	0-52	0-55	1-63	1-70	0-46	0-47	0-41	0-46	12
...	...	0-01	0-09	3-15	5-68	0-49	0-41	2-09	2-23	0-37	0-35	0-79	1-03	14
...	...	0-07	0-07	3-11	12-08	0-80	0-83	2-16	2-22	0-76	0-80	0-67	0-50	15
...	...	0-12	0-17	16-38	7-40	0-92	0-90	2-89	3-06	0-78	0-71	0-62	0-67	9
...	...	0-01	...	3-87	...	0-88	...	1-57	...	0-31	...	0-61	...	17
...	...	0-03	0-02	4-16	4-57	0-86	0-97	1-59	1-69	0-81	1-01	0-44	0-43	7
...	...	0-01	...	5-55	11-40	0-85	1-35	1-24	1-33	0-31	0-41	0-41	0-57	18
...	...	0-09	0-12	4-65	6-13	0-59	0-48	1-03	1-07	0-25	0-24	0-49	0-55	19
...	...	0-01	...	4-41	1-23	0-44	0-73	1-30	1-31	0-43	0-43	0-60	0-85	20
...	...	0-05	0-09	7-37	7-24	0-60	0-61	1-52	1-56	0-52	0-53	0-34	0-38	6
...	...	0-12	0-03	29-95	27-82	1-20	1-23	3-93	4-20	0-87	1-37	0-23	0-23	10
...	...	0-19	0-10	6-65	6-61	0-68	0-65	2-32	2-27	0-76	0-72	0-64	1-04	2
...	...	0-04	0-03	4-78	5-47	0-37	0-31	2-06	2-29	0-52	0-33	0-59	0-71	22
...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
...	...	0-06	0-06	9-25	8-68	0-73	0-67	1-90	1-75	0-57	0-51	0-59	0-57	10
...	...	...	...	10-88	8-93	1-73	1-62	2-27	1-25	0-30	0-26	0-36	0-33	23
...	...	0-03	0-03	5-06	4-59	1-05	1-03	2-10	2-47	0-72	0-72	0-65	0-56	1
...	...	0-07	0-47	121-46	69-49	1-35	1-20	3-76	3-29	1-14	0-99	0-92	0-78	8
...	...	0-04	...	4-22	5-76	0-68	0-43	1-25	1-47	0-58	0-45	0-76	0-42	3
...	...	...	...	7-13	4-71	0-22	0-23	0-70	0-69	0-23	0-20	0-04	0-05	19
...	...	0-01	0-01	4-39	5-77	0-43	0-65	1-65	1-97	0-32	0-33	0-25	0-15	1
...	...	0-03	0-03	4-93	6-65	0-60	0-26	1-43	1-75	0-42	0-69	...	0-02	1
...	...	...	...	2-53	3-82	0-83	0-40	0-93	0-97	0-18	0-19	0-03	0-03	10

railway, 3' 3 3/4" gauge.

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9).		Serial num- ber.	156 a		157 a		158 a	
Main and.	Sub-head.		TABLE D— PER TOTAL TRAIN-MILE					
Railway system.			Clothing.		Printing, station- ery and tickets.		Charges for deli- very and collec- tion of goods, etc.	
			Annas.		Annas.		Annas.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur	0·07	0·06	0·14	0·20	0·01	...
2	(a) to (g)	Bombay, Baroda and Central India.	0·18	0·08	0·37	0·31	...	...
3	(a)	Eastern Bengal	0·15	0·20	0·34	0·26	0·11	0·02
4	(a) to (d)	East Indian	0·07	0·07	0·21	0·23	0·06	0·07
5	(a) to (f)	Great Indian Peninsula	0·09	0·09	0·22	0·21	0·01	0·01
6	(a) and (b)	Madras and Southern Mahratta	0·07	0·07	0·28	0·39	0·03	0·03
7	(a) and (b)	Nizam's Guaranteed State	0·05	0·05	0·21	0·19	0·01	0·01
8	(a) to (i)	North Western	0·19	0·18	0·32	0·29	...	...
9	(a) and (b)	Oadh and Rohilkhand	0·11	0·14	0·16	0·25	0·03	0·02
10	(a)	South Indian	...	0·01	0·16	0·04	...	...
<b>3' 3½" GAUGE.</b>								
11	(a)	Assam-Bengal	...	0·01	0·36	0·31	...	...
12	(a) and (b)	Bengal and North-Western	0·03	0·06	0·21	0·22	...	...
14	(a) and (b)	Bhavnagar	...	0·11	0·36	0·30	...	...
15	(a) and (b)	Burma	0·08	0·16	0·18	0·22	...	...
3	(b) to (d)	Eastern Bengal	0·11	0·13	0·27	0·21	...	...
17	(a) and (b)	Gondal-Porbandar*	0·02	...	0·32	...	...	...
7	(c)	Hyderabad-Godavari Valley	0·06	0·07	0·21	0·25	...	...
18	(a)	Jamnagar	...	0·07	0·27	0·39	...	...
19	(a) to (d)	Jodhpur-Bikaner	0·08	0·04	0·22	0·22	...	...
20	(a)	Junagad.	0·02	0·09	0·42	0·38	...	...
6	(c) to (l)	Madras and Southern Mahratta	0·06	0·06	0·21	0·26	...	...
10	(c)	Nilgiri	...	0·04	0·04	0·05	...	...
2	(h) to (n)	Rajputana-Malwa	0·12	0·07	0·23	0·23	...	...
22	(a) and (b)	Rohilkund and Kumaon	0·06	0·01	0·26	0·37	...	...
10	(f)	Shoranur-Cochin	Included with the South Indian railway, 5' 6"					
10	(b), (d), (e) and (g) to (i)	South Indian	0·11	0·01	0·28	0·32	...	...
23	(a)	Udaipur-Chitorgarh	0·10	0·06	0·47	0·39	...	...
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Chhindwara Extensions.	0·07	0·06	0·06	0·06	...	...
8	(g)	Kalka-Simla	0·42	0·19	0·53	0·16	0·06	0·02
8	(h) and (i)	Kohat-Thal and Nowshera-Durgai	0·11	0·17	0·32	0·18	...	...
10	(j)	Morappur-Dharmapuri	...	...	0·01	0·01	...	...
1	(g)	Parulia-Ranchi	...	...	0·08	0·01	...	...
1	(h)	Raipur-Dhamtari	...	...	0·03	0·04	...	...
10	(h)	Tirupattur-Krishnagiri	...	...	0·01	0·02	...	...

\* Information for 2nd half of 1911 not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

[prepare these statistics.]

159 a.		160 a.		161 a.		162 a.		152 b.		153 b.		154 b.		Num-ber.
TRAFFIC EXPENSES—contd.														
—contd.														Main head.
Miscellaneous expenses.								PER CENT OF TRAFFIC EARNINGS. (Abstracts H. and I. of Revenue Accounts).						
Payments to other lines.		Other charges (net)		Total traffic expenses.		General superintendence (including office expenses).		Station staff.		Train staff.				
Annas.		Annas.		Annas.		Annas.		Per cent.		Per cent.		Per cent.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
0-01	0-01	0-66	0-66	...	...	5-79	5-79	1-30	1-50	3-31	4-20	1-32	1-48	1
0-01	0-01	0-31	0-01	0-01	...	6-17	6-06	0-72	0-30	3-33	4-32	0-79	0-97	2
0-01	0-01	...	...	0-01	0-32	10-00	10-17	2-05	1-37	11-29	7-26	2-34	1-98	3
0-02	0-02	0-09	0-09	0-01	0-01	6-34	6-65	1-27	1-40	4-14	4-53	1-72	1-99	4
0-01	0-01	0-10	0-14	0-01	0-01	5-31	5-45	0-88	1-02	3-52	4-02	2-04	2-30	5
0-02	0-02	0-01	0-02	0-01	0-01	4-58	5-45	1-00	1-10	3-15	3-71	1-16	1-21	6
0-01	0-01	0-23	0-26	...	0-01	4-13	4-10	1-09	1-25	2-23	2-51	1-86	1-38	7
0-01	...	0-04	0-01	0-04	0-03	6-11	6-63	1-11	1-20	4-70	3-25	1-65	1-71	8
0-02	...	0-35	0-30	0-01	0-02	5-71	5-93	1-63	1-39	4-44	5-49	1-57	2-21	9
0-01	0-01	0-26	0-20	...	...	4-11	4-15	1-63	1-38	3-53	3-61	1-28	1-12	10
...	...	...	...	0-01	0-02	5-53	6-06	2-61	2-62	6-43	6-66	1-57	1-51	11
0-05	0-05	0-15	0-10	0-05	0-05	3-51	3-66	1-06	1-17	3-36	3-65	0-94	1-00	12
0-01	0-01	0-17	0-36	0-01	0-01	4-28	5-31	0-34	0-31	3-50	4-41	0-63	0-70	14
0-01	0-02	...	...	0-03	0-03	4-49	4-79	1-44	1-37	3-37	3-60	1-37	1-31	15
0-02	0-01	...	0-36	0-07	0-23	3-63	6-23	1-33	1-37	6-15	5-31	1-64	1-25	3
0-01	...	0-06	...	0-01	...	3-29	...	0-84	...	3-47	...	0-70	...	17
0-04	0-02	0-22	0-23	...	0-01	4-15	4-83	1-73	2-40	3-22	4-17	1-63	2-48	7
0-01	0-02	0-42	0-22	...	...	3-14	5-01	0-63	2-26	2-47	3-03	0-62	0-90	18
...	...	0-25	0-35	0-01	0-01	2-76	2-96	1-05	0-96	2-13	2-17	0-51	0-49	19
0-01	0-02	0-21	...	0-01	0-01	3-25	4-34	0-87	1-59	3-56	3-23	0-84	0-98	20
0-02	0-02	0-11	0-10	0-01	0-01	3-39	3-53	1-28	1-49	3-23	3-78	1-12	1-29	6
0-01	0-01	...	...	...	...	6-23	7-13	1-49	1-51	4-87	5-16	1-08	1-68	10
0-02	0-02	0-15	0-14	...	...	4-93	5-19	1-20	1-30	4-11	4-19	1-35	1-22	2
0-02	0-03	0-37	0-40	...	...	4-45	5-25	1-08	1-61	3-93	4-55	1-00	1-25	22
gauge.	...	...	...	...	...	...	...	...	...	...	...	...	...	10
0-02	0-01	0-02	0-01	0-03	0-02	4-20	3-20	1-40	1-36	3-59	3-66	1-07	1-14	16
0-01	0-02	0-51	0-32	...	...	5-33	3-70	2-32	2-21	2-37	2-72	0-29	0-27	23
0-02	0-03	0-26	0-23	0-01	...	4-94	5-15	2-62	2-37	5-26	7-18	1-31	2-09	1
0-01	0-02	...	0-16	0-01	0-06	6-22	7-17	2-16	1-71	6-04	4-70	1-84	1-41	3
0-01	...	...	...	0-04	0-04	4-43	3-13	4-87	2-30	14-36	8-83	4-23	2-69	3
...	...	...	...	...	...	1-25	1-33	1-54	1-64	4-93	4-06	1-37	1-74	10
0-02	0-02	...	...	...	...	2-75	3-13	0-92	1-43	3-17	4-43	0-61	0-76	1
0-03	0-03	...	...	...	...	2-56	2-79	1-55	0-76	3-36	5-14	1-10	2-02	1
...	...	...	...	...	...	1-63	1-66	1-43	1-39	3-81	3-84	0-71	0-66	10



## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9.)		Series number.	155 b.	156 b.	157 b.			
Main head.	Sub-head.	Railway system.	TABLE D—					
			PER CENT OF TRAFFIC					
			Fuel, lighting, water and general stores.		Clothing.		Printing, stationery and tickets.	
Per cent.		Per cent.		Per cent.				
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.			
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur . . . . .	0.78	0.95	0.11	0.09	0.22	0.31
2	(a) to (g)	Bombay, Baroda and Central India . . . . .	0.93	1.25	0.20	0.10	0.42	0.49
3	(a)	Eastern Bengal . . . . .	2.04	1.10	0.28	0.28	0.62	0.35
4	(a) to (d)	East Indian . . . . .	0.95	1.14	0.10	0.10	0.29	0.33
5	(a) to (f)	Great Indian Peninsula . . . . .	1.13	1.35	0.14	0.18	0.35	0.36
6	(a) and (b)	Madras and Southern Mahratta . . . . .	0.69	0.88	0.10	0.10	0.37	0.55
7	(a) and (b)	Nizam's Guaranteed State . . . . .	0.64	0.65	0.07	0.08	0.30	0.31
8	(a) to (f)	North Western . . . . .	1.12	1.16	0.29	0.20	0.49	0.44
9	(a) and (b)	Oudh and Rohilkhand . . . . .	0.82	0.97	0.19	0.28	0.28	0.53
10	(a)	South Indian . . . . .	1.18	0.71	0.01	0.01	0.29	0.07
<b>3' 3 1/2" GAUGE.</b>								
11	(a)	Assam-Bengal . . . . .	1.08	1.54	...	0.01	0.80	0.66
12	(a) and (b)	Bengal and North-Western . . . . .	0.86	0.98	0.09	0.13	0.43	0.49
14	(a) and (b)	Bhavnagar . . . . .	1.33	2.04	...	0.22	0.61	1.59
15	(a) and (b)	Burma . . . . .	0.85	1.18	0.14	0.35	0.31	0.53
3	(b) to (d)	Eastern Bengal . . . . .	1.32	1.26	0.24	0.23	0.57	0.35
17	(a) and (b)	Gondal-Porbandar* . . . . .	1.35	...	0.04	...	0.72	...
7	(c)	Hyderabad-Godavari Valley . . . . .	0.89	1.20	0.13	0.17	0.43	0.62
18	(a)	Jamnagar . . . . .	0.75	1.27	...	0.15	0.49	0.84
19	(a) to (d)	Jodhpur-Bikaner . . . . .	1.02	1.12	0.06	0.07	0.46	0.45
20	(a)	Junagad . . . . .	1.19	1.85	0.04	0.21	0.35	0.23
6	(c) to (b)	Madras and Southern Mahratta . . . . .	0.71	0.92	0.13	0.13	0.43	0.63
10	(c)	Nilgiri . . . . .	0.28	0.35	0.01	0.05	0.05	0.06
2	(h) to (n)	Rajputana-Malwa . . . . .	1.13	1.93	0.21	0.14	0.40	0.51
22	(a) and (b)	Rohilkund and Kumzon . . . . .	1.13	1.42	0.11	0.09	0.10	0.73
10	(f)	Shoranur-Cochin . . . . .	Included with the	South Indian rail	way, 3' 3 1/2" gauge			
10	(b), (d), (e) and (g) to (i)	South Indian . . . . .	1.11	1.20	0.20	0.08	0.53	0.63
23	(a)	Udaipur-Chitorgarh . . . . .	0.48	0.83	0.13	0.13	0.61	0.85
<b>3' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Chhindwara Extensions . . . . .	1.63	1.61	0.18	0.17	0.14	0.16
8	(f)	Kalka-Simla . . . . .	1.48	1.12	0.67	0.27	0.88	0.22
8	(k) and (l)	Kohat-Thal and Nowshera-Durgai . . . . .	5.56	2.57	0.82	1.01	2.85	0.75
10	(f)	Morappur-Dharmapuri . . . . .	0.30	0.31	0.01	...	0.05	0.07
1	(g)	Purnia-Banohi . . . . .	0.49	0.33	...	...	0.05	0.02
1	(h)	Raipur-Dhamtari . . . . .	...	0.06	...	...	0.07	0.13
10	(k)	Tirupattur-Krishnagiri . . . . .	0.29	0.26	0.01	...	0.05	0.06

\*Information for 2nd half of 1913 not furnished.

DIX 11.—continued.

during each half of the calendar year 1911.

prepare these statistics.]

TRAFFIC EXPENSES—concl.														TABLE E.— GENERAL CHARGES.		Num- ber.
EARNINGS (Abstracts H. and I. of Revenue Accounts)—concl.														PER TOTAL TRAIN- MILE.		
Charges for delivery and collection of goods, etc.		Miscellaneous expenses.		Payments to other lines.		Other charges (net).		Total Traffic expenses.		General superintendence per cent on traffic earnings (including steam-boat).		Home expenditure.		Main head.		
Per cent.		Per cent.		Per cent.		Per cent.		Per cent.		Per cent.		Amos.				
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.			
0.01	...	0.02	0.02	0.08	1.03	0.01	...	8.58	9.61	1.30	1.30	0.35	0.35	1		
...	...	0.01	0.01	0.01	0.01	-0.01	...	6.90	7.88	0.72	0.80	0.41	0.43	2		
0.08	0.03	0.03	0.03	...	...	0.04	0.42	19.02	15.60	2.05	1.87	0.18	...	3		
0.09	0.10	0.03	0.04	0.12	0.11	0.02	0.01	8.78	9.04	1.27	1.40	0.34	0.37	4		
0.01	0.01	0.02	0.03	0.16	0.24	0.01	0.01	8.25	8.30	0.83	1.02	0.28	0.22	5		
0.04	0.05	0.02	0.03	-0.01	0.02	-0.02	-0.02	6.30	7.63	1.00	1.10	0.52	0.60	6		
0.02	0.02	0.02	0.01	0.34	0.43	...	0.01	6.07	6.85	1.09	1.25	0.39	0.36	7		
0.01	0.01	0.01	0.01	0.06	0.01	0.06	0.12	9.50	10.11	1.11	1.20	0.08	...	8		
0.03	0.03	0.03	-0.01	0.62	0.62	0.02	0.04	9.98	12.05	1.63	1.89	0.24	...	9		
...	...	0.01	0.01	-0.27	0.36	...	...	7.41	7.47	1.63	1.58	0.54	0.66	10		
...	...	...	...	...	...	0.02	0.02	12.51	13.02	2.61	2.62	1.18	1.20	11		
...	...	0.09	0.09	0.30	0.23	0.10	0.12	7.33	7.86	0.99	1.18	0.44	0.52	12		
...	...	0.02	0.02	0.28	0.71	0.01	0.01	7.21	10.51	0.84	0.91	0.08	0.08	14		
...	0.01	0.03	0.04	...	...	0.05	0.06	8.06	10.80	1.43	1.86	0.63	0.65	15		
...	...	0.03	0.02	...	0.53	0.15	0.40	12.03	10.94	1.80	1.44	{ Included with } the 5' 6" gauge }		3		
...	...	0.02	...	0.13	...	0.02	...	7.29	...	0.84	...	0.08	...	17		
...	...	-0.03	0.04	0.46	0.32	0.01	0.02	3.43	11.22	1.73	2.40	0.51	0.49	7		
...	...	0.02	0.03	0.78	1.30	0.01	...	5.77	11.00	0.63	2.98	0.09	0.04	18		
...	...	...	...	0.52	0.71	0.02	0.03	5.77	6.40	1.05	0.96	...	...	19		
...	...	0.03	0.03	0.41	...	0.01	0.03	7.30	9.45	0.87	1.39	0.08	0.06	20		
...	...	0.04	0.03	0.23	0.25	0.03	0.02	7.20	8.56	1.23	1.40	0.51	0.55	6		
...	...	0.01	0.01	...	...	...	...	7.79	8.23	1.49	1.51	0.72	0.28	10		
...	...	0.05	0.04	0.27	0.25	...	0.01	8.72	9.53	1.20	1.20	0.45	0.43	2		
...	...	0.05	0.05	0.70	0.30	...	...	8.50	10.43	1.03	1.51	0.04	1.10	22		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	10		
...	...	0.03	0.02	0.05	0.02	-0.03	0.05	7.95	8.16	1.40	1.36	0.54	0.59	10		
...	...	0.05	0.05	0.66	0.70	...	...	7.61	8.03	2.32	2.21	...	...	23		
...	...	0.06	0.09	0.66	0.67	0.01	0.01	12.97	14.35	2.62	2.97	1.73	1.80	1		
0.09	0.03	0.01	0.03	...	0.66	0.02	0.03	13.19	10.23	2.16	1.71	...	...	8		
...	...	0.03	0.01	...	...	0.32	0.21	32.59	18.92	4.87	2.90	0.09	...	5		
...	...	0.01	0.01	...	...	...	...	8.51	7.55	1.54	1.64	0.12	0.22	10		
...	...	0.04	0.04	...	...	...	...	5.23	7.11	0.92	1.46	1.45	1.37	1		
...	...	0.07	0.09	...	...	...	...	6.65	8.20	1.55	0.76	1.97	2.15	1		
...	...	0.01	0.01	...	...	...	...	8.26	8.72	1.48	1.39	0.21	0.21	10		

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9.)		Serial num- ber.	164 a.		165 a.		166 a.	
Main head.	Sub-head.		TABLE B.— PER TOTAL					
Railway systems.			Agent's Office- salaries and expenses.		Audit, accounts and pay office.		Stores De- partment.	
			Annas.		Annas.		Annas.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur	0.25	0.25	0.66	0.68	0.18	0.19
2	(a) to (g)	Bombay, Baroda and Central India	0.21	0.19	0.77	0.72	0.34	0.36
3	(a)	Eastern Bengal	0.29	0.32	0.82	0.75	0.28	0.28
4	(a) to (d)	East Indian	0.14	0.14	0.43	0.46	0.17	0.18
5	(a) to (f)	Great Indian Peninsula	0.14	0.18	0.56	0.58	0.18	0.19
6	(a) and (b)	Madras and Southern Mahratta	0.25	0.26	0.74	0.77	0.22	0.21
7	(a) and (b)	Nizam's Guaranteed State	0.21	0.25	0.93	1.02	0.15	0.19
8	(a) to (f)	North Western	0.13	0.15	0.44	0.49	0.13	0.13
9	(a) and (b)	Odish and Rohilkhand	0.24	0.26	0.65	0.75	0.22	0.23
10	(a)	South Indian	0.16	0.16	0.55	0.58	0.19	0.18
<b>3' 8 1/2" GAUGE.</b>								
11	(a)	Assam-Bengal	0.53	0.53	1.09	1.06	0.34	0.34
12	(a) and (b)	Bengal and North-Western	0.12	0.13	0.50	0.55	0.08	0.09
14	(a) and (b)	Bhavnagar	0.36	1.01	0.73	0.89	0.32	0.17
15	(a) and (b)	Burma	0.26	0.29	0.53	0.59	0.20	0.21
3	(b) to (d)	Eastern Bengal	Included with the 5' 6" gauge.					
27	(a) and (b)	Gondal-Porbandar*	0.59	...	0.89	...	0.36	...
7	(c)	Hyderabad-Godavari Valley	0.28	0.33	1.20	1.41	0.20	0.27
13	(a)	Jamnagar	0.51	1.39	1.02	1.43	0.21	0.23
19	(a) to (d)	Jodhpur-Bikaner	0.24	0.19	0.56	0.53	0.10	0.13
20	(a)	Junagad	0.44	1.39	0.88	1.65	0.39	0.70
6	(c) to (h)	Madras and Southern Mahratta	0.19	0.13	0.54	0.51	0.17	0.18
20	(c)	Nilgiri	0.20	0.21	0.74	0.79	0.25	0.25
9	(h) to (n)	Rajputana-Malwa	0.15	0.15	0.58	0.58	0.19	0.18
23	(a) and (b)	Rohilkhand and Kumaon	0.02	0.33	0.05	1.02	0.01	0.18
10	(f)	Shoranur Cochin	Included with the South Indian railway, 3' 8 1/2"					
10	(b), (d), (e) and (g) to (i)	South Indian	0.16	0.14	0.73	0.67	0.20	0.19
23	(c)	Udaipur-Chitorgarh	1.59	0.79	1.56	0.77	0.13	0.09
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur Chhindwara Extensions	0.14	0.15	0.47	0.49	0.10	0.11
3	(f)	Kalka-Simla	0.78	0.71	0.13	0.16	0.20	0.20
3	(h) and (i)	Kohat-Thal and Nowshera-Durgai	0.14	0.15	0.43	0.49	0.12	0.13
10	(f)	Morrappur-Dharmapuri	0.03	0.05	0.13	0.19	0.04	0.07
1	(g)	Parulia-Banohi	0.19	0.17	0.55	0.51	0.14	0.13
1	(h)	Raipur Dhamtari	0.13	0.15	0.49	0.54	0.09	0.11
10	(i)	Tirupattur-Krishnagiri	0.06	0.07	0.21	0.22	0.08	0.09

\* Information for 2nd-half of 1911 not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

prepare these statistics.]

.167 a.		168 a.		168 A a.		169 a.		170 a.		171 a.		172 a.		Num- ber.
GENERAL CHARGES—contd														
TRAIN-MILE—contd														Main head.
Medical Department.		Rents and miscellaneous.		Electricity and repairs and renewals of electric plant.		Police.		Advertising.		Electric telegraph.		Other charges (not).		
Annas.		Annas.		Annas.		Annas.		Annas.		Annas.		Annas.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
0'22	0'25	0'24	0'28	...	...	0'25	0'28	0'02	0'04	0'88	0'96	0'02	0'02	1
0'14	0'13	0'26	0'23	...	...	0'81	0'80	0'01	0'02	0'74	0'72	0'01	0'01	2
0'21	0'20	0'42	0'34	...	...	0'16	0'16	0'02	0'02	0'85	0'69	0'02	0'11	3
0'16	0'17	0'23	0'19	...	...	0'23	0'27	0'01	0'01	0'59	0'73	0'02	0'01	4
0'10	0'11	0'12	0'13	...	...	0'20	0'21	0'01	0'01	0'67	0'67	0'01	0'02	5
0'17	0'20	0'23	0'22	...	...	0'51	0'49	0'01	...	0'73	0'74	0'02	0'04	6
0'14	0'12	0'28	0'31	...	...	0'30	0'30	0'01	0'01	0'58	0'12	...	...	7
0'12	0'13	0'26	0'22	...	...	0'15	0'17	0'08	0'02	0'70	0'72	0'05	—0'04	8
0'13	0'13	0'27	0'27	...	...	0'11	0'14	0'02	0'02	0'66	0'71	0'01	0'02	9
0'20	0'15	0'43	0'09	...	...	0'45	0'35	...	...	0'61	0'62	0'01	0'01	10
0'33	0'40	0'20	0'20	...	...	0'44	0'44	0'01	0'01	0'24	0'24	0'01	0'02	11
0'10	0'09	0'10	0'08	...	...	0'24	0'22	...	0'01	0'51	0'56	0'02	0'02	12
0'26	0'17	0'42	0'37	...	...	0'49	0'55	0'01	0'05	0'63	0'73	0'02	0'04	14
0'22	0'26	0'22	0'28	...	...	0'39	0'34	0'01	0'02	0'68	0'70	0'01	0'01	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
0'42	...	0'55	...	...	...	0'59	...	0'01	...	0'63	...	0'04	...	17
0'27	0'35	0'31	0'33	...	...	0'51	0'36	0'01	0'01	0'58	0'65	...	...	7
0'30	0'07	0'22	0'73	...	...	0'36	0'25	...	0'01	0'71	0'42	0'06	0'01	18
0'05	0'06	0'17	0'16	...	...	0'07	0'07	...	...	0'55	0'53	0'02	0'02	19
0'41	0'24	0'49	0'79	...	...	0'33	0'39	0'01	0'02	0'72	0'24	0'04	0'03	20
0'17	0'16	0'17	0'17	...	...	0'39	0'36	0'01	0'01	0'70	0'72	0'01	0'01	6
0'42	0'30	0'10	0'13	...	...	0'69	0'54	...	...	0'81	0'66	0'01	0'01	10
0'18	0'17	0'17	0'19	...	...	0'35	0'34	0'01	0'01	0'69	0'68	...	...	2
0'01	0'12	0'02	0'37	...	...	0'02	0'36	...	0'01	0'04	0'75	...	0'02	22
gauge.	—	...	...	...	...	...	...	...	...	...	...	...	...	10
0'16	0'15	0'17	0'17	...	...	0'42	0'22	0'01	0'02	0'58	0'49	0'06	0'04	10
0'25	0'14	0'21	0'15	...	...	...	...	...	...	0'73	0'48	0'16	0'08	23
0'22	0'26	0'08	0'08	...	...	0'18	0'35	...	...	0'94	1'32	...	...	1
0'22	0'18	0'24	0'23	...	...	0'22	0'22	0'10	0'07	0'63	0'51	0'17	0'12	3
0'15	0'15	0'21	0'17	...	...	0'29	0'56	0'02	0'02	0'65	0'65	0'04	—0'01	3
0'03	0'02	...	...	...	...	0'17	0'13	...	...	0'20	0'21	...	...	10
0'21	0'20	0'02	0'01	...	...	0'08	0'07	...	...	1'51	0'38	...	...	1
0'05	0'06	0'01	0'03	...	...	0'12	0'47	...	...	0'42	0'49	...	...	1
0'04	0'03	...	...	...	...	0'24	0'22	...	...	0'30	0'29	...	...	10

## Analysis of working of each railway system

[Note—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9.)		Serial number	173 a.	163 b.	164 b.			
Main head.	Sub-head.	Railway system.	TABLE E.—					
			P&R TOTAL TRAIN MILE— concl.		P&R CENT ON			
			Total General charges.		Home expenditure.		Agent's office— salaries and expenses.	
			Annas.		Per cent.		Per cent.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur	3-27	3-39	0-80	0-90	0-36	0-40
2	(a) to (g)	Bombay, Baroda and Central India	3-20	3-11	0-46	0-55	0-24	0-24
3	(a)	Eastern Bengal	3-25	2-37	0-38	...	0-53	0-47
4	(a) to (d)	East Indian	2-37	2-53	0-46	0-52	0-19	0-20
5	(a) to (f)	Great Indian Peninsula	2-27	2-37	0-44	0-55	0-22	0-24
6	(a) and (b)	Madras and Southern Mahratta	3-46	3-73	0-71	0-82	0-34	0-35
7	(a) and (b)	Nizam's Guaranteed State	3-11	3-35	0-55	0-56	0-29	0-30
8	(a) to (c)	North Western	2-11	2-04	0-13	...	0-21	0-22
9	(a) and (b)	Oudh and Rohilkhand	2-56	2-52	0-39	...	0-36	0-43
10	(a)	South Indian	3-14	2-80	0-89	1-08	0-28	0-26
<b>3' 3 1/2" GAUGE.</b>								
11	(a)	Assam-Bengal	5-12	5-17	2-52	2-40	1-13	1-07
12	(a) and (b)	Bengal and North-Western	2-11	2-27	0-83	1-00	0-23	0-26
14	(a) and (b)	Bhavnagar	3-41	4-06	0-10	0-16	0-33	1-31
15	(a) and (b)	Burma	3-13	3-36	1-10	1-43	0-45	0-63
3	(b) to (d)	Eastern Bengal	Included with	the 5' 6" gauge.	...	...	...	...
17	(a) and (b)	Gondal-Porbandar*	4-10	...	0-17	...	1-25	...
7	(c)	Hyderabad-Godavari Valley	3-37	4-45	1-00	1-16	0-55	0-79
18	(a)	Jamnagar	4-23	5-33	0-16	0-08	0-90	2-97
19	(a) to (d)	Jodhpur-Bikaner	1-76	1-69	...	...	0-48	0-38
20	(a)	Junagad	4-11	6-68	0-15	0-14	0-88	2-95
6	(c) to (l)	Madras and Southern Mahratta	2-86	2-85	1-07	1-23	0-41	0-44
10	(c)	Nilgiri	3-94	4-06	0-89	1-08	0-25	0-26
2	(h) to (n)	Rajputana-Malwa	2-73	2-78	0-80	0-87	0-26	0-27
22	(a) and (b)	Rohilkhand and Kumaon	0-21	4-26	1-21	2-01	0-49	0-61
10	(f)	Shoranur-Cochin	Included with the	South Indian railway,	...	...	...	...
10	(b), (d), (e) and (g) to (i)	South Indian	2-98	2-75	1-01	1-23	0-29	0-29
23	(a)	Udaipur-Chitorgarh	4-63	2-50	...	...	2-01	1-70
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabalpur-Gondia and Nagpur-Chhindwara Extensions.	3-34	4-51	4-23	5-13	0-35	0-43
2	(f)	Kalka-Shimla	2-29	2-40	...	...	1-23	1-01
3	(k) and (l)	Kohat-Thal and Nowshera Durgai	2-45	2-38	0-66	...	0-96	0-29
10	(f)	Morappur-Dharmapuri	0-72	0-34	0-87	1-29	0-25	0-31
1	(g)	Purulia-Banohi	4-43	3-34	2-73	3-11	0-36	0-39
1	(h)	Baipur-Dhamsari	3-28	4-00	5-11	0-81	0-83	0-42
10	(k)	Tirupattur-Krishnagiri	1-14	1-28	0-61	1-05	0-23	0-25

\* Information for 2nd half of 1911 not furnished.

**DIX 11—continued.**

during each half of the calendar year 1911.

[prepare these statistics].

165 b		166 b		167 b		168 b		169 A b		169 A.		170 b.		NUM- BER.
GENERAL CHARGES—contd.														
TOTAL EARNINGS.														
Audit, accounts and pay office.		Stores Department.		Medical Department.		Rents and miscellaneous.		Electricity and repairs and renewals of elec- tric plant.		Police.		Advertising.		Main head.
Per cent.		Per cent.		Per cent.		Per cent.		Per cent.		Per cent.		Per cent.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
0.96	1.09	0.25	0.31	0.32	0.39	0.35	0.45	...	...	0.36	0.42	0.06	0.06	1
0.85	0.93	0.37	0.45	0.15	0.17	0.28	0.30	...	...	0.34	0.38	0.01	0.02	2
1.48	1.06	0.50	0.40	0.39	0.29	0.75	0.48	...	...	0.39	0.28	0.04	0.02	3
0.58	0.66	0.23	0.25	0.23	0.24	0.31	0.23	...	...	0.39	0.38	0.01	0.02	4
0.87	1.00	0.27	0.32	0.16	0.20	0.18	0.22	...	...	0.31	0.36	0.01	0.02	5
1.03	1.05	0.40	0.43	0.23	0.27	0.33	0.44	...	...	0.79	0.67	0.01	0.01	6
1.31	1.61	0.23	0.31	0.20	0.30	0.39	0.18	...	...	0.70	0.79	0.01	0.01	7
0.67	0.74	0.20	0.27	0.18	0.19	0.42	0.33	...	...	0.23	0.25	0.04	0.03	8
1.04	1.40	0.34	0.41	0.20	0.25	0.43	0.50	...	...	0.18	0.26	0.04	0.03	9
0.91	0.95	0.31	0.30	0.32	0.25	0.72	0.16	...	...	0.74	0.57	...	...	10
2.85	2.17	0.72	0.67	0.31	0.30	0.43	0.40	...	...	0.95	0.99	0.01	0.01	11
0.96	1.14	0.16	0.19	0.18	0.21	0.18	0.16	...	...	0.45	0.46	0.02	0.02	12
1.18	1.63	0.52	0.32	0.53	0.32	0.63	0.69	...	...	0.73	1.04	0.01	0.03	14
0.94	1.31	0.35	0.46	0.39	0.63	0.33	0.62	...	...	0.70	0.75	0.02	0.05	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
1.39	...	0.77	...	0.68	...	1.16	...	...	...	1.22	...	0.02	...	17
2.37	3.32	0.40	0.63	0.53	0.63	0.62	0.30	...	...	1.00	1.31	0.01	0.03	7
1.33	3.05	0.37	0.43	0.54	0.15	0.94	1.56	...	...	1.56	2.03	0.02	0.02	18
1.12	1.07	0.21	0.26	0.10	0.11	0.35	0.34	...	...	0.15	0.13	...	...	19
1.75	3.50	0.78	1.48	0.33	0.51	0.93	1.69	...	...	1.10	1.39	0.02	0.13	20
1.14	1.20	0.36	0.44	0.35	0.39	0.34	0.40	...	...	0.81	0.86	0.03	0.02	6
0.91	0.96	0.31	0.30	0.52	0.43	0.12	0.16	...	...	0.35	0.66	...	...	10
0.93	1.04	0.32	0.32	0.30	0.31	0.30	0.35	...	...	0.60	0.62	0.01	0.02	2
1.40	1.87	0.32	0.33	0.18	0.21	0.55	0.67	...	...	0.33	0.67	0.03	0.02	22
3.38 gauge.	...	...	...	...	...	...	...	...	...	...	...	...	...	10
1.36	1.37	0.33	0.39	0.30	0.30	0.21	0.26	...	...	0.30	0.60	0.03	0.04	16
1.96	1.66	0.17	0.17	0.31	0.31	0.27	0.22	...	...	...	...	...	...	23
1.14	1.38	0.25	0.32	0.54	0.75	0.14	0.09	...	...	0.43	0.36	...	...	1
0.21	0.15	0.23	0.23	0.35	0.25	0.54	0.22	...	...	0.50	0.41	0.16	0.10	8
3.17	2.66	0.32	0.05	1.03	0.93	1.50	1.01	...	...	4.32	3.33	0.13	0.13	3
0.89	1.15	0.31	0.39	0.13	0.13	...	...	...	...	1.22	1.05	...	...	10
1.07	1.15	0.26	0.29	0.40	0.46	0.04	0.02	...	...	0.11	0.16	...	...	2
1.23	1.58	0.24	0.32	0.14	0.17	0.04	0.10	...	...	0.32	1.33	...	...	1
0.81	0.93	0.29	0.31	0.17	0.11	...	...	...	...	0.24	0.75	...	...	10

## Analysis of working of each railway system

(Note.—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9).		Serial number.	171 £.		172 £.		173 £.	
Main head.	Sub-head.		TABLE E.—GENERAL CHARGES—concl'd.					
Railway system.			PER CENT ON TOTAL EARNINGS—concl'd.					
			Electric telegraph.		Other charges (net).		Total General charges.	
			Per cent.		Per cent.		Per cent.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur	1.27	1.38	0.08	0.08	4.78	5.43
2	(a) to (g)	Bombay, Baroda and Central India	0.82	0.93	0.02	0.02	3.54	3.99
3	(a)	Eastern Bengal	1.53	0.99	0.08	0.14	5.87	4.08
4	(a) to (d)	East Indian	0.80	1.03	0.08	0.01	3.23	3.59
5	(a) to (f)	Great Indian Peninsula	1.02	1.16	0.02	0.06	3.50	4.10
6	(a) and (b)	Madras and Southern Mahratta	1.00	1.01	0.03	0.05	4.78	5.10
7	(a) and (b)	Nizam's Guaranteed State	0.71	0.82	...	...	4.38	5.27
8	(a) to (i)	North Western	1.06	1.09	0.08	0.08	3.22	3.06
9	(a) and (b)	Oudh and Rohilkhand	1.06	1.33	0.02	0.03	4.08	4.70
10	(a)	South Indian	1.01	1.02	0.01	0.01	5.19	4.60
<b>3' 3 1/2" GAUGE.</b>								
11	(a)	Assam-Bengal	1.99	1.93	0.04	0.04	10.95	10.88
12	(a) and (b)	Bengal and North-Western	0.96	1.18	0.02	0.03	3.99	4.76
14	(a) and (b)	Bhavnagar	1.02	1.37	0.05	0.07	5.50	7.65
15	(a) and (b)	Burma	1.16	1.54	0.01	0.02	5.50	7.40
3	(b) to (d)	Eastern Bengal	Included with the 5' 6" gauge.					
17	(a) and (b)	Gondal-Forbandar*	1.35	...	0.09	...	3.70	...
7	(c)	Hyderabad-Godavari Valley	1.15	1.52	0.01	...	7.64	10.40
18	(a)	Jamnagar	1.23	1.03	0.06	0.02	7.68	11.39
19	(a) to (d)	Jodhpur-Bikaner	1.12	1.05	0.04	0.05	3.57	3.39
20	(a)	Junagad	1.57	1.77	0.08	0.06	8.19	14.17
6	(c) to (i)	Madras and Southern Mahratta	1.48	1.72	0.01	0.03	5.99	6.78
10	(c)	Nilgiri	1.00	1.05	0.01	0.01	4.36	4.96
2	(h) to (n)	Rajputana-Malwa	1.21	1.21	0.01	0.01	4.74	5.03
23	(a) and (b)	Rohilkhand and Kumaon	1.19	1.37	0.03	0.04	5.83	7.90
10	(f)	Shoranur-Cochin	Included with the South Indian railway 3' 3 1/2"					
10	(b), (d), (e) and (g) to (i)	South Indian	0.99	1.01	0.10	0.09	5.57	5.68
23	(a)	Udaipur-Chitorgarh	1.00	1.05	0.21	0.17	5.93	5.39
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabalpur-Gondia and Nagpur-Chhindwara Extensions.	2.29	3.77	...	...	9.37	12.85
8	(f)	Kalka-Simla	1.00	0.72	0.27	0.15	4.58	3.29
8	(b) and (i)	Kohat-Thal and Nowshera-Durgai	4.71	3.32	0.32	0.25	17.82	13.77
10	(f)	Morappur-Dharmapuri	1.33	1.22	0.01	0.01	5.06	5.55
1	(g)	Purulia-Ranchi	3.47	1.98	...	...	8.49	7.56
1	(h)	Raipur-Dhantari	1.09	1.45	...	...	8.52	11.73
10	(k)	Tirupattur-Krishnagiri	1.18	0.98	0.01	0.01	4.44	4.39

\* Information for 2nd-half of 1911 not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

(prepare these statistics.)

174		175		176		177		178		179		180		NUM- BER.
TABLE G.—SPECIAL AND MISCELLANEOUS EXPENSES.														
PER CENT ON GROSS EARNINGS.														
Law charges.		Compensation.		Rates and taxes.		Payments to other lines.		Other charges (net).		Total special and miscellaneous expenses.		Average number of locomotives on the line.		Main head.
Per cent.		Per cent.		Per cent.		Per cent.		Per cent.		Per cent.		No.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
0.02	0.07	0.06	0.12	0.15	0.17	1.45	1.61	1.79	1.54	3.47	3.51	392	398	1
0.04	...	0.28	0.27	0.43	0.47	0.67	1.23	0.83	3.32	2.30	4.29	229	290	2
0.04	0.01	1.08	0.38	0.35	0.20	0.57	0.79	1.09	1.11	3.13	2.44	344	242	3
0.05	0.03	0.18	0.27	0.21	0.20	0.41	0.27	1.18	1.30	1.98	2.07	1,074	1,076	4
0.05	0.03	0.32	0.39	0.21	0.24	1.63	0.32	0.93	1.37	3.16	2.39	1,005	1,025	5
0.02	0.01	0.12	0.11	0.38	0.31	0.35	0.34	1.16	2.52	2.03	3.79	249	252	6
0.01	0.01	0.02	0.05	0.61	0.01	0.73	0.74	1.35	2.17	2.64	2.98	60	59	7
0.03	...	0.24	0.33	0.15	0.14	0.06	0.69	1.43	1.11	1.53	2.32	1,059	1,006	8
0.01	0.01	0.15	0.15	0.05	0.12	1.16	0.62	1.10	1.22	2.47	2.12	249	249	9
0.01	...	0.01	0.01	0.06	0.17	0.77	-0.78	0.60	0.84	1.45	0.24	113	111	10
0.16	0.13	0.10	0.19	0.10	0.08	0.11	0.22	2.13	1.35	2.69	2.47	111	109	11
0.03	0.01	0.13	0.11	0.05	0.06	0.66	0.51	0.47	1.33	1.34	2.07	320	322	12
0.01	...	0.02	0.06	...	...	0.43	0.33	0.55	1.02	1.01	1.46	18	15	13
0.04	0.16	0.21	0.07	0.46	0.59	...	...	1.24	1.45	1.95	2.18	305	305	14
...	...	...	...	...	...	...	...	...	...	...	...	212	220	15
0.01	...	0.02	...	...	...	1.16	...	0.66	...	2.05	...	14	...	16
0.02	0.02	0.09	0.25	0.02	0.02	0.14	0.20	0.32	1.33	1.09	2.97	54	53	17
0.01	...	0.01	0.01	...	...	1.27	2.29	1.10	0.73	2.39	3.03	4	4	18
0.01	...	0.15	0.03	...	...	3.53	4.19	0.60	0.29	4.24	4.61	63	76	19
0.01	0.35	0.01	0.19	...	...	1.04	4.33	1.24	1.09	2.30	5.96	7	3	20
0.02	0.01	0.12	0.19	0.06	0.12	...	-0.12	1.25	2.79	1.45	2.93	233	233	21
...	...	...	...	0.39	1.04	...	...	0.73	1.13	1.17	2.22	14	14	22
0.01	...	0.33	0.30	0.02	0.03	0.06	0.11	1.13	2.32	1.60	2.73	303	510	23
0.09	...	0.12	0.07	0.01	0.01	...	0.11	0.45	0.63	0.67	0.61	54	51	24
gauge.	...	...	...	...	...	...	...	...	...	...	...	11	11	25
...	0.01	0.05	0.03	0.31	0.24	0.33	0.43	1.30	1.34	2.04	2.65	274	272	26
...	...	0.03	0.05	...	...	1.02	0.96	2.31	1.73	3.36	2.77	3	3	27
...	...	0.03	0.13	...	...	-0.99	0.33	2.43	1.30	1.47	2.31	55	55	28
...	...	0.10	0.51	0.33	0.15	...	0.33	1.01	0.93	2.34	1.92	32	30	29
0.02	...	0.03	0.29	...	...	...	...	3.35	3.61	3.35	3.30	25	23	30
...	...	...	...	0.22	0.13	...	...	1.41	0.37	1.33	0.75	3	2	31
...	...	0.02	0.03	0.37	0.43	...	...	0.22	0.43	0.61	0.99	9	9	32
...	...	...	0.24	...	...	...	...	0.43	0.53	0.43	0.77	4	4	33
...	...	...	...	...	0.19	...	...	0.03	0.43	0.03	0.65	3	3	34



## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9.)		Serial number.	181		182		183	
Main-head.	Sub-head.		FROM APPENDIX I					
Railway system.			Average miles run per locomotive per diem.		Actual weight of fuel (in terms)			
			Miles.		Coaching.		Goods.	
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
			lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
<b>5' 6" GAUGE.</b>								
1	(a)	Bengal-Nagpur	68.21	63.83	...	...	62.84	61.78
2	(a) to (g)	Bombay, Baroda and Central India	71.68	68.19	59.72	59.05	68.63	72.95
3	(a)	Eastern Bengal	64.47	71.22	55.89	56.16	77.02	81.19
4	(a) to (d)	East Indian	71.87	70.77	...	...	55.48	54.35
5	(a) to (f)	Great Indian Peninsula	65.25	60.35	60.44	59.16	80.53	90.07
6	(a) and (b)	Madras and Southern Mahratta	61.89	56.11	...	...	68.57	68.65
7	(a) and (b)	Nizam's Guaranteed State	76.48	74.35	46.64	46.19	61.43	62.18
8	(a) to (i)	North Western	68.03	64.34	...	...	61.29	62.40
9	(a) and (b)	Oudh and Rohilkhand	73.99	72.62	...	...	58.89	60.53
10	(a)	South Indian	49.82	51.42	48.85	40.85	54.05	58.42
<b>3' 3 3/4" GAUGE.</b>								
11	(a)	Assam-Bengal	56.37	57.91	...	...	45.84	46.06
12	(a) and (b)	Bengal and North-Western	64.29	59.00	...	...	42.97	40.97
14	(a) and (b)	Bhavnagar	78.98	83.59	...	...	38.58	34.24
15	(a) and (b)	Burma	80.26	70.39	36.37	35.42	43.99	49.54
3	(b) to (d)	Eastern Bengal	62.38	62.52	42.56	42.54	60.37	64.24
17	(a) and (b)	Gondal-Porbandar*	99.78	...	...	...	38.11	...
7	(c)	Hyderabad-Godavari Valley	72.26	66.31	36.78	39.42	41.06	48.86
18	(a)	Jamnagar	58.90	61.86	...	...	35.85	43.30
19	(a) to (d)	Jodhpur-Bikaner	85.28	80.08	...	...	41.13	45.82
20	(a)	Junagad	63.09	54.28	...	...	34.41	37.64
6	(c) to (i)	Madras and Southern Mahratta	72.33	69.05	...	...	42.46	43.83
10	(c)	Nilgiri	23.17	21.44	108.59	120.23	103.54	104.95
2	(h) to (a)	Rajputana-Malwa	52.61	51.65	...	...	45.29	40.55
22	(a) and (b)	Rohilkund and Kumaon	71.72	60.42	...	...	35.69	41.46
10	(f)	Shoranur-Cochin	68.75	66.45	36.26	36.32	35.52	37.08
10	(b), (d), (e) and (g) to (i)	South Indian	64.89	69.90	36.54	38.67	39.13	42.62
23	(a)	Udaipur-Chitorgarh	57.99	92.46	...	...	...	...
<b>2' 6" GAUGE.</b>								
1	(b), (c) and (e)	Gondia-Chanda, Jabulpore-Gondia and Nagpur- Ohhindwara Extensions.	42.00	40.36	...	...	78.37	80.43
3	(f)	Kalka-Simla	28.91	32.82	...	...	51.14	51.75
3	(h) and (i)	Kohat-Thal and Nowshera-Durgai	47.87	35.61	...	...	21.34	19.83
10	(f)	Morappur-Dharmapuri	38.14	39.32	...	...	...	21.95
1	(g)	Purnia-Banahi	44.35	44.16	...	...	58.98	65.00
1	(h)	Raipur-Dhamtari	58.05	45.35	...	...	38.85	37.58
10	(h)	Tirupattur-Krishnagiri	34.76	34.89	...	...	...	33.46

\* Information for 2nd-half of 1911 not furnished.

DIX 11—continued.

during each half of the calendar year 1911.

[prepare these statistics.]

184		185		186		187		188		189		190		Number.
OF THE ANALYSIS OF WORKING OF EACH RAILWAY—concl'd.														
of coal) per engine mile.		Average gross weight of trains—						Average through speed of trains—						Main head.
Mixed.		Coaching.		Goods.		Mixed.		Coaching.		Goods.		Mixed.		
Ibs.	Ibs.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Miles per hour.	Miles per hour.	Miles per hour.	Miles per hour.	Miles per hour.	Miles per hour.	
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
...	...	227.91	242.01	525.10	558.63	312.51	324.42	30.00	30.00	10.00	10.00	20.00	20.00	1
71.98	67.16	201.77	217.16	551.59	549.02	249.28	285.27	22.71	22.69	10.41	10.29	14.98	16.54	2
58.41	67.66	189.77	245.80	460.70	622.13	183.53	215.94	16.95	16.95	13.14	13.14	13.13	13.13	3
...	...	267.53	289.82	631.47	616.53	297.17	283.79	25.70	25.00	15.50	15.00	17.00	16.00	4
73.60	72.75	198.71	192.71	412.72	388.88	...	...	24.23	24.17	11.13	11.26	18.70	18.68	5
...	...	175.63	181.79	453.29	505.97	324.86	418.19	21.63	21.63	9.48	9.48	12.29	12.29	6
54.96	55.82	140.32	142.82	409.87	393.13	298.86	394.76	20.03	20.03	10.52	10.52	14.05	14.05	7
...	...	281.98	285.64	369.18	364.95	309.91	308.78	20.33	20.33	10.60	10.54	14.27	14.26	8
...	...	260.22	278.96	331.86	291.30	253.26	257.84	31.57	31.57	10.35	10.35	17.23	17.23	9
46.89	47.11	110.89	136.76	375.92	384.69	235.17	253.02	21.03	21.03	10.30	10.30	11.50	11.50	10
...	...	157.37	117.87	179.23	223.70	163.73	172.15	...	...	...	...	13.12	13.12	11
...	...	173.39	163.02	234.46	226.55	204.51	194.81	17.00	17.00	9.50	9.50	12.30	12.30	12
...	...	166.06	272.64	183.36	169.30	127.71	124.39	19.50	19.59	10.68	10.68	13.91	14.53	14
36.39	35.77	166.79	163.79	208.66	190.56	181.38	170.82	16.76	16.76	10.68	10.68	13.03	13.03	15
41.97	48.03	142.50	160.95	256.96	465.05	167.29	186.39	16.53	16.53	11.61	11.61	11.61	11.61	3
...	...	175.89	...	156.62	...	126.29	...	19.76	...	13.23	...	11.50	...	17
38.31	40.51	96.10	96.37	203.90	199.19	163.76	173.12	16.93	16.93	10.43	10.43	12.01	12.01	7
...	...	85.14	87.81	115.74	126.56	186.54	112.08	19.97	20.73	13.90	13.73	16.43	16.07	18
...	...	191.79	216.78	133.50	135.89	128.34	128.96	19.66	19.66	11.69	11.69	14.05	12.17	10
...	...	60.69	60.79	199.21	163.07	154.33	114.69	19.07	20.33	10.65	13.67	14.29	14.74	20
...	...	97.20	166.91	199.26	190.02	163.97	168.99	16.39	16.39	8.53	8.53	11.40	11.40	6
111.23	121.90	46.44	46.73	30.18	31.53	45.00	47.71	6.11	6.11	5.90	5.90	6.11	6.11	10
...	...	127.30	123.51	263.62	280.99	156.43	164.97	17.73	17.99	8.73	8.53	13.93	14.03	2
...	...	...	...	...	...	...	...	16.43	16.72	10.00	9.97	13.27	13.45	22
29.38	...	104.84	93.30	160.61	131.64	189.12	...	18.57	18.57	10.00	10.00	...	...	10
34.13	34.69	110.16	103.97	237.21	209.09	160.70	121.94	18.00	18.00	9.50	9.50	12.00	12.00	10
34.63	27.63	...	...	...	...	166.59	119.76	...	...	...	...	14.76	17.00	23
...	...	143.54	141.33	169.29	188.42	144.77	159.65	14.00	15.00	10.00	10.00	12.00	12.00	1
...	...	147.98	53.42	40.77	36.19	53.63	63.00	9.03	9.16	7.46	7.46	...	...	8
...	...	...	...	24.33	32.29	42.59	40.62	...	...	8.34	8.34	11.60	11.60	8
37.66	32.14	...	...	...	...	52.60	57.77	...	...	...	...	12.63	12.33	10
...	...	111.64	116.36	153.00	97.90	190.20	189.13	17.00	18.00	11.00	11.00	12.00	12.00	1
...	...	50.72	...	62.35	31.54	97.94	32.50	...	...	...	...	11.00	11.00	1
35.99	39.59	...	...	...	...	63.09	65.75	...	...	...	...	11.36	11.36	10

## Analysis of working of each railway system

[Note.—Railways not shown do not

Classification No. of Railway. (Detailed in "Index" to Appendix 9).		Serial number.	191		192	
Main head.	Sub-head.	Railway system.	FROM APPENDIX II OF THE ANALYSIS OF WORKING OF EACH RAILWAY.			
			AVERAGE MILEAGE per item of—			
			Coaching vehicles, including brakes.		Goods vehicles, includ- ing brakes.	
			Miles.		Miles.	
			1st half.	2nd half.	1st half.	2nd half.
<b>5' 6" GAUGE.</b>						
1	(a)	Bengal-Nagpur	141,528	146,444	418,124	401,784
2	(a) to (g)	Bombay, Baroda and Central India	138,838	172,012	251,887	232,412
3	(a)	Eastern Bengal	92,286	107,071	130,396	136,789
4	(a) to (d)	East Indian	425,845	424,202	1,369,503	1,245,561
5	(a) to (f)	Great Indian Peninsula	352,781	372,248	835,861	683,390
6	(a) and (b)	Madras and Southern Mahratta	98,328	94,781	167,075	143,108
7	(a) and (b)	Nizam's Guaranteed State	20,821	19,267	61,810	57,778
8	(a) to (c)	North Western	457,165	492,031	926,931	832,015
9	(a) and (b)	Oudh and Rohilkhand	121,574	131,592	183,472	149,801
10	(a)	South Indian	29,420	31,572	48,123	50,120
<b>3' 3 3/4" GAUGE.</b>						
11	(a)	Assam-Bengal	44,009	42,880	43,122	48,501
12	(a) and (b)	Bengal and North-Western	212,946	214,678	307,862	240,688
14	(a) and (b)	Bhavnagar	12,742	11,657	12,420	11,209
15	(a) and (b)	Burma	140,920	146,451	281,442	220,184
3	(b) to (d)	Eastern Bengal	100,812	100,027	140,897	133,390
17	(a) and (b)	Gondal-Porbandar*	13,500	—	9,191	—
7	(c)	Hyderabad-Godavari Valley	27,427	27,876	35,802	30,042
13	(a)	Jamnagar	2,623	2,407	817	730
19	(a) to (d)	Jodhpur-Bikaner	48,880	46,478	89,085	98,308
20	(a)	Junagad	4,542	4,284	4,984	4,468
6	(c) to (l)	Madras and Southern Mahratta	119,718	128,415	252,718	229,849
10	(c)	Nilgiri	1,091	1,077	618	569
2	(b) to (n)	Rajputana-Malwa	238,888	246,995	358,146	349,895
22	(a) and (b)	Rohilkund and Kumaon	28,954	28,040	48,811	32,046
10	(f)	Shoranur-Cochin	5,022	4,718	5,517	6,545
19	(b), (d), (e) and (g) to (i)	South Indian	163,228	167,536	178,058	187,136
23	(a)	Udaipur-Chitorgarh	2,336	2,322	1,252	1,374
<b>2' 6" GAUGE.</b>						
1	(b), (c) and (e)	Gondia-Chanda, Jabalpur-Gondia and Nagpur- Chhindwara Extensions.	19,675	20,693	26,204	23,459
8	(f)	Kalka-Simla	3,009	3,372	2,631	3,280
8	(k) and (l)	Kohat-Thal and Nowshera-Durgai	6,228	5,796	4,491	3,275
10	(f)	Morappur-Dharmapuri.	961	961	407	553
1	(g)	Purulia-Ranchi	5,684	5,250	2,661	2,654
1	(h)	Raipur-Dhamtari	1,211	1,179	2,638	1,861
10	(k)	Tirupattur-Krishnagiri	969	1,068	588	501

\* Information for 2nd-half of 1911 not furnished.

DIX 11—concluded.

during each half of the calendar year 1911.

prepare these statistics.]

193		194		195		196		Number.
FROM APPENDIX V OF THE ANALYSIS OF WORKING OF EACH RAILWAY.								
AVERAGE AGE OF SLEEPERS—				PERCENTAGE OF REMOVALS.				Main head.
Wood.		Iron.		Wood.		Iron.		
Years.	Years.	Years.	Years.	Per cent.	Per cent.	Per cent.	Per cent.	
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
7.45	7.50	12.86	13.29	2.33	0.94	3.06	0.72	1
11.15	11.84	13.56	13.17	8.42	3.81	2.07	0.04	2
7.50	7.50	14.50	15.00	10.85	2.60	0.19	2.78	3
10.75	10.83	10.83	10.96	2.41	2.33	2.49	2.23	4
..	..	..	..	2.83	1.94	2.33	2.99	5
10.97	11.14	..	..	3.92	4.63	..	..	6
..	..	..	..	..	..	..	..	7
6.73	7.00	14.40	14.63	3.17	1.74	4.80	2.43	8
12.55	1.18	14.20	14.18	1.11	1.19	3.30	4.21	9
8.29	8.49	30.29	30.71	4.90	3.57	0.22	0.09	10
..	..	..	..	4.26	3.00	..	..	11
9.33	10.25	..	..	1.94	1.83	..	..	12
12.04	12.43	..	..	4.64	5.53	..	..	14
10.31	10.52	..	..	2.90	4.74	..	..	15
9.50	10.00	9.00	9.00	2.45	1.80	0.17	0.74	3
12.23	..	20.53	..	3.14	..	0.03	..	17
..	..	..	..	..	..	..	..	7
9.85	10.15	..	..	1.54	0.90	..	..	18
..	..	16.00	16.00	..	..	0.04	0.37	19
..	..	..	..	1.39	3.60	..	..	20
12.42	12.47	..	..	3.95	5.62	0.46	0.23	6
11.00	11.00	19.50	19.50	3.73	2.57	..	..	10
5.67	6.02	..	..	2.62	1.22	0.06	0.63	2
10.50	10.50	24.00	24.50	0.31	1.05	..	..	23
13.33	14.41	..	..	1.87	2.09	..	..	10
6.86	7.21	..	..	3.63	3.80	1.36	3.39	10
6.63	7.03	19.70	19.04	1.81	..	..	..	23
..	..	..	..	..	..	..	..	..
5.13	5.53	0.75	0.26	0.33	1.01	..	..	1
3.18	3.63	..	..	1.57	1.59	..	..	8
6.32	6.56	7.61	8.11	1.65	3.75	24.42	..	3
4.97	5.37	..	..	1.64	1.37	..	..	10
3.94	4.43	..	..	1.56	0.63	..	..	1
10.41	10.68	..	..	3.23	2.39	..	..	1
5.59	6.09	..	..	0.09	0.12	..	..	10

## Coal and wood fuel consumed by locomotives on each railway system

NOTE.—The figures in this Appendix are amended ones in cases

Classification No. of railway. (Detailed in "Index to Appendix 2.")		Railways.	Sources of supply.	Calendar year.	Description of fuel, with the actual quantity consumed by					
Main head.	Sub-head.				Foreign coal.			Indian coal.		
					Actual quantity in tons.	Average cost per ton.		Actual quantity in tons.	Average cost per ton.	
		Including all freight, both rail and sea, from the pit's mouth to the engine-shed where issued to locomotives.	At pit's mouth.			Including all freight, both rail and sea, from the pit's mouth to the engine-shed where issued to locomotives.	At pit's mouth.			
1	2	3	4	5	6	7	8	9	10	11
		5' 6" GAUGE.				Rs.	Rs.		Rs.	Rs.
1	(a)	Bengal-Nagpur ...	Bengal, Berar and the Central Provinces.	1905 1906 1907 1908 1909 1910 1911	... ... ... ... ... ... ...	... ... ... ... ... ... ...	... ... ... ... ... ... ...	177,960 199,707 228,332 230,250 215,643 230,722 263,083	5'31 5'34 6'65 7'39 7'76 7'52 6'41	2'49 2'37 3'84 4'53 4'89 4'79 3'53
2	(a) to (g)	Bombay, Baroda and Central India.	England, Bengal and Singareni.	1905 1906 1907 1908 1909 1910 1911	12,621 26,682 34,899 17,874 16,311 17,682 18,333	17'13 21'67 22'05 23'75 21'64 20'42 21'18	a a a a a a a	75,769 64,635 73,436 108,709 131,133 153,390 192,317	15'06 14'67 15'79 15'81 17'63 17'66 15'59	a a a a a a a
3	(a)	Eastern Bengal ...	Bengal ...	1905 1906 1907 1908 1909 1910 1911	... ... ... ... ... ... ...	... ... ... ... ... ... ...	... ... ... ... ... ... ...	90,396 119,032 142,012 157,312 156,459 156,140 169,711	a 5'68 6'20 6'31 7'92 5'70 5'42	2'39 2'48 3'44 4'85 5'17 2'94 2'62
4	(a) to (d)	East Indian ...	Bengal ...	1905 1906 1907 1908 1909 1910 1911	... ... ... ... ... ... ...	... ... ... ... ... ... ...	... ... ... ... ... ... ...	505,915 532,758 600,045 630,572 607,671 610,754 685,737	4'00 3'67 4'47 5'05 4'90 4'73 5'21	1'92 1'85 2'53 2'74 2'78 2'78 2'84
5	(a) to (f)	Great Indian Peninsula.	Africa, Australia, England, Holland, Bengal, Central India, Central Provinces and Singareni.	1905 1906 1907 1908 1909 1910 1911	329 641 103 8,277 12,235 13,116 8,177	18'61 19'43 22'23 24'18 20'38 19'86 16'20	a a a a a a a	453,408 477,263 567,758 583,155 615,366 675,390 743,253	11'22 11'75 12'04 12'77 13'04 12'51 11'66	a a a a a a a
...	...	Madras ...	Bengal and Singareni.	1905 1906 1907	... ... ...	... ... ...	... ... ...	156,312 157,081 165,282	10'23 10'52 13'38	a a a
6	(a) & (b)	Madras and Southern Mahratta.	Africa, Australia, Bengal and Singareni.	1908 1909 1910 1911	8,971 10,095 1,358 ...	15'18 16'64 18'30 ...	a a a ...	156,464 151,439 163,583 160,362	12'02 13'06 12'43 11'87	5'32 5'15 4'78 4'32
7	(a) & (b)	Nizam's Guaranteed State.	Singareni ...	1905 1906 1907 1908 1909 1910 1911	... ... ... ... ... ... ...	... ... ... ... ... ... ...	... ... ... ... ... ... ...	24,900 26,919 29,345 32,682 36,041 40,166 41,140	5'84 5'59 5'58 5'79 5'89 6'22 6'30	4'50 4'50 4'50 4'72 4'75 5'21 5'25
8	(a) to (f)	North Western ...	England, Bengal, Baluchistan and Punjab.	1905 1906 1907 1908 1909 1910 1911	2,374 2,372 6,327 1,699 11,540 131 346	a a a a a a a	a a a a a a a	431,519 476,377 581,536 623,189 707,148 674,186 732,106	a a a a a a a	a a a a a 3'88 3'51
9	(a) & (b)	Oudh & Rohilkhand ...	Bengal ...	1905 1906 1907 1908 1909 1910 1911	... ... ... ... ... ... ...	... ... ... ... ... ... ...	... ... ... ... ... ... ...	131,424 142,729 152,881 150,670 151,545 155,147 177,571	10'32 14'53 10'61 11'77 10'61 9'07 8'38	2'13 2'48 3'73 4'99 4'77 2'53 2'59
10	(a)	South Indian ...	Africa, Bengal and Singareni.	1908 1909 1910 1911	... 20 20 ...	... 23'87 23'88 ...	... a a ...	45,899 52,756 48,227 46,985	18'59 16'25 16'54 15'57	4'60 3'02 2'98 3'15

**DIX 12**  
*and price paid per ton during the calendar years 1905 to 1911.*  
 where they differ from the corresponding figures in the earlier Reports.

locomotives and cost per ton.			Average cost per ton of all fuel consumed by locomotives excluding all freight, both rail and sea.  (Wood has been reduced to terms of coal at the rate of 2½ tons of wood to 1 ton of coal).	Consumption in pounds. (Calculated on the actual quantity of coal, wood being reduced to terms of coal at the rate of 2½ tons of wood to 1 ton of coal).				REMARKS.
Wood.				Per train-mile.	Per engine-mile.	Per 1,000 freight ton-miles.	Per 1,000 gross ton-miles.	
Actual quantity in tons.	Average cost per ton.							
		Including all freight, both rail and sea, from the station of supply to the engine shed where issued to the locomotives.	At station of supply.					
12	13	14	15	16	17	18	19	20
	Rs.	Rs.	Rs.					
297	4.88	4.42	2.49	74.83	63.71	618.19	193.34	
163	4.56	4.56	2.37	73.48	61.09	624.02	197.53	
45	4.58	4.58	3.81	81.29	65.65	631.70	204.60	
...	...	...	4.58	83.07	66.27	581.42	199.25	
...	...	...	4.89	76.30	61.17	534.61	179.35	
...	...	...	4.79	74.25	59.85	510.70	167.78	
166	8.78	8.78	3.53	76.08	62.84	504.90	163.02	
2,494	4.16	2.98	a	37.81	43.43	514.00	140.88	
2,491	4.77	3.27	a	57.18	47.42	478.62	143.15	
2,664	6.20	4.79	a	57.43	47.54	447.59	138.81	
2,370	5.16	3.95	a	63.85	52.29	690.20	167.18	
2,911	5.15	3.98	a	69.15	58.74	657.71	174.98	
3,409	6.82	5.43	a	71.97	59.77	651.81	175.06	
3,700	7.13	5.55	a	75.61	63.67	715.19	179.44	
...	...	...	2.39	78.38	53.59	975.41	232.23	
...	...	...	2.48	80.26	54.78	998.33	249.46	
...	...	...	3.44	84.57	58.10	1,097.07	238.91	
...	...	...	4.35	91.41	64.20	1,216.45	258.65	
...	...	...	5.17	89.94	61.63	1,127.17	231.16	
...	...	...	2.94	89.90	61.29	1,175.35	240.99	
...	...	...	2.61	89.79	63.19	1,014.18	222.92	
...	...	...	1.92	69.75	52.07	481.67	145.77	
...	...	...	1.85	63.79	51.07	426.30	141.43	
...	...	...	2.53	69.69	51.80	459.95	144.93	
...	...	...	2.74	73.96	55.15	479.94	151.77	
...	...	...	2.78	70.11	53.25	426.77	139.71	
...	...	...	2.78	70.06	54.93	384.91	130.85	
...	...	...	2.84	72.48	51.89	390.84	123.60	
4,892	5.48	3.51	a	67.43	59.09	755.74	200.52	
4,485	6.21	4.01	a	68.43	59.73	754.29	198.91	
4,666	6.61	4.37	a	71.83	62.71	770.91	208.61	
4,470	6.84	4.57	a	78.31	67.05	925.51	221.25	
2,059	6.19	4.22	a	80.23	69.72	806.27	216.85	
1,548	7.00	4.75	a	83.07	71.59	792.22	218.17	
2,415	6.57	4.60	a	85.30	73.97	815.41	219.00	
42,059	4.43	3.98	a	75.06	63.35	874.82	231.69	
31,115	4.34	4.09	a	75.06	63.74	895.19	228.97	
16,074	5.17	4.21	a	71.51	60.84	934.55	237.11	
6,537	5.33	4.50	a	79.53	68.25	1,194.17	261.72	
7,587	6.40	4.81	a	85.48	78.06	1,030.32	261.11	
7,375	6.91	4.96	a	85.28	71.40	1,001.83	238.90	
4,761	6.95	5.30	4.43	83.44	68.61	904.15	243.10	
...	...	...	4.50	57.30	49.19	516.05	134.53	
...	...	...	4.50	56.24	47.98	504.29	128.81	
...	...	...	4.10	57.85	49.20	500.25	126.90	
...	...	...	4.72	63.64	54.21	591.48	178.03	
...	...	...	4.75	68.87	56.87	693.58	191.83	
...	...	...	5.21	61.78	52.79	611.69	178.75	
...	...	...	5.25	63.91	56.69	576.79	173.35	
76,337	a	5.27	a	59.82	52.16	541.06	172.02	
77,122	a	5.92	a	63.32	53.67	551.86	178.04	
19,907	a	5.77	a	68.23	57.57	567.89	182.69	
5,093	a	6.51	a	71.11	58.91	644.92	212.03	
3,938	a	6.52	a	80.53	65.85	775.02	217.65	
5,357	5.80	4.84	a	76.87	62.10	664.92	196.10	
7,960	7.23	4.03	a	77.70	63.33	690.47	189.74	
...	...	...	2.13	59.16	50.26	919.25	192.32	
...	...	...	2.45	61.69	52.24	929.53	204.73	
...	...	...	3.78	64.53	54.16	968.81	208.35	
...	...	...	4.39	68.32	57.60	1,007.73	213.54	
...	...	...	4.77	63.31	53.84	1,029.27	205.81	
...	...	...	2.53	66.86	57.48	962.07	189.04	
...	...	...	2.89	69.43	59.71	1,025.24	205.41	
2,664	4.08	3.91	4.71	74.09	63.17	1,225.22	296.32	
4,241	4.23	4.19	a	70.03	61.02	1,151.68	294.15	
4,616	4.28	4.24	a	63.32	55.37	1,067.66	236.42	
4,975	4.36	4.54	3.46	59.30	53.03	876.17	207.93	

a Information not available.

Coal and wood fuel consumed by locomotives on each railway system

NOTE.—The figures in this Appendix are amended ones in cases

Classification No. of railway. (Detailed in "Index" to Appendix B.)		Railways.	Sources of supply.	Calendar year.	Description of fuel, with the actual quantity consumed by					
Main head.	Sub-head.				Foreign coal.			Indian coal.		
					Actual quantity in tons.	Average cost per ton.		Actual quantity in tons.	Average cost per ton.	
			Including all freight, both rail and sea, from the pit's mouth to the engine-shed where issued to locomotives.	At pit's month.			Including all freight, both rail and sea, from the pit's mouth to the engine-shed where issued to locomotives.		At pit's month.	
1	2	3	4	5	6	7	8	9	10	11
						Rs.	Rs.		Rs.	Rs.
11	(a)	Assam-Bengal ...	Scotland, Assam and Bengal.	1905 1906 1907 1908 1909 1910 1911	200	12.69	a	31,778 37,185 43,278 44,184 43,882 43,758 46,836	10.35 10.80 11.59 11.98 11.56 11.23 10.74	a a a a a a a
12	(a) & (b)	Bengal and North-Western.	Bengal	1905 1906 1907 1908 1909 1910 1911				85,854 98,124 111,280 112,664 117,328 123,475 133,898	7.29 7.97 8.92 8.92 9.98 8.65 7.61	2.42 2.38 3.73 4.21 5.18 4.07 2.96
13	(a) & (b)	Bengal Doab ...	Assam and Bengal ...	1905 1906 1907 1908 1909 1910 1911				3,652 3,876 3,852 3,629 4,073 4,201 4,479	11.41 10.98 11.88 10.65 10.28 11.09 9.70	2.69 2.75 4.25 4.50 4.50 3.50 2.75
14	(a) & (c)	Bhavnagar ...	England and Bengal.	1911	142	5 23.92	a	7,019	5 14.46	a
		Bhavnagar-Gondal-Junagad Porbandar.	Australia, England, and Bengal.	1905 1906 1907 1908 1909 1910	5 1,984 10,937 11,851	5 23.28 a b 20.48 b 22.84 b 24.10	a a a a	8,010 9,050 10,035 12,388 995 2,598	b 14.07 b 13.54 b 15.28 b 16.00 b 15.92 b 14.22	a a a a a a
15	(a) & (b)	Burma ...	England and Bengal	1905 1906 1907 1908 1909 1910 1911	348 88 2,133 1,731 1,158	23.16 23.32 22.05 22.74 22.60	a a a a a	95,711 94,734 96,576 104,359 105,791 110,597 113,100	12.28 12.81 13.45 14.29 14.84 13.50 13.48	a a a a a a a
		Deoghar	Bengal	1905 1906 1907 1908 1909 1910 1911				a a 330 314 395 a a	a a 6.79 8.97 6.50 a a	a a 4.61 7.90 4.50 a a
16	(a) & (b)	Dibru-Sadiya ...	Assam...	1905 1906 1907 1908 1909 1910 1911				5,568 6,663 7,455 7,663 8,672 9,651 9,981	6.50 6.50 6.50 6.50 6.50 6.50 6.50	a a a a a a a
3	(b) to (d)	Eastern Bengal ...	Assam and Bengal ...	1905 1906 1907 1908 1909 1910 1911				48,662 57,527 60,969 78,014 89,611 100,448 114,411	a 7.66 8.29 6.80 6.89 7.90 6.28	3.19 3.92 4.61 4.27 4.63 3.26 2.78
17	(a) & (b)	Gondal-Porbandar ...	England and Bengal.	1911	198	23.87	a	8,517	13.62	a
7	(c)	Hyderabad-Godavari Valley.	Singareni	1905 1906 1907 1908 1909 1910 1911				16,638 15,638 15,101 18,311 18,990 22,410 23,904	7.86 7.83 7.80 7.98 7.98 8.49 8.49	4.56 4.50 4.50 4.78 4.75 5.25 5.25

DIX 12—contd.

and price paid per ton during the calendar years 1905 to 1911.

where they differ from the corresponding figures in the earlier Reports.

Locomotives and cost per ton.			Average cost per ton of all fuel consumed by locomotives, excluding all freight, both rail and sea.  (Wood has been reduced to terms of coal at the rate of 2½ tons of wood to 1 ton of coal).	Consumption in pounds. (Calculated on the actual quantity of coal wood being reduced to terms of coal at the rate of 2½ tons of wood to 1 ton of coal).				REMARKS.
Wood.				Per train-mile.	Per engine-mile.	Per 1,000 freight ton-miles.	Per 1,000 gross ton-miles.	
Actual quantity in tons.	Average cost per ton.							
	Including all freight, both rail and sea, from the station of supply to the engine shed where issued to the locomotives.	At station of supply.						
12	13	14	15	16	17	18	19	20
	Rs.	Rs.	Rs.					
...	...	...	a	47.94	38.88	1,068.16	305.00	a
...	...	...	a	52.12	39.81	883.03	251.10	a
...	...	...	a	54.72	41.87	891.98	253.48	a
...	...	...	a	52.04	39.83	902.66	250.94	a
...	...	...	a	55.21	42.53	858.78	249.91	a
...	...	...	a	53.61	42.28	784.78	243.85	a
...	...	...	a	56.82	45.95	652.41	250.34	a
...	...	...	a	49.18	34.60	749.47	196.89	a
...	...	...	a	44.32	35.33	718.55	197.14	a
...	...	...	a	46.40	37.77	708.84	193.16	a
...	...	...	a	46.10	37.42	804.64	206.92	a
...	...	...	a	47.80	38.81	827.45	207.93	a
...	...	...	a	48.09	39.69	823.23	203.68	a
...	...	...	a	50.14	41.37	782.62	203.67	a
...	...	...	a	30.52	26.78	a	a	a
...	...	...	a	35.56	28.96	a	a	a
...	...	...	a	35.09	29.56	a	a	a
...	...	...	a	39.59	37.01	933.53	a	a
...	...	...	a	42.79	40.49	1,164.71	a	a
...	...	...	a	41.55	38.92	1,078.05	a	a
...	...	...	a	41.46	38.74	1,020.13	a	a
c 56	11.71	11.71	a	37.75	33.89	1,073.37	226.73	a
...	...	...	a	32.09	29.03	816.07	179.85	a
83	7.50	7.10	a	35.45	31.25	840.55	180.53	a
91	8.03	8.03	a	30.30	27.67	815.63	173.48	a
103	9.00	9.00	a	32.21	32.21	1,040.81	218.75	a
132	9.03	9.03	a	27.02	25.05	982.74	152.23	a
140	10.18	10.13	a	31.48	29.08	1,050.23	207.12	a
154	11.00	11.00	a	50.38	41.49	959.94	237.11	a
28,903	5.06	4.74	a	45.51	37.68	830.51	211.50	a
22,912	4.74	3.94	a	44.02	36.21	705.92	197.79	a
18,564	4.40	3.58	a	43.07	35.49	808.90	190.93	a
19,336	4.36	3.64	a	42.23	34.69	800.83	184.74	a
21,739	5.22	4.51	a	42.61	34.71	750.74	184.21	a
21,992	5.74	5.07	a	42.15	33.87	788.53	182.37	a
21,138	5.89	4.13	a	a	a	a	a	a
...	...	...	a	a	a	a	a	a
...	...	...	a	46.38	46.38	a	a	a
...	...	...	a	46.00	46.00	a	a	a
...	...	...	a	54.00	54.00	a	a	a
...	...	...	a	a	a	a	a	a
...	...	...	a	a	a	a	a	a
...	...	...	a	51.41	33.71	a	a	a
...	...	...	a	55.06	36.33	a	a	a
...	...	...	a	59.80	36.26	a	a	a
...	...	...	a	62.17	37.16	a	a	a
...	...	...	a	72.18	37.83	a	a	a
...	...	...	a	72.80	40.30	a	a	a
...	...	...	a	70.31	40.01	a	a	a
...	...	...	a	46.89	36.52	605.30	227.78	a
...	...	...	a	48.90	38.04	837.53	246.93	a
...	...	...	a	46.31	35.78	661.18	210.23	a
...	...	...	a	58.57	44.81	970.28	261.28	a
...	...	...	a	63.15	43.27	1,109.05	273.25	a
...	...	...	a	63.40	46.01	1,188.32	286.51	a
...	...	...	a	65.48	50.55	1,147.71	279.46	a
...	...	...	a	45.26	41.99	1,452.11	276.10	a
72	11.67	a	a	45.26	41.99	1,452.11	276.10	a
...	...	...	a	39.50	33.70	825.63	201.96	a
...	...	...	a	37.59	33.68	753.34	194.36	a
...	...	...	a	35.06	31.36	697.34	179.20	a
...	...	...	a	37.12	33.33	816.74	201.49	a
...	...	...	a	39.34	35.48	875.84	213.31	a
...	...	...	a	41.08	37.13	873.80	222.79	a
...	...	...	a	44.66	39.71	969.30	240.71	a

a Information not available.

b Excludes freight over home line.

c Old sleepers used for lighting purposes.

d Included with the East Indian railway, vide No. 4 (a) to (d).



Coal and wood fuel consumed by locomotives on each railway system

NOTE.—The figures in this Appendix are amended ones in cases

Classification No. of railway. (Detailed in "Index" to Appendix 9).	Railways.		Sources of supply.	Calendar year.	Description of fuel, with the actual quantity consumed by					
					Foreign coal.			Indian coal.		
					Actual quantity in tons.	Average cost per ton.		Actual quantity in tons.	Average cost per ton.	
Including all freight, both rail and sea, from the pit's mouth to the engine-shed where issued to locomotives.	At pit's month.	Including all freight, both rail and sea, from the pit's mouth to the engine-shed where issued to locomotives.	At pit's month.							
1	2	3	4	5	6	7	8	9	10	11
		<b>5' 3 1/2" GAUGE—concl'd.</b>					Rs.		Rs.	Rs.
18	(a)	Jamnagar ...	England and Bengal	1911	24	24'50	a	1,534	18'39	a
				1905	...	...	...	24,689	12'22	5'39
				1906	...	...	...	28,269	13'16	5'02
18	(a) to (d)	Jodhpur-Bikaner ...	Australia, Bengal and Rajputana.	1907	...	...	...	27,668	15'03	6'21
				1908	...	...	...	28,846	14'02	6'50
				1909	3,551	18'39	a	24,776	14'01	6'15
				1910	...	...	...	32,322	14'69	5'02
				1911	...	...	...	42,095	14'86	2'63
20	(a)	Junagad ...	England and Bengal	1911	90	a	a	2,461	18'45	a
6	(c) to (b)	Madras and Southern Mahratta.	Africa, Australia, Bengal and Singareni.	1908	36,177	22'50	a	51,749	14'95	5'89
				1909	12,245	20'00	a	89,539	14'55	5'55
				1910	1,399	20'52	a	106,553	14'71	4'06
				1911	...	...	...	119,305	18'68	4'21
				1905	...	...	...	1,796	18'34	a
				1906	...	...	...	1,102	17'25	a
21	(a)	Morvi ...	Bengal	1907	...	...	...	1,264	17'54	a
				1908	...	...	...	2,523	17'40	5'25
				1909	...	...	...	2,462	17'15	5'00
				1910	...	...	...	2,569	14'58	2'37
				1911	...	...	...	2,278	14'75	2'19
				1905	2,547	24'38	a	284	12'48	4'25
				1906	2,180	25'18	a	121	18'65	4'75
				1907	2,435	25'71	a	337	17'01	3'57
				1908	b	b	b	b	b	b
				1905	...	...	...	194,200	16'87	4'03
				1906	...	...	...	145,087	17'70	4'77
2	(h) to (n)	Rajputana-Malwa ...	Bengal and Singareni.	1907	...	...	...	156,612	14'57	4'94
				1908	...	...	...	155,609	14'80	6'39
				1909	...	...	...	158,849	14'75	5'14
				1910	...	...	...	161,195	13'72	5'06
				1911	...	...	...	180,013	14'00	5'48
				1905	...	...	...	8,942	11'11	2'35
				1906	...	...	...	8,749	11'85	2'75
22	(a) & (b)	Rohilkund and Kumaon.	Bengal	1907	...	...	...	6,681	12'81	4'25
				1908	...	...	...	6,575	12'45	4'25
				1909	...	...	...	12,686	11'23	4'07
				1910	...	...	...	12,596	9'55	2'56
				1911	...	...	...	16,231	9'14	2'49
				1905	...	...	...	72,314	12'42	3'19
				1906	...	...	...	78,541	12'53	3'33
10	(b) to (c)	South Indian ...	Africa and Bengal ..	1907	...	...	...	81,162	13'66	4'41
				1908	3,404	31'52	a	81,450	15'83	6'20
				1909	5,287	24'53	a	89,775	15'18	6'16
				1910	5,896	23'71	a	93,077	14'54	5'72
				1911	4,818	25'10	a	109,826	14'68	5'77
				1905	...	...	...	49,125	13'68	a
				1906	2,418	18'06	a	53,037	13'00	4'29
				1907	4,112	20'72	a	61,234	13'91	5'03
				1908	a	a	a	a	a	a
				1905	...	...	...	761	18'28	5'75
				1906	...	...	...	907	18'69	5'75
23	(a)	Udaipur-Chitorgarh...	Bengal	1907	...	...	...	922	16'11	5'00
				1908	...	...	...	890	16'78	5'00
				1909	...	...	...	878	16'00	5'00
				1910	...	...	...	954	15'87	5'00
				1911	...	...	...	1,114	12'75	3'75
		<b>2' 6" GAUGE.</b>								
				1905	...	...	...	161	15'00	5'00
				1906	...	...	...	207	15'49	a
2	(a)	Barai Light ...	Bengal and Singareni.	1907	...	...	...	3,202	16'00	a
				1908	...	...	...	2,293	15'75	5'50
				1909	...	...	...	2,686	15'00	6'50
				1910	...	...	...	3,107	15'87	6'50
				1911	...	...	...	3,291	15'45	6'50

DIX 12—contd.

and price paid per ton during the calendar years 1905 to 1911.

where they differ from the corresponding figures in the earlier Reports.

Locomotives and cost per ton.			Average cost per ton of all fuel consumed by locomotives, excluding all freight, both rail and sea.  (Wood has been reduced to terms of coal at the rate of 2½ tons of wood to 1 ton of coal).	Consumption in pounds. (Calculated on the actual quantity of coal, wood being reduced to terms of coal at the rate of 2½ tons of wood to 1 ton of coal).				REMARKS.
Wood.				Per train-mile.	Per engine-mile.	Per 1,000 freight ton-miles.	Per 1,000 gross ton-miles.	
Actual quantity in tons.	Average cost per ton.							
	Including all freight, both rail and sea, from the station of supply to the engine-shed where issued to the locomotives.	At station of supply.						
12	13	14	15	16	17	18	19	20
	Rs.	Rs.	Rs.					
9	12'00	12'00	a	45'61	39'60	2,183'35	317'31	
155	3'90	3'90	5'31	51'51	43'39	575'54	245'73	
168	3'71	3'71	5'02	45'56	45'37	806'35	237'36	
171	5'15	5'15	6'92	48'83	46'03	900'25	244'07	
173	5'33	5'33	6'51	46'79	43'53	1,039'75	243'50	
187	5'72	5'72	a	41'59	33'53	941'73	215'54	
194	4'30	4'30	5'03	42'38	39'24	837'30	204'56	
226	6'25	6'25	2'65	47'25	43'55	300'47	219'00	
c 50	10'00	10'00	a	40'04	38'08	1,223'90	239'24	
50,768	5'33	4'52	a	43'22	37'86	733'44	224'67	
40,379	5'59	4'60	a	46'07	40'53	803'51	234'31	
42,534	5'49	4'64	a	47'72	41'45	833'56	237'46	
51,464	5'30	4'75	a	50'00	43'14	857'45	243'51	
62	4'77	a	a	32'47	31'55	a	a	a Information not available.
15	10'39	a	a	37'66	37'00	a	a	
34	9'25	a	a	30'49	29'80	a	a	
45	10'50	a	a	33'15	32'58	a	a	
15	14'00	a	a	33'41	32'92	a	a	
25	14'00	a	a	34'77	33'83	a	a	
33	10'50	a	a	30'03	29'51	a	a	
4,502	4'62	4'12	a	60'50	52'45	a	a	
5,961	4'65	4'04	a	53'13	49'73	a	a	
6,969	4'68	4'31	a	50'73	45'34	a	a	b Included with the South Indian railway, vide No. 10 (b) to (d).
c 2,055	5'00	5'00	4'02	40'37	34'74	435'11	171'33	
c 1,126	5'00	5'00	4'79	40'33	34'54	327'34	174'25	
c 1,232	5'00	5'00	4'96	40'32	35'39	533'15	175'01	
c 1,063	5'00	5'00	6'41	43'67	37'04	693'23	195'75	
c 1,139	5'00	5'00	5'16	46'41	39'63	630'71	199'50	
c 935	5'00	5'00	5'03	46'39	39'73	651'04	193'35	
c 1,536	5'00	5'00	5'44	43'24	41'93	635'63	200'14	
8,923	3'51	3'34	3'73	43'29	34'79	794'75	237'60	
17,779	4'53	3'49	5'43	45'28	36'15	839'43	203'00	
30,411	4'77	3'48	7'12	43'79	34'59	863'31	174'83	
32,562	4'38	3'43	7'21	47'78	34'39	815'03	199'36	
19,318	4'59	3'03	5'40	49'13	36'70	733'19	210'50	
19,059	4'41	3'19	4'60	47'03	35'10	733'39	200'13	
13,719	4'62	3'25	3'91	49'64	35'26	750'96	193'32	
9,477	5'01	3'01	3'65	36'30	33'74	803'70	200'51	
5,537	5'24	4'34	3'59	36'36	33'13	777'07	193'32	
9,402	5'39	5'00	4'79	33'08	34'64	847'93	203'97	
25,332	4'33	4'77	a	40'33	35'43	912'10	223'75	
17,231	4'60	4'55	a	42'10	37'30	1,005'15	223'90	
15,950	4'56	4'51	a	43'33	37'73	937'45	216'43	
17,321	4'74	4'67	a	43'19	35'49	832'96	209'30	
70,137	5'36	4'00	a	37'04	32'62	713'13	200'65	
74,743	5'37	4'05	a	39'33	35'07	744'54	211'09	
69,639	4'99	4'05	a	42'61	37'39	745'69	220'64	d Included with the Madras and Southern Maharashtra railway, vide No. 3 (c) to (i).
d								
11	5'03	5'03	5'79	33'03	30'03	1,123'52	163'71	
11	4'59	4'59	5'77	37'27	34'30	1,039'35	173'24	
12	4'49	4'49	5'03	36'61	33'29	1,093'76	184'53	
2	5'37	5'47	5'01	34'67	33'23	1,159'01	174'31	
13	4'36	4'36	5'03	35'31	33'55	1,033'32	173'43	
15	5'04	5'04	5'04	37'31	35'16	1,139'63	163'43	
6	4'75	4'75	2'77	32'37	30'30	1,243'73	163'21	
742	5'34	5'00	3'87	40'32	40'06	a	a	
916	6'00	5'00	a	42'22	40'33	a	a	
163	3'31	3'25	a	59'44	57'99	a	a	
165	7'40	6'21	5'30	47'22	46'21	1,015'63	339'13	
243	6'30	5'30	6'76	46'09	44'39	1,161'20	336'40	
39	7'31	6'00	6'61	43'51	42'41	1,132'63	372'63	
43	8'00	8'00	6'57	51'37	41'43			

Coal and wood fuel consumed by locomotives on each railway system.

Notes.—The figures in this Appendix are amended ones in cases

Classification No. of railway. (Detailed in "Index to Appendix 9).		Railways.	Sources of supply.	Calendar year.	Description of fuel with the actual quantity consumed by					
Main head.	Sub-head.				FOREIGN COAL.			INDIAN COAL.		
					Actual quantity in tons.	Average cost per ton.		Actual quantity in tons.	Average cost per ton.	
		Including all freight, both rail and sea, from the pit's mouth to the engine-shed where issued to locomotives.	At pit's mouth.			Including all freight, both rail and sea, from the pit's mouth to the engine shed where issued to locomotives.	At pit's mouth.			
1	2	3	4	5	6	7	8	9	10	11
						Rs.	Rs.		Rs.	Rs.
30	(a)	2' 6" GAUGE—contd. Champamer-Shivrajpur Light.	Bengal ...	1911	...	...	...	448	14-51	3-50
3	(d)	Cooch Bihar	Assam and Bengal ...	1905	...	...	...	587	a	9-57
				1906	...	...	...	856	11-27	11-15
				1907	...	...	...	1,459	15-23	11-08
				1908	...	...	...	1,363	12-50	a
				1909	...	...	...	1,614	11-58	11-19
				1910	...	...	...	b	b	b
				1905	...	...	...	123	17-01	a
				1906	...	...	...	246	15-89	a
				1907	...	...	...	179	23-54	a
				1908	...	...	...	183	25-44	a
				1909	...	...	...	260	23-95	a
				1910	...	...	...	320	20-19	a
				1911	...	...	...	380	19-60	a
32	(a)	Dahri-Bohtas	Bengal ...	1911	...	...	...	441	5-50	2-25
33	(a)	Dholpur-Bari	Bengal ...	1908	...	...	...	178	12-45	7-00
				1909	...	...	...	237	12-41	3-50
				1910	...	...	...	220	9-68	3-60
				1911	...	...	...	257	10-00	3-60
2	(o) & (p)	Gaekwar's Dabhoi and Rajpipla.	Bengal ...	1905	...	...	...	1,385	16-06	a
				1906	...	...	...	1,833	16-68	a
				1907	...	...	...	1,860	17-84	a
				1908	...	...	...	2,110	17-57	a
				1909	...	...	...	2,174	18-35	a
				1910	...	...	...	2,492	18-77	a
				1911	...	...	...	2,970	16-69	a
1	(b) to (A)	Gondia-Chanda, Jabalpur-Gondia Extension, Moorbhani, Nagpur-Chhindwara, Parlakimedi Light, Purnia-Ranchi, and Raipur-Dhamtari.	Bengal, Berar and Central Provinces.	1905	...	...	...	7,333	9-50	2-41
				1906	...	...	...	10,761	7-70	2-94
				1907	...	...	...	18,155	7-09	3-24
				1908	...	...	...	30,953	6-35	4-85
				1909	...	...	...	28,134	6-97	5-18
				1910	...	...	...	33,254	6-21	5-05
				1911	...	...	...	35,344	6-18	4-25
				1905	...	...	...	5,189	a	a
				1906	...	...	...	4,917	a	a
				1907	...	...	...	7,081	a	a
				1908	...	...	...	9,991	a	a
				1909	...	...	...	9,560	a	a
				1910	...	...	...	6,282	a	a
				1911	9	37-98	a	7,909	a	3-51
				1905	12	a	a	2,726	a	a
				1906	...	...	...	3,548	a	a
				1907	...	...	...	4,001	a	a
				1908	1	a	a	3,840	a	a
				1909	...	...	...	4,731	a	a
				1910	...	...	...	3,986	a	a
				1911	...	...	...	3,638	a	3-51
				1906	...	...	...	1,342	11-60	a
				1907	...	...	...	1,528	14-25	a
				1908	...	...	...	1,659	16-85	4-60
				1909	...	...	...	1,173	15-93	3-02
				1910	...	...	...	1,433	15-22	2-28
				1911	...	...	...	1,603	16-02	3-19
				1905	...	...	...	d	d	d
				1906	...	...	...	317	17-25	a
				1907	...	...	...	390	17-54	a
				1908	...	...	...	536	17-40	5-25
				1909	...	...	...	645	17-15	5-00
				1910	...	...	...	409	14-56	2-37
				1911	...	...	...	366	14-75	2-25
21	(a)	Morvi	Bengal ...	1905	...	...	...	d	d	d
				1906	...	...	...	317	17-25	a
				1907	...	...	...	390	17-54	a
				1908	...	...	...	536	17-40	5-25
				1909	...	...	...	645	17-15	5-00
				1910	...	...	...	409	14-56	2-37
				1911	...	...	...	366	14-75	2-25

DIX 12—contd.

and price paid per ton during the calendar years 1905 to 1911.

where they differ from the corresponding figures in the earlier Reports.

Locomotives and cost per ton.			Average cost per ton of all fuel consumed by locomotives excluding all freight, both rail and sea.  (Wood has been reduced to terms of coal at the rate of 2½ tons of wood to 1 ton of coal).	Consumption in pounds. (Calculated on the actual quantity of coal, wood being reduced to terms of coal at the rate of 2½ tons of wood to 1 ton of coal.)				REMARKS.
Wood.				Per train-mile.	Per engine-mile.	Per 1,000 freight ton-miles.	Per 1,000 gross ton-miles.	
Actual quantity in tons.	Average cost per ton.							
12	13	14	15	16	17	18	19	20
	Rs.	Rs.	Rs.					
...	...	...	3'50	36'58	36'57	a	a	a Information not available.
...	...	...	3'57	17'53	14'94	a	a	
...	...	...	11'15	20'41	17'31	a	a	
...	...	...	11'68	25'66	22'57	a	a	
...	...	...	a	25'20	21'89	a	a	
...	...	...	11'19	27'03	23'57	a	a	
...	...	...	b	b	b	b	b	b Converted to the 3' 8½" gauge and included with the Eastern Bengal railway 3' 3½" gauge section, vide No. 3 (b) to (d).
2	24'77	a	a	63'99	63'99	a	a	
3	16'84	a	a	34'18	34'18	a	a	
1	25'89	a	a	16'70	19'16	a	a	
2	18'37	a	a	23'89	15'66	a	a	
2	20'43	a	a	21'47	16'68	a	a	
2	20'16	a	a	24'41	16'77	a	a	
2	18'51	a	a	26'63	17'23	a	a	
...	...	...	2'25	a	a	a	a	
3	6'68	6'33	7'06	27'92	22'77	a	a	
2	7'54	7'54	3'58	29'41	24'93	a	a	
4	c 27'06	c 27'06	3'99	25'33	20'59	a	a	
4	c 18'90	c 18'00	3'75	30'81	23'72	a	a	c The increase in the price per ton was due to the consumption of unworkable sleepers as fire-wood.
144	4'87	4'17	a	26'56	26'43	a	a	
79	3'45	3'01	a	28'90	28'75	a	a	
91	3'53	3'00	a	25'47	24'26	a	a	
78	3'15	3'00	a	27'73	27'63	a	a	
82	5'47	4'43	a	28'63	28'34	a	a	
104	3'68	3'35	a	28'71	28'00	a	a	
120	4'35	3'90	a	31'01	29'98	a	a	
...	...	...	2'41	46'33	40'78	1,040'14	820'38	
...	...	...	2'04	57'52	48'98	1,421'63	835'15	
...	...	...	3'94	70'55	57'48	1,509'23	889'87	
...	...	...	4'85	98'07	78'44	1,333'43	578'33	
...	...	...	5'18	88'19	64'12	1,352'11	421'10	
...	...	...	5'05	63'37	66'85	1,368'32	426'84	
...	...	...	4'25	89'12	71'76	2,066'72	451'26	
...	...	...	a	71'18	66'77	6,500'12	942'23	
43	a	a	a	77'29	67'65	5,407'71	808'13	
3	a	a	a	73'53	65'26	5,879'28	887'70	
...	...	...	a	91'32	79'78	6,773'94	1,137'23	
21	a	5'63	a	83'56	68'46	6,483'53	1,021'55	
15	a	5'63	a	67'97	58'16	5,900'92	659'89	
4	a	4'00	a	65'22	50'78	5,277'42	611'74	
2	a	a	a	19'72	16'08	1,243'44	301'98	
132	a	6'00	a	19'43	16'17	1,763'93	337'51	
75	a	6'00	a	23'03	18'15	1,951'14	371'30	
3	a	6'00	a	21'07	22'22	2,433'25	494'20	
...	...	...	a	20'31	20'26	3,518'42	531'42	
...	...	...	a	24'25	21'74	2,556'54	424'53	
...	...	...	3'51	22'54	20'64	2,314'64	368'96	
...	...	...	a	35'63	31'86	a	a	
207	4'13	3'79	a	37'24	33'75	a	a	
186	4'25	4'25	a	38'51	37'23	6,148'09	477'00	
93	3'63	3'60	4'70	32'76	32'68	3,727'88	377'97	
116	4'17	4'16	3'29	41'33	41'04	3,588'14	452'30	
160	4'27	4'24	3'49	48'60	46'43	3,687'26	490'43	
166	4'43	4'35	a	a	a	a	a	d Included with the 3'3½" gauge section.
...	...	...	d	25'52	25'27	a	a	
3	10'89	a	a	29'00	27'66	a	a	
5	10'50	a	a	28'53	28'25	a	a	
5	14'00	a	a	24'37	24'03	a	a	
7	14'00	a	a	24'32	24'13	a	a	
7	10'50	a	a	22'07	21'27	a	a	

## Coal and wood fuel consumed by locomotives on each railway system

Note.—The figures in this Appendix are amended ones in cases

Main head.	Sub-head	Classification No. of railway. (Detailed in "Index" to Appendix 9).	Railways.	Sources of supply.	Calendar year.	Description of fuel, with the actual quantity consumed by				
						Foreign coal.		Indian coal.		
						Actual quantity in tons.	Average cost per ton.		Actual quantity in tons.	Average cost per ton.
Including all freight, both rail and sea, from the pit's mouth to the engine shed where issued to locomotives.	At pit's mouth.	Including all freight, both rail and sea, from the pit's mouth to the engine shed where issued to locomotives.	At pit's mouth.							
1	2	3	4	5	6	7	8	9	10	11
						Rs.	Rs.		Rs.	Rs.
			2' 6" GAUGE—concl'd.							
28	(c)	Powayan Light ...	Bengal		1905 1906 1907 1908 1909 1910 1911	...	...	24	11-76	2-35
39	(a)	Shahdara (Delhi)-Saharanpur Light.	Bengal		1907 1908 1909 1910 1911	...	...	697 1,715 1,891 1,898 a	15-00 15-50 14-00 13-22 a	5-22 5-22 5-22 5-22 a
40	(a)	Tarkessur-Magra Light.	Bengal		1905 1906 1907 1908 1909 1910 1911	...	...	1,128 1,428 1,696 1,435 1,680 1,424 1,670	4-33 4-24 5-96 7-72 6-50 4-70 4-38	1-56 1-81 3-40 4-48 3-58 1-75 1-50
41	(a)	Tezpur-Balipara Light.	Assam		1905 1906 1907 1908 1909 1910 1911	...	...	643 673 576 418 401 374 396	13-50 13-50 13-50 15-19 15-19 15-19 13-50	a a a a a a a
			2' 0" GAUGE.							
43	(a)	Darjeeling-Himalayan.	Bengal		1905 1906 1907 1908 1909 1910 1911	...	...	4,176 3,800 3,989 3,918 4,089 4,322 4,771	10-61 10-34 8-50 9-70 10-32 10-69 9-44	2-25 2-25 2-25 3-38 3-38 4-00 2-75
5	(g)	Gwalior Light ...	Bengal		1905 1906 1907 1908 1909 1910 1911	...	...	2,559 2,848 3,103 2,822 2,581 3,123 3,687	13-63 13-63 11-38 11-87 11-87 9-75 9-77	3-75 3-75 5-00 5-50 5-50 2-60 2-40
45	(a)	Jagadhri Light ...	Bengal		1911	...	...	75	11-71	3-00
46	(a)	Jorhat (Provincial)	Assam		1905 1906 1907 1908 1909 1910 1911	...	...	364 346 1,010 1,135 1,181 704 635	13-61 13-61 18-61 15-31 15-31 15-45 13-75	a a a a a a a
5	(h)	Matheran ...			1907 1908 1909 1910 1911	11	25-00	a	19-00 18-00 17-75 13-90 17-81	a a a a a
47	(a)	Pipar Road-Bhavi ...	Bengal		1910 1911	...	...	21 189	15-00 26-00	4-00 a
		TOTAL			1905b 1906b 1907c 1908c 1909c 1910b 1911d	18,286 37,286 50,070 75,108 84,559 82,147 83,183	...	2,656,530 2,863,878 3,265,444 3,558,539 3,657,896 3,801,248 4,223,020	...	...

DIX 12—conold.

and price paid per ton during the calendar years 1905 to 1911.

where they differ from the corresponding figures in the earlier Reports.

locomotives and cost per ton.			Average cost per ton of all fuel consumed by locomotives, excluding all freight, both rail and sea.  (Wood has been reduced to terms of coal at the rate of 2½ tons of wood to 1 ton of coal).	Consumption in pounds. (Calculated on the actual quantity of coal, wood being reduced to terms of coal at the rate of 2½ tons of wood to 1 ton of coal).				REMARKS.
Wood:		At station of supply.		Per train-mile.	Per engine-mile.	Per 1,000 freight ton-miles.	Per 1,000 gross ton-miles.	
Actual quantity in tons.	Average cost per ton.							
12	13	14	15	16	17	18	19	20
	Rs.	Rs.	Rs.					
1,308	3.59	3.59	8.68	20.99	19.41	a	a	a
1,520	3.70	3.48	8.70	21.94	20.74	a	a	a
1,501	3.82	3.48	8.70	23.28	21.23	a	a	a
1,533	3.85	3.52	8.88	22.75	20.37	a	a	a
1,545	3.88	3.05	7.62	23.51	19.64	a	a	a
1,416	3.57	3.27	8.17	21.44	18.99	a	a	a
1,578	3.74	3.44	8.60	24.06	21.70	a	a	a
...	...	...	...	...	...	...	...	...
...	...	...	5.22	35.70	a	a	a	a
...	...	...	5.22	27.85	a	a	a	a
...	...	...	5.22	28.01	a	a	a	a
...	...	...	5.22	30.22	a	a	a	a
...	...	...	...	...	...	...	...	...
...	...	...	1.56	28.53	26.92	a	a	a
...	...	...	1.81	34.94	32.33	a	a	a
...	...	...	3.40	40.84	38.10	a	a	a
...	...	...	4.49	34.72	32.70	a	a	a
...	...	...	3.56	37.46	35.10	a	a	a
...	...	...	...	30.70	28.72	a	a	a
...	...	...	1.75	30.84	29.10	a	a	a
...	...	...	...	...	...	...	...	...
...	...	...	...	38.85	a	a	a	a
...	...	...	...	40.44	a	a	a	a
...	...	...	...	35.84	a	a	a	a
...	...	...	...	30.51	a	a	a	a
...	...	...	...	28.12	a	a	a	a
...	...	...	...	25.78	a	a	a	a
...	...	...	...	28.00	a	a	a	a
...	...	...	...	...	...	...	...	...
...	...	...	3.25	37.14	37.14	a	a	a
...	...	...	3.25	36.48	36.48	a	a	a
...	...	...	3.25	38.18	38.18	a	a	a
...	...	...	3.38	38.52	38.52	a	a	a
...	...	...	3.38	37.28	37.28	a	a	a
...	...	...	4.00	37.57	37.57	a	a	a
...	...	...	2.75	57.86	57.86	a	a	a
...	...	...	...	...	...	...	...	...
27	6.00	6.00	3.79	41.90	36.97	a	a	a
25	6.00	6.00	3.79	44.61	40.59	a	a	a
25	6.00	6.00	5.08	44.96	46.67	a	a	a
27	6.00	6.00	5.54	41.46	37.96	a	a	a
32	6.00	6.00	5.47	38.56	33.40	a	a	a
35	6.00	6.00	2.56	35.83	35.16	a	a	a
39	6.00	6.00	2.37	35.22	35.21	a	a	a
...	...	...	...	...	...	...	...	...
24	11.71	11.71	16.18	38.19	16.59	a	a	a
...	...	...	...	...	...	...	...	...
...	...	...	...	35.90	a	a	a	a
...	...	...	...	41.78	a	a	a	a
...	...	...	...	40.14	a	a	a	a
...	...	...	...	48.33	a	a	a	a
...	...	...	...	51.98	a	a	a	a
...	...	...	...	31.01	a	a	a	a
...	...	...	...	35.64	a	a	a	a
...	...	...	...	...	...	...	...	...
...	...	...	...	68.95	68.95	a	a	a
...	...	...	...	64.78	64.78	a	a	a
...	...	...	...	62.11	62.11	a	a	a
...	...	...	...	51.66	51.66	a	a	a
...	...	...	...	58.20	58.20	a	a	a
...	...	...	...	...	...	...	...	...
...	...	...	4.00	32.30	32.30	a	a	a
...	...	...	...	22.30	22.30	a	a	a
...	...	...	...	...	...	...	...	...
253,027	...	...	...	...	...	...	...	...
248,638	...	...	...	...	...	...	...	...
188,672	...	...	...	...	...	...	...	...
164,496	...	...	...	...	...	...	...	...
127,025	...	...	...	...	...	...	...	...
127,723	...	...	...	...	...	...	...	...
132,958	...	...	...	...	...	...	...	...

a Information not available.

b Excluding (1) the Deoghur, (2) Baraset-Basirhat, (3) Bakhtiarpore-Bihar, (4) Howrah-Amta and (5) Howrah-Sheekhala Light railways.

c Excluding numbers (2), (3), (4) and (5) referred to in note b.

d Excluding numbers (2), (3), (4) and (5) referred to in note b and the Arrah-Sasaram and Shahdara (Delhi)-Sahasarpur Light railways.

Quantity of (i) Indian coal mined, consumed by Locomotives on the railways in India and  
(ii) foreign coal imported into India.

Particulars.	Years.											
	1886	1888	1887	1888	1889	1890	1901	1892	1893	1894	1895	1896
1	2	3	4	5	6	7	8	9	10	11	12	13
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Quantity of coal mined in each Province—												
Assam ... ..	43,707	70,859	89,302	101,628	116,076	145,708	154,208	164,080	164,420	189,448	172,717	177,259
Baluchistan ... ..	...	...	411	2,902	2,238	15,541	10,268	12,294	20,094	24,753	25,458	25,267
Bengal ... ..	1,123,700	1,186,802	1,310,060	1,360,594	1,541,363	1,626,245	1,747,123	1,920,050	1,902,686	2,035,934	2,716,155	2,037,920
Burma ... ..	...	...	...	...	...	...	...	3,670	2,938	12,111	17,268	22,063
Central India ... ..	7,698	12,539	15,487	41,569	62,066	77,942	69,741	89,623	94,943	132,637	118,479	115,296
Central Provinces ... ..	119,116	117,287	122,961	167,768	144,465	137,022	141,776	132,005	135,118	140,405	122,776	141,165
Kashmir ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Madras ... ..	...	...	...	...	...	...	20	61	502	1,337	1,737	...
Nizam's Territory ... ..	...	...	3,269	12,382	69,646	125,486	144,968	149,601	157,421	240,525	232,015	262,681
North-West Frontier Pro- vince ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Punjab ... ..	...	...	7,523	11,249	22,835	40,977	60,714	66,352	77,294	66,467	72,466	79,017
Rajputana (Bikaner) ... ..	...	...	...	...	...	...	...	...	...	...	...	...
United Provinces ... ..	...	...	...	...	...	...	...	...	...	...	...	1,000
<b>Total</b> ... ..	<b>1,294,221</b>	<b>1,369,467</b>	<b>1,584,063</b>	<b>1,708,903</b>	<b>1,946,172</b>	<b>2,168,621</b>	<b>2,329,677</b>	<b>2,537,086</b>	<b>2,562,001</b>	<b>2,823,907</b>	<b>3,540,019</b>	<b>2,963,088</b>
Quantity of Indian Coal consumed by the locomotives on the rail- ways in India.	489,716	470,075	489,774	551,770	715,240	654,829	797,142	885,402	924,900	1,062,748	1,119,621	1,193,051
Quantity of Indian coal exported by sea—												
To Indian Ports, excluding Burma.	*	*	*	*	*	*	*	*	*	149,619	162,276	369,942
To ports outside of India, in- cluding Burma.	7500	7199	7315	715,796	739,972	726,336	74,515	715,726	752,302	154,282	211,467	191,430
Quantity of foreign coal imported into India—												
From the United Kingdom ... ..	778,648	699,462	786,149	785,776	717,024	631,725	726,069	629,374	616,819	675,043	773,075	624,420
From other countries ... ..	49,659	42,652	43,010	20,483	62,180	21,857	17,944	23,123	18,066	67,112	15,458	63,513

\* Information not available.

† These figures are for the official year and exclude Burma.

DIX 13.

exported by sea to Indian ports and to foreign ports outside India including Burma, and during the calendar years 1885 to 1911.

Years.														
1887	1888	1889	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
185,533	200,329	235,423	216,733	254,100	221,096	239,323	263,785	277,045	265,480	205,795	273,234	305,533	297,335	294,693
13,043	13,372	15,822	23,231	24,656	33,989	40,909	49,867	41,725	43,164	43,468	45,212	52,443	53,614	44,707
3,142,427	3,622,000	4,095,285	4,978,492	5,467,535	6,250,288	6,561,212	7,062,680	7,234,103	8,617,820	9,993,948	11,500,911	10,000,611	10,779,539	11,469,004
11,872	6,975	9,105	10,228	12,406	13,362	9,306	1,165	...	1,222	...	...	...	...	...
134,778	134,726	164,689	164,489	194,392	171,533	193,277	195,774	197,701	170,392	179,588	155,107	121,543	130,400	143,587
131,629	149,709	154,576	172,642	191,516	196,981	159,154	139,027	147,205	62,949	134,083	213,789	239,100	220,637	211,616
...	...	...	...	...	1,080	999	370	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
265,559	294,822	401,216	469,291	421,212	455,494	393,733	419,546	454,294	467,324	414,221	444,211	443,993	500,173	505,389
...	...	...	...	...	...	...	...	...	...	...	90	96	90	140
92,792	85,892	81,835	74,083	67,730	55,373	43,704	45,594	61,622	73,119	60,749	54,794	37,308	40,160	30,575
...	511	4,249	9,250	12,094	16,803	21,764	45,976	43,964	22,272	26,092	21,287	11,469	12,744	14,761
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4,066,204	4,609,198	5,093,280	6,118,692	6,635,727	7,424,402	7,438,396	8,216,795	8,617,739	9,785,261	11,147,239	12,799,636	11,670,114	12,647,412	12,716,533
1,829,120	1,416,241	1,860,771	1,853,051	1,968,831	2,091,993	2,243,699	2,447,341	2,664,930	2,865,678	2,285,444	2,558,539	2,687,606	2,301,248	2,223,020
731,742	737,689	672,311	1,030,709	1,167,892	974,602	1,235,816	1,447,867	1,635,263	1,830,793	1,805,056	2,124,642	1,716,623	1,561,322	1,604,086
390,979	420,290	467,208	711,674	845,652	729,216	733,273	606,955	1,144,090	1,204,732	1,040,242	1,045,095	912,154	1,261,248	1,263,971
210,237	297,076	406,451	31,719	112,619	196,474	138,711	176,795	147,799	199,215	227,176	173,483	311,252	261,310	245,043
47,616	34,289	112,694	46,939	79,108	22,772	30,439	77,169	50,024	27,160	74,612	211,640	179,169	54,746	78,714



**APPEN**  
*Details of working of State collieries, worked by*

Colliery.	Owned by.	Province.	Calendar year.	Capital outlay.	OUTPUT.			
					Large coal.	Small coal.	Slack coal.	Total.
1	2	3	4	5	6	7	8	9
				Rs.	Tons.	Tons.	Tons.	Tons.
Ballarpur ...	Central Provinces Administration.	Central Provinces.	1907	5,81,524	...	...	...	15,439
			1908	6,75,625	...	...	...	45,229
			1909	7,61,454	63,120	*22,117	...	85,237
			1910	7,59,090	66,839	*26,638	...	93,277
			1911	7,83,071	69,576	27,027	...	96,603
Dandot ...	North Western railway.	Punjab ...	1905	2,13,486	28,624	25	14,513	43,162
			1906	2,03,177	28,947	140	14,574	43,661
			1907	2,04,646	23,309	...	13,156	36,465
			1908	2,47,970	17,513	...	11,274	28,787
			1909	2,62,490	14,377	...	9,752	24,629
			1910	2,37,306	20,001	...	11,981	31,982
			1911	30,315	12,798	...	5,462	18,260
Korhurbaree and Serampore...	East Indian railway.	Bengal ...	1905	22,34,832	512,150	19,226	86,628	618,004
			1906	22,85,524	510,044	26,060	87,875	623,979
			1907	27,34,082	513,792	29,337	73,599	616,778
			1908	28,83,307	550,923	39,878	81,043	671,744
			1909	29,17,977	475,749	34,968	77,626	588,341
			1910	30,85,406	440,387	41,326	71,822	559,535
Mohpani ...	Great Indian Peninsula railway.	Central Provinces.	1905	6,58,458	10,192	...	53,806	22,998
			1906	7,02,912	24,210	...	53,293	27,503
			1907	8,02,228	36,788	...	54,564	41,332
			1908	8,07,639	43,034	...	55,208	48,242
			1909	8,37,670	57,981	...	52,686	60,667
			1910	8,55,901	37,741	...	51,742	39,483
Khost ...	North Western railway.	Baluchistan	1905	3,05,815	4,959	296	28,885	34,140
			1906	3,05,769	852	†73	‡31,575	32,500
			1907	3,31,078	419	†36	‡29,415	29,870
			1908	3,03,299	290	†25	‡30,740	31,055
			1909	2,97,023	635	†55	‡40,374	41,064
			1910	2,96,415	429	†37	‡44,293	44,759
Khost pressed fuel factory ...	North Western railway.	Baluchistan	1911	2,80,743	1,035	†90	‡38,033	39,158
			1907	27,752	...	...	...	12,462
			1908	27,752	...	...	...	15,850
			1909	27,752	...	...	...	18,140
			1910	29,068	...	...	...	19,460
Haripur pressed fuel factory	North Western railway.	Punjab ...	1911	37,104	...	...	...	20,659
			1905	80,701	...	...	...	6,162
			1906	72,613	...	...	...	6,541
			1907	69,050	...	...	...	6,015
			1908	68,871	...	...	...	5,268
			1909	59,081	...	...	...	6,274
1910	54,650	...	...	...	5,837			
1911	50,551	...	...	...	...			

\* Includes slack coal.  
† Nut coal.  
‡ Mixed coal.

§ Splint coal.  
|| Pressed fuel.

**DIX 14.**  
*either Railway Companies or the State.*

Quantity issued.	Gross earnings.	Working expenses.	Net gain or loss.	Percentage on capital.	Average number of persons employed daily.	Number of tons raised per person employed.	Number of persons killed.	Number of persons injured.	REMARKS.
10	11	12	13	14	15	16	17	18	19
Tons.	Rs.	Rs.	Rs.	Per cent.					
13,154	65,879	745,042	20,837	3.58	329	47	...	...	The working of the colliery was started from the 1st April 1907.
45,299	2,10,950	1,24,808	86,047	12.74	456	99	...	1	
82,852	3,85,292	2,36,821	1,48,971	19.56	750	114	...	3	
95,682	4,06,822	2,88,097	1,48,725	19.59	688	136	...	1	
96,603	4,04,163	2,85,813	1,38,350	17.67	735	131	1	1	
43,162	3,25,404	3,21,843	3,561	1.66	1,360	32	1	4	The decrease in the capital outlay in 1911 was due chiefly to the amount written off for depreciation during the year, and also to credits afforded on account of the sale of plant and the transfer of stores owing to the closing of the colliery from the 1st June 1911.
43,661	3,40,218	3,45,709	-5,491	...	1,340	38	...	4	
36,465	2,78,961	2,82,942	-3,981	...	1,073	34	...	4	
28,787	2,19,383	2,54,291	-35,608	...	902	32	1	5	
24,629	1,72,244	2,41,378	-69,334	...	688	36	2	5	
31,982	2,18,168	2,18,195	-27	...	859	37	1	4	
18,260	1,27,060	98,102	83,958	37.60	921	20	1	3	
627,020	**11,20,809	11,20,809	...	...	8,370	74	1	10	
642,959	**10,81,339	10,81,339	...	...	6,900	90	1	10	
617,095	**11,39,841	11,39,841	...	...	6,149	100	1	21	
668,831	**12,45,426	12,45,426	...	...	5,934	222	9	7	
576,368	**10,55,656	10,55,656	...	...	5,885	100	5	15	
568,752	**10,82,824	10,82,824	...	...	5,789	97	4	2	
641,388	**12,89,572	12,89,572	...	...	6,257	101	3	5	
23,388	1,16,056	1,68,815	-52,759	...	680	34	...	1	
25,944	1,44,457	1,77,997	-33,540	...	790	35	...	1	
40,855	2,21,051	2,10,649	10,402	1.80	979	42	...	...	
45,351	2,60,044	2,56,805	-3,239	...	1,227	39	1	4	The capital outlay is made up of the purchase money, Rs. 440,000, and the expenditure incurred from the date of purchase, 1st July 1904.
58,519	3,40,294	3,01,744	38,550	4.60	1,224	50	...	3	
38,961	2,14,438	2,27,168	-12,730	...	965	41	...	1	
50,830	2,81,580	2,14,839	66,741	...	1,087	48	1	2	
34,149	2,01,444	2,28,050	-26,606	2.75	719	48	5	1	The decrease in the capital outlay in 1911 was due chiefly to the amount written off for depreciation.
32,500	2,78,610	2,95,382	-16,772	...	704	46	5	1	
29,378	2,27,082	2,37,766	-10,684	...	706	42	4	2	
31,547	2,84,792	2,19,268	65,524	...	715	44	25	4	
40,237	3,94,384	3,69,660	24,724	8.33	763	53	3	1	
42,829	4,31,151	3,84,880	46,271	15.61	782	55	4	6	
39,574	3,49,248	3,41,769	7,479	2.66	754	52	7	3	
12,462	1,50,503	1,86,747	-36,244	49.56	24	292	1	...	Purchased by the North Western railway with effect from the 1st April 1907. The capital outlay is made up of the purchase money, Rs. 24,927, and the expenditure incurred from the date of purchase.
15,350	1,85,047	1,77,991	7,056	25.43	24	640	...	...	
18,140	2,19,606	2,11,617	7,989	28.79	27	672	...	...	
19,460	2,35,074	2,24,955	10,119	0.41	29	671	...	...	
20,659	2,50,799	2,35,642	15,157	40.82	29	689	...	...	
6,162	69,426	67,075	2,351	1.67	7	380	...	...	The decrease in the capital outlay in 1911 was due chiefly to the amount written off for depreciation.
6,541	75,222	71,149	4,073	5.61	12	545	...	...	
6,015	69,172	73,121	-3,949	...	11	527	...	...	
5,268	69,582	68,682	900	...	11	479	...	...	
6,274	72,148	73,922	-1,774	...	11	570	...	...	
5,897	67,819	84,919	-17,100	60.20	11	536	...	1	The factory was closed on the 31st December 1911.
...	...	78	-78	...	...	...	...	...	

\* Excludes establishment charges charged to capital account.  
\*\* Coal issued to railway at cost price.

Rolling-stock under different heads on each

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		Railway.	ENGINEERS.				COACHING					
Main head.	Sub-head.		Employed exclusively on passenger working.	Employed exclusively on goods working.	Employed on mixed working or on both passenger working and goods working.	Total.	SALOONS, ROYAL AND STAYS.			SALOONS, ORDINARY.		
							4-wheel-ed.	6-wheel-ed.	Bogie.	4-wheel-ed.	6-wheel-ed.	Bogie.
1	2	3	4	5	6	7	8	9	10	11	12	13
<i>5' 6" gauge.</i>												
1	(a)	Bengal-Nagpur	81	...	309	390	...	...	...	3	...	...
2	(a) to (g)	Bombay, Baroda and Central India	125	...	162	287	...	...	...	15	...	...
3	(a)	Eastern Bengal	81	50	106	240	...	...	...	21	...	...
4	...	East Indian	192	387	496	1,075	...	...	2	...	...	4
5	(a) to (f)	Great Indian Peninsula	294	543	170	1,010	...	...	...	...	...	...
6	(a) & (b)	Madras and Southern Mahratta	67	...	183	250	...	1	1	...	...	...
7	(a) & (b)	Nizam's Guaranteed State	...	23	39	61	4	...	6	3	...	...
8	(a) to (d)	North Western	225	699	150	1,074	...	...	3	...	...	...
9	(a) & (b)	Oodh and Behlikhand	20	...	150	240	...	...	2	...	...	11
10	(a)	South Indian	25	...	89	114	...	...	...	...	...	...
...	...	Calcutta Port Commissioners'	...	45	...	45	...	...	...	...	...	...
<i>3' 3 1/2" gauge.</i>												
11	...	Assam-Bengal	5	...	104	109	...	...	1	3	...	1
12	...	Bengal and North-Western	54	...	274	328	...	3	...	7	9	1
13	...	Bengal Decants	...	...	10	10	...	...	...	3	1	...
14	...	Bhavnagar	...	...	20	20	...	...	...	...	...	...
15	(a) & (b)	Burma	8	...	227	305	...	...	2	...	...	...
16	...	Dibru-Sadiya	...	...	28	28	...	...	...	...	...	...
3	(b) to (d)	Eastern Bengal	...	...	229	229	...	...	1	15	6	...
4	...	East Indian (Deoghur)	...	...	2	2	...	...	...	...	...	...
17	...	Gondal-Parbandar	...	...	14	14	...	...	...	...	...	...
7	(e)	Hyderabad-Godavari Valley	14	10	41	65	...	...	3	...	...	...
18	...	Jamnagar	...	...	4	4	...	...	...	...	...	...
19	(a) to (d)	Jodhpur-Bikaner	...	...	64	64	2	...	3	...	...	...
20	...	Juwagad	...	...	8	8	...	...	2	...	...	...
6	(e) to (f)	Madras and Southern Mahratta	40	10	233	283	...	...	6	...	...	...
21	...	Morvi	3	2	3	5	...	...	1	...	...	...
2	(b) to (a)	Rajputana-Malwa	189	...	323	511	...	...	1	3	...	7
23	(a) & (b)	Rohilkund and Kumaon...	4	...	54	58	...	...	...	...	...	...
19	(b) to (c)	South Indian	20	...	230	300	...	...	3	...	...	...
23	...	Udaipur-Chitorgarh	1	...	3	3	...	...	...	...	...	...

DIX 15.

railway at the close of the calendar year 1911.

VEHICLES.

RESERVED CARRIAGES.			INSPECTION CARRIAGES.			DINING CARS.			FAMILY CARRIAGES.			FIRST CLASS CARRIAGES.			NUM- BER.
4-wheeled.	6-wheeled.	Bogie.	4-wheeled.	6-wheeled.	Bogie.	4-wheeled.	6-wheeled.	Bogie.	4-wheeled.	6-wheeled.	Bogie.	4-wheeled.	6-wheeled.	Bogie.	
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
27	1	1	1	...	...	...	...	4	...	...	...	20	...	...	1
11	6	4	...	...	...	...	...	5	...	...	...	1	...	4	9
3	...	...	...	...	...	...	...	1	...	...	...	13	...	3	3
44	5	1	...	...	...	...	...	10	...	...	...	71	...	22	4
7	...	2	1	...	...	1	...	20	8	...	...	68	...	0	5
11	1	...	3	2	1	...	...	4	3	...	...	24	...	...	6
3	...	1	...	...	...	...	...	...	3	...	...	9	...	...	7
56	14	4	...	...	...	...	...	11	...	...	...	82	...	1	8
24	...	2	1	...	...	...	...	3	2	...	...	36	...	...	0
...	...	...	5	...	...	1	...	...	...	2	...	...	1	...	10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	18	...	4	...	...	3	...	...	...	1	...	...	11
8	...	...	...	...	...	...	3	...	...	...	...	6	20	...	12
...	...	...	1	...	...	1	1	...	...	...	...	...	3	...	13
2	...	1	...	...	...	...	...	...	2	...	...	2	...	...	14
25	2	16	...	...	...	...	...	1	...	...	1	15	...	...	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
...	...	...	...	...	4	...	...	1	...	...	...	15	...	3	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
4	...	...	...	...	...	...	...	...	2	...	...	2	...	...	17
4	3	1	...	...	1	...	...	...	...	1	...	...	6	...	7
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18
...	...	...	3	...	...	3	...	...	4	...	...	4	...	...	19
2	...	...	...	...	...	...	...	...	1	...	...	...	...	...	20
6	...	6	...	...	...	...	...	6	...	...	...	45	...	...	6
...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	21
...	...	1	17	...	6	...	...	4	41	...	...	40	...	4	2
4	...	...	...	3	...	1	1	...	...	...	...	6	3	...	22
...	...	...	3	...	7	...	...	5	...	...	7	12	...	6	23
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	24

## Rolling-stock under different heads on each

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX B).		Railway.	ENGINES.				COACHING.					
Main head.	Sub-head.		Employed exclusively on passenger working.	Employed exclusively on goods working.	Employed on mixed working or on both passenger working and goods working.	Total.	SALOONS, ROYAL AND STATE.			SALOONS, ORDINARY.		
							4-wheel-ed.	6-wheel-ed.	Bogie.	4-wheel-ed.	6-wheel-ed.	Bogie.
1	2	3	4	5	6	7	8	9	10	11	12	13
		2' 6" gauge.										
25	...	Arrah-Sasaram Light ...	...	...	5	5	...	...	...	1	...	...
27	...	Baraset-Basrhat Light ...	...	...	7	7	...	...	...	...	...	...
28	...	Bareilly Light ...	...	...	13	13	...	...	...	...	...	...
1	(b), (c), (e), (g) & (h).	Bengal-Nagpur ...	...	...	76	76	...	...	...	1	...	...
29	...	Bakhtiarpore-Bihar Light ...	...	...	4	4	...	...	...	...	...	...
30	...	Champamer-Shivrajpur Light ...	...	...	3	3	...	...	...	...	...	...
31	...	Cutoch ...	...	...	4	4	...	...	...	...	...	...
32	...	Dehri-Rohitas Light ...	...	...	3	3	...	...	...	...	...	1
33	...	Dholpur-Bari ...	...	...	3	3	...	...	...	...	...	1
3	(b)	Eastern Bengal ...	...	...	7	7	...	...	...	2	...	...
2	(e) & (g)	Gaekwar's Dabhol and Rajppla ...	...	...	15	15	2	...	1	...	...	...
4	(f)	Kalka-Simla ...	...	...	35	35	...	...	...	...	...	1
5	(h) & (i)	Kohat-Thal and Nowshera-Durgal ...	...	...	28	28	...	...	...	...	...	...
10	(j) & (k)	Morappur-Dharmapuri and Tirupattur-Krishnagiri ...	...	...	6	6	...	...	...	...	...	...
21	...	Morvi ...	3	1	1	5	...	...	...	1	...	2
1	(d)	Mourbhauj ...	...	...	3	3	...	...	...	...	...	...
1	(f)	Parlakimedi Light ...	...	...	3	3	...	...	1	...	...	...
22	(e)	Powayan Light ...	...	...	5	5	...	...	...	...	...	...
34	...	Shahdara (Delhi)-Sahasrampur Light ...	...	...	3	3	...	...	...	1	...	...
40	...	Tarkesur-Magra Light ...	...	...	6	6	...	...	...	...	...	...
41	...	Tezporo-Balipara Light ...	...	...	3	3	...	...	...	...	...	...
		2' 6" gauge.										
42	...	Darjeeling-Himalayan ...	...	...	17	17	...	...	1	2	...	...
5	(g)	Gwalior Light ...	...	...	20	20	...	...	2	...	...	2
43	...	Howrah-Amta Light ...	...	...	18	18	...	...	...	...	...	...
44	...	Howrah-Sheakhala Light ...	...	...	3	3	...	...	...	...	...	...
45	...	Jagadhri Light ...	...	...	2	2	...	...	...	...	...	...
46	...	Jorhat (Provincial) ...	...	...	9	9	...	...	...	...	...	...
5	(h)	Matheran Light ...	...	...	5	5	...	...	...	2	...	...
47	...	Pipat Road-Bhavi Light ...	...	...	2	2	...	...	...	...	...	...



Rolling-stock under different heads on each

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX D).		Railway.	COACHES								
Main head.	Sub-head.		COMPOSITE, 1ST AND 2ND CLASS.			COMPOSITE, 1ST, 2ND AND 3RD CLASS, &c.			OTHER COMPOSITE CARRIAGES.		
			6-wheel- ed.	6-wheel- ed.	Bogie.	6-wheel- ed.	6-wheel- ed.	Bogie.	6-wheel- ed.	6-wheel- ed.	Bogie.
30	31	32	33	34	35	36	37	38	39	40	41
		5' 6" gauge.									
1	(a)	Bengal-Nagpur ...	43	...	23	...	...	0	5	...	...
2	(a) to (g)	Bombay, Baroda and Central India ...	28	4	46	...	...	0	...	...	19
3	(a)	Eastern Bengal ...	40	...	27	...	...	...	...	...	24
4	...	East Indian ...	30	...	37	...	...	...	13	...	15
5	(a) to (f)	Great Indian Peninsula ...	73	...	117	3	...	23	...	...	122
6	(a) & (b)	Madras and Southern Mahratta ...	57	...	11	...	...	7	3	...	6
7	(a) & (b)	Nizam's Guaranteed State ...	13	...	4	...	...	...	...	...	...
8	(a) to (d)	North Western ...	113	...	21	...	...	33	10	...	3
9	(a) & (b)	Oudh and Rohilkhand ...	51	...	15	...	...	...	4	...	25
10	(a)	South Indian ...	30	...	8	...	...	3	...	...	3
...	...	Calcutta Port Commissioners' ...	...	...	...	...	...	...	...	...	...
		5' 2 1/2" gauge.									
11	...	Assam-Bengal ...	1	...	10	...	...	10	...	...	10
12	...	Bengal and North-Western ...	23	10	16	...	...	...	...	...	...
13	...	Bengal Dockers ...	1	5	...	1	...	...	...	...	...
14	...	Bhavnagar ...	3	...	6	...	...	2	...	...	1
15	(a) & (b)	Burma ...	23	...	23	...	...	40	...	...	11
16	...	Dihra-Gadga ...	10	...	1	...	...	...	...	...	...
17	(b) to (d)	Eastern Bengal ...	30	...	14	...	...	...	...	...	3
18	...	East Indian (Deoghur) ...	...	...	...	...	...	...	2	...	...
19	...	Gondal-Forbandar ...	3	...	4	...	...	1	...	...	...
20	(a)	Hyderabad-Godavari Valley ...	...	11	4	...	...	...	...	2	...
21	...	Jamnagar ...	4	...	...	...	...	...	...	...	...
22	(a) to (d)	Jodhpur-Bikaner ...	20	...	3	...	...	...	...	...	31
23	...	Jungad ...	4	...	1	...	...	...	...	...	...
24	(a) to (j)	Madras and Southern Mahratta ...	64	...	20	...	...	...	...	...	...
25	...	Morvi ...	5	...	3	...	...	...	...	...	...
26	(b) to (a)	Rajputana-Malwa ...	35	...	37	...	...	34	...	...	...
27	(a) & (b)	Rohilkhand and Kumaon ...	3	3	6	...	...	3	...	...	...
28	(b) to (c)	South Indian ...	30	...	27	...	...	23	...	...	...
29	...	Udaipur-Chitorgarh ...	3	...	...	...	...	...	...	...	...

\* Includes 3 composite restaurant and sleeping carriages.  
 † Includes 3 third class carriages with dining accommodation.  
 ‡ Includes one refreshment car with luggage van.









Rolling-stock under different heads on each railway

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		Railway.	COACHING								
Main head.	Sub-head.		THIRD CLASS CARRIAGES WITHOUT BRAKE COMPARTMENTS—total.			THIRD CLASS CARRIAGES WITH BRAKE COMPARTMENTS.					Third class and postal vans.
			Bogie.	Ambulance.		4-wheeled.	6-wheeled.	Bogie.	Ambulance.		
	4-wheeled.	Bogie.								4-wheeled.	Bogie.
52	53	54	55	56	57	58	59	60	61	62	
		<i>5' 6" gauge.</i>									
1	(e)	Bengal-Nagpur	176	20	...	57	...	...	...	...	28
2	(a) to (g)	Bombay, Baroda and Central India	131	8	7	4	...	15	...	...	30
3	(a)	Eastern Bengal	87	...	...	25	...	19	...	...	6
4	...	East Indian	245	100	24	37	...	18	...	6	68
5	(a) to (f)	Great Indian Peninsula	209	18	15	121	...	16	23	10	31
6	(a) & (b)	Madras and Southern Mahratta	85	45	...	2	...	...	...	...	11
7	(a) & (b)	Nizam's Guaranteed State	8	...	...	...	...	...	...	...	8
8	(a) to (d)	North Western	140	436	340	50	...	...	...	...	70
9	(a) & (b)	Oudh and Rohilkhand	41	185	50	11	...	...	7	7	38
10	(a)	South Indian	23	...	...	17	...	...	...	...	4
		Calcutta Port Commissioners	...	...	...	...	...	...	...	...	...
		<i>3' 3 1/2" gauge.</i>									
11	...	Assam-Bengal	...	96	...	...	...	...	...	...	10
12	...	Bengal and North-Western	6	...	...	3	215	176	...	...	21
13	...	Bengal Doonars	...	...	...	...	...	...	...	...	4
14	...	Bhavnagar	14	...	...	...	...	...	...	...	1
15	(a) & (b)	Burma	227	54	...	6	...	37	...	...	47
16	...	Dibru-Sadiya	9	...	...	...	...	...	...	...	6
17	(b) to (d)	Eastern Bengal	180	...	...	7	...	...	...	...	15
18	...	East Indian (Deoghur)	...	...	...	...	...	...	...	...	...
19	...	Gondal-Porbandar	6	...	...	3	...	...	...	...	3
20	(a)	Hydrabad-Godavari Valley	7	...	...	...	...	...	...	...	4
21	...	Jamnagar	2	...	...	...	...	...	...	...	...
22	(a) to (d)	Jodhpur-Bikaner	48	...	...	...	...	...	...	...	19
23	...	Junagad	6	...	...	1	...	3	...	...	1
24	(a) to (l)	Madras and Southern Mahratta	78	1	...	237	...	10	2	...	34
25	...	Morvi	6	...	...	1	...	...	...	...	1
26	(A) to (a)	Rajputana-Malwa	304	5	...	18	...	...	...	...	43
27	(a) & (b)	Rohilkhand and Kumaon	33	...	...	2	...	...	...	...	1
28	(b) to (d)	South Indian	337	1	...	...	...	76	...	...	37
29	...	Udaipur-Chilbergadh	...	...	...	2	...	...	...	...	1



Rolling-stock under different heads on each railway.

CLASSIFICATION NO. OF RAILWAY (DETAILS IN "INDEX" TO APPENDIX B).		Railway.	COACHING								Total class and postal vans.
Main head.	Sub-head.		THIRD CLASS CARRIAGES WITHOUT BRAKE COMPARTMENTS—consolid.			THIRD CLASS CARRIAGES WITH BRAKE COMPARTMENTS.					
			Bogie.	Ambulance.		4-wheeled.	2-wheeled.	Bogie.	Ambulance.		
4-wheeled.	Bogie.	4-wheeled.		Bogie.							
59	59	60	61	62	63	64	65	66	67	68	69
		<i>4' 6" gauge.</i>									
25	—	Arrah-Sassaram Light ... ..	...	...	...	...	...	...	...	...	...
27	...	Barasat-Basirhat Light ... ..	...	...	...	...	...	...	...	...	1
28	...	Barui Light ... ..	32	...	...	...	...	...	...	...	...
1	(b), (c), (d), (e) & (f)	Bengal-Nagpur ... ..	21	...	...	...	...	...	...	...	...
29	...	Bakhtiarpore-Bihar Light ... ..	...	...	...	...	...	...	...	...	1
30	...	Champaner-Shivrajpur Light ... ..	1	...	...	...	...	...	...	...	...
31	...	Cutch ... ..	1	...	...	...	...	3	...	...	...
32	...	Dehri-Bohtas Light ... ..	2	...	...	...	...	...	...	...	...
33	...	Dholpur-Bari ... ..	2	...	...	...	...	2	...	...	...
3	(b)	Eastern Bengal ... ..	...	...	...	7	...	...	...	...	2
2	(o) & (p)	Gaekwar's Dabhol and Rajpipla ... ..	...	...	...	...	...	...	...	...	...
8	(j)	Kalka-Simla ... ..	16	...	...	...	...	...	...	...	4
8	(k) & (l)	Kohat-Thal and Nowshera-Durgal ... ..	6	...	...	...	...	...	...	...	...
10	(j) & (k)	Morappur-Dharmapuri and Tirupattur-Krishnagiri ... ..	10	...	...	...	...	...	...	...	...
21	...	Morvi ... ..	13	...	...	...	...	...	...	...	2
1	(d)	Mourbhauj ... ..	5	...	...	...	...	...	...	...	...
1	(f)	Paylakimedi Light ... ..	3	...	...	...	...	...	...	...	...
23	(o)	Powayan Light ... ..	...	...	...	4	...	...	...	...	...
39	...	Shahdara (Delhi)-Baharapur Light ... ..	...	...	...	3	...	...	...	...	...
40	...	Tarakeswar-Magra Light ... ..	...	...	...	3	...	...	...	...	...
61	...	Tospore-Balipara Light ... ..	2	...	...	...	...	...	...	...	...
		<i>4' 6" gauge.</i>									
42	...	Darjeeling-Himalayan ... ..	1	...	...	3	...	...	...	...	...
5	(g)	Gwalior Light ... ..	20	...	...	...	...	...	...	...	...
43	...	Howrah-Amra Light ... ..	...	...	...	...	...	...	...	...	...
44	...	Howrah-Sheakhala Light ... ..	...	...	...	...	...	...	...	...	...
45	...	Jagadhri Light ... ..	...	...	...	...	...	...	...	...	...
46	...	Jorhat (Provincial) ... ..	...	...	...	...	...	...	...	...	...
5	(h)	Matheran Light ... ..	...	...	...	...	6	...	...	...	...
47	...	Pipar Road-Bhavi Light ... ..	1	...	...	...	...	1	...	...	...



## Rolling-stock under different heads on each

[In this statement the few six-wheeled wagons in use on Indian railways

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		Railway.	GOODS							
Main head.	Sub-head.		COVERED GOODS WAGONS, BOGIES.		COVERED GOODS WAGONS, 4-WHEELED.		High-sided wagons, bogie.	High-sided wagons, 4-wheeled.	Medium-sided wagons, bogie.	Medium-sided wagons, 4-wheeled.
			Ordinary.	Military.	Ordinary.	Military.				
87	88	89	90	91	92	93	94	95	96	97
		<i>5' 6" gauge.</i>								
1	(a)	Bengal-Nagpur ... ..	...	...	2,533	1,571	...	...	...	728
2	(a) to (g)	Bombay, Baroda and Central India ...	...	...	2,400	1,221	...	1,000	...	443
3	(a)	Eastern Bengal ... ..	...	...	2,823	1,455	...	52	...	...
4	...	East Indian ... ..	...	...	2,386	7,131	...	6,908	...	...
5	(a) to (f)	Great Indian Peninsula ... ..	51	...	5,817	4,047	101	2,698	...	...
6	(a) & (b)	Madras and Southern Mahratta ...	...	...	1,067	1,298	...	1,209	...	...
7	(a) & (b)	Nizam's Guaranteed State ... ..	...	...	98	280	10	963	...	...
8	(a) to (d)	North Western ... ..	...	560	2,363	6,683	70	1,552	...	...
9	(a) & (b)	Oudh and Rohilkhand ... ..	...	...	2,396	3,190	...	...	...	...
10	(a)	South Indian ... ..	...	...	224	571	...	431	...	...
	...	Calcutta Port Commissioners' ...	...	...	745	...	...	200	...	...
		<i>3' 3 1/2" gauge.</i>								
11	...	Assam-Bengal ... ..	100	...	1,150	605	15	269	...	...
12	...	Bengal and North-Western ... ..	200	...	4,021	2,183	...	...	...	...
13	...	Bengal Doonah ... ..	...	...	203	...	...	...	...	...
14	...	Bhavnager ... ..	...	...	82	56	...	12	...	...
15	(a) & (b)	Burma ... ..	473	75	4,124	20	16	00	...	310
16	...	Dibru-Sadiya ... ..	...	...	203	...	...	864	...	...
3	(b) to (d)	Eastern Bengal ... ..	600	...	2,226	446	2	...	...	...
4	...	East Indian (Deoghur) ... ..	...	...	4	...	...	...	...	...
17	...	Gondal-Forbandar ... ..	...	...	55	38	...	9	...	...
7	(c)	Hyderabad-Godavari Valley ... ..	...	...	510	171	2	257	...	...
18	...	Jamnagar ... ..	...	...	40	...	...	...	...	...
19	(a) to (d)	Jodhpur-Bikaner ... ..	6	...	908	25	...	...	...	...
20	...	Junagad ... ..	39	...	...	...	...	4	...	...
6	(c) to (f)	Madras and Southern Mahratta ...	...	91	4,150	221	63	221	162	268
21	...	Morvi ... ..	...	...	29	...	15	62	...	...
2	(b) to (e)	Rajputana-Malwa ... ..	475	...	2,318	1,772	...	121	...	169
22	(a) & (b)	Rohilkhand and Kumaon ... ..	...	...	1,098	250	...	...	...	...
10	(b) to (d)	South Indian ... ..	357	...	1,800	250	137	700	6	...
23	...	Udaipur-Chitorgarh ... ..	...	...	33	...	...	...	...	...

DIX 15—contd.

railway at the close of the calendar year 1911.

have been included with four-wheeled wagons.]

VEHICLES.												NUM- BER.
LOW-SIDED WAGONS, BOGIE.		LOW-SIDED WAGONS, 4-WHEELED.		Coal or coke wagons.	Cattle wagons.	Accident vans.	Platform wagons.	Powder vans.	Timber trucks.	MOTOR TRUCKS.		
Ordinary.	Military.	Ordinary.	Military.							108	109	104
...	...	100	130	4,867	...	23	...	6	110	...	123	1
...	144	26	...	761	...	19	...	7	30	...	...	2
...	...	321	351	...	1	19	...	5	11	...	63	3
...	...	3,019	1,525	778	20	57	89	31	100	...	...	4
...	...	85	...	216	...	61	...	34	101	...	50	5
...	...	...	229	...	1	20	3	2	187	...	...	6
...	...	...	...	...	...	...	...	...	6	...	...	7
302	140	511	1,232	600	24	...	19	65	60	...	...	8
...	...	14	279	327	...	9	...	6	131	...	...	9
...	...	...	...	...	...	8	...	3	...	120	62	10
...	...	82	...	...	...	2	35	...	...	2	20	...
...	...	306	...	...	4	5	...	3	80	...	16	11
...	26	442	25	670	...	...	2	1	264	...	...	12
...	...	48	...	...	1	1	...	...	32	...	...	13
11	...	261	...	...	3	...	...	1	10	...	...	14
35	...	...	275	30	305	14	...	12	197	187	180	15
...	...	70	...	...	...	...	...	1	54	...	...	16
...	...	208	228	...	...	10	5	2	229	...	...	17
...	...	5	...	...	...	...	...	...	...	...	...	18
7	...	162	...	...	2	...	...	...	9	...	...	17
...	...	...	...	...	...	...	...	...	20	...	...	7
...	...	40	...	...	...	...	...	...	...	...	...	18
...	151	...	151	...	25	...	...	1	...	...	...	19
2	...	70	...	...	1	...	...	1	3	...	...	20
...	...	65	238	380	...	14	47	13	125	90	...	6
2	...	...	...	...	...	1	...	...	...	...	...	21
227	353	9	304	30	...	18	...	38	55	...	...	2
...	...	242	...	...	...	7	...	2	75	...	...	22
...	...	...	...	...	6	...	...	8	79	...	20	19
27	...	...	...	...	...	...	...	...	...	...	...	23
...	...	10	...	...	...	...	...	...	...	...	...	...

\* These are 5' 6" gauge coal wagons purchased from, and kept for use on, the East Indian railway.



## Rolling-stock under different heads on each

[In this statement the few six-wheeled wagons in use on Indian railways

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		Railway.	GOODS							
Main head.	Sub-head.		COVERED GOODS WAGONS, BOGS.		COVERED GOODS WAGONS, 4-WHEELED.		High-sided wagons, bogie.	High-sided wagons, 4-wheeled.	Medium-sided wagons, bogie.	Medium-sided wagons, 4-wheeled.
			Ordinary.	Military.	Ordinary.	Military.				
87	88	89	90	91	92	93	94	95	96	97
		<i>2' 6" gauge.</i>								
25	...	Arrah-Sasaram Light ...	...	...	27	...	...	20	...	...
27	...	Baraset-Basirhat Light ...	...	...	6	...	...	29	...	...
28	...	Barai Light ...	87	...	...	...	10	...	...	...
1	(b), (c), (e), (g) & (h).	Bengal-Nagpur ...	238	243	20	...	...	...	280	...
29	...	Bakhtiarpore-Bihar Light ...	...	...	14	...	...	18	...	...
30	...	Chazpansar-Shivrajpur Light ...	5	...	...	...	...	1	...	...
31	...	Cutch ...	...	...	...	...	...	15	...	...
32	...	Dehri-Bohtas Light ...	...	...	21	...	...	...	...	...
33	...	Dholpur-Bari ...	8	...	...	...	...	10	...	...
3	(b)	Eastern Bengal ...	...	...	80	...	...	...	...	...
3	(c) & (p)	Gaekwar's Dabhol and Rajpipia ...	...	...	63	...	...	...	...	...
8	(j)	Kalka-Simla ...	...	20	64	...	30	18	...	...
8	(k) & (l)	Kohat-Thal and Nowshera-Dargal ...	...	49	25	...	13	19	...	...
10	(j) & (k)	Morappur-Dharmapuri and Tirupattur-Krishnagiri ...	24	...	...	...	25	...	...	...
21	...	Morvi ...	16	...	10	...	9	...	...	...
1	(d)	Mourbhanj ...	6	...	2	...	...	...	...	...
1	(f)	Parlakimedi Light ...	2	...	...	...	...	...	...	...
22	(c)	Powayan Light ...	1	...	57	...	...	...	...	...
39	...	Shahdara (Delhi)-Sahasrapur Light ...	...	...	80	...	...	...	...	...
40	...	Tarkessur-Magra Light ...	...	...	20	...	...	...	...	...
41	...	Terpore-Balipara Light ...	...	...	30	...	3	13	...	...
		<i>2' 0" gauge.</i>								
43	...	Darjeeling-Himalayan ...	1	...	86	...	...	148	...	...
5	(g)	Gwallior Light ...	...	...	155	...	6	55	...	...
43	...	Howrah-Amta Light ...	...	...	14	...	...	33	...	...
44	...	Howrah-Sheakhala Light ...	...	...	4	...	...	4	...	...
45	...	Jagadhri Light ...	...	...	1	...	...	...	...	...
46	...	Jorhat (Provincial) ...	49	...	...	...	14	...	...	...
5	(b)	Matheran Light ...	...	...	7	...	...	16	...	...
47	...	Pipar Road-Bhavl Light ...	...	...	...	...	...	4	...	...

DIX 15—contd.

railway at the close of the calendar year 1911.

have been included with four-wheeled wagons.]

VEHICLES.												Mile head.
LOW-SIDED WAGONS, BOXES.		LOW-SIDED WAGONS, 4-WHEELED.		Coal or coke wagons.	Cattle wagons.	Accident vans.	Platform wagons.	Powder vans.	Timber trucks.	Boxcar trucks.		
Ordinary.	Military.	Ordinary.	Military.							Double.	Single.	
98	99	100	101	102	103	104	105	106	107	108	109	110
...	...	...	...	...	...	...	...	...	...	...	...	35
...	...	...	...	...	...	...	...	...	...	...	...	37
37	...	...	...	...	...	...	...	...	...	...	...	38
44	...	30	...	108	...	2	...	...	43	...	...	1
4	...	12	...	...	...	...	...	...	...	...	...	20
...	...	49	...	...	...	...	...	...	...	...	...	30
14	...	...	...	...	...	...	...	...	...	...	...	31
7	...	28	...	...	...	...	...	...	...	...	...	33
...	...	25	...	...	...	...	...	...	...	...	...	35
...	...	9	...	...	...	...	1	...	...	...	...	3
143	...	88	...	...	...	...	...	1	...	...	...	3
...	...	8	...	...	...	...	...	1	...	...	...	8
...	14	4	2	69	10	...	74	3	...	...	...	8
...	...	...	...	...	...	...	...	...	...	...	...	10
38	...	...	...	...	...	...	...	...	...	...	...	31
10	...	2	...	...	...	...	...	...	...	...	...	1
12	...	2	...	...	...	...	...	...	...	...	...	1
...	...	3	...	...	...	...	...	...	2	...	...	23
...	...	100	...	...	...	...	...	...	...	...	...	39
...	...	37	...	...	...	...	...	...	...	...	...	40
...	...	6	...	...	...	...	...	...	2	...	...	41
1	...	...	...	...	...	...	...	...	3	...	2	43
...	...	10	...	...	...	1	...	...	...	1	...	5
10	...	4	...	...	...	...	...	...	...	...	...	43
...	...	...	...	...	...	...	...	...	...	...	...	44
...	...	6	...	...	...	...	...	...	...	...	...	45
4	...	...	...	...	...	...	...	...	...	...	...	45
...	...	...	...	...	...	...	...	...	...	...	...	5
...	...	2	...	...	...	...	...	...	...	...	...	47

\* These are light military trollies.

## Rolling-stock under different heads on each

/ CLASSIFICATION No. OF RAILWAY (DETAINED IN "INDEX" TO APPENDIX 3).		Railway.	GOODS VEHICLES—consolid.							
Main-head.	Sub-head.		Ballast wagons.	Brake-vans (used indifferently on passenger, goods or mixed service).	Travelling oil tanks.	Travelling water tanks.	Travelling gas holders.	Travelling cranes.	Miscellaneous.	Total goods vehicles.
111	112	113	114	115	116	117	118	119	120	121
		<i>5' 6" gauge.</i>								
1	(a)	Bengal-Nagpur ... ..	95	245	47	—	13	24	271	11,883
2	(a) to (g)	Bombay, Baroda and Central India ... ..	478	179	30	25	13	16	261	7,683
3	(a)	Eastern Bengal ... ..	324	84	30	13	4	8	70	5,328
4	...	East Indian ... ..	280	784	94	1	6	34	11	24,214
5	(a) to (f)	Great Indian Peninsula ... ..	406	657	42	11	19	60	1	15,487
6	(a) & (b)	Madras and Southern Mahratta ... ..	95	260	38	11	13	14	24	4,400
7	(a) & (b)	Nizam's Guaranteed State ... ..	71	33	...	3	1	3	8	1,436
8	(a) to (g)	North Western ... ..	240	326	71	20	31	68	207	20,985
9	(a) & (b)	Oudh and Rohilkhand ... ..	113	77	14	3	8	23	...	6,488
10	(a)	South Indian ... ..	55	66	7	1	6	2	13	1,554
...	...	Calcutta Port Commissioners' ... ..	12	1	...	...	...	3	...	1,104
		<i>3' 6 1/4" gauge.</i>								
11	...	Assam-Bengal ... ..	110	16	3	...	3	17	14	2,914
12	...	Bengal and North-Western... ..	...	236	13	...	...	23	9	7,586
13	...	Bengal Dooms ... ..	...	15	...	...	...	3	...	383
14	...	Bhavnagar ... ..	40	9	1	1	...	1	6	463
15	(a) & (b)	Burma ... ..	632	210	3	21	...	37	131	7,324
16	...	Dibru-Sadiya ... ..	...	21	6	...	...	2	...	1,311
3	(b) to (d)	Eastern Bengal ... ..	50	82	14	...	7	16	109	4,324
4	...	East Indian (Doogar) ... ..	...	3	...	...	...	...	...	11
14	...	Gondal-Porbandar ... ..	25	8	1	...	...	1	64	369
7	(a)	Hyderabad-Godavari Valley ... ..	33	28	1	1	1	3	7	1,003
18	...	Jamnagar ... ..	...	4	...	...	...	...	...	64
1	(a) to (d)	Jodhpur-Bikaner ... ..	...	33	3	14	...	...	...	1,343
...	...	Junagad ... ..	9	2	...	...	...	...	...	134
6	(a) to (f)	Madras and Southern Mahratta ... ..	...	51	28	48	34	23	3	6,394
21	...	Morvi ... ..	...	3	...	...	...	...	...	111
2	(b) to (a)	Rajputana-Malwa ... ..	358	300	21	...	...	27	3	8,773
23	(a) & (b)	Rohilkhand and Kumaon ... ..	...	38	...	...	...	13	...	1,320
10	(b) to (f)	South Indian ... ..	875	128	38	23	...	3	6	4,170
22	...	Udaipur-Chitorgarh ... ..	...	3	...	...	...	...	...	46

DIX. 15—contd.

railway at the close of the calendar year 1911.

MOTOR CARS.							LOWER CLASS CARRIAGES PROVIDED WITH LATRINE ACCOMMODATION FOR PASSENGERS.				NUMBR.
RAIL MOTORS.			ROAD MOTORS.			Total.	Intermediate class.	Third class.	Composites containing intermediate or third class accommodation.	Total.	Main head.
Motor Engines, with or without detachable trailers (for passengers or goods).	Motor coaches, self-propelled (for passengers).	Motor Inspection Trolleys (for engineers).	Motor cars (for passengers).	Motor Trucks (e.g. Howard's for passengers or goods).	Motor Vans (for parcels and goods).						
...	...	1	1	...	...	2	40	208	66	304	1
...	...	1	2	...	2	5	...	224	48	272	2
...	...	2	1	...	9	6	18	142	73	215	3
...	5	17	3	...	2	27	95	384	247	720	4
...	1	2	1	...	1	5	...	448	123	571	5
...	2	2	1	...	...	5	4	165	30	205	6
...	...	...	...	...	...	...	...	72	5	77	7
...	1	5	3	...	2	11	140	677	307	1,324	8
...	...	4	...	...	2	6	26	320	190	466	9
...	1	...	...	...	...	1	...	61	...	61	10
...	...	...	...	...	...	...	...	...	...	...	...
...	...	2	...	...	...	2	...	47	129	176	11
...	...	...	...	...	...	...	32	176	78	280	12
...	...	...	...	...	...	...	...	...	3	3	13
...	...	...	...	...	...	...	...	40	...	40	14
...	...	1	1	...	1	3	...	245	87	332	15
...	...	...	...	...	...	...	...	12	...	12	16
...	...	2	...	...	...	2	48	320	79	447	17
...	...	...	...	...	...	...	...	...	...	...	18
...	...	1	...	...	...	1	...	24	...	24	14
...	...	...	...	...	...	...	...	61	8	69	17
...	...	1	...	...	...	1	...	6	...	6	18
...	...	1	...	...	...	1	17	108	32	157	19
...	...	1	...	...	...	1	...	12	...	12	20
...	...	1	...	...	...	1	...	256	51	307	21
...	...	...	...	...	...	...	...	24	3	27	22
...	...	...	...	...	...	...	31	473	143	627	23
...	...	...	1	...	1	2	...	27	23	50	24
...	...	2	2	...	...	4	...	218	28	246	25
...	...	1	...	...	...	1	...	14	3	17	26

\* These are four engines and 8 trailers.

## Rolling-stock under different heads on each

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		Railway.	GOODS VEHICLES—small.							
Main head.	Sub-head.		Ballast wagons.	Brake-vans (used indiscriminately on passenger, goods or mixed service).	Travelling oil tanks.	Travelling water tanks.	Travelling gas holders.	Travelling cranes.	Miscellaneous.	Total goods vehicles.
111	112	113	114	115	116	117	118	119	120	121
		<i>2' 6" gauge.</i>								
25	...	Arrah-Sasaram Light ...	...	4	...	...	...	...	...	51
27	...	Barnat-Basirhat Light ...	...	3	...	...	...	...	...	26
28	...	Barul Light ...	2	...	...	2	...	1	...	161
1	(b), (c), (e), (g) & (h)	Bengal-Nagpur ...	...	17	6	...	2	2	2	1,108
29	...	Bukhtarpore-Bihar Light ...	...	...	...	...	...	...	...	49
30	...	Champaner-Shivrajpur Light ...	...	2	...	...	...	...	...	57
31	...	Cateh... ..	...	...	...	...	...	...	...	29
32	...	Dehri-Rohtas Light ...	...	...	...	...	...	...	5	51
33	...	Dholpur-Bari ...	...	2	...	...	...	...	...	45
3	(b)	Eastern Bengal ...	...	1	...	...	...	...	2	93
2	(e) & (g)	Gaekwar's Dabhol and Rajpipla ...	...	19	...	...	...	...	2	305
8	(f)	Kalka-Simla ...	...	18	...	1	...	1	35	196
8	(k) & (l)	Kohat-Thal and Nowshera-Dargal ...	150	14	...	...	...	...	...	445
10	(f) & (k)	Morappur-Dharmapuri and Tirupat-tur-Krishnagiri ...	...	...	...	...	...	...	...	48
21	...	Morvi... ..	...	2	...	1	...	...	...	70
1	(d)	Mourbhanj ...	...	...	...	...	...	...	...	20
1	(f)	Parlakimedi Light ...	...	3	...	...	...	...	...	19
22	(e)	Powayan Light ...	...	...	...	...	...	...	6	71
39	...	Shabdara (Delhi)-Saharapur Light ...	...	9	...	...	...	...	...	159
40	...	Tarkessur-Magra Light ...	...	3	...	...	...	...	...	60
41	...	Tespore-Balipara Light ...	...	3	...	...	...	...	...	55
		<i>2' 6" gauge.</i>								
42	...	Darjeeling-Himalayan ...	...	...	...	...	...	...	9	250
5	(g)	Gwalior Light ...	...	4	...	...	...	...	...	233
43	...	Howrah-Amta Light ...	...	11	...	...	...	...	...	71
44	...	Howrah-Sheakhaha Light ...	...	1	...	...	...	...	...	9
45	...	Jagedhri Light ...	...	1	...	...	...	...	...	3
46	...	Jorhat (Provincial) ...	...	...	...	...	...	...	19	35
5	(h)	Matheran Light ...	...	2	...	1	...	1	...	27
47	...	Pipar Road-Bhavi Light ...	...	...	...	...	...	...	...	6

\* These are general service wagons.

DIX 15—concl'd.

railway at the close of the calendar year 1911.

MOTOR CARS.						LOWER CLASS CARRIAGES PROVIDED WITH LATRINE ACCOMMODATION FOR PASSENGERS.					Number.
RAIL MOTORS.			ROAD MOTORS.			Total.	Intermediate class.	Third class.	Composites containing intermediate or third class accommodation.	Total.	
Motor Engines, with or without detachable trailers (for passengers or goods).	Motor coaches, self-propelled (for passengers).	Motor Inspection Trolleys (for engines).	Motor cars (for passengers).	Motor Trucks (e.g., Road's, for passengers or goods).	Motor Vans (for parcels and goods).						Intermediate class.
122	123	124	125	126	127	128	129	130	131	132	133
...	...	...	...	...	...	...	...	...	...	...	35
...	...	...	...	...	...	...	...	...	...	...	37
...	...	2	1	...	...	3	...	...	...	...	38
...	...	...	...	...	...	...	...	20	18	77	1
...	...	...	...	...	...	...	...	...	...	...	39
...	...	...	...	...	...	...	...	1	...	1	30
...	1	...	...	...	...	1	...	6	1	5	31
...	...	...	...	...	...	...	...	...	...	...	32
...	...	...	...	...	...	...	...	4	1	5	33
...	...	...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	...	...	3
...	1	...	...	...	...	1	...	14	2	16	8
...	...	...	...	...	...	...	...	...	...	...	9
...	...	...	...	...	...	...	...	...	...	...	10
...	...	...	...	...	...	...	...	...	...	...	10
...	...	...	...	...	...	...	...	6	4	10	21
...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	22
...	...	...	...	...	...	...	...	...	3	3	23
...	...	...	...	...	...	...	...	...	...	...	40
...	...	...	...	...	...	...	...	...	...	...	41
...	...	...	...	...	...	...	...	...	...	...	42
...	...	...	...	...	...	...	...	4	...	4	43
...	...	...	...	...	...	...	...	5	...	5	44
...	2	1	...	...	...	3	...	...	...	...	45
...	...	...	...	...	...	...	...	...	...	...	46
...	...	...	...	...	...	...	...	...	...	...	46
...	...	...	...	...	...	...	...	...	...	...	46
...	...	...	...	...	...	...	...	...	...	...	46
...	1	...	...	...	...	1	...	...	...	...	47
...	...	...	...	...	...	...	...	...	...	...	47

\* This is a rail petrol mail van.

Number of, outlay on, and work done by, rolling-stock

CLASSIFICATION No. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9).		Railway.	Engines employed exclusively on passenger working.			Engines employed exclusively on goods working.			Engines employed on mixed working or on both passenger working and goods working.		
Main head.	Sub-head.		Number at close of 1910.	Number added in 1911.	Number at close of 1911.	Number at close of 1910.	Number added in 1911.	Number at close of 1911.	Number at close of 1910.	Number added in 1911.	Number at close of 1911.
1	2	3	4	5	6	7	8	9	10	11	12
		5' 6" gauge.									
1	(a)	Bengal-Nagpur ... ..	81	...	81	...	...	...	309	...	309
2	(a) to (g)	Bombay, Baroda and Central India.	120	5	125	...	...	...	147	15	162
3	(a)	Eastern Bengal ... ..	75	6	81	41	18	59	119	-13	106
4	...	East Indian ... ..	195	-3	192	416	-29	387	464	32	496
5	(a) to (f)	Great Indian Peninsula ...	296	8	304	511	35	546	170	...	170
6	(a) & (b)	Madras and Southern Mahratta	73	-6	67	...	...	...	161	22	183
7	(a) & (b)	Nizam's Guaranteed State ...	...	...	...	24	-1	23	38	...	38
8	(a) to (t)	North Western ... ..	225	...	225	679	20	699	150	...	150
9	(a) & (b)	Oudh and Rohilkhand ... ..	99	...	99	...	...	...	121	29	150
10	(a)	South Indian ... ..	25	...	25	...	...	...	91	-2	89
		3' 3 1/2" gauge.									
11	...	Assam-Bengal ... ..	...	5	5	...	...	...	103	2	104
12	...	Bengal and North-Western ...	54	...	54	...	...	...	274	...	274
13	...	Bengal Doocars ... ..	...	...	...	...	...	...	10	...	10
14	...	Bhavnagar ... ..	...	...	...	...	...	...	21	-1	20
15	(a) & (b)	Burma ... ..	8	...	8	...	...	...	293	4	297
16	...	Dibru-Sadiya ... ..	...	...	...	...	...	...	26	...	26
3	(b) to (d)	Eastern Bengal ... ..	...	...	...	...	...	...	290	29	329
4	...	East Indian (Deoghur) ... ..	...	...	...	...	...	...	2	...	2
17	...	Gondal-Forbandar ... ..	...	...	...	...	...	...	14	...	14
7	(c)	Hyderabad-Godavari Valley ...	3	11	14	10	...	10	42	-1	41
18	...	Jamnagar ... ..	...	...	...	...	...	...	4	...	4
19	(a) to (d)	Jodhpur-Bikaner ... ..	...	...	...	...	...	...	64	...	64
20	...	Junagad ... ..	...	...	...	...	...	...	8	...	8
6	(c) to (l)	Madras and Southern Mahratta	40	...	40	5	5	10	235	-2	233
21	...	Morvi ... ..	3	...	3	2	...	2	3	...	3
2	(h) to (n)	Rajputana-Malwa ... ..	175	14	189	...	...	...	322	...	322
22	(a) & (b)	Rohilkhand and Kumaon ... ..	4	...	4	...	...	...	53	1	54
10	(b) to (i)	South Indian ... ..	10	10	20	...	...	...	283	-3	280
23	...	Udaipur-Chitorgarh ... ..	1	...	1	...	...	...	2	...	2

DIX 16.

during 1911 (except where otherwise stated).

GINES.										
Total No. of locomotives on the 31st December 1911.	Number of all classes per mile of line open on 31st December 1911, excluding 2nd, 3rd, etc., tracks.	Average mileage run by each per annum.				Average mileage run by each per diem.				NUM- BER.
		Engines employed exclusively on passenger working.	Engines employed exclusively on goods working.	Engines employed on mixed working or on both passenger working and goods working.	All classes of engines.	Engines employed exclusively on passenger working.	Engines employed exclusively on goods working.	Engines employed on mixed working or on both passenger working and goods working.	All classes of engines.	Main head.
13	14	15	16	17	18	19	20	21	22	23
390	0.21	36,852	...	20,939	24,244	101	...	57	66	1
287	0.25	34,651	...	19,333	28,005	95	...	53	71	2
248	0.48	19,775	17,410	31,950	24,454	54	38	87	67	3
1,075	0.42	36,038	27,750	24,290	26,077	99	76	66	71	4
1,010	0.35	31,344	21,024	15,039	23,021	88	58	41	63	5
250	0.24	34,108	...	16,069	21,022	93	...	44	58	6
61	0.17	...	25,139	29,038	27,685	...	69	80	76	7
1,074	0.23	37,585	10,837	23,140	24,248	108	30	63	66	8
249	0.16	31,030	...	23,932	26,754	85	...	66	73	9
114	0.26	21,765	...	14,422	18,066	60	...	29	50	10
...	...	...	...	...	...	...	...	...	...	...
109	0.14	23,372	...	20,829	20,945	64	...	57	57	11
328	0.16	18,861	...	22,632	22,011	58	...	62	60	12
10	0.07	...	...	...	...	...	...	...	...	13
20	0.11	...	...	23,838	23,838	...	...	65	65	14
305	0.20	26,723	...	26,537	26,538	78	...	73	73	15
26	0.28	...	...	21,468	21,496	...	...	59	59	16
229	0.22	...	...	21,808	21,868	...	...	60	60	17
2	0.42	...	...	...	...	...	...	...	...	18
14	0.07	...	...	22,978	22,978	...	...	90	90	17
65	0.17	18,571	12,829	29,624	25,235	51	25	78	69	7
4	0.07	...	...	22,043	22,013	...	...	60	60	18
64	0.06	...	...	32,723	32,723	...	...	90	90	19
8	0.09	...	...	19,930	19,930	...	...	55	55	20
283	0.14	29,543	19,624	25,672	25,667	81	27	79	79	6
8	0.11	19,319	2,422	35,938	21,927	53	7	93	58	21
511	0.23	22,947	...	16,456	18,857	63	...	45	52	2
58	0.11	...	...	21,924	21,924	...	...	60	60	22
300	0.25	32,056	...	20,276	23,633	88	...	55	65	10
3	0.04	4,343	...	23,651	27,550	12	...	65	75	23



## Number of, cutlay on, and work done by, rolling-stock

CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		Railway.	ENGINES								
Main head	Sub-head.		Engines employed exclusively on passenger working.			Engines employed exclu- sively on goods working.			Engines employed on mixed working or on both passen- ger working and goods working.		
			Number at close of 1910.	Number added in 1911.	Number at close of 1911.	Number at close of 1910.	Number added in 1911.	Number at close of 1911.	Number at close of 1910.	Number added in 1911.	Number at close of 1911.
1	2	3	4	5	6	7	8	9	10	11	12
		<i>2' 6" gauge.</i>									
25	...	Arrah-Sasaram Light ...	...	...	...	...	...	...	...	5	5
27	...	Baraset-Basirhat Light ...	...	...	...	...	...	...	7	...	7
28	...	Barsi Light ...	...	...	...	...	...	...	12	1	13
1	(b), (c), (e), (g) & (h).	Bengal-Nagpur ...	...	...	...	...	...	...	75	...	75
29	...	Bukhtiarpore-Bihar Light ...	...	...	...	...	...	...	4	...	4
30	...	Champaner-Shivrajpur Light ...	...	...	...	...	...	...	...	3	3
31	...	Cutch ...	1	-1	...	...	...	...	3	1	4
32	...	Dehri-Rohtas Light ...	...	...	...	...	...	...	...	3	3
33	...	Dholpur-Bari ...	...	...	...	...	...	...	3	...	3
3	(b)	Eastern Bengal ...	...	...	...	...	...	...	9	-2	7
2	(e) & (p)	Gaekwar's Dabhol and Rajpipla ...	...	...	...	...	...	...	13	2	15
8	(j)	Kalka-Simla ...	...	...	...	...	...	...	36	-1	35
8	(k) & (l)	Kohat-Thal and Nowshera- Durgai ...	...	...	...	...	...	...	29	-1	28
10	(j) & (k)	Morappur Dharmapuri and Tirupattur-Krishnagiri ...	...	...	...	...	...	...	6	...	6
21	...	Morvi ...	3	...	3	1	...	1	1	...	1
1	(d)	Mourbhauj ...	...	...	...	...	...	...	3	...	3
1	(f)	Parlakimedi Light ...	...	...	...	...	...	...	3	...	3
22	(c)	Powayan Light ...	...	...	...	...	...	...	5	...	5
39	...	Shahdara (Delhi)-Saharanpur Light ...	...	...	...	...	...	...	8	...	8
40	...	Tarkessur-Magra Light ...	...	...	...	...	...	...	6	...	6
41	...	Tezpur-Balipara Light ...	...	...	...	...	...	...	3	...	3
		<i>2' 0" gauge.</i>									
42	...	Darjeeling-Himalayan ...	...	...	...	...	...	...	16	1	17
5	(g)	Gwalior Light ...	...	...	...	...	...	...	20	...	20
43	...	Howrah-Amta Light ...	...	...	...	...	...	...	18	...	18
44	...	Howrah-Sheakhala Light ...	...	...	...	...	...	...	4	-1	3
45	...	Jagadhri Light ...	...	...	...	...	...	...	...	2	2
46	...	Jorhat (Provincial) ...	...	...	...	...	...	...	9	...	9
5	(h)	Matheran Light ...	...	...	...	...	...	...	5	...	5
47	...	Pipar Road-Bhavi Light ...	...	...	...	...	...	...	2	...	2

DIX 16—contd.

during 1911 (except where otherwise stated).

Total No. of locomotives on the 31st December 1911.	Number of all classes per mile of line open on 31st December 1911, excluding 2nd, 3rd, etc., tracks.	Average mileage run by each per annum.				Average mileage run by each per diem.				Num-ber.
		Engines employed exclusively on passenger working.	Engines employed exclusively on goods working.	Engines employed on mixed working or on both passenger working and goods working.	All classes of engines.	Engines employed exclusively on passenger working.	Engines employed exclusively on goods working.	Engines employed on mixed working or on both passenger working and goods working.	All classes of engines.	
13	14	15	16	17	18	19	20	21	22	23
5	0'08	...	...	14,738	14,738	...	...	49	49	25
7	0'14	...	...	17,682	17,682	...	...	48	48	27
13	0'11	...	...	14,903	14,903	...	...	41	41	28
75	0'12	...	...	18,964	18,964	...	...	88	88	1
4	0'14	...	...	10,924	10,924	...	...	30	30	29
3	0'15	...	...	9,155	9,155	...	...	28	28	30
4	0'10	...	...	8,006	8,006	...	...	22	22	31
3	0'18	...	...	6,558	6,558	...	...	18	18	32
3	0'15	...	...	8,506	8,506	...	...	23	23	33
7	0'20	...	...	8,859	8,859	...	...	24	24	3
15	0'11	...	...	15,059	15,059	...	...	41	41	2
35	0'08	...	...	10,100	10,100	...	...	27	27	8
28	0'28	...	...	14,065	14,065	...	...	29	29	8
6	0'14	...	...	13,375	13,375	...	...	37	37	10
5	0'26	4,147	1,674	23,026	7,428	11	5	63	20	21
3	0'09	...	...	11,398	11,398	...	...	31	31	1
3	0'12	...	...	7,256	7,256	...	...	30	30	1
5	0'13	...	...	13,000	13,000	...	...	36	36	23
8	0'09	...	...	18,338	18,338	...	...	50	50	39
6	0'18	...	...	21,431	21,431	...	...	59	59	40
3	0'15	...	...	10,442	10,442	...	...	39	39	41
17	0'28	...	...	15,762	15,762	...	...	43	43	42
20	0'08	...	...	16,769	16,769	...	...	46	46	5
18	0'20	...	...	13,369	13,369	...	...	37	37	43
3	0'15	...	...	19,648	19,648	...	...	54	54	44
2	0'00	...	...	3,158	3,158	...	...	22	22	45
9	0'30	...	...	...	...	...	...	...	...	46
5	0'40	...	...	3,083	3,083	...	...	8	8	5
2	0'11	...	...	7,479	7,479	...	...	30	30	47

\* The line was opened on the 11th August 1911 only and therefore worked 143 days in the year.

## Number of, outlay on, and work done by, rolling-stock

CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 2.)		Railway.	ENGINES— <i>concl.</i>				COACHING.		
Main head.	Sub-head.		Ton-mileage hauled per engine, in thousands of tons.	Average under repairs or renewals at any one time.	Total value, in thousands of rupees on 31st December 1911.	Total value per mile of line open on 31st December 1911, excluding 2nd, 3rd, etc., tracks.	Number at close of 1910.	Number added in 1911.	Number at close of 1911.
24	25	26	27	28	29	30	31	32	33
		<i>5' 6" gauge.</i>							
1	(a)	Bengal-Nagpur ... ..	9,237	43	2,13,98	11,556	881	32	913
2	(a) to (g)	Bombay, Baroda and Central India.	9,227	37	1,25,56	10,739	677	32	759
3	(a)	Eastern Bengal ... ..	6,635	35	...	...	730	21	751
4	...	East Indian ... ..	10,759	107	4,69,27	16,335	2,163	126	2,309
5	(a) to (f)	Great Indian Peninsula ...	7,670	215	4,31,97	14,886	1,978	51	2,029
6	(a) & (b)	Madras and Southern Mahratta	6,542	44	1,09,33	10,487	705	-5	700
7	(a) & (b)	Nizam's Guaranteed State ...	8,536	10	25,70	7,329	178	7	185
8	(a) to (i)	North Western ... ..	8,093	295	4,92,31	10,354	2,768	281	3,049
9	(a) & (b)	Oudh and Rohilkhand ... ..	7,892	37	1,17,33	8,094	380	37	937
10	(a)	South Indian ... ..	4,629	22	...	...	306	4	310
		<i>3' 3½" gauge.</i>							
11	...	Assam-Bengal ... ..	3,711	8	39,26	4,970	308	25	333
12	...	Bengal and North-Western ...	4,470	31	1,05,14	5,434	1,068	13	1,081
13	...	Bengal Doars ... ..	...	1	2,70	1,765	48	...	48
14	...	Bhavnagar ... ..	3,563	1	4,30	2,333	97	...	97
15	(a) & (b)	Burma ... ..	4,840	25	1,04,59	6,841	962	42	1,004
16	...	Dibru-Sadiya ... ..	...	6	...	...	72	1	73
3	(b) to (d)	Eastern Bengal ... ..	3,836	41	* 67,20	* 6,189	785	19	804
4	...	East Indian (Deoghur) ... ..	...	...	...	...	10	...	10
17	...	Gondal-Porbandar ... ..	5,049	1	3,37	1,735	82	...	82
7	(c)	Hyderabad-Godavari Valley...	3,422	6	20,32	5,245	146	9	155
18	...	Jamnagar ... ..	2,758	...	1,36	2,506	22	...	22
19	(a) to (d)	Jodhpur-Bikaner ... ..	7,031	10	20,30	1,739	238	6	234
20	...	Junagad ... ..	3,140	...	1,96	2,198	44	...	44
6	(c) to (f)	Madras and Southern Mahratta	4,456	39	† 69,36	† 3,424	1,157	45	1,205
21	...	Morvi ... ..	...	2	2,75	3,725	45	1	46
2	(h) to (n)	Rajputana-Malwa ... ..	3,949	77	98,99	4,484	1,511	43	1,554
22	(a) & (b)	Rohilkund and Kumaon ... ..	4,327	6	17,00	3,699	191	19	210
10	(b) to (i)	South Indian ... ..	4,335	26	† 87,95	† 5,190	1,171	31	1,252
23	...	Udaipur-Chitorgarh ... ..	4,550	...	95	1,413	23	...	23

\* Includes the outlay on the 2' 6" gauge section.

† Excludes the outlay by the West of India Portuguese railway.

‡ Includes the outlay on the 5' 6" and 2' 6" gauge sections of the South Indian railway.

DIX 16—contd.

during 1911 (except where otherwise stated).

STOCK.

Number per mile of line open on 31st December 1911, excluding 2nd, 3rd, etc., tracks.						Average mileage run by each per annum.						Number.
1st class.	2nd class.	Intermediate class.	3rd class.	All other classes.	Total of all classes.	1st class.	2nd class.	Intermediate class.	3rd class.	All other classes.	Total of all classes.	
34	35	36	37	38	39	40	41	42	43	44	45	46
0.05	0.03	0.03	0.23	0.09	0.49	47,528	65,242	70,552	58,310	49,703	56,781	1
0.06	0.07	...	0.37	0.10	0.60	...	...	...	...	...	60,171	2
0.16	0.11	0.18	0.64	0.38	1.47	35,314	45,463	56,172	57,785	35,513	42,464	3
0.09	0.06	0.07	0.48	0.23	0.88	64,982	77,089	91,781	69,440	49,469	65,782	4
0.07	0.08	...	0.34	0.19	0.66	...	...	...	...	...	62,617	5
0.08	0.08	0.01	0.39	0.11	0.67	...	...	...	...	...	41,431	6
0.12	0.05	...	0.21	0.15	0.53	...	...	...	...	...	41,399	7
0.06	0.04	0.05	0.30	0.19	0.64	49,072	60,829	69,410	66,174	39,275	54,896	8
0.08	0.05	0.04	0.27	0.17	0.61	6,863	3,918	3,258	21,226	13,031	47,696	9
0.05	0.08	...	0.33	0.07	0.53	37,642	39,355	...	34,310	19,780	31,778	10
0.05	0.03	0.04	0.16	0.14	0.42	30,239	33,926	16,366	37,016	18,731	39,350	11
0.05	0.03	0.03	0.40	0.02	0.53	64,611	81,353	88,927	73,768	21,030	72,106	12
...	...	...	...	...	0.31	...	...	...	...	...	...	13
...	...	...	...	...	0.54	...	...	...	...	...	39,464	14
0.06	0.05	...	0.42	0.13	0.66	...	...	...	...	...	52,245	15
...	...	...	...	...	0.80	...	...	...	...	...	...	16
0.08	0.05	0.03	0.36	0.20	0.77	...	...	...	...	...	...	3
...	...	...	...	...	2.09	10,540	10,780	10,492	5,938	7,310	6,935	4
0.06	0.05	...	0.23	0.08	0.42	...	...	...	...	...	...	17
0.07	0.05	...	0.17	0.11	0.40	36,785	59,273	...	59,592	42,130	65,119	7
...	...	...	...	...	0.48	...	...	...	...	...	29,893	18
...	...	...	...	...	0.21	...	...	...	...	...	...	19
0.09	0.05	...	0.25	0.10	0.49	...	...	...	...	...	31,274	20
0.05	0.04	...	0.34	0.15	0.58	...	...	...	...	...	25,961	6
0.16	0.04	...	0.36	0.05	0.61	...	...	...	...	...	...	21
0.09	0.05	0.02	0.45	0.09	0.70	...	...	...	...	...	58,895	2
0.06	0.03	0.03	0.27	0.06	0.45	...	...	...	...	...	46,551	22
0.09	0.07	...	0.70	0.18	1.04	40,953	44,014	...	55,389	34,232	49,721	10
...	...	...	...	...	0.34	...	...	...	...	...	42,900	23

## Number of, outlay on, and work done by, rolling-stock

CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9.)		Railway.	ENGINES— <i>concd.</i>				COACHING		
Main head.	Sub-head.		Ton-mileage hauled per engine, in thousands of tons.	Average under repairs or renewals at any one time.	Total value, in thousands of rupees on 31st December 1911.	Total value per mile of line open on 31st Decem- ber 1911, excluding 2nd, 3rd, etc., tracks.	Number at close of 1910.	Number added in 1911.	Number at close of 1911.
24	35	26	27	28	29	30	31	32	33
		<i>2' 6" gauge.</i>							
25	...	Arrah-Sasaram Light	---	---	1,27	2,991	---	23	23
27	...	Barnaset-Basirhat Light	---	---	1,67	3,265	42	...	42
28	...	Barsi Light	---	1	---	---	41	8	49
1	(b), (c), (e), (g) & (h).	Bengal-Nagpur	2,266	6	29,14	4,578	196	...	196
29	...	Bukhtiarpore-Bihar Light	---	---	99	3,513	20	...	20
30	...	Champaner-Shivrajpur Light	---	---	85	4,199	...	2	2
31	...	Cutch	540	---	46	1,321	9	...	9
32	...	Dehri-Bohtas Light	---	1	41	1,730	...	8	8
33	...	Dholpur-Bari	---	1	55	2,811	5	2	7
3	(b)	Eastern Bengal	---	1	---	---	56	...	56
2	(o) & (p)	Gaekwar's Dabhol and Rajpipla.	---	2	2,46	1,862	51	7	58
8	(f)	Kalka-Simla	681	15	10,22	17,223	23	9	102
8	(k) & (l)	Kohat-Thal and Nowahera-Durgai.	751	14	7,06	6,923	66	---	66
10	(j) & (k)	Morappur-Dharnapuri and Tirupattur-Krishnagiri.	1,271	1	---	---	21	---	21
21	...	Morvi	---	1	96	5,039	51	...	51
1	(d)	Mourbhauj	1,011	1	---	---	11	---	11
1	(f)	Parlakimedi Light	714	---	---	---	7	---	7
22	(c)	Powayan Light	---	1	1,02	2,591	18	---	18
39	...	Shahdara (Delhi)-Sahasranpur Light.	---	1	2,76	2,988	27	8	35
40	...	Tarkessur-Magra Light	---	1	1,04	3,118	22	---	22
41	...	Tezpur-Balipara Light	---	1	60	2,974	12	---	12
		<i>2' 0" gauge.</i>							
42	...	Darjeeling-Himalayan	---	2	3,32	6,499	106	...	108
5	(g)	Gwalior Light	---	6	4,05	1,620	81	...	83
43	...	Howrah-Amta Light	---	---	2,63	5,994	96	...	96
44	...	Howrah-Sheakhala Light	---	---	65	3,281	24	...	24
45	...	Jaquadhri Light	---	---	20	6,618	---	4	4
46	...	Jorhat (Provincial) ...	---	1	---	---	21	---	21
5	(h)	Matheran Light	---	2	1,40	11,142	32	---	32
47	...	Pipar Road-Bhavi Light	18	---	19	996	8	1	4

DIX 16—contd.

during 1911 (except where otherwise stated).

Number per mile of line open on 31st December 1911, excluding 2nd, 3rd, etc., tracks.						Average mileage run by each per annum.						Number.
1st class.	2nd class.	Inter-mediate class.	3rd class.	All other classes.	Total of all classes.	1st class.	2nd class.	Intermedi-ate class.	3rd class.	All other classes.	Total of all classes.	Main head.
34	35	36	37	38	39	40	41	42	43	44	45	4
...	...	...	...	...	0.38	...	...	...	...	...	...	25
...	...	...	...	...	0.82	...	...	...	...	...	...	27
0.04	0.04	...	0.29	0.05	0.42	...	...	...	...	...	2,948	28
...	...	...	...	...	0.31	...	...	...	...	...	49,800	1
0.05	0.02	0.09	0.41	0.15	0.71	...	...	...	...	...	...	29
...	...	...	...	...	0.10	...	...	...	...	...	1,000	30
0.04	0.02	...	0.13	0.05	0.24	18,357	27,536	...	6,119	18,768	27,536	31
...	...	...	...	...	0.34	...	...	...	...	...	...	32
0.05	0.03	...	0.23	0.05	0.35	...	...	...	...	...	...	33
0.16	0.09	0.23	0.94	0.17	1.59	...	...	...	...	...	...	3
0.03	0.08	...	0.29	0.04	0.44	...	...	...	...	...	...	2
0.43	0.30	...	0.74	0.33	1.70	8,251	10,325	...	10,424	5,405	9,164	8
0.10	0.04	0.08	0.39	0.09	0.65	12,008	22,306	49,154	32,364	34,422	29,380	8
0.05	0.05	...	0.30	0.08	0.48	40,186	40,186	...	39,362	27,368	39,960	10
0.37	0.31	...	1.68	0.23	2.68	...	...	...	...	...	...	21
0.08	0.04	0.02	0.16	0.06	0.34	8,228	24,514	24,331	30,304	6,416	20,398	1
0.06	0.01	0.01	0.20	...	0.28	...	...	...	...	...	41,236	1
0.05	0.05	...	0.34	0.08	0.47	...	...	...	...	...	...	22
0.03	...	0.03	0.32	...	0.38	...	...	...	...	...	...	29
0.07	0.04	0.09	0.45	0.02	0.68	...	...	...	...	...	...	40
0.15	...	...	0.45	...	0.60	...	...	...	...	...	...	41
...	...	...	...	...	2.12	...	...	...	...	...	...	42
...	...	...	...	...	0.24	...	...	...	...	...	...	5
...	...	...	...	...	2.19	...	...	...	...	...	...	43
...	...	...	...	...	1.22	...	...	...	...	...	...	44
...	...	...	...	...	1.21	...	...	...	...	...	0,316	45
...	...	...	...	...	0.70	...	...	...	...	...	...	46
1.31	0.67	...	0.56	...	2.54	...	...	...	...	...	...	5
0.05	0.05	...	0.10	...	0.20	...	...	...	...	...	14,030	47

## Number of, outlay on, and work done by, rolling-stock

CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		Railway.	COACHING STOCK—conold.					GOODS				
Main head.	Sub-head.		Average mileage run by each per diem.	Freight ton mileage per vehicle, in thousands of tons.*	Average under repairs or renewals at any one time.	Total value, in thousands of rupees on 31st December 1911.	Total value per mile of line open on 31st December 1911, exclud- ing 2nd, 3rd, etc., tracks.	NUMBERS AT CLOSE OF				
								Covered wagons.	Open wagons.	Timber trucks, includ- ing bolster trucks.	All other classes.	
47	48	49	50	51	52	53	54	55	56	57	58	
<i>5' 6" gauge.</i>												
1	(a)	Bengal-Nagpur ... ..	156	51	139	†1,05,07	†5,674	5,092	5,829	251	441	
2	(a) to (g)	Bombay, Baroda and Central India.	229	90	129	†92,26	†7,899	3,513	3,294	20	535	
3	(a)	Eastern Bengal ... ..	133	41	116	...	...	4,502	524	75	206	
4	...	East Indian ... ..	189	66	277	†2,91,81	†11,402	10,518	12,547	100	1,074	
5	(a) to (f)	Great Indian Peninsula ... ..	172	55	391	†2,12,34	†7,317	9,436	4,216	241	885	
6	(a) & (b)	Madras and Southern Mahratta	113	50	90	...	...	2,305	1,581	167	388	
7	(a) & (b)	Nizam's Guaranteed State ... ..	113	34	22	10,65	2,036	358	1,030	4	52	
8	(a) to (i)	North Western ... ..	149	50	247	†3,08,06	†6,499	15,280	4,307	49	756	
9	(a) & (b)	Oudh and Rohilkhand ... ..	131	48	37	...	...	5,532	675	141	146	
10	(a)	South Indian ... ..	87	49	19	...	...	746	542	152	108	
<i>3' 3½" gauge.</i>												
11	...	Assam-Bengal ... ..	34	32	30	†31,03	†4,055	2,000	603	26	67	
12	...	Bengal and North-Western ... ..	197	47	101	...	...	6,308	645	234	279	
13	...	Bengal Doons ... ..	...	...	...	2,89	1,331	263	54	26	20	
14	...	Bhavnagar ... ..	109	34	9	4,41	2,467	142	324	10	17	
	(a) & (b)	Burma ... ..	143	35	30	†78,49	†5,184	4,955	1,986	414	338	
	...	Dibru-Sadiya ... ..	...	...	...	...	...	273	934	54	30	
3	(b) to (d)	Eastern Bengal ... ..	...	...	38	...	...	3,224	518	184	222	
4	...	East Indian (Deoghur) ... ..	19	...	...	...	...	4	5	...	2	
17	...	Gondal-Porbandar ... ..	...	34	9	†3,52	†1,810	98	208	9	64	
7	(c)	Hyderabad-Godavari Valley ... ..	173	41	18	11,62	2,972	590	345	20	39	
18	...	Jamnagar ... ..	82	27	1	†72	†1,331	40	60	...	4	
19	(a) to (d)	Jodhpur-Bikaner ... ..	...	...	16	...	...	852	312	...	87	
20	...	Junagad... ..	86	23	...	†1,34	†2,069	35	94	3	3	
6	(c) to (d)	Madras and Southern Mahratta	98	24	133	...	...	4,323	1,357	222	262	
21	...	Morvi ... ..	...	...	...	3,47	4,685	29	42	...	3	
2	(b) to (n)	Rajputana-Malwa ... ..	161	47	195	...	...	5,527	2,701	75	397	
22	(a) & (b)	Rohilkhand and Kumaon ... ..	127	34	20	...	...	1,343	242	76	59	
10	(b) to (i)	South Indian ... ..	136	47	60	...	...	2,400	1,341	91	223	
23	...	Udaipur-Chitorgarh ... ..	113	43	2	†1,40	†2,079	38	10	...	3	

\*For the purposes of this item, unit-miles are converted into tons at certain fixed rates for each class of passenger, to which is added the ton-mileage of other coaching traffic.

† Includes the outlay on motor cars.

## DIX 16—contd.

during 1911 (except where otherwise stated).

STOCK.											
1910.	NUMBERS ADDED IN 1911.					NUMBER AT CLOSE OF 1911.					NUM- BER.
Total of all classes.	Covered wagons.	Open wagons.	Timber trucks, in- cluding bolster trucks.	All other classes.	Total of a class.	Covered wagons.	Open wagons.	Timber trucks, including bolster trucks.	All other classes.	Total of all classes.	Main hand.
59	60	61	62	63	64	65	66	67	68	69	70
11,613	18	161	...	81	260	5,110	5,990	251	522	11,973	1
7,373	175	248	...	-2	421	3,688	3,452	20	533	7,693	2
5,809	-218	224	...	13	19	4,284	748	75	221	5,328	3
24,239	50	-73	...	-4	-27	10,568	12,474	100	1,070	24,212	4
24,806	463	230	...	-14	679	9,949	4,446	241	851	15,467	5
4,891	10	2	20	-14	18	2,815	1,538	187	374	4,409	6
1,444	-5	3	...	-6	-8	353	1,033	4	46	1,436	7
20,392	384	170	...	19	573	15,664	4,477	49	775	20,965	8
6,494	61	-43	-10	-14	-6	5,593	632	181	132	6,498	9
1,543	52	-58	20	-5	11	798	496	172	98	1,554	10
2,926	2	91	...	-5	88	2,062	694	96	62	2,914	11
7,516	66	...	...	3	69	6,374	645	284	262	7,565	12
363	...	-6	6	...	...	263	48	32	20	363	13
493	...	...	...	...	...	142	324	10	17	493	14
6,993	140	191	...	...	331	5,095	1,477	414	338	7,324	15
1,391	20	...	...	...	20	293	934	54	30	1,311	16
4,148	110	...	45	91	176	3,884	518	229	243	4,324	3
11	...	...	...	...	...	4	5	...	2	11	4
369	...	...	...	...	...	93	203	9	64	369	17
994	100	-3	...	2	99	690	342	20	11	1,093	7
104	...	-20	...	...	-20	40	40	...	4	84	18
1,251	124	...	...	-33	91	976	312	...	54	1,342	19
134	...	...	...	...	...	35	24	3	2	134	20
6,064	252	60	-67	-15	230	4,475	1,417	155	247	6,294	6
74	...	37	...	...	37	29	79	...	3	111	21
3,700	76	39	-22	-21	72	5,603	2,740	53	376	8,772	2
1,720	...	...	...	...	...	1,343	242	78	59	1,720	22
4,054	21	104	8	-17	116	2,421	1,445	99	205	4,170	10
46	...	...	...	...	...	33	10	...	3	46	23

\* Includes 150 5' 6" gauge coal wagons purchased from, and kept for use on, the East Indian railway.



## Number of, outlay on, and work done by, rolling-stock

CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		Railway.	COACHING STOCK— <i>concl.</i>					GOODS			
Main head.	Sub-head.		Average mileage run by each per diem.	Freight ton mileage per vehicle, in thousands of tons*.	Average under repairs or renewals at any one time.	Total value in thou- sands of rupees on 31st Decem- ber 1911.	Total value per mile of line open on 31st Decem- ber 1911, exclud- ing 2nd, 3rd, etc., tracks.	NUMBER AT CLOSE OF			
								Covered wagons.	Open wagons	Timber trucks, includ- ing bolster trucks.	All other classes.
47	48	49	50	51	52	53	54	55	56	57	58
		<i>2' 6" gauge.</i>									
25	...	Arrah-Sasaram Light ...	...	...	...	1,22	2,028	...	...	...	...
27	...	Baraset-Basirhat Light ...	...	...	...	...	...	6	29	...	3
28	...	Barni Light ...	3	...	2	...	...	67	64	...	5
1	(b), (c), (e), (g) & (h).	Bengal-Nagpur ...	137	26	11	17,00	2,669	479	489	43	27
29	...	Bukhtiarpore-Bihar Light ...	...	...	...	...	...	14	34	...	...
30	...	Champance-Shivrajpur Light ...	2	...	...	38	1,884	...	...	...	...
31	...	Cutch ...	75	11	...	†37	†1,022	...	29	...	...
32	...	Debri-Rohas Light ...	...	...	...	...	...	...	...	...	...
33	...	Dholpur-Bari ...	...	...	...	53	4,251	5	35	...	2
3	(b)	Eastern Bengal ...	...	...	12	...	...	103	37	37	4
2	(c) & (p)	Gaekwar's Dabhoi and Rajpipla ...	...	...	6	...	...	55	199	...	13
8	(f)	Kalka-Simla ...	25	6	22	†7,13	†11,979	78	73	...	44
9	(k) & (l)	Kohat-Thal and Nowshera- Durgai.	30	18	2	2,21	2,168	74	338	...	33
10	(f) & (k)	Morappur-Dharmapuri and Tirupattur-Krishnagiri.	101	15	...	...	...	24	24	...	...
21	...	Morvi ...	...	...	...	1,49	7,890	20	47	...	3
1	(d)	Mourbhanj ...	57	11	...	...	...	8	12	...	...
1	(f)	Parlakimedi Light ...	113	21	...	...	...	2	14	...	3
22	(c)	Powayan Light ...	...	...	2	...	...	58	8	2	8
39	...	Shahdara (Delhi)-Saharanpur Light.	...	...	...	138	1,436	80	100	...	9
40	...	Tarakesur-Magra Light ...	...	...	...	70	2,099	20	36	...	3
41	...	Tespora-Balipara Light ...	...	...	...	...	...	30	20	2	3
		<i>2' 0" gauge.</i>									
42	...	Darjeeling-Himalayan ...	...	...	...	1,43	2,810	87	149	5	9
5	(g)	Gwalior Light ...	...	...	...	...	...	161	65	1	5
43	...	Howrah-Amta Light ...	...	...	...	...	...	14	46	...	11
44	...	Howrah-Sheakhala Light ...	...	...	...	...	...	4	4	...	1
45	...	Jagadhri Light ...	44	...	...	8	2,438	...	...	...	...
46	...	Jorhat (Provincial) ...	...	...	...	...	...	42	25	...	13
5	(h)	Matheran Light ...	...	...	16	...	...	2	22	...	4
47	...	Pipax Road-Bhavi Light ...	39	...	...	13	690	...	4	...	...

\* For the purposes of this item, unit-miles are converted into tons at certain fixed rates for each class of passenger, to which is added the ton-mileage of other coaching traffic.

† Includes the outlay on motor cars.

DIX 16—contd.

during 1911 (except where otherwise stated).

STOCK.											
1910.	NUMBER ADDED IN 1911.					NUMBER AT CLOSE OF 1911.					NUM- BER.
Total of all classes.	Covered wagons.	Open wagons.	Timber trucks, includ- ing bolster trucks.	All other classes.	Total of all classes.	Covered wagons.	Open wagons.	Timber trucks, including bolster trucks.	All other classes.	Total of all classes.	Main head.
59	60	61	62	63	64	65	66	67	68	69	70
...	27	20	...	4	51	27	20	...	4	51	26
38	...	...	...	...	...	6	39	...	3	38	27
186	20	5	...	...	25	87	69	...	5	161	28
1,031	21	47	...	4	72	500	529	43	81	1,103	1
48	...	...	...	4	...	14	34	...	...	48	29
...	5	50	...	2	57	5	50	...	2	57	30
29	...	...	...	...	...	...	29	...	...	29	31
...	21	25	...	5	51	21	25	...	5	51	32
42	8	...	...	...	8	8	85	...	2	45	33
181	-23	-23	-37	...	-33	80	9	...	4	93	3
257	9	37	...	2	48	64	236	...	15	305	2
194	7	-16	...	11	2	85	59	...	55	199	8
445	12	-67	...	55	...	86	271	...	69	445	6
48	...	...	...	...	...	24	24	...	...	48	10
70	...	...	...	...	...	20	47	...	3	70	21
20	...	...	...	...	...	8	12	...	...	20	1
19	...	...	...	...	...	2	14	...	3	19	1
71	...	...	...	...	...	58	9	2	8	71	22
189	...	...	...	...	...	80	100	...	9	189	39
59	...	1	...	...	1	20	37	...	3	60	40
55	...	...	...	...	...	30	20	2	3	55	41
250	...	...	...	...	...	87	149	5	9	250	42
232	-6	6	...	...	...	155	71	1	5	232	5
71	...	...	...	...	...	14	46	...	11	71	43
9	...	...	...	...	...	4	4	...	1	9	44
...	1	6	...	1	3	1	6	...	1	3	45
85	6	-7	...	6	5	43	18	...	19	85	46
28	5	-6	...	...	-1	7	16	...	4	27	5
4	...	2	...	...	2	...	6	...	...	6	47

## Number of, outlay on, and work done by, rolling-stock

CLASSIFICATION NO. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		Railway.	Number of all classes per mile of line open on 31st December 1911, excluding 2nd, 3rd, etc., tracks.	Average mileage run by each per annum.	Average mileage run by each per diem.	GOODS AVERAGE TARE IN TONS.	
Main head	Sub-head.					Covered wagons.	Open wagons.
71	72	73	74	75	76	77	78
		<i>5' 6" gauge.</i>					
1	(a)	Bengal-Nagpur ... ..	6.40	15,762	43	3.13	3.47
2	(a) to (g)	Bombay, Baroda and Central India.	6.09	10,975	30	7.74	7.83
3	(a)	Eastern Bengal ... ..	10.40	10,743	29	3.35	7.99
4	...	East Indian ... ..	9.13	20,023	55	7.62	7.11
5	(a) to (f)	Great Indian Peninsula ... ..	5.23	15,024	41	3.16	7.05
6	(a) & (b)	Madras and Southern Mah- ratta.	4.23	12,887	35	7.85	7.64
7	(a) & (b)	Nizam's Guaranteed State ... ..	4.08	15,064	41	7.75	7.00
8	(a) to (c)	North Western ... ..	4.41	14,860	41	7.58	7.71
9	(a) & (b)	Oudh and Rohilkhand ... ..	4.24	14,261	39	7.76	6.59
10	(a)	South Indian ... ..	3.48	10,151	28	7.39	6.93
		<i>3' 3 3/4" gauge.</i>					
11	...	Assam-Bengal ... ..	3.59	4,638	13	5.08	3.64
12	...	Bengal and North-Western ... ..	3.66	14,243	39	4.13	3.36
13	...	Bengal Dockers ... ..	2.37	...	...	...	...
14	...	Bhavnagar ... ..	2.75	6,797	13	3.73	3.06
15	(a) & (b)	Burma ... ..	4.79	13,852	33	4.75	3.75
16	...	Dibru-Sadiya ... ..	14.32	...	...	...	...
3	(b) to (d)	Eastern Bengal ... ..	4.12	...	...	5.83	3.66
4	...	East Indian (Deoghur) ... ..	2.30	...	...	3.51	3.51
17	...	Gondal-Porbandar ... ..	1.90	...	...	3.72	3.06
7	(c)	Hyderabad-Godavari Valley ... ..	2.79	10,986	30	4.29	3.96
18	...	Jamnagar ... ..	1.48	2,529	7	4.25	4.11
19	(a) to (d)	Jodhpur-Bikaner ... ..	1.18	14,421	40	5.34	4.73
20	...	Junagad ... ..	1.51	3,835	24	3.74	3.14
6	(c) to (i)	Madras and Southern Mahratta	3.01	12,770	33	4.46	4.23
21	...	Morvi ... ..	1.50	...	...	...	...
2	(h) to (n)	Rajputana-Malwa ... ..	3.97	15,036	41	4.33	4.27
22	(a) & (b)	Rohilkund and Kumaon ... ..	3.73	11,902	32	4.97	3.32
10	(b) to (c)	South Indian ... ..	3.46	14,629	40	5.05	4.46
23	...	Udaipur-Chitorgarh ... ..	0.68	11,184	31	4.02	3.19

\* The calculations have been arrived at without taking into account 150 5' 6" gauge coal wagons purchased from, and kept for use on, the East Indian railway.

## DIX-16—contd.

during 1911 (except where otherwise stated).

Average carrying capacity in tons—		Average load of a goods vehicle, loaded and empty, per mile.	Freight ton-mileage per vehicle, in thousands of tons.	Average repairs or renewals at any one time.	Total value, in thousands of rupees on 31st December 1911.	Total value per mile of line open on 31st December 1911, excluding 2nd, 3rd, etc., tracks.	Grand total value of rolling-stock in thousands of rupees on 31st December 1911.	Grand total value of rolling-stock per mile of line open on 31st December 1911, including 2nd, 3rd, etc., tracks.	Number.
Covered wagons.	Open wagons.								
79.	80.	81.	82.	83.	84.	85.	86.	87.	88.
1479	1740	781	94	408	3,71,62	20,009	6,90,67	37,239	1
1691	1775	694	45	403	1,99,77	17,698	4,17,69	35,734	2
1808	1557	574	62	357	...	...	3,16,48	61,792	3
1678	1633	817	156	1,343	8,38,83	32,384	715,59,91	762,131	4
1653	1549	765	127	1,044	3,71,50	12,802	10,15,21	35,005	5
1841	1706	685	81	218	1,59,78	17,355	2,30,61	27,842	6
1807	1849	762	107	39	36,26	10,338	72,61	20,703	7
1950	1647	696	106	490	5,89,30	12,393	13,90,67	29,346	8
1805	1361	592	52	153	2,39,08	16,424	3,56,91	24,516	9
1895	1544	667	71	44	...	...	Included with Indian railway, section).	the South (3'3" gauge section).	10
1622	806	689	39	198	61,99	7,837	1,38,19	16,892	11
††11 16	††10 58	††8 68	††45	169	11,95,17	10,242	3,08,81	15,676	12
...	...	...	...	...	6,56	4,296	12,06	7,889	13
735	791	881	24	84	3,44	3,045	14,65	6,195	14
1026	892	400	46	669	1,44,89	9,445	3,27,47	21,420	15
...	...	...	...	...	...	...	**20,15	**35,050	16
1177	980	403	...	267	11,45,91	12,438	12,15,11	119,627	17
500	700	...	...	...	...	...	Included with Indian railway	the East (5' 6" gauge).	18
735	790	846	29	35	4,08	2,900	10,95	5,635	19
1046	1173	449	45	31	19,95	5,100	52,09	13,317	20
735	735	814	10	4	1,72	3,177	3,30	7,014	21
1085	1355	823	76	48	**37,40	**3,297	57,70	5,087	22
783	725	...	28	...	1,42	1,597	5,22	5,864	23
796	770	887	48	262	15,45,81	15,7,123	152,15,17	1510,547	24
725	1225	...	...	4	2,54	3,438	8,76	11,548	25
989	1068	403	58	441	12,31,53	10,493	13,30,62	114,977	26
1170	928	411	33	33	**43,62	**3,490	60,62	13,159	27
949	918	881	60	109	**12,00,83	**11,853	**12,88,83	**17,043	28
390	749	210	22	1	75	1,120	3,10	4,612	29

\* Includes the outlay on coaching stock and motor cars.

† Includes the outlay on coaching stock.

†† Includes the outlay on the 5'6" and 3'6" gauge sections of the South Indian railway.

‡ Includes the outlay by the West of India Portuguese railway.

§ Includes the outlay on the 2'6" gauge section.

|| Includes the outlay on the Deoghur railway (3' 3" gauge).

||| Includes the outlay on the Ledo and Tikak-Margherita Colliery railway.

|||| Excludes the outlay by the Ledo and Tikak-Margherita Colliery railway.

||||| The calculations have been arrived at without taking into account 150 5' 6" gauge coal wagons purchased from, and kept for use on, the East Indian railway.

Number of, outlay on, and work done by, rolling-stock

CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9).		Railway.	Number of all classes per mile of line open on 31st December 1911, excluding Snd, 3rd, etc., tracks.	Average mileage run by each per annum.	Average mileage run by each per diem.	GOODS	
Main head.	Sub-head.					AVERAGE TARE IN TONS.	
						Covered wagons.	Open wagons.
71	72	73	74	75	76	77	78
		2' 6" gauge.					
25	...	Arrah-Sasaram Light ...	0.84	...	...	3.20	3.20
27	...	Baraset-Basirhat Light ...	0.74	...	...	2.75	2.50
28	...	Barhi Light ...	1.39	895	2	6.58	4.57
1	(b), (c), (e), (g) & (h).	Bengal-Nagpur ...	1.73	9,844	27	7.18	7.08
29	...	Bukhtiarpore-Bihar Light ...	1.71	...	...	2.75	2.25
30	...	Champamer-Shivrajpur Light ...	2.82	...	...	7.00	3.00
31	...	Cutch ...	0.79	4,489	13	...	9.00
32	...	Dehri-Rohtas Light ...	2.14	...	...	...	...
33	...	Dholpur-Bari ...	2.29	...	...	7.00	3.00
3	(b)	Eastern Bengal ...	2.64	...	...	3.22	1.75
2	(o) & (p)	Gaekwar's Dabhoi and Raj- pipra.	2.31	...	...	...	...
8	(j)	Kalka-Simla ...	3.27	6,656	18	4.58	4.76
9	(k) & (l)	Kohat-Thal and Nowshera- Durgal.	4.36	3,976	11	4.58	1.35
10	(f) & (k)	Morappur-Dharmapuri and Tirupattur-Krishnagiri.	1.09	6,735	18	6.46	5.98
21	...	Morvi ...	3.71	...	...	...	...
1	(d)	Mourbhanj ...	0.62	14,448	40	5.84	4.76
1	(f)	Parlakimedi Light ...	0.77	3,387	9	6.98	4.06
22	(c)	Powayan Light ...	1.34	...	...	3.16	...
39	...	Shahdara (Delhi)-Saharanpur Light.	2.04	...	...	3.70	3.20
40	...	Tarkessur-Magra Light ...	1.30	...	...	...	...
41	...	Tespore-Balipara Light ...	2.74	...	...	2.00	2.00
		2' 0" gauge.					
43	...	Darjeeling-Himalayan ...	4.30	...	...	1.60	1.30
5	(g)	Gwalior Light ...	0.98	...	...	2.95	2.13
43	...	Howrah-Amta Light ...	1.62	...	...	2.58	2.25
44	...	Howrah-Sheakhala Light ...	0.46	...	...	2.00	2.00
45	...	Jagadhri Light ...	2.42	...	...	3.30	2.47
46	...	Jorhat (Provincial) ...	2.83	...	...	...	...
5	(h)	Matheran Light ...	2.14	...	...	1.40	1.40
47	...	Pipar Road-Bhavi Light ...	0.32	...	...	...	...

## DIX 16—conold.

during 1911 (except where otherwise stated).

## STOCK—conold.

Average carrying capacity in tons.		Average load of a goods vehicle, loaded and empty, per mile.	Freight ton-mileage per vehicle, in thousands of tons.	Average under repairs or renewals at any one time.	Total value, in thousands of rupees on 31st December 1911.	Total value per mile of line open on 31st December 1911, excluding 2nd, 3rd, etc., tracks.	Grand total value of rolling stock, in thousands of rupees on 31st December 1911.	Grand total value of rolling-stock per mile of line open on 31st December 1911, including 2nd, 3rd, etc., tracks.	Num-ber.
Covered wagons.	Open wagons.								
79	80	81	82	83	84	85	86	87	88
8'00	8'00	...	...	...	1,07	1,765	3,56	5,979	25
7'00	7'00	...	...	...	*2,48	4,853	4,15	8,118	27
15'50.	15'48	...	...	4	...	...	11,32	9,692	28
15'77	15'37	3'20	29	32	39,39	6,181	85,53	13,423	1
6'00	6'00	...	...	...	*2,08	*7,436	3,07	10,979	29
16'00	8'00	...	...	...	83	4,109	2,06	10,182	30
...	10'00	...	...	...	27	723	1,12	3,066	31
16'00	7'50	...	...	...	*78	*3,049	1,14	4,779	32
16'00	8'00	...	...	...	67	3,397	2,05	10,459	33
4'63	4'58	...	...	10	...	...	Included with Bengal railway, section).	the Eastern (3' 8 1/2" gauge)	3
...	...	...	...	...	*5,52	*4,189	7,99	6,051	3
9'74	13'57	2'64	14.	15	5,05	8,423	22,55	37,024	6
8'77	8'57	1'52	5	20	4,88	4,735	14,10	13,926	6
9'50	10'00	2'52	14	1	...	...	Included with Indian railway, section).	the South (3' 3 1/2" gauge)	10
4'75	8'00	...	...	3	1,22	6,394	3,58	13,923	21
13'10	11'33	1'92	27	...	...	...	1,70	5,253	1
9'04	7'38	2'30	9	...	...	...	1,60	6,481	1
4'81	...	...	...	8	*1,73	*4,367	2,75	6,958	22
8'00	8'00	...	...	1	4,25	4,594	3,24	9,016	29
...	...	...	...	...	85	2,563	2,89	7,780	40
4'00	4'00	...	...	...	1,00	5,007	1,60	7,981	41
4'39	4'40	...	...	...	2,69	5,222	7,44	14,591	42
7'81	4'37	...	...	...	*5,89	*2,025	9,14	3,655	5
5'00	5'00	...	...	...	*4,45	*10,150	7,08	16,144	43
5'00	5'00	...	...	...	*1,21	*6,185	1,86	9,416	44
7'00	7'00	...	...	...	10	3,006	33	11,517	45
...	...	...	...	...	...	...	2,40	7,984	46
3'00	3'00	...	...	13	†1,38	†10,911	2,78	22,053	5
...	...	...	...	...	5	2,87	37	1,963	47

\* Includes the outlay on coaching stock.  
† Includes the outlay on coaching stock and motor cars.

APPENDIX 17.

Rolling-stock fitted with automatic brakes at the close of the calendar year 1911.

Classification No. of Railway. (Detailed in "Index" to Appendix 9).		LOCOMOTIVES.											Coaching vehicles, including brake-vans used exclusively on passenger service.				Goods vehicles, including brake-vans used indiscriminately on passenger, goods or mixed service, but excluding cranes.			
Main head.	Sub-head.	RAILWAY SYSTEM.	Engines employed exclusively on passenger working.			Engines employed exclusively on goods working.			Engines employed exclusively on mixed working, or on both passenger working and goods working.			Brak-ed.	Piped.	Not fitted.	Percentage of braked and piped on total.	Brak-ed.	Piped.	Not fitted.	Percentage of braked and piped on total.	
			Fitted.	Not fitted.	Per-centage of fitted on total.	Fitted.	Not fitted.	Per-centage of fitted on total.	Fitted.	Not fitted.	Per-centage of fitted on total.									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
		<i>5' 6" Gauge.</i>																		
1	(a)	Bengal-Nagpur .	81	...	100.00	...	...	...	200	100	97.64	913	...	...	100.00	5,410	1,233	5,216	55.98	
2	(a) to (g)	Bombay, Baroda and Central India.	125	...	100.00	...	...	...	139	23	85.80	758	3	...	100.00	3,401	87	5,189	32.41	
3	(a)	Eastern Bengal	81	...	100.00	69	...	100.00	87	39	63.31	663	58	32	95.74	237	13	5,070	4.70	
4	...	East Indian .	191	1	99.48	368	19	95.09	233	313	87.06	3,073	15	221	99.48	9,533	123	14,503	40.03	
5	(a) to (f)	Great Indian Peninsula.	296	...	100.00	385	161	70.51	159	11	93.63	1,975	...	54	97.34	3,501	204	11,732	24.03	
6	(a) & (b)	Madras and Southern Mahratta.	67	...	100.00	...	...	...	159	24	86.89	700	...	...	100.00	3,027	1,653	713	83.77	
7	(a) & (b)	Nizam's Guaranteed State.	...	...	...	...	23	...	19	19	50.00	179	6	...	100.00	137	11	1,236	9.63	
8	(a) to (s)	North Western	235	...	100.00	699	...	100.00	143	8	94.67	3,974	75	...	100.00	12,139	143	8,625	58.75	
9	(a) & (b)	Oudh and Rohilkhand.	99	...	100.00	...	...	...	143	8	94.67	989	39	29	96.91	1,973	614	3,979	28.46	
10	(a)	South Indian .	25	...	100.00	...	...	...	69	20	77.53	310	...	...	100.00	679	203	670	56.83	
		<i>3' 3 1/2" Gauge.</i>																		
11	...	Assam-Bengal .	5	...	100.00	...	...	...	103	1	99.04	325	8	...	100.00	1,592	208	1,097	62.13	
12	...	Bengal and North-Western.	54	...	100.00	...	...	...	93	181	33.94	578	212	291	73.08	2,255	15	7,293	3.57	
13	...	Bengal Doon .	...	...	...	...	...	...	...	10	...	...	11	37	23.92	...	...	369	...	
14	...	Bhavnagar .	...	...	...	...	...	...	8	12	40.00	33	10	54	44.33	...	1	491	6.79	
15	...	Burma .	16	...	100.00	...	...	...	208	89	70.05	1,051	48	385	69.62	3,394	39	3,963	46.39	
16	...	Dibru-Sadiya .	...	...	...	...	...	...	...	28	...	9	3	61	16.44	170	216	923	28.69	
3	(b) to (d)	Eastern Bengal	...	...	...	...	...	...	210	10	91.70	621	92	101	87.44	48	8	4,255	1.23	
4	...	East Indian (Deoghur.)	...	...	...	...	...	...	...	2	...	...	...	10	...	...	...	11	...	
17	...	Gondal-Forbandar.	...	...	...	...	...	...	5	9	35.71	18	12	59	39.59	...	...	308	...	
7	(c)	Hyderabad-Godavari Valley.	14	...	100.00	...	10	...	17	24	41.46	145	10	...	100.00	105	...	985	9.63	
18	...	Jamnagar	...	...	...	...	...	...	4	...	100.00	10	1	11	50.00	2	...	83	2.39	
19	...	Jaipur-Bikaner	...	...	...	...	...	...	...	64	...	...	11	233	4.70	...	...	1,343	...	
20	...	Junagad	...	...	...	...	...	...	3	5	87.50	19	2	23	47.73	...	...	134	...	
6	(a) to (i)	Madras and Southern Mahratta.	40	...	100.00	10	...	100.00	553	180	32.75	3,376	705	704	39.60	13	...	6,280	6.19	
21	...	Morvi .	...	3	...	...	2	...	...	3	...	16	3	27	41.90	...	...	111	...	
2	(k) to (n)	Rajputana-Malwa	189	...	100.00	...	...	...	183	189	56.83	913	596	46	97.04	2,438	4,439	1,843	78.93	
22	(a) & (b)	Rohilkhand and Kumaon.	4	...	100.00	...	...	...	30	24	55.56	64	52	94	55.24	15	4	1,689	1.11	
10	(b) to (f)	South Indian .	29	...	100.00	...	...	...	246	34	87.88	590	24	638	49.04	63	186	3,923	4.86	
23	...	Udaipur-Chitargarb.	...	1	...	...	...	...	...	2	...	...	11	13	47.89	...	...	46	...	
		Carried over .	1,522	5	...	1,521	215	...	2,551	1,280	...	15,770	1,355	3,086	...	46,063	9,301	92,128	...	

\* Excludes two rail motor cars fitted with automatic vacuum brake.  
 † Excludes four motor engines fitted with automatic vacuum brake.  
 ‡ Excludes three rail motor cars fitted with automatic vacuum brake.  
 § Includes 7 engines fitted with the Westinghouse brake.  
 ¶ Includes 42 vehicles fitted with the Westinghouse brake.  
 †† Includes 3 vehicles piped for the Westinghouse brake.  
 ††† Includes 160 5' 6" gauge coal wagons purchased from, and kept for use on, the East Indian railway.

## APPENDIX 17—concl'd.

Rolling-stock fitted with automatic brakes at the close of the calendar year 1911.

Classification No. of Railway (Detailed in "Index" to Appendix 2.)		RAILWAY SYSTEM.	Locomotives.									Coaching vehicles, including brake-vans used exclusively on passenger service.			Goods vehicles, including brake-vans used indiscriminately on passenger, goods or mixed service, but excluding cranes.				
			Engines employed exclusively on passenger working.			Engines employed exclusively on goods working.			Engines employed exclusively on mixed working, or on both passenger working and goods working.			Brak-ed.	Piped.	Not fitted.	Percentage of brak-ed and piped on total.	Brak-ed.	Piped.	Not fitted.	Percentage of brak-ed and piped on total.
			Fitted.	Not fitted.	Percentage of fitted on total.	Fitted.	Not fitted.	Percentage of fitted on total.	Fitted.	Not fitted.	Percentage of fitted on total.								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
		Brought forward	1,522	8	...	1,521	215	...	3,881	1,299	...	15,770	1,358	2,065	...	46,008	9,851	35,158	...
		3' 6" Gauge.																	
25		Arrah-Sasaram Light	...	...	...	...	...	...	...	5	...	...	...	28	...	...	...	51	...
27		Baraset-Basirhat Light	...	...	...	...	...	...	...	7	...	...	...	42	...	...	...	38	...
28		Bazal Light	...	...	...	...	...	...	12	1	93.81	49	...	...	100.00	41	117	2	98.75
29		Bukharpore-Bihar Light	...	...	...	...	...	...	...	4	...	...	...	20	...	...	...	48	...
30		Champamer-Shivrajpur Light.	...	...	...	...	...	...	...	3	...	...	...	2	...	...	...	87	...
31		Catch	...	...	...	...	...	...	...	4	...	...	...	9	...	...	...	29	...
32		Dehri-Bohtas Light	...	...	...	...	...	...	...	3	...	...	...	8	...	...	...	81	...
33		Dholpur-Bari	...	...	...	...	...	...	...	3	...	...	...	7	...	...	...	45	...
3	(b)	Eastern Bengal	...	...	...	...	...	...	...	7	...	...	...	26	...	...	...	33	...
2	(c) & (p)	Gackwar's Dabhol and Rajpipla.	...	...	...	...	...	...	...	15	...	...	...	22	...	...	...	305	...
1	(b) to (k)	Gondia-Chanda, Jubbul-pore-Gondia, Mourhanj, Nagpur-Chhindwara, Par-lakinedi Light, Puralia-Randhi and Rajpur-Dhamtari.	...	...	...	...	...	...	70	11	68.42	177	...	27	82.71	1,004	...	138	88.67
6	(j)	Kalka-Simla	...	...	...	...	...	...	25	...	100.00	102	...	...	100.00	194	1	...	100.00
8	(z) & (i)	Kohat-Thal and Now-shera-Dargal.	...	...	...	...	...	...	...	29	...	...	...	66	...	...	...	445	...
10	(j) & (k)	Morapur-Dharmapuri and Kirapattur-Krishna-giri.	...	...	...	...	...	...	...	6	...	...	...	21	...	...	...	48	...
21		Morvi	...	3	...	...	1	...	...	1	...	...	...	51	...	...	...	70	...
22	(o)	Powayan Light	...	...	...	...	...	...	...	5	...	...	...	19	...	...	...	71	...
39		Shabdara (Delhi)-Saha-ranpur Light.	...	...	...	...	...	...	...	9	...	...	...	25	...	...	...	180	...
40		Tarkessur-Magra Light.	...	...	...	...	...	...	...	6	...	...	...	23	...	...	...	80	...
41		Tezpore-Balpara Light.	...	...	...	...	...	...	...	3	...	...	...	12	...	...	...	55	...
		3' 6" Gauge.																	
42		Darjeeling-Himalayan	...	...	...	...	...	...	...	17	...	...	...	108	...	...	...	250	...
5	(g)	Gwalior Light	...	...	...	...	...	...	...	20	...	...	...	28	...	...	...	228	...
43		Howrah-Amta Light	...	...	...	...	...	...	...	13	...	...	...	38	...	...	...	71	...
44		Howrah-Shankhala Light	...	...	...	...	...	...	...	8	...	...	...	24	...	...	...	0	...
45		Jagadhri Light	...	...	...	...	...	...	...	2	...	...	...	4	...	...	...	8	...
46		Jorhat (Provincial)	...	...	...	...	...	...	...	9	...	...	...	21	...	...	...	25	...
5	(h)	Matheran	...	...	...	...	...	...	2	2	40.00	...	...	22	...	...	...	26	...
57		Pipar Road-Bharvi Light	...	...	...	...	...	...	...	2	...	...	...	4	...	...	...	6	...
		Total	1,522	8	99.48	1,521	216	87.85	2,070	1,478	64.27	16,107	1,356	2,944	81.58	47,202	9,419	34,008	77.48



## APPENDIX 18.

Rolling-stock lighted by either gas or electricity at the close of the calendar year 1911.

CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPEN- DIX 9.)		RAILWAY SYSTEM.	Number of vehicles fitted for light- ing with			Number of vehicles not fitted.	Propor- tion per cent of fitted to total.	Systems of electric lighting in use.
Main h ad.	Sub-head.		Gas. [Pint- sch's system.]	Elec- tricity.	Total.			
1	2	3	4	5	6	7	8	9
<b>5' 6" Gauge.</b>								
1	(a)	Bengal-Nagpur . . . . .	1,026	62	1,088	41	96·37	Stone's, Mather and Platt's, Vickers-Hall and Bowman and Still's systems.
2	(a) to (g)	Bombay, Baroda and Central India.	811	83	894	2	99·78	Stone's, Vickers-Hall, Aichels and Vicarino-Crawford systems.
3	(a)	Eastern Bengal . . . . .	671	20	691	106	86·70	Vickers-Hall, Stone's, Mather and Platt's and Tudor systems.
4	...	East Indian . . . . .	1,668	120	1,788	196	90·11	Stone's system.
5	(a) to (f)	Great Indian Peninsula . . . . .	1,504	216	1,720	98	94·71	Stone's, Vickers-Hall, Aichels, Vicarino-Crawford, Mather and Platt's and Tudor systems.
6	(a) & (b)	Madras and Southern Mahratta . . . . .	875	*14	889	69	92·80	Stone's, Vickers-Hall, Tudor and Rosenburg systems.
7	(a) & (b)	Nizam's Guaranteed State . . . . .	140	6	146	61	70·53	Aichels's and Stone's systems.
8	(a) to (d)	North Western . . . . .	2,619	138	2,757	...	100·00	Stone's system.
9	(a) & (b)	Oudh and Rohilkhand . . . . .	751	78	829	142	85·38	Stone's and Vickers-Hall systems.
10	(a)	South Indian . . . . .	304	40	344	22	93·99	Stone's system.
<b>3' 3 3/4" Gauge.</b>								
11	...	Assam-Bengal . . . . .	316	1	317	...	100·00	Vickers-Hall system.
12	...	Bengal and North-Western . . . . .	...	1,088	1,088	222	83·05	Stone's system.
13	...	Bengal Doocars . . . . .	...	45	45	19	70·31	Vickers-Hall system.
14	(a) & (b)	Bhavnagar . . . . .	...	16	16	78	17·02	Vicarino-Crawford system.
15	(a) & (b)	Burma . . . . .	...	65	65	980	6·84	Stone's, Vickers-Hall and Vicarino-Crawford systems.
16	...	Dibru-Sadiya . . . . .	...	1	1	78	1·37	Vickers-Hall system.
3	(b) to (d)	Eastern Bengal . . . . .	692	17	709	152	82·35	Vickers-Hall and Stone's systems.
17	(a) & (b)	Gondal-Forbandar . . . . .	...	24	24	50	32·43	Vicarino-Crawford system.
7	(c)	Hyderabad-Godavari Valley . . . . .	118	3	121	60	66·65	Stone's and Vickers-Hall systems.
18	...	Jamnagar . . . . .	...	...	...	28	...	...
19	(a) to (d)	Jodhpur-Bikaner . . . . .	...	258	258	18	95·20	Stone's system.
20	...	Junagad . . . . .	...	4	4	37	9·76	Vicarino-Crawford system.
6	(c) to (l)	Madras and Southern Mahratta . . . . .	1,126	*4	1,130	99	91·94	Stone's system.
21	...	Morvi . . . . .	...	...	...	45	...	...
2	(h) to (n)	Rajputana-Malwa . . . . .	...	1,322	1,322	288	84·74	Independent Storage Battery system.
22	(a) & (b)	Rohilkund and Kumaon . . . . .	...	158	158	78	68·95	Stone's system.
10	(b) to (s)	South Indian . . . . .	...	485	485	769	83·99	Stone's system.
23	...	Udaipur-Chitorgarh . . . . .	...	...	...	28	...	...
<b>2' 0" Gauge.</b>								
25	...	Arrah-Sasaram Light . . . . .	...	28	28	...	100·00	Mather and Platt's system.
27	...	Baraset-Basirhat Light . . . . .	...	45	45	...	100·00	Mather and Platt's system.
28	...	Barsi Light . . . . .	...	49	49	...	100·00	Stone's and Leitner-Lucas systems.
29	...	Bukhtiarpore-Bihar Light . . . . .	...	...	...	20	...	...
30	...	Champacer-Shivrajpur Light . . . . .	...	...	...	2	...	...
3	(b)	Eastern Bengal . . . . .	...	...	...	57	...	...
31	...	Cutch . . . . .	...	...	...	9	...	...
32	...	Dehri-Rohtas Light . . . . .	...	...	...	8	...	...
33	...	Dholpur-Bari . . . . .	...	7	7	...	100·00	Independent Storage Battery system.
2	(o) & (p)	Gaekwar's Dabhoi and Rajpipla . . . . .	...	...	...	56	...	...
1	(b) to (h)	Gondia-Chanda, Jubbulpore-Gondia, Moubhanj, Nagpur-Chhindwara, Parlakimedi Light, Puralia-Banchi and Raipur-Dhamtari . . . . .	191	...	191	40	82·68	...
8	(j)	Kalka-Simla . . . . .	...	118	118	...	100·00	Stone's system.
8	(k) & (l)	Kobat-Thal and Nowshera-Durgai . . . . .	...	9	9	27	25·00	Stone's system.
10	(j) & (k)	Morappur-Dharmapuri and Tirapat-tur-Krishnagiri . . . . .	21	...	21	...	100·00	...
21	...	Morvi . . . . .	...	...	...	51	...	...
22	(c)	Powayan Light . . . . .	...	...	...	18	...	...
39	...	Shahdara (Delhi)-Saharanpur Light . . . . .	...	35	35	...	100·00	Mather and Platt's system.
40	...	Tarkessur-Magra Light . . . . .	...	...	...	22	...	...
41	...	Tezpur-Balipara Light . . . . .	...	...	...	18	...	...
<b>3' 0" Gauge.</b>								
42	...	Darjeeling-Himalayan . . . . .	...	30	30	71	29·70	Oil motor-driven direct-coupled-60-volt generating set in separate van.
5	(g) & (A)	Gwalior and Matheran Light . . . . .	...	...	...	118	...	...
43	...	Howrah-Amra Light . . . . .	...	...	...	26	...	...
44	...	Howrah-Sheekhala Light . . . . .	...	...	...	24	...	...
45	...	Jagadhri Light . . . . .	...	...	...	4	...	...
46	...	Jorhat (Provincial) . . . . .	...	...	...	21	...	...
47	...	Pipar Road-Bhavi Light . . . . .	...	...	...	4	...	...
TOTAL			12,831	4,584	17,415	4,817	80·14	

\* Also fitted for gas.

## APPENDIX 19.

Trains provided with means of communication throughout between passengers and railway servants on the 31st December 1911.

CLASSIFICATION No. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 19)		RAILWAY SYSTEM.	Particulars.	Mail.	Passenger.	Mixed.	Total.	REMARKS.
Main head	Sub-head.							
1	2	3	4	5	6	7	8	9
		<b>5' 6" GAUGE.</b>						
1	(a)	Bengal-Nagpur	Total number of trains run Total number of trains fitted with communication.	4 4	48 48	40 ...	92 52	English chain system.*
3	(a)	Eastern Bengal	Total number of trains run... Total number of trains fitted with communication.	10 10	93 95	31 31	136 136	English chain system.*
4	(a) to (d)	East Indian ...	Total number of trains run Total number of trains fitted with communication.	8 8	106 49	145 ...	259 57	English chain system* and Bamber's system.†
5	(a) to (f)	Great Indian Peninsula.	Total number of trains run Total number of trains fitted with communication.	16 16	140 140	86 ...	342 156	English chain system.*
6	(a) & (b)	Madras and Southern Mahratta.	Total number of trains run Total number of trains fitted with communication.	8 8	108 104	34 ...	150 112	English chain system.*
7	(a) & (b)	Nizam's Guaranteed State.	Total number of trains run Total number of trains fitted with communication.	2 2	4 4	... ...	6 6	English chain system.*
8	(a) to (f)	North Western	Total number of trains run Total number of trains fitted with communication.	10 10	97 97	72 ...	179 107	English chain system* and King's system.‡
9	(a) & (b)	Oudh and Rohilkhand.	Total number of trains run Total number of trains fitted with communication.	2 2	11 11	80 60	93 73	English chain system.*
10	(a)	South Indian ...	Total number of trains run Total number of trains fitted with communication.	4 4	27 27	40 ...	71 31	English chain system.*
		<b>3' 3½" GAUGE.</b>						
11	(a)	Assam-Bengal	Total number of trains run Total number of trains fitted with communication.	... ...	... ...	26 8	26 8	English chain system.*
12	(a) & (b)	Bengal and North-Western.	Total number of trains run... Total number of trains fitted with communication.	... ...	10 10	136 ...	146 10	English chain system.*
14	(a) & (b)	Bhavnagar ...	Total number of trains run Total number of trains fitted with communication.	... ...	11 11	13 ...	24 11	English chain system.*
15	(a) & (b)	Burma ...	Total number of trains run Total number of trains fitted with communication.	6 6	118 2	37 10	209 24	English chain system.*
3	(b) to (d)	Eastern Bengal	Total number of trains run Total number of trains fitted with communication.	8 8	37 37	28 26	73 71	English chain system.*
17	(a) & (b)	Gondal-Forbandar.	Total number of trains run Total number of trains fitted with communication.	... ...	6 4	9 ...	15 4	English chain system.*
19	(a) to (d)	Jodhpur-Bikaner.	Total number of trains run Total number of trains fitted with communication.	... ...	2 2	22 ...	24 2	Electric bell §
3	(c) to (f)	Madras and Southern Mahratta.	Total number of trains run... Total number of trains fitted with communication.	6 2	10 4	32 ...	38 6	English chain system.*
7	(c)	Hyderabad-Godavari Valley.	Total number of trains run Total number of trains fitted with communication.	... ...	4 4	... ...	4 4	English chain system.*
2	(h) to (n)	Rajputana-Malwa.	Total number of trains run Total number of trains fitted with communication.	6 6	38 38	91 27	135 71	English chain system.*
22	(a) & (b)	Rohilkund and Kumaon.	Total number of trains run... Total number of trains fitted with communication.	... ...	4 4	23 ...	32 4	English chain system.*
10	(b) to (i)	South Indian ...	Total number of trains run Total number of trains fitted with communication.	8 4	63 40	157 51	228 35	English chain system.*
		<b>2' 6" GAUGE.</b>						
1	(b) to (A)	Bengal-Nagpur	Total number of trains run Total number of trains fitted with communication.	... ...	4 4	30 23	34 26	English chain system.*

\* English chain system.—With indicating disc, in connection with automatic vacuum brake.  
† Bamber's system.—With indicating whistle, in connection with automatic vacuum brake.  
‡ King's system.—Without indicating disc, in connection with automatic vacuum brake.  
§ Electric bell.—Simple electric communication. No connection with automatic vacuum brake.

## APPENDIX 20.

Carriages provided with means of communication between passengers and railway servants on the 31st December 1911.

CLASSIFICATION No. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9.)		RAILWAY SYSTEM.	Particulars.	First class, including saloons, dining cars and reserved, inspection and family carriages.	Second class.	Intermediate class.	Third class.	All other carriages including canteens, but excluding those (such as carriage trucks, luggage vans, etc.,) which do not require to be provided with means of communication.	TOTAL.	REMARKS.
Main head.	Sub-head.									
1	2	3	4	5	6	7	8	9	10	11
		5' 6" GAUGE.								
1	(a)	Bengal-Nagpur	Total number of carriages ... Total number of carriages fitted with communication.	61 59	28 28	40 40	520 513	162 162	611 603	English chain system.*
2	(a) to (g)	Bombay, Baroda and Central India.	Total number of carriages ... Total number of carriages fitted with communication.	45 45	37 37	... ...	405 379	141 139	639 600	English chain system.*
3	(a)	Eastern Bengal	Total number of carriages ... Total number of carriages fitted with communication.	40 40	15 15	45 45	306 306	219 219	625 625	English chain system.*
4	...	East Indian ...	Total number of carriages ... Total number of carriages fitted with communication.	159 158	84 79	101 99	962 372	610 558	1,916 1,266	English chain system.* [138 carriages fitted with Bamber's system.†]
5	(a) to (f)	Great Indian Peninsula.	Total number of carriages ... Total number of carriages fitted with communication.	116 116	121 121	... ...	929 875	650 650	1,816 1,762	English chain system.*
6	(a) & (b)	Madras and Southern Mahratta.	Total number of carriages ... Total number of carriages fitted with communication.	50 50	38 36	4 4	389 389	220 218	701 699	English chain system.*
7	(a) & (b)	Nizam's Guaranteed State.	Total number of carriages ... Total number of carriages fitted with communication.	34 28	10 10	... ...	72 72	48 48	164 156	English chain system.*
8	(a) to (i)	North Western	Total number of carriages ... Total number of carriages fitted with communication.	176 176	91 91	150 150	1,218 1,218	536 536	2,171 2,171	English chain system.* [11 carriages fitted with King's system.‡]
9	(a) & (b)	Oudh and Rohilkhand.	Total number of carriages ... Total number of carriages fitted with communication.	83 81	38 33	36 36	359 350	189 189	700 699	English chain system.*
10	(a)	South Indian ...	Total number of carriages ... Total number of carriages fitted with communication.	9 9	26 26	... ...	184 184	75 75	294 294	English chain system.*

\* English chain system.—With indicating disc, in connection with automatic vacuum brake.  
† Bamber's system.—With indicating whistle, in connection with automatic vacuum brake.  
‡ King's system.—Without indicating disc, in connection with automatic vacuum brake.

## APPENDIX 20—concl.

Carriages provided with means of communication between passengers and railway servants on the 31st December 1911.

CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9.)		RAILWAY SYSTEM.	Particulars.	First class, including saloons, dining cars and reserved, inspection and family carriages.	Second class.	Intermediate class.	Third class.	All other carriages including composites, but excluding those (such as carriage trucks, luggage vans, etc.) which do not require to be provided with means of communication.	TOTAL.	REMARKS.
Main head.	Sub-head.									
1	2	3	4	5	6	7	8	9	10	11
<b>3' 3 1/2" GAUGE.</b>										
11	...	Assam-Bengal	Total number of carriages ... Total number of carriages fitted with communication.	31 23	...	...	96 96	82 82	309 201	English chain system.*
12	...	Bengal and North-Western.	Total number of carriages ... Total number of carriages fitted with communication.	65 59	36 26	32 32	783 534	189 181	1,075 793	English chain system.*
13	...	Bengal Doocars	Total number of carriages ... Total number of carriages fitted with communication.	10 1	1 ...	...	21 ...	16 6	43 7	Simple cord.†
14	...	Bhavnagar	Total number of carriages ... Total number of carriages fitted with communication.	7 4	5 2	...	53 19	29 14	94 39	English chain system.*
15	(a) & (b)	Burma	Total number of carriages ... Total number of carriages fitted with communication.	53 28	28 ...	...	550 252	241 144	877 434	English chain system.*
3	(b) to (d)	Eastern Bengal	Total number of carriages ... Total number of carriages fitted with communication.	50 48	28 28	51 47	349 311	151 135	629 569	English chain system.*
17	...	Gondal-Forbandar	Total number of carriages ... Total number of carriages fitted with communication.	8 5	4 3	...	43 8	24 14	79 30	English chain system.*
19	(a) to (d)	Jodhpur-Bikaner	Total number of carriages ... Total number of carriages fitted with communication.	25 25	7 7	17 9	108 47	114 113	371 201	Electric bell.‡
7	(c)	Hyderabad-Godavari Valley.	Total number of carriages ... Total number of carriages fitted with communication.	19 19	10 10	...	67 66	47 45	148 140	English chain system.*
20	...	Junagad	Total number of carriages ... Total number of carriages fitted with communication.	5 3	...	...	23 9	13 7	41 19	English chain system.*
6	(c) to (i)	Madras and Southern Mahratta.	Total number of carriages ... Total number of carriages fitted with communication.	70 28	37 8	...	601 178	461 170	1,109 884	English chain system.*
21	(a)	Morvi	Total number of carriages ... Total number of carriages fitted with communication.	4 1	...	...	24 6	18 9	40 18	English chain system.*
2	(h) to (n)	Rajputana-Malwa	Total number of carriages ... Total number of carriages fitted with communication.	124 124	46 45	31 27	920 782	379 273	1,400 1,261	English chain system.*
22	(a) & (b)	Rohtak and Kumaon.	Total number of carriages ... Total number of carriages fitted with communication.	18 18	6 6	3 ...	112 45	97 50	206 119	English chain system.*
10	(b) to (i)	South Indian	Total number of carriages ... Total number of carriages fitted with communication.	50 25	36 8	...	786 388	261 138	1,153 569	English chain system.*
<b>2' 6" GAUGE.</b>										
1	(b) to (h)	Bengal-Nagpur	Total number of carriages ... Total number of carriages fitted with communication.	9 5	3 2	...	115 91	81 71	208 170	English chain system.*

\* English chain system.—With indicating disc, in connection with automatic vacuum brake.  
† Simple cord.—No connection with automatic vacuum brake.  
‡ Electric bell.—Simple electric communication. No connection with automatic vacuum brake.

## APPENDIX 21.

*Railways on which points and signals were interlocked and on which block instruments were used for train signalling at the close of the calendar year 1911.*

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9.)		RAILWAY SYSTEM.	Total number of sta- tions on railway.	STATIONS AT WHICH POINTS AND SIGNALS WERE INTERLOCKED.			STATIONS AT WHICH BLOCK IN- STRUMENTS WERE USED FOR TRAIN SIGNALLING.		
Main head.	Sub- head.			No.	Total number of levers used in each system.	Name of system of interlocking.	No.	Total number of block instru- ments of each system.	Name of block instru- ment.
1	2	3	4	5	6	7	8	9	10
		5' 6" GAUGE.							
1	(a)	Bengal-Nagpur . . . . .	274	124	397 14 53	Cabin interlocking List and Morse's . Indirect interlock- ing.	119	103 9 2	Neale's, single line. Theobald's Train Key, single line. Webb and Thompson's, single line.
2	(a) to (g)	Bombay, Baroda and Central India.	190	166	1,208 440 45	Cabin interlocking Dutton's Experimental . . . . .	164	40 20 88 2	Preese's, double line. Sykes' (L. & B.) Tyer's Tablet, single line. Tyer's (L. & B.)
3	(a)	Eastern Bengal . . . . .	147	49	1,080 50 12 18	Cabin interlocking List and Morse's . Dutton's Experimental . . . . .	104	14 19 61 24	Tyer's Tablet three position, double line. Pryce and Ferreira's, double line. Neale's, single line. Pryce and Ferreira's (L. & B.)
4	—	East Indian . . . . .	457	310	3,209 2,738 106	Cabin interlocking Dutton's Grouped levers . . . . .	396	61 133 15 118 69	Pryce and Ferreira's, (L. & B.) Neale's, single line. Tyer's Tablet, single line. East Indian railway's, double line. East Indian railway's tablet, single line.
5	(a) to (f)	Great Indian Peninsula . . . . .	511	247	5,198 140 167	Cabin interlocking List and Morse's . Grouped levers . . . . .	511	77 196 76 147 15	Preese's, single line. Does not give out a token or tablet. Voucher, single line. Train wire, single line. Does not give out a token. Preese's, double line. Tyer's, double line.
6	(a) & (b)	Madras and Southern Mah- ratta.	200	73	652 108	Cabin interlocking Key interlocking . . . . .	168	18 150	Winter's, double line. Theobald's Train Key, single line.
7	(a) & (b)	Nizam's Guaranteed State.	45	4	68 8 2 12	Cabin interlocking Dutton's Simplex . . . . . Experimental . . . . .	5	5	Webb and Thompson's, single line.
8	(g) to (i)	North Western . . . . .	696	405	3,654 2,925 16	Cabin interlocking List and Morse's . Experimental . . . . .	23	23	Tyer's two position (L. & B.)
9	(a) & (b)	Ondh and Rohilkhand . . . . .	258	180	1,558 110 78 2 28 77 1,424	List and Morse's . . . Grouped levers Sarby and Farmer's Wrench's Key interlocking . Experimental . . . . . Cabin interlocking	13	13	Neale's, single line.
10	(a)	South Indian . . . . .	83	1	12	Cabin interlocking	67	64 2 1	Theobald's Train Key, single line. Winter's Double Dial, single line. Does not give out a token or tablet. Experimental.
		3' 3½" GAUGE.							
11	—	Assam-Bengal . . . . .	134	4	48	Dutton's . . . . .	5	5	Neale's, single line.
12	—	Bengal and North-Western	324	10	14 22	Dutton's List and Morse's . . . . .	15	10 5	Tyer's Tablet, single line. Neale's, single line.
13	—	Bengal Doonars . . . . .	30	—	—	—	—	—	—
14	—	Bhavnagar . . . . .	27	2	8	Experimental . . . . .	2	2	Theobald's Train Key, single line.
15	—	Burma . . . . .	303	92	96 129 681	List and Morse's . Simplex Cabin interlocking	113	10 4 91 8	Sykes' (L. & B.) Tyer's Tablet, single line. Neale's, single line. Theobald's Train Key, single line.
		Carried over . . . . .	3,879	1,609	26,547	—	1,705	1,705	—

## APPENDIX 21—concl'd.

Railways on which points and signals were interlocked and on which block instruments were used for train signalling at the close of the calendar year 1911.

CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9.)		RAILWAY SYSTEM.	Total number of stations on railway.	STATIONS AT WHICH POINTS AND SIGNALS WERE INTERLOCKED.			STATIONS AT WHICH BLOCK IN- STRUMENTS WERE USED FOR TRAIN SIGNALLING.		
Main head.	Sub- head.			No.	Total number of levers used in each system.	Name of system of interlocking.	No.	Total number of block instru- ments of each system.	Name of block instru- ment.
-1	-2	3	4	5	6	7	8	9	10
		Brought forward	3,679	1,909	26,547	...	1,705	1,705	...
		3' 3½" GAUGE—concl'd.							
16		Dibru-Sadiya . . . . .	41	...	...	...	...	...	...
3	(b) to (d)	Eastern Bengal . . . . .	188	24	149 328	Cabin interlocking List and Morse's . . . . .	48	21	Tyer's Tablet, single line.
17		Gondal-Porbandar . . . . .	28	...	7	Grouped levers . . . . .		28	Neale's, single line.
7	(c)	Hyderabad-Godavari Valley . . . . .	52	45	36 68	List and Morse's . . . . . Cabin interlocking Grouped levers . . . . .	5	5	Webb and Thompson's, single line.
18		Jamnagar . . . . .	7	...	3	...		...	...
19		Jodhpur-Bikaner . . . . .	105	...	...	...	...	...	
20		Junagad . . . . .	11	...	...	...	...	...	
6	(c) to (b)	Madras and Southern Maharatta . . . . .	808	5	73 2 1	Cabin interlocking Winter's Experimental . . . . .	142	40	Winter's, single line. Does not give out a token or tablet.
21		Morvi . . . . .	13	...	...	...		101	Roberts' Key Staff, single line. Theobald's Train Key, single line.
2	(h) to (n)	Rajputana-Malwa . . . . .	825	118	306 436 32	Sydney Jones' . . . . . Tappet . . . . . MacKenzie and Hol- land's . . . . .	175	173	Tyer's Tablet, single line. Tyer's Three position, dou- ble line.
22	(a) & (b)	Rohilkund and Kumaon. . . . . .	74	...	26 353	Dutton's . . . . . Whitney's . . . . .		...	...
10	(b) to (i)	South Indian . . . . .	268	127	54 10 18 44 8 16	Cabin interlocking List and Morse's . . . . . Dutton's . . . . . Winter's . . . . . Saxby and Farmer's Experimental . . . . .	54	32	Winter's Ticket issuing, single line. Does not give out a token or tablet.
23		Udaipur-Chitorgarh . . . . .	11	...	...	...		19	Theobald's Train Key, single line. Neale's, single line. Experimental.
		3' 6" GAUGE.							
25		Arrah-Sasaram Light . . . . .	15	...	...	...	...	...	...
27		Baraset-Basirhat Light . . . . .	22	...	...	...	...	...	...
28		Barai Light . . . . .	23	...	...	...	...	...	...
29		Bukhtiar-pore-Bihar Light . . . . .	12	...	...	...	...	...	...
30		Champamer-Shivrajpur Light . . . . .	7	...	...	...	...	...	...
31		Cuteh . . . . .	5	...	...	...	...	...	...
32		Dehri-Bohtas Light . . . . .	5	...	...	...	...	...	...
33		Dholpur-Bari . . . . .	7	...	...	...	...	...	...
3	(b)	Eastern Bengal . . . . .	12	...	3	List and Morse's . . . . .	...	...	...
2	(o) & (p)	Gaekwar's Dabhoi and Raippla . . . . .	57	...	...	...	...	...	...
1	(b) to (h)	Gondia-Chanda, Jubbulpore-Gondia, Mourbhani, Nagpur-Chhindwara, Par- lakmedi Light, Purnia-Banchi and Raipur- Dhamtari . . . . .	82	...	...	...	...	...	...
8	(j)	Kalka-Simla . . . . .	20	...	...	...	...	...	...
9	(k) & (l)	Kohat-Thal and Nowshera. Dargai . . . . .	17	...	...	...	...	...	...
10	(f) & (k)	Morappur-Dharmapuri and Tirupattur-Krish- nagiri . . . . .	8	...	...	...	...	...	...
21		Morvi . . . . .	5	...	...	...	...	...	...
22	(c)	Powayan Light . . . . .	9	...	...	...	...	...	...
39		Shahdara (Delhi)-Saharan- pur Light . . . . .	17	...	...	...	...	...	...
40		Tarkessur-Magra Light . . . . .	16	...	...	...	...	...	...
41		Tes-pore-Balipara Light . . . . .	7	...	...	...	...	...	...
		3' 0" GAUGE.							
42		Darjeeling-Himalayan . . . . .	10	...	...	...	...	...	...
5	(g)	Gwalior Light . . . . .	30	...	...	...	...	...	...
43		Howrah-Amra Light . . . . .	24	...	...	...	...	...	...
44		Howrah-Sheakhala Light . . . . .	12	...	...	...	...	...	...
45		Jagadhri Light . . . . .	1	...	...	...	...	...	...
46		Jochat (Provincial) . . . . .	6	...	...	...	...	...	...
5	(h)	Matheran Light . . . . .	2	...	...	...	...	...	...
47		Pipar Road-Bhavi Light . . . . .	3	...	...	...	...	...	...
		Total	5,534	1,926	29,114	...	2,124	2,124	...

## APPENDIX 22.

Train accidents and casualties on railways treated as one system during the calendar years 1910 and 1911.

DESCRIPTION.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, IX of 1890, i.e., serious accidents.		Other accidents.		Total number of accidents.		NUMBER OF PASSENGERS AND OTHERS. (Figures in italics were not passengers.)				NUMBER OF RAILWAY SERVANTS.				TOTAL OF ALL CLASSES.			
							Killed.		Injured.		Killed.		Injured.		Killed.		Injured.	
	1910.	1911.	1910.	1911.	1910.	1911.	1910.	1911.	1910.	1911.	1910.	1911.	1910.	1911.	1910.	1911.	1910.	1911.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Collisions between passenger trains or parts of passenger trains.	3	8	1	4	4	12	...	...	1	24	...	1	1	20	...	1	2	44
2. Collisions between passenger trains and goods or mineral trains, engines, and vehicles standing foul of the line.	19	22	25	33	44	55	...	...	{ 84 } 3	35	4	2	14	21	4	2	50	56
3. Collisions between goods trains or parts of goods trains.	13	16	55	76	68	92	1	1	{ 8 } 4	...	5	7	25	12	6	8	32	12
4. Collisions between light engines.	3	1	34	29	37	30	...	...	...	...	1	1	1	1	1	1	1	1
5. Passenger trains or parts of passenger trains leaving the rails.	99	46	97	183	196	204	...	9	29	49	2	1	6	...	2	10	35	49
6. Goods trains or parts of goods trains, engines, etc., leaving the rails.	23	16	595	696	618	712	...	1	1	{ 2 } 1	11	5	10	3	11	6	11	6
7. Trains or engines travelling in the wrong direction through points.	11	9	97	147	108	156	...	...	23	3	...	1	4	4	...	1	27	7
8. Trains running into stations or sidings at too high a speed.	6	2	34	32	40	34	1	...	20	...	3	...	6	...	4	...	26	...
9. Trains running over cattle on the line.	8	7	6,075	6,607	6,088	6,614	...	...	...	...	...	...	1	...	...	...	1	...
10. Trains running over obstructions on the line.	17	14	228	184	245	198	9	7	12	20	1	...	4	15	10	7	16	35
11. Trains running through gates at level crossings.	...	1	17	23	17	24	...	...	...	...	...	...	...	1	...	...	...	1
12. The bursting of boilers of engines.	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
13 (a). The bursting of tubes, etc., of engines.	1	...	256	279	257	279	...	...	...	...	...	...	1	3	...	...	1	3
Carried over ...	203	142	7,515	8,368	7,719	8,410	{ 1 } 10	10	110	113	} 27	18	73	80	33	36	202	214

APPENDIX 22—conold.

Train accidents and casualties on railways treated as one system during the calendar years 1910 and 1911.

DESCRIPTION.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, LX of 1890, &c., serious accidents.		Other accidents.		Total number of accidents.		NUMBER OF PASSENGERS AND OTHERS. (Figures in italics were not passengers.)				NUMBER OF RAILWAY SERVANTS.				TOTAL OF ALL CLASSES.			
	1910.	1911.	1910.	1911.	1910.	1911.	Killed.		Injured.		Killed.		Injured.		Killed.		Injured.	
							1910.	1911.	1910.	1911.	1910.	1911.	1910.	1911.	1910.	1911.	1910.	1911.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Brought forward	203	142	7,515	8,268	7,718	8,410	1	10	110	113	27	18	73	80	39	36	202	214
13. The failure of machinery, springs, etc., of engines	3	...	896	928	899	928	...	...	...	...	...	...	...	1	...	...	...	1
14. The failure of tyres	1	...	3	3	4	3	...	...	...	...	...	...	...	...	...	...	...	...
15. The failure of wheels	...	...	3	40	3	40	...	...	...	...	...	...	...	...	...	...	...	...
16. The failure of axles	3	4	42	50	45	54	...	...	...	...	...	...	...	...	...	...	...	...
17. The failure of brake apparatus	1	...	10	11	11	11	...	...	...	...	...	...	1	...	...	...	1	...
18. The failure of couplings	4	4	431	538	435	542	...	...	...	1	...	...	...	1	...	...	...	2
19. The failure of tunnels, bridges, viaducts, culverts, etc.	1	...	3	3	4	3	...	...	...	...	3	...	...	...	3	...	...	...
20. Broken rails.	1	1	371	193	272	194	...	...	...	...	...	...	...	...	...	...	...	...
21. The flooding of portions of permanent-way.	23	13	145	63	168	75	1	...	9	...	4	1	...	2	5	1	9	2
22. Slips in cuttings or embankments	5	2	64	75	69	76	...	...	...	...	...	...	...	...	...	...	...	...
23. Fire in trains.	5	4	319	292	323	256	2	2	12	5	...	1	1	6	2	3	13	11
24. Fire at stations, or involving injury to bridges or viaducts	1	3	74	73	75	76	1	1	3	...	1	...	2	...	2	1	5	...
25. Other accidents	55	43	738	696	845	939	3	7	53 21	15 5	2	7	31	25	5	14	105	55
<b>TOTAL</b>	<b>306</b>	<b>216</b>	<b>10,563</b>	<b>11,996</b>	<b>10,899</b>	<b>11,612</b>	<b>3</b>	<b>12</b>	<b>184</b>	<b>134</b>	<b>37</b>	<b>27</b>	<b>108</b>	<b>125</b>	<b>55</b>	<b>55</b>	<b>335</b>	<b>285</b>



Number of servants of all races employed on each railway system (open lines only) and

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPEN- DIX 2.)		RAILWAY SYSTEM.	NUMBER OF SERVANTS EMPLOYED.							
Main head.	Sub-head.		Europeans.		Anglo-Indians.		Indians.		Total.	
			1910.	1911.	1910.	1911.	1910.	1911.	1910.	1911.
1	2	3	4	5	6	7	8	9	10	11
1	(a) to (h)	Bengal-Nagpur . . . . .	524	598	678	719	32,771	33,117	33,968	34,423
2	(a) to (g) & (o) & (p).	Bombay, Baroda and Central India . . . . .	278	329	260	244	21,687	23,043	22,225	23,616
3	...	Eastern Bengal . . . . .	*401	423	*512	561	*35,336	37,117	*36,299	38,101
4	...	East Indian . . . . .	1,604	1,678	1,107	1,151	83,617	86,753	86,328	89,587
5	...	Great Indian Peninsula . . . . .	1,281	1,266	1,051	1,075	75,384	76,878	77,716	79,219
6	...	Madras and Southern Mahratta . . . . .	326	345	1,676	1,754	39,368	41,499	41,899	43,536
7	...	Nizam's Guaranteed State . . . . .	117	118	348	354	9,829	10,243	10,294	10,720
8	...	North Western . . . . .	1,292	1,272	665	710	79,633	82,796	81,790	84,778
9	...	Oudh and Rohilkhand . . . . .	*284	294	*301	310	*22,923	24,386	*23,508	24,940
10	...	South Indian . . . . .	242	247	1,181	1,231	23,105	23,563	24,523	25,041
11	...	Assam-Bengal . . . . .	76	84	246	220	8,395	8,417	8,717	8,721
12	...	Bengal and North-Western . . . . .	156	154	222	221	21,665	22,600	22,043	22,985
13	...	Bengal Doars . . . . .	6	6	4	4	1,039	1,240	1,049	1,250
14	...	Bhavnagar . . . . .	...	4	...	12	...	1,680	...	1,686
15	...	Burma . . . . .	199	222	662	662	20,457	19,769	21,348	20,633
16	...	Dibru-Sadiya . . . . .	10	11	...	...	1,226	1,424	1,306	1,485
17	...	Gondal-Porbandar . . . . .	...	2	...	11	...	1,006	...	1,019
18	...	Jamnagar . . . . .	...	1	...	1	...	267	...	269
19	...	Jodhpur-Bikaner . . . . .	15	15	7	8	5,130	5,931	5,152	5,954
20	...	Junagad . . . . .	...	1	...	9	...	738	...	743
21	...	Morvi . . . . .	1	1	1	...	490	509	492	510
2	(h) to (z)	Rajputana-Malwa . . . . .	502	536	546	560	30,033	31,977	31,086	33,063
22	...	Rohilkund and Kumaon . . . . .	48	56	21	19	4,709	4,600	4,778	4,675
23	...	Udaipur-Chitorgarh . . . . .	2	2	...	...	366	366	368	368
25	...	Arrah-Sasaram Light . . . . .	...	2	...	...	...	408	...	410
27	...	Baraset-Basirhat Light . . . . .	...	...	2	2	365	376	367	378
28	...	Barsi Light . . . . .	3	6	24	16	647	724	674	746
29	...	Bakhtiarpore-Bihar Light . . . . .	1	1	...	...	153	162	154	163
30	...	Champaner-Shivrajpur Light . . . . .	1	1	...	...	352	314	353	315
31	...	Cutch . . . . .	1	1	...	...	193	168	194	169
32	...	Dehri-Rohas Light . . . . .	...	1	...	...	...	209	...	210
33	...	Dholpur-Bari . . . . .	1	1	1	...	126	131	123	132
39	...	Shahdara (Delhi)-Saharanpur Light . . . . .	4	4	1	1	594	566	599	571
40	...	Tarkessur-Magra Light . . . . .	...	...	1	1	243	260	244	261
41	...	Tempore-Balipara Light . . . . .	2	2	1	1	187	223	190	231
42	...	Darjeeling-Himalayan . . . . .	23	23	9	9	333	371	365	393
43	...	Howrah-Amra Light . . . . .	5	6	2	1	684	713	*691	719
44	...	Howrah-Sheakhala Light . . . . .	...	...	...	...	68	109	38	109
45	...	Jagadhri Light . . . . .	...	...	...	...	...	60	...	60
46	...	Jorhat (Provincial) . . . . .	1	1	...	...	224	233	225	234
47	...	Pipar Road-Bhavi Light . . . . .	...	...	...	...	44	44	44	44
TOTAL			7,406	7,639	9,554	9,877	5,22,741	5,45,454	5,39,701	5,63,080

\* Revised figures.

DIX 23.

the amounts deposited by them in the Provident Fund at the close of the calendar year 1911.

AMOUNT DEPOSITED IN PROVIDENT FUND.						REMARKS.
Number of depositors.		Amount at credit on the 31st December 1911.				
Voluntary.	Compulsory.	Voluntary.	Compulsory.	Bonus given by the Railway.	Total to depositors' credit.	
12	13	14	15	16	17	18
		Rs.	Rs.	Rs.	Rs.	
595	5,677	2,76,608	23,91,857	20,94,516	47,02,981	
2	4,382	32,032	32,61,759	19,24,624	†52,22,415	† Excludes the Provident Fund transactions of the Godhra-Rutlam-Nagda railway which are included with those of the Rajputana-Malwa railway.
191	6,622	55,538	23,82,500	20,35,061	44,63,159	
7,658	14,279	‡	‡	‡	‡1,87,14,650	‡ Amounts under voluntary and compulsory deposits and bonus given by the railway are not available.
1	10,096	630	1,55,45,197	§	1,55,45,827	§ The bonus given by the railway is included in the amount at the credit of voluntary and compulsory depositors.
...	10,121	...	49,26,991	29,23,483	78,60,494	
...	2,063	...	10,13,130	9,88,971	19,52,101	
791	13,443	1,78,874	56,72,437	30,07,488	1,08,58,799	
205	3,679	49,100	16,18,139	13,99,669	30,66,907	
85	5,765	58,658	23,19,943	20,43,816	44,21,912	
56	1,702	6,730	6,19,175	4,01,667	10,27,632	
16	2,909	97,800	13,82,279	13,09,540	27,89,619	
...	164	...	79,232	41,441	1,20,673	
107	234	21,730	1,12,436	99,079	2,21,295	
...	3,608	...	17,86,006	15,24,414	38,10,420	
...	...	...	...	...	...	
17	196	12,510	60,537	49,442	1,22,539	
12	34	1,191	9,215	8,475	16,881	
56	714	10,167	1,65,698	1,49,807	3,25,673	
20	116	4,702	26,897	21,758	53,369	
...	109	...	26,306	2,487	29,295	
716	4,408	1,71,196	27,16,703	25,00,255	‡58,89,265	‡ Includes the Provident Fund transactions of the Godhra-Rutlam-Nagda railway.
7	749	3,259	3,03,617	2,85,936	5,92,312	
...	42	...	12,761	12,681	24,792	
...	37	...	735	579	1,364	
...	64	...	2,541	7,329	10,270	
...	...	...	...	...	...	
...	29	...	2,229	2,657	4,876	
1	...	334	...	334	668	
...	...	...	...	...	...	
...	...	...	...	...	...	
...	...	...	...	...	...	
...	103	...	16,682	12,971	29,65	
...	80	...	7,984	2,995	10,979	
...	...	...	...	...	...	
...	...	...	1,46,019	1,39,365	3,45,384	
...	177	...	28,953	22,392	52,344	
...	152	...	1,000	6,004	7,004	
...	19	...	...	...	...	
...	...	...	...	...	...	
8	33	1,812	12,653	7,000	21,624	
...	...	...	...	...	...	
10,544	21,706	9,82,826	4,60,07,210	2,50,17,182	9,07,21,598	

## APPENDIX 24.

Number of men enrolled in Railway Volunteer Corps on the 31st December 1911.

CLASSIFICATION NO. OF RAIL- WAY (DETAILED IN "INDEX" TO APPENDIX 9).		Corps.	ENROLLED STRENGTH.							Sergeant Instructors fur- nished by the Army.	REMARKS.
Main head.	Sub- head.		EFFICIENTS.			Non-efficient.	Total number of volun- teers of all nationalities in corps, including those on construction work.	Total number of European and Anglo-Indian employes on open lines of railway.			
			Officers.	Non-Commission- ed officers.	Volunteers.						
1	2	3	4	5	6	7	8	9	10	11	
1	...	Bengal-Nagpur-- <i>First and Second Battalions, Bengal-Nagpur Railway Volun- teer Rifles</i> ... ..	40	111	976	14	1,141	1,312	10		
2	(a) to (g) & (c) & (p)	Bombay, Baroda and Central India-- <i>First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles</i> ... ..	23	79	461	16	579	578	4		
3	...	Eastern Bengal-- <i>Eastern Bengal Railway Volunteer Rifles</i> ... ..	22	77	838	11	948	984	5		
4	...	East Indian-- <i>East Indian Railway Volunteer Rifles</i> ... ..	75	200	2,098	22	2,395	2,829	18		
5	...	Great Indian Peninsula-- <i>First and Second Battalions, Great Indian Peninsula Railway Volun- teer Rifles</i> ... ..	54	226	1,307	49	1,636	2,336	12		
6	...	Madras and Southern Mahratta-- <i>First and Second Battalions, Mad- ras and Southern Mahratta Rail- way Volunteer Rifles</i> ... ..	46	214	1,631	26	1,917	2,089	17		
7	...	Nizam's Guaranteed State-- <i>Hyderabad Volunteer Rifles</i> ... ..	9	32	216	28	285	472	2		
8	...	North Western-- <i>North Western Railway Volunteer Rifles</i> ... ..	40	123	1,410	25	1,598	1,982	12		
9	...	Oudh and Rohilkhand -- <i>Oudh and Rohilkhand Railway Volunteer Rifles</i> ... ..	26	77	429	16	548	604	3		
		<i>United Provinces Horse, Oudh Squadron</i> ... ..	2	...	1	...	3				
10	...	South Indian-- <i>South Indian Railway Volunteer Rifles</i> ... ..	28	79	1,066	24	1,197	1,478	9		
11	...	Assam-Bengal-- <i>Assam-Bengal Railway Volunteer Rifles</i> ... ..	20	30	361	...	311	304	3		
12	...	Bengal and North-Western-- <i>Bengal and North-Western Rail- way Volunteer Rifles</i> ... ..	19	45	317	9	390	365	4		
		<i>United Provinces Horse, Gorakhpur Squadron</i> ... ..	4	6	24	3	37				
		Carried over ...	408	1,299	11,035	243	12,985	15,358	100		

## APPENDIX 24.—concl'd.

Number of men enrolled in Railway Volunteer Corps on the 31st December 1911.

CLASSIFICATION No. OF RAIL- WAY (DETAILED IN "INDEX" TO APPENDIX 9).		Corps.	ENROLLED STRENGTH.							Sergeant Instructors furnish- ed by the Army.	REMARKS.
Main head.	Sub- head.		EMPLOYED.			Non-officers.	Total number of volun- teers of all nationalities in corps, including those on construction work.	Total number of European and Anglo-Indian employes on open lines of railway.			
			Officers.	Non-Commissio- ned officers.	Volunteers.						
1	2	3	4	5	6	7	8	9	10	11	
		Brought forward ...	408	1,999	11,085	248	12,985	15,358	100		
13	...	Bengal Doars—									
		Northern Bengal Mounted Rifles O. and G. Squadron ...	...	...	8	...	8	10	...		
14	...	Bhavnagar—									
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles ...	...	1	5	...	6	16	1		
15	...	Burma—									
		Burma Railways Volunteer Corps	33	80	632	35	780	894	9		
17	...	Gondal-Porbandar—									
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles ...	...	2	9	...	11	18	...		
19	...	Jodhpur-Bikaner—									
		Second Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles ...	...	1	18	...	14	28	...		
20	...	Junagad—									
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles ...	...	3	5	...	8	10	...		
2	(A) to (n)	Rajputana-Malwa—									
		Second Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles ...	28	102	593	7	730	1,028	9		
22	...	Rohilkund and Kumaon—									
		Bengal and North-Western Railway Volunteer Rifles ...	3	7	56	...	66	75	...		
23	...	Udaipur-Chitorgarh—									
		Second Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles ...	...	1	...	...	1	2	...		
39	...	Shahdara (Delhi)-Saharanpur—									
		North Western Railway Volunteer Rifles ...	...	...	2	...	2	5	...		
30	...	Champaner-Shivrajpur—									
		Great Indian Peninsula Railway Volunteer Rifles ...	1	...	...	...	1	1	...		
40	...	Tarkessur-Magra									
		East Indian Railway Volunteer Rifles ...	...	...	1	...	1	1	...		
42	...	Darjeeling-Himalayan—									
		Northern Bengal Mounted Rifles, "A" and "B" Troops ...	3	1	21	...	24	32	1		
		TOTAL ...	475	1,497	12,975	285	14,632	17,516	120		

## APPENDIX 25.

*Strength and cost of the Police force, including watch jemadars and watchmen, on each railway system (open lines) for the calendar year 1911.*

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9).		RAILWAY SYSTEM.	Number of Subordinate officers of (i) Government and (ii) Railway Police.	Number of (i) Government Constables and (ii) Railway Watchmen.	PORTION OF THE TOTAL ANNUAL COST BORNE BY THE RAILWAY ADMINISTRATION.				COST OF TOTAL FORCE TO THE RAILWAY ADMINISTRATION.		REMARKS.
Main head.	Sub-head.				Supervision.	(i) Government Constables and (ii) Railway Watchmen.	Contingencies.	Total cost to the railway.	Per mile open.	Per train mile.	
1	2	3	4	5	6	7	8	9	10	11	12
			Average No.	Average No.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1	---	Bengal-Nagpur . . .	56	974	52,076	75,950	9,428	1,37,464	54-00	0-02	
2	(a) to (g) & (o) & (p).	Bombay, Baroda and Central India.	107	737	27,361	78,338	13,574	1,19,323	38-89	0-02	
3	---	Eastern Bengal . . .	139	1,120	1,007	79,249	1,079	81,335	50-90	0-01	
4	---	East Indian . . .	133	2,590	98,007	2,10,862	59,077	3,67,946	148-87	0-02	
5	(a) to (j).	Great Indian Peninsula	34	1,599	73,668	1,56,715	27,843	2,58,226	88-08	0-01	
6	---	Madras and Southern Mahratta.	51	1,859	50,931	2,05,359	25,512	2,82,002	90-02	0-05	
7	---	Nizam's Guaranteed State.	10	418	26,340	55,037	3,591	84,968	118-00	0-03	
8	---	North Western . . .	---	2,104	---	2,80,029	1,081	2,31,110	47-00	0-01	
9	---	Oudh and Rohilkhand	---	494	-1,940*	43,548	3,898	45,004	29-48	0-01	*Due to adjustments.
10	---	South Indian . . .	---	480	---	1,88,078	---	1,88,078	110-98	0-02	
11	---	Assam-Bengal . . .	12	315	22,048	28,418	5,666	51,127	64-78	0-03	
12	---	Bengal and North-Western.	51	683	7,056	77,059	1,251	85,366	44-00	0-01	
13	---	Bengal Doars . . .	---	12	---	1,129	---	1,129	7-38	---	
14	---	Bhavnagar . . .	10	40	7,233	4,697	2,068	13,988	78-23	0-03	
15	---	Burma . . .	57	559	61,620	78,835	8,130	1,48,585	97-19	0-02	
16	---	Dibru-Sadiya . . .	1	11	218	835	6	589	6-44	0-02	
17	---	Gondal-Forbandar . . .	12	28	6,455	4,261	2,951	12,707	65-73	0-03	
18	---	Jamnagar . . .	1	9	---	---	---	4,309	90-58	0-06	
19	---	Jodhpur-Bikaner . . .	3	54	2,892	5,700	138	8,730	8-05	---	
20	(h) to (n).	Rajputana-Malwa . . .	141	1,276	56,828	1,19,528	9,498	1,79,854	91-47	0-02	
21	---	Morvi . . .	6	14	2,296	1,732	1,396	5,424	88-43	0-03	
22	---	Rohilkund and Kumaon	10	230	1,524	17,140	1,505	20,169	43-88	0-02	
23	---	Barri Light . . .	---	35	266	1,922	251	2,439	21-47	0-02	
24	---	Chaspaner-Shivrajpur Light.	---	1	---	123	---	123	7-23	---	
25	---	Dholpur-Bari . . .	---	9	---	475	2	477	24-31	0-03	
26	---	Jagadhri Light . . .	---	4	---	231	---	231	69-77	0-04	

## APPENDIX 26.

Transactions of the Fine Funds for the calendar year 1911.

CLASSIFICATION NO. OF RAILWAY. (DETAILED IN "INDEX" TO APPENDIX 9.)		RAILWAY SYSTEM.	ASSETS.				DISBURSEMENTS.						Balance on 31st December 1911.
Main head.	Sub-head.		Balance on 31st December 1910. (Revised.)	Fines and bonus forfeited during 1911.	Interest on balance.	Total.	Hospitals for sick employes.	Compensation allowances.	Schools.	Recreation clubs.	Miscellaneous.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	...	Bengal-Nagpur	46,217	16,978	1,212	64,407	...	...	3,299	3,896	10,379	17,374	47,133
2	(a), (c) to (g) & (o) & (p).	Bombay, Baroda and Central India	3,105	8,775	...	11,880	150	438	846	1,840	2,720	6,034	5,856
3	...	Eastern Bengal	3,248	15,129	55	18,432	...	190	3,631	9,104	4,332	17,537	833
4	...	East Indian	69,737	29,420	1,504	1,00,661	...	200	2,772	5,006	31,116	39,094	61,807
5	...	Great Indian Peninsula	233	16,960	1,146	20,339	...	3,370	749	5,639	8,364	16,342	1,997
6	...	Madras and Southern Mahratta	25,695	9,312	604	35,611	...	1,919	685	2,364	4,784	9,763	25,008
7	...	Nizam's Guaranteed State	13,195	8,008	854	22,057	...	...	...	...	1,071	1,071	20,086
8	...	North Western	35,869	33,093	1,176	59,638	582	732	9,489	15,129	6,036	31,968	37,670
9	...	Oudh and Rohilkhand	18,918	18,414	550	32,882	...	...	453	3,236	4,523	8,231	24,651
10	...	South Indian	1,22,368	4,780	4,043	1,31,211	50	339	675	7,306	19,107	29,367	1,02,844
11	...	Assam-Bengal	11,038	7,566	...	18,604	...	324	3,200	2,074	3,507	3,005	9,699
12	...	Bengal and North-Western	1,47,661	24,000	3,947	1,75,608	100	587	1,713	3,414	4,728	10,541	1,05,067
13	...	Bengal Doon	2,271	2,458	65	4,794	...	...	90	278	10	378	4,416
14	...	Bhavnagar	*2,178	170	...	2,348	...	...	...	100	1	101	2,249
15	...	Burma	204	16,096	...	16,300	...	...	3,036	7,446	4,851	14,045	1,835
17	...	Gondal-Forbandar	*2,151	...	...	2,151	...	...	40	...	...	40	2,111
18	...	Jamnagar	*888	40	9	497	...	...	...	...	...	...	497
19	...	Jodhpur-Bikaner	11,975	4,023	332	16,330	240	...	609	1,568	...	2,412	13,918
20	...	Junagad	*676	65	...	741	...	...	...	...	...	...	741
21	...	Morvi	1,015	128	...	1,143	...	...	153	...	...	153	990
2	(b) & (h) to (n).	Rajputana-Malwa	397	8,312	11	8,620	100	151	6,251	205	1,022	7,729	891
22	...	Rohilkhand and Kumaon	44,857	3,904	2,281	51,142	...	...	...	...	322	932	50,210
23	...	Udaipur-Chitorgarh	537	45	...	632	...	...	...	...	...	...	632
33	...	Dholpur-Bari	15	9	...	24	...	...	...	...	...	...	24
40	...	Tarkessur-M & g r a Light	...	36	...	36	36	...	...	...	...	36	...
41	...	Tespore-Balipara Light	2	26	...	28	...	...	19	...	...	19	9
42	...	Darjeeling-Himalayan	266	279	...	545	...	...	...	100	182	232	318
45	...	Jagadhri Light	...	1	...	1	...	...	...	...	...	...	1
46	...	Jorhat (Provincial)	488	178	15	681	...	...	...	...	187	137	544

\* Balance on 31st March 1911, the date on which the Bhavnagar-Gondal-Junagad-Forbandar railway system, of which these lines formed a part, was disintegrated.

APPEN  
Railway and Railway-aided schools at

CLASSIFICATION No. OF RAILWAY (DETAILED IN "INDEX" TO APPENDIX 9.)		RAILWAY SYSTEM.	RAILWAY				
Main head.	Sub-head.		Number of schools.	ATTENDANCE.			
				Children.		Apprentices and workmen.	
				Number on the rolls.	Average daily attendance.	Number on the rolls.	Average daily attendance.
1	2	3	4	5	6	7	8
1	...	Bengal-Nagpur . . . . . { European Indian . . . . .	8 14	432 679	364 542	863	275
2	(a) to (c) & (e) & (p)	Bombay, Baroda and Central India . European	3	114	95	2	3
3	...	Eastern Bengal . . . . . { European Indian . . . . .	6	124	108	385	160
4	...	East Indian . . . . . { European Indian . . . . .	24 69	871 3,090	786 2,274	92 3,495	79 1,258
5	(a) to (f)	Great Indian Peninsula . . . . { European Indian . . . . .	7	389	302	...	...
6	...	Madras and Southern Mahratta . { European Indian . . . . .	17 4	805 308	640 242	76	22
7	(a) & (b)	Nizam's Guaranteed State . . . { European Indian . . . . .	1 1	47 52	39 39	...	...
8	...	North Western . . . . . { European Indian . . . . .	2 27	80 94	68 78	25 2,599	21 696
9	...	Oudh and Rohilkhand . . . . . { European Indian . . . . .	5 4	53 8	39 7	25 140	26 28
10	(a)	South Indian . . . . . European	2	86	67	...	...
11	...	Assam-Bengal . . . . . Indian	...	...	...	...	...
12	...	Bengal and North-Western . . . { European Indian . . . . .	2	55	47	...	...
13	...	Bengal Doonars . . . . . Indian	...	...	...	...	...
14	...	Dhavnagar . . . . . Indian	1	21	21	...	...
15	...	Burma . . . . . { European Indian . . . . .	3 2	126 183	107 164	13 18	11 16
16	...	Dibru-Sadiya . . . . . Indian	1	72	62	...	...
17	...	Gondal-Forbandar . . . . . Indian	1	56	52	...	...
19	...	Jodhpur-Bikaner . . . . . Indian	3	46	18	...	...
7	(c)	Hyderabad-Godavari Valley . . { European Indian . . . . .	3 2	109 84	89 61	2	1
21	...	Morvi . . . . . Indian	1	24	18	...	...
2	(h) to (n)	Rajputana-Malwa . . . . . { European Indian . . . . .	7 6	126 288	105 213	109 86	96 76
10	(b) to (i)	South Indian . . . . . European	4	257	190	25	23
23	...	Barsi Light . . . . . { European Indian . . . . .	...	...	...	...	...
41	...	Tozpur-Balipara Light . . . . Indian	1	...	...	22	3
Total ..			230	8,679	6,982	8,290	2,738

DIX 27.

the close of the calendar year 1911.

SCHOOLS.								RAILWAY AIDED SCHOOLS.							REMARKS.
INCOME.							Total expenditure.	Balance in hand at the close of the year 1911.	Number of schools.	AVERAGE DAILY ATTENDANCE.		RAILWAY GRANT.			
Balance of funds in hand at the close of the year 1910.	Government grant.	Railway grant.		School fees.	Miscellaneous receipts.	Total income.				Children.	Apprentices and workmen.	From Revenue.	From the Fine Fund.	Total	
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.				Rs.	Rs.	Rs.	
9,065	10,125	10,056	834	11,490	2,781	45,321	33,368	12,453	4	400	...	1,148	...	1,148	
3,262	3,434	7,290	2,445	4,133	1,040	22,224	14,901	7,626	...	...	...	...	...	...	
2,127	1,595	4,833	946	1,916	57	10,954	8,168	2,768	22	80	...	4,291	...	4,291	
...	...	1,710	...	...	...	1,710	1,710	...	3	119	...	2,474	2,642	5,116	
...	...	...	...	...	...	...	...	...	15	787	...	1,139	1,180	2,378	
22,200	22,404	25,591	...	97,329	22,219	1,69,733	1,67,208	22,525	8	338	...	2,602	...	2,602	
10,774	6,556	4,498	2,454	14,691	3,901	42,674	28,812	14,068	2	441	...	...	318	318	
...	5,349	32,528	749	3,037	1,206	42,869	42,869	...	15	332	...	6,374	...	6,374	
...	...	...	...	...	...	...	...	...	7	346	...	1,591	...	1,591	
...	9,729	26,726	80	7,324	671	44,480	44,480	...	13	138	...	3,308	658	3,959	
...	531	2,811	...	788	...	4,130	4,130	...	2	122	...	200	...	360	
...	...	984	...	274	...	1,238	994	274	...	...	...	...	...	...	
...	...	165	...	56	...	221	171	50	...	...	...	...	...	...	
2,598	2,348	3,133	667	529	188	9,458	6,118	3,340	23	679	...	27,536	7,965	35,501	
201	...	7,945	69	95	3	8,583	6,370	2,213	6	245	4	3,610	768	4,378	
289	1,008	2,829	288	1,391	...	5,820	5,254	566	20	208	...	9,505	100	9,605	
...	...	808	...	...	...	806	808	...	4	239	...	2,019	...	2,019	
33	1,370	4,925	88	...	65	6,481	6,478	3	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	5	105	...	...	3,200	3,200	
3,287	1,254	1,280	1,712	1,223	...	8,706	4,993	3,713	...	...	...	324	...	324	
...	...	...	...	...	...	...	...	...	2	95	...	...	...	...	
...	...	...	...	...	...	...	...	...	1	20	...	300	30	430	
27	...	165	...	38	...	230	189	59	...	...	...	...	...	...	
506	2,803	1,781	723	2,695	...	7,808	5,981	1,917	23	49	...	421	421	842	
2,973	4,172	684	1,456	2,330	...	11,045	8,400	3,045	21	51	...	406	406	812	
...	...	360	...	585	623	1,568	1,568	...	...	...	...	...	...	...	
...	...	824	40	186	...	850	769	81	...	...	...	...	...	...	
...	...	609	...	...	...	609	609	...	...	...	...	...	...	...	
...	...	3,073	...	804	...	3,877	3,044	833	3	250	...	506	...	106	
...	...	1,275	...	148	...	1,423	1,299	124	8	612	...	818	...	818	
...	...	...	183	...	...	753	158	...	...	...	...	...	...	...	
783	3,640	3,204	4,588	3,451	609	17,025	15,561	1,461	35	151	...	9,192	60	9,252	
362	960	770	1,578	2,265	32	5,967	5,704	263	1	111	...	784	25	809	
1,443	1,020	3,714	227	1,432	...	13,466	11,473	1,993	1	54	...	...	360	360	
...	...	...	...	...	...	...	...	...	1	7	...	...	30	30	
...	...	...	...	...	...	...	...	...	...	14	...	...	...	...	
...	...	34	19	...	...	33	38	...	...	...	...	...	...	...	
60,400	78,898	1,38,368	19,710	1,38,220	34,540	5,10,144	4,31,288	78,906	246	5,987	4	79,031	18,230	97,261	



## APPENDIX 28.

No. 105 R. P. of 1910.

GOVERNMENT OF INDIA.

RAILWAY DEPARTMENT.  
(RAILWAY BOARD)*Simla, the 23rd June 1910.*

**Terms on which the Government of India are prepared to consider offers for the construction by the Agency of private companies of branch lines forming feeders either to State lines worked by the State or to railways worked by companies.**

**RESOLUTION.**—In supersession of all previous orders on the subject, the following information is published detailing the conditions on which the Government of India will be prepared to receive applications for the grant of financial assistance to companies formed to provide capital for the construction of such branch railways as Government may be prepared to entrust to companies. The opportunity has been taken to consolidate the existing orders on the subject, and the terms offered have been made considerably more liberal in several respects.

**2. The conditions on which concessions for the construction of branch lines will be granted are as follows :—**

- (i) The prospectus of the company to be formed for the purpose of providing capital for the line must be submitted to, and approved by, the Government of India before issue. The capital of the company must be expressed in rupees, and subscription must be invited only in India. The construction of the line will not be begun until the Government of India are satisfied that capital sufficient to meet the estimated expenditure has been subscribed.
- (ii) The railway shall be built according to plans and estimates approved by the Government of India, and must conform to the fixed and moving dimensions for the time being prescribed. The gauge of the line, the route followed, the situation of stations, and details of a similar character shall be subject to the approval of the Government.
- (iii) All land in British Territory, which is, in the opinion of the Government of India, required for the construction of the line, will be provided free of charge including land permanently or temporarily required for quarrying ballast, for brickfields and similar purposes.
- (iv) The results of existing surveys will be made available to persons applying for concessions under these rules. In cases where this is considered advisable by the Railway Board, fresh surveys will be made at the request of promoters enquiring into the probable prospects of any projected line, on the understanding that no preferential claim to a concession for the construction of the line is thereby established. If permission be eventually given for the construction of any line, the cost of all surveys, whether special surveys or surveys previously made by the Government, shall be included in the capital cost of the railway. The Government of India expressly disclaim all responsibility for the accuracy of any survey, plan, estimate, or other information supplied by them.
- (v) Electric telegraphs and telegraphic appliances will be supplied and maintained by the Government of India at the charges and on the conditions in force for the time being for similar services on State railways.
- (vi) Railway materials for the construction of the branch line will be carried over State railways at the special rates charged for similar materials belonging to State railways.
- (vii) The Government of India will grant financial assistance to approved companies either in the shape of a guarantee of interest on capital expenditure, or of a rebate to the branch line company from the net earnings of the main line

## APPENDIX 28—contd.

from traffic interchanged with the branch. Assistance in the latter form can only be promised where the main line is worked by the State; but the Government of India will, in other cases, endeavour to arrange on behalf of the branch line company a similar agreement with the company working the parent line. A rebate and a guarantee of interest cannot be granted simultaneously in respect of the same branch line:

- (a) *Guarantee of interest.*—The Government of India will be prepared to guarantee from the close of the period during which interest is payable out of capital a fixed minimum dividend of  $8\frac{1}{2}$  per cent on the actual capital expenditure on the railway to the end of the year in respect of which the dividend is declared, subject to the condition that all surplus profits which may be earned by the company in excess of 5 per cent shall be equally divided between the Government and the company. This guarantee, where given, will remain in force until the line is purchased by the Government. Any sums payable by the Government under the guarantee shall be payable in rupees.
- (b) *Rebate.*—When the branch line connects with a railway owned and worked by the State, the Government of India will be prepared to allow the company in respect of and at the end of each calendar year, by way of rebate, such a sum, not exceeding in any year the net earnings (exclusive of earnings derived from the carriage of revenue stores) from traffic interchanged between such State railway and the branch line as shall, together with the net earnings of the branch line, make up an amount equal to interest at the rate of 5 per cent per annum on the actual expenditure charged to the capital account of the company. This undertaking will be subject to the proviso that, when the net earnings of the company, without the assistance of a rebate, suffice to pay interest at a rate exceeding 5 per cent, the surplus shall be divided equally between the Government and the company. The payment of rebate shall commence at the close of the period during which interest is payable from capital. Payments on account will, subject to subsequent adjustment, be permissible at the end of each half-year. For the purpose of calculating the rebate, the net earnings of the main line from traffic interchanged with the branch will be assumed to bear the same proportion to the gross earnings of the main line from such traffic as the net earnings of the whole main line system, including the branch, bear to the gross earnings of the whole system.
- (viii) No concession will be granted with the form of assistance referred to in condition (vii) (a) above, until terms for the construction and working of the proposed branch line by the main line administration have been arranged to the satisfaction of the Government of India. If, in the case of a concession granted with the form of assistance referred to in condition (vii) (b), it be intended by the Branch Line Co. to construct and work the branch line itself, the amount to be spent each year on working expenses will be subject to the approval and sanction of the Government of India.
- (ix) Where the main line is a railway owned and worked by the State, the main line administration will, if it is so desired, work the branch line for a percentage of the gross earnings of the branch. When the branch and main line are of the same gauge this percentage will usually be that obtaining on the whole system, including the branch, from time to time, but will not in any case exceed 50 per cent of the gross earnings of the branch from all sources, and will include all charges on account of the use of the main line rolling-stock, subject to the condition that the company shall, if and when required to do so during the continuance of the working contract, bear the capital portion of the cost as stated by Government of strengthening the permanent-way and bridges of the branch line to enable the rolling-stock for the time being of the working railway to be used on it without restriction. Where the gauges are not the same, special working terms will be fixed in each case. When the main line is not worked by State agency, the Government of India, if desired to do so by the branch line company, will endeavour to negotiate similar terms for working with the main line administration.
- (x) No capital expenditure by the branch line company shall be recognised, as between the Government of India and the company, unless the prior sanction of the Government of India to that expenditure has been obtained. The company shall have no power to increase its share or stock capital without

APPENDIX 28—*contd.*

the sanction of the Government of India or the Secretary of State, or to borrow money, otherwise than for purely temporary purposes, except on conditions to be specified by these authorities.

- (xi) The branch line company, if so required, shall keep accounts in forms approved by the Government of India, and they shall supply, free of charge, all accounts required by the Government. The accounts will be subject to audit by officers appointed by the Government.
- (xii) Funds for the execution of new works chargeable to capital, which may be found to be necessary for the safety or efficiency of working after the branch railway has been opened to public traffic, shall be provided by the branch line company. Such works, and their cost shall, when the branch railway is worked by the main line administration, be agreed upon between the branch line company and the main line administration before they are undertaken; in the event of any difference of opinion as to the necessity for, or the cost of, any such work, the matter shall be referred to the Railway Board, whose decision shall be final.
- In the event of the branch line company failing to provide, after six months' notice, any additional capital for work required under this condition or conditions (ii) and (ix) above, the Government of India shall be at liberty to supply the necessary funds, and to carry out the work, and shall be entitled to receive from the sums payable to the branch line company, by way of net earnings or rebate, interest at 5 per cent (or any lower rate that it may in special cases agree to accept) on funds so applied.
- (xiii) Subject to the law for the time being in force, payment out of capital will be sanctioned, during a period which may extend to the close of the half-year in which the railway shall have been opened throughout for public traffic, of such sums as, with the interim net earnings, shall be required to pay interest at a rate to be agreed upon on the paid-up capital of the company.
- (xiv) Such expenses on account of administration of the branch line company as the Government of India may sanction may be charged during construction to the capital account of the company, and with effect from the date on which the line is opened for traffic throughout will be charged as follows:
- (a) if the branch line company works its own line, as part of the working expenses of the line:
- (b) if the company's line is worked by the main line administration:
- (1) when the net earnings do not suffice to pay interest at 5 per cent (or suffice to pay only 5 per cent) on the capital expenditure, as part of the working expenses to be met out of the stipulated percentage of the earnings of the branch taken by the working agency:
- (2) when the net earnings exceed 5 per cent on the capital expenditure, as a first charge on surplus profits before division; provided that, if the surplus profits are insufficient to meet the administration charges, the balance will be paid by the working agency out of the stipulated percentage of the earnings of the branch taken by it.
- (xv) The rates and arrangements in force on State railways as regards services rendered to other departments of State shall apply to the branch line. The branch line company shall also be liable when called on to provide, at such stations as may be ordered by Government, buildings for post office and quarters for post office staff at a charge not exceeding  $7\frac{1}{2}$  per cent per annum on the capital cost of the said buildings and quarters.
- (xvi) The Government of India reserve the right to fix and vary from time to time the classification of goods for tariff purposes, and the maximum and minimum rates for each class of goods and for passengers. They also reserve a general right of control in respect of the number and timing of trains.
- (xvii) During the first year after opening of the branch line, or part thereof, the expenditure incurred on the maintenance of the line may be charged to capital.
- (xviii) Notwithstanding anything in the preceding clauses, expenditure due to extraordinary accidents and casualties, or to defects and their consequence in the construction of the line or in any part thereof, shall be met by the branch line company, in addition to the percentage of earnings payable to the main line

APPENDIX 28—*contd.*

as working expenses, and shall be charged against the branch line net earnings, or against capital, according to circumstances, in accordance with the general usage on Indian railways.

- (xix) All agreements for lines constructed under these terms shall include a special purchase clause permitting the Government of India to purchase the lines at any time, after giving one year's notice, in the following cases:
- (1) When the Government of India consider it desirable that the gauge of the branch line should be altered.
  - (2) When it is desired to convert the branch line into a line of through communication.
  - (3) When the Government of India desire to extend the branch line (without altering the gauge or making the line part of a through route), and the branch line company is unable or unwilling to supply the necessary capital for such extension.

In the event of a line being purchased under this clause, the price payable shall be 25 times the average net earnings (excluding payments on account of guarantee or rebate) during the three years preceding the purchase, or 115 per cent of the capital expenditure on the line, whichever may be the greater. All payments shall be made on a rupee basis.

- (xx) The agreements shall also include an ordinary purchase clause permitting the Government of India to purchase the lines at the expiry of 30 years from the date on which the railway was declared open for traffic or at subsequent intervals of 10 years, subject to the condition that at least one year's previous notice of the intention to purchase has been given. The price payable on purchase under this clause shall be 25 times the average net annual earnings (excluding payments on account of guarantee or rebate) during the three years preceding the purchase, subject to a maximum of 120 per cent and a minimum of 100 per cent of the capital expenditure on the line at the time of purchase. All payments shall be made on a rupee basis.

3. Applications for concessions under these orders should be submitted in the forms prescribed by Memorandum A attached to this Resolution. Copies of the forms may be obtained on application to the Secretary to the Railway Board. Requests from promoters for information as regards existing surveys, or for new surveys—*vide* paragraph 2 (iv)—should be addressed to the Secretary to the Railway Board. Applications for new surveys should contain the information required by Memorandum B hereto attached.

The Secretary to the Government of Madras, Public Works Department, Railways.

The Secretaries to the Governments of Bombay, Bengal, Burma, Eastern Bengal and Assam, the United Provinces of Agra and Oudh and the Punjab, Public Works Department.

The Honourable the Resident at Hyderabad.

The Honourable the Resident in Mysore.

The Honourable the Chief Commissioners of the Central Provinces and Coorg.

The Honourable the Agents to the Governor General for Rajasthan, Central India and Baluchistan.

The Honourable the Agent to the Governor General and Chief Commissioner, North-West Frontier Province.

The Accountant General, Public Works Department.

The Bombay, Bengal, Bengal National, Upper India, Punjab, Karachi, Madras, Rangoon and Chittagong Chambers of Commerce.

ORDER.—Ordered that this resolution be forwarded for information to the Local Governments and Administrations, to the officers and to the Chambers of Commerce noted in the margin.

Ordered also that the Resolution be published for general information in the *Gazette of India*.

R. O. F. VOLKERS,

*Secretary to the Railway Board.*

*Documents accompanying.*

*Enclosure No. I.* Memorandum A for the guidance of persons or syndicates desirous of submitting proposals for the construction of branch or feeder railways, with Form A and Appendices A, B and C.

*Enclosure No. II.* Memorandum B for the guidance of persons or syndicates desirous of having surveys made for branch or feeder lines of railway by the Railway Board.

APPENDIX 28—*contd.*

Enclosure No. I (with Form A and Appendices A, B and C) to Government of India resolution No. 105 R. P. of 1910.

## MEMORANDUM A.

For the guidance of persons or syndicates desirous of submitting proposals for the construction of branch railways in India forming feeders either to State lines worked by State or to railways worked by Companies.

1. All applications for leave to construct a branch or feeder railway in any part of British India are to be addressed to the Secretary to the Railway Board.

2. All such applications shall be printed and shall be drawn up, as far as may be in Form A attached hereto, and shall specify—

(a) the company, person, or syndicate by whom the application is preferred; the proposed amount of capital, the number of shares and the amount of each share;

(b) all the termini, together with the names of all the principal towns from, through, into, or near which the railway is intended to be constructed, as well as the names of each civil division and district to be traversed by the proposed alignment;

(c) the length, so far as known, of the proposed railway;

(d) the gauge, the weight of rails, etc.;

(e) the motive power to be employed;

(f) the maximum tolls, rates, and fares proposed to be charged on the projected railway;

(g) the proposals for working the railway when constructed; and if any agreement is under contemplation, or has been provisionally arranged with any existing Railway Administration under which the proposed line, when constructed, is to be leased out for working by such Railway Administration, the exact nature and terms of such agreement;

(h) any further information that may be required to enable Government to thoroughly understand the scope of the proposals.

3. Every such application shall be accompanied by a map to a scale of one mile to one inch, with the line of the proposed railway delineated thereon, so as to show its general course and direction, and also by an estimate as correct as may be of the works proposed to be authorised.

4. When the applicants draw up their own detailed plans and estimates, these documents are invariably to be prepared in strict accordance with the Rules for the preparation of railway projects issued under the authority of the Government of India, of which copies may be obtained on payment from the Superintendent of Government Printing, Calcutta.

5. If Government are prepared to entertain an application put forward in respect of a line that has already been surveyed, permission will be accorded on application to the Secretary to the Railway Board, to inspect, at all reasonable hours, the detailed plans, sections, and estimates at the disposal of Government; and copies of such plans, sections and estimates will be furnished on payment of the cost of copying.

6. But in regard to all such information, statistics, plans, sections or estimates, which may be furnished, it is to be recognised that the information thus offered to any person interested in the matter, is simply the best information of the kind at the disposal of Government, and that Government cannot accept any responsibility whatever in regard to the accuracy of any of the documents.

## APPENDIX 28—contd.

## Form A.

To accompany all applications for leave to construct a branch or feeder railway in any part of British India.

Nature of particulars to be specified.	Particulars.
1 The name of the Company, person or persons by whom the application is preferred; the proposed amount of capital, the number of shares, and the amount of each share.	
2 The termini, together with the names of all the principal towns from, in, through, or into, or near which the railway is intended to be constructed.	<i>Reference to an Appendix (vide Appendix A) may be here given if necessary.</i>
3 The length, as far as known, of the proposed railway.	
4 The gauge proposed and weight of rails, etc.	
5 The motive power to be employed.	
6 The maximum tolls, rates, and fares intended to be charged on the proposed railway.	<i>Reference to an Appendix (vide Appendix B) may be here given if necessary.</i>
7 Details of any agreement which may have been provisionally arranged, or which it is desired to enter into, under which the proposed line, when constructed, is to be leased out for working to any existing Railway Administration.	<i>Reference to an Appendix (vide Appendix C) may be here given if necessary.</i>
8 Any further information that may be required to enable the Government of India to thoroughly understand the scope of the proposals.	



## APPENDIX 28—contd.

## Appendix B.

Schedule of maximum and minimum rates and fares intended to be charged on the proposed branch railway.

	Maximum. Pies per mile.	Minimum. Pies per mile.
<i>Passenger fares—</i>		
1st class . . . . .	...	...
2nd class . . . . .	...	...
Intermediate class . . . . .	...	...
3rd or lowest class . . . . .	...	...

	Maximum. Pies per mile.	Minimum. Pies per mile.
<i>Carriages—</i>		
Single carriage . . . . .	...	...
<i>Trucks—</i>		
Two or more carriages on one truck . . . . .	...	...
<i>Horses—</i>		
Single horse . . . . .	...	...
<i>Dogs—</i>		
Each . . . . .	...	...
<i>Parcels and luggage—</i>		

If it is proposed to adopt the rates approved by the Indian Railway Conference Association, it will be sufficient to state this fact; otherwise the rates proposed should be stated.

	Maximum. Pies per maund per mile.	Minimum. Pies per maund per mile.
<i>Goods rates—</i>		
5th class . . . . .	...	...
4th „ . . . . .	...	...
3rd „ . . . . .	...	...
2nd „ . . . . .	...	...
1st „ . . . . .	...	...
Special class . . . . .	...	...
X class (Explosives, including dangerous goods) . . . . .	...	...



APPENDIX 28—contd.

Appendix C.

*Working of proposed branch railway.*

No agreement has yet been arranged with any existing Railway Administration under which the projected branch railway is to be worked; but when completed, it is proposed to offer the working to the \_\_\_\_\_ Railway Company on the following terms:—

(i) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(ii) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(iii) etc. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPENDIX 28—contd.

Or

It has been provisionally arranged with the railway, when completed, on the following terms:—

Railway Company to work the projected branch

(i) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(ii) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(iii), etc. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPENDIX 28—*revised.*

Enclosure No. II to Government of India resolution No. 105 B. P. of 1910.

## MEMORANDUM B.

Information to be supplied by persons or syndicates desirous of having surveys for branch or feeder lines of railway in India carried out by the Railway Board.

1. All such applications shall specify—

- (a) the company, person, or syndicate by whom the application is preferred ;
- (b) all the termini, together with the names of all the principal towns from, through, into, or near which the survey is intended to be carried, as well as the names of each civil division and district to be traversed by the proposed alignment ;
- (c) the length, so far as known, of the proposed railway ;
- (d) the gauge and the motive power to be employed ;
- (e) the intentions of the applicants as to the construction and working of the railway. If it is intended that the working shall be leased to any existing Railway Administration, the nature of the contemplated agreement shall be specified.

2. Every such application shall be accompanied by a map to a scale of one mile to one inch, with the line of the proposed survey delineated thereon, so as to show the general course and direction.

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