

ADMINISTRATION REPORT
ON
THE RAILWAYS IN INDIA

FOR
1890-91.

BY
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PART II.



CALCUTTA:
OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.
1892.

CALCUTTA:
GOVERNMENT OF INDIA CENTRAL PRINTING OFFICE,
8, HASTINGS STREET.

The following lengths of railway have been opened to public traffic from the 1st April 1891 to 15th December 1891 :

Date.	Railway.	From	To	Miles.	REMARKS.
1st April 1891	Rohilkhand-Kumaun, Lucknow-Bareilly section	Gola-Gokaran-Náth	Pilibhit	58	
8th April 1891	Jodhpore-Bikanir	Jodhpore	Merta Road	64½	
21st April 1891	Kolhápur	Kolhápur	Miráj	29½	
15th May 1891	Bengal and North-Western.	Chupra	Revilganj	7½	
1st July 1891	Mu Valley	Sagaing	Shwebo	53½	
20th July 1891	The Gaekwar's Mehsána	Mehsána	Pátan	24½	
16th October 1891	Jodhpore-Bikanir	Merta Road	Nagaur	35	
29th October 1891	Bengal and North-Western.	Gonda	Colonelganj	18	For goods traffic only.
1st December 1891	Southern Mahratta, Mysore section.	Mysore	Nanjangúd	15½	
9th December 1891	Jodhpore-Bikanir	Nagaur	Bikanir Town	68	

CONTENTS.

	Page	Paragraph
CHAPTER I.		
STORES AND ROLLING-STOCK.		
<i>Section i.—Stores.</i>		
<i>General—</i>		
Working of the Stores department during 1890-91—		
Calcutta	1	1
Bombay		2
Kurrachee		3
Madras		4
East Indian	2	5
Bengal and North-Western, including the Tirhoot State railway		6
Rohilkhund-Kumaun		7
Bengal-Nágpur		8
Indian Midland	3	9
Rajputana-Malwa		10
Southern Mahratta, including Mysore section		11
South Indian		12
Eastern Bengal	4	13
Bombay, Baroda and Central India		14
Madras		
Khámgaon and Amráoti		
Bhávnagar-Gondal-Junágarh-Porbandar		
<i>Store balances—</i>		
Stores transactions on the several Indian railways during 1890, and review thereof	4	15
<i>Miscellaneous—</i>		
East Indian	12	16
Bengal and North-Western, including the Tirhoot State railway		17
Bengal-Nágpur		18
Rajputana-Malwa		19
South Indian	13	20
North Western		21
Oudh and Rohilkhand		22
Eastern Bengal		23
Burma	14	24
Great Indian Peninsula		25
Bombay, Baroda and Central India		26
Madras		27
Bhávnagar-Gondal-Junágarh-Porbandar	15	28
<i>Section ii.—Rolling-stock.</i>		
Locomotive and vehicle stock on the several Indian railways on the 31st December 1890	15	29
Vehicles adapted for military purposes, on the 31st December 1890		30
East Indian	16	31
Bengal and North-Western, including the Tirhoot State railway		32
Bengal-Nágpur		33
Indian Midland		34
Rajputana-Malwa	17	35
Wardha Coal		36
Southern Mahratta, including Mysore section		37
South Indian		38
North Western	18	39
Oudh and Rohilkhand		40
Eastern Bengal		41
Burma		42
Great Indian Peninsula	19	

	Page	Paragrah
CHAPTER I—concl'd.		
<i>Section ii.—Rolling-stock—concl'd.</i>		
Bombay, Baroda and Central India	19	43
Madras		44
Bhávnaġar-Gondal-Junáġarh-Forbandar		45
Morvi		46
CHAPTER II.		
CAPITAL.		
East Indian	30	2
Patna-Gya	32	3
Bengal and North-Western, including the Tirhoot State railway		4
Bareilly-Pilibhit	33	5
Bengal-Náġpur		6
Indian Midland	34	7
Rajputana-Malwa	35	8
Southern Mahratta, including the Mysore section	36	9
Villupuram-Guntakal	37	10
North Western	38	11
Amritsar-Patháńkot		12
Oudh and Rohilkhand	39	13
Lucknow-Sitapur-Seramau		14
Eastern Bengal	41	15
Bengal Central		16
Wardha Coal	42	17
Burma, including the Toungoo-Mandalay extension		18
Great Indian Peninsula	43	19
Bombay, Baroda and Central India	44	20
Madras	45	21
South Indian	46	22
Tárakeshwar		23
Deoghur	47	24
Rohilkhand-Kumaun		25
Darjeeling-Himalayan	47	26
Dibru-Sadiya		27
Khámgaon and Amraoti	48	28
Bhopal-Itáńsi		29
The Nizam's Guaranteed State	48	30
Ráġpura-Bhátinda		31
Jummu and Kashmir (Native State section)	49	32
Jodhpore		33
Bhávnaġar-Gondal-Junáġarh-Forbandar	49	34
Average mileage capital cost of Indian railways on the 31st December 1890		35
Cost and particulars of some of the large railway bridges in India	49	36
Cost and particulars of the important railway tunnels in India		36
CHAPTER III.		
STATISTICS OF INDIAN RAILWAYS, 1889 AND 1890.		
<i>Review of expenditure on working.</i>		
Maintenance per mean mile: standard gauge	62	2
Maintenance per mean mile: metre and other narrow gauges		3
Maintenance per mile of track, including sidings: standard gauge	63	4
Maintenance per mile of track, including sidings: metre and other narrow gauges		5
Maintenance per 1,000 gross ton-miles: standard gauge	64	6
Maintenance per 1,000 gross ton-miles: metre and other narrow gauges		7
Locomotive expenses per train-mile: standard gauge	65	8
Locomotive expenses per train-mile: metre and other narrow gauges		9
Locomotive expenses per train-mile: comparison between lines: standard gauge	65	10
Locomotive expenses per train-mile: comparison between lines: metre and other narrow gauges		11
Locomotive expenses per 1,000 gross ton-miles: standard gauge	66	12

	Page	Paragraph
CHAPTER III—concl.		
Locomotive expenses per 1,000 gross ton-miles: metre and other narrow gauges	66	13
Locomotive expenses: cost of fuel		14
Locomotive expenses per 1,000 gross ton-miles, excluding cost of fuel: standard gauge	67	15
Locomotive expenses per 1,000 gross ton-miles, excluding cost of fuel: metre and other narrow gauges		16
Carriage and wagon expenses per 1,000 home vehicle miles: standard gauge	68	17
Carriage and wagon expenses per 1,000 home vehicle miles: metre and other narrow gauges		18
Traffic expenses per train-mile: standard gauge.	69	19
Traffic expenses per train-mile: metre and other narrow gauges		20
General charges: percentage on gross earnings: standard, metre, and other narrow gauges	70	21
Compensation		22
Summary of working expenses compared with gross earnings		23
CHAPTER IV.		
REVENUE RESULTS—TRAFFIC AND WORKING.		
Map showing principal centres of traffic on Indian railways for the year 1890	72	1
Map showing the distribution of traffic on Indian railways during the year 1890.		
Map showing the several systems of Indian railways corrected to the 30th September 1891		
Details of the earnings and expenditure of the several railways		3
East Indian		4
Patna-Gya	76	5
Bengal and North-Western, including the Tirhoot State railway	78	6
Bareilly-Pilibhit	81	7
Bengal-Nágpur	82	8
Indian Midland	85	9
Rajputana-Malwa	88	10
Southern Mahratta, including the Mysore section	91	11
Villupuram-Guntakal, Nellore branch	93	12
Villupuram-Guntakal, Villupuram-Tiruvannámalai section	95	13
North Western, including Amritsar-Patháńkot and Jammu and Kashmir	97	14
Oudh and Rohilkhand	102	15
Lucknow-Sitapur-Seramau	104	16
Eastern Bengal	106	17
Bengal Central	109	18
Wardha Coal	111	19
Burma, including the Toungoo-Mandalay extension	113	20
Great Indian Peninsula	116	21
Bombay, Baroda and Central India	119	22
Madras	122	23
South Indian	124	24
Tárakeshwar	127	25
Deoghur	129	26
Rohilkhand-Kumaun	130	27
Darjeeling-Himalayan	132	28
Dibru-Sadiya	134	29
Khámgaon and Amráoti	136	30
Bhopal-Itársi	137	31
The Nizam's Guaranteed State	139	32
Rájpura-Bhátinda	141	33
Jodhpore	142	34
Bhávnágar-Gondal-Junágarh-Porbandar	144	35
CHAPTER V.		
SCHOOLS AND FINE FUNDS.		
<i>Section i.—Schools.</i>		
Railway, and local and district schools	148	1
<i>Section ii.—Fine Funds.</i>		
Summary of transactions on State railways worked by the State	149	2
Details of expenditure	150	3

APPENDICES.

	PAGE
A.—Statistics of the working of Indian railways, Parts I and II, for the half-years ended 30th June and 31st December 1890	i
B.—Statement showing the general results of the working of the principal railways during the years 1886 to 1890	lxxx
C.—Statement showing the mileage, age, cost, and general results of the working of Indian railways for the year 1890	xcii
D.—Statement of Indian railways constructed and in progress on the 31st March 1891	xcv
E.—Statement showing the distribution of the mileage of railways by Provinces on the 31st March 1891	clxxiv
F.—Table of railways constructed in or traversing Native States	clxxvi
G.—Details of capital expenditure and mileage cost of State railways at the end of the half-year in which the last open section of each line was completed	clxxxiv
H.—Supplementary contract between the Secretary of State for India in Council and the Indian Midland Railway Company for the transfer of the Sindia State railway, dated the 18th March 1890	cxciv
I.—Memorandum of agreement between the Secretary of State for India in Council and the Great Indian Peninsula Railway Company for the working and maintenance of the Wardha Coal State railway, dated the 6th May 1890	cxcvi
J.—Memorandum of agreement between the Secretary of State for India in Council and the Great Indian Peninsula Railway Company for the working and maintenance of the Khámgaon State railway, dated the 6th May 1890	cxcix
K.—Memorandum of agreement between the Secretary of State for India in Council and the Great Indian Peninsula Railway Company for the working and maintenance of the Amráoti State railway, dated the 6th May 1890	ccii
L.—Contract between the Secretary of State for India in Council and the Bengal and North-Western Railway Company for the working and maintenance of the Tirhoot State and the Bengal and North-Western railways as one system, dated the 18th July 1890	ccv
M.—Contract between the Secretary of State for India in Council and the Rohilkhand-Kumaun Railway Company for the working and maintenance of the Bareilly-Pilibhit, Lucknow-Sitapur-Seramau State, and the Rohilkhand-Kumaun railways as one system, dated the 8th September 1890	ccxx
N.—Agreement between the Southern Mahratta Railway Company and the Madras Railway Company for working the Bangalore City Junction station, dated the 20th November 1890	ccxxxvii
O.—Contract between the Secretary of State for India in Council and the South Indian Railway Company for the working and maintenance of the late South Indian Guaranteed railway and the Villupuram-Guntakal State railway, dated the 24th November 1890	ccxlii
P.—Agreement between the Southern Mahratta Railway Company and the Madras Railway Company for working the Guntakal Junction station, dated the 22nd December 1890	cclx
Q.—Agreement between the South Indian Railway Company and the Pondicherry Railway Company for the working of the Pondicherry railway, dated the 30th December 1890	cclxiv
R.—Memorandum of agreement between the Government of India and the Bengal Central Railway Company for the working of the Bengal Central railway through the agency of the State, dated the 13th February 1891	cclxvi
S.—Agreements between the Government of India and His Highness the Maharaja of Jammu and Kashmir for the construction and working of the Jammu and Kashmir State railway, dated the 14th July 1888 and the 18th November 1890	ccclix

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PART II.

CHAPTER I.

STORES AND ROLLING-STOCK.

SECTION I.—STORES.

General.

Working of the Stores Department during 1890-91.

At the four principal Indian ports* the arrangements for landing and forwarding English stores and making local purchases mentioned in last year's report continued unaltered.

*Calcutta.
Bombay.
Kurrachee.
Madras.

Stores arriving from England for the East Coast railway have been consigned as found convenient to the ports of Coconada and Vizagapatam, arrangements being made with a local firm for doing the work of landing and transport.

During the year under review the account of Government surplus stores in the custody of the East Indian Railway Company was closed.

East Indian Railway.

2. The cost of working the Stores Department was further reduced during the year, the following reductions in sanctioned establishment having taken place:

	Per mensem.
	R a.
Controller's office clerks	450 0
Depôt clerks	2,348 0
Menials	7 6
Gunner	40 0

There has been an addition of Rs. 2,936 on account of staff engaged departmentally for landing stores, &c., the former practice of doing this work by contract having been found unsatisfactory; but this increase of staff is more than covered by the reduction in the estimate for handling stores by contract.

The depôt at Rampore Haut has been closed. No new depôts or offices

have been opened, and there have been no amalgamations of depôts or offices during the year.

Bengal and North-Western including the Tirhoot State Railway.

3. On taking over the working of the Tirhoot State railway, the Stores Department was re-organized and placed under one Store-keeper at Samastipur, with a depôt store at Sonapore under a Sub-store-keeper.

The stores of both the Bengal and North-Western and Tirhoot State railways were verified by a Government stock-verifier during the official year.

Rohilkhand-Kumaun Railway.

4. On the 1st January 1891 the stores of the Lucknow-Sitapur-Seramau railway were amalgamated with those of the Rohilkhand-Kumaun railway. A store depôt was arranged for at Charbagh, as during the period the line was worked by the Oudh and Rohilkhand railway all consumable stores were supplied direct from the general stores of that line.

Bengal-Nágpur Railway.

5. *Measures taken to concentrate stores at one depôt.*—During the year 1890 the following depôts were open :—

Umaria,	| Dehika.	| Biláspur.
---------	---------	-----------

the head stores magazine being at Nágpur. The depôts at Umaria and Biláspur were, however, subsequently closed, and a new depôt was opened at Sambalpur Road, where all stores from Umaria and Biláspur were concentrated. The depôt at Dehika is needed, as new rolling-stock arriving from England *via* Calcutta is received here and erected. The Sambalpur Road depôt was opened on account of the new branch to Sambalpur city.

Surplus plant and stores.—Surplus plant and stores returned from construction are valued by a committee, and stores which are not worth repairing are sold off; others are repaired by the Locomotive Department, revalued by the Committee, and are then entered in the lists of surplus stores of the railway.

This arrangement of repairing stores before entry in the list of surplus stores necessarily somewhat retards the issue of the lists, but the delay will be amply compensated for by the articles entered therein being in good order and fit for immediate use.

The first list of surplus stores for this railway was issued in December 1890.

Landing and forwarding.—The agreement with the Great Indian Peninsula Railway Company for landing and forwarding stores for this railway was terminated during 1890-91, as there was no longer any need for it, all English materials being now received *via* Calcutta.

The late Nágpur Chhattisgarh State railway materials.—Of the metre gauge materials belonging to the late Nágpur Chhattisgarh State railway, taken over by the Government under agreement with the Bengal-Nágpur Railway Company, the greater portion of the serviceable permanent-way and girder-work, &c., has been disposed of by transfer to other lines. A valuation statement of the remaining material has been received, and measures are now being taken for its disposal.

Indian Midland Railway.

6. The stores yard, sheds and offices for the permanent accommodation for stores were made over for occupation in January. Since that time the transfer of the stores from the old temporary depôt has been in progress.

Rajputana-Malwa Railway.

7. The stores at Sábarmati, Khandwa, Fatehgarh and Cawnpore Depôts were verified during the year, with satisfactory results.

All stores, fuel, &c., obtained from England for this line are landed at the Bombay, Baroda and Central India Railway Company's basin at Colaba.

Deodar sleepers are chiefly used on this line, and they are obtained from the Government Forest Department at one rupee and nine annas per sleeper.

A special committee of Officers representing each department has been formed to scrutinize English indents, with a view to prevent accumulation of stores.

Southern Mahratta Railway including the Mysore section.

8. Stores to the value of Rs8,482 were transferred to the East Coast railway from the Bellary Kistna railway stores depôt at Nandyál, and it is expected that more of this material will be taken over in connection with the construction of the East Coast railway. This matter is receiving further consideration, as it is very desirable that the accumulation of stores at Nandyál in excess of capital requirements, which occurred prior to the transfer of the line to the Southern Mahratta Railway Company, should be reduced by disposing of the material to the best advantage.

South Indian Railway.

9. During the calendar year 6,867 tons of stores and materials, valued at £58,247, were shipped to India in forty-one consignments, besides which 13,329 tons of coal were forwarded from England, and 4,640 tons were obtained from Australia at an average cost, at port of delivery, of £1-10-9 per ton.

Eastern Bengal State Railway.

10. The working of the Stores Department during 1890-91 resulted at the close of the year in the total value of surplus stores on the system being reduced to less than one lakh of rupees.

Under the orders of the Government of India, the verification of stock was removed from the control of the Stores Department, and placed under the Examiner of Accounts of the line. By 31st March 1891 the verification of all stores was completed, except that of the Dacca section, which was in progress.

Bombay, Baroda and Central India Railway.

11. The system of continuous verification of stores is in force on this line. It provides for the verification of each class of stores about once a year and gives satisfactory results.

A special committee of Officers representing each department has been formed to scrutinize English indents, with a view to prevent accumulation of stores.

Madras Railway.

12. During the calendar year 10,664 tons of stores and materials other than fuel, valued at £115,473, were shipped to India in forty-two consignments, and 6,471 tons of coal and coke were forwarded from England at an average cost, at port of delivery, of £1-18-3 per ton.

Khámgaon and Amráoti Railways.

13. The stores of these railways are in the custody of the Great Indian Peninsula Railway Company, which uses them when required. The value of stores thus used is recovered from the Company and credited to the Capital account of the railways.

Bhávnaagar-Gondal-Jundágarh-Porbandar Railway.

14. The Stores Department was till July 1890 under the supervision of the Locomotive and Carriage Superintendent, and since then under the independent charge of the Acting Store-keeper.

All consumable stores are obtained locally on contract except coal, which is procured from Bombay; permanent-way materials and rolling-stock are obtained from England on indents submitted to the Secretary of State. The stores in the magazines at the end of the previous official year were verified during the year. No surplus stores are kept, but steps are taken to dispose of worn-out stores by public auction annually.

The work of stacking and loading of materials received at the Bhávnaagar Bandar from Bombay by sea has been done by contract at the reduced rate of 5 annas per ton, the system of letting out such work on contract having proved economical.

Stores balances.

15. The table on pages 8 to 11 contains an abstract of the stores transactions of the several Indian railways for the calendar year 1890. At the close of the year the capital locked up in stores represented a sum of R6,43,40,362, showing a net increase of R25,23,842 as compared with the opening balance of the year. Besides this there was a sum of R43,68,589 under adjustment on the 31st December 1890, making a total of R6,87,08,951 at the debit of stores.

The increase in the stores balance during the year under review was partly due to the accumulation of materials for construction and renewals, and will be reduced by the completion of the works for which they have been procured.

Of the State lines worked by Companies, it is noticed that accumulations of stores have occurred during the year under review on the following railways, though on the whole there has been a reduction of R6,34,664 :

	R
East Indian	2,84,147
Indian Midland	4,06,583
Southern Mahratta	1,63,115
Villupuram-Guntakal	7,31,896

The increase on the East Indian railway is mainly due to the addition to stock of iron sleepers, the expenditure of this class of material during the year having fallen considerably below the estimates of the Engineering Department, owing to the former practice of replacing wooden sleepers—irrespective of their condition—with iron sleepers, where the line has been relaid with steel rails, having been abandoned.

Including wooden sleepers, the stock on 31st December 1890 aggregated 135,041 sleepers in number, valued at R17,48,749, as shown in the following statement, which also gives the stock of steel rails and fastenings, which has since

been issued for relaying, and that of second-hand material specially reserved for use in the construction of branch lines :—

DESCRIPTION.	STOCK ON THE 31ST DECEMBER 1890.		
	QUANTITY.		Book value.
	No.	Mile of single road.	
<i>New—</i>			<i>R</i>
Bolts and nuts for steel rails	159,068	75	22,645
Fishplates, 26 inches, for steel rails	43,106	61	37,966
Rails, steel feet	475,579	45	4,29,702
Sleepers, D. O., complete	174,158	90	15,44,918
Sleepers, wooden	48,280	25	1,79,273
			22,14,504
<i>Old—</i>			
Bolts and nuts for iron rails	269,403	137	8,407
Chairs, cast iron	347,595	94	1,29,903
Fishplates, iron, 18 inches	168,159	171½	29,900
Rails, iron, first class, fit for main line . feet	1,165,352	110	6,53,842
Rails, iron, second class, fit for sidings	796,220	75	2,98,369
Sleepers, wooden, first class, fit for main line .	4,954	3	12,515
Sleepers, wooden, second class, fit for sidings	7,649	1	12,043
Spikes for cast iron chairs	948,718	128	26,673
			11,71,652
TOTAL R			33,86,156

The items in the foregoing statement represent nearly one-half of the entire stores balance of the line, and the reduction of stock of these items to the limit of ordinary requirements will bring the amount of capital locked up in stores within 55 lakhs of rupees, a result which the railway authorities hope to see realized within the next twelve or eighteen months.

The following statement shows the stores balances on the East Indian railway and the interest paid thereon for the nineteen half-years from 1st July 1881 to 31st December 1890 :

Period.	English stores in transit.	IN INDIA.				Total.	Interest at 4½ per cent. per annum.	
		New stores.	Returned stores.	Scrap.	Sales outstanding.			
	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>	
31st December 1881 . . . . .	...	Details incomplete.				1,19,48,613 2 11	2,68,843 12 9
30th June 1882	17,70,269 15 0	75,89,200 11 8	13,41,533 8 6	4,57,517 12 10	Included under new stores.	1,11,58,522 0 0	2,51,066 11 11	
31st December 1882	6,71,218 0 0	71,12,665 12 9	12,84,667 10 9	3,77,758 14 1		94,46,310 5 7	2,12,541 15 9	
30th June 1883	11,03,835 5 0	59,06,316 9 7	18,19,209 8 9	4,82,879 9 4		93,12,241 0 8	2,09,525 6 9	
31st December 1883	4,29,182 6 7	62,56,834 8 10	15,37,467 12 4	4,23,669 3 1		86,47,153 14 10	1,94,560 15 5	
30th June 1884	5,82,419 15 7	56,68,158 9 6	12,34,998 15 3	4,92,745 11 8		79,78,323 4 0	1,79,512 4 4	
31st December 1884	9,97,739 0 6	59,00,779 11 6	10,74,051 2 2	4,57,937 1 6		1,40,021 12 0	85,70,828 11 8	1,92,836 14 4
30th June 1885	11,85,309 14 8	45,75,239 8 5	8,63,867 13 10	3,70,200 7 9		2,19,017 10 0	72,13,635 6 8	1,62,306 12 9
31st December 1885	4,45,020 14 9	53,21,521 2 10	12,75,577 3 10	3,09,265 8 11		81,459 1 0	74,32,843 15 4	1,67,238 15 10
30th June 1886	3,67,352 6 0	45,93,583 9 11	10,02,470 9 10	3,12,806 4 10		13,584 6 10	62,89,797 5 5	1,41,520 7 0
31st December 1886	5,24,992 13 5	59,35,686 9 1	5,81,124 4 4	2,86,027 9 7		16,035 6 6	73,43,866 10 11	1,65,237 0 0
30th June 1887	1,31,308 4 0	49,88,107 6 7	8,32,215 4 9	2,92,560 1 10	2,508 9 3	62,46,699 10 5	1,40,550 11 10	
31st December 1887	8,29,547 7 1	52,53,950 2 5	8,31,369 6 4	1,76,887 1 0	7,556 7 10	70,99,310 8 8	1,59,734 7 10	
30th June 1888	1,75,078 11 6	49,30,375 10 5	8,83,398 13 11	2,27,143 2 1	...	62,15,996 5 11	1,39,859 14 8	
31st December 1888	5,59,746 9 0	51,07,986 12 2	8,70,840 9 8	2,43,816 13 9	369 3 2	67,82,759 15 9	1,28,603 0 0	
30th June 1889	5,11,256 1 1	51,41,908 14 9	9,47,520 2 4	2,58,021 3 5	10,272 2 7	68,68,978 8 2	1,43,864 3 9	
31st December 1889	3,41,468 4 6	54,46,463 7 4	8,59,795 1 6	3,67,595 11 7	18,065 2 11	70,33,387 11 10	1,61,964 5 4	
30th June 1890	3,98,635 1 1	48,40,810 2 0	12,62,346 12 9	4,65,012 5 5	32,777 11 7	69,99,582 0 10	1,54,331 10 6	
31st December 1890	2,33,102 5 1	51,30,110 2 4	12,93,844 15 11	4,74,691 7 1	23,289 3 10	71,55,038 2 3	1,62,497 2 1	

The increase on the Indian Midland railway is mainly due to rolling-stock fittings received from England for the first equipment of the line, which have been made over to the Great Indian Peninsula Railway Company for the construction of the vehicles. Machinery for the locomotive workshops, and permanent-way for the Bhopal-Itarsi State railway and for thirteen new crossing stations, received late during the year 1890, were charged off in the year 1891.

The increase on the Southern Mahratta railway is chiefly due to the value of some covered goods wagons received from England being debited during the year. The material has subsequently been withdrawn for erection of the wagons during 1891. The increase under the head "Tools and stores" is due to tools returned to stock on the completion of the line.

The increase on the Villupuram-Guntakal State railway represents principally the value of bridgework, station materials and tools, received prior to the 31st December 1890. The whole of the bridgework, for which the masonry was not then ready and the greater part of the station materials will be issued and charged to final heads during 1891. Under the head "Tools" there is a considerable debit, but lists of surplus tools have been sent to the East Coast and the Nilgiri railways, while a complete list of all stores available for transfer is under preparation and will be shortly issued.

With the exception of the Oudh and Rohilkhand and the Eastern Bengal State railways, all the State lines worked by the State show reductions in the stores balances, the total value of stock reduced during the year under review being R8,42,298.

Increases on the Oudh and Rohilkhand railway are noticed mainly under the heads "Engineers' plant," "Permanent-way" and "Tools and stores." The increase under "Engineers' plant" is entirely due to a quantity of heavy plant and machinery returned from the Ganges bridge at Bálawali. The increase under "Permanent-way materials" is attributable to the new steel rails obtained from England for the purpose of relaying, having been received too late in the year to be put into the road, and also to the large quantity of serviceable iron rails replaced in the line by new steel rails, and of which only a portion could be utilized during the year. The increase under "Tools and stores" is due to stores obtained during the latter part of 1890 not having been wholly used up by the end of the year.

The accumulation of stores during 1890 on the Eastern Bengal State railway is mainly under the head "Permanent-way," and is due to materials received for renewals, but not issued during the year.

Of the railways worked by guaranteed Companies, the Great Indian Peninsula and Madras railways exhibit accumulations of stores during 1890 to the following extent, the total increase being R16,18,640:

	R
Great Indian Peninsula	10,12,003
Madras	7,21,562

As stated in the last year's administration report, the closing balance of the Great Indian Peninsula railway on 31st December 1889 was materially reduced during the first four months of 1890, but the balance was subsequently augmented by large receipts from England of permanent-way materials and other stores during the later months of the year now under review. It is, however, reported that a substantial reduction has again been effected since the close of the year 1890, the balance on 30th April 1891 being R76,48,029, which compares favourably with the balance on the 31st December 1890, *viz.*, R80,21,508 (including the amount under adjustment).

The question of the increase in the stores balances of the Great Indian Peninsula railway at the end of 1890 has had the attention of the Agent, and instructions have been issued by the Government of Bombay requiring a stricter examination of the home indents on the part of heads of departments, a course which it is hoped will in a short time result in a reduction of stock.

On the Madras railway accumulations were heavy under the following heads:—

	R
Fuel, locomotive	2,31 000
Permanent-way	3,72,000
Timber	63,000

Regarding the increase under the head "Fuel," the Locomotive Superintendent of the railway explains that in December 1889 the stock had run down and was abnormally low; on the 31st December 1890 the stock of patent fuel was about normal, but the stock of firewood was rather larger than usual, owing to some large deliveries that had been made at Tiruvallúr for use on the Madras division. The general balance was also increased by a sum of R41,216, being the value of Indian coal purchased at the close of the year.

The increase under the head "Permanent-way" to the extent of R2,06,000 was caused by the re-adjustment of prices, and the balance consists of the value of old rails taken into stock. Of this balance R73,000 have already been adjusted, and as all the rails have been sold their value will be recovered and credited in due course.

The stock of timber at the close of 1889 was very low, amounting to only R17,173, and the stock on the 31st December 1890, which, in consequence, appears high in comparison, was required to meet demands during 1891.

All other railways, with the exception of the Bhopal-Itársi State railway (Native States section); and the Nizam's Guaranteed State railway, both of which lines are owned by Native States and worked by companies, show reductions in their stores balances during the year under review.

Statement of Stores transactions

Serial No.	RAILWAYS.	Balance on the 1st January 1890.	Receipts during the year.	Issues during the year.	BALANCE IN HAND		
					A Iron bridge-work.	B Engineer's plant.	C Workshop machinery.
		R	R	R	R	R	R
I	State Lines worked by Companies. East Indian	64,28,419*	71,39,495	68,55,348	...	...	...
II	Patna-Gya	Included in East Indian railway stores transactions.			...	...	...
III	Tirhoot	} Statement of stores transactions for 1890 not received.			...	...	...
	Bengal and North-Western				...	7,05,123	6,91,116
IV	Gola Gokaran Náth Pilibhit Section. Bareilly-Pilibhit section	Included in Rohilkhand-Kumaun railway stores transactions Co.'s Section.			...	...	...
V	Bengal-Nágpur	52,56,245	90,17,404	1,05,30,330	3,54,296	2,14,952	1,53,386
VI	Indian Midland	36,50,556	53,04,005	48,97,422	49,821	18,420	81,042
VII	Bhopal-Itársi (British section)	There are no stores on this line.			...	...	...
VIII	Rajputana-Malwa	51,86,426	50,79,934	57,10,487	63,098	48,946	1,12,691
X	Dhond-Manmád	11,853	...	...	...	...	...
XI	Southern Mahratta	21,38,896	21,22,087	19,58,972	41,834	70,441	66,506
XII	Southern Mahratta (Mysore sec- tion).	5,15,501	3,21,056	3,67,625	3,968	8,004	5,199
XIII	Bezváda Extension	There are no stores on this line.			...	...	...
	Villupuram-Guntakal	22,64,092	33,45,552	26,13,656	5,35,691	78,059	9,043
	Villupuram-Guntakal, Nellore branch.	1,15,911	9,356	53,723	6,215	4,945	2,623
	TOTAL	2,68,67,899	3,30,44,015	3,36,78,679	...	...	...
XV	(Under construction.) Godhra-Rutlam	There were no stores on this line on the 31st December 1890.			...	...	...
XVI	Máyavaram-Mutupet . . . . .	...	...	...	...	...	...
	TOTAL . . . . .	...	...	...	...	...	...
	State Lines worked by the State.						
XVII	North Western	1,15,41,778	1,39,31,653	1,48,96,430	4,91,422	2,42,929	49,925
	Chenab bridge	2,33,373	3,57,824	4,75,752	3,575	35,836	1,276
XVIII	Amritsar-Pathámkot	9,422	...	2,692	323	...	...
XIX	Jammu and Kashmir (British section).	There are no stores on this section of the railway.			...	...	...
XX	Oudh and Rohilkhand	21,50,784	28,59,733	26,51,692	23,604	1,02,323	19,571
	Lucknow-Sitapur-Seramau	2,73,461	12,166	2,32,393	4,059	1,403	49
XXI	Eastern Bengal	18,22,858†	39,34,005	34,74,001	29,252	51,003	29,655
	Kaunia-Dhar-la section	10,233	8,658	12,330	...	16	...
XXII	Bengal Central	99,484	10,092	16,140	3,401	16,213	1,830
XXIII	Nalháti	14,690§	31,486	33,168	161	886	139
	Wardha Coal	Exempted from submitting the statement of stores transactions for 1890.			...	...	...
XXIV	Cherra-Companyganj . . . . .	...	5,687	5,687	...	...	...
XXV	Jorhát	17,756	15,169	15,889	...	...	...
XXVI	Burma . . . . .	...	...	...	...	...	...
XXVII	Toungoo-Mandalay	15,46,052	11,98,268	14,40,865	49,247	76,606	1,09,141
	TOTAL	1,80,20,491	2,24,14,741	2,32,57,039	...	...	...
XXVIII	(Under construction.) Sind-Pishin (Chaman Extension)	1,56,078‡	16,49,764	9,22,655	45,081	1,06,714	7,644
XXIX	Mianwáli-Mári . . . . .	...	5,75,374	4,71,338	12,058	4,104	3,601
XXX	East Coast	There were no stores on this line on the 31st December 1890.			...	...	...
	Kistna bridge . . . . .	...	64,988	25,046	679	5,923	6,765
XXXI	Mu Valley	3,788	20,42,239	2,87,965	1,59,544	37,695	2,714
	TOTAL	1,59,866	43,32,365	17,07,004	...	...	...
	Carried over	4,50,48,256	5,97,91,121	5,86,42,722	...	...	...

* The difference between the closing balance of 1889 and the opening balance of 1890 is due to the stores in the hands of head instead of being included in lump

† Includes the transactions of the Assam-Bihar section also. The difference of Rs. 2,749 between the closing balance of 1889 into one depôt on the Behar section, which were not quite

‡ The difference of Rs. 158 between the closing balance of 1889 and the opening balance of this statement and the closing balance of the

on the several railways during 1890.

ON THE 31ST DECEMBER 1890.				TOTAL BALANCE.	AMOUNT UNDER ADJUSTMENT ON THE 31ST DECEMBER 1890.	GRAND TOTAL AT DEBIT OF STORES ON THE 31ST DECEMBER 1890.	RAILWAYS.	Serial No.
D	E	F	G					
Permanent-way.	Rolling-stock.	Station materials and fencing.	Tools and Stores.	R	R	R		
R	R	R	R	R	R	R	State Lines worked by Companies.	
...	...	...	...	67,12,566	4,42,472	71,55,038	East Indian	I
...	...	...	...	...	...	...	Patna-Gya	II
...	...	...	...	...	...	...	Tirhoot	} III
...	...	...	14,007	14,007	...	14,007	Bengal and North-Western .	
...	...	...	...	...	...	...	Gola Gokaran Nâth-Pilibhit section.	} IV
...	...	...	...	...	...	...	Bareilly-Pilibhit section	
16,12,813	3,31,269	1,96,765	8,79,838	37,43,319	1,13,055	38,56,374	Bengal-Nâgpur	V
8,43,605	23,47,107	3,41,325	3,75,819	40,57,139	1,85,896	42,43,035	Indian Midland	VI
...	...	...	...	...	...	...	Bhopal-Itârsi (British section)	VII
11,13,220	11,54,560	3,99,517	19,63,841	48,55,873	-64,999	47,90,874	Rajputana-Malwa	VIII
...	...	11,853	...	11,853	...	11,853	Dhond-Manmâd	X
1,85,545	6,19,914	2,13,679	11,04,092	23,02,011	-1,22,170	21,79,841	Southern Mahratta	XI
1,87,846	89,722	75,284	98,912	4,68,935	4,049	4,72,984	Southern Mahratta (Mysore section.)	XII
...	...	...	...	...	...	...	Bezvâda Extension	XIII
29,83,910	1,415	1,94,343	1,93,527	39,95,988	6,97,390	46,93,378	Villupuram-Guntakal.	
44,928	1,930	4,476	6,427	71,544	6,091	77,635	Villupuram-Guntakal, Nellore branch.	
...	...	...	...	2,62,33,235	12,61,784	2,74,95,019	TOTAL.	
...	...	...	...	...	...	...	(Under construction.)	
...	...	...	...	...	43,005	43,005	Godhra-Rutlam	XV
...	...	...	...	...	43,005	43,005	Mâyavaram-Mutupet	XVI
...	...	...	...	...	43,005	43,005	TOTAL.	
...	...	...	...	...	...	...	State Lines worked by the State.	
39,35,062	29,13,084	3,82,164	28,62,415	1,08,77,001	12,06,488	1,20,83,489	North-Western	} XVII
25,663	1,874	13,719	34,102	1,16,045	1,230	1,17,275	Chenab bridge	
3,657	...	1,786	964	6,730	...	6,730	Amritsar-Pathânkot	XVIII
...	...	...	...	...	...	...	Jammu and Kashmir (British section).	XIX
8,51,511	6,95,812	29,821	6,36,183	23,58,825	...	23,58,825	Oudh and Rohilkhand	XX
7,626	12,068	7,748	20,281	53,234	...	53,234	Lucknow-Sitapur-Seramau.	
9,90,847	6,52,273	88,901	4,90,931	23,32,862	54,190	23,87,052	Eastern Bengal	} XXI
1,924	4,621	...	...	6,561	6	6,567	Kaunia-Dharlla section	
37,405	70	21,759	12,758	93,436	216	93,652	Bengal Central	XXII
3,127	3,377	221	5,097	13,008	1,019	14,027	Nalhâti	XXIII
...	...	...	...	...	...	...	Wardha Coal.	
...	...	...	...	...	...	...	Cherra-Companyganj	XXIV
4,295	7,223	158	5,360	17,036	...	17,036	Jorhât	XXV
2,36,895	2,36,972	68,985	5,25,609	13,03,455	...	13,03,455	Burma	XXVI
...	...	...	...	...	...	...	Toungoo-Mandalay	XXVII
...	...	...	...	1,71,78,193	12,63,149	1,84,41,342	TOTAL.	
17,736	30,167	9,846	6,65,999	8,83,187	74,727	9,57,914	(Under construction.)	
67,066	395	1,102	15,710	1,04,036	2,726	1,06,762	Sind-Pishin (Chaman Extension).	XXVIII
...	...	...	...	...	...	...	Mianwâli-Mâri	XXIX
...	...	...	...	...	...	...	East Coast	} XXX
...	499	274	25,802	39,942	...	39,942	Kistna bridge	
13,43,855	20,596	94,551	99,107	17,58,062	11,432	17,69,494	Mu Valley	XXXI
...	...	...	...	27,85,227	88,885	28,74,112	TOTAL.	
...	...	...	...	4,61,96,655	26,56,823	4,88,53,478	Carried over.	

Engineers and on temporary loan to the Delhi-Umballa-Kalka railway having been shown in the present statement under their class in the "Amount under adjustment," and the opening balance of 1890 is due to certain adjustments in connection with the verification and collection of stores completed when the statement for 1889 was submitted. and the opening balance of 1890 is due to stores in transit. previous year's statement is due to the exclusion of the value of "forms" from the present statement.

Statement of Stores transactions

Serial No.	RAILWAYS.	Balance on the 1st January 1890.	Receipts during the year.	Issues during the year.	BALANCE IN HAND		
					A	B	C
					Iron bridge-work.	Engineer's plant.	Workshop machinery.
		R	R	R	R	R	R
	Brought forward	4,50,48,256	5,97,91,121	5,86,42,722			
	Lines worked by Guaranteed Companies.						
XXXII	Great Indian Peninsula	64,58,142	1,01,45,456	91,33,453	...	...	...
XXXIII	Bombay, Baroda and Central India.	32,55,916	30,25,070	31,07,668	6,54,596	34,201	86,070
XXXIV	Madras	18,39,605	28,52,550	21,30,988	1,71,449	7,103	8,299
	South Indian	30,64,008	43,77,688	44,10,015	...	...	...
	TOTAL	1,46,17,671	2,04,00,764	1,87,82,124			
	Assisted Companies.						
XXXV	Delhi-Umballa-Kalka	6,02,145	57,10,177	58,83,569	175	137	34
XXXVI	Tarakeshwar	There are no stores on this railway.			...	...	...
XXXVII	Deoghur	1,696	3,597	3,857	...	...	...
XXXVIII	Rohilkhand-Kumaun (Company's section).	96,616	87,986	1,18,736	354	1,444	3,489
XXXIX	Darjeeling-Himalayan	1,26,249	1,23,092	1,47,781	...	...	...
XL	Dibru-Sadiya	} Exempted from submitting the statement of stores transactions.					
XLI	Thaton-Duyinzaiik						
	TOTAL	8,26,706	59,24,852	61,53,943			
	Lines owned by Native States and worked by Companies.						
XLII	Khámgaon	5,390	...	391	...	...	...
XLIII	Amráoti	9,155	...	460	...	...	...
XLIV	Bhopal-Itarsi (Native States section).	42,145	21,787	5,091	...	...	...
XLV	The Nizam's Guaranteed State.	6,61,317	12,45,026	11,55,310	3,744	19,597	23,463
XLVI	The Gaekwar's Dabhoi	} Exempted from submitting the statement of stores transactions.					
XLVII	The Gaekwar's Mehsána						
XLVIII	The Gaekwar's Petlád						
	TOTAL	7,18,007	12,66,813	11,61,252			
	<i>(Under construction.)</i>						
XLIX	Kolhapur	} Exempted from submitting the statement of stores transactions.					
	Lines owned by Native States and worked by State Railway Agency.						
L	Rájpura-Bhátinda	1,66,114	75,995	1,57,208	12,590	1,003	390
LI	Jammu and Kashmir (Native State section).	} Statement of stores transactions for 1890 not received.					
	TOTAL	1,66,114	75,995	1,57,208			
	Lines owned and worked by Native States.						
LII	Jodhpore	48,920	1,51,301	1,71,652	...	...	...
LIII	Bhánagar-Gondal-Junágarh- Porbandar.	3,90,846	7,49,513	7,67,616	3,483	26,596	2,602
LIV	Morvi	} Exempted from submitting the statement of stores transactions.					
	TOTAL	4,39,766	9,00,814	9,39,268			
	<i>(Under construction.)</i>						
LV	Jodhpore-Bikanir	} Statement of stores transactions for 1890 not received.					
	GRAND TOTAL	6,18,16,520	8,83,60,359	8,58,36,517			

on the several railways during 1890—concluded.

ON THE 31ST DECEMBER 1890.							RAILWAYS.	Serial No.
D	E	F	G	TOTAL BALANCE.	AMOUNT UNDER ADJUSTMENT ON THE 31ST DECEMBER 1890.	GRAND TOTAL AT DEBIT OF STORES ON THE 31ST DECEMBER 1890.		
Permanent-way.	Rolling-stock.	Station materials and fencing.	Tools and Stores.	R	R	R		
R	R	R	R	4,61,96,655	26,56,823	4,88,53,478	Brought forward	
...	...	...	...	74,70,145	5,51,363	80,21,508	Lines worked by Guaranteed Companies.	
6,80,163	5,94,532	1,38,103	9,85,653	31,73,318	2,68,191	34,41,509	Great Indian Peninsula	XXXII.
4,98,420	36,311	25,059	18,14,526	25,61,167	4,81,114	30,42,281	Bombay, Baroda and Central India.	XXXIII.
...	...	...	...	30,31,681	4,10,497	34,42,178	Madras	XXXIV.
				1,62,36,311	17,11,165	1,79,47,476	SOUTH INDIAN	
							TOTAL.	
							Assisted Companies.	
85,536	236	3,05,096	37,559	4,28,753	...	4,28,753	Delhi-Umballa-Kalka	XXXV.
...	...	...	...	...	...	...	Tárakeshwar	XXXVI.
321	596	...	519	1,436	...	1,436	Deoghur	XXXVII.
1,784	27,752	5,805	25,208	65,866	...	65,866	Rohilkhand-Kumaun (Company's section).	XXXVIII.
16,074	...	2,510	82,976	1,01,560	...	1,01,560	Darjeeling-Himalayan	XXXIX.
...	...	...	...	...	...	...	Dibru-Sadiya	XL.
				...	...	...	Thatón-Duyinzáik	XLI.
				5,97,615	...	5,97,615	TOTAL.	
							Lines owned by Native States and worked by Companies.	
4,999	...	...	...	4,999	...	4,999	Khámgaon	XLII.
8,695	...	...	...	8,695	...	8,695	Amráoti	XLIII.
55,364	...	3,477	...	58,841	...	58,841	Bhopal-Itársi (Native States section).	XLIV.
1,41,620	2,81,380	24,158	2,57,071	7,51,033	13	7,51,046	The Nizam's Guaranteed State.	XLV.
...	...	...	...	...	...	...	The Gaekwar's Dabhoi	XLVI.
				...	...	...	The Gaekwar's Mehsána	XLVII.
				...	...	...	The Gaekwar's Petlád	XLVIII.
				8,23,568	13	8,23,581	TOTAL.	
							(Under construction.)	
...	...	...	...	...	...	...	Kolhapur	XLIX.
							Lines owned by Native States and worked by State Railway Agency.	
22,795	...	47,551	572	84,901	588	85,489	Rájpura-Bhátinda	L.
...	...	...	...	...	...	...	Jammu and Kashmir (Native State section).	LI.
				84,901	588	85,489	TOTAL.	
							Lines owned and worked by Native States.	
15,692	...	...	12,877	28,569	...	28,569	Jodhpore	LII.
55,106	58,772	13,061	2,13,123	3,72,743	...	3,72,743	Bhávnaagar-Gondal-Junágarh-Porbandar.	LIII.
...	...	...	...	...	...	...	Morvi	LIV.
				4,01,312	...	4,01,312	TOTAL.	
							(Under construction.)	
...	...	...	...	...	...	...	Jodhpore-Bikanir	LV.
				6,43,40,362	43,68,589	6,87,08,951	GRAND TOTAL.	

Miscellaneous.

East Indian Railway.

16. *Manauri oil mills.*—The outturn of these mills, as regards the chief articles of production during the last two years, may be compared as follows:—

DESCRIPTION.	1889.		1890.	
	Gallons.	Cost.	Gallons.	Cost.
		₹		₹
Castor oil, first quality	342,884	3,74,685	310,567	4,18,363
Linseed oil, raw	15,960	25,066	12,021	18,709
Linseed oil, boiled	5,115	8,046	4,757	8,100

The average cost of outturn for castor oil, first quality, for 1890 is ₹1-5-7 as against ₹1-1-6 per gallon in 1889, the cause of the excess being that the contract rate for castor seed in 1890 was ₹5-10-10 per cwt. against ₹4-7-0 per cwt. in 1889.

Bengal and North-Western, including the Tirhoot State Railway.

17. *Oil.*—Canadian mineral oil has been largely used for locomotives, as well as for oiling vehicles; and a large stock sufficient for twelve months' consumption is still on hand. Its use has led to considerable saving in expenditure, but excessive waste from leakage of the casks in which it is received necessitates the use of tanks for its storage pending consumption.

Ferries.—The temporary slipway laid down on the sands at Paleza Ghát proved a success and enabled the railway to dock and survey three steamers and two cargo flats during the season, as effectually as could be done by sending the vessels to dock in Calcutta, and at one-fourth the usual cost. Moreover, the materials for constructing the slip are still available for laying down again whenever required.

Bengal-Nágpur Railway.

18. Castor oil obtained from Cawnpore is used on this railway for lubricating and lighting throughout, the rate being ₹323-12-0 per ton delivered at Nágpur.

Canadian lubricating oil was tried on this railway with no better result than castor oil and as the Great Indian Peninsula and East Indian railways which are the terminal lines, do not use Canadian oil, its use on the Bengal-Nágpur railway would, it is supposed, entail great inconvenience in running through vehicles. But it is quite possible that these oils might be used indiscriminately in the same axle box.

Rajputana-Malwa Railway.

19. The rates and consumption of vegetable oils supplied under contract were:

	1890.			1891.			Consumption.
	₹	a.	p.	₹	a.	p.	
Castor oil	17	4	0	15	0	0	per cwt. 605 tons.
Linseed oil, raw	1	13	6	1	11	3	per gallon 3,425 gallons.
Linseed oil, boiled	1	14	9	1	12	6	" 4,150 "
Cocoanut oil	14	15	0	15	15	6	per cwt. 5 tons.

From a run of 24,366 vehicle miles it has been ascertained that there is practically no difference in the lubricating power of mineral and castor oil. The duty performed was 4,195,190 *Journal foot tons* per pound of castor and mineral oil, respectively, while the consumption was—

Mineral—8 lbs. 3 ozs.
Castor—8 lbs. 3½ ozs.

so that unless the market value of castor oil is appreciably in excess of that of the other, there will be no advantage in making a change in the lubricant.

South Indian Railway.

20. Castor oil is the universally adopted lubricant and as it is a product of some of the districts traversed by the line, its displacement by Canadian oil appears improbable.

North-Western Railway.

21. *Oil mill.*—The statement below shows the total quantity and average cost of vegetable oils manufactured in the railway oil-mill, Lahore, during the last two years:

DESCRIPTION.	1889.		1890.	
	Total quantity manufactured.	Average cost per cwt.	Total quantity manufactured.	Average cost per cwt.
	Cwt.	R a. p.	Cwt.	R a. p.
Castor oil	25,414	13 11 8	20,800	17 6 4
Linseed oil, raw	564	18 7 9	122	17 8 1
Linseed oil, boiled . . . . .	...	...	301	17 3 6
Til oil	368	20 2 8	...	...

The increased cost of production of castor oil for 1890 is owing to the cost of the seed being higher than the average for the previous years. The smaller outturn of the oil was due to a supply of rape oil having been obtained from the Punjab Oil and Flour Mills Company, Lahore.

Fuel.—The following statement shows the quantity and cost of fuel of every description taken into stock during 1890-91.

DESCRIPTION.	Quantity.	Cost.	Average cost per ton, 1890-91.	Average cost per ton, 1889-90.
			R a. p.	R a. p.
	Tons.	R	R a. p.	R a. p.
Patent fuel . . . . .	...	...	...	23 0 0
English coal	41,206	8,36,985	20 5 0	22 4 2
Bengal coal	44,215	6,55,460	14 13 2	14 14 9
Dandot coal	25,938	2,59,383	10 0 0	13 0 0
Khost coal	5,312	79,678	15 0 0	15 0 0
Wood	158,722	6,92,609	4 5 10	4 7 11
English coke	802	30,513	38 0 9	41 2 1
Bengal coke	2,031	48,999	24 2 0	24 3 9

The average cost per ton of all descriptions of fuel was slightly less than in the previous year.

Stone quarries.—The Taraki quarry has been largely extended and a new quarry (Guznara) has been opened near the Sohawa tunnel for the supply of stone to the Punjab Irrigation Department.

Another quarry in the Sodhi range between Khewra and Haranpur is being opened for the supply of protection stone for large bridges. The distance from the points on the Khewra branch to the extreme end of the new siding is 3 miles, and with a small branch to the quarry, the total length of line laid, including siding, will be $4\frac{1}{2}$ miles. The quarry is capable of yielding enormous quantities of stone.

Oudh and Rohilkhand Railway.

22. In consequence of a great rise in the price of castor oil in 1889, Canadian lubricating oil was introduced, and extensive experiments were made with a view to ascertain its relative value compared with castor oil. The result was that for lubricating carriage, wagon, and tender journals, both the oils were considered to be equally good; but for machinery, castor oil was found to be much superior.

During 1890-91 all journals were lubricated with the Canadian oil, and unless the price of castor oil falls considerably below that of Canadian, or unless the lubricating qualities of the latter fall off, its use will still be continued.

Eastern Bengal State Railway.

23. The following statement shows the quantity of oil used during 1890, as compared with the year 1889, and the average cost:

	1889.		1890.	
	Quantity used.	Average cost per gallon.	Quantity used.	Average cost per gallon.
Castor oil	Gal.	} 1 3 9	Gal.	} 1 6 10
	58,512		30,520	
From local markets	39,013		72,765	
	97,525		103,285	
Cocoanut oil	10,904	1 4 3	1,507	1 4 10
Canadian oil	14,681	1 0 0	13,378	1 0 0
Kerosine oil	30,903	0 11 9	37,401	0 10 9

Burma State Railway.

24. *Fuel.*—Samples of coal from the northern Shan States and from near Yamethin have been tried, but the results were very poor. The Shwebo Mining Syndicate is also raising coal, the value of which as a locomotive fuel has not yet been tested. During the year the only coal obtained from England was a cargo of between four and five hundred tons of Auckland West Hartley steam coal, which was purchased from a local firm at ₹19 per ton. Bengal coal and wood have been the principal fuels.

The burning of patent compressed fuel, which cost ₹25 per ton, was discontinued during the year and Bengal coal adopted in lieu; 13,265 tons were purchased at a cost of about ₹16 per ton delivered in Rangoon.

Oil.—The Burma mineral carriage lubricant manufactured by the Burma Oil Company from earth oil was experimented with, and gave satisfaction. During the year under review 13,660 gallons were purchased at Rs-14-0 per gallon, against Rs-7-0 per gallon paid for castor oil.

Great Indian Peninsula Railway.

25. Castor oil is used for axle boxes of vehicles on this railway, and the same oil is chiefly used for machinery. For lubricating engine cylinders a mixed oil, consisting of one part Kellogg's non-corrosive oil and one part cocoanut oil has been used with satisfactory results. Canadian oil has not yet been introduced on this railway.

Bombay, Baroda and Central India Railway.

26. The rates and consumption of vegetable oils supplied under contracts were—

	1890.			1891.			Consumption.
	R	a.	p.	R	a.	p.	
Castor oil	. 17	4	0	13	15	0	per cwt. 185 tons.
Linseed oil, raw	. 1	13	6	1	11	3	per gallon 1,100 gallons.
Linseed oil, boiled	. 1	14	9	1	12	6	" 6,549 "
Cocoanut oil	. 14	15	0	15	15	6	per cwt. 162 tons.

Oil mills are now being put up at Sábarmati (the junction of the broad and metre gauge sections), and it is hoped they will soon be in working order.

Madras Railway.

27. The oil required has always been purchased by contract. For lubricating purposes castor oil was universally used prior to 1890, but in May of that year a trial consignment of Canadian oil was obtained, which gave such satisfaction as a carriage and wagon lubricant that a second shipment has been procured. It is proposed to use this oil in future for this purpose and for steam cylinders and valves, but it does not answer well for general engine lubricating, as it runs away too quickly and is very dirty in appearance.

Bhāvnagar-Gondal-Jundāgarh-Porbandar Railway.

28. Thirty-two thousand three hundred and sixty-five deodar sleepers have been obtained in India for renewals at the rate of Rs-8 each, delivered at Delhi station. A contract for the supply of one lakh of sleepers of the same sort has been made with a local contractor at Rs-7 each. The sleepers are under supply.

SECTION II.—ROLLING-STOCK.

29. The statement on pages 20 to 25 shows the stock of locomotive engines and vehicles on the several Indian railways on the 31st December 1890, and that on pages 26 to 29 the number of vehicles adapted for military purposes.

East Indian Railway.

30. *Couplings.*—The whole of the postal vans have now a coupling at each end, and the work of providing a second coupling to the joint stock vehicles of the East Indian railway and Great Indian Peninsula Railway Companies is in progress; but none of the ordinary coaching or goods stock of this railway are so fitted.

The Board has, however, agreed that future indents for stock shall provide for couplings at both ends in some proportion to be fixed hereafter.

Bengal and North-Western including the Tirhoot State Railway.

31. All the Intermediate class and carriages for native females on the line have been provided with latrine accommodation.

The leaking of locomotive boiler tubes has not been so bad and will no doubt disappear when the use of river, instead of well, water is arranged for at Sonapore and Savan.

The Eucalyptus fluid continues to give satisfaction in removing scale from the tubes and boilers.

Bengal-Nágpur Railway.

32. The following are details of locomotive, coaching and goods stock turned out of the shops for traffic :

6 Locomotive engines.

Coaching—7 Composite carriages (1st and 2nd).

12 Third class carriages (ordinary).

Goods—50 Iron-covered goods wagons.

52 Iron-covered goods wagons converted from bolster wagons.

6 Timber trucks.

The following stock has been completed, but not yet delivered to the Traffic Department :

1 Composite carriage (1st and 2nd class).

36 Third class carriages.

6 Iron-covered goods wagons.

8 Timber trucks (underframes in use by Engineering Department).

15 Covered goods (underframes fitted with wooden sides for use on Kutni branch).

The late Nágpur-Chhattisgarh State railway stock.—Under agreement with the Bengal-Nágpur Railway Company, the Government of India took over from the Company all the serviceable locomotives and rolling-stock of the late Nágpur-Chhattisgarh State railway, of which the greater portion was disposed of by transfer to the Southern Mahratta railway in 1889, leaving the following which were kept in reserve for the construction of feeder lines in the Central Provinces :—

Composite (1st and 2nd class)	1
Third class	9
Brake-vans	6
Low-sided wagons	45
Timber trucks	2
Reserved carriages	2
Officers' saloon carriages	2
Crane, 3-ton	1
Covered goods wagons	75
Big "F" class engines	4

But as this scheme was abandoned and the locomotives and rolling-stock were deteriorating, they were offered to the Government of Bengal at a reduction of 10 per cent. of their present value. The offer was accepted, and the locomotives and rolling-stock were delivered free of cost at the Naiháti Junction of the Eastern Bengal State railway.

This disposed of all the locomotives and rolling-stock taken over by Government from the Bengal-Nágpur Railway Company, with the exception of 2 "B" class engines, which were also subsequently transferred to the Burma State railway.

Indian Midland Railway.

33. *Brakes.*—None of the stock is fitted either with the automatic vacuum or Westinghouse brake, but 87 engines are fitted with the simple vacuum brake.

Rajputana-Malwa Railway.

34. *Couplings.*—Two thousand seven hundred and ninety-one vehicles, out of a total of 8,851, are fitted with flexible buffers and screw couplings.

Wheels and axles.—The substitution of iron axles for those of steel which were found defective is being pushed forward. Out of the 20,457 axles in running use, 9,198 had been changed on 31st March 1891.

Verification and renumbering of the rolling-stock.—The verification and renumbering of the stock was conducted during the year.

Conversion of the Cleminson's into covered bogie wagons.—The conversion of the Cleminson's into covered bogie wagons was commenced in August 1890, and 94 out of a total of 245 completed by 31st March 1891.

Provision of latrine accommodation in third class carriages for women.—The number of vehicles provided with the above accommodation considered necessary on this railway is 55. Of these, 5 were completed during the year, and the others are in hand.

The pattern employed is that which was approved of by the Railway Conference of Locomotive and Carriage Superintendents.

Wardha Coal State Railway.

35. No addition was made to the rolling-stock during the year under review, but one 1st and 2nd class composite and one 4th class carriage were written off in March 1890, and one 3rd class was converted into a 4th class in July 1890. Since the 1st January 1891 all the rolling-stock has been disposed of, with the exception of 2 locomotive engines, 38 ballast wagons, and 1 travelling crane, which have been kept back for the use of the Warora colliery.

Southern Mahratta Railway, including the Mysore section.

36. *Brakes.*—No automatic vacuum brakes have been fitted to stock running on this line, but the following have been fitted with Westinghouse brakes:—

Locomotives	3
Coaching vehicles	12

Couplings.—None of the rolling-stock, except locomotives, are fitted with double couplings.

Buffers and couplings.—A portion of the stock now in use has been fitted with Jones' patent buffers and couplings, and arrangements are being made to fit all the remaining coaching and goods vehicles of both lines, including the vehicles now in course of erection, with the same type of buffers and couplings.

Axles.—It is also in contemplation to substitute iron axles for steel on the whole of the Company's stock.

South Indian Railway.

37. During the year under review 54 coaching vehicles were added to the stock and charged to Capital account, and 77 goods vehicles were converted. There are no continuous or automatic brakes in use on the line.

Couplings.—The whole of the stock on the Villupuram-Guntakal section is fitted with Jones' horizontal couplings.

North Western Railway.

38. *Brakes.*—Satisfactory progress was made in the work of fitting the automatic vacuum brake gear to the rolling-stock of this railway during the year. Passenger trains fitted with this brake commenced running on the Sind-Pishin section in November 1890. Up to the 31st March 1891 the following stock was fitted with the vacuum brake:—

	No.
Locomotives	64
Coaching vehicles	383
Goods vehicles	<i>Nil.</i>

Couplings.—The whole of the coaching stock has been provided with a coupling at each end and the goods is also being similarly fitted.

Oudh and Rohilkhand Railway.

39. *Rolling-stock adapted for military purposes.*—The carrying capacity of 39 covered goods wagons was raised from 6 horses or 8 ponies to 8 horses or 10 ponies.

Couplings.—The whole of the stock of this railway, both passenger and goods, has couplings at both ends.

Eastern Bengal State Railway.

40. *Brakes.*—Up to the 31st March 1891 the following were the standard gauge locomotive and vehicle stock fitted with the automatic vacuum brake gear:

Locomotives	4
Coaching vehicles	15

inclusive of 3 milk-vans fitted with train pipes only.

Couplings.—The whole of the standard gauge rolling-stock has couplings at both ends.

Burma State Railway.

41. The principal works undertaken during the year by the shops were:

- Fitting 147 third class carriages with hinged seats and racks to carry rifles.
- Providing foot-boards to 113 third class carriages.
- Fitting screw couplings to 1,362 vehicles.
- Fitting shelves in 80 third class carriages.
- Constructing 10 horse-boxes and 17 luggage vans.
- Replacing wooden underframes of 28 vehicles with iron underframes.
- Fitting 30 third class carriages with reserved compartments and latrines for women as required by the Railway Act.
- Providing wagons with brake gear: work in progress.
- Making a spring furnace and removing two cupolas from old to new foundry.
- An engine traverser was erected, and the new tender shop finished.

Couplings.—During the official year 1890-91, 888 goods vehicles were fitted with Jones' flexible buffers and screw couplings; all the coaching stock, consisting of 639 vehicles and 1,161 goods vehicles, having been fitted with these couplings prior to 1890. There now remain 333 vehicles to be fitted with similar couplings.

Great Indian Peninsula Railway.

42. *Brakes.*—The following rolling-stock is fitted with continuous brakes :

	Automatic Vacuum.	Simple Vacuum.
Engines, including tenders	63	192
Vehicles	67	<i>Nil.</i>

Couplings.—The whole of the coaching stock of this railway is fitted with screw couplings at both ends. The goods stock is fitted with chain couplings, but screw couplings are now being adopted for a portion of this stock, and it is expected that about 30 per cent. of the goods vehicles will be so fitted during the financial year 1891-92.

Bombay, Baroda and Central India Railway.

43. *Brakes.*—The whole of the passenger stock is fitted with the non-automatic vacuum brake; 45 engines required for working passenger trains have also been so fitted.

Couplings.—All passenger vehicles have screw couplings at both ends.

The goods stock has chain couplings at both ends, but in accordance with a recent decision, all the goods vehicles are to be fitted with one screw coupling each; this will be done on receipt of material, which has been ordered from England.

Madras Railway.

44. During the year under review 82 engines passed through the shops for repairs, and the following vehicles were erected :

- 6 composite carriages and 99 covered goods wagons—chargeable to Revenue.
- 1 composite and 35 third class carriages and 8 brakevans—chargeable to Capital.

Besides these 99 iron-covered goods wagons were received from England.

Couplings.—The fitting of all the Company's stock with two couplings has been sanctioned, and work will be put in hand as soon as funds are available from next year's budget.

There are no continuous or automatic brakes in use on the line.

Bhavnagar-Gondal-Junagarh-Porbandar Railway.

45. Nearly all the passenger stock and a portion of the goods stock has been fitted with Jones' patent couplings.

Morvi Railway.

46. One engine was constructed in the Morvi shop under the superintendence of the Locomotive and Carriage Superintendent, the cylinders and wheels only being obtained from England.

The stock of engines and coaching and goods vehicles has been well maintained, and improvements have been effected in the spring gear and widening of seats.

List of locomotive engine stock on the severa

Progressive No.	CLASS OR DESCRIPTION OF ENGINE.	STATE LINES WORKED BY COMPANIES.										STATE LINES WORKED BY THE									
		STANDARD GAUGE.				METRE GAUGE.						STANDARD GAUGE.				METRE GAUGE.					
		I.—East Indian.	V.—Bengal-Nagpur.	VI.—Indian Midland.	Total.	III.— Tirhoot, Bengal and North- Western.	VIII.—Rajputana-Malwa.	XI.—Southern Mahratta.	XII.—Southern Mahratta, (Mysore section).	VIII.—Tirupuram-Guntakal, Nel- lore-Tirupati section.	VIII.—Tirupuram-Guntakal, Vil- upuram-Tiruvannamalai section.	Total.	XVII.—North Western.	XX.—Oudh and Rohil- khand.	XXI.—Eastern Bengal, includ- ing Calcutta and South-Eastern & XXII.—Bengal Central railways.	Wardha Coal.	Total.	Lucknow-Sitapur-Seramau.	XXI.—Eastern Bengal (Northern Bengal, Assam- Behar and Dacca Sections).	XXVI.—Burma.	Total.
1	Tank . . . . .	...	...	10	10	...	...	...	...	...	...	5	...	3	...	8	1	...	...	...	1
2	Tank, mail	5	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	Passenger	96	...	42	138	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	Passenger and goods . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	7	7	...	...	...	...	...
5	Tank, goods	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	Goods	473	...	35	508	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	Mixed . . . . .	...	...	(a)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Miscellaneous . . . . .	...	...	5	5	...	...	(b) 1	...	...	1	24	1	...	...	25	...	...	...	...	...
9	Class A . . . . .	...	...	...	...	1	5	5	5	...	15	6	13	...	19	1	2	3	6	...	...
10	Class B . . . . .	...	...	...	...	...	29	...	...	...	29	84	31	...	115	...	...	...	...	...	...
11	Class C . . . . .	...	...	...	...	...	20	...	...	...	20	(c) 4	30	4	38	...	...	...	...	...	...
12	Class D . . . . .	...	...	...	...	9	1	...	...	...	10	15	...	...	15	...	...	...	...	...	...
13	Class E . . . . .	...	...	...	...	9	69	...	...	...	78	10	...	...	10	...	26	24	50	...	...
14	Class F . . . . .	...	...	...	...	45	116	145	21	10	35	10	...	...	10	10	30	62	102	...	...
15	Class H . . . . .	...	6	...	6	...	...	...	...	...	...	145	47	...	192	...	...	...	...	...	...
16	Class J . . . . .	...	...	...	...	...	...	...	...	...	...	17	...	...	17	...	...	...	...	...	...
17	Class L . . . . .	...	59	...	59	...	...	...	...	...	...	220	...	...	220	...	...	...	...	...	...
18	Class M . . . . .	...	...	...	...	35	...	...	...	...	35	...	...	...	...	...	...	...	...	...	...
19	Class N . . . . .	...	...	...	...	30	...	16	...	...	46	...	...	...	...	...	...	...	...	...	...
20	Class O . . . . .	...	...	...	...	36	109	26	...	...	171	...	...	...	...	...	17	18	35	...	...
21	Class P . . . . .	...	...	...	...	...	...	...	...	...	...	25	...	...	25	...	...	...	...	...	...
22	Class Q . . . . .	...	...	...	...	...	...	...	...	...	...	17	...	...	17	...	...	...	...	...	...
23	Class K.S. . . . .	...	...	...	...	...	...	...	...	...	...	101	...	...	101	...	...	...	...	...	...
24	Class S . . . . .	...	...	...	...	...	...	...	...	...	...	10	...	...	10	...	...	...	...	...	...
25	Class S.S. . . . .	...	...	...	...	...	...	...	...	...	...	6	...	...	6	...	...	...	...	...	...
26	Fairlie's . . . . .	...	...	...	...	...	...	...	...	...	...	(c) 15	...	...	15	...	...	...	...	...	...
27	Twin . . . . .	...	...	...	...	...	...	...	...	...	...	20	...	...	20	...	...	...	...	...	...
28	Tramway . . . . .	...	...	...	...	...	...	...	...	...	...	4	...	...	4	...	...	...	...	...	...
TOTAL		576	65	92	733	100	414	177	42	10	50	793	(d) 613	156	98	7	874	12	75	107	194

(a) Ballast (construction) engines.

(b) South Indian railway type.

(c) Metre gauge engines.

(d) Includes 19 metre gauge engines (4 Class C and 15 Fairlie's; also 4 Ferozepore steam tramway engines)

List of goods stock on the several

Progressive No.	PARTICULARS	STATE LINES WORKED BY COMPANIES.										STATE LINES WORKED BY THE									
		STANDARD GAUGE.				METRE GAUGE.						STANDARD GAUGE.				METRE GAUGE.					
		I.—East Indian.	V.—Bengal-Nagpur.	VI.—Indian Midland.	Total.	III.—Bengal and North-Western.	VIII.—Rajputana-Malwa.	XI.—Southern Mahratta.	XII.—Southern Mahratta (Mysore section.)	Vilupuram-Guntakal, Nellore-Tirupati section.	Vilupuram-Guntakal, Vilupuram-Tiruvannamalai section.	Total.	XVII.—North Western.	XX.—Oudh and Rohilkhand.	XXI.—Eastern Bengal, including Calcutta and South-Eastern and XXII.—Bengal Central railways.	Wardha Coal.	Total.	Lucknow-Sitapur-Seraman.	XXI.—Eastern Bengal (North-Bengal, Assam-Bihar and Dacca sections).	XXVI.—Burma.	Total.
1	Wagons, covered goods (wooden)	3,450	...	916	4,366	638	2,049	2,643	400	...	5,750	6,790	...	112	45	6,947	202	699	...	2,757	
2	Wagons, covered goods iron or iron rectangular	2,481	871	...	3,352	(b) 988	2,322	...	...	100	100	3,510	...	3,812	1,138	...	4,950	...	731	(j) 1,856	731
3	Wagons, iron, cylindrical	...	...	...	...	...	...	...	...	...	...	...	...	...	274	...	274	...	...	...	...
4	Wagons, open, high-sided	1,684	...	600	2,284	...	143	75	150	...	...	368	572	62	76	...	710	...	...	...	...
5	Wagons, medium-sided	...	160	...	160	...	150	111	...	...	...	261	...	...	...	...	...	...	...	...	...
6	Wagons, low-sided and ballast	...	185	360	545	291	2,401	944	105	110	150	3,991	2,084	270	124	38	2,516	66	121	544	731
7	Wagons, cotton (covered)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Wagons, open, for jute	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	111	...	111
9	Wagons, pilot	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	Wagons, dummy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	Wagons, plank	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	...	4	...	4
12	Wagons, fuel	...	...	...	...	...	...	...	...	...	...	...	...	...	82	...	82	...	...	50	50
13	Wagons, coal or coke	11	...	...	11	...	...	...	...	...	...	...	(f) 2	...	...	320	322	...	...	...	...
14	Wagons, horse or cattle	18	...	...	18	...	...	25	3	...	...	28	...	...	5	...	5	...	...	...	...
15	Wagons, platform	...	20	...	20	...	55	36	...	4	...	95	...	...	...	...	...	...	...	...	...
16	Wagons, flat	...	...	...	...	...	...	...	...	...	...	...	61	...	...	...	61	...	...	...	...
17	Wagons, relief	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	Trucks, bogie	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	6
19	Trucks, cattle and sheep	5	...	...	5	4	...	...	...	...	...	4	...	6	...	...	6	...	...	100	100
20	Trucks, timber	105	16	...	121	82	79	40	27	4	...	232	72	207	17	...	296	10	40	245	295
21	Trucks, platform	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20	...	20
22	Trucks, fuel	...	...	...	...	...	...	...	...	...	...	...	18	...	...	...	18	...	...	...	...
23	Trucks, bolster	...	187	...	187	...	...	...	...	...	...	...	...	...	...	...	26	...	...	...	...
24	Trucks, six-wheeled	...	...	...	...	...	...	...	...	...	...	...	60	...	...	...	60	...	...	...	...
25	Brake vans	209	65	(a) 38	312	...	...	...	...	1	1	...	...	...	28	3	31	...	6	...	6
26	Powder vans	31	4	4	39	1	35	11	2	2	...	51	55	8	...	1	64	1	2	6	9
27	Salt wagons	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Accident vans	...	...	10	10	...	15	10	3	...	...	28	...	4	5	...	9	2	...	...	2
29	Treasure vans	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	Tool or stores vans	...	...	...	...	9	1	...	...	...	...	10	...	...	1	...	1	...	1	...	1
31	Coal hoppers	1,151	...	...	1,151	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Oil tanks, or oil tank wagons	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	Water tanks or water tank wagons	...	...	8	8	...	4	...	...	...	...	4	20	2	...	...	31	...	...	...	...
34	Rail carriages or trucks	...	...	...	...	...	...	...	...	...	...	...	(h)	...	...	...	...	...	...	...	...
35	Miscellaneous vehicles	18	...	...	18	6	...	...	...	...	...	6	9	...	...	...	96	...	...	...	...
36	Travelling cranes	...	5	8	13	12	26	15	5	2	...	60	41	13	4	1	59	2	10	15	27
37	Accident cranes	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL		9,163	1,513	1,944	12,620	2,015	7,280	3,910	695	212	251	14,319	(i) 9,924	4,384	1,896	408	16,612	283	1,753	2,818	4,854

(a) Includes twelve Construction brake vans.

(b) Two hundred are on bogie frames.

(c) Eleven hundred and eighty are bogie wagons.

(d) Seventy-five covered goods and seventy-five high-sided are on bogie frames.

(e) Includes 37 metre gauge wagons and 21 Ferozepore steam tramway trucks.

(f) Metre gauge vehicles.

(g) One metre gauge.

(h) Eleven metre gauge trucks.

(i) Includes 51 metre gauge and 21 Ferozepore steam tramway vehicles.

(j) Five hundred are bogie wagons.

(k) Fifty ballast wagons are on bogie frames.

(l) Twenty-five are iron bogie trucks.

Indian railways on the 31st December 1890.

STATE.	LINES WORKED BY GUARANTEED COMPANIES.					ASSISTED COMPANIES.					LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.		LINES OWNED AND WORKED BY NATIVE STATES.			Progressive No.							
	4' GAUGE.	2' 6" GAUGE.			2' GAUGE.	STANDARD GAUGE.				METRE GAUGE.	METRE GAUGE.		2' GAUGE.	2' 6" GAUGE.	STANDARD GAUGE.		2' 6" GAUGE.	METRE GAUGE.		2' 6" GAUGE.			
		XXIII.—Nalhati.	XXI.—Eastern Bengal (Kamia-Dharila branch).	XXIV.—Cherra-Company-ganj.		Total.	XX.—Jorhat.	XXXII.—Great Peninsula.	XXXIII.—Bombay, Baroda and Central India.		XXXIV.—Madras.	Total.						South Indian.	XXXVII.—Deoghur.		XXXVIII.—Rohilkhand-Kumaun.	XL.—Dibru-Sadiya.	Total.	XXXIX.—Darjeeling-Himalayan.	XLI.—Thahton-Duyinzak.	XLV.—The Nizam's Guaranteed State.	XLVI.—The Gackwar's Dabhoi.	LII.—Jodhpore.	LIII.—Bhavnagarh Gondal-Junagárh-Forbandar.	Total.	LIV.—Morvi.
15	(m)1	...	...	1	...	4,479	1,787	330	6,596	856	...	120	59	179	29	...	170	26	...	227	227	10	1
...	400	400	277	...	...	...	...	4	...	...	...	...	...	...	...	2
...	3
...	...	(n)118	118	...	...	876	880	1,687	3,443	(p)663	...	...	364	364	(q)92	...	(r)469	155	...	...	...	...	4
13	39	...	39	(o)61	2,116	653	267	3,036	(s)254	...	...	40	65	105	(t)17	...	...	...	...	584	584	43	6
...	77	...	...	...	...	...	...	...	...	...	...	...	...	7
...	25	...	...	25	11	...	36	...	...	...	...	...	...	...	...	...	...	...	1	...	8
...	9
...	10
...	130	130	...	...	...	...	...	...	...	...	...	...	...	...	...	11
...	12
...	6	...	...	...	...	...	...	...	...	...	...	...	...	13
...	14
...	15
...	16
...	17
...	16	...	...	16	...	...	...	...	...	...	...	10	...	...	21	21	35	18
...	21	...	50	71	(u)37	...	...	...	...	...	...	...	...	...	6	6	...	19
...	...	2	2	4	3	191	60	150	401	3	...	20	30	50	...	...	...	6	...	16	16	...	20
...	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	21
...	22
...	23
...	24
...	25
...	17	60	...	60	34	(s)2	6	7	15	...	(s)1	11	6	(s)4	...	4	2	25
...	6	...	27	3	...	1	...	...	...	...	...	...	...	2	2	...	26
...	150	...	...	150	...	...	...	...	...	...	...	...	...	...	...	...	...	27
...	28
...	29
...	1	1	30
...	31
...	32
...	19	19	...	12	4	4	20	...	...	...	...	...	...	2	...	...	...	...	...	...	33
...	34
...	(s)8	...	8	2	(s)41	...	...	(s)120	6	126	1	...	35
...	46	...	6	52	1	...	2	...	2	...	2	...	...	...	2	2	...	36
...	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	37
28	67	139	206	71	7,799	3,617	3,031	14,447	2,209	(s)10	189	526	725	147	(s)42	667	193	(s)124	866	990	99	99	

(m) Used for the carriage of mails.
 (n) Called "Open goods wagons" (iron under frames).
 (o) Forty are on bogie frames.
 (p) Two hundred and fifty wagons are of iron bodies.
 (q) One hundred wagons are of iron bodies.
 (r) Includes 2 trucks on cotton truck frames and 8 on bogie frames.

(s) Figures taken from the Administration Report on Indian railways, Part I, for 1890-91 (page 161).
 (t) Four "Clemenson's" cars.
 (u) Thirteen "Clemenson's" cars.
 (v) Includes low-sided and ballast wagons.

Statement showing the rolling-stock on Indian railways adapted

Serial Number.	RAILWAY.	GAUGE.	NUMBER OF COACHING VEHICLES FITTED FOR AMBULANCE PURPOSES.					Percentage on entire stock of the class on the line.	NUMBER OF COACHING HOOKS OR RACKS FOR			
			First class.	Second class.	Inter-mediate class.	Third class.	Total.		First class.	Second class.	Inter-mediate class.	
<i>State Lines worked by Companies —</i>												
I	East Indian	Standard	...	...	...	45	45	6'00	...	...	...
III	{ Tirhoot Bengal and North-Western }	Metre .	...	...	...	...	...	...	...	...	...
V	Bengal-Nágpur	Standard	...	...	...	...	...	...	(d) 20	...	(e) 7
VI	Indian Midland	Standard	...	...	...	...	...	...	...	6	...
VIII	Rajputana-Malwa	Metre .	...	...	...	5	5	0'45	...	2	14
XI	Southern Mahratta	Metre .	...	...	...	3	3	0'56	(d) 14	21	...
XII	Southern Mahratta (Mysore section)											
<i>State Lines worked by the State —</i>												
XVII	North Western	Standard	...	...	...	414	414	35'69	(j) 27	20	22
XX	Oudh and Rohilkhand	Standard	...	...	...	15	15	5'77	...	...	20
	Lucknow-Sitapur-Seramau	Metre .	...	...	...	...	...	...	...	...	(e) 2
XXI	Eastern Bengal. { Eastern, Southern and Central sections Northern and Behar sections Dacca section Kaunia-Dharlla branch	Standard	...	...	16	...	16	30'77	...	...	(a) 6
		Metre .	...	...	...	...	...	...	(d) 16	8	21
		Metre	(d) 5	4	(e) 1
		2' 6"
XXIII	Nalháti	4' 0"	...	...	...	...	...	...	...	...	...
XXIV	Cherra-Companyganj	2' 6"	...	...	...	...	...	...	...	...	...
XXV	Jorhát	2' 0"	...	...	...	...	...	...	...	...	...
XXVI	Burma	Metre .	...	...	...	68	68	20'61	...	...	...

CHAP. I.—STORES AND ROLLING-STOCK.

21

for Military purposes on the 31st December 1890.

VEHICLES FITTED WITH SUSPENDING RIFLES.			NUMBER OF HORSE BOXES.	NUMBER OF COVERED GOODS WAGONS ADAPTED FOR THE CARRIAGE OF HORSES.				NUMBER OF OPEN GOODS WAGONS SUITABLE FOR THE CARRIAGE OF ARTILLERY GUNS.				Serial Number.	REMARKS.
Third class.	Total.	Percentage on entire stock of the class on the line.		Wooden.	Iron.	Total.	Percentage on entire stock of the class on the line.	Medium or high-sided.	Ballast or low-sided.	Total.	Percentage on entire stock of the class on the line.		
...	...	...	(a)75	Composite. (b)791		791	13'34	...	1,309	1,309	77'60	I	(a) To carry 6 horse each. (b) To carry 8 horse each. Fitted with side ventilator windows and breas rails.
30	30	14'70	(c)15	(c)74	...	74	5'11	...	53	53	17'96	III	(c) To carry 4 horse each. (d) These are composite (1st and 2nd class carriages.
83	110	80'29	(a)4	...	...	...	...	20	...	20	6'27	V	(e) These are composite (intermediate and 3rd class) carriages
146	152	90'47	(f)10	...	(g)496	496	100'00	...	220	220	25'28	VI	(f) To carry 3 horse each. (g) To carry 8 horses or 10 ponies each.
99	115	10'32	(c)82	(h)200	...	200	4'58	...	1,988	1,988	72'32	VIII	(h) 100 to carry 6 country-bred horses or 10 ponies each. 100 to carry 4 wale horses, 6 country bred horses or 10 ponies each.
90	125	23'71	(c)24	...	(i)	...	...	102	853	955	64'18	XI XII	(i) 100 iron covered goods wagons to carry 6 horses each were under construction.
406	475	40'95	(k)124	(l)75	(m)3,743	3,818	56'23	123	801	924	35'65	XVII	(j) Including composite (1st and 2nd class carriages. (k) 31 to carry 3 horse each and 93 to carry 6 horses each (l) To carry 8 horse each. (m) 412 to carry 12 horse each and 3,331 to carry 8 horses each
...	20	100'00	(n)27	(g)150	(g)300	450	11'80	...	213	213	44'65	XX	(n) 23 to carry 6 horse each and 4 to carry 4 horses each.
28	30	66'66	(c)1	(c)3	...	3	1'92	...	...	...	...	...	(o) Of these four are (intermediate and 3rd class) composites.
67	73	28'85	(p)6	(q)9	(a)545	554	45'15	...	86	86	100'00	...	(p) 5 to carry 3 horses each and 1 to carry 6 horses.
141	186	96'87	(c)8	(r)571	...	571	99'65	...	(s)22	22	13'33	XXI	(q) 4 to carry 8 horses each and 5 are ambulance wagons suitable for the carriage of cattle.
36	46	100'00	(c)2	(c)128	...	128	100'00	...	...	...	...	...	(r) 252 to carry 4 horses each and 319 to carry 4 ponies each.
1	1	16'66	...	(c)2	...	2	13'33	...	...	...	...	XXIII	(s) Includes 2 covered goods wagons.
138	138	41'82	(c)20	(t)73	(t)50	123	6'63	...	166	166	27'85	XXVI	(t) To carry 4 horses, mules or artillery bullocks, or 6 small bullocks or ponies each.

CHAPTER II.

CAPITAL.

The following paragraphs detail the capital transactions of some of the more important railways during the year 1890 :

East Indian Railway (Standard gauge).

2. The capital transactions of the East Indian railway as recorded in the Finance and Revenue Accounts of the Empire may be thus given. The figures do not represent the actual money expended in constructing the line, but the capital expenditure incurred by the State in the purchase of the line and subsequent additions :

The capital authorised to be raised by the East Indian Railway Company, under Acts of 1849 and 1864 for the purpose of the undertaking, aggregated	£	27,000,000
Further capital authorised to be raised by the issue of redeemable debentures and irredeemable debenture stock		4,450,000
Total authorised capital		<u>31,450,000</u>

The sum actually raised, and which has been consolidated into the capital stock of the Company, was	£	26,200,000
Debentures and debenture stock issued		4,450,000
Total capital raised		<u>30,650,000</u>

Under the Purchase Act, 42 and 43 Vict., Cap. CCVI, the capital stock of the Company was taken over by Government at a commuted value of £125 for every £100 of capital stock. The par value of this stock on the purchase became

Under the same Act the debentures and debenture stock were virtually taken over by Government as State debt to the amount of

Total sum paid for the East Indian railway may consequently be stated at

Of the £37,200,000, representing the valuation at which Government accepted the railway, the following portions have been taken over or purchased :

Debentures and debenture stock taken over	£	4,450,000	@	£	4,450,000
Redemption of £64,350, East Indian railway 4½ per cent. debenture stock, by the issue of India 3½ and 3 per cent. stock, being the excess of the amount of 3½ and 3 per cent. stock issued in exchange over the amount of debenture stock redeemed—					
3½ per cent.			@		8,028
3 per cent.			@		8,387
Commuted capital stock purchased by the Secretary of State by issue of India 4 per cent. stock	£	5,115,939	@	£	5,115,939
Carried over		<u>9,565,939</u>	@		<u>9,582,354</u>

	£	£	
Brought forward	9,565,939	@	9,582,354
Commuted capital stock purchased by the Secretary of State by issue of 4 per cent. rupee debt	10,675	@ (a)	10,675
Commuted capital stock purchased by the Secretary of State by issue of India 3½ per cent. stock	2,001,880	@	2,235,168
Commuted capital stock purchased by the Secretary of State by issue of India 3 per cent. stock	170,663	@	215,243
	11,749,157	@	12,043,440
			£12,032,765
			Rx. 10,675

So that up to the end of 1890 the commuted value of capital stock and debentures and debenture stock, valued at £11,749,157, was paid for by the State by the creation of a "Debt" of £12,032,765 + Rx. 10,675, and the balance of the *commuted capital remains to be discharged* by the payment of an annuity of £850,538, which is exclusive of the annuity deferred.

The amount of "Debt" thus created has been transferred in the Finance and Revenue Accounts in the year concerned to the "Debt incurred for productive Public Works," and has been so recorded against the capital account of the East Indian railway,

Since the purchase of the line—1st January 1880 to 31st December 1890—the capital transactions of the East Indian railway stand as follows:

Debt incurred in, or created for, the purchase of the line—

	£	£	Rx.
East Indian railway debentures and debenture stock	4,450,000		
India 4 per cent. stock issued in redemption of portion of the East Indian railway annuity	5,115,939		
India 4 per cent. rupee debt issued in redemption of portion of the East Indian railway annuity . . . . .	...		10,675
India 3½ per cent. stock issued in redemption of portion of the East Indian railway annuity, and 4½ per cent. debenture stock	2,243,196		
India 3 per cent. stock issued in redemption of portion of the East Indian railway annuity, and 4½ per cent. debenture stock	223,630		
Capital outlay incurred since purchase of line—	12,032,765		
Overdrawn capital to the 31st December 1879	£	26,45,269	
Capital account including unfinished construction works—	2,33,40,939		
	2,59,86,208		
Capital advance and stores suspense accounts	71,84,523		
	3,31,70,731		
<i>Deduct</i> —Value of stores, cash, deposits, &c., received from the Company on purchase of line	£	99,85,434	
	2,31,85,297		
		...	2,318,530
TOTAL		12,032,765	2,329,205

(a) Rx.

Patna-Gya State Railway (Standard gauge).

3. The total capital outlay on final heads of account to the 31st December 1890 amounted to ₹43,46,743.

There was no amount at debit of suspense. Owing to credits, chiefly due to materials returned from the Dakra hill siding, the transactions of the year resulted in a credit of ₹327 to capital.

The net earnings of the year were in excess of the interest charges, ₹173,823, by ₹106,276.

Bengal and North-Western and Tirhoot Railways (Metre gauge).

4. The total capital outlay on final heads of account to the 31st December 1890 was as follows :

	₹
Bengal and North-Western railway	2,53,10,544*
Tirhoot State railway	2,28,51,202
TOTAL	<u>4,81,61,746</u>

The amount held in suspense was :

Bengal and North-Western railway	4,84,360
Tirhoot State railway	1,42,963
TOTAL	<u>6,27,323</u>

The expenditure of the year on final heads was as follows :

(1) Bengal and North-Western railway	5,66,763
(2) Tirhoot State railway	19,28,612
TOTAL	<u>24,95,375</u>

The outlay under (1) was chiefly on the construction of the Bahramghat and Revelganj branches, and under (2) on the construction of the Sitamarhi branch and Khanwa Ghât extension.

The total capital outlay, including suspense, to the end of 1890 on the two railways and the interest charges thereon, were as follows :

	Bengal and North-Western railway.	Tirhoot State Railway.
	₹	₹
Capital outlay to the end of 1890	2,57,94,904	2,29,94,165
Interest charges for 1890	11,04,244	9,14,207
Excess of net earnings over interest charges	5,54,912	

Bareilly-Pilibhit State Railway (Metre gauge).

5. The total capital outlay on final heads of account to the 31st December 1890 amounted to ₹15,37,682.

There was no balance at debit of the suspense accounts.

The expenditure of the year on final heads was ₹5,728.

* Includes outlay on lines not opened for traffic, ₹5,22,637, but excludes interest on capital during construction, ₹10,90,014.

The total capital outlay to the end of 1890, and the interest charges thereon, were as follows :

	<i>R</i>
Capital outlay to the end of 1890	15,37,682
Interest charges	61,404
Deficit of net earnings below interest charges of 1890	20,883

Bengal-Nágpur Railway (Standard gauge).

6. The capital raised for the purposes of this railway has, since the Administration Report of 1889-90 was issued, been increased by a further sum of £1,200,000; the total capital at end of December 1890 therefore stood at £6,905,781 as follows :

	<i>£</i>
Share capital	3,000,000
Debenture loan sanctioned by Secretary of State, bearing interest at 3½ per cent.	1,000,000
Debenture loan sanctioned by Secretary of State, bearing interest at 3¼ per cent.	500,000
Under Victoria 51, c. 5, bearing interest at 3¼ per cent.	2,400,000
Capital not bearing interest	5,781
TOTAL	6,905,781
To this should be added the cost of the Katni-Umaria section R48,53,830 at R13 per £	} 373,371
TOTAL	7,279,152, or

R9,46,28,976 converted at R13 per £.

The capital outlay on final heads of account to the 31st December 1890 amounted to R7,73,90,260.

The amount held in suspense was R40,76,502.

The following table shows the capital expenditure during the year :

	Open line.	Line under construction.	TOTAL.
	<i>R</i>	<i>R</i>	<i>R</i>
Preliminary expenses	7,360	...	7,360
Land	49,463	68,613	1,18,076
Formation	7,75,147	24,27,873	32,03,020
Bridgework	19,69,971	19,10,158	38,80,129
Fencing	72,273	7,275	79,548
Ballast and permanent-way	13,94,786	36,18,632	50,13,418
Stations and buildings	5,38,266	1,68,264	7,06,530
Plant	—55,198	—47,590	—1,02,788
Rolling-stock	1,57,055	...	1,57,055
General charges	5,45,417	4,86,083	10,31,500
TOTAL	54,54,540	86,39,308	1,40,93,848

The interest charges for the year 1890 amounted to R33,88,852, the net earnings being R5,47,463. The excess of interest charges over net earnings was R28,41,389.

Indian Midland Railway (Standard gauge).

7. The capital raised to the 31st December 1890 was :

	<i>£</i>
Share capital	3,000,000
Debenture bonds—	
@ 3½ per cent.	1,000,000
@ 3¼ per cent.	1,754,100
Advances from money raised under Act 51 Vict., Cap. 5	1,130,000
Capital not bearing interest	2,016
TOTAL	6,886,116

The total capital outlay on final heads to the 31st December 1890 was R7,88,56,497, divided as follows :

	R
Preliminary expenses	9,03,173
Land	5,52,943
Formation	78,54,576
Bridge-work	2,05,19,188
Fencing	24,86,112
Electric telegraph	275
Ballast and permanent-way	2,80,23,266
Stations and buildings	61,36,178
Plant	4,72,037
Rolling-stock	78,63,729
General charges	35,01,428
Commission, &c., on loans	2,91,551
Loss by exchange	2,52,050

The amount held in suspense at the close of the year was R44,58,328.

The expenditure of the year on final heads was R46,05,542, as follows :

	R
Land	59,463
Formation	82,439
Bridge-work	3,47,085
Fencing	3,10,277
Electric telegraph	-7,655
Ballast and permanent-way	5,41,299
Stations and buildings	10,74,599
Plant	92,479
General charges	7,120
Rolling-stock	20,98,436

The total capital outlay to the end of 1890, including suspense, and the interest charges for the year, were as follows :

	R
Capital outlay to the end of 1890, including suspense	8,33,14,825
Interest for the year 1890	33,94,210
Deficit of net earnings below interest charges	27,94,431

Rajputana-Malwa State Railway (Metre gauge).

8. The total capital outlay on final heads of account on the several sections of the system to the 31st December 1890 was as follows :

	R
Rajputana-Malwa railway	8,80,07,142
Holkar railway	1,30,09,568
Rewári-Ferozepore railway	1,27,16,976
Cawnpore-Achnera railway	1,14,52,778
TOTAL	12,51,86,464

The amount held in suspense for the entire system was R48,21,046.

The expenditure of the year on final heads was as follows :

	R
(1) Rajputana-Malwa railway	2,70,405
(2) Holkar railway	14,232
(3) Rewári-Ferozepore railway	11,936
(4) Cawnpore-Achnera railway	-3,694
TOTAL	2,92,879

The outlay under (1) was chiefly on account of alterations to rolling-stock, fencing the line, and additions and alterations under the head of "Stations and buildings;" under (3) there was an actual outlay of over ₹90,000, chiefly on fencing and a new workshop at Sirsa, the net outlay ₹11,936 being mainly due to a large return of material from the Tusham quarry siding and other works; and under (4) the credit was chiefly due to the return of material on the completion of the Muttra-Brindaban extension; the actual expenditure, ₹14,000, was spread over small works.

The following are the principal works on which outlay was incurred during the year:

	₹
Fencing main line, Rajputana-Malwa railway	49,958
Fencing main line, Rewári-Ferozepore railway	63,875
Alteration of 247 Clemenson's wagons to American type Bogie covered goods wagons	95,867

The total capital outlay, including suspense, to the end of 1890 on the entire system, and the interest charges thereon, were as follows:—

	Rajputana-Malwa railway, including Rewári-Ferozepore railway.	Holkar railway.	Cawnpore-Achnera railway.
	₹	₹	₹
Capital outlay to end of 1890	10,55,43,388	(a) 1,30,09,568	1,14,54,554
Interest for 1890 reckoned at 4 per cent. on the capital outlay to the end of 1889, and at 2 per cent. on capital outlay during 1890	42,32,758	5,70,218	4,58,302
Excess of net earnings over interest charges	32,32,824	—1,64,312	3,18,792

Southern Mahratta Railway, including the Mysore section (Metre gauge).

9. The total capital outlay on final heads on the combined lines to the 31st December 1890 amounted to ₹10,52,32,665, *vis.*, on the Southern Mahratta railway ₹9,09,53,991, and on the Mysore State railway, ₹1,42,78,674. This latter sum includes ₹1,90,025 on account of expenditure on the Mysore-Nanjangúd extension under construction at the end of the year. The amounts held in suspense were ₹23,31,025 on the Southern Mahratta railway, and ₹4,32,936 on the Mysore State railway.

The capital expenditure on final heads of account for the year amounted to ₹23,72,388, *i.e.*, ₹19,93,926 on the Southern Mahratta railway, and ₹3,78,462 on the Mysore State railway; and was incurred principally on "Land," "Formation," "Bridge work," "Fencing," "Ballast and permanent-way," "Stations and buildings," "General charges," and "Rolling-stock."

The following are some of the principal works on which capital expenditure was incurred during the year on open line. Expenditure to a large extent was also incurred on the Nandyál-Cumbum section of the Bellary-Kistna line, which was completed and opened for traffic in the middle of June 1890:

Southern Mahratta railway.

	₹
Junction works, Poona	1,42,099
Lowering the Great Indian Peninsula railway line through the Poona cantonment and erecting an overbridge at the Bund road to bring in the Southern Mahratta railway line to the eastern end of the Poona station	34,934
Quarters for locomotive staff at Ghorpuri	35,944
Workshops and store buildings, Hubli	42,512
Central office buildings, Dhárwár	55,757

(a) Interest on one crore of rupees calculated at 4½ per cent.

Mysore State railway.

	R
(Between Gubbi and Harihar).	
Earth-work	55,423
Ballasting	44,869

The capital authorized for the entire system (including the Mysore State railway), *viz.*, £7,000,000, was fully paid up before the close of June 1888, and has since been supplemented by advances received from the Secretary of State to the extent of £623,000. The total sum received for expenditure on capital account is detailed below :

	£	£	R
Capital authorized for the Southern Mahratta railway (including the Bel-lary-Kistna section)—			
Shares	3,500,000		
Debentures	2,300,000		
	5,800,000		7,06,00,000
For the Mysore State railway debentures		1,200,000	1,60,61,569
		7,000,000	8,66,61,569
Capital not bearing interest made up of premia and transfer fees		55,163	7,57,102
		7,055,163	8,74,18,671
Advances by the Secretary of State—	£		
1st April 1889	423,000		
1st October 1889	100,000		
1st July 1890	100,000		
	623,000		74,76,000
TOTAL	7,678,163		9,48,94,671

The amount of guaranteed interest paid to the shareholders during the calendar year ending December 1890 amounted to R31,39,444 on account of the Southern Mahratta railway, and R6,48,733 on account of the Mysore State railway.

The net earnings were less than the interest charges of 1890 by R21,64,707 for the Southern Mahratta railway, and R3,87,032 for the Mysore State railway.

Villupuram-Guntakal State Railway (Metre gauge).

10. The total capital outlay on final heads of account to the 31st December 1890 on the main line* was R1,16,75,383.

The amount held in suspense was R50,51,903.

The net expenditure of the year on final heads was R85,10,701, and was chiefly incurred on "Formation," "Bridgework," "Ballast and permanent-way," and "Rolling-stock."

The total capital outlay, including suspense to end of 1890, and interest charges thereon, were as follows :

	R
Capital outlay to the end of 1890	1,67,27,286
Interest for 1890 reckoned at 4 per cent. on the capital outlay	4,55,037
Inefficiency of net earnings below interest charges of 1890	4,48,525

*The capital expenditure on the Villupuram-Tiruvannamalai section, which was opened for traffic on the 17th November 1890, amounted approximately to R14,36,000 and to R14,39,000 including suspense.

The total capital outlay on final heads of account to the 31st December Nellore branch. 1890 was R62,26,218.

The amount held in suspense was R81,166.

The net expenditure of the year on final heads was R29,748, and was chiefly incurred on "Land," "Formation," and "Rolling-stock."

The total capital outlay, including suspense to end of 1890 on the Nellore branch of the Villupuram-Guntakal State railway and interest charges thereon, were as follows:

	R
Capital outlay to the end of 1890	63,07,384
Interest for 1890 reckoned at 4 per cent. on the capital outlay	2,53,078
Deficiency of net earnings below interest charges	2,00,716

North Western Railway (Standard gauge).

11. The total capital outlay on final heads of account to 31st December 1890 was as follows:

	R
North Western railway (including expenditure on final heads, late Sind, Punjab and Delhi railway)	38,04,04,722
Chenab bridge at Sher Shah	38,23,901
Jammu and Kashmir railway, British section	2,74,190
TOTAL	<u>38,45,02,813</u>

The distribution of this amount over the three sections of the North Western railway is as below:

	R
Main line, with other branches	28,16,24,361
Pishin section	6,97,94,960
Sind-Sagar and Khusálgarh branches	3,30,83,492
TOTAL	<u>38,45,02,813</u>

The amount held in suspense was R1,25,96,012.

The expenditure of the year was as follows:

	R
1. North Western railway	41,71,821
2. Chenab bridge, Sher Shah	2,62,634
3. Jammu and Kashmir railway, British section	88,789
TOTAL	<u>45,23,244</u>

The outlay under item (2) was chiefly in connection with the completion of the bridge over the river Chenab, including a junction station at Sher Shah, and under item (3) on "Ballast and permanent-way" and "Stations and buildings." On the North Western railway item (1), the expenditure was chiefly incurred on the following works:

	R
Troop traffic works	7,90,194
Bolan high level line	1,89,311
Mithri chord line and Bolan junction	57,530
Regrading Sibi-Násák Frontier, including certain flood works	2,21,160
Flood works, Sharigh division	2,88,235
Flood works, Bolan district	28,201
Jhelum-Ráwalpindi grades	6,97,636
Additional water-ways between miles 159 and 217, Saháranpur district	81,431
Ballasting, Sind-Sagar line	91,528
Additional bridges of 8 spans near Lárkhána	63,037
New engine-changing station at Dádú	43,509

	₹
Extension of line from Bandar head station to Kiámári	96,261
Enlarging engine shed, Sukkur	27,891
Bridge protection, Koreshi branch	28,904
Road over-bridge at Sahárunpur junction	29,933
Land at Kurrachee	29,164
Additional sidings at Bostán and Quetta	97,172
Locomotive workshops, Quetta	29,142
Raising and relaying line at mile 304, between Gulistán and Kila Abdulla	36,026
Training works and alterations to girders, Chenab bridge, Wazirabad	47,773
Continuous automatic vacuum brake gear for engines and vehicles	6,19,805
Draw-bars and cradles	33,191
Providing second screw coupling to every vehicle on the North Western railway	43,974
Supply and erection of machinery in the Locomotive workshops at Quetta and Sukkur	71,082
First class carriages for the Rájputra-Bhátinda railway	28,840
Brake-vans for Rájputra-Bhátinda railway	25,346

The total capital outlay including suspense to end of 1890 on the three sections, and the interest charges thereon, were as follows :

	Main line and other branches.	Pishin section.	Sind-Sagar and Khusálgarh branches.
	₹	₹	₹
Capital outlay to end of 1890	29,41,00,581	6,97,94,960	3,22,03,284
Interest for 1890 reckoned at 4% on the capital outlay to end of 1889, and at 2% on capital outlay during 1890	1,42,74,293*	27,86,816	13,16,311
Deficit of net earnings below interest charges	37,40,463	34,25,421	10,66,149

Amritsar-Pathánkot State Railway (Standard gauge).

12. The total capital outlay on final heads to the 31st December 1890 amounted to ₹56,06,703. The amount held in suspense was ₹6,730.

The expenditure during the year was ₹12,422.

The net earnings of the year fell short of the interest charges, ₹2,24,653 by ₹1,12,439.

Oudh and Rohilkhand Railway (Standard gauge).

13. The total capital outlay on final heads of account to the 31st December 1890 was as follows :

	₹
Oudh and Rohilkhand Guaranteed railway expenditure to 31st December 1888	8,91,57,649
State expenditure	12,61,764
TOTAL	9,04,18,813

The amount held in suspense was ₹23,70,467.

The expenditure of the year charged to final heads was ₹5,39,876; but owing to credits of ₹2,59,130 afforded to Capital for stores returned from the

* Includes ₹74,54,323 on account of annuity for the two half-years, payable on account of purchase-money of late Sind, Punjab and Delhi Railway.

Benares and Bálawali bridges, the net capital outlay amounted to ₹2,80,746. The following are the principal works on which the expenditure was incurred :

	₹
Protection works on the right and left banks of the Rám-ganga	88,122
Strengthening training works at the Bálawali Ganges bridge	29,160
Twenty-five second class carriages	97,555
Twenty-five composites (first and second class)	98,259
Other works	1,05,619

The total capital outlay including suspense to the end of 1890, and the interest charges thereon, were as follows :

	Amount.
	₹
Capital outlay to the end of 1890	9,37,89,280
Interest for 1890 on moneys borrowed in England for the purchase of the railway by the State at the average rate of exchange for the two half-years, and on outlay since 1889 at 4 per cent. on the capital outlay to the end of 1889 and at 2 per cent. on capital outlay during 1890	44,23,109
Deficit of net earnings below interest charges	6,68,631

Lucknow-Sitapur-Seraman State Railway (Metre gauge).

14. The total capital outlay on final heads of account to the 31st December 1890 amounted to ₹35,64,011. The amount held in suspense was ₹77,058.

The expenditure of the year on works and establishment was ₹5,541; but owing to credits amounting to ₹90,190, chiefly on account of the transfer of the cost of certain rolling-stock and 5 miles of line beyond Gola Gokaran Náth to the Lucknow-Bareilly section of the Rohilkhand-Kumaun railway, the capital outlay on final heads was reduced by ₹84,649.

The capital outlay, including suspense, to the end of 1890, and the interest charges thereon, were as follows :

	₹
Capital outlay to the end of 1890	36,41,069
Interest charges	1,51,326
Deficit of net earnings below interest charges of 1890	59,510

Eastern Bengal State Railway.

(Eastern and Southern sections, standard gauge; Northern, Assam-Bihar and Dacca sections, metre gauge; Kaunia-Dharilla branch, 2' 6" gauge.)

15. The total capital outlay on final heads of account to the 31st December 1890 was as follows :

	₹
Eastern section, including Calcutta, and South-Eastern section, standard gauge	5,50,98,303
Northern section, metre gauge	2,32,33,494
Assam-Bihar section, metre gauge	1,22,28,381
Dacca section, metre gauge	66,59,883
Kaunia-Dharilla branch, 2' 6" gauge	9,37,215
TOTAL	9,81,57,276

The distribution of this amount over the three sections of the Eastern Bengal State railway system was as follows :

	<i>R</i>
Eastern section	5,50,98,303
Northern section, including the Assam-Bihar section and the Kaunia-Dharlla branch	3,63,99,090
Dacca section	66,59,883
TOTAL	<u>9,81,57,276</u>

The total amount held in suspense was 23,35,834

The expenditure of the year 1890 was as follows :

	<i>R</i>
(1) Eastern section, including the Calcutta and South-Eastern railway	11,85,044
(2) Northern section :	1,64,121
(3) Dacca section	8,648
(4) Assam-Bihar section	12,97,167
(5) Kaunia-Dharlla branch	—4,988
TOTAL	<u>26,49,992</u>

The outlay on the Assam-Bihar section was on works for the general completion of the line, and that on the Dacca section was chiefly for a river face wall at Náráyanganj. The credit in the case of the Kaunia-Dharlla branch was due to sale of the steamer *Condor*. On the Eastern and Northern sections the expenditure was chiefly incurred on the following works :

	<i>R</i>
<i>Eastern section—</i>	
Raita extension	1,33,088
Budge-Budge extension	2,09,235
Acquiring line from the Port Commissioners for the Budge-Budge extension	2,28,054
Raising line between miles 116 and 121½	48,976
Third steamer of the <i>Alligator</i> type	95,785
One steam launch, two flats, and machinery for the "Dufferin" bridge	38,441
Five H class locomotive engines	1,69,032
<i>Northern section—</i>	
Five O class engines	97,913

The total capital outlay including suspense to end of 1890 on the following sections, and the interest charges thereon, were as follows :

	Eastern section.	Northern, including Assam-Bihar section and Kaunia-Dharlla branch.	Dacca section.	TOTAL.
	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>
Total outlay to end of 1890	5,74,27,569	3,64,05,658	66,59,883	10,04,93,110
Interest for 1890, calculated at 4 per cent. on the capital outlay to end of 1889, and at 2 per cent. on the outlay during 1890	*32,08,391	14,35,984	2,65,885	49,10,260
Excess of net earnings over interest charges	6,93,869	5,99,457	—1,33,265	11,60,061

* Includes R23,54,850 on account of interest on debenture loans and annuity for the two half-years on account of purchase of the Eastern Bengal line.

Bengal Central Railway (Standard gauge).

16. The total capital outlay on final heads of account to 31st December 1890 was ₹95,95,077.

The amount held in suspense was ₹93,135.

The expenditure of the year was ₹2,47,108, of which ₹2,34,172 was expended on completing the ballasting of the line; ₹2,711 on surveying proposed lines to Madaripur; and ₹3,888 on a saloon carriage for the Agent.

The interest* on paid up capital and advance by the Secretary of State for the year, ₹4,39,962 was in excess of the net earnings by ₹1,94,056.

Wardha Coal State Railway (Standard gauge).

17. The total capital outlay on the combined undertaking (railway and colliery) to the 31st December 1890 amounted to ₹70,06,181, the outlay on the railway being ₹56,24,004, of which a sum of ₹1,75,752 was held in suspense on account of the railway.

The capital expenditure during the year was as follows :

Bridge-work	23,958
Ballast and permanent-way	33,932
Plant	3,514
Rolling-stock	96,038
General charges	118
Loss by exchange	—1,69,484
Warora colliery works	27,665
Suspense	—64,314
TOTAL	—48,573
Expenditure in England	23,645
Expenditure in India	—72,218

Burma State Railway including the Toungoo-Mandalay Extension (Metre gauge).

18. The total capital outlay on final heads of account to the 31st December 1890 was as follows :

	₹
Irrawaddy and Sittang sections	2,94,09,504
Toungoo-Mandalay section	2,05,59,970
TOTAL	4,99,69,474

The amount held in suspense was :

	₹
Irrawaddy and Sittang sections	8,07,914
Toungoo-Mandalay extension	5,28,992
TOTAL	13,36,906

The expenditure of the year on final heads was as follows :

	₹
Irrawaddy and Sittang sections	2,83,454
Toungoo-Mandalay extension	2,71,837
TOTAL	5,55,291

* Converted at the average rate of exchange for the first half of the year, and at the average rate of the Secretary of State's bills drawn on India for the second half of the year.

Engineering plant which had previously been issued and charged off in the accounts of the Toungoo-Mandalay extension were returned to stock during the year at a valuation of R1,12,655.

The expenditure was chiefly incurred on the following works:

<i>Irrawaddy and Sittang sections—</i>		R
Rolling-stock fitted with Jones' couplings		82,251
<i>Toungoo-Mandalay extension—</i>		
Raising embankments		49,590
Shore line Mandalay		103,627

The total capital outlay, including suspense, to the end of 1890, and the interest charges thereon, were as follows:

	Irrawaddy and Sittang sections.	Toungoo-Mandalay extension.
	R	R
Capital outlay to end of 1890	302,17,418	2,10,88,962
Interest charges	12,02,987	8,43,124
Excess of net earnings over interest charges for 1890	3,87,882	—85,802

Great Indian Peninsula Railway (Standard gauge):

19. The capital of the Company was reduced during the year by £31,300, made up thus:

Matured 3½ per cent. debentures withdrawn	£	1,002,100
<i>Less—</i> Additional 3½ per cent. debentures issued:		
By conversion of 3½ per cent.	£	669,000
By new bonds		301,800
		970,800
Net reduction:		31,300

By these modifications the details of the capital bearing interest stood as under:

5 per cent. Share capital	£	20,000,000
4 " " Debenture stock		2,701,450
3½ " " Debentures		845,200
3½ " " Debentures		1,534,800
Total Capital bearing interest		25,081,450
<i>Add—</i> Capital not bearing interest	£	290,074
<i>Less—</i> Discount on—		
Debenture stock	£	225,891
		64,163
Total Capital paid into treasury		25,145,633

The year opened with an overdrawal of capital of £35,065, the interest on which for the first month of the year amounted to £54. The capital was again

overdrawn in the month of June 1890 by £102,999, the interest on which amounted to £193. The total interest for the first half amounting to £247 was recovered from the Company. In the second half of the year there were overdrawals each month which amounted at the close of December 1890 to £312,864, but as this was a non-surplus half-year, the interest, amounting to £4,267, was not recovered from the Company.

The state of the Company's capital account on 31st December 1890 is shown below:

	£	R
Capital authorized	26,666,666	29,09,09,083
Capital subscribed	25,145,633	27,43,15,992
Capital expended on—		
Final heads	24,736,099	26,98,48,349
Suspense (Stores)	735,305	80,21,509
Suspense (other accounts)	—12,907	—1,40,794
Balance available of—		
Capital authorized	1,208,169	1,31,80,019
Capital subscribed	—312,864	—34,13,072
Amount expended on—		
Way and works	20,816,160	22,70,85,380
Rolling-stock	3,919,939	4,27,62,969

The guaranteed interest paid on capital during the year was R1,29,83,034 in England and R22,824 in India, making a total of R1,30,05,858, equivalent to an average rate of 4.75 per cent. on $\frac{£25,081,450}{R27,36,15,819}$, the total capital bearing interest.

The net amount of capital withdrawn in England and in India during the year, amounting to R26,89,083, was expended as follows:

	R
On construction account	15,22,536
On stores suspense account	10,85,351
	<u>26,07,887</u>
Add—Decrease in credit balance of suspense (capital advance) account	81,196
	<u>26,89,083</u>

The principal capital works on which outlay was incurred are detailed below:

	Cash.	Stores.	TOTAL.
	R	R	R
Bhusával—New goods station	1,22,143	53,094	1,75,237
Doubling line—Bhusával to Shegaon	1,03,301	6,190	1,09,491
Poona—Junction arrangements	1,15,527	60,727	1,76,254
Twenty-three carriage trucks	2,218	27,269	29,487
Fifty low-sided bogie wagons	3,775	2,00,312	2,04,087
Forty additional locomotive engines . . . . .	...	5,61,446	5,61,446
Nágpur—Junction station arrangements	38,189	49,234	87,423
Byculla—New station	15,422	44,126	59,548

Bombay, Baroda and Central India Railway (Standard gauge).

20. The total capital outlay on final heads of account to the 31st December 1890 amounted to R9,21,07,465.*

* Includes R1,27,184, the outlay by the Company on the Pátri branch, but excludes R8,08,405, the State outlay on the branch, which was met from Civil Works grant.

The amount held in suspense was ₹32,08,580.
No additional capital was either authorized or raised during the year 1890.
The capital account on 31st December 1890 was as follows:

	£	£	₹
Capital authorized—			
Share capital	6,250,000		
Debenture bonds	3,663,500		
	—————		9,913,500 = 10,81,47,272
Capital subscribed—			
Share capital	6,250,000		
Debenture bonds converted into stock	1,300,300		
Debenture bonds at 3½ per cent. Debenture bonds at 3¼ per cent.	788,500		
Capital not bearing interest	18,419		
	—————		8,807,219 = 9,60,78,748
Capital Expenditure—			
On construction account, final heads	8,443,184 =		9,21,07,465
On stores in suspense	319,557 =		34,86,072
On advances in suspense	—25,437 =		—2,77,492
	—————		
TOTAL	8,737,304 =		9,53,16,045
Balance available of—			
Capital authorized	1,176,196 =		1,28,31,227
Capital subscribed	69,915 =		7,62,703

The expenditure of the year on final heads was ₹4,63,456.

This outlay was chiefly incurred on large bridges, erection of additional workshop machinery, and on various additions and alterations to stations, staff quarters, and workshops.

The following are the principal works on which outlay was incurred during the year:

	₹
Large bridges	1,02,209
Permanent-way	38,507
Re-arrangement of Viramgam station yard to admit the metre gauge line from Mehsána	30,095
Plant, locomotive and carriage and wagon	97,601
Rolling-stock, carriage and wagon	36,970

The total capital bearing interest to the end of 1890 was ₹9,58,77,818.

Guaranteed interest for 1890	₹45,78,954	
Contribution to Provident Fund	„ 74,982	46,53,936
Excess of net earnings over guaranteed interest charges, &c.		28,44,241

Madras Railway (Standard gauge).

21. The total capital outlay to the 31st December 1890 was ₹11,79,83,331, of which ₹30,42,281 was the value of stores in stock up to that date.

The amount held in suspense was ₹30,43,184.

The net expenditure on final heads during the year under review, after crediting ₹2,11,712, amounted to ₹6,64,239, and was incurred chiefly on the reconstruction of bridges, on laying new permanent-way over the Tungabhadra bridge, on additions and alterations at stations, and on the construction of coaching and goods stock.

The principal credits were as follows :

	R
Amount transferred to revenue in connection with the expenditure incurred on the Chitrávati bridge	98,181
Amount transferred to revenue in connection with the expenditure incurred on the Pápaghni bridge	80,000
Amount received from the Calicut Municipality, being half of their contribution towards the cost of the Ferók and Kallai bridges	11,250
Amount received from the Southern Mahratta railway, being the value of zinc roofing at Timmanacherla	7,384
Amount received for the sale of five old engines	8,693
TOTAL	<u>2,05,508</u>

The expenditure was chiefly on the following items :

	R
New bridge over the Pápaghni river	1,47,512
Laying new permanent-way over certain of the girder bridges, north-west line	81,190
Raising the line at the 60th mile, south-west line	29,142
<i>Rolling-stock—</i>	
200 iron covered goods wagons	1,93,537
36 third class carriages	72,919
14 ambulance third class carriages	49,716

The total subscribed capital of the Company on the 31st December 1890 stood as follows :

	£
Subscribed capital at { 5 per cent.	8,757,670
{ 4½ "	999,960
{ 4½ "	500,000
Debentures at { 3½ "	237,800
{ 3½ "	265,200
Capital not bearing interest	12,014
TOTAL	<u>10,772,644</u>

	R
Guaranteed interest for 1890	57,67,615
Net earnings	45,21,480
Deficiency of net earnings below guaranteed interest	<u>12,46,135</u>

South Indian Railway (Metre gauge).

22. The total capital outlay on final heads of account to the 31st December 1890 was R4,96,80,825, of which R34,14,847 was the value of stores in stock up to that date.

The amount held in suspense was R34,14,847.

The net expenditure on final heads during the year under review, after crediting R59,041, amounted to R3,07,063, and was incurred chiefly on "Earth-work," "Bridgework," "Ballast and permanent-way," "Stations and buildings," and "Carriage and wagon stock."

The principal credits were as follows :

	R
Value of plant, &c., transferred to the Villupuram-Guntakal State railway	38,028
Adjustments of wrong debits to capital	18,120

The expenditure was chiefly on the following items :

	R
Enlarging station accommodation at Villupuram to accommodate Villupuram-Guntakal State railway traffic	73,414
<i>Rolling-stock—</i>	
Composite and Second class carriages	53,808
Third class carriages	87,631

The total capital of the Company on the 31st December 1890 stood as follows :

	£
Consolidated stock at 5 per cent.	3,070,668
Consolidated stock at 4½ per cent.	137,612
Debenture stock at 4½ per cent.	425,000
Debenture bonds at 3½ per cent.	756,300
Debenture bonds at 3¼ per cent.	313,700

Capital not bearing interest	60,127
--	--------

4,703,280

60,127

4,763,407

R

Guaranteed interest on the above for 1890	22,52,460
Net earnings	26,08,432

Excess of net earnings over guaranteed interest	3,55,972
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Târukeshwar Railway (Standard gauge).

23. The total capital outlay from the commencement of operations to the 31st December 1890 amounted to R17,28,778.

Deoghur Railway (Metre gauge).

24. The total capital outlay on final heads to the 31st December 1890 amounted to R2,81,180.

The amount held in suspense was R1,436.

Rohilkhand-Kumaun Railway (Metre gauge).

25. The total capital outlay on final heads of account to the 31st December 1890 amounted to R20,37,223. The amount held in suspense was R3,79,829.

The expenditure of the year on final heads amounted to R26,535, incurred chiefly on renewing huldoo sleepers, but owing to credits of R2,91,032, due principally to the sale of certain rolling-stock and plant to the Lucknow-Bareilly section of the Rohilkhand-Kumaun railway, the total capital outlay was reduced by R2,64,497.

The total capital outlay, including suspense to the end of 1890, and the interest charges thereon, were as follows :

	R
Capital outlay to the end of 1890	24,17,052
Interest charges	1,24,163
Excess of net earnings over interest charges	26,839

Darjeeling-Himalayan Railway (2' 0" gauge).

26. The total capital outlay on final heads of account to the 31st December 1890 amounted to ₹28,50,547. The amount held in suspense was ₹1,01,560.

The expenditure of the year on final heads amounted to ₹36,313, of which ₹24,476 was incurred on "Stations and buildings."

Dibru-Sadiya Railway (Metre gauge.)

27. The total capital outlay on final heads of accounts to the 31st December 1890 was £466,871, or ₹57,06,682. The amount at debit of suspense was not ascertained. The suspense accounts of the Company were general, and hence were not kept in the railway books.

The expenditure incurred during the year on final heads was £12,555, or ₹1,87,932, which was chiefly on the following works:

	₹
Two E class engines	37,553
Building 155 high-sided wagons	1,08,191
Building 50 low-sided wagons	32,595

The interest charges of the year, ₹2,77,109, fell short of the net earnings by ₹1,00,149.

Khámgaon and Amráoti State Railways (Standard gauge).

28. The total capital outlay on final heads of account to the 31st December 1890 amounted to ₹4,85,521 on the Khámgaon, and to ₹4,36,460 on the Amráoti railway; the amounts held in suspense on these lines were ₹4,999 and ₹8,695, respectively.

No expenditure was incurred during the year on capital account.

The total capital outlay, including suspense, to the end of 1890, and the interest charges thereon, were as follows:

	Khámgaon State railway.	Amráoti State railway.
	₹	₹
Capital outlay to the end of 1890	4,90,520	4,45,155
Interest charges	19,627	17,815
Excess of net earnings over interest charges of 1890	6,465	28,438

Bhopal-Itársi State railway (Standard gauge).

29. The total capital outlay on final heads of account to the 31st December 1890 amounted to ₹61,73,110, and was divided between the Government of India and the Bhopal Durbar as under:

	₹
Government of India	12,85,077
Bhopal Durbar	48,88,033

The amount held in suspense was ₹1,11,967.

The expenditure of the year on final heads amounted to ₹1,24,409, and was incurred chiefly under "Ballast and permanent-way" ₹93,251.

The total capital outlay, including suspense to the end of 1890, and the interest charges thereon, were as under :

	Government of India.	Bhopal Durbar. :
	R	R
Capital outlay to the end of 1890	12,85,077	50,00,000
Interest charges	50,351	1,96,599
Deficit of net earnings below interest charges of 1890	66,924	2,52,691

The Nizam's Guaranteed State Railway (Standard gauge).

30. The total capital outlay on final heads of account to the 31st December 1890 amounted to ₹3,68,35,942; the amount held in suspense was ₹8,75,252.

The expenditure of the year on final heads, amounting to ₹2,42,451, was incurred chiefly on "Carriage and wagon stock" ₹1,47,291, and on "Stations and buildings" ₹68,305.

The total capital outlay, including suspense to the end of 1890, and the interest charges thereon, were as follows :

	R
Capital outlay to the end of 1890	3,77,11,194
Interest charges	19,39,368
Deficit of net earnings below interest charges of 1890	8,99,778

Rajpura Bhatinda State Railway (Standard gauge).

31. The total capital outlay on final heads of account to the 31st December 1890 amounted to ₹64,15,004, the amount held in suspense was ₹85,530.

The expenditure of the year on final heads was ₹3,38,419 incurred chiefly on "Ballasting" ₹2,14,735, "Stations and buildings" ₹42,587, and "Land" ₹41,720.

The total capital outlay including suspense to the end of 1890, and the interest charges thereon, were as follows :

	R
Capital outlay to the end of 1890	65,00,534
Interest charges	2,57,661
Deficit of net earnings below interest charges of 1890	2,536

Jammu and Kashmir State Railway, Native State section (Standard gauge).

32. The total capital outlay on final heads to the 31st December 1890 amounted to ₹11,19,846, the amount held in suspense being ₹1,17,226.

The expenditure during the year 1890 was ₹4,32,733, incurred chiefly on "Bridge-work," "Ballast and permanent-way," and "Stations and buildings."

The net earnings of the year fell short of the interest charges, ₹44,604, by ₹30,834.

Jodhpore State Railway (Metre gauge).

33. The total capital outlay on final heads of account to the 31st December 1890 was ₹22,73,338. The expenditure of the year amounted to ₹1,971, but owing to credits of ₹2,611, the total capital outlay was reduced by ₹640.

Bhavnagar-Gondal-Junagarh-Porbandar State Railway (Metre gauge).

34. The total capital outlay on final heads of account to the 31st December 1890 was ₹ 1,64,45,102. The distribution of this amount over the four proprietary States was as below:

	₹
Bhavnagar	67,27,283
Gondal	45,60,703
Junagarh	34,23,693
Porbandar	17,33,423
TOTAL	<u>1,64,45,102</u>

The amount held in suspense was ₹ 3,96,949.

The expenditure of the year on final heads was ₹ 6,04,259; and was incurred chiefly on the following works:

	₹
Earth-work	63,539
Ballast and permanent-way	75,635
Bridges	1,06,477
Six Composite and 40 Third class carriages	48,186

The total capital outlay, including suspense, to end of 1890 and the interest charges thereon, were as follows:

	₹
Capital outlay to the end of 1890	1,68,42,051
Interest for 1890	7,21,761
Deficit of net earnings below interest charges	1,21,494

Average mileage capital cost of Indian railways.

35. On pages 50 to 53 will be found a statement showing the average mileage capital cost of Indian railways on the 31st December 1890, distributed, as far as possible, over main heads of expenditure, exclusive of steam ferries and suspense items.

Railway bridges and tunnels.

36. The statements on pages 54 to 61 give the details of the cost of some of the large railway bridges and tunnels in India.

Statement showing the average mileage capital cost of Indian railways on the 31st December

Serial number.	RAILWAY.	LENGTH OF LINE.			PRELIMINARY EXPENSES.		LAND.		FORMATION.		BRIDGEWORK.		FENCING, &c.		ELECTRIC TELEGRAPH.		
		Double	Single.	Total.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	
		Miles.	Miles.	Miles.	R	R	R	R	R	R	R	R	R	R	R	R	
	STANDARD GAUGE.																
	STATE LINES WORKED BY COMPANIES.																
I.	East Indian	474'14	1,051'30	1,525'44	Distribution over main heads cannot be given												
II.	Patna-Gya . . . . .	...	57'20	57'20	6,904	121	64,00	1,119	2,50,012	4,371	2,88,785	5,045	1,85,16.	3,237	...	...
V.	Bengal-Nágpur . . . . .	...	586'01	586'01	14,86,732	2,537	2,31,254	395	61,53,843	10,501	1,36,50,727	23,291	2,13,50.	364	...	...
VI.	Indian Midland . . . . .	...	677'35	677'35	9,03,173	1,333	5,52,043	816	75,54,575	11,396	2,05,19,188	30,293	24,86,112	3,670	2.5	...
VII.	Bhopal-Itársi (British section).	Included with Native State section, No. XLIV															
X.	Dhond-Manmád . . . . .	...	145'50	145'50	1,28,528	883	97,593	671	9,14,803	6,287	21,77,070	14,963	2,09,964	1,443	...	...
XIII.	Bezváda Extension . . . . .	...	21'47	21'47	15,319	714	46,938	2,186	1,75,513	8,175	96,545	4,497	13,936	649	...	...
	STATE LINES WORKED BY THE STATE.																
XVII.	North Western	2'25	2,390'25	2,392'50	(c)	32,40,903	1,355	21,44,863	896	1,81,71,096	15,954	5,29,77,042	34,682	61,43,544	2,693	8,72,076	36
XVIII.	Amritsar-Pathánkot . . . . .	...	64'79	64'79	Distribution over main heads cannot be given											
XIX.	Jammu and Kashmir (British section).	...	8'49	8'49	4,64	547	2,350	260	7,865	926	5,63	664	3,449	406	...	...
XX.	Oudh and Rohilkhand . . . . .	...	692'55	692'55	10,66,011	1,539	1,26,147	181	31,04,998	4,483	2,45,56,102	35,458	15,73,450	2,272	46,129	6
XXI.	Eastern Bengal—Eastern and Southern sections.	29'60	219'69	249'29	Distribution over main heads cannot be given												
XXII.	Bengal Central . . . . .	...	125'01	125'01	1,44,573	1,157	25,969	208	7,18,568	5,738	12,87,149	10,296	4,04,477	3,236	12,933	10
	Wardha Coal . . . . .	...	46'50	46'50	91,642	1,971	4,745	102	3,02,318	6,501	10,70,331	23,018	2,21,989	4,795	...	...
	LINES WORKED BY GUARANTEED COMPANIES.																
XXXII.	Great Indian Peninsula	458'95	829'2	1,288'22	Distribution over main heads cannot be given												
XXXIII.	Bombay, Baroda and Central India.	60'11	408'79	468'90	Distribution over main heads cannot be given												
XXXIV.	Madras	42'41	793'89	836'30	Distribution over main heads cannot be given												
	ASSISTED COMPANIES.																
XXXVI.	Tárákeshwar . . . . .	...	22'23	22'2	Distribution over main heads cannot be given											
	LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.																
XLII.	Khámgaon . . . . .	...	7'50	7'5	36	49	1,110	149	41,036	5,871	57,634	7,685	7,360	982	...	...
XLIII.	Amráoti . . . . .	...	5'50	5'5	11,799	2,145	2,450	445	20,377	3,7	62,10	11,292	11,699	2,127	...	...
XLIV.	Bhopal-Itársi (Native State section).	...	57'11	57'11	...	...	13,198	231	15,07,188	26,791	18,46,566	32,334	64,420	1,128	...	...
XLV.	The Nizam's Guaranteed State.	...	329'20	329'20	Distribution over main heads cannot be given												
XLVIII.	The Gaekwar's Petlád . . . . .	...	13'35	13'35	Distribution over main heads cannot be given											
	LINES OWNED BY NATIVE STATES AND WORKED BY STATE RAILWAY AGENCY.																
L.	Rájpura-Bhátinda . . . . .	...	107'94	107'94	59,422	551	48,35	448	2,68,838	2,490	5,36,976	4,975	1,84,686	1,711	...	...
LI.	Jammu and Kashmir (Native State section)	...	15'92	15'92	23,934	1,503	...	...	34,533	2,16	3,00,296	8,863	1,566	98	...	...
	TOTAL STANDARD GAUGE	1,067'46	8,671'83	9,739'29	...	...	...	...	...	...	...	...	...	...	...	...

(a) The decrease as compared with last year's report is due to certain credits.

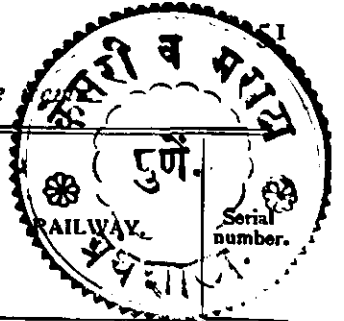
(b) Includes Rs. 91,541 on account of commission, &c., on loans not shown in the preceding columns.

(c) Includes 112'16 miles either temporarily closed or constructed but not opened, the outlay on which is included with the outlay on the open length.

(d) Includes Rs. 23,21,271 on account of maintenance and sundries not included in the preceding columns.

CHAP. II.—CAPITAL.

1890, distributed over main heads of expenditure, exclusive of steam ferries and suspense



BALLAST AND PERMANENT-WAY		STATIONS AND BUILDINGS		PLANT		ROLLING-STOCK		GENERAL CHARGES		LOSS BY EXCHANGE		TOTAL		Serial number.
Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Amount.	Per mile.	
R	R	R	R	R	R	R	R	R	R	R	R	R	R	
...	
23,62,695	41,306	5,80,787	10,154	67,972	1,188	1,42,455	2,491	2,39,866	4,192	1,58,106	2,764	35,15,04,792	2,30,428	
2,27,51,628	38,825	44,04,814	7,517	16,03,401	2,744	70,61,910	12,037	40,52,442	6,915	6,53,185	1,115	43,46,743	75,992	
2,80,23,266	41,369	61,36,178	9,059	4,72,137	697	78,63,720	11,610	35,01,427	5,169	2,52,050	372	6,22,72,468	1,06,265	
...	
50,20,008	34,502	8,03,960	3,520	1,81,771	1,249	17,298	119	7,73,610	5,317	6,56,990	4,515	7,88,56,496	1,16,419	
6,03,617	28,114	2,92,312	13,613	8,991	419	20,354	949	1,17,275	5,462	...	...	1,09,81,595	75,475	
...	...	...	...	...	...	...	...	...	...	...	...	...	13,90,830	64,750
10,99,16,275	4,794	3,49,28,909	14,599	90,59,628	3,786	5,42,09,940	22,658	2,64,42,565	11,052	86,40,816	3,033	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	37,94,18,928	1,58,587
1,90,452	22,433	31,561	3,717	3,745	441	...	...	19,191	2,390	...	...	56,06,703	86,537	
2,51,96,875	36,383	96,70,560	13,963	21,13,780	3,190	1,41,10,699	20,808	85,54,042	12,352	...	...	2,74,190	32,296	
...	...	...	...	...	...	...	...	...	...	...	...	...	9,04,18,813	1,30,559
37,95,782	30,364	10,45,090	8,300	3,20,076	2,560	10,27,198	8,217	7,11,592	5,692	...	...	5,33,24,258	2,13,904	
17,85,159	38,391	3,56,500	7,667	2,16,617	4,659	9,42,559	10,270	4,55,343	9,792	...	...	95,95,975	76,754	
...	...	...	...	...	...	...	...	...	...	...	...	...	54,48,253	1,17,166
...	...	...	...	...	...	...	...	...	...	...	...	...	26,98,48,349	2,09,472
...	...	...	...	...	...	...	...	...	...	...	...	...	9,29,15,870	2,01,597
...	...	...	...	...	...	...	...	...	...	...	...	...	11,49,41,050	1,36,949
...	...	...	...	...	...	...	...	...	...	...	...	...	17,28,773	77,768
2,78,789	37,172	49,141	6,552	3,431	458	11,669	1,516	3,1967	4,262	...	...	4,55,521	64,736	
2,41,571	43,922	45,092	8,199	3,010	518	8,64	1,571	29,709	5,402	...	...	4,36,460	79,356	
19,73,035	34,541	3,80,807	6,658	26,600	467	...	...	3,51,202	6,125	...	...	61,73,110	1,08,092	
...	...	...	...	...	...	...	...	...	...	...	...	...	3,68,35,942	1,11,895
...	...	...	...	...	...	...	...	...	...	...	...	...	6,47,824	48,526
41,08,621	38,064	2,55,931	7,930	83,583	774	...	...	2,68,589	1,458	...	...	64,15,004	59,431	
5,25,127	33,048	1,19,329	7,495	23,141	1,454	...	...	90,920	5,711	...	...	11,19,846	70,342	
...	...	...	...	...	...	...	...	...	...	...	...	...	1,58,49,86,899	1,62,742

(e) Includes Rs 1,01,672 on account of loss on working, not included in the preceding columns.
 (f) Excludes Rs 13,82,176 on account of the Warora colliery. The decrease as compared with last year's report is due to adjustment of loss by exchange between the railway and the colliery.
 (g) Includes the Pátri branch, the State outlay (Rs 08,405) on which was met from the Civil Works Grant. The capital outlay shown in this table is inclusive of this amount.

Statement showing the average mileage capital cost of Indian railways on the 31st December 1890,

Serial number.	RAILWAY.	LENGTH OF LINE.			PRELIMINARY EXPENSES.		LAND.		FORMATION.		BRIDGEWORK.		FENCING, &C.		ELECTRIC TELEGRAPH.	
		Double	Single	Total	Total	Per mile.	Total	Per-mile.	Total	Per mile.	Total	Per mile.	Total	Per mile.	Total	Per mile.
	METRE GAUGE.	Miles.	Miles.	Miles.	R	R	R	R	R	R	R	R	R	R	R	R
	STATE LINES WORKED BY COMPANIES.															
III.	Tirhoot . . . . .	...	322'53	322'53	1,83,607	569	7,51,702	2,331	10,21,502	3,167	39,18,293	12,147	8,64,757	2,681	...	...
	Bengal and North-Western	...	376'00	376'00	3,01,960	803	...	...	17,50,296	4,655	45,70,638	12,156	2,06,103	548	...	...
	Bareilly-Pilibhit . . . . .	...	36'00	36'00	50,619	1,406	43,693	1,214	99,091	2,753	2,13,082	5,919	36,323	1,009	...	...
VIII.	Rajputana-Malwa	1'14	1,676'69	1,671'83	22,71,382	1,351	12,68,804	759	71,99,468	4,106	2,15,49,875	12,890	23,02,046	1,377	...	...
XI.	Southern Mahratta . . . . .	...	1,043'70	1,043'70	11,90,911	1,041	10,25,442	983	1,88,17,373	18,030	1,83,66,507	17,597	13,47,110	1,291	...	...
XII.	Southern Mahratta (Mysore section.)	...	296'00	296'00	2,95,374	998	68,711	232	23,47,474	7,931	18,92,088	6,392	1,34,195	453	...	...
	VILLUPURAM-GUNTAKAL.															
	Nellore-Tirupati section	...	82'92	82'92	48,994	591	85,220	1,028	9,94,215	11,990	15,06,085	18,163	59,731	720	...	...
	Villupuram-Tiruvannamalai section.	...	42'50	42'50	Distribution over main heads cannot be given											
	STATE LINES WORKED BY THE STATE.															
	Lucknow-Sitapur-Seramau	...	104'59	104'59	77,640	742	1,05,425	1,008	1,96,660	1,880	2,65,834	2,542	59,352	567	...	...
XXI.	Eastern Bengal (Northern section)	...	477'58	477'58	Distribution over main heads cannot be given											
	Dacca section	...	477'58	477'58	Distribution over main heads cannot be given											
	Assam-Bihar section.	...	477'58	477'58	Distribution over main heads cannot be given											
XXVI.	Burma	...	547'00	556'00	4,58,381	823	7,44,894	1,340	55,56,420	10,065	83,54,066	15,025	23,42,212	4,213	...	...
XXVII.	Toungoo-Mandalay	9'00	547'00	556'00	4,58,381	823	7,44,894	1,340	55,56,420	10,065	83,54,066	15,025	23,42,212	4,213	...	...
	LINES WORKED BY GUARANTEED COMPANIES.															
	South Indian . . . . .	...	654'61	654'61	Distribution over main heads cannot be given											
	ASSISTED COMPANIES.															
XXXVII.	Deoghur . . . . .	...	4'79	4'79	Distribution over main heads cannot be given											
XXXVIII.	Rohilkhand-Kumaun . . . . .	...	55'00	55'00	90,660	1,648	...	...	1,27,926	2,326	1,52,926	2,780	4,986	91	...	...
XL.	Dibru-Sadiya . . . . .	...	78'00	78'00	1,41,590	1,815	32,807	421	...	...	9,63,141	12,348	...	...	...	...
	LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.															
XLVII.	The Gaekwar's Melsana . . . . .	...	27'73	27'73	3,335	120	...	...	83,343	3,006	1,57,683	5,686	16,069	579	...	...
	LINES OWNED AND WORKED BY NATIVE STATES.															
LII.	Jodhpore . . . . .	...	124'00	124'00	14,397	116	782	6	75,328	607	87,853	708	430	3	22,45	181
LIII.	Bhavnagar-Gondal-Junagarh-Porbandar.	...	329'16	(9)329'16	1,19,442	363	...	...	16,74,017	5,086	41,19,819	12,516	71,451	217	10,423	32
	TOTAL METRE GAUGE	10'14	6,272'80	6,282'94	...	...	...	...	...	...	...	...	...	...	...	...
	SPECIAL GAUGES.															
	STATE LINES WORKED BY THE STATE.															
XXI.	Eastern Bengal (Kaunia-Dharla branch) (2' 6").	...	37'03	37'03	2,272	61	14,513	392	35,616	962	54,904	1,483	1,609	43	...	...
XXIII.	Nalhāti (4' 0").	...	27'25	27'25	...	...	4,163	...	...	...	21,690	706	...	...	...	...
XXIV.	Cherra-Companyganj (2' 6").	...	7'5	7'50	...	...	1,670	223	60,734	8,098	51,426	6,857	...	...	...	...
XXV.	Jorhāt (2' 0").	...	28'40	28'40	388	14	4,774	168	79,323	2,793	38,184	1,345	2,999	106	2,147	76
	ASSISTED COMPANIES.															
XXXIX.	Darjeeling-Himalayan (2' 0").	...	51'00	51'00	72,000	1,412	20,094	334	...	...	8,53,842	16,742	...	...	...	...
XLI.	Thaton-Duyinzäk (2' 6").	...	8'00	8'00	Distribution over main heads cannot be given											
	LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.															
XLVI.	The Gaekwar's Dabhoi (2' 6").	...	71'66	71'66	Distribution over main heads cannot be given											
	LINES OWNED AND WORKED BY NATIVE STATES.															
LIV.	Morvi (2' 6").	...	94'00	94'00	18,134	193	1,171	12	...	...	6,39,830	6,807	...	...	...	...
	TOTAL SPECIAL GAUGES . . . . .	...	324'84	324'84	...	...	...	...	...	...	...	...	...	...	...	...
	GRAND TOTAL, ALL GAUGES.	10'77'60	15,269'47	16,347'07	...	...	...	...	...	...	...	...	...	...	...	...

(a) Excludes ₹10,90,018 on account of "Interest on capital during construction," but includes ₹1,76,339 on account of "Maintenance allowed to be charged to capital," not shown in any of the preceding columns.
 (b) The decrease as compared with last year's report is due chiefly to transfer of rolling-stock to the Lucknow-Bareilly railway.
 (c) The decrease as compared with last year's report is due to the sale of certain rolling-stock and plant to the Lucknow-Bareilly railway.
 (d) Includes ₹2,17,830 on account of "Purchase of concession," not shown in any of the preceding columns.
 (e) The decrease as compared with last year's report is due to certain credits.

distributed over main heads of expenditure, exclusive of steam ferries and suspense items—concl'd.

BALLAST AND PERMANENT-WAY.		STATIONS AND BUILDINGS.		PLANT.		ROLLING-STOCK.		GENERAL CHARGES.		LOSS BY EXCHANGE.		TOTAL.		RAILWAY.	Serial number.
Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Amount.	Per mile.		
R	R	R	R	R	R	R	R	R	R	R	R	R	R		
76,65,825	23,768	29,60,595	9,179	5,91,904	1,835	22,99,082	7,128	13,36,762	4,145	7,04,770	2,185	2,22,98,798	69,137	Tirhoot	} III.
77,15,175	20,519	28,25,702	7,515	8,40,552	2,236	32,65,921	8,686	15,92,833	4,236	...	...	2,32,45,569	61,823	Bengal and North-Western	
7,16,767	19,910	2,31,747	6,437	12,620	350	...	...	91,670	2,546	42,070	1,169	15,37,682	42,713	Bareilly-Pilibhit	
68,97,214	4,120	1,71,89,814	10,282	29,12,125	1,742	2,03,50,136	12,172	53,33,216	4,084	49,12,354	2,938	12,51,86,164	74,880	Rajputana-Malwa	VIII.
2,15,49,213	20,647	94,23,387	9,029	25,76,012	2,468	99,03,576	9,489	63,63,170	6,097	4,91,090	470	9,09,53,991	87,146	Southern Mahratta	XI.
50,29,056	16,990	9,64,043	3,257	2,91,065	983	21,72,730	7,340	8,93,913	3,020	...	...	1,40,88,649	47,597	Southern Mahratta (Mysore section.)	XII.
13,07,238	18,177	4,29,523	5,178	1,45,919	1,760	5,77,393	6,963	6,29,540	7,592	2,42,360	2,922	62,26,218	75,087	VILLUPURAM-GUNTAKAL.	
...	...	...	...	...	...	...	...	...	...	...	...	14,36,000	33,788	Nellore-Tirupati section Vilupuram-Tiruvannamalai section.	
15,45,474	14,776	3,63,807	3,478	1,02,253	978	6,32,964	6,032	2,14,522	2,051	80	1	35,64,011	34,076	STATE LINES WORKED BY THE STATE.	
...	...	...	...	...	...	...	...	...	...	...	...	4,06,19,924	85,054	Lucknow-Sitapur-Seramau Eastern { Northern section Bengal { Dacca section Assam-Behat section.	} XXI.
1,35,87,307	24,438	53,72,567	9,663	10,91,680	1,963	76,29,035	13,721	35,42,302	6,371	12,50,610	2,249	4,99,69,474	89,873	{ Burma. {oungoo-Mandalay	XXVI. XXVII.
...	...	...	...	...	...	...	...	...	...	...	...	4,62,65,978	70,677	LINES WORKED BY GUARANTEED COMPANIES.	
...	...	...	...	...	...	...	...	...	...	...	...	2,81,180	58,701	South Indian	
8,91,079	16,201	1,42,237	2,586	51,251	932	3,94,875	7,18	1,81,283	3,296	...	...	20,37,223	37,040	ASSISTED COMPANIES.	
14,25,957	18,282	1,30,101	1,668	4,11,497	5,276	9,04,195	11,593	14,48,700	18,573	...	...	56,75,818	72,767	Deoghur	XXXVII
5,29,278	19,087	90,037	3,247	8,258	298	12,644	456	19,188	692	...	...	9,19,835	33,171	Rohilkhand-Kumaun	XXXVII
15,58,784	12,571	1,47,882	1,193	16,728	135	3,06,805	2,474	41,894	338	...	...	22,73,338	18,333	Dibru-Sadiya	XL.
49,16,242	14,936	21,41,764	6,531	3,52,828	1,524	21,57,548	6,555	8,73,566	2,654	...	...	1,64,45,102	49,961	LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	
...	...	...	...	...	...	...	...	...	...	...	...	45,30,25,254	72,104	The Gaekwar's Mchšana	XLVII.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	LINES OWNED AND WORKED BY NATIVE STATES.	
4,95,839	13,390	24,208	654	8,956	242	1,75,314	4,734	8,291	224	...	...	8,21,522	22,185	Jodhpore	LII.
1,90,486	6,190	25,600	939	4,700	172	44,611	1,637	30,000	1,101	7,995	293	3,20,919	11,777	Bhavnagar-Gondal-Junágarh-Torbandar.	LIII.
80,862	10,732	20,124	2,683	5,530	737	92,913	12,388	33,433	4,458	...	...	3,46,092	46,226	TOTAL METRE GAUGE.	
3,10,651	10,938	75,580	2,661	31,702	1,116	1,34,855	4,748	41,248	1,452	...	...	7,21,851	25,417	SPECIAL GAUGES.	
6,96,263	13,652	2,44,044	4,783	69,592	1,365	4,65,509	9,128	2,50,398	4,910	...	...	28,50,547	55,893	STATE LINES WORKED BY THE STATE.	
...	...	...	...	...	...	...	...	...	...	...	...	4,48,083	56,010	Eastern Bengal (Kaunia-Dharila branch) (2' 0").	XXI.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nalhati (1' 0")	XXIII.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	Cherra-Companyganj (2' 6")	XXIV.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	Jorbhat (2' 0")	XXV.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	ASSISTED COMPANIES.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	Darjeeling-Himalayan (2' 0").	XXXIX
...	...	...	...	...	...	...	...	...	...	...	...	...	...	Thaton-Duyinzáik (2' 6")	XLI.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	The Gaekwar's Dabhoi (2' 6").	XLVI.
9,07,178	9,651	33,865	360	12,455	132	2,81,008	3,000	1,02,347	1,089	...	...	19,96,988	21,243	LINES OWNED AND WORKED BY NATIVE STATES.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	Morvi (2' 6")	LIV.
...	...	...	...	...	...	...	...	...	...	...	...	92,44,176	23,458	TOTAL SPECIAL GAUGES.	
...	...	...	...	...	...	...	...	...	...	...	...	2,04,71,56,328	1,25,237	GRAND TOTAL, ALL GAUGES.	

(f) The comparatively small outlay is due to the works being very light.
 (g) Excludes 450 miles of State mileage in dock Estates and quarry lines constructed and maintained by the States themselves.
 (h) The decrease as compared with last year's report is due to the transfer of a locomotive engine and a lathe to the Eastern Bengal State railway.
 outlay shown represents the amount paid by the State for the purchase of the line and the expenditure subsequently incurred.
 (i) Includes Rs. 1,75,205 on account of maintenance and contingencies not included in any of the preceding columns.

Statement of the cost and particulars

RAILWAY.	Serial No.	NAME OF BRIDGE.	Date of opening.	No. of spans.	Span in clear.	Length of bridge.	Depth of foundation below low water.	Height from low-water level to underside of girders.	Total weight of girders.	Cost of work to grade-level
(Standard gauge.)					Feet.	Feet.	Feet.	Feet.	Tons.	Rs.
EAST INDIAN.	1	Soane	22nd Dec. 1862	28	150'00	4,726'00	32	35'60	3,702'00	...
	2	Jumna (Allahabad)	15th Aug. 1865	17	4 of 200'00 3 of 30'00	3,235'00	42	60'00	4,300'00	29,86,000
	3	Jumna (Delhi)	1st Jan. 1857	12	211'50	2,640'00	7 to 39	23'50	3,491'00	5,28,475
	4	Jubilee (over the Hooghly, between Hooghly station on the E. I. R. and Nai-háti on the E. B. R.) Do. Approach Viaducts Naibáti Hooghly	15th Mar. 1887	2	52'67	1,213'25	98'50	55'00	3,460'15	(f) 10,71,652
				1	106'50					
				29	10'83					
35				10'83						
				74	29'17	3,278'00	...	...
			1	25'83						
			1	43'00						
				1	48'00					
BENGAL-NAGPUR.	5	Kanhán	1st Sept. 1887	6	17'00	1,237'00	9 to 26	50'00	1,058'00	3,74,623
				2	60'00					
	6	Wainganga	June 1882 29th April 1889	9	150'00	1,450'00	21	54'00	1,234'47	(i) 6,75,666
	7	Sheonath No. II	31st May 1889	14	150'00	2,250'00	6 to 12	57'00	1,920'00	4,93,055
	8	Damuda	12th June 1890	2	100'00	2,364'00	4 to 75	40'75	2,330'00	3,63,060
				10	200'00					
9	Chambal	15th May 1881	12	100'00	2,74'00	75	112'50	3,026'00	17,39,057	
			2	136'00						
INDIAN MIDLAND.	10	Jumna (Kalpi)	1st Feb. 1888	10	250'00	2,640'00	90	76'63	3,200'00	12,72,232
	11	Betwa (Mánikpur branch)	5th June 1889	13	150'00	2,166'00	13	77'75	1,772'30	8,21,000
				1	00'00					
	12	Ken (Bánda)	1st Aug. 1889	12	100'00	1,558'00	4	65'66	1,125'30	3,96,000
				1	250'00					
13	Betwa (Lalitpur)	1st Jan. 1889	9	150'00	1,446'00	12	56'14	1,200'86	4,02,749	
BHOPAL-ITÁRSI.	14	Nerbudda	18th Nov. 1884	14	150'00	2,240'00	4	65'00	1,980'00	3,45,696
	15	Sutlej (Ludhiána)	Jany. 1870	(p) 46	99'00	5,193'00	40 to 50	16'60	(g) 2,34'00	20,97,296
	16	Beas	April 1869	33	93'00	3,820'00	43 to 70	20'00	1,665'00	15,66,476
NORTH WESTERN.	17	Jumna (Saháranpur)	Jany. 1869	26	99'00	2,663'50	42	19'00	1,308'00	7,64,420
	18	Kaisir-i-Hind (over the Sutlej at Ferozepore)	8th May 1887	27	44'50	4,293'00	78	26'00	6,000'00	14,48,037
	19	Ravi	12th April 1875	33	93'00	3,217'00	15	20'00	1,419'00	9,50,202
	20	Alexandra (over the Chenab between Wazirabad and Kathála)	22nd Jany. 1876	64	133'50	9,088'00	75	20'00	5,248'00	24,03,756
	21	Jhelum	Towards end of 1876	50	90'00	4,875'00	30	20'75	2,150'00	6,90,137
	22	Attock	24th May 1883	5	2 of 308'40 3 of 257'00	1,655'00	(r)	111'00	2,202'00	14,77,580
	23	Empress (over the Sutlej at Ad-amwában)	8th June 1878	16	250'00	4,210'00	103	28'75	6,704'00	26,98,885
	24	Victoria (over the Jhelum at Chak Nizam)	16th May 1887	17	150'00	2,720'00	82	19'00	2,988'00	7,73,481
	25	Lansdowne over the Indus at Sukkur— { Rohri Channel . . . } { Sukkur Channel . . . }	27th Mar. 1889	1	790'00	900'00	None in river	51'00	3,292'00	2,88,320
				1	270'00					
1				23'00						
26	Sher Shah (over the Chenab at Sher Shah)	1st Feb. 1890	17	20'00	3,650'00	75	29'00	3,740'00	10,64,453	

* Bridges the cost of which is less than Rs. 100,000 at the present time.

some of the large* railway bridges in India.

Total cost of girders.	Cost of protective works.	Total cost, including cost of protective works.	Cost per lineal foot, excluding protective works, where separately stated.	Cost of erection of girders per ton.	Serial No.	REMARKS.
R	R	R	R	R		
(a) 10,33,324	...	(b) 43,33,324	917	79	1	Has the rails above and the roadway below. The roadway was subsequently doubled. (a) Represents the cost of the second line only. (b) Represents the total expenditure on the bridge debited to capital, and includes some special items not separately detailed, as well as the cost of iron work for the first line.
(c) 14,60,300	...	(d) 44,47,300	1,374	110	2	The substructure of this bridge is for a double line, but the girders are erected for a single line only. It has the rails above and the roadway below. (c) Of this amount, R13,13,000 represent the cost of girders, and R1,47,300 the cost of upper and lower road-ways. (d) Represents the total expenditure on the bridge debited to capital, and includes some special items not separately detailed.
10,49,779	...	(e) 16,60,355	629	74	3	Has the rails above and the roadway below. (e) Represents the total expenditure on the bridge debited to capital, and includes some special items not separately detailed.
21,78,852	1,009	32,51,514	2,680	(k) 350	4	(f) Includes Plant R3,81,544. Supervision R3,19,456. (g) Estimated expenditure. The approach viaducts are brick arches.
...	...	64,611	147	...		
...	...	4,80,263	147	...		
(h) 2,85,537	13,174	6,73,334	534	...	5	(h) Does not include the cost of erection and painting.
(j) 2,93,324	22,248	(k) 9,91,238	684	40	6	Has been converted from metre to standard gauge, and the expenditure shown represents the cost of the bridge as standard gauge one. (i) Includes the cost (R6,74,432) of the old metre gauge bridge to girder level. (j) Represents the cost of the new standard gauge girders and all charges in connection with their erection, as well as the cost of removal of metre gauge girders, and of diversions and temporary bridge. (k) Excludes the cost (R12,675) of timber work in permanent-way. The cost of the metre gauge girders removed, which are not included in these figures, was R2,40,803.
(l) 3,93,247	Nil	(m) 8,86,302	394	87	7	(l) Does not include the cost of erection and painting. (m) The total cost of works has not yet been adjusted.
6,27,746	19,171	10,09,977	419	55	8	
9,02,295	6,29,083	32,71,035	971	78	9	
10,96,401	1,59,564	25,28,197	897	107	10	The abutments and piers are built for a double line, but the girders are erected for a single line only with roadway on the same level which has not, however, been taken into use.
5,75,240	...	13,96,240	645	85	11	
3,11,538	...	7,37,538	472	84	12	The expenditure shown is approximate only.
3,61,607	2,615	7,66,971	529	64	13	
5,77,925	...	(o) 9,44,171	421	85	14	Has a combined road and railway on the same level. (o) Includes some special items not separately detailed.
(q) 10,08,780	(p) 2,54,000	33,60,076	(s) 598	Contract included erection.	15	(p) Twelve spans have been removed. (q) Does not include girders removed. (r) Includes cost to 1874, since which date a large amount of additional expenditure has been incurred. (s) Calculated as for the present length. (t) The contract rate for the construction of these three bridges, including protective works, was R428 per foot run of the bridges, and the figures as to cost are approximate only.
7,23,690	3,00,000	25,90,166	630		16	
5,70,180	2,00,000	15,34,600	501		17	
15,52,329	11,07,900	41,08,266	699	50	18	Carries the rails below and the roadway above.
5,01,641	1,50,472	16,02,315	451	125	19	Carries the rails above and a footpath below.
19,94,271	9,40,336	53,38,363	484	121	20	
9,40,487	8,248	17,11,872	334	124	21	Carries the rails above and a footpath below.
15,96,980	1,45,956	32,20,316	1,857	437	22	Has the rails above and a military road below. (u) Pier No. 1.—All standards and struts founded at same level, <i>vis.</i> , 343'68 or 21'68 feet above low-water level. Pier No. 2.—All standards and struts founded at same level, <i>vis.</i> , 310'12 or 2'88 feet below low-water level. Pier No. 3.—Up-stream strut on east side of pier was founded at 311'88 or 10'12 feet below low-water level; all other standards and struts founded at same level, <i>vis.</i> , 313'30 or 8'70 feet below low-water level. Pier No. 4.—Two main standards and one down-stream strut, all on west side of pier, were founded at 337'29 or 15'29 feet above low-water level; all other standards and struts founded at same level, <i>vis.</i> , 343'29 or 21'29 feet above low-water level.
23,96,558	(v) 20,06,246	71,01,669	1,210	105	23	Has a combined road and railway on the same level. (v) Includes R1,98,055, cost of materials for temporary bridge.
8,02,104	3,73,226	19,48,811	(w) 579	(w) 66	24	Has a combined road and railway on the same level and a footway on each side, supported on wrought-iron brackets, and provided with a hand-rail. (w) Includes R18,000, cost of staging.
24,96,074	4,946	27,89,340	3,094	185	25	Has a roadway on the same level as the rails, and a footway on each side, the roadway being formed of steel corrugated troughs fitted with teak scantlings.
3,77,912	...	5,57,380	829	110		
10,83,528	6,66,120	28,34,101	594	56	26	Has a roadway on the same level as the rails, 15' wide between girders and 14'-6" headway at centre from rail level to bottom of cross girders of top boom. The roadway consists of corrugated steel troughs fitted with deodar battens.

Statement of the cost and particulars of

RAILWAY.	Serial No.	NAME OF BRIDGE.	Date of opening.	No. of spans.	Span in clear.	Length of bridge.	Depth of foundation below low water.	Height from low-water level to underside of girders.	Total weight of girders.	Cost of work to girder-level.
(Standard gauge—concl'd).					Feet.	Feet.	Feet.	Feet.	Tons.	₹
ODDH AND ROHILKHAND.	27	Gumti (Jaunpur)	24th Dec. 1874	16	82'00	1,472'00	45 to 50	44'17	811'00	4,21,530
	28	Rámanga (Bareilly)	24th June 1874	34	56'00	2,260'00	85	25'77	490'00	4,50,625
	29	Ganges (Rájghat), Aligarh branch	5th June 1874	33	83'00	3,040'00	55	24'39	1,050'00	3,78,991
	30	Ganges (Cawnpore)	15th July 1875	25 2	100'00 40'00	2,830'00	50 to 65	31'66	1,815'00	7,11,073
	31	Ganges (Bálawali)	9th May 1887	11	245'17	2,904'00	100	39'94	3,944'00	10,13,279
	32	Soláni	1st Jan. 1886	11	148'75	1,760'00	60	16'00	1,563'00	4,03,182
	33	Dufferin (over the Ganges at Benares).	1st Oct. 1887	7 9	331'00 104'00	3,523'00	25 to 141	75'32	6,780'00	14,90,995
EASTERN BENGAL.	34	Gorai	1st Jan. 1871	7 9	185'00 46'25	1,744'00	78 to 96 25	51'00 46'50	1,645'00 154'00	...
	35	Kistna	9th Oct. 1873	36	100'00	3,855'00	(c) 9	48'67	2,556'00	(d) 6,11,163
GREAT INDIAN PENINSULA.	36	Tapti	12th Augt. 1872	28 5	59'00 138'00	2,556'00	15'96	60'33	2,392'00	(e) 7,72,163
	37	Nerbudda	8th Mar. 1870	5 6 arches	137'00 40'00	1,052'00	4'60	81'33	525'00	4,06,032
	38	Nerbudda	{ Old . 23rd June 1861 New . 16th May 1881 }	25	183'50	4,687'50	76	48'50	4,650'00	23,21,000
BOMBAY, BARODA AND CENTRAL INDIA.	39	Tapti	19th Nov. 1860	30	60'00	1,875'00	20	50'50	...	...
	40	Cheyer	{ Old . 1st Sep. 1865 New . 1st May 1880 }	50	64'00	3,500'00	100	14'00	988'00	9,10,934
MADRAS.	41	Tungabhadra	16th Jan. 1871	58	64'00	4,060'00	14	34'00	1,065'00	4,23,031
	42	Pennér	{ Old . May 1869 New . 1st Oct. 1889 }	13	131'00	1,830'00	33 to 54'33	22'00	1,999'00	...
	43	Chitravati	{ Old . 1st Sep. 1868 New . 6th Mar. 1890 }	19	131'00	2,670'00	18 to 78	18'00	2,938'00	...
(Metre gauge). RAJPUTANA-MALWA.	44	Jumna (Agra)	1st Jan. 1876	16	133'00	2,272'00	70	31'66	2,551'40	3,92,886
	45	Nerbudda	14th June 1877	14	183'00	(h) 2,836'00	14	80'00	2,362'00	9,39,407
	46	Jumna (Muttra)	15th Dec. 1884	7	150'00	1,146'00	71	27'00	1,309'00	3,06,341
	47	Bhima	1st Augt. 1884	14	150'00	2,342'00	18'60	58'77	1,680'00	3,33,256
	48	Kistna (Bijápur branch)	1st Augt. 1884	21	150'00	3,392'00	13'00	43'17	2,498'00	3,43,345
SOUTHERN MAHRATTA.	49	Kistna (Poona branch)	2nd Feb. 1888	14	150'00	2,339'50	4'17	75'70	1,897'12	3,19,092
	50	Hagari	4th Oct. 1877	34	64'00	2,396'00	68'30	16'30	661'00	6,42,732
	51	Doraoavi	15th June 1890	1 2 1	250'00 150'00 66'50	670'00	...	(n) 29'00 to 179'63	560'00	3,47,264
	52	Gandak	25th Apl. 1887	8	250'00	2,176'00	40 to 90	37'50	2,495'00	6,07,133
BENGAL AND NORTH-WESTERN.	53	Rápti	15th June 1886	9	150'00	1,445'00	86	41'00	1,145'70	4,93,956

* Bridges the cost of which is less than ₹ 100,000.

some of the large* railway bridges in India—concl'd.

Total cost of girders.	Cost of protective works.	Total cost, including cost of protective works.	Cost per lineal foot, excluding protective works, where separately stated.	Cost of erection of girders per ton.	Serial No.	REMARKS.
R	R	R	R	R		
3,24,622	8,526	7,54,678	507	109	27	
1,53,539	8,77,656	14,81,820	267	63	28	
3,10,388	1,08,820	7,98,199	227	28	29	
8,75,745	1,60,139	17,46,957	561	(a)	30	Has the rails above and the roadway below. (a) Included in the cost of girders.
10,56,000	6,73,430	27,72,709	723	62	31	
3,99,277	2,10,014	10,12,473	456	10	32	
32,55,035	1,45,121	48,91,151	1,347	47	33	Has a roadway on the same level as the rails and a footway on each side supported on cantilevers outside the girders. The sum of Rs. 16,206, being the estimated value of surplus plant is excluded from the "Total cost, including cost of protective works."
...	...	(b) 14,83,750	846	...	34	(b) Includes Rs22,618 charged to Revenue, and Rs379, charged to Capital for protection of the piers.
6,61,903	...	12,73,066	330	30	35	The girders are for a single line and the piers for a double line. (c) Nine piers and two abutments are founded above low-water level. (d) Includes Rs25,656, being the cost of other items not separately detailed.
7,90,173	64,910	16,27,248	611	71	36	Carries a double line. (e) Includes Rs95,918, being the cost of other items not separately detailed.
2,63,064	...	6,69,096	636	235	37	The girders are for a single line and the piers for a double line.
12,58,929	(f) 1,95,830	(g) 37,75,759	805	49	38	The figures as to cost refer to the new bridge only, the cost of the old bridge is not known. (f) Includes some special items not separately detailed. (g) Excludes cost of the approaches, Rs36,366.
...	...	8,95,260	477	...	39	
1,95,689	...	(h) 12,45,464	356	...	40	(h) Includes some special items not separately detailed, but excludes the cost of the old bridge, Rs4,06,293.
1,99,921	...	(i) 7,55,756	186	54	41	(i) Includes some special items not separately detailed.
2,84,610	...	11,32,077	619	...	42	The cost does not include the expenditure incurred on the old bridge, Rs1,72,576.
3,85,833	...	13,58,194	509	...	43	The cost does not include the expenditure incurred on the old bridge, Rs3,54,705.
6,90,683	48,776	(j) 18,33,877	786	85	44	Lattice girders carrying the rails below and the carriage-road above. (j) Includes some special items not separately detailed.
4,42,205	777	(k) 18,73,925	660	106	45	"Triangulated girders" designed to carry the rails above and the carriage-road below. (k) Includes two abutment spans. (l) Includes some special items not separately detailed.
3,72,000	14,194	(m) 8,49,000	728	35	46	Has a combined road and railway on the same level. (m) Includes some special items not separately detailed.
4,70,566	26,561	8,30,383	343	73	47	
7,47,808	48,174	11,39,327	322	74	48	
4,86,231	24,320	8,29,643	344	...	49	
1,21,173	...	7,63,905	319	...	50	
3,61,198	405	7,08,867	1,057	100	51	(n) The height is from ground to under-side of girders.
7,29,506	48,244	13,84,883	614	61	52	Has a foot-way on each side supported on wrought-iron brackets and provided with a hand rail.
(o) 3,29,522	5,77,226	14,00,704	570	65	53	(o) Includes Rs74,543, being cost of erection of girders.

Statement showing the cost and particulars of the

RAILWAY.	Serial No.	Name of tunnel.	Position of tunnel (Nearest station).	Single or double line.	Gauge.	LENGTH.				TOTAL.	Total cost, including tools and plant.
						Unlined.	1 lined.	2 lined.	Com-pletely lined.		
						Feet.	Feet.	Feet.	Feet.	Feet.	₹
EAST INDIAN.	1	Monghyr . . .	Below Jamálpur . . .	Built double line, but 2' narrow for too . . .	Standard . . .	434	...	...	466	900	No record.
	2	Saranda . . .	Goilkera . . .	Single . . .	Standard . . .	...	...	...	...	1,588	(a) 4,44,787
BENGAL-NÁGPUR.	3	Bhortonk . . .	Khodri . . .	Single . . .	Standard . . .	...	...	...	1,000	1,000	2,09,715
	4	Mhow Gháts . . .	{ Pátal Páni to Kálakhund. }	Single . . .	Standard . . .	...	...	345	...	345	1,94,925
RAJPUANA-MALWA.	5	Bear's Rock . . .	Castle Rock . . .	Double . . .	Standard . . .	...	...	...	471	471	3,63,606
	6	Castle Rock . . .	Castle Rock . . .	Double . . .	Standard . . .	...	...	...	1,242	1,242	9,08,615
SOUTHERN MAHRATTA.	7	No. 2 . . .	Alandi . . .	Single . . .	Metro . . .	630	...	...	...	630	1,53,963
	8	Nandicanama . . .	Chelama . . .	Single . . .	Standard . . .	...	...	...	1,527	1,527	4,41,418
	9	Soháwa No. 1 . . .	Soháwa . . .	Single . . .	Standard . . .	...	...	539	...	539	(b) 1,67,629
NORTH-WESTERN (Main Line).	10	Margalla No. 3 . . .	Sarai Kála . . .	Single . . .	Standard . . .	...	450	500	...	950	(b) 1,87,150
	11	Attock No. 4 . . .	Khairabad . . .	Single . . .	Standard . . .	...	...	776½	...	776½	(b) 1,80,924
	12	Attock No. 5 . . .	Khairabad . . .	Single . . .	Standard . . .	...	...	721½	...	721½	(b) 1,63,603
	13	Khairabad No. 7 . . .	Khairabad . . .	Single . . .	Standard . . .	...	...	404	...	404	(b) 1,55,540
	14	Gundakinduff . . .	{ Midway between Bábar Kachh and Kócháli. }	Single . . .	Standard . . .	...	...	577	...	577	2,08,826
NORTH-WESTERN (Pishin Section).	15	Kócháli Lower . . .	Kócháli . . .	Single . . .	Standard . . .	...	...	512	...	512	1,84,061
	16	Karez No. 1 . . .	Dirgi . . .	Single . . .	Standard . . .	806	...	...	...	806	1,32,382
	17	{ Karez No. 2 . . . Karez Tunnel . . . }	Dirgi . . .	Single . . .	Standard . . .	2,034	...	...	...	2,034	4,41,963
		18									
	19	Iron Gates . . .	Mangi . . .	Single . . .	Standard . . .	1,233	...	...	...	1,233	3,12,679
	20	Mudgorge Arching . . .	Mudgorge . . .	Single . . .	Standard . . .	...	...	1,092	...	1,092	4,12,344

* All tunnels either more than 660 feet in length or costing over 1½ lakhs are included in this list.

important* tunnels on the railways in India.

Cost per foot run.	Time taken to drive heading.	TIME TAKEN TO COMPLETE TUNNEL.		REMARKS GIVING NATURE OF GROUND PASSED THROUGH, &c.	Serial No.
		From	To		
R					
...	Not known	March 1856	June 1861	Quartz and slate	1
		(Work suspended during one year.)			
280	1'75 years	January 1888	.....	Tunnel is still unfinished. Material excavated, all hard rock. A great deal of water met with.	2
				(a) A revised estimate amounting to Rs.42,474 has since been sanctioned. When the tunnel is completed, the cost per foot run, according to this estimate, would be Rs.93.	
210	1'00 year	14th June 1888	6th July 1890	Hard rock. No water.	3
				The total cost excludes the cost of plant.	
565	Not known	1873	December 1877	Columnar basalt, but the columns were cone-shaped with spaces in, between filled with clay, and there was great difficulty owing to constant slips. Eventually the work was finished as an open cutting with covered way, and moorum was filled over the arch.	4
772	Not known	April 1883	October 1889	Loam	5
732	Not known	April 1883	October 1889	Loam	6
244	About 2 years	1884	1886	Black trap rock	7
289	About 2½ years	1884	1890	Limestone rock	8
311	.....	November 1878	15th Mar. 1880	Red clay and sandstone. War prices were paid. Owing to Afghan war, common coolies were getting 8 annas per day. The heading was got through in six months, and the work was then left quite in abeyance, pending further orders, till September 1879; otherwise the whole would have been complete within a year.	9
197	0'54 year	4th April 1881	15th Aug. 1882	Nummulitic limestone shaken with clay seams	10
233	.....	Not recorded	.....	Treacherous shale	11
226	.....	Not recorded	.....	Ditto	12
385	.....	Not recorded	.....	Ditto	13
				(b) The charges do not include tools and establishment, for which an addition of, say, 15 to 20 per cent. should be made to the figures given. Cost of faces is included. Probably charges for timbers, &c., have not been exactly distributed; a safe rate for a completely lined tunnel would apparently be about Rs.230 per foot.	
362	.....	1884	1886	Sandstone in hard and soft beds	14
359	.....	1884	1886	Soft sandstone with beds of soft earth	15
164	.....	.....	.....	Hard limestone The frequent openings near the roof, as in some Kares's, give the tunnel its name.	16
217	.....	.....	.....	Hard limestone	17
275	.....	.....	.....	Gravel with red clay This was originally intended to be an open cutting, but owing to the difficulty of getting it out, it had to be arched over.	18
254	.....	.....	.....	Hard limestone	19
378	.....	.....	.....	Hard limestone This was originally intended to be an open cutting, but owing to the constant slips, &c., it was eventually covered in.	20

Statement showing the cost and particulars of the

RAILWAY.	Serial No.	Name of tunnel.	Position of tunnel (Nearest station).	Single or double line.	Gauge.	LENGTH.				TOTAL.	Total cost, including tools and plant.
						Unlined. Feet.	1 lined. Feet.	2 lined. Feet.	Com- pletely lined. Feet.		
CHAMAN EXTENSION.	21	Khoják . . .	Shelabagh . . .	Double . . .	Standard . . .	...	5,900	6,962	...	12,862	R (a) 64,51,629
	22	No. 1	Sanzal	Double	Standard . . . .	...	...	756	...	756	(a) 2,28,429
	23	No. 3	Sanzal	Double	Standard . . . .	...	...	800	...	800	(a) 2,62,791
GREAT INDIAN PENINSULA.	24	Thull Ghát tunnel No. 2.	Kására	Double	Standard . . . .	...	...	...	1,625	1,625	3,90,394
	25	Thull Ghát tunnel No. 4.	Kására	Double	Standard	628	...	...	85	713	1,15,170
	26	Thull Ghát tunnel No. 7.	Igatpuri	Double	Standard	1,461	...	...	...	1,461	1,77,255
	27	Thull Ghát tunnel No. 8.	Igatpuri	Double	Standard	1,247	...	...	...	1,247	1,52,325
	28	Thull Ghát tunnel No. 11.	Igatpuri	Double	Standard	777	...	...	...	777	94,605
	29	Bágra	Bágra	Double	Standard . . . .	...	...	...	910	910	2,15,747
	30	Bhore Ghát tunnel No. 7.	Palasdhari	Double	Standard	837	...	...	...	837	1,06,627
	31	Bhore Ghát tunnel No. 8.	Palasdhari	Double	Standard	858	...	...	...	858	1,13,907
	32	Bhore Ghát tunnel No. 9.	Thákurvadi	Double	Standard	825	...	...	...	825	1,08,677
	33	Bhore Ghát tunnel No. 13.	Thákurvadi	Double	Standard	1,305	...	...	...	1,305	1,73,649
	34	Bhore Ghát tunnel No. 22.	Reversing Station	Double	Standard	828	...	...	...	828	1,12,982
	35	Bhore Ghát tunnel No. 23.	Reversing Station	Double	Standard	405	...	...	363	768	2,09,783
	36	Bhore Ghát tunnel No. 24.	Reversing Station	Double	Standard	975	...	...	48	1,023	1,50,352

* All tunnels either more than 660 feet in length or costing over 1½ lakhs are included in this list.

important* tunnels on the railways in India—concl'd.

Cost per foot run.	Time taken to drive heading.	TIME TAKEN TO COMPLETE TUNNEL.		REMARKS GIVING NATURE OF GROUND PASSED THROUGH, &c.	Serial No.
		From	To		
R					
502	2'01 years	13th April 1888	31st July 1891	Shale clay and shingle with much water in places. Nearly the whole required timbering. These figures are approximate only.	21
302	4'13 months	24th December 1888.	6th June 1890	The ground for about 200 feet each side was exceedingly treacherous. At the north end immense boulders of rocks held in by softer shale. Generally the ground was shale, with numerous greasy backs and very heavy ground in many lengths. Figures approximate.	22
328	5'33 months	5th April 1889	10th Nov. 1890.	Shale, very much the same as No. 1, but no boulders. Several lengths were very wet and heavy owing to numerous water springs. Figures approximate. (a) Under arrangements in sanctioned projects and the then classification of capital expenditure, cost of "Tools and plant" has been booked under that head. To comply with instructions in this form a proportion of the expenditure under "Tools and plant" has been added to estimated expenditure on the main tunnel. In case of small tunnels on which no machines were used, 1½ per cent. has been added to the estimated expenditure on the same account.	23
240	4'75 years	February 1858.	March 1864	Loose rock	24
162	3'58 years.	December 1860.	July 1864.	Rock	25
121	4'08 years	March 1859	May 1864	Rock	26
122	5'08 years	July 1859	August 1864	Rock	27
122	3'17 years	February 1859	September 1863	Loose rock	28
237	About 6 years			Through hard rock with fissures	29
127	5'17 years	January 1857	December 1862	Trap rock	30
133	.....	.....	October 1862	Trap rock	31
132	5'25 years	October 1856	December 1862	Trap rock	32
133	5'08 years	October 1856	December 1862	Trap rock	33
136	4'25 years	May 1856	June 1862	Trap rock	34
273	4'00 years	August 1856	February 1862	Trap rock	35
147	3'75 years	January 1857	March 1861	Trap rock	36

CHAPTER III.

STATISTICS OF INDIAN RAILWAYS, 1889 AND 1890.

REVIEW OF EXPENDITURE ON WORKING.

In the Appendices, pages i to lxxix, will be found full details, by half-years, of the working expenses on the principal Indian railways for 1890. The following paragraphs briefly review the salient points connected with the expenses on working of all Indian railways for the same period, as compared with 1889, on an annual basis.

Maintenance per mean mile maintained (Standard gauge).

2. During the year, the total expenses on maintenance of way and works of the standard gauge lines amounted to ₹2,13,95,799, or an average rate of ₹2,235 per mean mile maintained on the total mean mileage (miles 9,574·34) of these lines; while in 1889 the expenses were, on the standard gauge lines, ₹2,27,36,447, giving an average of ₹2,493 per mean mile maintained on a total mean mileage of 9,119·84 miles.

Maintenance per mean mile maintained (Metre and other narrow gauges).

3. Similarly, on the metre and other narrow gauge lines, the total expenses on maintenance of way and works amounted to ₹70,10,603, averaging ₹1,078 per mean mile maintained on the total mean mileage (miles 6,504·10) of these lines; similar expenses in 1889 on metre and other narrow gauge lines, amounting to ₹72,94,835, or an average of ₹1,188 per mean mile maintained on a total mean mileage of 6,139·29 miles.

Maintenance per mile of track, including sidings (Standard gauge).

4. On the standard gauge lines, comparing the cost of maintenance per mile of track, including sidings, the lines are found to run in the following order, the figures in parentheses denoting the mean age of line :

Mean age.	1889.	R.	Mean age.	1890.	R.
Years.			Years.		
1. (6) Bengal Central		617	1. (7) Bengal Central		699
2. (14) Wardha Coal		779	2. (15) Wardha Coal		1,121
3. (15) Oudh and Rohilkhand		1,043	3. (3) Indian Midland, including—		1,249
4. (2) Indian Midland, including		1,142	4. (7) Bhopal-Itarsi		1,254
5. (6) Bhopal-Itarsi			5. (27) Madras . . . . .			1,435
6. (4) Bengal-Nágpur		1,246	6. (16) Oudh and Rohilkhand		1,443
7. (26) Madras		1,547	7. (2) Bengal-Nágpur		1,477
8. (7) The Nizam's Guaranteed State, including—		1,686	8. (8) The Nizam's Guaranteed State, including—		
9. (1) Bezvada Extension			1,849	9. (2) Bezvada Extension . . . . .		1,587
10. (22) Eastern Bengal		2,087	10. (27) East Indian, including—		1,770
11. (12) North Western, including—			12. (6) Patna-Gya,		
12. (6) Amritsar-Pathankot		2,215	13. (13) North Western, including—		2,234
13. (1) Rájputra-Bhátinda			14. (7) Amritsar-Pathankot, . . . . .			2,535
14. (25) Great Indian Peninsula, including—		2,221	15. (8) Jammu and Kashmir,		
15. (12) Dhond-Manmád,			16. (2) Rájputra-Bhátinda,		
16. (20) Khámgaon,		2,662	17. (21) Eastern Bengal		
17. (19) Amráoti			18. (26) Great Indian Peninsula, including—		
18. (26) East Indian, including—			19. (13) Dhond-Manmád,		
19. (11) Patna-Gya,			20. (21) Khámgaon,		
20. (5) Tárakeshwar			21. (20) Amráoti		
21. (23) Bombay, Baroda and Central India			22. (24) Bombay, Baroda and Central India		

(a) Excludes the Gaekwar's Petlad railway, for which information is not available.
 (b) This railway was amalgamated with the Indian Midland railway from the 1st March 1889. This remark applies to all the tables.
 * Open for period under one year.

The expenses on permanent-way alone per mile of track, including sidings, compare as follows:

1889.		R	1890.		R
1. Bengal Central		332	1. Bengal Central		374
2. Madras		511	2. Madras		554
3. Bengal-Nágpur		575	3. Bengal-Nágpur		611
4. Wardha Coal		580	4. Wardha Coal		825
5. Oudh and Rohilkhand		646	5. Indian Midland, including—		826
6. Indian Midland, including—		751	6. Bhopal-Itársi.		
7. Bhopal-Itársi,				7. North Western, including—		925
8. Great Indian Peninsula, including—			8. Amritsar-Patháńkot,		
9. Dhond-Manmád,		1,127	9. Jammu and Kashmir,		
10. Khámgaon,				10. Rájputana-Bhátinda.	
11. Amráoti.			11. Oudh and Rohilkhand		953
12. Eastern Bengal		(a) 1,200	12. East Indian, including—		955
13. North Western, including—			13. Patna-Gya,		
14. Amritsar-Patháńkot,		1,255	14. Tárakeshwar.		
15. Rájputana-Bhátinda.				15. The Nizam's Guaranteed State, including		1,067
16. The Nizam's Guaranteed State, including			16. Bezváda Extension.		
17. Bezváda Extension.		1,263	17. Eastern Bengal		(a) 1,160
18. Bombay, Baroda and Central India		1,267	18. Great Indian Peninsula, including—		1,181
19. East Indian, including—				19. Dhond-Manmád,	
20. Patna-Gya,		1,679	20. Khámgaon,		
Sindia (January and February),				21. Amráoti.	
21. Tárakeshwar.			22. Bombay, Baroda and Central India		1,289

Maintenance per mile of track, including sidings (Metre and other narrow gauges).

5. For the metre and other narrow gauge lines similar comparisons give the following results:

Mean age.			Mean age.		
Years.	1889.	R	Years.	1890.	R
1. (2) The Gaekwar's Mehsána		332	1. (3) The Gaekwar's Mehsána		286
2. (3) Lucknow-Sitapur-Seramau		359	2. (5) Cherra-Companyganj		318
3. (3) Morvi		382	3. (4) Lucknow-Sitapur-Seramau		447
4. (12) The Gaekwar's Dabhoi		504	4. (4) Morvi		505
5. (5) Rohilkhand-Kumaun, including—		517	5. (6) Jorhat		520
6. (5) Bareilly-Pilibhit.				6. (7) Tirhoot, including—		528
7. (8) Tirhoot		531	7. (6) Bengal and North Western.		
8. (6) Bhávnagar-Gondal-Junágarh-Porbandar.		563	8. (6) Rohilkhand-Kumaun, including—		528
9. (5) Bengal and North Western		570	9. (6) Bareilly-Pilibhit.		
10. (5) Jorhát		593	10. (3) Villupuram-Guntakal, Nellore branch		576
11. (4) Jodhpore		599	11. (5) Jodhpore		641
12. (2) Villupuram-Guntakal, Nellore branch.		756	12. (9) Villupuram-Guntakal, Villupuram-Tiruvannámalai section.		643
13. (4) Cherra-Companyganj		842	13. (11) The Gaekwar's Dabhoi		658
14. (10) Rajputana-Malwa		886	14. (11) Rajputana-Malwa		734
15. (4) Southern Mahratta, including—		995	15. (7) Bhávnagar-Gondal-Junágarh-Porbandar		797
16. (4) Mysore section.				16. (4) Southern Mahratta, including—	
17. (12) Northern Bengal, including—		997	17. (5) Mysore section.		
18. (8) Kaunia-Dharila,				18. (13) Northern Bengal, including—		1,160
19. (4) Dacca,			19. (9) Kaunia-Dharila,		
20. (1) Assam-Bihar.			20. (5) Dacca,		
21. (26) Nalháti		1,065	21. (2) Assam-Bihar.		1,198
22. (6) Dibrú-Sadiya		1,527	22. (27) Nalháti		
23. (9) Burma, including—		1,868	23. (7) Dibrú-Sadiya		1,427
24. (1) Toungoo-Mandalay.				24. (10) Burma, including—		1,482
25. (16) South Indian		2,132	25. (2) Toungoo-Mandalay.		
			26. (10) Darjeeling-Himalayan		1,513
			27. (17) South Indian		1,547

The expenses on permanent-way alone per mile of track, including sidings (where known), compare as follows:

1889.		R	1890.		R
1. Lucknow-Sitapur-Seramau		195	1. Lucknow-Sitapur-Seramau		215
2. Bengal and North Western		209	2. The Gaekwar's Mehsána		218
3. Cherra-Companyganj		269	3. Villupuram-Guntakal, Nellore-Tirupati section.		258
4. Villupuram-Guntakal, Nellore branch		293	4. Cherra-Companyganj		271
5. The Gaekwar's Dabhoi		301	5. Tirhoot, including—		281
6. Rohilkhand-Kumaun, including—		321	6. Bengal and North Western.		
7. Bareilly-Pilibhit.				7. Rohilkhand-Kumaun, including—		281
8. Bhávnagar-Gondal-Junágarh-Porbandar		332	8. Bareilly-Pilibhit.		
9. Morvi		344	9. The Gaekwar's Dabhoi		357
10. Tirhoot		369	10. Jorhát		358
11. Jorhát		392	11. Morvi		403
12. Jodhpore		491	12. Rajputana-Malwa		424
13. Rajputana-Malwa		505			

(a) Calculated on the figures given in the analyses of working.
* Open for period under one year.

1889.		R	1890.		R
14.	Southern Mahratta, including—	505	13.	Villupuram-Guntakal, Villupuram-Tiruvannámalaí section.	472
15.	Mysore section.		14.	Jodhpore		538
16.	Northern Bengal, including—	594	15.	Bhávnaġar-Gondal-Junáġarh-Porbandar	557
17.	Kaunia-Dharla,		16.	Darjeeling-Himalayan		640
18.	Dacca,	803	17.	Southern Mahratta, including—	668
19.	Assam-Behar.		18.	Mysore section.	
20.	Nalháti	938	19.	Northern Bengal, including—	673
21.	Dibru-Sadiya	1,259	20.	Kaunia-Dharla,	
22.	South Indian	1,327	21.	Dacca,	942
23.	Burma, including—		22.	Assam-Behar.	
24.	Toungoo-Mandalay.		23.	South Indian	1,002
			24.	Burma, including—	1,015
			25.	Toungoo-Mandalay.	
			26.	Dibru-Sadiya	1,032
			27.	Nalháti	

Maintenance per 1,000 gross ton-miles (Standard gauge).

6 Comparing the maintenance charges per 1,000 gross ton-miles of traffic, the standard gauge lines stand in the following order, the figures in parentheses representing the ton-mileage per mean mile worked of the several lines :

1889.		R	1890.		R
1.	(887,277) Oudh and Rohilkhand	1'37	1.	East Indian, including—	1'31
2.	(1,338,610) Eastern Bengal, including—	1'55	2.	Patna-Gya,	
3.			Bengal Central,	3.	Tárakeshwar.
4.	(1,925,999) East Indian, including—	1'75	4.	(1,311,955) Eastern Bengal, including—	1'57
5.			Patna-Gya,		
6.	(1,585,196) Great Indian Peninsula, including—	2'04	5.	Bengal Central.	1'82
7.			Sindia (January and February),	6.		Oudh and Rohilkhand.
8.	(1,585,196) Great Indian Peninsula, including—	2'04	7.	(812,230) Madras	1'84
9.			Tárakeshwar.		
10.	(475,899) Wardha Coal	2'06	8.	(1,709,242) Great Indian Peninsula, including—	1'94
11.			Bombay, Baroda and Central India			9.	Dhond-Manmád,
12.	(1,735,894) Bombay, Baroda and Central India	2'07	10.	Khámgaon,	2'09
13.	(1,092,044) North-Western, including—	2'23	11.	Amráoti.	
14.			Amritsar-Pathánkot,	12.	(1,636,284) Bombay, Baroda and Central India	2'09
15.	Rájpura-Bhátinda.	2'23	13.	(971,180) North Western, including—	2'21
16.	(777,511) Madras	2'36	14.			Amritsar-Pathánkot,
17.	(512,571) Bengal-Náġpur	2'75	15.	Jummu and Kashmir,	2'66
18.	(437,848) Indian Midland, including—	2'79	16.	Rájpura-Bhátinda.	
19.			Bhopal-Itársi.	17.	(533,526) Wardha Coal
20.	(457,368) The Nizam's Guaranteed State, including—	4'05	18.	(461,152) Indian Midland, including—	2'94
21.	Bezváda Extension.		19.			Bhopal-Itársi.
			20.	The Nizam's Guaranteed State, including—	3'03
			21.	Bezváda Extension.	4'63
			22.	(348,618) Bengal-Náġpur	

Maintenance per 1,000 gross ton-miles (Metre and other narrow gauges).

7. On the metre and other narrow gauge lines similarly the lines compare as follows :

1889.		R	1890.		R
1.	(753,150) Rajputana-Malwa	1'34	1.	(610,646) Rajputana-Malwa	1'37
2.	(407,966) Tirhoot	1'47	2.	(423,505) Tirhoot, including—	1'40
3.	(402,589) Bengal and North-Western	1'57	3.			Bengal and North-Western
4.	(247,281) Bhávnaġar-Gondal-Junáġarh-Porbandar	2'44	4.	(646,514) Burma, including—	2'70
5.	(409,466) Northern Bengal, including—	2'78	5.			Toungoo-Mandalay.
6.			Kaunia-Dharla,	6.	(465,542) Northern Bengal, including—	2'85
7.	Dacca,	7.	Kaunia-Dharla,		
8.	Assam-Behar.	2'78	8.	Dacca,	2'85
9.	(153,310) Rohilkhand-Kumaun, including—	3'26	9.	Assam-Behar.	
10.			Bareilly-Pilibhit.	10.	(234,321) Villupuram-Guntakal, Villupuram-Tiruvannámalaí section.	2'89
11.	(568,450) Burma, including—	3'80	11.	(558,692) South Indian	3'11
12.			Toungoo-Mandalay.	12.	(202,410) Villupuram-Guntakal, Nellore-Tirupati section	3'14
13.	(205,834) Villupuram-Guntakal, Nellore branch	4'02	13.	(162,123) Rohilkhand-Kumaun, including—	3'15
14.	(258,211) Southern Mahratta, including—	4'16	14.			Bareilly-Pilibhit.
15.			Mysore section.	15.	(254,586) Bhávnaġar-Gondal-Junáġarh-Porbandar	3'47
16.	(495,060) South Indian	4'81	16.	(263,637) Southern Mahratta, including—	4'40
17.	(119,744) Nalháti	10'14	17.			Mysore section.

Locomotive expenses per train-mile (Standard gauge).

8. The locomotive expenses on the standard gauge lines open for traffic amounted to ₹2,39,20,860 on a train-mileage of 36,365,141, giving an average cost of 10'52 annas per train-mile; while in 1889 the expenditure was, on standard gauge lines, ₹2,46,58,275 on a train-mileage of 35,363,028, or an average of 11'16 annas per train-mile

Locomotive expenses per train-mile (Metre and other narrow gauges).

9. On the metre and other narrow gauge lines open for traffic during the year, the total expenses were ₹86,28,406, the train-mileage 15,780,956, and the average cost per train-mile 8.75 annas; corresponding figures for the narrow gauge lines open for traffic in 1889 being total expenses ₹87,43,693, train-mileage 15,559,860, and average cost per train-mile 8.99 annas.

Locomotive expenses per train-mile: comparison between lines (Standard gauge).

10. A comparison of the locomotive expenses per train-mile of the standard gauge lines gives the following, the figures in parentheses before the names representing the consumption of fuel (a) per train-mile and its average cost per ton in rupees; those after the train-mileage per mean mile and cost thereof:

	lb	₹	1889.	No.	Ans.		lb	₹	1890.	No.	Ans.
1.			East Indian, including—			1.	(b)	(b)	Eastern Bengal, including—	(4,866)	6.76
2.			Patna-Gya, Sindia (January and Feby.), Asansol-Purulia section of the Bengal-Nágpur, Tarakeshwar.	(5,101)	7.04	2.	(45.13)	(4.82)	Bengal Central.		
3.	(51.98)	(1.95)				3.	(40.55)	(7.57)	Oudh and Rohilkhand	(3,231)	6.93
4.	(42.81)	(8.96)	Oudh and Rohilkhand.	(3,116)	7.54	4.			East Indian, including—		
5.	(b)	(b)	Eastern Bengal, including—	(4,906)	7.68	5.	(52.55)	(1.92)	Patna-Gya, Asansol-Goilkera section of the Bengal-Nágpur, Tarakeshwar.	(4,741)	7.01
6.	(49.63)	(5.04)	Bengal Central.	(1,941)	8.90	6.	(77.88)	(5.00)	Wardha Coal	(2,074)	8.86
7.	(77.16)	(4.25)	Wardha Coal	(1,723)	9.20	7.	(61.96)	(6.20)	Nizam's Guaranteed State, including—	(1,851)	9.64
8.	(65.81)	(6.51)	Nizam's Guaranteed State, including—	(1,662)	11.00	8.			Bezvada.		
9.	(48.32)	(14.48)	Indian Midland, including—	(2,825)	11.78	9.	(48.02)	(11.07)	Indian Midland, including—	(1,675)	10.19
10.	(36.31)	(16.55)	Bhopal-Itarsi.	(3,232)	12.96	10.	(37.88)	(15.76)	Bhopal-Itarsi.	(2,932)	11.40
11.	(40.30)	(15.22)	North Western, including—	(5,026)	13.96	11.	(40.91)	(14.78)	Madras		
12.			Amritsar-Pathankot, Rajpura-Bhatinda.	(5,729)	14.21	12.			North-Western, including—		
13.	(40.36)	(18.12)	Bombay, Baroda and Central India.	(1,748)	16.65	13.			Amritsar-Pathankot, Jammu and Kashmir, Rajpura-Bhatinda.	(3,096)	12.11
14.	(51.36)	(12.63)	Great Indian Peninsula, including—			14.	(39.81)	(17.54)	Bombay, Baroda and Central India, including—	(4,944)	12.89
15.			Dhond-Manmad, Khamgaon, Amraoti.			15.	(53.60)	(11.77)	Gaekwar's Petlad.		
16.	(69.16)	(9.48)	Bengal-Nágpur.			16.			Great Indian Peninsula, including—	(6,175)	13.08
						17.	(73.75)	(7.45)	Dhond-Manmad, Khamgaon, Amraoti.		
						18.			Bengal-Nágpur	(1,194)	15.71
						19.					
						20.					
						21.					
						22.					
						23.					

Locomotive expenses per train-mile: comparison between lines (Metre and other narrow gauges).

11. Following the same system with the metre and other narrow gauge lines, the results are:

	lb	₹	1889.	No.	Ans.		lb	₹	1890.	No.	Ans.
1.	(19.75)	(5.06)	Nalhati	(1,806)	4.09	1.	(21.64)	(3.93)	Nalhati	(2,036)	3.81
2.	(b)	(c)	Northern Bengal, Kaunia-Dharila, Dacca, Assam-Bihar.	(2,559)	5.61	2.			Northern Bengal, Kaunia-Dharila, Dacca, Assam-Bihar.	(2,887)	5.55
3.	(32.69)	(5.05)		(2,087)	5.95	3.	(33.04)	(4.91)		(2,829)	5.48
4.			Tirhoot	(2,001)	6.15	4.			Deoghur		
5.	(37.10)	(6.47)		(2,755)	6.47	5.	(c)	(c)	Tirhoot.		
6.	(28.75)	(11.46)	Bengal and North-Western	(2,327)	6.63	6.	(31.47)	(8.49)	Bengal and North-Western.	(2,085)	5.54
7.	(c)	(c)	Deoghur			7.			Rohilkhand-Kumaon, including—	(985)	7.51
8.	(29.14)	(13.66)	Cherra-Companyganj	(1,028)	7.55	8.	(20.99)	(15.64)	Bareilly-Pilibhit.		
9.	(20.25)	(21.85)	The Gaekwar's Dabhoi	(1,325)	7.69	9.			Thaton-Duyinzaiik	(1,524)	7.66
10.			Thaton-Duyinzaiik	(1,110)	7.76	10.	(c)	(c)	Jodhpore	(938)	8.13
11.	(c)	(c)	Morvi			11.	(24.94)	(30.00)	Morvi	(1,373)	8.15
12.	(17.95)	(30.71)		(919)	8.00	12.	(19.47)	(30.81)	The Gaekwar's Dabhoi	(1,189)	8.27
13.	(21.19)	(17.88)	Rohilkhand-Kumaon, including—	(926)	8.11	13.	(20.65)	(2.93)	Cherra-Companyganj	(1,911)	8.28
14.			Bareilly-Pilibhit.			14.	(39.70)	(12.28)	Bhavnagar-Gondal-Junagarh-Porbandar		
15.	(21.82)	(29.99)	Jodhpore			15.	(23.01)	(26.43)		(1,684)	8.32
16.	(21.65)	(29.73)	Bhavnagar-Gondal-Junagarh-Porbandar	(1,724)	8.83						

(a) The consumption and cost of fuel on lines burning wood have been, for the sake of comparison, converted to the assumed coal equivalent, three parts of wood being taken as equal to one part of coal.
 (b) Calculated on the figures given in the analyses of working.
 (c) Information not available.

1889.		No.	Ans.	1890.		No.	Ans.							
17.	(29'45)(18'42)	Southern Mahratta, including— Mysore section.	(1,686)	9'11	17.	(31'13)	(8'51)	Dibru-Sadiya	(1,745)	8'62				
18.					(33'21)	(8'57)	Dibru-Sadiya	(1,541)	9'35	South Indian, including— Villupuram-Guntakal, Nellore branch.	(2,939)	9'41	18.	(29'44)
19.	(23'90)	(24'52)	Burma, including— Toungoo-Mandalay.	(2,663)									9'80	
20.					(30'15)	(21'32)	Rajputana-Malwa, including— The Gaekwar's Mehsana.	(3,733)	9'89	21.	(28'62)	(19'18)		Burma, including— Toungoo-Mandalay.
21.	(18'71)	(15'27)	Jorhat.	(812)						12'46			22.	
22.					(a)	(a)	Darjeeling-Himalayan	(2,476)	14'73		23.	(28'63)	(21'13)	Rajputana-Malwa, including— The Gaekwar's Mehsana.
23.	(a)	(a)	Darjeeling-Himalayan	(2,509)						14'11	24.			
24.					(a)	(a)	Darjeeling-Himalayan	(2,509)	14'11		25.	(a)	(a)	Darjeeling-Himalayan
25.	(a)	(a)	Darjeeling-Himalayan	(2,509)						14'11	26.			
26.					(a)	(a)	Darjeeling-Himalayan	(2,509)	14'11		27.	(a)	(a)	Darjeeling-Himalayan
27.	(a)	(a)	Darjeeling-Himalayan	(2,509)						14'11	28.			

Locomotive expenses per 1,000 gross ton-miles (Standard gauge).

12. A comparison of locomotive expenses on the standard gauge lines, based on the comparative cost per 1,000 gross ton-miles hauled, gives the following results, the figures in parentheses before the names being the consumption of fuel (b) per 1,000 gross ton-miles in pounds; those after, the ton-mileage hauled per mean mile worked :

1889.		No.	R	1890.		No.	R		
1.	(138'32)	East Indian, including— Patna-Gya, Sindia (January and February), Asansol-Purulia section of the Bengal-Nagpur, Tarakeshwar.	(1,916,865)	1'17	1.	(144'54)	East Indian, including— Patna-Gya, Asansol-Goikera section of the Bengal-Nagpur, Tarakeshwar.	(1,723,414)	1'21
2.					(150'38)				
3.	(181'87)	Eastern Bengal, including— Bengal Central.	(1,338,610)	1'76		4.	(178'53)	Eastern Bengal, including— Bengal Central.	(1,311,955)
4.					(247'93)	The Nizam's Guaranteed State, including Bezvada Extension.			
5.	(314'73)	Wardha Coal	(475,899)	2'27			6.	(302'76)	Wardha Coal
6.					(119'83)	North Western, including— Amritsar-Pathankot, Rajputana-Bhatinda.	(1,092,044)		
7.	(116'86)	Bombay, Baroda and Central India	(1,735,894)	2'53				8.	(130'40)
8.					(183'37)	Indian Midland, including— Bhopal-Itarsi.	(437,848)	2'61	
9.	(131'93)	Madras	(777,511)	2'68					10.
10.					(186'32)	Great Indian Peninsula, including— Dhond-Manmad, Khamgaon, Amraoti.	(1,585,197)	3'21	11.
11.	(233'62)	Bengal-Nagpur	(517,517)	3'52					12.

Locomotive expenses per 1,000 gross ton-miles (Metre and other narrow gauges).

13. For the metre and other narrow gauge lines a similar comparison gives—

1889.		No.	R	1890.		No.	R		
1.	(169'35)	Tirhoot	(407,966)	1'90	1.	(154'95)	Tirhoot, Bengal and North-Western.	(423,505)	1'70
2.	(142'87)	Bengal and North-Western	(402,559)	1'91	2.	(c)	Northern Bengal— Kaunia-Dharla, Dacca, Assam-Bihar.	(465,542)	1'96
3.	(c)	Northern Bengal, including— Kaunia-Dharla, Dacca, Assam-Bihar.	(409,466)	2'17	3.	(127'59)	Burma, including— Toungoo-Mandalay.	(646,514)	2'68
4.	(204'30)	Burma, including— Toungoo-Mandalay.	(568,450)	2'87	4.	(127'57)	Rohilkhand-Kumaun, including— Bareilly-Pilibhit.	(162,123)	2'85
5.	(111'97)	Rohilkhand-Kumaun, including— Bareilly-Pilibhit.	(153,310)	3'00	5.	(148'34)	Rajputana-Malwa	(610,646)	3'32
6.	(127'10)	Rajputana-Malwa	(753,159)	3'11					

(a) Information not available.

(b) The consumption and cost of fuel on lines burning wood have been, for the sake of comparison, converted to the assumed coal equivalent, three parts of wood being taken as equal to one part of coal.

(c) Calculated on the figures given in the analyses of working.

X415.27

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1889.				1890.			
No.	R	No.	R	No.	R	No.	R
12. (192'35)	372	(258,211)	372	12. (180'20)	3'39	(517,062)	3'39
13. (181'31)				13. (180'20)			
14. (150'96)	3'85	(462,908)	373	14. (145'63)	3'44	(254,586)	3'44
15. (322'14)				15. (145'63)			
16. (322'14)	4'17	(110,744)	4'17	16. (182'88)	3'68	(263,637)	3'68
17. (322'14)				16. (182'88)			

Locomotive expenses: cost of fuel.

14. The differences in the average prices of coal per ton varying, as will be noticed in the foregoing paragraphs, from ₹1'95 on the East Indian railway to ₹30'71 on the Morvi railway in 1889, and from ₹1'92 on the East Indian railway to ₹30'81 on the Morvi railway in 1890, render any comparison of working on the different lines on the basis of locomotive cost very misleading. A better comparison can be made if the cost of fuel be deducted from the locomotive expenses per 1,000 gross ton-miles, and this is done in the following paragraphs:—

Locomotive expenses per 1,000 gross ton-miles, excluding cost of fuel (Standard gauge).

15. Excluding, then, the cost of fuel, the locomotive expenses on the standard gauge lines, compare as follows:

1889.		R	1890.		R
1. East Indian, including—	}	1'05	1. Oudh and Rohilkhand	}	1'0
2. Patna-Gya, Sindia (January and February), Asansol-Purulia section of the Bengal-Nágpur,			2. East Indian, including—		
3. Tárákeshwar.			3. Patna-Gya, Asansol-Goalkera section of the Bengal-Nágpur.		
4. Oudh and Rohilkhand	}	1'05	4. Tárákeshwar.	}	(a)
5. Eastern Bengal, including—			5. Eastern Bengal, including—		
6. Bengal Central.	}	1'35	6. Bengal Central.	}	1'18
7. Indian Midland, including—			7. Indian Midland, including—		
8. Bhopal-Itársi	}	1'42	8. Bhopal-Itársi.	}	1'45
9. The Nizam's Guaranteed State, including—			9. Wardha Coal		
10. Bezváda Extension.	}	1'45	10. The Nizam's Guaranteed State, including—	}	1'48
11. Bombay, Baroda and Central India			11. Bezváda Extension.		
12. North Western, including—	}	1'58	12. Bombay, Baroda and Central India, including—	}	1'50
13. Amritsar-Patháńkot,			13. The Gaekwar's Petlád.		
14. Rájputana-Bhátinda.	}	1'59	14. North Western, including—	}	1'52
15. Wardha Coal			15. Amritsar-Patháńkot,		
16. Madras	}	1'67	16. Jammu and Kashmir,	}	1'55
17. Great Indian Peninsula, including—			17. Rájputana-Bhátinda.		
18. Dhond-Manmád,	}	1'70	18. Madras	}	1'61
19. Khámgaon,			19. Great Indian Peninsula, including—		
20. Amráoti.	}	2'16	20. Dhond-Manmád,	}	1'94
21. Bengal-Nágpur			21. Khámgaon,		
	}	2'53	22. Amráoti.	}	2'20
			22. Bengal-Nágpur		

Locomotive expenses per 1,000 gross ton-miles, excluding cost of fuel (Metre and other narrow gauges).

16. The locomotive expenses of the metre and other narrow gauge lines compare as follows:

1889.		R	1890.		R
1. Bengal and North-Western	}	1'18	1. Tirhoot.	}	1'12
2. Tirhoot			2. Bengal and North-Western		
3. Burma, including—	}	1'41	3. Northern Bengal, including—	}	(a)
4. Toungoo-Mandalay.			4. Kaunia-Dharlla,		
5. Rájputana-Malwa	}	1'64	5. Dacca,	}	1'51
6. Northern Bengal, including—			6. Assam-Bihar.		
7. Kaunia-Dharlla,	}	1'67	7. Burma, including—	}	1'59
8. Dacca,			8. Toungoo-Mandalay		
9. Assam-Bihar.	}	(a)	9. Bhávnagar-Gondal-Junágarh-Porbandar	}	1'72
10. Bhávnagar-Gondal-Junágarh-Porbandar			10. Rájputana-Malwa		
11. Rohilkhand-Kamaun, including—	}	1'73	11. Rohilkhand-Kumaun, including—	}	1'92
12. Bareilly-Pilibhit			12. Bareilly-Pilibhit.		
13. Southern Mahratta, including Mysore section.	}	1'84	13. South Indian, including—	}	1'96
14. South Indian, including—			14. Villupuram-Guntakal (Nellore-Tirupati and Villupuram-Tiruvannámalaí sections).		
15. Villupuram-Guntakal, Nellore branch	}	2'14	15. Southern Mahratta, including—	}	2'01
16. Nalháti			16. Mysore section.		
	}	2'36	17. Southern Mahratta, including—	}	2'1
			17. Mysore section.		

(a) Calculated on the figures given in the analyses of working.

Carriage and wagon expenses per 1,000 home vehicle miles (Standard gauge).

17. The carriage and wagon expenses for the standard gauge lines open for traffic show the following comparison of cost per 1,000 home vehicle miles, the figures in parentheses before the names giving the total vehicle mileage; those after, the average mileage per coaching and goods vehicle respectively :

No.	1889.	No.	R	No.	1890.	No.	R												
1.	(6,386,562) Wardha Coal	{ 35,832 } { 14,679 }	3'79	1.	(6,128,185) Wardha Coal	{ 57,963 } { 14,026 }	4'98												
2.	(59,801,014) { Oudh and Rohilkhand	{ 34,196 } { 9,519 }	4'68	2.	(240,741,767) { East Indian, including— Patna-Gya Tarakeshwar.	{ 57,826 } { 17,754 }	5'02												
3.	(245,810,366) { East Indian, including— Patna-Gya, Tarakeshwar, Sindia January and February), Asansol-Purulia section of the Bengal-Nagpur.	{ 54,414 } { 18,809 }	5'04	3.		{ 33,333 } { 8,369 }	5'34												
4.				(17,217,111) Bengal-Nagpur				{ 30,547 } { 10,834 }	5'15	4.	(13,863,897) { The Nizam's Guaranteed State, including— Bezvada extension.	{ 32,286 } { 14,214 }	5'93						
5.										(37,369,647) { Eastern Bengal, including— Bengal Central.				{ 31,635 } { 12,438 }	6'51	5.	(20,231,902) Bengal-Nagpur	{ 25,271 } { 11,506 }	6'43
6.					(18,747,393) { Indian Midland, including— Bhopal-Itarsi.											{ 30,198 } { 11,758 }			
7.	(11,087,456) { The Nizam's Guaranteed State, including Bezvada Extension.	{ 33,223 } { 10,344 }	8'32			7.	(37,521,906) { Eastern Bengal, including— Bengal Central.												
8.				(62,072,395) { Bombay, Baroda and Central India.		{ 37,994 } { 12,508 }		8'55	8.		(58,136,663) { Bombay, Baroda and Central India.	{ 36,610 } { 11,539 }	10'11						
9.									(76,664,454) { North Western, including— Amritsar-Pathankot. Rajputana-Bhaintinda.	{ 26,667 } { 12,561 }				10'80	9.		(50,478,403) Madras	{ 25,991 } { 10,103 }	11'04
10.					(148,887,946) { Great Indian Peninsula, including— Dhond-Manmad, Khamgaon, Amraoti.										{ 28,983 } { 13,168 }	14'21				10.		(160,432,777) { Great Indian Peninsula, including— Dhond-Manmad, Khamgaon, Amraoti.	{ 29,778 } { 14,385 }	12'14
11.	(49,114,469) Madras	{ 26,726 } { 10,238 }	14'64				11.													(169,816,303) { North Western, including— Amritsar-Pathankot, Rajputana-Bhaintinda, Jammu and Kashmir.	{ 25,763 } { 11,872 }				12'59
12.				(21,154,673) { Bengal and North Western		{ 46,858 } { 10,820 }	2'51	12.			(11,904,448) { Bhavnagar-Gondal-Junagarh- Probandar.	{ 26,234 } { 7,510 }	2'44						
13.								(9,500,918) { Bhavnagar-Gondal-Junagarh- Probandar.	{ 28,785 } { 7,164 }	3'04				13.			(40,209,617) { Tirhoot, Bengal and North West-erp.	{ 44,335 } { 11,352 }	2'67
14.					(43,334,148) { Burma, including Toungoo-Man-dalay.									{ 28,670 } { 8,912 }	3'77	14.						(35,607,139) { Northern Bengal, Kaunia-Dharila, Dacca,	{ 31,921 } { 13,248 }	3'76
15.	(15,705,118) Tirhoot	{ 37,559 } { 9,681 }	4'17													15.				(52,135,585) { Assam-Bihar, Burma, including Toungoo-Man-dalay.	{ 31,634 } { 11,373 }				4'50
16.				(29,147,095) { Northern Bengal, Kaunia-Dharila, Dacca,		{ 29,982 } { 11,405 }	4'28				16.	(2,113,414) { Villupuram-Gun- takal, Nellore Tirupati sec- tion.	{ 29,138 } { 3,361 }			5'05			
17.								(2,109,894) { Assam-Bihar, Rohilkhand-Ku- maun, including Bareilly-Pili- bhit.	{ 18,353 } { 6,211 }	4'36	17.						(156,631) Villupuram-Gun- takal,	{ 624 }	5'09
18.					(36,507,199) { Southern Mah- ratta, including Mysore section						{ 20,130 } { 5,457 }			4'86	18.							(2,236,488) { Rohilkhand-Ku- maun, including Bareilly-Pili- bhit.	{ 18,075 } { 6,956 }	5'32
19.	(146,555,654) { Rajputana-Mal- wa.	{ 26,904 } { 14,366 }	5'93												19.					(41,199,112) { Southern Mah- ratta, including Mysore section.	{ 19,661 } { 5,715 }				5'49
20.				(2,109,400) { Villupuram-Gun- takal, Nellore branch.		{ 28,739 } { 3,893 }	6'51					20.	(46,297,303) { South Indian, including Pondicherry,		{ 34,574 } { 12,170 }	5'81			
21.								(41,226,907) { South Indian, in- cluding— Pondicherry.	{ 33,863 } { 10,600 }	7'48		21.					(123,403,992) { Rajputana-Mal- wa.	{ 26,719 } { 11,185 }	11'40
22.					(571,168) Nalhati						{ 26,122 } { 8,737 }	18'68		22.					

Carriage and wagon expenses per 1,000 home vehicle miles (Metre and other narrow gauges).

18. For the metre and other narrow gauge lines in a similar manner, the order of the lines is as follows :

No.	1889.	No.	R	No.	1890.	No.	R
1.	(21,154,673) { Bengal and North Western	{ 46,858 } { 10,820 }	2'51	1.	(11,904,448) { Bhavnagar-Gon- dal-Junagarh- Probandar.	{ 26,234 } { 7,510 }	2'44
2.	(9,500,918) { Bhavnagar-Gon- dal-Junagarh- Probandar.	{ 28,785 } { 7,164 }	3'04	2.	(40,209,617) { Tirhoot, Bengal and North West- erp.	{ 44,335 } { 11,352 }	2'67
3.	(43,334,148) { Burma, including Toungoo-Man- dalay.	{ 28,670 } { 8,912 }	3'77	3.			
4.				(15,705,118) Tirhoot	{ 37,559 } { 9,681 }	4'17	4.
5.	(29,147,095) { Northern Bengal, Kaunia-Dharila, Dacca,	{ 29,982 } { 11,405 }	4'28				5.
6.				(2,109,894) { Assam-Bihar, Rohilkhand-Ku- maun, including Bareilly-Pili- bhit.	{ 18,353 } { 6,211 }	4'36	6.
7.	(36,507,199) { Southern Mah- ratta, including Mysore section	{ 20,130 } { 5,457 }	4'86				7.
8.				(146,555,654) { Rajputana-Mal- wa.	{ 26,904 } { 14,366 }	5'93	8.
9.	(2,109,400) { Villupuram-Gun- takal, Nellore branch.	{ 28,739 } { 3,893 }	6'51				9.
10.				(41,226,907) { South Indian, in- cluding— Pondicherry.	{ 33,863 } { 10,600 }	7'48	10.
11.	(571,168) Nalhati	{ 26,122 } { 8,737 }	18'68				11.

Traffic expenses per train-mile (Standard gauge).

19. Following the procedure adopted in the foregoing, the traffic expenses per train-mile on the standard gauge lines vary as shown below, the figures in parentheses before the names representing the train-mileage per mean mile worked; those after, the average distance between stations:

No.	1889.	Miles. Ans.	No.	1890.	Miles. Ans.
1.	(1,941) Wardha Coal	11'25 4'43	1.	(1,462) The Gaekwar's Petlad	6'68 2'78
2.	(3,232) { North Western, including Amritsar-Pathankot, Rajpura-Bhatinda. }	7'59 4'50	2.	(2,074) Wardha Coal	11'25 4'05
3.			(3,096) { North-Western, including Amritsar-Pathankot, Rajpura-Bhatinda, Jammu and Kashmir }	7'47 4'80	
4.					
5.	(1,662) { Indian Midland, including Bhopal-Itarsi }	10'80 4'91	5.	(3,231) Oudh and Rohilkhand	6'72 4'85
6.					
7.	(3,116) Oudh and Rohilkhand	6'86 5'02	7.	(1,675) { Indian Midland, including Bhopal-Itarsi }	9'79 4'88
8.	(5,729) { Great Indian Peninsula, including— Dhond-Manmad, Khámgaon, Amráoti. }	7'20 5'30	8.	(6,175) { Great Indian Peninsula, including— Dhond-Manmad, Khámgaon, Amráoti. }	7'16 4'99
9.					
10.					
11.	(2,437) Bengal Central	5'21 5'37	11.	(2,349) Bengal Central	5'00 5'08
12.	(2,825) Madras	6'61 5'40			
13.	(5,026) Bombay, Baroda and Central India	5'55 5'49	13.	(1,851) { The Nizam's Guaranteed State, including— Bezvada Extension. }	8'16 5'23
14.					
15.	(1,723) { The Nizam's Guaranteed State, including— Bezvada Extension. }	8'55 5'51	15.	(2,932) Madras	6'36 5'34
16.					
17.					
18.	(5,101) { East Indian, including— Patna-Gya, Sindia (January and February), Asansol-Parulia section of the Bengal-Nágpur, Tárákeshwar. }	8'51 5'69	18.	(5,011) Bombay, Baroda and Central India	5'55 5'56
19.					
20.	(1,748) Bengal-Nágpur	8'38 7'44	19.	(5,065) { East Indian, including— Patna-Gya, Tárákeshwar. }	8'58 5'76
21.	(6,247) Eastern Bengal	3'79 7'96	20.		
			21.	(1,108) Bengal-Nágpur	9'16 6'37
			22.	(6,164) Eastern Bengal	3'72 8'25

Traffic expenses per train-mile (Metre and other narrow gauges).

20. On the metre and other narrow gauge lines a similar comparison of traffic expenses gives the following:

No.	1889.	Miles. Ans.	No.	1890.	Miles. Ans.
1.	(926) Jodhpore	6'89 2'67	1.	(938) Jodhpore	6'89 2'68
2.	(3,733) { Rajputana-Malwa, including— The Gaekwar's Mehsana. }	7'23 3'58	2.	(3,165) { South Indian, including Villupuram-Guntakal, Nellore-Tirupati section, and Villupuram-Tiruvannamalai section. }	6'62 3'35
3.					
4.	(2,939) { South Indian, including— Villupuram-Guntakal, Nellore branch. }	6'54 3'66	4.	(3,112) { Rajputana-Malwa, including— The Gaekwar's Mehsana. }	7'23 4'07
5.					
6.	(2,001) Bengal and North-Western	6'48 4'16	6.	(2,036) Nahati	4'54 4'09
7.	(1,028) The Gaekwar's Dabhoi	5'88 4'51	7.	(1,189) The Gaekwar's Dabhoi	6'51 4'12
8.	(1,806) Nahati	4'54 4'52	8.	(1,684) Bhavnagar-Gondal-Junagarh-Porbandar	6'67 4'40
9.	(1,724) Bhavnagar-Gondal-Junagarh-Porbandar	7'00 4'83			
10.	(1,110) Morvi	7'56 4'99	9.	(1,373) Morvi	7'83 4'56
11.	(1,686) { Southern Mahratta, including— Mysore section. }	7'73 5'10	10.	(1,730) { Southern Mahratta, including— Mysore Section. }	7'66 4'57
12.					
13.	(2,559) { Northern Bengal, including— Kaunia-Dharila, Dacca, Assam-Bihar. }	7'06 5'11	11.	(2,085) { Bengal and North-Western, including Tirhoot State Railway. }	6'18 4'65
14.					
15.	(2,755) Deoghur	4'79 5'36	13.	(2,887) { Northern Bengal, including— Kaunia-Dharila, Dacca, Assam-Bihar. }	6'95 4'78
16.					
17.	(1,541) Dibru-Sadiya	2'79 5'40	14.	(2,829) Deoghur	4'75 5'16
18.	(2,087) Tirhoot	5'93 5'55	15.		
19.	(2,327) Cherra-Companyganj	3'75 5'62	16.	(1,911) Cherra-Companyganj	3'75 5'24
20.	(2,476) Darjeeling-Himalayan	5'10 5'77	17.		
21.	(2,663) { Burma, including— Toungoo-Mandalay. }	6'36 6'43	18.	(2,509) Darjeeling-Himalayan	4'64 6'95
22.					
23.	(919) { Rohilkhand-Kumaun, including— Bareilly-Pilibhit. }	7'00 8'85	19.	(985) { Rohilkhand-Kumaun, including— Bareilly-Pilibhit. }	7'00 8'71
24.					
25.	(8'2) Jorhat	4'73 10'11	20.	(1,224) Tháon-Duyinzaik	8'00 9'10
26.	(1,325) Tháon-Duyinzaik	8'00 10'15	21.	(857) Jorhat	4'73 9'75

General charges, percentage on gross earnings (Standard, Metre and other narrow gauges).

21. The general charges of standard, metre and other narrow gauge lines may fairly be compared on one basis, that of percentage on gross earnings, excluding steam-boat. Taking the lines on one list they vary as follows :

	R	1889.	Per cent.		R	1890.	Per cent.
1.	(2,898)	Jodhpore (M)	2'75	1.	(2,991)	Jodhpore (M)	2'70
2.	(25,672)	Great Indian Peninsula (B), including— Dhond-Manmád (B), Khámgaon (B), Amráoti (B).	3'47	2.	(26,406)	Great Indian Peninsula (B), including— Dhond-Manmád (B), Khámgaon (B), Amráoti (B).	3'33
3.				3.			
4.				4.			
5.	(29,259)	Eastern Bengal (B)	3'62	5.	(28,076)	Bombay, Baroda and Central India (B)	4'06
6.	(28,714)	Bombay, Baroda and Central India (B)	3'86	6.	(27,119)	East Indian (B), including— Patna-Gya (B), Tárakeshwar (B).	4'21
7.	(27,745)	East Indian (B), including— Patna-Gya (B), Sindia (B) (January and February), Ánsol-Purulia section of the Bengal-Nágpur (B), Tárakeshwar (B).	4'27	7.	(11,104)	North Western (B), including— Amritsar-Pathámkot (B), Rájpura-Bhátinda (B), Jammu and Kashmir (B).	4'34
8.				8.			
9.				9.			
10.				10.			
11.	(11,688)	North Western (B), including— Amritsar-Pathámkot (B), Rájpura-Bhátinda (B).	4'27	11.	(27,077)	Eastern Bengal (B)	4'36
12.	(11,792)	Rajputana-Malwa (M), including The Gaekwar's Mehsána (M).	5'54	12.	(3,706)	The Gaekwar's Petlád (B)	4'51
13.	(10,887)	Oudh and Rohilkhand (B)	5'78	13.	(7,980)	Northern Bengal (M), including— Kaunia-Dharila (S), Dacca (M), Assam-Behar (M).	5'41
14.	(10,856)	Madras (B)	5'83	14.	(11,326)	Madras (B)	5'80
15.	(7,636)	Northern Bengal (M), including— Kaunia-Dharila (S), Dacca (M), Assam-Behar (M).	5'92	15.	(8,585)	South Indian (M), including— Villupuram-Guntakal, Nellore-Tirupati section (M), Villupuram-Tiruvannámalai section (M).	5'95
16.				16.			
17.				17.			
18.	(7,990)	South Indian (M), including— Villupuram-Guntakal, Nellore branch (M).	6'51	18.	(10,658)	Oudh and Rohilkhand (B)	5'07
19.	(8,770)	Burma (M), including— Toungoo-Mandalay (M).	6'76	19.	(2,964)	The Gaekwar's Dabhoi (S)	6'01
20.				20.			
21.	(7,395)	Wardha Coal (B)	7'14	21.	(10,289)	Rajputana-Malwa (M), including— The Gaekwar's Mehsána (M).	6'34
22.	(2,430)	The Gaekwar's Dabhoi (S)	7'96	22.	(9,869)	Burma (M), including— Toungoo-Mandalay (M).	6'46
23.	(6,369)	Tirhoot (M)	8'34	23.	(6,297)	Bengal and North-Western (M), including— Tirhoot (M).	8'92
24.	(5,957)	Deoghur (M)	9'61	24.	(11,303)	Darjeeling-Himalayan (S)	9'05
25.	(6,692)	The Nizam's Guaranteed State (B), including— Bezváda Extension (B).	10'18	25.	(5,494)	Deoghur (M)	9'88
26.				26.			
27.	(11,261)	Darjeeling-Himalayan (S)	11'52	27.	(7,299)	The Nizam's Guaranteed State (B), including— Bezváda Extension (B).	9'45
28.	(4,681)	Rohilkhand-Kumaun (M), including Bareilly-Pilibhit (M).	11'59	28.	(7,261)	Wardha Coal (B)	10'02
29.	(5,025)	Bhávnapur-Gondal-Junágarh-Porbandar (M)	11'67	29.	(4,716)	Bhávnapur-Gondal-Junágarh-Porbandar (M)	11'49
30.	(3,817)	Nalháti (S)	12'64	30.	(2,272)	Jorhát (S)	12'44
31.	(5,364)	Bengal and North-Western (M)	12'68	31.	(3,700)	Nalháti (S)	12'74
32.	(4,386)	Southern Mahratta (M), including Mysore section (M).	13'23	32.	(4,321)	Southern Mahratta (M), including— Mysore Section (M).	12'77
33.				33.			
34.	(4,814)	Indian Midland (B), including— Bhopal-Itársi (B).	13'29	34.	(3,141)	Morvi (S)	12'91
35.	(5,807)	Bengal Central (B)	13'46	35.	(4,656)	Indian Midland (B), including Bhopal-Itársi (B).	12'95
36.	(2,608)	Morvi (S)	13'72	36.	(6,593)	Dibru-Sadiya (M)	13'07
37.	(5,925)	Dibru-Sadiya (M)	15'02	37.	(4,216)	Rohilkhand-Kumaun (M), including— Bareilly-Pilibhit (M).	13'52
38.	(2,164)	Jorhát (S)	15'73	38.	(5,342)	Bengal Central (B)	13'77
39.	(6,855)	Bengal-Nágpur (B)	16'16	39.	(5,214)	Bengal-Nágpur (B)	15'53
40.	(1,375)	Cherra-Companyganj (S)	28'56	40.	(2,332)	Cherra-Companyganj (S)	23'08
41.				41.			
42.				42.			
43.				43.			
44.				44.			
45.				45.			
46.				46.			
47.				47.			
48.				48.			
49.				49.			
50.				50.			

The figures in parentheses represent the gross earnings (excluding steam-boat) per mean mile worked; the initial letter (B) indicates the Standard gauge, (M) the Metre or 3' 3 $\frac{3}{8}$ " gauge, and (S) other gauges.

Compensation.

22. The total expenses on the whole of the lines for compensation for goods lost or damaged, personal injury, or other claims connected with railway working, amounted to R1,45,202, being 0'07 per cent. on the gross earnings, against R1,74,614 equal to a percentage of 0'09 on gross earnings in 1889.

Summary of working expenses compared with gross earnings.

23. Taking the whole of the Indian railways, the expenses { 5,715 } the main abstracts compare as follows with the gross earnings (excl' { 34,574 } m-
{ 12,170 }
{ 6,719 }
{ 85 } 11

boat services), which amounted to ₹20,49,47,414 in 1890, compared with ₹20,36,87,782 in 1889:

1889.			1890.		
—	Working expenses.	Per cent. on gross earnings.	—	Working expenses.	Per cent. on gross earnings.
	₹			₹	
Maintenance	3,00,31,282	14.74	Maintenance	2,84,06,402	13.86
Locomotive	3,34,01,968	16.40	Locomotive	3,25,49,266	15.88
Carriage and wagon	92,84,992	4.56	Carriage and wagon	1,00,29,076	4.89
Traffic	1,61,24,847	7.92	Traffic	1,64,70,498	8.04
General	1,07,81,121	5.29	General	1,10,39,035	5.39
Miscellaneous	23,88,394	1.17	Miscellaneous	23,92,367	1.17
TOTAL	(a) 10,24,72,741	50.31	TOTAL	(b) 10,13,81,552	49.47

For the standard gauge lines separately, the figures are as follows:

1889.			1890.		
—	Working expenses.	Per cent. on gross earnings.	—	Working expenses.	Per cent. on gross earnings.
	₹			₹	
Maintenance	2,27,36,447	14.52	Maintenance	2,13,95,799	13.62
Locomotive	2,46,58,275	15.75	Locomotive	2,39,20,860	15.23
Carriage and wagon	73,81,275	4.71	Carriage and wagon	74,98,372	4.78
Traffic	1,18,09,607	7.54	Traffic	1,21,38,063	7.73
General	72,72,899	4.64	General	74,26,128	4.73
Miscellaneous	18,15,212	1.16	Miscellaneous	17,47,914	1.11
TOTAL	(a) 7,61,33,852	48.61	TOTAL	(b) 7,46,21,044	47.52

and for the metre and other narrow gauge lines as follows:

1889.			1890.		
—	Working expenses.	Per cent. on gross earnings.	—	Working expenses.	Per cent. on gross earnings.
	₹			₹	
Maintenance	72,94,835	15.50	Maintenance	70,10,603	14.64
Locomotive	87,43,693	18.57	Locomotive	86,28,406	18.01
Carriage and wagon	19,03,717	4.04	Carriage and wagon	25,30,704	5.28
Traffic	43,15,240	9.17	Traffic	43,32,435	9.04
General	35,08,222	7.45	General	36,12,907	7.54
Miscellaneous	5,73,182	1.22	Miscellaneous	6,44,453	1.35
TOTAL	2,63,38,889	55.95	TOTAL	2,67,55,508	55.86

(a) Includes ₹4,60,137 paid by the North Western, the Great Indian Peninsula, and the Nizam's Guaranteed State railways as rent of leased lines not included under any of the above heads.

(b) Includes ₹4,93,908 paid by the North Western, the Great Indian Peninsula, and the Nizam's Guaranteed State railways as rent of leased lines not included under any of the above heads.

CHAPTER IV.

REVENUE RESULTS—TRAFFIC AND WORKING.

The two graphic maps at the commencement of this report show the marked difference in the amount of traffic on the several railways in India. These maps will probably be issued quinquennially in future.

Map No. 1 shows the principal centres of railway traffic. These are illustrated by coloured rectangles which represent the amount of traffic, including both outwards and inwards traffic; while Map No. 2 illustrates, by the coloured bands, the distribution of traffic over railways or sections of railways as shown by the outward bookings from each station.

For the map showing the centres of traffic the ratio of the average receipts from each passenger booked to the average receipts from each ton of goods booked has been taken, and the number of passengers converted into freight tons on the equivalent thus obtained.

For the map showing the distribution of traffic the ratio of the average receipts from one passenger carried one mile to the average receipts from one freight ton of goods carried one mile has been taken as a basis, and the number of passengers has been converted into freight tons on the equivalent thus obtained. The combined passenger and goods traffic at each principal centre and for each group of stations is thus represented by freight tonnage in both cases.

2. A map showing the several systems of Indian railways, corrected to the 30th September 1891, has also been inserted at the commencement of the report.

3. The details of the earnings and expenditure of each line are tabulated in Part I of the Administration Report and in the appendices to this volume.

The following paragraphs contain a brief general review of the traffic and working of some of the more important railways during the year 1890:

East Indian Railway (Standard gauge).

4. The length of line open for traffic on the 31st December 1890 (exclusive of sidings), comprising the East Indian railway system, was as follows:

	Miles.
East Indian railway proper, including the Dildárnagar-Gházipur branch	1,525·44
Tárakeshwar railway*	22·23
Patna-Gya State railway*	57·20
Bengal-Nágpur railway, Ásansol-Goilkera section*	147·46
Rajputana-Malwa State railway, Agra east bank to Agra Fort†	1·00
Eastern Bengal State railway, Calcutta to Naiháti‡	23·24
TOTAL	1,776·57

During the year there was an increase from 55 to 147·46 miles in the open length of the section of the Bengal-Nágpur railway worked by the Company. The mileage of the Rajputana-Malwa State railway worked over by the Company has been reduced from 3·01 miles to 1 mile owing to the transfer of the Sindia State railway to the Indian Midland Railway Company.

The mileage of the East Indian railway proper, together with that of the

* Worked by the East Indian Railway Company.

† Laid on a mixed standard and metre gauge, worked over by the East Indian railway.

‡ Worked over by the East Indian railway.

Rajputana-Malwa State railway and of the Eastern Bengal State railway as above, over which the East Indian railway has running powers, amounted to 1,549·68 miles.

The following table shows the general results of working of the East Indian railway proper as compared with the previous year :

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.*	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week, excluding steam-boat.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889 . . .	1,549·68	8,218,511	4,49,57,901	1,58,42,930	2,91,14,971	35·24	557	8·09
1890 . . .	1,549·68	8,084,823	4,34,39,355	1,39,14,808	2,95,24,547	32·03	538	8·20
Increase or decrease . . .	...	-133,688	-15,18,546	-19,28,122	+4,09,576	-3·21	-19	+0·11
Percentage of increase or decrease . . .	...	-1·63	-3·38	-12·17	+1·41	-9·11	-3·41	...

The surplus profits of the undertaking for the two years compare thus—

	1889.	1890.	Increase.
	R	R	R
Government share	37,66,925	45,72,460	8,05,535
East Indian Railway Company's share	9,41,731	11,43,115	2,01,384
TOTAL	47,08,656	57,15,575	10,06,919

The increase in surplus profits during 1890 was wholly due to larger net earnings consequent on the decrease in working expenses.

The following table shows the gross earnings under the main heads as compared with 1889 :

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	1,48,26,514	1,44,04,649	-4,21,865
Goods	2,94,64,255	2,81,17,801	-13,46,454
Electric telegraph	72,972	68,963	-4,009
Steam-boat	44,256	64,246	+19,990
Sundries	5,49,904	7,83,696	+2,33,792
TOTAL	4,49,57,901	4,34,39,355	-15,18,546

Coaching.—The number of passengers of the various classes carried, including troops and police, and season tickets and the earnings therefrom, compare as follows :

	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R		R
1889	46,612	4,82,352	158,338	6,69,562	633,859	5,62,225	13,252,466	1,14,69,645	14,006,275	1,31,83,784
1890	47,552	4,80,544	165,975	6,29,533	668,326	5,75,159	12,994,314	1,10,89,698	13,876,167	1,27,74,934
Increase or decrease	+940	-1,808	+7,637	-40,029	+29,467	+12,934	-258,152	-3,79,947	-220,108	-4,08,850

* Including contribution to the Provident Fund.

The falling off in the earnings from second class traffic was chiefly due to native gentlemen not having availed themselves of reserved accommodation to the same extent as in the previous year, and to the movements of troops during 1890 having been over shorter distances owing to the opening of the Indian Midland railway. The opening of the Indian Midland railway also partly accounts for the increased number with reduced earnings. It may also be mentioned that the traffic of 1889 included earnings from the return of troops from Burma, and from the despatch of others to the Lushai Expedition. There was, however, an improvement in the holiday and four and six monthly return tickets, which was due to the extension of time for which these tickets were made available. The decrease in earnings from the third class traffic was principally due to a falling off in the pilgrim traffic owing to depression of trade consequent on an unusually heavy rainy season, and to the opening of alternative routes resulting in diversion of traffic to the Indian Midland and Bengal-Nágpur railways.

The average sum received for carrying a passenger one mile amounted, as in the previous year, to 2.69 pies

The coaching earnings per passenger train-mile were ₹4.12 against ₹4.30.

Goods.—The following is a summary of the tonnage of goods lifted, and the earnings therefrom, as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	2,435,544	2,11,62,122	2,317,665	2,04,43,363	-117,879	-7,18,759
Military stores	10,083	4,47,707	9,805	4,20,481	-278	-27,226
Railway materials for construction	77,550	44,951	26,118	31,571	-51,432	-13,380
Coal for the public and construction	1,406,989	65,81,921	1,458,437	62,34,301	+51,448	-3,47,620
Coal for revenue only	193,247	4,02,482	190,513	3,94,359	-2,734	-8,123
Revenue stores other than coal	711,335	6,29,632	342,030	4,16,996	-369,305	-2,12,636
Live stock	2,233	91,215	2,642	1,16,204	+409	+24,989
Rents, miscellaneous, &c. . . . .	...	1,05,543	...	62,421	...	-43,122
Less—Outstandings irrecoverable	4,836,981	2,94,65,573	4,348,110	2,81,19,696	-488,871	-13,45,877
	...	1,318	...	1,895	...	+577
TOTAL	4,836,981	2,94,64,255	4,348,110	2,81,17,801	-488,871	-13,46,454

The decrease in "General merchandise" chiefly occurred under "Linseed," "Mustard and rape seeds," and "Castor oil seeds," "Rice" and "Cotton piece-goods." The following is a comparison of the tonnage of these goods lifted, and the earnings therefrom, during the two years 1889 and 1890:

	Tons.	Earnings. R
<i>Linseed—</i>		
1889	206,468	16,55,734
1890	158,625	13,01,700
<i>Mustard and rape seeds—</i>		
1889	101,091	5,94,731
1890	67,652	3,97,966
<i>Castor-oil seeds—</i>		
1889	30,398	2,19,944
1890	20,788	1,17,455
<i>Rice—</i>		
1889	273,070	14,30,474
1890	257,406	11,73,933
<i>Cotton piece-goods—</i>		
1889	66,357	20,63,179
1890	65,127	18,81,750

Linseed.—The decrease was due to the rise in exchange and sea freight, coupled with prices above shippers' views, and also to a total stoppage of despatches to Bombay, *via* Jubbulpore, from Cawnpore, and *via* Háthras, and from the Oudh and Rohilkhand railway, *via* Aligarh, presumably owing to diversion to the Indian Midland railway.

Mustard and rape seeds.—Decrease due to a partial failure of crops, and to diversion of traffic to the Indian Midland railway.

Castor-oil seeds.—Decrease due to high prices asked by sellers, short crop, and free supply by sea of Madras Coast seed.

Rice.—The decrease was principally due to the fact that in 1889, owing to a deficient harvest in the Patna and Shahabad Districts, there was an increase in the traffic from the Tirhoot and Bengal and the North-Western railways, *via* Mokameh and Digha Ghât. Considerable quantities were also despatched from stations on the Loop line and in the Burdwan and Raneegunge Districts. This demand ceased in 1890. Howrah earnings, however, greatly improved owing to a demand for shipment from Calcutta: there was also a slight improvement in despatches to Benares Cantonment.

Cotton piece-goods.—The decrease in European piece-goods is attributed to the failure of some large firms, and to the unsettled state of exchange. The most noticeable features in this traffic were a falling-off in the despatches from Calcutta to the North-Western Provinces and the Punjab, especially to Cawnpore and Delhi, and an improvement in the despatches to Behar and Bengal, for the Patna and Gya and the Chota Nágpur Districts. There was a noticeable increase in the despatches of Indian piece-goods from Cawnpore to Howrah, Mirzapur, Allahabad, Agra, Shikohabad, and Háthras.

There were, however, improvements chiefly in raw cotton and iron (railway materials for foreign railways), the comparison of the tonnage lifted and the earnings therefrom with 1889 being as follows:

	Tons.	Earnings. R
<i>Raw cotton —</i>		
1889	52,361	9,38,122
1890	49,418	10,87,880
<i>Iron (railway materials for foreign railways)—</i>		
1889	64,269	6,07,588
1890	70,257	7,33,799

Raw cotton.—The decrease in the quantity lifted, with an increase in the earnings, was due to a considerable increase in the weight of cotton carried to Calcutta with an average lead of about 800 miles, while a heavy falling-off occurred in the bookings to Bombay, for which the lead over the East Indian railway was a little under 100 miles.

Iron (railway material for foreign railways).—There was a marked increase in the carriage of iron for the Delhi-Umballa-Kalka railway, but a decrease in the case of the Bengal-Nágpur railway.

Under "Coal for the public and construction" there was an increase in the quantities carried on account of foreign railways and in the public traffic at Howrah, but a large decrease in earnings, caused chiefly by a slack demand for export owing to an accumulation of stocks; the downward despatches to Howrah were, however, helped by a good demand for coal intended for shipment to coast ports, chiefly Madras and Rangoon.

The decrease under "Revenue stores other than coal" was chiefly due to smaller despatches for the Engineering department for maintenance purposes.

The average sum received for carrying a ton of goods one mile was 5.79

pies compared with 5·67 pies in 1889. The goods earnings per goods tra mile were R6·13 against R6·17.

The following table compares the working expenses* of the railway during the years 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	R		₹		₹	
Maintenance	54,43,286	12·11	38,78,004	8·93	-15,65,282	-28·7
Locomotive	36,31,047	8·08	35,51,286	8·17	-79,761	-2·2
Carriage and wagon	12,13,622	2·70	11,86,061	2·73	-27,561	-2·2
Traffic	29,35,250	6·53	29,14,896	6·71	-20,354	-0·6
General	19,17,423	4·26	18,24,441	4·20	-92,982	-4·8
Steam-boat	57,308	0·13	78,951	0·18	+21,643	+37·7
Special and miscellaneous	6,44,994*	1·43	4,81,169*	1·11	-1,63,825	-25·4
TOTAL	1,58,42,930	35·24	1,39,14,808	32·03	-19,28,122	-12·1

Maintenance.—The decrease was in a great measure due to the introduction of a more economical system of renewals of permanent-way, whereby wooden sleepers are not replaced by Denham-Olphert's sleepers until the life of the wooden sleepers in the road has been fully utilised. The expenditure on reballasting the road was also considerably smaller, as this work is now approaching completion. It may also be mentioned that the maintenance expenditure during 1890 included an adjustment of R1,88,437 expended on strengthening bridges during the preceding year.

One hundred miles of road was, as usual, relaid with steel rails during the year.

Locomotive.—The decrease was mainly due to charges for replacement of engines and tenders having been less, to a larger credit to the department or account of working branch lines, and to reduction of establishment.

General.—Decrease due chiefly to reduction of establishment, and to larger credits for working branch lines.

Steam-boat.—The increase was chiefly due to the steamer *Bradford Leslie* having been laid up for repairs, and to increased traffic, to meet which the steamers *Robin* and *Patna* and country boats were hired.

Special and miscellaneous.—The decrease was due chiefly to the fact that in 1889 payments had to be made to foreign lines for the hire and mileage of rolling-stock, while in 1890 there were receipts on this account which are included in the earnings of the line. There was also a large decrease under "Loss by exchange" due to the improved exchange rates.

There were no changes of importance in the coaching fares. The

Fares and rates.

chief alterations in goods rates will be found in Chapter VIII, paragraph 10, pages 122 and 123 of Part I of the Administration Report.

Patna-Gya State Railway (Standard gauge).

5. The principal terms on which this line is maintained and worked by the East Indian Railway Company will be found on pages 67 and 68, Chapter IV of Part II of the Administration Report for 1889-90.

* Including contribution to Provident Fund.

General results.

The following table shows the general results of working as compared with the previous year :

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R			
1889	57'20	125,299	5,21,515	2,53,954	2,67,561	48.69	175	6.15
1890	57'20	115,120	5,17,487	2,37,388	2,80,099	45.87	174	6.44
Increase or decrease . . . . .	...	-10,179	-4,028	-16,566	+12,538	-2.82	-1	+0.29
Percentage of increase or decrease . . . . .	...	-8.12	-0.77	-6.52	+4.69	...	-0.57	...

Gross earnings.

The following table shows the gross earnings under main heads as compared with 1889 :

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	3,85,774	3,66,679	-19,095
Goods	1,31,089	1,46,509	+15,420
Electric telegraph	2,301	2,245	-56
Sundries	2,351	2,054	-297
TOTAL	5,21,515	5,17,487	-4,028

Coaching.—The number of passengers of the various classes carried, including troops and police, and the earnings therefrom, compare as follows :

	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R		R
1889	902	3,330	4,258	7,329	11,031	7,289	6,9,946	3,58,419	716,137	3,76,367
1890	925	3,503	3,707	6,295	12,347	7,753	685,861	3,39,287	702,840	3,56,838
Increase or decrease	+23	+173	-551	-1,034	+1,316	+464	-14,085	-19,132	-13,297	-19,529

The falling-off in the third class traffic was due to a smaller number of pilgrims having visited Gya.

The average sum received for carrying a passenger one mile amounted to 2.50 pies, being the same as in 1889.

The coaching earnings per passenger train-mile were R4.71 against R4.52.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889 :

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	64,643	1,18,616	76,568	1,39,967	+11,925	+21,351
Railway materials for construction	10,076	3,066	2,768	887	-7,308	-2,179
Coal for the public and construction	1,941	2,921	2,416	3,266	+475	+345
Coal for revenue only	104	53	128	62	+24	+9
Revenue stores other than coal	13,236	5,569	3,412	1,674	-9,824	-3,895
Live stock	16	157	16	148	...	-9
Rents, miscellaneous, &c. . . . .	...	707	...	505	...	-202
TOTAL	90,016	1,31,089	85,308	1,46,509	-4,708	+15,420

The increase in "General merchandise" occurred chiefly in husked rice, jaggree and molasses, linseed, and mustard and rape seeds.

The average sum received for carrying a ton of goods one mile amounted to 7.76 pies against 7.25 pies in 1889.

The goods earnings per goods train-mile were ₹3.92 against ₹3.28.

The working expenses, as compared with those of the previous year, are detailed in the following table:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	₹		₹		₹	
Working expenses calculated at the same rate per cent. of the gross receipts of the Patna-Gya State railway as was the aggregate working expenses of the undertaking and the State line to the aggregate receipts of the undertaking during the two halves of the year	1,83,685	35.22	1,63,826	31.66	-19,859	-10.81.
Contribution to the East Indian railway Provident fund	3,378	0.65	3,537	0.68	+159	+4.71
$\frac{1}{4}$ th share of net earnings payable to the East Indian Railway Company for working	66,891	12.82	70,025	13.53	+3,134	+4.69
TOTAL	2,53,954	48.69	2,37,388	45.87	-16,566	-6.52

The decrease in the working expenses was due to the lower percentage of expenses to earnings at which the undertaking and the State line were worked.

Fares and rates.

These are the same as on the East Indian railway.

Bengal and North-Western, including the Tirhoot State railway (Metre gauge).

6. The working of the Tirhoot State railway was transferred from State agency to the Bengal and North-Western Railway Company from the 1st July 1890, from which date the two railways have been worked as one undertaking.

Under the contract with the Secretary of State for India, which is printed as Appendix L to this volume, the net earnings of the undertaking, after deducting interest on any additional capital raised by the Company or advanced to the Company by the Secretary of State for the purposes of the contract, are divided in the proportion of the capital outlay on each line, the Company receiving, in addition to its share, 5 per cent. on the proportion of net earnings which may be payable to Government.

The mean mileage worked during the year was 670.75 miles against 649 miles in 1889, the increase being due to the opening of the following additional lengths of the Tirhoot State railway during 1890:

Durbhunga to Sitamarhi, 42 miles, opened on the 1st July.

Pratápganj to Kunwa Ghât, 8 miles, opened on the 14th November.

The mean mileage of the two railways was as under:

	Miles.
Bengal and North-Western	376.00
Tirhoot	294.75

General results.

The following table shows the general results of working as compared with the previous year :

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week excluding steam-boat.	Percentage of net earnings on total* capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889	649'00	1,322,108	41,08,498	20,76,288	20,32,210	50'54	111	4'37
1890	670'75	1,398,488	46,01,592	20,28,228	25,73,364	44'08	121	5'27
Increase or decrease	+21'75	+76,380	+4,93,094	-48,060	+5,41,154	-6'46	+10	+0'90
Percentage of increase or decrease	+3'35	+5'78	+12'00	-2'31	+26'63	...	+9'01	...

The share of the net earnings of the Tirhoot State railway due to Government for the second-half of 1890 amounted to ₹4,60,653.† The net earnings for the previous corresponding half-year were ₹5,17,787.

Gross earnings.

The following table shows the gross earnings under main heads as compared with 1889 :

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	16,82,979	18,04,772	+ 1,21,793
Goods	19,21,920	22,85,143	+ 3,63,223
Electric telegraph	20,103	19,892	- 211
Steam-boat	3,52,971	3,78,701	+ 25,730
Sundries	1,30,525	1,13,084	- 17,441
TOTAL	41,08,498	46,01,592	+4,93,094

Coaching.—The number of passengers of the various classes carried, including troops and police, and the earnings therefrom, compare as follows :

	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R		R
1889	13,922	39,389	20,472	30,984	17,570	13,120	4,347,922	14,90,537	4,399,886	15,74,030
1890	14,978	41,956	18,201	28,313	21,101	15,450	4,547,245	16,00,532	4,601,525	16,86,251
Increase or decrease	+1,056	+2,567	-2,271	-2,671	+3,531	+2,330	+199,323	+1,09,995	+201,639	+1,12,221

The increase in the third class traffic was chiefly due to the opening of the extensions of the Tirhoot State railway.

The average sum received for carrying a passenger one mile amounted to 1'95 pies against 1'96 pies in 1889.

The coaching earnings per passenger train-mile were ₹3'13 against ₹2'99.

* Excludes interest on Capital outlay on the Bengal and North-Western railway during construction.
 † Subject to correction.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	₹	Tons.	₹	Tons	₹
General merchandise	558,714	17,94,457	614,563	21,04,553	+55,849	+3,10,096
Military stores	21	212	17	133	-4	-79
Railway materials for construction	21,575	44,183	41,384	93,225	+19,809	+49,042
Coal for the public and construction	13,992	28,886	19,576	35,332	+5,584	+6,446
Coal for revenue only	21,352	23,035	24,370	20,742	+3,018	-2,293
Revenue stores other than coal	9,198	14,638	9,654	11,253	+456	-3,385
Live stock	193	2,727	291	5,834	+98	+3,107
Rents, miscellaneous, &c. . . . .	...	13,782	...	14,071	...	+289
TOTAL	625,045	19,21,920	709,855	22,85,143	+84,810	+3,63,223

The increase in the traffic in general merchandise chiefly occurred under the following items:

	Tons.	₹
Cotton piece-goods	2,267	19,804
Grains	19,713	1,56,928
Metals	8,816	37,464
Oil-seeds	3,130	11,488
Salt	3,133	16,033
Timber	8,413	13,372

The increase under "Railway materials for construction" was due to the carriage of materials for the Bahramghat and Revilganj branches, and for the Sitamarhi extension.

The average sum received for carrying a ton of goods one mile amounted to 6.75 pies against 6.27 pies in 1889.

The goods earnings per goods train-mile were ₹2.78 against ₹2.53.

The following table compares the working expenses of the railways during

Working expenses. the years 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	₹		₹			
Maintenance	4,01,393	9.77	3,98,488	8.66	-2,905	-0.72
Locomotive	5,01,040	12.20	4,83,829	10.52	-17,211	-3.43
Carriage and wagon	1,18,556	2.89	1,07,372	2.33	-11,184	-9.43
Traffic	3,92,949	9.56	4,06,496	8.83	+13,547	+3.45
General	4,00,704	9.75	3,76,827	8.19	-23,877	-5.96
Steam-boat	2,19,515	5.34	2,25,767	4.91	+6,252	+2.85
Special and miscellaneous	42,131	1.03	29,449	0.64	-12,682	-30.10
TOTAL	20,76,288	50.54	20,28,228	44.08	-48,060	-2.31

The decreases in the working expenses were chiefly due to the Bengal and North-Western and Tirhoot railways having been worked as one system during the second-half of 1890, to less expenditure on repairs and renewals of engines and

vehicles, and to the contribution to the Provident Fund for the second-half of 1890 not having been made, pending orders as to the rate of distribution of bonus.

The increase under "Traffic" was mainly due to the additional mileage worked, and that under "Steam-boat" to increased expenditure on fuel owing to additional ferry services.

The chief alterations in the coaching fares and goods rates will be found on pages 121 and 123, Chapter VIII of Part I of the Administration Report.

Fares and rates.

Bareilly-Pilibhit State Railway (Metre gauge).

7. The principal terms on which this line was worked by the Rohilkhand-Kumaun Railway Company will be found on page 69, Chapter IV of Part II of the Administration Report for 1889-90.

General results.

The following table shows the general results of working as compared with the previous year :

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889	36	27,018	1,09,855	73,002	36,853	66.45	59	2.40
1890	36	28,342	1,19,450	78,929	40,521	66.08	64	2.64
Increase or decrease .	...	+1,324	+9,595	+5,927	+3,668	-0.37	+5	+0.24
Percentage of increase or decrease.	...	+4.90	+8.73	+8.12	+9.95	...	+8.47	...

Gross earnings.

The gross earnings under main heads are compared with 1889 in the following table :

	1889.	1890.	Increase.
	R	R	R
Coaching	42,975	47,791	4,816
Goods	59,915	61,746	1,831
Electric telegraph	1,177	1,593	416
Sundries	5,788	8,320	2,532
TOTAL	1,09,855	1,19,450	9,595

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, compare as follows :

	FIRST CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R
1889	324	1,029	1,242	1,059	128,293	38,620	129,859	40,708
1890	379	1,200	1,388	1,107	138,567	41,673	140,334	43,980
Increase	55	171	146	48	10,274	3,053	10,475	3,272

The improvement in the coaching traffic was chiefly due to the visit of His Royal Highness Prince Albert Victor of Wales to the Nepal terai.

The average sum received for carrying a passenger one mile amounted to 2'08 pies, being the same as in 1889.

The coaching earnings per passenger train-mile were R4'25 against R3'85.

Goods.—The following is a summary of the number of tons of goods lifted and the earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	35,194	58,965	34,795	59,114	- 399	+ 149
Military stores	2	8	1	4	- 1	- 4
Railway materials for construction	666	442	2,456	1,647	+ 1,790	+ 1,205
Coal for the public and construction	93	28	92	26	- 1	- 2
Revenue stores other than coal	884	339	2,274	744	+ 1,390	+ 405
Rents, miscellaneous, &c. . . . .	...	133	...	211	...	+ 78
TOTAL	36,839	59,915	39,618	61,746	+ 2,779	+ 1,831

The increase under "Railway materials for construction" was due to the carriage of materials for the construction of the line beyond Pilibhit.

The average sum received for carrying a ton of goods one mile amounted to 9'19 pies against 9'55 pies in 1889.

The goods earnings per goods train-mile were R3'61 against R3'78.

The following statement shows the working expenses of the railway during 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	R		R			
Maintenance	14,383	13'09	19,126	16'00	+ 4,743	+ 32'98
Locomotive	14,003	12'75	13,756	11'52	- 247	- 1'76
Carriage and wagon	2,835	2'58	3,520	2'95	+ 685	+ 24'16
Traffic	15,931	14'50	16,270	13'62	+ 339	+ 2'13
General	17,117	15'38	17,268	14'46	+ 151	+ 0'88
Special and miscellaneous	8,733	7'95	8,989	7'53	+ 256	+ 2'93
TOTAL	73,002	66'45	78,929	66'08	+ 5,927	+ 8'12

The increase under "Maintenance" was principally due to special expenditure incurred in ballasting, in pitching the piers of certain bridges, and in alteration and painting of the Deoha and Nakatia bridges.

Fares and rates.

There were no changes in the class fares and rates during the year.

Bengal-Nágpur Railway (Standard gauge).

8. The sanctioned mileage of this railway is 831½ miles, of which 586 miles were open on the 31st December 1890. The sections of line opened during the year 1890 with dates of opening for goods traffic are given below:

Purulia to Chakardharpore	72 miles, 23rd January.
Biláspur to Raigarh	82¼ miles, 10th February.
Raigarh to Sambulpur Road	44¾ miles, 20th April.
Umaria to Birsinghpur	18¼ miles, 11th May.
Chakardharpore to Goilkerá	20¼ miles, 15th May.

The open section of this railway at the Bengal end, from Ásansol to Goilkera, including the branch from Damoodur to the Sanctoria coal mines, 147·46 miles, was worked, as a temporary measure, by the East Indian Railway Company. The gross earnings of the section during 1890 amounted to R3,85,773, and the total working expenses to R4,43,900. The following paragraphs include the transactions of the section at the Bengal end worked by the East Indian Railway Company.

The table below shows the general results of working as compared with the previous year:

Year.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889	300·00	525,106	20,40,943	16,37,783	4,03,160	80·25	131	0·57
1890	545·65	608,665	28,64,578	23,17,115	5,47,463	80·89	101	0·67
Increase or decrease .	+ 245·65	+ 83,559	+ 8,23,635	+ 6,79,332	+ 1,44,303	+ 0·64	—30	+ 0·10
Percentage of increase or decrease.	+ 81·88	+ 15·91	+ 40·36	+ 41·48	+ 35·79	...	—22·90	...

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase.
	R	R	R
Coaching	3,80,567	5,43,378	1,62,811
Goods	14,82,235	21,01,475	6,19,240
Electric telegraph	9,026	16,855	7,829
Sundries	1,69,115	2,02,870	33,755
TOTAL	20,40,943	28,64,578	8,23,635

Coaching.—The number of passengers of the various classes carried, including troops and police, and season tickets and the earnings therefrom, compare as follows:

	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.
		R		R		R		R		R
1889	2,657	7,190	18,014	12,205	32,104	8,580	802,425	3,30,162	855,200	3,58,137
1890	3,968	14,746	20,011	16,831	41,681	16,470	1,048,122	4,54,341	1,113,782	5,02,388
Increase	1,311	7,556	1,997	4,626	9,577	7,890	245,697	1,24,179	258,582	1,44,251

The increase in the passenger traffic was entirely due to the opening of the new sections. As the traffic on the newly opened sections had not developed during the first-half of 1890, more than 90 per cent. of the above increases were obtained in the second-half of the year.

The average sum received for carrying a passenger one mile amounted to 2·60 pies against 2·69 pies in 1889.

The coaching earnings per passenger train-mile were ₹2.82 against ₹2.70 *Goods*.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	₹	Tons.	₹	Tons.	₹
General merchandise	181,016*	9,57,209	283,410	15,53,857	+ 102,394	+ 5,96,648
Military stores	170	576	510	2,566	+ 340	+ 1,990
Railway materials for construction	193,673	3,39,626	114,515	2,13,640	- 79,158	- 1,25,986
Coal for the public and construction	119,523*	1,20,162	335,474	2,58,609	+ 215,951	+ 1,38,447
Coal for revenue only	12,360	25,738	15,109	36,369	+ 2,749	+ 10,631
Revenue stores other than coal	55,366	30,209	93,740	31,282	+ 38,374	+ 1,073
Live stock	2	60	3	16	+ 1	- 44
Rents, miscellaneous, &c. . . . .	...	8,655	...	5,136	...	- 3,519
TOTAL	562,110*	14,82,235	842,761	21,01,475	+ 280,651	+ 6,19,240

The improvement under "General merchandise" was almost entirely due to the increased mileage of the railway. The noticeable increases occurred in the traffic in "Grains," "Oil seeds" and "Salt."

The increase under "Grains" amounted to 30,848 tons in the quantity carried and to ₹2,70,295 in earnings, and was chiefly owing to merchants on the Biláspur-Sambulpur section having taken advantage of exporting by the railway instead of by carts. There was also an increased demand for Chhattisgarh rice in Berar, Rajputana, and Central India.

The decrease under "Railway materials for construction" was principally due to an adjustment made in the accounts of the second-half of the year in respect of the charge for the carriage of construction material, which resulted in a write-back to the credit of Capital of a sum of ₹2,04,108.

The increase under "Coal for the public and construction" was for the most part due to an improvement in the public coal traffic on the Bengal end of the line. There was also an increase on the Central Provinces end of the line, due to larger imports of coal from the Warora colliery to the surrounding Mill Companies.

The average sum received for carrying a ton of goods one mile amounted to 8.98 pies against 7.15 pies in 1889.

The goods earnings per goods train-mile were ₹5.05 against ₹3.86.

The following table compares the working expenses of the railway during the years 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	₹		₹		₹	
Maintenance	4,23,041	20.73	8,79,503	30.70	+ 4,56,462	+ 107.90
Locomotive	5,35,728	26.25	5,35,140	18.68	- 588	- 0.11
Carriage and wagon	90,423	4.43	1,30,049	4.54	+ 39,626	+ 43.82
Traffic	2,41,213	11.82	2,65,098	9.26	+ 23,885	+ 9.90
General	3,25,849	15.97	4,44,812	15.53	+ 1,18,963	+ 36.51
Special and miscellaneous	21,529	1.05	62,513	2.18	+ 40,984	+ 190.37
TOTAL	16,37,783	80.25	23,17,115	80.89	+ 6,79,332	+ 41.48

* Excludes the tonnage carried on the Ásansol-Purulia section during the first-half of 1889, information not being available.

The large increase under "Maintenance" was almost entirely due to the additional mileage worked during the year. The increases under "Carriage and wagon," "Traffic" and "General" may also be ascribed to the same cause.

Locomotive.—The decrease was principally due to the write-back of ₹41,951 to Capital in the accounts of the first-half of the year. This amount was incurred on the restoration of metre gauge engines after the conversion of the late Nágpur-Chhattisgarh State railway to the standard gauge, and was in the first instance charged to Revenue. The expenditure on "Fuel" was also less, owing to a reduction in the price paid for coal during the year 1890. The charges for "General superintendence," however, showed an increase, owing to the additional mileage worked, and to a revision in the basis of division of charges for establishments between Capital and Revenue.

Special and miscellaneous.—The larger amount paid to the East Indian Railway Company for the additional mileage of the section of the Bengal-Nágpur railway worked by that Company during 1890 chiefly accounts for the increased expenditure under this head.

There were no changes of importance in the coaching fares. The chief alterations in the goods rates will be found on page 123, Chapter VIII of Part I of the Administration Report.

Indian Midland Railway (Standard gauge).

9. The mean mileage worked was 696·54 miles as compared with 580·58 miles in 1889. The increase was due to the Jhánsi-Mánikpur, Jhánsi-Agra and Bina-Saugor sections having been worked during only a part of 1889. The mean mileage worked includes 19·19 miles of foreign lines worked over by the Indian Midland railway, the details of which are given on page 74, Chapter IV of Part II of the Administration Report for 1889-90.

The mileages of the several sections of the Indian Midland railway were as follows:

	Miles.
Jhánsi to Bhopal	180·50
Jhánsi to Agra	135·02
Jhánsi to Cawnpore	135·22
Jhánsi to Mánikpur	180·37
Binato Saugor	46·24
	677·35

The following table shows the general results of working as compared with the previous year:

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889	580·58	929,832	27,22,157	21,26,107	5,96,050	78·10	90	0·76
1890	696·54	1,109,093	31,24,364	25,24,585	5,99,779	80·80	86	0·72
Increase or decrease	+115·96	+179,261	+4,02,207	+3,98,478	+3,729	+2·70	-4	-0·04
Percentage of increase or decrease	+19·97	+19·28	+14·77	+18·74	+0·63	...	-4·44	...

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase or decrease.
	<i>R</i>	<i>R</i>	<i>R</i>
Coaching	11,09,605	14,69,837	+ 3,60,232
Goods	15,37,841	15,48,724	+ 10,883
Electric telegraph	11,623	10,189	- 1,434
Sundries	63,088	95,614	+ 32,526
TOTAL	27,22,157	31,24,364	+ 4,02,207.

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, compare as follows:

	FIRST CLASS.		SECOND CLASS.		THIRD CLASS (BY MAIL.)		THIRD CLASS (BY ORDINARY TRAIN).		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		<i>R</i>		<i>R</i>		<i>R</i>		<i>R</i>		<i>R</i>
1889	4,534	34,619	13,244	39,763	...	...	1,095,166	9,32,473	1,112,944	10,06,855
1890	6,486	52,427	23,175	72,282	66,712	86,124	1,208,845	11,05,906	1,305,218	13,16,739
Increase	1,952	17,808	9,931	32,519	66,712	86,124	113,679	1,73,433	192,274	3,09,884

The increases under the several classes may be ascribed to two principal causes: in the first place the railway was open for through traffic during the whole of 1890, which was not the case in 1889, the construction of several sections having only been completed towards the close of the latter year; in the second place, an accession of coaching traffic of all descriptions was obtained from the 1st October 1890, as the line was utilised from that date for military transport and the transmission of the mails.

The average sum received for carrying a passenger one mile amounted to 2.72* pies against 2.82* pies in the previous year.

The coaching earnings per passenger train-mile were R2.54 against R2.25.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	<i>R</i>	Tons.	<i>R</i>	Tons.	<i>R</i>
General merchandise	142,445	11,04,415	172,388	13,12,999	+ 29,943	+ 2,08,584
Military stores	580	7,883	872	13,693	+ 292	+ 5,810
Railway materials for construction	449,651	3,38,742	153,589	68,530	- 2,96,062	- 2,70,212
Coal for public and construction	5,935	27,317	7,234	35,977	+ 1,299	+ 8,660
Coal for revenue only	16,816	40,717	27,389	75,435	+ 10,573	+ 34,718
Revenue stores other than coal	18,569	12,497	221,403	37,246	+ 202,834	+ 24,749
Live stock	68	1,584	34	1,110	- 34	- 474
Rents, miscellaneous, &c. . . . .	...	4,686	...	3,734	...	- 952
TOTAL	634,064	15,37,841	582,909	15,48,724	- 51,155	+ 10,883

* These figures include the traffic on the Bhopal-Itarsi State railway.

The increase under "General merchandise" may be attributed to the same causes which led to the improvement in the passenger traffic.

The improvement, however, was confined to the first-half of the year. During the second-half of the year the general merchandise traffic fell off on account of the failure of the *khari*f crop following the indifferent crop of the previous season, which had the effect of curtailing exports of food-grains to a very serious extent. The cotton crop was also later in the markets and deficient in quantity, while the unusually heavy monsoon caused breaches on the Oudh and Rohilkhand railway and a long interruption to traffic *via* Cawnpore. The heavy rain also rendered communication over the unmetalled roads, between outlying towns and the railway, a matter of great difficulty. Again the fluctuations in exchange affected the trade in imported goods, and led to a considerable falling-off in the movements of European piece-goods.

The completion of the line accounts for the decrease in the earnings from the carriage of materials for construction.

The traffic in the more important commodities carried during the years 1889 and 1890 is compared in the following table*:

	1889.		1890.		Increase.		Decrease.	
	Tons.	₹	Tons.	₹	Tons.	₹	Tons.	₹
Cotton, raw	9,864	1,51,460	10,327	1,45,577	463	...	..	5,883
Cotton, manufactured	5,830	92,216	6,916	1,19,176	1,086	26,960	...	...
Grains	46,348	2,10,382	56,865	2,46,233	10,517	35,851	...	...
Hides, skins, &c.	3,310	31,142	5,456	54,146	2,146	23,004	...	...
Metals	3,922	41,760	3,153	33,828	...	...	769	7,932
Oil seeds	14,991	1,04,586	25,951	1,87,854	10,960	83,268	...	...
Provisions	6,216	73,324	8,687	1,05,367	2,471	32,043	...	...
Salt	15,101	90,807	16,053	1,11,314	952	20,507	...	...
Spices and grocery	3,140	29,235	2,731	32,241	...	3,006	409	...
Sugar and jaggree	17,598	1,75,895	19,345	1,89,074	1,747	13,179	...	...
Stone and lime	11,847	41,734	13,951	37,121	2,104	...	...	4,613
Tobacco	1,901	22,567	2,361	29,886	460	7,319	...	...

The earnings from "General merchandise" on the Bhopal-Itarsi line during 1889 and 1890 amounted to 16.47 and 16.21 per cent., respectively, of the traffic on the Indian Midland railway.

The average sum received for carrying a ton of goods one mile amounted to 7.24† pies against 7.79† pies in 1889.

The goods earnings per goods train-mile were ₹2.91 against ₹3.52.

The following table compares the working expenses of the railway during the years 1889 and 1890 :

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings		
	₹		₹			
Maintenance	6,19,383	22.75	8,22,532	26.33	+ 2,03,149	+ 32.80
Locomotive	6,45,710	23.72	7,05,019	22.56	+ 59,309	+ 9.18
Carriage and wagon	1,23,975	4.55	1,81,467	5.81	+ 57,492	+ 46.37
Traffic	2,88,323	10.59	3,37,568	10.80	+ 49,245	+ 17.08
General	3,61,701	13.29	3,98,311	12.75	+ 36,610	+ 10.12
Special and miscellaneous	87,015	3.20	79,688	2.55	- 7,327	- 8.42
TOTAL	21,26,107	78.10	25,24,585	80.80	+ 3,98,478	+ 18.74

* The figures in this table include traffic on the Bhopal-Itarsi State railway.

† Includes traffic on the Bhopal-Itarsi State railway.

Maintenance.—The increase was due to the increased length of line maintained, and to the cost of additional ballast required on certain sections.

During the year 6·17 miles of Indian Midland railway type of steel rails were substituted for the original material on the Gwalior-Agra section.

* The increases under "Locomotive," "Carriage and wagon," and "Traffic" were due to the increased traffic worked during the year.

General.—The increase was principally due to no portion of these charges having been debited to Capital account as was done during construction.

From the 1st October 1890, a new rate of 3 pies per mile was introduced for third class passengers travelling by mail trains.

Fares and rates.

Rajputana-Malwa State Railway (Metre gauge.)

10. The principal terms under which this line is worked by the Bombay, Baroda and Central India Railway Company will be found on pages 76 and 77, Chapter IV of Part II of the Administration Report for 1889-90.

The mean mileage worked during the year was 1,671·83 miles against 1,666·99 miles in 1889. The increase was due to the opening, on the 26th August 1889, of the Muttra-Brindaban extension, 7·41 miles. The mileage was distributed as follows:

	Miles.
Rajputana section	713·14
Malwa section	407·00
Rewari-Ferozepore section	291·04
Cawnpore-Achnera section	260·65
TOTAL	1,671·83

The following table shows the general results of working as compared with the previous year:

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889	1,666·99	6,303,781	1,99,30,005	91,32,788	1,07,97,217	45·82	230	8·29
1890	1,671·83	5,247,830	1,74,28,281	87,85,756	86,42,525	50·41	200	6·65
Increase or decrease	+4·84	-1,055,951	-25,01,724	-3,47,032	-21,54,692	+4·59	-30	-1·64
Percentage of increase or decrease	+0·29	-16·75	-12·55	-3·80	-19·96	...	-13·04	...

The surplus profits divisible between Government and the Bombay, Baroda and Central India Railway Company amounted to R24,03,122 against R45,55,793 in 1889, the $\frac{1}{2}$ th share of which payable to the Company was R4,80,673,* against R9,11,870.

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	60,16,333	57,75,759	-2,40,574
Goods	1,36,73,491	1,13,81,314	-22,92,177
Electric telegraph	55,393	51,447	-3,946
Sundries	1,84,788	2,19,761	+34,973
TOTAL	1,99,30,005	1,74,28,281	-25,01,724

* Includes R49 paid to the Company for past years.

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, compare as follows :

	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		₹		₹		₹		₹		₹
1889	15,572	1,36,443	70,877	2,48,808	242,447	2,82,829	8,392,399	47,02,206	8,721,295	53,70,286
1890	15,778	1,28,140	63,999	1,93,538	222,755	2,52,250	8,258,987	45,95,504	8,561,519	51,69,432
Increase or decrease	+ 206	-8,303	-6,878	-55,270	-19,692	-30,579	-133,412	-1,06,702	-159,776	-2,00,854

The decrease in the second class traffic was chiefly due to the falling off of 6,189 in the number, and of ₹48,124 in earnings from troops and police, and that in the third class traffic, to a general decrease in the ordinary passenger traffic.

The average sum received for carrying a passenger one mile amounted to 2'13 pies, and was the same as in the previous year.

The coaching earnings per passenger train-mile were ₹2'87 against ₹3'00.

Goods.—The following is a summary of the tonnage of goods lifted, and the earnings therefrom, as compared with 1889 :

	1889.		1890.		Increase or decrease.	
	Tons.	₹	Tons.	₹	Tons.	₹
General merchandise	1,166,502	1,29,27,752	1,080,638	1,07,73,429	-85,864	-21,54,323
Military stores	5,138	1,23,195	7,493	1,22,623	+2,355	-572
Railway materials for construction	44,257	70,517	15,066	23,207	-29,191	-42,310
Coal for the public and construction	8,057	55,195	7,529	51,572	-528	-3,623
Coal for revenue only	80,747	2,98,666	65,054	2,35,905	-15,693	-62,761
Revenue stores other than coal	71,178	1,55,828	51,419	1,22,807	-19,759	-33,021
Live stock	1,862	27,309	2,010	33,187	+148	+5,878
Rents, miscellaneous, &c. . . . .	...	15,029	...	13,584	...	-1,445
TOTAL	1,377,741	1,36,73,491	1,229,209	1,13,81,314	-1,48,532	-22,92,177

The large decrease under "General merchandise" occurred chiefly in the traffic in raw cotton, grains and oil-seeds, of which the following are the details :

Raw cotton.—The quantity carried and the earnings therefrom were 71,891 tons and ₹11,46,442, against 80,856 tons and ₹14,59,763 in 1889. The decrease in cotton forwarded *via* Sábarmati chiefly to Bombay alone amounted to 11,498 tons in the weight carried and to ₹3,39,173 in earnings.

Grains.—The quantity carried was 272,278 tons and the earnings ₹20,79,473 against 346,141 tons and ₹34,86,487 in the previous year. The decrease in wheat was 50,035 tons in quantity and ₹6,78,363 in earnings, and that in the other descriptions of grain amounted to 23,828 tons in quantity, and ₹7,28,651 in earnings. This falling off was chiefly confined to the traffic forwarded *via* Sábarmati.

Oil-seeds.—The quantity carried was 83,099 tons, and the earnings ₹4,99,925 against 141,381 tons and ₹12,92,401 in the previous year. The decrease was entirely in traffic booked to the Bombay, Baroda and Central India railway *via* Sábarmati.

There was, however, an increase over 1889 of 1,093 tons and ₹52,093 in the traffic in cotton twist and yarn, and an increase of ₹75,626 in the earnings from the sugar traffic, notwithstanding a decrease of 1,632 tons in the quantity carried.

The falling off in the earnings under "Railway materials for construction" was chiefly due to the completion of certain capital works on the Rewári-Ferozepore section, and on the Brindaban extension.

The decrease in earnings from "Revenue stores other than coal" was due to the carriage of less material, and to fewer ballast trains having been run.

The average sum received for carrying a ton of goods one mile amounted to 7'40 pies, against 6'63 pies in 1889.

The goods earnings per goods train-mile were ₹3'52, against ₹3'18.

The following table compares the working expenses of the railway during

Working expenses. . . the years 1889 and 1890 :

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	₹		₹			
Maintenance . . .	16,85,897	8'46	14,03,411	8'05	—2,82,486	—16'76
Locomotive . . .	38,98,703	19'56	33,81,032	19'40	—5,17,671	—13'28
Carriage and wagon . . .	8,69,706	4'36	14,06,595	8'07	+5,36,889	+61'73
Traffic . . .	14,12,349	7'09	13,42,265	7'70	—70,084	—4'96
General . . .	11,04,953	5'54	11,05,226	6'34	+273	+0'02
Special and miscellaneous . . .	1,61,180	0'81	1,47,227	0'85	—13,953	—8'66
TOTAL . . .	91,32,788	45'82	87,85,756	50'41	—3,47,032	—3'80

Maintenance.—The decrease was due to the issue of a small number of 50-lb. steel rails for renewals, to less outlay on special works under repairs to bridges, and to less expenditure on repairs to stations and buildings.

During 1890, 48 miles were re-laid with 50-lb. steel rails.

Locomotive.—The large decrease as compared with the previous year was almost wholly under cost of working trains, the train-mileage run having been less by 1,055,951 miles. The reduction in the quantity and value of the fuel used alone amounted to 17,549 tons and ₹3,86,788.

Carriage and wagon.—The large increase was almost solely due to wheel and axle changing operations, and to more extensive repairs executed during the year.

Traffic.—The decrease was due to the falling off in traffic, and to savings under "General superintendence."

Special and miscellaneous.—The decrease was chiefly due to the adjustment of arrear charges under "Hire of locomotives" in 1889.

The principal alterations in the coaching fares and goods rates will be found on pages 121, 122 and 124 of Chapter VIII, Part I of the Administration Report.

Fares and rates.

Southern Mahratta Railway including the Mysore section (Metre gauge).

11. The mean mileage worked during the year was 1,309'22 miles against 1,123'59 miles in 1889. The increase was due to the Harihar-Gubbi and Cumbum-Kistna Terminus sections having been worked for only a part of 1889, and to the opening of the following additional lengths during 1890:

	Miles.
Cumbum-Nandyál section of main line opened on the 15th June	63'10
Kistna Terminus to Kistna Canal wharf station of main line opened on the 27th October	1'80
Ghorpuri to Poona, Poona branch, opened on the 4th October	0'91

The open mileages of the several sections were as follows:

Main line—Portuguese frontier to the river Kistna wharf station opposite Bezvada	512'43
Bijápur branch—Gadag to Hotgi	173'08
Poona branch—Londa to Poona	277'19
Harihar branch—Hubli to Harihar permanent station	81'00
Mysore State railway	296'00

TOTAL . 1,339'70

The following table shows the general results of working as compared with the previous year:

General results.

Year.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889 . . .	1,123'59	1,894,928	49,27,878	37,44,229	11,83,649	75'98	84	1'11
1890 . . .	1,309'22	2,265,591	56,57,414	44,20,976	12,36,438	78'14	83	1'15
Increase or decrease . . .	+185'63	+370,573	+7,29,536	+6,76,747	+52,789	+2'16	—1	+0'04
Percentage of increase or decrease . . .	+16'52	+19'56	+14'80	+18'07	+4'46	...	—1'19	...

The following table shows the gross earnings under main heads as compared with 1889:

Gross earnings.

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	21,37,010	24,81,124	+3,44,114
Goods	26,80,905	30,73,617	+3,92,712
Electric telegraph	21,710	23,653	+1,943
Sundries	88,253	79,020	—9,233
TOTAL	49,27,878	56,57,414	+7,29,536

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, compare as follows :

	FIRST CLASS.		SECOND CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R
1889 . . .	10,124	67,236	25,085	64,078	3,369,158	18,20,828	3,404,367	19,52,142
1890 . . .	11,491	64,356	32,367	72,558	4,027,108	21,08,428	4,070,966	22,45,342
Increase or decrease .	+1,367	-2,880	+7,282	+8,480	+657,950	+2,87,600	+666,599	+2,93,200

The decrease in earnings with increased numbers carried under the first class was due to a reduction of 33 per cent. in the fares which was introduced from the 1st January 1890.

A similar reduction in the second class fares resulted in an increase both in number and in earnings.

The improvement in the third class passenger traffic was chiefly due to the increased length of line worked, and partly to a reduction in fares from 2½ to 2 pies over the Hubli-Mysore section which was introduced, as an experimental measure, from the 1st October 1890.

The average sum received for carrying a passenger one mile amounted to 2.54 pies against 2.63 pies in the previous year.

The coaching earnings per passenger train-mile were R2.42 against R2.61.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889 :

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	462,570	22,64,107	489,025	27,18,299	+26,455	+4,54,192
Military stores	1,023	9,612	981	12,072	-42	+2,460
Railway materials for construction .	58,774	1,61,233	24,743	76,381	-34,031	-84,852
Coal for the public and construction	1,450	4,916	1,500	5,206	+50	+290
Coal for revenue only	7,939	25,793	8,908	26,663	+969	+870
Revenue stores other than coal . . .	128,418	2,04,171	127,516	2,20,702	-902	+16,531
Live stock	72	1,518	96	2,242	+24	+724
Rents, miscellaneous, &c. . . . .	...	9,535	...	12,052	...	+2,497
TOTAL	660,246	26,80,905	652,769	30,73,617	-7,477	+3,92,712

The improvement under "General merchandise" was almost entirely due to the additional mileage worked. The principal increases are noted below :

Cotton, raw	R 27,831	Provisions	R 63,746
Cotton piece-goods	23,449	Salt	33,354
Grains	1,29,573	Sugar	76,381

The decrease under "Railway materials for construction" was consequent on the completion of the system.

The average sum received for carrying a ton of goods one mile amounted to 8.74 pies against 8.43 pies in 1889.

The goods earnings per goods train-mile were R2.47 against R2.49.

The following table compares the working expenses of the railway during Working expenses. the years 1889 and 1890 :

	1889.		1890.		Increase in amount.	Percentage of increase.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	R		R			
Maintenance . . .	12,07,089	24.50	15,17,023	26.81	3,09,934	25.67
Locomotive . . .	10,78,371	21.88	12,70,236	22.45	1,91,865	17.79
Carriage and wagon . . .	1,77,366	3.60	2,26,381	4.00	49,015	27.63
Traffic . . .	6,03,857	12.25	6,46,768	11.43	42,911	7.11
General . . .	6,52,023	13.23	7,22,202	12.77	70,179	10.76
Special and miscellaneous	25,523	0.52	38,366	0.68	12,843	50.32
TOTAL . . .	37,44,229	75.98	44,20,976	78.14	6,76,747	18.07

The net increase of **₹6,76,747** in the working expenses of the year under review is mainly attributable to the extra mileage worked. It was also due to the almost entire cessation of debits against Capital on account of establishment charges, to a write-back from Capital to Revenue of a sum of **₹46,536** incurred in the previous year on ballasting, and to special renewals of sleepers and ballast on which account about **₹2,40,231** were expended.

The chief alterations in coaching fares and goods rates will be found on **Fares and rates.** pages 121 and 123 of Chapter VIII of Part I of the Administration Report.

Villupuram-Guntakal State Railway, Nellore branch (Metre gauge).

12. The terms under which this branch was worked by the South Indian Railway Company will be found on pages 85 and 86, Chapter IV of Part II of the Administration Report for 1889-90.

General results. The following table shows the general results of working as compared with the previous year :

Year.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay including suspense.
	Miles.	Miles.	R	R	R		R	
1889 . . .	82.85	142,993	2,54,535	1,79,555	74,980	70.54	59	1.19
1890 . . .	82.94	136,874	2,42,602	1,90,240	52,362	78.42	56	0.83
Increase or decrease .	+0.09	-6,119	-11,933	+10,685	-22,618	+7.88	-3	-0.36
Percentage of increase or decrease	+0.11	-4.28	-4.69	+5.95	-30.17	...	-5.80	...

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	1,90,274	1,78,012	- 12,262
Goods	61,255	62,201	+ 946
Electric telegraph	1,650	1,425	- 225
Sundries	1,356	964	- 392
TOTAL	2,54,535	2,42,602	- 11,933

Coaching.—The number of passengers of the various classes carried, including troops and police, and season tickets, and the earnings therefrom compare as follows :

	FIRST CLASS.		SECOND CLASS.		THIRD CLASS.		TOTAL.	
	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.
		R		R		R		R
1889	786	1,800	3,646	2,213	699,194	1,80,907	703,626	1,84,920
1890	731	1,697	3,715	2,344	659,432	1,68,774	663,878	1,72,815
Increase or decrease .	-55	-103	+69	+131	-39,762	-12,133	-39,748	-12,105

The large decrease under third class is attributable to fewer persons having attended the feast at Tirupati in 1890, and to the prevalence of cholera at Kálahasti and Venkatagiri during the first-half of the year.

The average sum received for carrying a passenger one mile, as in the previous year, amounted to 2'03 pies.

The coaching earnings per passenger train-mile were R1'95 against R2'02.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	33,705	55,292	37,647	57,124	+3,942	+1,832
Military stores	7	59	3	16	-4	-43
Railway materials for construction	15,684	790	...	...	-15,684	-790
Coal for revenue only	12	16	39	50	+27	+34
Revenue stores other than coal	17,518	4,589	10,365	4,644	-7,153	+55
Live stock	37	325	8	64	-29	-261
Rents, miscellaneous, &c. . . . .	...	184	...	303	...	+119
TOTAL	66,963	61,255	48,062	62,201	- 18,901	+ 946

The increase in "General merchandise" chiefly occurred under "Iron" and "Salt." The total quantity of "Iron" carried over the railway was 6,957 tons, against 2,172 tons in the previous year, the earnings therefrom being R3,719 against R1,532. The increase was due to large consignments of rails having been carried to Tirupati from Rénigunta, Trichinopoly Fort, Vikravándi and foreign lines, in connection with the construction of the Villupuram-Guntakal State railway. The total quantity of salt carried was 7,004 tons, against 5,658 tons in the previous year, the earnings therefrom being R11,874

against ₹9,053. This increase was caused by larger exports from Nellore and Vencatachellum to foreign railways.

Under "Grains" there was a decrease of 2,137 tons and of ₹2,543, principally attributable to a heavy falling off in the transport of rice, consequent on the failure of crops.

The average sum received for carrying a ton of goods one mile amounted to 7.33 pies against 7.02 pies in 1889.

The goods earnings per goods train-mile were ₹1.35 against ₹1.25.

The following table compares the working expenses of the railway during Working expenses. the years 1889 and 1890 :

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount	Per cent. on gross earnings.		
	₹		₹		₹	
Maintenance . . .	68,563	26.94	52,709	21.73	-15,854	- 23.12
Other charges . . .	1,10,992	43.60	1,37,531	56.69	+ 26,539	+ 23.91
TOTAL . . .	1,79,555	70.54	1,90,240	78.42	+ 10,685	+ 5.95

The decrease under "Maintenance" was due to a smaller proportion of the head-quarter establishment of the South Indian railway having been debited against the branch, to reduction of subordinate establishment and maintenance gangs, to less work on ballasting, to trifling outlay on new minor works and to reduced charges under "Unclassified expenditure."

The other charges which showed an increase of ₹26,539 represent the payments to the South Indian railway for working the branch, and include ₹42,375, the quarter share of profits for the past two years.

Fares and rates. There were no changes in the class fares and rates during the year.

Villupuram-Guntakal State Railway, Villupuram-Tiruvannamalai section (Metre gauge).

13. This section, 42.45 miles in length, was opened for traffic on the 17th November 1890, and worked by the South Indian Railway Company, as a temporary arrangement, on the same terms as those agreed upon for working the Nellore branch of the Villupuram-Guntakal State railway, which will be found on pages 85 and 86, Chapter IV, Part II of the Administration Report for 1889-90.

The following table shows the general results of working from the date of opening to the end of the year :

Period.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay including suspense.
	Miles.	Miles.	₹	₹	₹		₹	
17th November to 31st December 1890	5.23	8,610	19,948	13,436	6,512	67.36	73	0.04

Gross earnings. The gross earnings under main heads were as under :

	R
Coaching	17,434
Goods	2,478
Electric telegraph	36
TOTAL	<u>19,948</u>

Coaching.—The following table shows the number of passengers of the various classes carried, including troops and police, and season tickets and the earnings therefrom :

Period.	FIRST CLASS.		SECOND CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R
17th November to 31st December 1890 .	62	122	576	365	55,279	16,796	55,917	17,283

The third class traffic was considerably affected by the large attendance at the Karthegai feast at Tiruvannámalai, which was held a week after the opening of the line. This class contributed 84 per cent. of the gross earnings.

The average sum received for carrying a passenger one mile amounted to 2'03 pies.

The coaching earnings per passenger train-mile were R4'20.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom :

	Tons.	R
General merchandise	728	1,072
Railway materials for construction	5,708	1,073
Coal for revenue only	119	105
Revenue stores other than coal	1,386	228
TOTAL	<u>7,941</u>	<u>2,478</u>

The earnings under "General merchandise" were chiefly derived from the carriage of grain, stone and lime, and miscellaneous articles of merchandise.

The earnings under "Railway materials for construction" were 43 per cent. of the total goods earnings.

The average sum received for carrying a ton of goods one mile amounted to 5'53 pies.

The goods earnings per goods train-mile were R0'56.

The following table shows the working expenses of the railway from the 17th November to the 31st December 1890 :

	Amount.	Per cent. on gross earnings.
	R	
Maintenance	3,550	17'80
Other charges	9,886	49'56
TOTAL	<u>13,436</u>	<u>67'36</u>

The expenditure on "Maintenance" was mainly incurred under "Wages" and "Maintenance and renewal of permanent-way."

The class fares and rates on this section are the same as those in force on the Nellore branch of the Villupuram-Guntakal State railway.

Fares and rates,

the Nellore branch of the Villupuram-Guntakal State railway.

North Western including the Amritsar-Patháńkot and Jammu and Kashmir State Railways (Standard gauge).

14. The mean mileage worked was 2,400 miles against 2,384 miles in 1889, the increase being chiefly due to the opening of 24.41 miles of the Jammu and Kashmir State railway on 15th March 1890. The mileages of the sections worked were as follows :

	Miles.
Commercial section—(Main line and branches)	1,607
Military section—(Sind-Pishin and Sind-Sagar railways, including the Khusálgarh branch)	793
TOTAL	2,400

The open mileage of the commercial section includes 64.79 miles of the Amritsar-Patháńkot and 15.92 miles of the Jammu and Kashmir State railway (Native State section) leased to the North Western railway, as well as 13 miles of the East Indian railway between Gháziabad and Delhi, and 10.50 miles of the Chenab Weir branch, from Wazirabad to Kanki, worked over by the North Western railway. The last named branch is worked for the traffic in stone required for the Punjab Irrigation works.

Under the agreement which took effect from the 1st January 1886, the payments by the North Western railway for the lease of the Amritsar-Patháńkot line are 1 per cent. of the capital outlay for the first year, rising by a quarter per cent. each year up to the fifth year. The rent for 1890 was calculated at 2 per cent. on the capital outlay, and the amount paid as rent was ₹1,12,214.

The British section of the Jammu and Kashmir State railway from Sialkot to the Kashmir frontier, 8.49 miles, forms an integral part of the main line of the North Western railway; and the Kashmir section, from the Kashmir frontier to the left bank of the Tawi river, near Jammu, 15.92 miles, is maintained and worked by the North Western railway on the following terms :

The North Western railway pays to the Kashmir Darbar each half-year a sum calculated at the rate of one per cent. per annum on the capital expenditure on the Kashmir section, and after deducting from the gross earnings this sum and the cost of working, calculated at the same percentage of the gross earnings as represents the percentage of working expenses on the gross earnings of the main line of the North Western railway, including the Kashmir section plus five per cent. per annum on the gross earnings of that section for the use of rolling-stock, the surplus, if any, is divided equally between the Darbar and the North Western railway. The amount paid to the Darbar from the date of opening of the Jammu and Kashmir State railway, *viz.*, the 15th March 1890, to the end of the year was ₹13,771.

The cadre for the Subordinate Revenue Establishment, which was under consideration last year, was sanctioned in June 1890. This fixes the number of posts for each department carrying salaries above ₹200 per mensem, in substitution of the original incremental classes E to H.

The working of the cash and pay departments of the railway has been let on contract, on a fixed payment of ₹3,000 per mensem, resulting in a monthly saving of about ₹1,000.

The branch line from Rájputra to Patiála, 16 miles, was worked by the North Western railway, as a leased line, from the 1st January to the 12th October

1889, and the transactions of the branch for this period are included in the following paragraphs. From the 13th October 1889, the date of opening of the extension from Patiála to Bhátinda, separate accounts have been maintained for the Rájputra-Bhátinda railway, in accordance with the terms of a revised working agreement which is now under execution.

The following table compares the general results of working of the railway during the years 1889 and 1890:

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.*	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week, excluding steam-boat.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889 . . .	2,384	7,746,438	2,81,08,838	1,79,22,078	1,01,86,760	63.76	226	2.59
1890 . . .	2,400	7,620,240	2,72,86,821	1,71,41,434	1,01,45,387	62.82	219	2.55
Increase or decrease .	+16	-126,198	-8,22,017	-7,80,644	-41,373	-0.94	-7	-0.04
Percentage of increase or decrease .	+0.67	-1.63	-2.92	-4.36	-0.41	...	-3.10	...

The figures relating to the three sections, *viz.*, the main line and branches, the Sind-Sagar and Khusálgarh branches, and the Pishin section for 1889 and 1890 are given below :

	Main line and branches.		Sind-Sagar and Khusálgarh branches.		Pishin section.		TOTAL.	
	1889.	1890.	1889.	1890.	1889.	1890.	1889.	1890.
	R	R	R	R	R	R	R	R
Gross earnings	2,43,69,533	2,36,63,503	13,42,267	13,45,191	23,97,038	22,78,127	2,81,08,838	2,72,86,821
Working expenses	1,38,93,020	1,31,29,672	13,22,727	10,95,030	27,06,322	29,16,732	1,79,22,078	1,71,41,434
Net earnings	1,04,76,504	1,05,33,831	19,540	2,50,161	-3,09,284	-6,38,605	1,01,86,760	1,01,45,387

The net earnings of the main line were better by ₹57,327 than in the previous year; the working of the Sind-Sagar and Khusálgarh branches also resulted in a net earning of ₹2,50,161 against ₹19,540 in 1889, but the Pishin section continues to be worked at a loss. Not only were the earnings on this section less than those of the previous year by ₹1,18,911, but the working expenses, consequent on heavy flood repairs, were also greater by ₹2,10,410. The net loss on this section was ₹6,38,605, as compared with ₹3,09,284 for 1889.

The train-mileage and earnings per train-mile were as under :

YEAR.	Mean mileage worked.	Train-mileage.	Average number of trains each way per diem over the whole line.	PER TRAIN-MILE.			Average number of passengers in a passenger train.	Average weight of goods in a goods train.
				Gross earnings.	Working expenses.	Net earnings.		
	Miles.	Miles.	No.	R	R	R	No.	Tons.
1889 . . .	2,384	7,746,438	4.45	3.63	2.31	1.32	223	122
1890 . . .	2,400	7,620,240	4.35	3.58	2.25	1.33	210	117

* Includes rent of leased lines.

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	87,31,938	89,75,931	+2,43,993
Goods	1,87,98,296	1,78,01,662	-9,97,234
Electric telegraph	66,840	69,967	+3,127
Steam-boat	67,667	3,907	-63,760
Sundries	4,44,097	4,35,954	-8,143
TOTAL	2,81,08,838	2,72,86,821	-8,22,017

Coaching.—The number of passengers of the various classes carried, including troops and police, and season tickets and the earnings therefrom, compare as follows:

YEAR.	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R		R
1889	40,172	2,99,404	122,857	3,24,581	414,067	4,04,591	9,486,623	65,87,334	10,063,719	76,15,910
1890	45,239	3,12,343	121,859	3,56,632	347,777	3,70,133	9,332,079	66,88,623	9,846,934	77,27,752
Increase or decrease	+5,067	+12,939	-998	+32,071	-66,290	-34,458	-154,544	+1,01,289	-216,765	+1,11,842

Of the total increase in the earnings from passengers, R27,370 were due to improvement in the traffic on the Sind-Sagar and Khusálgarh branches. The decrease in the intermediate class is attributed to the abolition of return tickets at reduced fares from the 1st July 1890, which, however, resulted in an increase in the earnings under third class. The increased earnings with decreased numbers under the second and third classes were due to the average distance travelled by each passenger having been greater than in the previous year.

The average sum received for carrying a passenger one mile amounted to 2'64 pies against 2'62 pies in the previous year.

The coaching earnings per passenger train-mile were R3'34 against R3'50.

The other items of coaching traffic are compared in the following table:

YEAR.	Military baggage, horses, carriages, &c.	Passengers' luggage.	Carriages, horses, dogs, &c.	Parcels.	Special trains.
	R	R	R	R	R
1889	2,23,256	2,07,418	1,31,033	3,48,263	19,461
1890	3,11,204	2,29,386	1,42,486	3,63,647	14,224
Increase or decrease	+87,948	+21,968	+11,453	+15,384	-5,237

There has been a steady improvement in earnings from all the above sources, except "Special trains." The increase under "Military baggage, &c.," was due to the movement of troops on the frontier, especially from Kurrachee to Quetta, and Quetta to Kiamari and Unballa, and from other stations to Ráwalpindi.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	1,753,560	1,68,29,777	1,730,835	1,57,28,741	-22,725	-11,01,036
Military stores	17,565	4,25,960	17,124	3,95,354	-441	-30,606
Railway materials for construction	252,469	2,41,653	498,562	2,62,142	+246,093	+20,489
Coal for the public and construction	12,998	86,139	42,848	2,65,555	+29,850	+1,79,416
Coal for revenue only	108,307	4,42,559	96,199	2,69,701	-12,108	-1,72,858
Revenue stores other than coal.	773,569	6,86,182	819,367	7,91,024	+45,798	+1,04,842
Live stock	1,350	35,427	1,106	36,508	-244	+1,081
Rents, miscellaneous, &c.	...	50,599	...	52,037	...	+1,438
TOTAL	2,919,818	1,87,98,296	3,206,041	1,78,01,062	+286,223	-9,97,234

The decrease under "General merchandise" chiefly occurred in grains, oil-seeds, wool, timber and railway plant and rolling-stock. The increase in railway material for construction was due to ballast carried on capital account for the Sind-Sagar line. The increase under "Coal for the public and construction" was due almost entirely to a larger quantity having been carried for the public. The increase under "Revenue stores other than coal" was chiefly due to the carriage of stores from Taraki to Ganda Singhwála for protection work of the Kaiser-i-Hind bridge at Ferozepore.

The following table shows the principal variations in the traffic in "General merchandise" as compared with 1889:

COMMODITIES.	INCREASE.		DECREASE.	
	Tons.	R	Tons.	R
Cotton, raw	...	55,881	2	...
Cotton piece-goods	...	...	82	25,609
Drugs and chemicals	283	13,066	...	...
Grains	67,461	...	...	3,84,627
Hides and skins	...	...	2,577	35,292
Liquors	780	25,937	...	...
Metals	...	...	241	82,039
Oils	5,665	85,616	...	...
Oil-seeds	...	...	22,721	4,71,883
Provisions	7,383	...	...	13,482
Railway plant and rolling-stock	...	...	200,562	7,80,171
Salt	5,772	46,748	...	...
Stone and lime	1,09,915	3,25,155	...	...
Timber	...	...	5,908	92,132
Tobacco	840	10,513	...	...
Wool	...	...	2,562	1,34,773

The average sum received for carrying a ton of goods one mile amounted to 5.93 pies against 5.64 pies in 1889.

The goods earnings per goods train-mile were Rs 3.61 against Rs 3.58.

Steam-boat.—The closing of the Sukkur-Rohri and Chenab ferries consequent on the opening of the bridges over the river Indus at Sukkur and the river Chenab at Sher Shah, accounts for the decrease in the earnings under this head.

The following statement shows the working expenses of the railway, including rent of leased lines, during the years 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	<i>₹</i>		<i>₹</i>		<i>₹</i>	
Maintenance	58,42,495	20.79	53,04,331	19.44	-5,38,164	-9.21
Locomotive	63,11,583	22.45	57,71,346	21.15	-5,40,237	-8.56
Carriage and wagon	19,04,322	6.78	20,93,300	7.67	+1,88,978	+9.92
Traffic	21,84,059	7.77	22,80,320	8.36	+96,261	+4.41
General	11,97,550	4.26	11,86,231	4.35	-11,319	-0.95
Steam-boat	1,24,146	0.44	82,094	0.30	-42,052	-33.87
Special and miscellaneous	3,57,923	1.27	4,23,812	1.55	+65,889	+18.41
TOTAL	1,79,22,078	63.76	1,71,41,434	62.82	-7,80,644	-4.36

Maintenance.—The net decrease was chiefly due to less renewals of permanent-way, the number of miles renewed having been 271 against 303 in 1889. The repairs of flood damages, however, cost ₹5,00,649 against ₹2,84,867, or ₹2,15,782 more than in the previous year, the outlay on this account during 1890 being almost entirely confined to the Sind-Pishin section. The charges under "Conservancy of rivers" and "Unclassified expenditure" were also greater by ₹1,64,575 and ₹76,839, respectively, but there was a decrease of ₹51,084 under "Repairs of stations and buildings."

Locomotive.—As compared with 1889, there was a decrease of ₹5,40,237, of which ₹2,81,831 were due to less expenditure on renewals and repairs to engines; the number renewed and repaired in the two years being—

	<i>Renewed.</i>	<i>Repaired.</i>
1889	16	296
1890	4	287

The decrease was also due to less stores having been carried for revenue, and to the smaller train-mileage worked during 1890.

Carriage and wagon.—The increase was entirely due to heavier repairs of stock, the number of vehicles repaired having been 11,686 against 11,207. The number of vehicles renewed was, however, smaller by 63.

Traffic.—The increase was chiefly due to an increase of ₹74,125 under the head of "Fuel, lighting, water, and general stores," partly owing to the supply of State pattern roof-lamps, and to an increase in the cost of castor oil, and partly to the opening of certain flag stations on the line. There was also an increase of ₹38,521 under the head of "Salaries, wages, &c.," mainly due to the appointment of an Officiating Traffic Superintendent during the absence on privilege leave of the permanent incumbent, to increases of pay of certain officers, and to the additional open mileage.

Steam-boat.—The decrease was due to the closing of the Sukkur-Rohri and Chenab ferries referred to on page 100. There was, however, an increase of ₹27,279 in the outlay on "Repairs" to vessels.

Special and miscellaneous.—The increase was chiefly due to "Payments to the East Indian railway for the use of the line from Ghaziabad to Delhi" having been charged to this head. In the first half-year of 1889, this item was charged to the Traffic account. The amount of compensation paid in 1890 was also greater by ₹8,846. The rent paid on account of the lease of the Jammu and Kashmir State railway (Native State section), ₹13,771, was also a new item of expenditure during 1890.

Passenger train service.—Important changes in the timing of all passenger trains were made from the 1st October 1890, consequent on changes in the time of arrival of the trains of the East Indian and other railways at Gháziabad, Delhi and Saháranpur. Minor alterations were also made to suit local requirements.

The chief alterations in coaching fares and goods rates will be found on pages 121, 123 and 124 of Chapter VIII, Part I, of the Administration Report.

Fares and rates.

Oudh and Rohilkhand Railway (Standard gauge).

15. The following table shows the general results of working as compared with the previous year :

General results.

Year.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	₹	₹	₹		₹	
1889 . . .	692'55	2,158,292	75,39,683	33,35,607	42,04,076	44'24	209	4'56
1890 . . .	692'55	2,237,938	73,81,396	36,26,918	37,54,478	49'14	205	4'05
Increase or decrease . . .	...	+79,646	-1,58,287	+2,91,311	-4,49,598	+4'90	-4	-0'51
Percentage of increase or decrease . . .	...	+3'69	-2'10	+8'73	-10'69	...	-1'91	...

Owing to heavy renewals and repairs to flood damages there was a large increase in coal and stores carried on account of revenue at very low rates, which, in a great measure, accounts for the train-mileage showing an increase, while the gross earnings exhibit a decrease.

It may also be explained in regard to these apparently unfavourable results, that the earnings during 1889 were exceptionally good owing to a heavy export traffic in grain. The net earnings for the year 1890 were, however, largely in excess of those of the years 1886, 1887, and 1888, as may be seen from the following figures :

	Net earnings.
	₹
1886	28,60,755
1887	31,35,249
1888	30,16,005
1889	42,04,076
1890	37,54,478

The net earnings of 1890 were also seriously affected by the breaks in the line, and by the renewals of way having been heavier than in previous years.

Gross earnings.

The following table shows the gross earnings under main heads as compared with 1889 :

	1889.	1890.	Increase or decrease.
	₹	₹	₹
Coaching	34,07,831	33,95,454	-12,377
Goods	37,38,722	37,20,159	-18,563
Electric telegraph	23,957	24,457	+500
Sundries	3,69,173	2,41,326	-1,27,847
TOTAL	75,39,683	73,81,396	-1,58,287

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets and the earnings therefrom, compare as follows :

	UPPER CLASS.		INTERMEDIATE CLASS.		LOWER CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		₹		₹		₹		₹
1889	42,092	1,54,851	101,333	1,16,967	4,896,202	28,37,783	5,039,627	31,09,601
1890	43,345	1,64,959	105,115	1,37,014	4,760,152	27,77,079	4,908,612	30,79,052
Increase or decrease	+ 1,253	+ 10,108	+ 3,782	+ 20,047	- 136,050	- 60,704	- 131,015	- 30,549

The improvement in the upper and intermediate class traffic was chiefly due to the visit of His Royal Highness Prince Albert Victor. The decrease in the lower class passenger traffic may be ascribed to the severe weather and sickness that prevailed during the months of July and August, and to the breaks in the line.

The average sum received for carrying a passenger one mile amounted to 2.65 pies against 2.63 pies in the previous year.

The coaching earnings per passenger train-mile were ₹3.29 against ₹3.41.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom, as compared with 1889 :

	1889.		1890.		Increase or decrease.	
	Tons.	₹	Tons.	₹	Tons.	₹
General merchandise	747,212	32,84,586	693,629	31,14,656	-53,583	-1,69,930
Military stores	3,003	26,087	2,818	28,666	-185	+ 2,579
Railway materials for construction	100,107	59,719	108,941	52,544	+8,834	-7,175
Coal for the public and construction	24,910	1,32,421	36,830	2,29,830	+11,920	+97,409
Coal for revenue only	36,327	1,23,634	41,707	1,63,672	+5,380	+40,038
Revenue stores other than coal	222,939	88,849	339,229	1,15,866	+116,290	+27,017
Live stock	200	4,425	190	4,237	-10	-188
Rents, miscellaneous, &c. . . . .	...	19,001	...	10,694	...	-8,307
TOTAL	1,134,698	37,38,722	1,223,344	37,20,165	+ 88,646	-18,557
Less—Outstandings irrecoverable . . . . .	...	...	...	6	...	+6
NET TOTAL	1,134,698	37,38,722	1,223,344	37,20,159	+ 88,646	-18,563

The decrease in general merchandise was due to large falling off in the rice and wheat traffic. Under "Grains" there was a decrease of 17,677 tons and of ₹1,43,722 in comparison with the previous year, and under "Oil-seeds," "Cotton, raw," "Jute," and "Timber," there were also decreases to the extent of ₹1,24,566, ₹13,058, ₹18,593, and ₹10,867, respectively.

Against the above decreases there were increases under "Metals," ₹58,674; "Opium," ₹8,983; "Salt," ₹49,038, and "Sugar," ₹23,500.

The increase under "Coal for the public and construction" was due to larger quantities having been carried for the North Western railway *vid* Moghal Sarai. This traffic was, however, checked to some extent owing to breaks during August 1890, when coal booked *vid* Moghal Sarai had to be diverted over the East Indian railway route.

The increases under "Coal for revenue only" and "Revenue stores other than coal" were owing to larger quantities of coal and permanent-way materials having been carried, for heavy renewals and flood damage repairs.

Sundries.—The large decrease under this head was owing to a reduction in the amount received from foreign railways for mileage of vehicles. The exports of grain in Oudh and Rohilkhand railway wagons were considerably less, while the imports of coal in foreign wagons largely increased.

The following table compares the working expenses of the railway during the years 1889 and 1890 :

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	R		R			
Maintenance	8,41,896	11'17	11,51,528	15'60	+ 3,09,632	+ 36'78
Locomotive	10,16,755	13'49	9,69,771	13'14	- 46,984	- 4'62
Carriage and wagon	2,80,051	3'71	2,92,526	3'96	+ 12,475	+ 4'45
Traffic	6,76,602	8'97	6,78,097	9'19	+ 1,495	+ 0'22
General	4,35,873	5'78	4,41,033	5'98	+ 5,160	+ 1'18
Special and miscellaneous	84,430	1'12	93,963	1'27	+ 9,533	+ 11'29
TOTAL	33,35,607	44'24	36,26,918	49'14	+ 2,91,311	+ 8'73

Maintenance.—The increase was due chiefly to more extensive renewals of permanent-way, and to the cost of repairs to the heavy breaches in the line near Cawnpore and Bareilly. During the year 44'71 miles of rails were relaid with steel rails, 44'63 miles with 75lb and 0'08 miles with 60lb rails.

Locomotive.—The decrease was owing to a reduced consumption of fuel per train-mile, 40'55lb against 42'81lb in 1889, and to a small reduction in the issue-price of coal.

Carriage and wagon.—The increase was mainly due to heavier repairs and renewals of vehicles.

General.—The increase is accounted for by the India Office charges for 1889-90, as no such charge was made in the previous year.

Special and miscellaneous.—The increase was mainly due to charges on account of the mileage of foreign stock.

The alterations that have been made in the passenger fares from the 1st January 1891 are noted on page 121, Chapter VIII of Part I of the Administration Report. No important alterations were made in the goods rates during the year.

Fares and rates.

Lucknow-Sitapur-Seramau State Railway (Metre gauge).

16. This line was worked by the Oudh and Rohilkhand railway, at 50 per cent. of the gross earnings of the Lucknow-Sitapur-Seramau railway, the maintenance having been carried out by the Government of the North-Western Provinces and Oudh.

The general results of working are compared with the previous year in the following table :

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889	104'59	161,295	(a) 3,18,875	2,07,860	1,11,015	65'19	59	2'83
1890	104'59	161,669	(b) 3,37,288	2,45,471	91,817	72'78	62	2'52
Increase or decrease . . . . .	...	+ 374	+ 18,413	+ 37,611	- 19,198	+ 7'59	+ 3	- 0'31
Percentage of increase or decrease . . . . .	...	+ 0'23	+ 5'77	+ 18'09	- 17'29	...	+ 5'08	...

(a) Excludes R2,965 (on account of ballast train earnings due to the Oudh and Rohilkhand railway)

(b) Excludes R1,744 included with the transactions of that railway.

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	INCREASE.
	R	R	R
Coaching	1,66,555	1,69,587	3,032
Goods	(a) 1,48,565	(b) 1,63,460	14,895
Electric telegraph	2,219	2,587	368
Sundries	1,536	1,654	118
TOTAL	3,18,875	3,37,288	18,413

Coaching.—The number of passengers carried, including troops and police and season tickets, and earnings therefrom, compare as follows:

	UPPER CLASS.		INTERMEDIATE CLASS.		LOWER CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R
1889	4,014	7,549	5,146	3,891	515,130	1,46,153	524,290	1,57,593
1890	3,646	7,644	4,675	3,618	508,685	1,48,630	517,006	1,59,892
Increase or decrease	-368	+95	-471	-273	-6,445	+2,477	-7,284	+2,299

The average sum received for carrying a passenger one mile amounted to 2.10 pies, being the same as in 1889.

The coaching earnings per passenger train-mile were R2.43 against R2.07.

Goods.—The following is a summary of the number of tons lifted, and the earnings therefrom, as compared with 1889:

	1889.		1890.		DIFFERENCE.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	74,442	1,47,192	64,522	1,50,835	-9,920	+3,643
Military stores	121	576	128	648	+7	+72
Railway materials for construction	3,842	2,187	4,413	11,367	+571	+9,180
Coal for revenue only	15	22	12	18	-3	-4
Revenue stores other than coal	4,955	787	8,136	1,812	+3,181	+1,025
Rents, miscellaneous, &c. . . . .	...	766	...	524	...	-242
Less—Ballast-train earnings due to the Oudh and Rohilkhand railway	83,375	1,51,530	77,211	1,65,204	-6,164	+13,674
		2,965		1,744		-1,221
		1,48,565		1,63,460		+14,895

The increase under "Railway materials for construction" was due to the carriage of material for the construction of the extension of the line beyond Gola Gokaran Nâth.

The average sum received for carrying a ton of goods one mile amounted to 6.47 pies against 5.88 pies in 1889.

(a) Excludes R2,965 } on account of ballast train earnings due to the Oudh and Rohilkhand railway
 (b) Excludes R1,744 } included with the transactions of that railway.

The goods earnings per goods train-mile were ₹1.78 against ₹1.84. Details of the working expenses as compared with those of the previous year are given in the table below:

	1889.		1890.		Increase in amount	Percentage of increase.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	₹		₹			
Maintenance	40,940	12.84	50,980	15.12	10,040	24.52
Other expenses calculated at 50 per cent. on gross earnings	1,59,438	50.00	1,68,644	50.00	9,206	5.77
Expenses incurred by the State	7,482	2.35	25,847	7.66	18,365	245.41
	2,07,860	65.19	2,45,471	72.78	37,611	18.09

The increase under "Maintenance" was mainly due to extra expenditure on maintenance and renewal of permanent-way, to increase of the salary of the Executive Engineer on promotion, and to the entire establishment charges of the Engineering Department having been debited to Revenue.

Fares and rates.

There were no changes in class fares and rates during the year.

Eastern Bengal State Railway.

(Eastern and Southern sections, standard gauge; Northern, Assam-Bihar, and Dacca sections, metre gauge; Kaunia-Dharila branch, 2'-6" gauge.)

17. The mean mileage worked was 756.86 miles against 709.34 miles in 1889. The increase was due to the opening of 74.12 miles of the Assam-Bihar section on the 1st July 1889; 4.36 miles of the branch from Rajbári to Pachooria in March 1890; 13.66 miles of the Budge-Budge extension on the 1st June 1890; and two short lengths of siding converted into main line.

The mileages of the several sections were as follows:

	Miles.
Eastern and Southern sections	242.37
Northern, Assam-Bihar, and Dacca sections	477.49
Kaunia-Dharila branch	37.00
	<u>756.86</u>

The following table shows the general results of working as compared with the previous year:

Year.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week, excluding steam-boat.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	₹	₹	₹		₹	
1889	709.34	2,666,811	1,11,76,674	49,85,049	61,91,625	44.60	282	6.36
1890	756.86	2,979,178	1,14,78,381	54,08,060	60,70,321	47.12	271	6.04
Increase or decrease	+47.52	+312,337	+3,01,707	+4,23,011	-1,21,304	+2.52	-11	-0.32
Percentage of increase or decrease	+6.70	+11.71	+2.70	+8.49	-1.96	...	-3.90	..

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	36,43,839	37,09,720	+ 65,881
Goods	64,46,104	67,41,067	+ 2,94,963
Electric telegraph	27,850	28,680	+ 830
Steam-boat	7,65,492	8,09,933	+ 44,441
Sundries	2,93,389	1,88,981	- 1,04,408
TOTAL	1,11,76,674	1,14,78,381	+ 3,01,707

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, compare as follows:

	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R		R
1889	45,382	1,41,141	121,744	1,46,057	998,889	4,25,031	6,516,725	24,75,301	7,682,740	31,87,530
1890	40,016	1,37,979	126,214	1,52,105	992,013	4,31,961	6,718,274	25,67,756	7,876,517	32,89,801
Increase or decrease	-5,366	-3,162	+ 4,470	+ 6,048	-6,876	+ 6,930	+ 201,549	+ 92,455	+ 193,777	+ 1,02,271

The decrease in first class traffic was apparently due to a larger number of passengers having travelled second class. There was a considerable increase in return tickets in the intermediate class traffic. The third class traffic still shows steady improvement, due mainly to normal increase of traffic and partly to more extensive through booking with the East Indian and Darjeeling-Himalayan railways, to the opening of the Budge-Budge extension, and to a considerable pilgrim traffic on the occasion of an eclipse of the moon in November 1890.

The average sum received for carrying a passenger one mile amounted to 2.72 pies against 2.75 pies in the previous year.

The coaching earnings per passenger train-mile were R2.91 against R3.13.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	852,948	60,24,431	893,070	62,02,491	+ 40,122	+ 1,78,060
Military stores	1,504	25,797	344	2,475	- 1,160	- 23,322
Railway materials for construction	30,792	58,720	57,682	1,59,866	+ 26,890	+ 1,01,146
Coal for the public and construction	81,254	1,16,901	76,695	1,22,523	- 4,559	+ 5,622
Coal for revenue only	73,234	98,954	91,101	1,22,198	+ 17,867	+ 23,244
Revenue stores other than coal	67,167	79,719	52,749	97,512	- 14,418	+ 17,793
Live stock	129	4,957	73	1,278	- 56	- 3,679
Rents, miscellaneous, &c.	—	36,625	—	32,724	—	- 3,901
TOTAL	1,107,028	64,46,104	1,171,714	67,41,067	+ 64,686	+ 2,94,963

The increase under "General merchandise" was mainly due to the improved traffic in grains, kerosine oil, salt, sugar, and miscellaneous articles of merchandise. There were, however, decreases in the traffic in jute, cotton piece-goods, oil-seeds, and tobacco.

Grains.—The quantity lifted was more by 35,389 tons and the earnings by ₹1,23,555. The increase was partly due to the additional length opened on the Behar section, and partly to heavier despatches from the Northern and Behar sections to the districts served by the Eastern section where the crops were deficient owing to heavy floods.

Kerosine oil.—There was an increase of 5,865 tons in the quantity carried and of ₹17,914 in earnings, due to the opening of the extension to the petroleum depôt at Budge-Budge.

Salt.—The increase amounted to 6,464 tons in the quantity carried and ₹45,202 in earnings, due to the additional length opened on the Behar section and to increased quantities having been booked from Chitpore to Serajganj and stations on the Bengal Central railway, *via* Dum-Dum.

Sugar.—The improvement of ₹20,460 in earnings was principally due to large despatches from Kissengunge station. The quantity moved, however, fell off by 2,733 tons, due to less import from the Central and Eastern sections owing to successful competition of raw sugar from Java.

Miscellaneous articles of merchandise.—The increase in earnings amounted to ₹72,968, and was attributed to the increased open mileage, and to the normal development of traffic.

Jute.—In the first-half of the year the traffic in "Jute" was more by 31,631 tons and ₹3,12,019, due to a considerable percentage of the previous season's crops having been held back in the hopes of more favourable markets. In the second-half of the year, owing to unfavourable markets, traders again held back their stocks, which led to a decrease of 44,253 tons in the quantity carried and of ₹3,56,358 in earnings. The traffic for the whole of the year under review was thus less by 12,622 tons and ₹44,339 than that of the previous year.

Cotton piece-goods.—Owing to the rate for baled cotton piece-goods having been reduced from $\frac{2}{3}$ to $\frac{1}{2}$ pie per maund per mile, the quantity carried increased by 352 tons with decreased earnings of ₹12,775.

Oil-seeds.—The traffic fell off by 9,525 tons and ₹26,571, owing to short crops.

Tobacco.—Short crops, resulting from heavy rains and floods and dullness of market, account for the decrease of 3,105 tons in the quantity carried and of ₹25,792 in earnings.

The increase under "Railway materials for construction" was due to work done for the Assam-Bihar section and the Budge-Budge extension.

The average sum received for carrying a ton of goods one mile amounted to 9·08 pies against 9·55 pies in 1889.

The goods earnings per goods train-mile were ₹3·96 against ₹4·29.

The following table compares the working expenses of the railway during the years 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	₹		₹		₹	
Maintenance	11,90,216	10·65	13,36,599	11·64	+ 1,46,383	+ 12·30
Locomotive	11,60,189	10·38	11,35,222	9·89	— 24,967	— 2·15
Carriage and wagon	3,36,806	3·01	4,18,369	3·65	+ 81,563	+ 24·22
Traffic	11,08,625	9·92	12,14,638	10·58	+ 1,06,013	+ 9·56
General	4,60,795	4·12	5,08,162	4·43	+ 47,367	+ 10·28
Steam-boat	5,88,878	5·27	6,22,739	5·43	+ 33,861	+ 5·75
Special and miscellaneous	1,39,540	1·25	1,72,331	1·50	+ 32,791	+ 23·50
TOTAL	49,85,049	44·60	54,08,060	47·12	+ 4,23,011	+ 8·49

The increase in working expenses was due to the serious damage to the line caused by the extraordinary floods, to more extensive relaying of permanent-way, to higher expenditure in the locomotive department on account of extra train-mileage, and to an increase in the traffic charges owing to the increased number of stations on the new lengths of line opened for traffic. The expenditure on fuel was also greater than in 1889.

The alterations made during the year are noted on page 124, Chapter VIII, of Part I of the Administration Report.

Fares and rates.

Bengal Central Railway (Standard gauge).

18. The principal terms of the agreement under which this line is worked by the Eastern Bengal State railway will be found on page 102, Chapter IV, Part II, of the Administration Report for 1889-90.

The following table shows the general results of working as compared with the previous year :

General results.

with the previous year :

Year.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889 . . .	125	303,444	7,37,191	4,41,203	2,95,988	59.85	113	3.13
1890 . . .	125	293,642	6,67,803	4,21,897	2,45,906	63.18	103	2.54
Increase or decrease . . .	...	-9,802	-69,388	-19,306	-50,082	+3.33	-10	-0.59
Percentage of increase or decrease . . .	...	-3.23	-9.41	-4.38	-16.92	...	-8.85	...

The following table shows the gross earnings under main heads as compared with 1889 :

Gross earnings.

compared with 1889 :

	1889.	1890.	Increase or decrease.
	R	R	R.
Coaching	5,15,070	4,97,306	-17,764
Goods	2,10,440	1,62,117	-48,323
Electric telegraph	1,903	1,996	+93
Sundries	9,778	6,384	-3,394
TOTAL	7,37,191	6,67,803	-69,388

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, compare as follows :

	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R		R
1889	3,468	4,431	32,319	13,520	167,786	75,281	1,291,202	4,08,007	1,494,775	5,01,239
1890	2,627	4,743	32,971	14,880	152,720	69,312	1,223,317	3,89,740	1,411,635	4,78,675
Increase or decrease	-841	+312	+652	+1,360	-15,066	-5,969	-67,885	-18,267	-83,140	-22,564

The decrease in passenger traffic was chiefly due to a large pilgrim traffic in 1889, and also to breaches in the line caused by floods during the latter half of 1890.

The average sum received for carrying a passenger one mile amounted to 3'08 pies against 3'05 pies in 1889.

The coaching earnings per passenger train-mile were R2'59 against R2'76.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889 :

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	76,249	1,90,649	59,077	1,39,502	-17,172	-51,147
Military stores	203	271	156	196	-47	-75
Railway materials for construction	112	17	...	...	-112	-17
Coal for the public and construction	20,568	15,951	22,659	19,119	+2,091	+3,168
Coal for revenue only	6,121	2,068	5,232	1,872	-889	-196
Revenue stores other than coal	981	734	1,081	721	+100	-13
Live stock	6	121	4	75	-2	-46
Rents, miscellaneous, &c. . . . .	...	629	...	632	...	+3
TOTAL	104,240	2,10,440	88,209	1,62,117	-16,031	-48,323

The decrease under "General merchandise" was chiefly due to jute having been held back in the hope of obtaining a more favourable market, and to the traffic in this commodity having been abnormally large in 1889. The sugar traffic from Jhikargacha also fell off owing to less demand.

The increased earnings under "Coal for the public and construction" was due to a greater demand in the Jessore district, as also by the Bengal Central Flotilla Company.

• The average sum received for carrying a ton of goods one mile amounted to pies 5'88 against pies 6'39 in 1889.

The goods earnings per goods train-mile were R1'59 against R1'80.

The following table compares the working expenses of the railway during

Working expenses. the years 1889 and 1890 :

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
Maintenance	R 89,844	12'19	R 1,01,766	15'24	+11,922	+13'27
Other expenses calculated at 40 per cent. of the gross earnings of the Bengal Central railway earned by the Eastern Bengal railway	2,91,590	39'96	2,66,873	39'96	-27,717	-9'41
Expenses incurred direct by the Company	56,769	7'70	53,258	7'98	-3,511	-6'19
TOTAL	4,41,203	59'85	4,21,897	63'18	-19,306	-4'38.

Maintenance.—The increase was chiefly due to repairs to damages caused by floods.

Other expenses.—The decrease was due to smaller charges by the Eastern Bengal State railway owing to falling off in earnings.

There was no change in the coaching fares. The principal alterations in Fares and rates, the goods rates during 1890 will be found on page 124, Chapter VIII of Part I of the Administration Report.

Wardha Coal State Railway (Standard gauge).

19. The following table shows the general results of working as compared with the previous year :

Year.	Mean mileage worked.	Train mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889 . . .	45'00	87,356	3,32,793	1,70,515	1,62,278	51'24	142	2'87
1890 . . .	45'00	93,328	3,26,736	2,07,355	1,19,381	63'46	140	2'12
Increase or decrease . . .	...	+5,972	-6,057	+36,840	-42,897	+12'22	-2	-0'75
Percentage increase or decrease	...	+6'84	-1'82	+21'61	-26'43	...	-1'41	...

The following table shows the gross earnings under main heads as compared with 1889 :

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	44,843	43,169	-1,674
Goods	1,87,542	1,93,665	+6,123
Electric telegraph	1,091	1,029	-62
Sundries	99,317	88,873	-10,444
TOTAL	3,32,793	3,26,736	-6,057

Coaching.—The number of passengers of the various classes carried, including troops and police, and the earnings therefrom, compare as follows :

	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R		R
1889	285	763	589	855	1,997	1,228	150,738	38,718	153,609	41,564
1890	281	753	384	560	1,543	980	148,095	37,757	150,303	40,050
Decrease	4	10	205	295	454	248	2,643	961	3,306	1,514

The average sum received for carrying a passenger one mile amounted to 2'08 pies against 2'10 pies in 1889.
The coaching earnings per passenger train-mile were R2'04 against R2'21.

Goods.—The following is a summary of the number of tons lifted and the earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	₹	Tons.	₹	Tons.	₹
General merchandise	36,657	71,812	32,042	69,905	-4,615	-1,907
Railway materials for construction	34	43	77	87	+43	+44
Coal for the public and construction	109,795	1,13,222	116,204	1,19,172	+6,499	+5,950
Coal for revenue only	10	4	166	105	+156	+101
Revenue stores other than coal	1,740	2,138	4,727	4,114	+2,987	+1,976
Live stock . . . . .	...	...	2	6	+2	+6
Rents, miscellaneous, &c. . . . .	...	323	...	276	...	-47
TOTAL	148,236	1,87,542	153,308	1,93,665	+5,072	+6,123

The principal variations in the traffic in "General merchandise" were increases of ₹2,874 and of ₹2,208 under "Grains" and "Miscellaneous articles," respectively, and decreases of ₹4,163 and of ₹1,613 under "Oil-seeds" and "Timber," respectively.

The improvement under "Coal for the public and construction" was due to increased demand for coal by the Bengal-Nágpur railway and by the public.

The average sum received for carrying a ton of goods one mile amounted to 5·75 pies against 5·79 pies in 1889.

The goods earnings per goods train-mile were ₹2·68 against ₹2·80.

Sundries.—The decrease in the sundry earnings was chiefly due to less mileage run by home vehicles on foreign railways, owing to the Great Indian Peninsula Railway Company having elected to tranship their coal at the junction station during November and December 1890.

The following table compares the working expenses of the railway for the years 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	₹		₹			
Maintenance	44,321	13·32	63,774	19·52	+19,453	+43·89
Locomotive	48,595	14·60	51,652	15·81	+3,057	+6·29
Carriage and wagon	24,177	7·26	30,544	9·35	+6,367	+26·33
Traffic	24,184	7·27	23,640	7·23	-544	-2·25
General	23,747	7·14	32,738	10·02	+8,991	+37·86
Special and miscellaneous	5,491	1·65	5,007	1·53	-484	-8·81
TOTAL	1,70,515	51·24	2,07,355	63·46	+36,840	+21·61

Maintenance.—The increase was due to large renewals of sleepers.

Carriage and wagon.—The increase was due to putting the low-sided wagons into good order, and fitting them to run on mixed trains.

General.—The increase was chiefly due to the expenses being now divided between the railway and the colliery in the proportion of work done by each individual employed upon the combined undertaking, whereas in 1889 they were divided in terms of the total expenditure.

There were no alterations of importance in the coaching fares or goods

Fares and rates. rates.

Burma State Railway, including the Toungoo-Mandalay extension (Metre gauge).

20. The mean mileage worked during the year was 554.40 miles against 534.78 in 1889. The increase was due to the fact that in 1889 the section from Kamèthin to Mandalay was open for ten months only, *vis.*, from 1st March 1889. The mean mileages of the sections worked were as follows :

	<i>Miles.</i>
Irrawaddy and Sittang sections	334.40
Toungoo-Mandalay extension	220.00
	554.40

The following table shows the general results of working as compared with the previous year:

Year.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings for mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889	534.78	1,423,973	46,90,263	31,16,711	15,73,552	66.45	169	3.08
1890	554.40	1,597,974	54,71,432	31,23,241	23,48,191	57.08	190	4.58
Increase or decrease	+19.62	+174,001	+7,81,169	+6,530	+7,74,639	-9.37	+21	+1.50
Percentage of increase or decrease	+3.67	+12.22	+16.66	+0.21	+49.23	...	+12.43	...

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	29,02,195	31,86,431	+2,84,236
Goods	17,10,793	22,19,786	+5,08,993
Electric telegraph	16,498	16,317	-181
Sundries	60,777	48,898	-11,879
TOTAL	46,90,263	54,71,432	+7,81,169

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom compare as follows :

	FIRST CLASS.		SECOND CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R				R		R
1889	12,144	62,068	110,985	1,48,628	4,814,995	25,61,519	4,938,124	27,72,215
1890	15,475	81,637	124,390	2,02,563	5,097,025	27,31,308	5,236,890	30,15,508
Increase	3,331	19,569	13,405	53,935	282,030	1,69,789	298,766	2,43,293

The improvement in the passenger traffic may be ascribed to the increased mileage worked and to a general development of passenger traffic.

The average sum received for carrying a passenger one mile amounted to 3'13 pies against 3'11 pies in 1889.

The coaching earnings per passenger train-mile were R3'91 against R3'98.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	294,781	14,33,448	391,204	20,25,521	+96,423	+5,92,073
Military stores	1,113	26,295	929	23,430	-184	-2,865
Railway materials for construction	154,114	1,09,255	65,851	32,061	-88,263	-77,194
Coal for the public and construction	347	2,394	813	1,371	+466	-1,023
Coal for revenue only	1,789	4,762	7,317	12,039	+5,528	+7,277
Revenue stores other than coal	112,971	77,578	149,642	78,522	+36,671	+944
Live stock	2,787	50,727	1,732	37,193	-1,055	-13,534
Rents, miscellaneous, &c. . . . .	...	7,045	...	9,826	...	+2,781
Outstandings, irrecoverable . . . . .	...	-711	...	-177	...	+534
TOTAL	567,902	17,10,793	617,488	22,19,786	+49,586	+5,08,993

The noticeable increases under "General merchandise" occurred in the traffic in rice (husked and unhusked) and timber, the increases in the quantity carried and in the earnings being tons 59,068 and R2,77,814 and tons 19,790 and R1,14,904, respectively. The increase in rice was due to large shipments of unhusked rice to Japan, and to a scarcity of husked rice in Upper Burma which created a demand upwards. The increase in the timber traffic was due to the erection of a large number of saw-mills near the railway, to general activity in the trade, and to the opening out of the country. There were increases also in most of the remaining commodities classified under this heading, which are ascribed to the increase in the mean-mileage worked and to the growth of traffic. It may also be mentioned that a portion of the river traffic was diverted on to the railway, which is gradually being more appreciated.

The large decrease under "Railway materials for construction" was due to the completion of construction works on the Toungoo-Mandalay extension.

The decrease under "Live stock" was apparently due to the centres of supply having been able to meet local demands.

The average sum received for carrying a ton of goods one mile amounted to 6'20 pies against 5'75 pies in 1889.

The goods earnings per goods train-mile were R2'83 against R2'46.

The following table compares the working expenses of the railway during the years 1889 and 1890:

	1889.		1890.		Increase or decrease.	Percent- age of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	R		R		R	
Maintenance	11,55,643	24.64	9,67,873	17.69	-1,87,770	-16.25
Locomotive	8,72,039	18.59	9,59,897	17.54	+87,858	+10.07
Carriage and wagon	1,63,400	3.48	2,34,474	4.29	+71,074	+43.50
Traffic	5,72,324	12.20	5,59,831	10.23	-12,493	-2.18
General	3,16,983	6.76	3,53,374	6.46	+36,391	+11.48
Special and miscellaneous	36,322	0.78	47,792	0.87	+11,470	+31.58
TOTAL	31,16,711	66.45	31,23,241	57.08	+6,530	+0.21

Maintenance.—The decrease was chiefly under "Maintenance and renewal of permanent-way" and partly under "Repairs of stations and buildings." In consequence of the banks having settled, less ballast was used and less men per mile were required for maintenance. The expenditure in 1889 on repairs of stations and buildings was abnormal, owing to the reconstruction of two sets of staff-quarters which had been destroyed by fire, and to special repairs to buildings damaged by storms in that year. During the year 25.62 miles of rails were relaid, of which 17.26 miles were relaid with 41½ lb steel rails and 8.35 miles with 50 lb steel rails.

Locomotive.—There were increases under the following subheads: (1) "General superintendence," (2) "Running expenses," (3) "Fuel," (4) "Oil, tallow, &c.," and (5) "Maintenance and renewals of engines and machinery," which were due to (1) the transfer from India of an Officer of a higher grade, to the salary of an Assistant Locomotive Superintendent having been charged to Capital during three months of the previous year, and to the salaries of certain employes in the shops having been debited to this head instead of to works as in the previous year, (2) to the entertainment of additional drivers and to the native drivers now being allowed overtime, (3) to additional engine-mileage run, (4) to increased train-mileage and rise in cost of castor oil, and (5) to increased train-mileage and heavier repairs to engines.

Carriage and wagon.—The increase was chiefly under "Repairs and renewals, &c.," due to most of the older portion of the stock having reached an age when heavy repairs and renewals became necessary.

General.—The increase was chiefly under (1) "Stores Department" and partly under (2) "Audit and Accounts Department," and was due (1) to the share of the Secretary of State's general charges for payments in England during the years 1880-81 to 1888-89 having been erroneously debited to Capital in those years and written back to Revenue in 1890, and to a portion of the Stores Department establishment having been debited to Capital during four months of 1889, and (2) to a portion of the Audit office establishment having been also debited to Capital, Toungoo-Mandalay extension, during four months of the previous year.

From the 20th May 1890 a through mixed train was run between Rangoon and Mandalay, which was necessary for the increased number of passengers, and to enable goods to reach Mandalay more expeditiously.

From the 22nd December 1890 an accelerated mail service between Rangoon and Mandalay was started, and the up and down trains on the Irrawaddy and Sittang branches were made to connect at Rangoon.

Fares and rates: No changes were made during the year.

Great Indian Peninsula Railway (Standard gauge).

21. The mean mileage worked during 1890 was 1,444'56 miles, which includes 145'50 miles of the Dhond-Manmád, 7'50 miles of the Khámgaon and 5'50 miles of the Amráoti State railways worked by the Great Indian Peninsula Railway Company as leased lines.

In the following paragraphs the earnings and working expenses (excluding charges incurred direct by the State) of leased lines are included, but the net earnings and results calculated thereon refer to the Great Indian Peninsula railway only.

The following table shows the general results of working as compared with the previous year :

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889 . . .	1,443'92	8,271,501	3,70,68,814	1,90,59,340	1,80,09,474	51'42	494	6'55
1890 . . .	1,444'56	8,920,156	3,81,45,242	1,89,94,983	1,91,50,259	49'80	508	6'90
Increase or decrease . . .	+0'64	+648,655	+10,76,428	-64,357	+11,40,785	-1'62	+14	+0'35
Percentage of increase or decrease . . .	+0'04	+7'84	+2'90	-0'34	+6'33	...	+2'83	...

The working expenses in the above table include the following payments on account of rent of leased lines :

	1889.	1890.
	R	R
Dhond-Manmád State railway	2,62,240	2,75,942
Khámgaon State railway	22,528	26,092
Amráoti State railway	42,450	47,138
TOTAL	3,27,218	3,49,172

The divisible surplus of the first half-year at the date of submission of accounts amounted to R61,92,976. There were no surplus profits in the second half of the year, the interest charges, amounting to R64,77,786, having exceeded the net earnings by R2,04,266. In 1889 the divisible profits, at date of submission of accounts for the first-half of the year, amounted to R53,54,210.

After deducting from the net earnings of the year the Company's moiety of surplus profits, charges for guaranteed interest, contribution to provident fund and interest on overdrawn capital, the net result showed that the gain to the State for the year amounted to R28,62,878 as against the gain of R22,30,647 in 1889.

The following table shows the gross earnings under main heads as compared with 1889 :

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	87,46,964	87,76,053	+29,089
Goods	2,79,43,119	2,89,38,849	+9,95,730
Electric telegraph	66,087	61,764	-4,323
Sundries	3,12,644	3,68,576	+55,932
TOTAL	3,70,68,814	3,81,45,242	+10,76,428

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, compare as follows:

	FIRST CLASS.		SECOND CLASS.		THIRD CLASS (BY MAIL TRAINS).		THIRD CLASS (BY OTHER TRAINS).		TOTAL.	
	No.	Earnings	No.	Earnings	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R		R
1889	74,767	3,90,924	545,401	6,18,396	561,151	9,62,754	10,923,284	53,30,261	12,104,600	73,02,335
1890	70,189	3,58,162	564,897	5,09,059	585,580	9,77,989	11,104,390	54,17,123	12,325,051	73,82,333
Increase or decrease	-4,578	-2,762	+19,496	-19,337	+24,430	+15,235	+181,106	+86,862	+220,454	+79,998

The increase in coaching traffic was wholly due to an improvement in the third class passenger traffic amounting to ₹1,02,097, which was caused partly by increased facilities afforded to through passengers by other than mail trains, partly to a larger traffic under "Troops and police," and partly to the fact that passengers by the south-east mail, from Poona to Raichur, who were formerly charged at the 2½ pies rate and classed as ordinary third class passengers, are now charged at the 3 pies rate and classed as third class by mail. The decrease in the earnings from second class passengers is explained by the fact that in the previous year there was special traffic in connection with the National Congress held in Bombay.

There was a decrease of ₹28,686 in the earnings from passengers' luggage, due to less Government treasure having been booked as luggage. There was also a falling off of ₹36,093 in the earnings from carriages, horses, dogs, &c. (military, and ordinary), due to the special traffic that was brought on to the line in 1889 in connection with the Lushai Expedition, and to the carriage of large batches of mules for Government in the second-half of that year. The reduction in the rate for horses from 1st October 1890 also accounted for the decrease.

The average sum received for carrying a passenger one mile amounted to 2.69 pies against 2.70 pies in 1889. The coaching earnings per passenger train-mile were ₹2.75 against ₹2.85.

Goods.—The following is a summary of the number of tons of goods lifted and the earnings therefrom during 1890 as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	1,685,931	2,58,68,111	1,790,264	2,66,71,934	+104,333	+8,03,823
Military stores	5,587	1,46,977	6,639	1,39,004	+1,052	-7,973
Railway materials for construction	264,936	1,17,368	127,349	73,287	-137,587	-44,081
Coal for the public and construction	77,384	1,80,768	88,014	1,90,340	+10,630	+9,572
Coal for revenue only	163,694	6,13,760	183,830	7,08,613	+20,136	+1,84,853
Revenue stores other than coal	416,684	7,83,730	471,704	8,88,477	+55,020	+1,04,747
Live stock	10,081	1,22,963	9,672	1,24,866	-409	+1,903
Rents, miscellaneous, &c. . . . .	..	1,09,442	...	52,328	...	-57,114
TOTAL	2,624,297	2,79,43,119	2,677,472	2,89,38,849	+53,175	+9,95,730

The increase in the earnings under "General merchandise" occurred principally in wheat ₹5,51,929, oils ₹1,30,030, linseed ₹3,64,249, other oil-seeds ₹1,93,167, ground-nuts ₹1,32,583, sugar and jaggree ₹2,13,685, and timber ₹70,488.

There was a sudden demand in the Bombay market from up-country stocks of wheat, of which there were good crops in the Jubbulpore district, and along the Bengal-Nágpur railway. The wheat traffic would probably have been more

brisk but for the high rate of exchange which prevailed during September and October 1890. Linseed crops were rather above the average, and other oil-seeds generally yielded a fair average outturn. Large consignments of ground-nuts were booked from the south-east section of the line to meet demands from Europe. The increase in the traffic in sugar and jaggree was due to larger importation of German and Mauritius sugar *via* Bombay, as well as to increased traffic received from the Madras railway.

The principal commodities in which the traffic fell off were raw cotton, R4,31,735, dyes and tans (hurdah or myrabolam) R94,640, cotton seed R1,87,487, and cocoanuts R97,171. The cotton crop was later than in the previous year, and the movement of cotton to Bombay was consequently later than usual. The decrease in the cotton traffic was also partly due to a reduction in through rates, especially on the traffic received from the Southern Mahratta railway. A general falling off in supplies of myrabolam took place in the first-half of the year from all districts traversed by the Great Indian Peninsula railway system and lines in connection therewith. The decrease in cotton seed was principally in the traffic from the Berárs, and is explained by the fact that in the first half of 1889 there was a strong demand for this commodity in the Bombay market and in the Rajputana district which was not maintained in 1890. The traffic in cocoanuts declined between Bombay and Jubbulpore and stations on the Indian Midland, Rajputana-Malwa and East Indian railways.

The increase under "Coal for revenue only" was due to larger quantities of Singareni coal having been carried for the Company's requirements; while that under "Revenue stores other than coal" was due to extensive ballasting operations.

The decrease under "Rents, miscellaneous, &c.," was principally due to decreased earnings from the haulage of rolling-stock for foreign lines.

The average sum received for carrying a ton of goods one mile amounted to 8'85 pies against 9'14 pies in 1889.

The goods earnings per goods train-mile were R5'05 against R5'37.

Sundries.—The increase in the sundry earnings was due to profits from the construction of rolling-stock for the Indian Midland Railway Company.

The working expenses for 1889 and 1890 compare as follows:

	1889.		1890.		Increase or decrease in amount.	Per cent- age of in- crease or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	<i>R</i>		<i>R</i>		<i>R</i>	
Maintenance	46,59,268	12'57	47,81,856	12'54	+1,22,588	+2'63
Locomotive	73,46,156	19'82	72,91,512	19'11	—54,644	—0'74
Carriage and wagon	21,15,770	5'71	19,47,499	5'11	—1,68,271	—7'95
Traffic	27,38,324	7'39	27,84,400	7'30	+46,076	+1'68
General	12,84,849	3'46	12,70,044	3'33	—14,805	—1'15
Special and miscellaneous*	9,14,973	2'47	9,19,672	2'41	+4,699	+0'51
TOTAL	1,90,59,340	51'42	1,89,94,983	49'80	—64,357	—0'34

The increase under "Maintenance" was principally due to heavy renewals of sleepers, to smaller credits for old materials returned to store, and to increased outlay on ballasting; while that under "Traffic" was chiefly owing to the replacement of condemned wagon covers.

* Including rent of leased lines.

The decreases under "Locomotive" and "Carriage and wagon" were due to less renewals of engines and vehicles, and to the improved rate of exchange.

A change was made in the classification of third class passengers by the south-east mail, between Poona and Raichur. These were formerly charged at the 2½ pies rate and were classified as ordinary third class passengers; they now pay at the 3 pies rate and are classified as third class mail passengers.

The principal alterations in the goods rates will be found on page 124, Chapter VIII of Part I of the Administration Report.

Bombay, Baroda and Central India Railway (Standard gauge).

22 The mean mileage worked during the year was 460·90 miles, made up as follows :

Company's own line	Miles.	438·78
Patri branch		22·12
	TOTAL	460·90

The following table shows the general results of working as compared with the previous year:

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay,* including suspense.
1889.	Miles. 460·90	Miles. 2,316,444	₹ 1,32,34,371	₹ 56,17,118	₹ 76,17,253	42·44	₹ 552	8·02
1890.	460·90	2,309,600	1,29,40,370	54,42,193	74,98,177	42·06	540	7·87
Decrease . . . . .	...	6,844	2,94,001	1,74,925	1,19,076	0·38	12	0·15
Percentage of decrease . . . . .	...	0·30	2·22	3·11	1·56	...	2·17	...

The following table compares the total amount payable to the Company on account of surplus profits earned during 1889 and 1890:

	1889.	1890.
Net earnings	₹ 76,17,253	₹ 74,98,177
Deduct—		
Guaranteed interest	45,39,459	45,78,954
Interest on overdrawn capital	28,840	...
Contribution to Provident Fund	76,173	74,982
TOTAL	46,44,472	46,53,936
Balance surplus profits	29,72,781	28,44,241
Moiety payable to the Company	14,86,390	14,22,120
Add—Guaranteed interest	45,39,459	45,78,954
(a) Total payable to the Company	60,25,849	60,01,074
Percentage of total capital bearing interest, <i>vis.</i> , ₹9,58,77,818 for 1889, ₹9,58,77,818 for 1890	6·28	6·26
(b) Amount payable to the Company for Rajputana-Malwa railway (¼ surplus profits for 1890)	9,11,870	14,80,673
TOTAL PAYABLE TO THE COMPANY (a + b)	69,37,719	64,81,747
Percentage on total capital bearing interest	7·23	6·76

* Excluding the State outlay (₹8,08,405) on the Patri branch, which was met from the Civil Works grant.
 † Inclusive of ₹49 paid to the Company for past periods.

The following table shows the gross earnings under main heads as compared with 1889:

Gross earnings.	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	43,42,090	44,11,393	+ 9,303
Goods	86,49,482	82,90,012	-3,59,470
Electric telegraph	36,990	36,815	-175
Sundries	2,05,809	2,02,150	-3,659
TOTAL	1,32,34,371	1,29,40,370	-2,94,001

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, compare as follows:

	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R		R
1889	104,139	1,32,832	919,403	3,01,662	497,732	8,10,789	11,913,946	26,13,910	13,435,220	38,59,193
1890	102,144	1,31,804	900,022	3,12,977	488,984	7,69,139	12,337,692	26,94,766	13,888,842	39,08,686
Increase or decrease	-1,995	-1,028	+40,619	+11,315	-8,748	-41,650	+423,746	+30,856	+453,622	+49,493

The decrease in the intermediate class was probably due to more passengers having travelled third class by the slow trains. The increase in third class was chiefly in single journey passengers.

The average sum received for carrying a passenger one mile was 2.64 pies against 2.65 pies in 1889.

The coaching earnings per passenger train-mile, *viz.*, R3.50, were the same as in the previous year.

Goods.—The following is a summary of the tonnage of goods lifted, and the earnings therefrom, as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	992,524	78,07,018	963,635	75,74,223	-28,889	-2,32,795
Military stores	1,716	51,068	992	26,633	-724	-24,435
Railway materials for construction	7,404	6,148	12,891	25,855	+5,487	+19,707
Coal for the public and construction	40,350	2,26,531	24,438	1,38,139	-15,912	-88,392
Coal for revenue only	57,186	1,32,848	41,829	1,03,374	-15,357	-29,474
Revenue stores other than coal	112,291	1,36,983	103,875	1,25,892	-8,416	-11,091
Live stock	13,707	2,80,797	14,903	2,89,435	+1,196	+8,638
Rents, miscellaneous, &c. . . . .	...	8,089	...	6,461	...	-1,628
TOTAL	1,225,178	86,49,482	1,162,563	82,90,012	-62,615	-3,59,470

The decrease under "General merchandise" chiefly occurred in the traffic in grains and oil-seeds. The total quantity of grains carried over the railway was 121,594 tons, and the earnings therefrom R7,25,322 against 199,306 tons

and R11,20,610 during the previous year, while the quantity of oil-seeds carried was 55,949 tons, with earnings amounting to R4,48,971 against 122,044 tons and R9,36,795 in 1889.

There was, however, a large increase in the cotton traffic, the quantity of raw cotton carried and the earnings therefrom being 134,989 tons and R17,41,304, respectively, against 115,538 tons and R15,03,477 in 1889. There were also increases, as compared with 1889, of R51,177 in metals, R1,44,743 in railway plant and rolling-stock, R82,740 in sugar and R44,929 in tobacco.

The decrease in the quantity of "Military stores" carried and the earnings therefrom was in traffic carried from Bombay and stations beyond Dádar junction to Nusseerabad, Agra, Ferozepore and other stations on the Rajputana-Malwa railway and from Máhim to Ahmedabad.

The falling off in the tonnage and earnings from "Coal for the public, and construction," was entirely in the coal carried for the use of the Rajputana-Malwa railway.

The average sum received for carrying a ton of goods one mile amounted to 8.70 pies against 7.82 pies in 1889.

The goods earnings per goods train-mile were R7.90, against R8.04.

The following table compares the working expenses of the railway during the years 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	R		R		R	
Maintenance	16,56,183	12.51	15,77,735	12.19	-78,448	-4.74
Locomotive	20,21,501	15.27	18,66,072	14.42	-1,55,429	-7.69
Carriage and wagon	5,30,463	4.01	5,85,974	4.53	+55,511	+10.46
Traffic	7,94,415	6.00	8,01,878	6.20	-7,463	+0.94
General	5,11,433	3.87	5,24,890	4.06	+13,457	+2.63
Special and miscellaneous	1,03,123	0.78	85,644	0.66	-17,479	-16.95
TOTAL	56,17,118	42.44	54,42,193	42.06	-1,74,925	-3.11

Maintenance.—The decrease is spread over all the items of expenditure under this head, the most important being under "Bridges," owing to lighter repairs to the large bridges, and to a credit for bridge materials found excess in stock.

Locomotive.—The large reduction under this head was chiefly due to a decrease in the exchange charges, amounting to R1,03,106; there were also savings under fuel and carriage of revenue stores.

Carriage and wagon.—The increase was almost solely due to extensive repairs to goods vehicles carried out in the first-half of 1890.

Special and miscellaneous.—The decrease was partly due to the payment of R13,844 in 1889 as compensation for cotton destroyed by fire near Panoli station, and to the reduced payments for toll on the Carnac Bridge on account of the falling off in the through grain traffic in 1890.

The principal alterations in the coaching fares and goods rates will be found on pages 121, 122, and 124 of Chapter VIII, Part I, of the Administration Report.

Madras Railway (Standard gauge).

23. The following table shows the general results of working as compared with the previous year :

Year.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on capital outlay, including suspense.
	<i>Miles.</i>	<i>Miles.</i>	<i>R</i>	<i>R</i>	<i>R</i>		<i>R</i>	
1889 . . .	839'30	2,370,897	91,10,895	53,72,474	37,58,421	58'97	208	3'21
1890 . . .	839'30	2,460,802	95,06,135	49,84,655	45,21,480	52'44	218	3'83
Increase or decrease . . .	...	+89,905	+3,95,240	-3,87,819	+7,83,059	-6'53	+10	+0'62
Percentage of increase or decrease . . .	...	+3'79	+4'34	-7'22	+20'95	...	+4'81	...

The following table shows the gross earnings under main heads as compared with 1889 :

	1889.	1890.	Increase or decrease.
	<i>R</i>	<i>R</i>	<i>R</i>
Coaching	37,17,890	37,64,491	+46,601
Goods	52,04,228	53,56,234	+1,52,006
Electric telegraph	19,106	18,490	-616
Sundries	1,69,671	3,66,920	+1,97,249
TOTAL	91,10,895	95,06,135	+3,95,240

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, compare as follows :

	FIRST CLASS.		SECOND CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		<i>R</i>		<i>R</i>		<i>R</i>		<i>R</i>
1889 . . .	16,653	1,78,021	65,727	1,82,821	8,769,841	28,10,521	8,852,221	31,80,363
1890 . . .	16,854	1,59,014	74,345	2,00,088	8,669,608	28,93,975	8,760,807	32,53,077
Increase or decrease . . .	+201	-19,007	+8,618	+17,267	-100,233	+74,454	-91,414	+72,714

The increase in the number of first class passengers carried is attributed to a large number of European tourists having travelled over the line during the latter half of the year. The decrease in earnings was in a great measure due to the loss of a large percentage of the Bangalore-Bombay traffic, *via* Raichur, on the opening of the Southern Mahratta railway through to Poona. The reduction of the first class fare, from 18 to 12 pies per mile on 1st July 1889, also accounts for some portion of the loss in earnings.

Under second class traffic the total number carried and earnings increased, but, excluding troops and police, the earnings were *R*2,366 less than those of the previous year—a result also attributable to the opening of the Southern Mahratta route to Poona.

The decrease in the number of third class passengers is attributed to the prevalence of cholera and influenza during the first-half of the year,

and to the train service between Pódanúr and Calicut having been interrupted by flood damages in the second-half of the year. The decrease in numbers during the latter period was also partly due to the introduction of a through mixed service over both the north-west and south-west lines, long distance passengers being thus able to complete their journey on one ticket, instead of having to break their journey overnight at Cuddapah, Gooty, Salem, or Pódanúr, and re-book next morning to their destination. The increased earnings are attributed to fractions of an anna having been abolished in fares over four annas, and to the enhanced fare for mail trains introduced on 1st October 1890.

The average sum received for carrying a passenger one mile amounted to 1·85 pies against 1·84 pies in the previous year.

The coaching earnings per passenger train-mile were ₹3·37 against ₹3·53.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	₹	Tons.	₹	Tons.	₹
General merchandise	787,183	48,36,774	844,111	50,23,050	+56,928	+1,86,276
Military stores	1,578	68,637	1,353	51,280	-225	-14,357
Railway materials for construction	13,490	51,100	5,511	16,495	-7,979	-34,605
Coal for the public and construction	11,856	72,591	11,027	60,560	-829	-12,031
Coal for revenue only	1,386	2,131	2,808	5,387	+1,422	+3,256
Revenue stores other than coal	81,948	1,17,707	328,605	1,57,272	+46,657	+39,565
Live stock	1,733	39,022	1,207	23,408	-526	-15,614
Rents, miscellaneous, &c. . . . .	...	16,266	...	15,782	...	-484
TOTAL	1,099,174	52,04,228	1,194,622	53,56,234	+95,448	+1,52,006

The increased earnings under "General merchandise" occurred chiefly in the sugar traffic. The total quantity of sugar carried over the railway was 33,557 tons, with earnings of ₹2,76,192, against 30,826 tons and ₹1,61,088 during the previous year. The increase was due to larger exports from North Arcot to the Great Indian Peninsula railway, and from Tirupúr and Gooty to Malabar and Ádóni, respectively.

The grain traffic gave diminished earnings of ₹12,706 only, but a very heavy decrease occurred under "Rice," amounting to 21,800 tons and ₹2,57,906. This was balanced to a large extent by increases under "Ragi" of 30,873 tons, and ₹1,60,393, under "Gram" of 1,635 tons, and ₹51,934, and under "Cholum and Cumbu (inferior food-grains)" of 5,867 tons and ₹35,219. The falling off in rice was due to the almost total cessation of this traffic between Kátpádi and the Malabar coast. Scarcity prevailed for some months in the Tanjore district, and the higher prices offered there diverted the North Arcot rice by the South Indian railway direct to the towns and villages where scarcity existed. The Malabar coast obtained its supply of rice by steamers from Cocanada and other east coast ports, instead of by railway as formerly.

Under "Hides and skins" there was a decrease of 2,262 tons and ₹54,618, which was almost entirely due to a falling off in the traffic in sheep skins. Very large quantities of skins were brought into Madras by steamer from Calcutta, and the variation in the rate of exchange between India and England tended to affect the shipment of dressed hides to Europe.

Under "Cotton" there was an increase of 3,231 tons and of ₹21,036. During the early part of the year the despatches of cotton were less owing to a late season, and to the fluctuations in exchange. In the latter half of the year the cotton trade more than recovered itself, resulting in a net increase both in tonnage and earnings for the whole year.

Under "Tobacco" there was an increase of 1,876 tons and of ₹23,815, due to the development of the traffic in both half-years.

Under "Railway plant and rolling-stock" there was an increase of ₹35,903 and a decrease of 11,000 tons. The increased earnings were due to the longer leads which prevailed in the first-half of the year.

The average sum received for carrying a ton of goods one mile amounted to 7.65 pies against 7.75 pies in 1889. The goods earnings per goods train-mile were ₹3.99 against ₹3.95.

The following table compares the working expenses of the railway during the years 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	₹		₹			
Maintenance	15,38,561	16.89	12,52,930	13.18	-2,85,631	-18.56
Locomotive	17,45,771	19.16	17,53,446	18.44	+7,675	+0.44
Carriage and wagon	7,18,910	7.89	5,57,517	5.86	-1,61,393	-22.46
Traffic	7,99,976	8.78	8,20,687	8.63	+20,711	+2.59
General	5,31,049	5.83	5,50,887	5.80	+19,838	+3.73
Special and miscellaneous	38,207	0.42	49,188	0.52	+10,981	+28.74
TOTAL	53,72,474	58.97	49,84,655	52.44	-3,87,819	-7.22

Maintenance.—The decrease under "Maintenance" was mainly due to credits on account of the value of old rails and girders from the original Pennér and Chitrávati bridges returned to stock, and to decreased loss under exchange, combined with a heavy debit in the previous year in connection with the Calicut extension.

During the year 55.71 miles of rails were relaid, of which 30.78 miles were of iron and 24.93 miles of steel.

Carriage and wagon.—The decrease was principally due to the much smaller number of vehicles repaired and renewed, as also to the higher rate of exchange which prevailed during the year.

From 1st October the third class mail fare was raised from 2 to 3 pies per mile, with the object of reducing the excessive number of passengers by mail trains and inducing

Fares and rates.
them to use the local trains.

The third class minimum fares by mail trains between Bangalore Cantonment and City, and between Pódanúr and Coimbatore, were from 1st January reduced from 1 anna to 6 pies.

Numerous alterations were made in the goods rates to secure better loading of wagons, and to adjust rates on a mileage basis with the ruling rates on other railways.

South Indian Railway (Metre gauge).

24. The Pondicherry railway, 7½ miles in length, is worked by the South Indian Railway Company as an integral part of their system. A copy of the working agreement is printed as Appendix Q to this volume.

The following paragraphs include the transactions connected with the working of the Pondicherry railway and the amount received by the South Indian railway for working that line, but the net earnings and results calculated thereon refer to the South Indian railway only.

The table below shows the general results of working as compared with the previous year:

Year.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total outlay including suspense.
	Miles	Miles.	R	R	R		R	
1889	654'50	2,047,659	56,84,843	39,96,712	16,88,131	70'30	1'5	3'42
1890	654'61	2,230,375	61,62,961	35,54,528	26,08,433	57'67	1'70	5'25
Increase or decrease	+0'02	+182,716	+4,78,118	-4,42,184	+9,20,302	-12'63	+14	+1'83
Percentage of increase or decrease . . . . .	...	+8'92	+8'41	-11'06	+54'52	...	+8'48	...

The net earnings gave a surplus profit of R 2,86,683, which is equally divisible between Government and the Company. This is the first year in which the South Indian railway has realised surplus profits since the formation of the Company.

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase.
	R	R	R
Coaching	30,41,855	31,22,966	81,111
Goods	25,39,182	28,79,069	3,39,887
Electric telegraph	19,047	19,464	417
Sundries	84,759	1,41,462	56,703
TOTAL	56,84,843	61,62,961	4,78,118

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom compare as follows:

	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R		R
1889	15,112	53,270	108,889	97,813	9,980	6,951	7,644,700	27,29,434	7,778,681	28,87,468
1890	15,537	52,997	127,501	1,09,084	...	...	7,881,109	28,15,953	8,024,247	29,78,034
Increase or decrease	+425	-273	+18,712	+11,271	-9,980	-6,051	+236,409	+86,519	+245,566	+90,566

The increases in the second and third classes are attributed to a larger attendance at the Streerungam, Arianimoolum and Kirthigai festivals. The increase in the number of pilgrims who travelled in connection with the last named feast was largely due to the opening of the Villupuram-Guntakal State railway to Tiruvannámalai. The satisfactory development in second class traffic is due in a great measure to the low fare of 4 pies per mile now in force, as since its introduction from the 1st February 1889 there has been a steady increase in the number of passengers using this class. The improvement in the second class traffic may also be attributed to the abolition of the intermediate class.

The average sum received for carrying a passenger one mile amounted to 2'06 pies against 2'07 pies in the previous year.

The coaching earnings per passenger train-mile were R3'35 against R3'45.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889 :

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	716,512	23,50,410	760,386	26,83,857	+43,874	+3,33,447
Military stores	108	3,296	116	2,876	+8	-420
Railway materials for construction	71,371	42,440	85,860	55,785	+14,489	+13,345
Coal for the public and construction	5,240	3,293	944	2,231	-4,296	-1,062
Coal for revenue only	14,384	23,037	15,671	28,965	+1,487	+5,928
Revenue stores other than coal	431,063	1,11,187	298,284	98,155	-132,779	-13,032
Live stock	134	2,172	87	1,397	-47	-775
Rents, miscellaneous, &c. . . . .	...	3,347	...	5,803	...	+2,456
TOTAL	1,238,812	25,39,182	1,161,548	28,79,069	-77,261	+3,39,847

The increase under "General merchandise" chiefly occurred in the grain traffic. The total quantity of grains carried over the railway increased by 38,790 tons and R2,90,042, due to larger exports from Madras and districts north of Trichinopoly to Madura and Tinnevely, in consequence of the partial failure of the crops in the southern portion of the Peninsula.

There was an increase of 40,656 tons and of R39,483 in the "Stone and lime" traffic, due to heavier movement of road metal for Madras and other places and of stone for the Harbour works.

Under "Metals, iron," there was a decrease of 2,194 tons, but an increase of R24,375 in the earnings, caused by the longer leads which were obtained during 1890 in connection with the carriage of rails for the Villupuram-Guntakal State railway.

There were decreases of 2,501 tons and R11,421, and of 709 tons and R12,699 under "Cotton, raw," and "Cotton piece-goods," respectively. The fluctuations in the former commodity are attributed to the inferior crops of 1890, combined with the depressed condition of the European markets, and in the latter to large imports in 1889.

There was a falling off of 18,640 tons and of R20,474 in the "Oil seeds" traffic, principally due to the smaller conveyance of "Til or gingelly" and "Ground-nut seeds" during the first-half of the year under review.

The average sum received for carrying a ton of goods one mile amounted to 7'16 pies against 7'44 pies in 1889.

The goods earnings per goods train-mile were R2'25 against R2'21.

The following table compares the working expenses of the railway during Working expenses. the years 1889 and 1890 :

	1889.		1890.		Increase or decrease.	Percentage of increase or decrease.
	Amount.	Per cent on gross earnings.	Amount.	Per cent. on gross earnings.		
	R		R		R	
Maintenance	15,78,864	27'77	11,49,235	18'66	-4,29,629	-27'21
Locomotive	12,32,877	21'69	12,62,852	20'46	+29,975	+2'43
Carriage and wagon	3,08,469	5'43	2,69,068	4'37	-39,401	-12'77
Traffic	4,79,170	8'43	4,77,367	7'75	-1,803	-0'38
General	3,68,231	6'47	3,67,748	5'97	-483	-0'13
Special and miscellaneous	29,101	0'51	28,258	0'46	-843	-2'89
TOTAL	39,96,712	70'30	35,54,528	57'67	-4,42,184	-11'06

Maintenance.—The decrease was due chiefly to only 49·26 miles having been renewed with 50lb steel rails against 76·73 miles in 1889, and to less expenditure on the reconstruction and enlargement of bridges necessitated by the floods of 1884. The higher rate of exchange which prevailed in 1890 also caused a reduction of R 1,22,763 in the expenditure of this department.

Locomotive.—The increased expenditure occurred mainly under "Running expenses" in consequence of the additional train-mileage run, and under "Fuel" owing to the increased consumption and cost of coal. The locomotive expenses would have been higher but for the saving under "Loss by exchange," and for a reduced expenditure under "Maintenance and renewal of locomotive engines and machinery," the workshop staff having been occupied in erecting new engines on capital account.

Carriage and wagon.—The decrease was mainly under "Repairs and renewals of vehicles and machinery," due to no heavy repairs having been undertaken during the second half of the year, in consequence of new stock having been under erection.

This railway was purchased by the State on the 1st January 1891, and the working of the line and that of the Villupuram-Guntakal State railway, including the construction of the unopen section of the latter railway, was made over to a Company from the same date.

No important changes in fares and rates have been made during the year

Fares and rates. under review.

Tarakeshwar Railway (Standard gauge).

25. The principal terms on which this line is worked by the East Indian Railway Company will be found on page 133, Chapter IV, of Part II of the Administration Report for 1889-90.

The following table shows the general results of working as compared with the previous year:

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay.
	Miles.	Miles.	R	R		R	R	
1889 . . .	22·23	52,051	2,84,895	1,48,317	1,36,578	52·06	246	7·90
1890 . . .	22·23	51,470	2,86,526	1,42,243	1,44,283	49·64	248	8·35
Increase or decrease .	...	-581	+1,631	-6,074	+7,705	-2·42	+2	+0·45
Percentage of increase or decrease .	...	-1·12	+0·57	-4·10	+5·64	...	+0·81	...

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	2,68,420	2,65,975	-2,445
Goods	16,051	19,635	+3,584
Electric telegraph	362	413	+51
Sundries	62	503	+441
TOTAL	2,84,895	2,86,526	+1,631

Coaching.—The number of passengers of the various classes carried, including season tickets and the earnings therefrom, compare as follows :

	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R		R
1889	303	284	2,275	968	79,445	19,353	996,385	2,43,869	1,078,408	2,64,474
1890	312	277	2,779	1,168	82,134	19,956	982,612	2,39,982	1,068,137	2,61,383
Increase or decrease	+9	-7	+504	+200	+2,988	+603	-13,773	-3,887	-10,271	-3,091

The decrease in the third class traffic was due to fewer pilgrims having visited Tárakeshwar than in 1889.

The average sum received for carrying a passenger one mile amounted to 3'00 pies against 2'95 pies in the previous year.

The coaching earnings per passenger train-mile were R5'62 against R5'56.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom, as compared with 1889 :

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	14,838	14,468	18,137	17,730	+3,299	+3,262
Railway materials for construction	5	8	391	564	+386	+556
Coal for the public	920	707	1,002	708	+82	+1
Coal for revenue only	1	1	3	4	+2	+3
Revenue stores other than coal	4,022	730	2,090	443	-1,932	-287
Rents, miscellaneous, &c. . . . .	...	137	...	186	...	+49
TOTAL	19,786	16,051	21,623	19,635	+1,837	+3,584

The increase under "General merchandise" occurred chiefly in the jute traffic. The total quantity of jute carried over the railway was 2,048 tons and the earnings therefrom R2,679 against 1,113 tons and R1,401 during the previous year.

The average sum received for carrying a ton of goods one mile amounted to 9'66 pies against 8'79 pies in 1889.

The goods earnings per goods train-mile were R4'74 against R4'21.

The working expenses, as compared with the previous year, are detailed in the following table :

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
Working expenses calculated at the same rate per cent. of the gross receipts of the Tárakeshwar railway as was the aggregate working expenses of the East Indian railway system to the gross receipts of that system during the two halves of the year	R 98,204	34'47	R 90,025	31'42	-8,179	-8'33
5 per cent. on gross receipts of the Tárakeshwar railway for use of the East Indian railway rolling-stock	14,245	5'00	14,326	5'00	+81	+0'57
1 per cent. on net earnings for contribution to East Indian Railway Provident Fund	1,724	0'61	1,822	0'63	+98	+5'68
1/8th share of net earnings payable to East Indian Railway Company for working	34,144	11'98	36,070	12'59	+1,926	+5'64
TOTAL	1,48,317	52'06	1,42,243	49'61	-6,074	-4'10

The decrease in the working expenses was due to the lower percentage of expenses to earnings at which the East Indian railway system was worked.

There was no alteration in the coaching fares. The goods rates are the same as on the East Indian railway.

Fares and rates.

Deoghur Railway—(Metre gauge).

26. The following table shows the general results of working as compared with the previous year:

General results.

Year.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889	4.79	13,196	28,533	15,838	12,695	55.51	115	4.49
1890	4.79	13,436	26,095	15,180	10,915	58.17	105	3.86
Increase or decrease		+ 240	-2,438	-658	-1,780	+ 2.66	-10	-0.63
Percentage of increase or decrease . . . . .	...	+ 1.79	-8.54	-4.15	-14.02	...	-8.70	...

The following table shows the gross earnings under main heads as compared with 1889:

Gross earnings.

	1889.	1890.	Decrease.
	R	R	R
Coaching	25,865	23,941	1,924
Goods	2,466	1,971	495
Sundries	202	183	19
TOTAL	28,533	26,095	2,438

Coaching.—The number of passengers of the various classes carried, and the earnings therefrom, compare as follows:

	FIRST CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R
1889	601	300	212,423	25,565	213,024	25,865
1890	635	318	185,613	23,623	186,248	23,941
	+ 34	+ 18	-26,810	-1,942	-26,776	-1,924

The decrease in the earnings from passengers was due to a falling off in the pilgrim traffic to Deoghur.

The average sum received for carrying a passenger one mile amounted to 5.15 pies against 4.86 pies in the previous year.

Goods.—The earnings were entirely derived from "General merchandise."

The tonnage lifted and the earnings therefrom were 6,605 tons and R1,971 against 7,855 tons and R2,466 in 1889.

The average sum received for carrying a ton of goods one mile amounted to 11'96 pies, against 13'25 pies in 1889.

The following table compares the working expenses of the railway during the years 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	R		R			
Maintenance	2,999	10'51	3,283	12'58	+284	+9'47
Locomotive	5,333	18'69	4,601	17'63	-732	-13'73
Carriage and wagon	345	1'21	387	1'48	+42	+12'17
Traffic	4,418	15'49	4,331	16'60	-87	-1'97
General	2,743	9'61	2,578	9'88	-165	-6'02
	15,838	55'51	15,180	58'17	-658	-4'15

Maintenance.—The increase was due to the purchase of new sleepers during 1890.

Locomotive.—The decrease was due to the repairs to locomotives having been less than in 1889.

Fares and rates. No changes were made during the year.

Rohilkhand-Kumaun Railway (Metre gauge).

27. Under the contract for the construction and working of this line, the Rohilkhand-Kumaun Railway Company will receive from Government, during the period of ten years computed from the date of opening * for traffic, a half-yearly subsidy of R20,000. The surplus profits in excess of interest charges at 5 per cent. per annum on the paid-up share capital are divided equally between Government and the Company.

The following table shows the general results of working as compared with the previous year:

YEAR.	Mean mileage worked. (a)	Train-mileage.	Gross earnings. (b)	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889	67	67,688	3,20,206	1,60,071	1,60,135	49'09	92	6'68
1890	67	73,149	3,14,834	1,63,831	1,51,003	52'04	90	6'25
Increase or decrease . . . . .	...	+5,461	-5,372	+3,760	-9,132	+2'05	-2	-0'43
Percentage of increase or decrease . . . . .	...	+8'08	-1'68	+2'35	-5'70	...	-1'10	...

The surplus profits of the year 1890, after payment of interest, &c., divisible between Government and the Company, amounted to R21,311 against R33,484 in 1889.

* The line was opened throughout for traffic on the 12th October 1884.

(a) Includes 12 miles of the Bareilly-Pilibhit State railway, between Bareilly and Bhojepura, worked over by the Rohilkhand-Kumaun railway.

(b) Includes the net earnings of the cart-road and tonga service.

The following table details the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	1,84,916	1,76,627	-8,289
Goods	81,187	85,171	+3,984
Electric telegraph	1,856	1,490	-366
Sundries	52,247	51,546	-701
TOTAL	3,20,206	3,14,831	-5,372

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, compare as follows:

YEAR.	FIRST CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R
1889	3,534	32,678	6,964	30,682	131,802	82,870	142,300	1,46,230
1890	3,286	30,826	6,448	32,206	123,987	74,510	133,721	1,37,542
Increase or decrease	-248	-1,852	-516	+1,524	-7,815	-8,360	-8,579	-8,688

The decrease in the first class passenger traffic was due to a smaller number of visitors to Naini Tal and the adjoining hill stations on account of the severity of the monsoon which, for a time, stopped communication with the hills. The decrease in the third class was principally due to scarcity in Kumaun, and the consequent prohibition against pilgrims from other parts of the country visiting the Gangetic shrines in the interior of the district.

The average sum received for carrying a passenger one mile amounted to 5'08 pies against 4'92 pies in 1889.

The coaching earnings per passenger train-mile were R5'48 against R5'52.

Goods.—The following is a summary of the tonnage of goods carried and the earnings therefrom as compared with 1889:

	1889.		1890.		INCREASE OR DECREASE.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	36,285	73,510	35,452	74,793	-833	+1,283
Military stores	421	2,721	426	2,745	+5	+24
Railway materials for construction	2,061	2,789	2,040	1,808	-21	-981
Coal for the public and construction	94	34	92	26	-2	-8
Revenue stores other than coal	2,230	1,826	10,428	5,510	+8,198	+3,684
Live stock	23	132	2	52	-21	-80
Rents, miscellaneous, &c. . . . .	...	175	...	237	...	+62
TOTAL	41,114	81,187	48,440	85,171	+7,326	+3,984

The principal variations in the traffic in "General merchandise" were increases of R4,384 and R4,157 under "Grains" and "Provisions," respec-

tively; and decreases of R2,803 and R3,183 under "Oil-seeds" and "Miscellaneous articles of merchandise" respectively. The increase under "Grains" was due to better crops and larger exports to the districts in Kumaun, while that under "Provisions" was almost entirely due to the good potatoe crop in the hills. The falling off in the "Oil-seeds" traffic was due to unfavourable prices in consequence of the low rate of exchange.

The increase under "Revenue stores other than coal" was due to the carriage of a larger quantity of ballast.

The average sum received for carrying a ton of goods one mile amounted to 8.67 pies against 9.26 pies in 1889.

The goods earnings per goods train-mile were R2.03 against R2.38.

The following statement shows the working expenses of the railway during

Working expenses. the years 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	R		R		R	
Maintenance	37,040	11.57	33,425	10.62	-3,615	-9.76
Locomotive	33,351	10.41	33,901	10.77	+550	+1.65
Carriage and wagon	6,358	1.99	8,381	2.66	+2,023	+31.82
Traffic	36,437	11.38	38,986	12.38	+2,549	+7.00
General	38,752	12.10	41,465	13.17	+2,713	+7.00
Special and miscellaneous	8,133	2.54	7,673	2.44	-460	-5.66
TOTAL	1,60,071	49.99	1,63,831	52.04	+3,760	+2.35

The decrease under "Maintenance" was principally due to smaller renewal of sleepers and less ballasting during the second-half of the year, and the excess under "General" to an increase in the Home expenditure, and to the grant of increments and additions to salaries.

The Company's agreement granting a rebate of 50 per cent. on all receipts from Military passenger fares above R27,000 per annum, excluding baggage, &c., came into force on the 1st July 1890.

Darjeeling-Himalayan Railway (2'-0" gauge).

28. The following table shows the general results of working as compared with the previous year:

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889	51	126,258	5,74,294	3,45,177	2,29,117	60.10	217	7.79
1890	51	127,949	5,76,436	3,43,541	2,32,895	59.60	217	7.89
Increase or decrease	...	+1,691	+2,142	-1,636	+3,778	-0.50	...	+0.10
Percentage of increase or decrease	...	+1.34	+0.37	-0.47	+1.65	...	...	...

The following table details the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	2,18,364	2,12,074	-6,290
Goods	3,47,832	3,57,090	+9,258
Electric telegraph	3,092	3,095	+3
Sundries	5,006	4,177	-829
TOTAL	5,74,294	5,76,136	+2,142

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom compared as follows:

	FIRST CLASS.		SECOND CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R
1889	3,575	45,161	6,902	45,153	35,133	76,741	45,610	1,67,055
1890	3,600	43,863	7,663	52,606	33,282	70,698	44,545	1,67,167
Increase or decrease	+25	-1,298	+761	+7,453	-1,851	-6,043	-1,065	+112

The falling off in the third class was mainly due to a decrease in the local passenger traffic during the months of July and August when through communication was interrupted owing to heavy slips.

The average sum received for carrying a passenger one mile amounted to 25.86 pies against 31.36 pies in 1889.

The coaching earnings per passenger train-mile were R5.62 against R5.69.

Goods.—The total tonnage of goods carried rose from 21,950 tons in 1889 to 23,797 tons in 1890, and the earnings from R3,47,832 to R3,57,090.

The earnings from the carriage of tea, grains, provisions, and stone and lime were more by R11,836, R5,484, R2,673 and R3,351, respectively, while those from metals and cotton piece-goods fell off by R6,560 and R5,730, respectively.

The goods earnings per goods train-mile were R3.96, being the same as in 1889.

The following table shows the working expenses of the railway during 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	R		R		R	
Maintenance	59,727	10.40	77,157	13.39	+ 17,430	+ 29.18
Locomotive	1,16,204	20.23	1,12,827	19.57	- 3,377	- 2.91
Carriage and wagon	32,203	5.52	32,172	5.58	- 121	- 0.37
Traffic	45,547	7.93	55,595	9.64	+ 10,048	+ 22.06
General	66,156	11.52	52,142	9.05	- 14,014	- 21.18
Special and miscellaneous	25,250	4.40	13,648	2.37	- 11,602	- 45.95
TOTAL	3,45,177	60.10	3,43,541	59.60	- 1,636	- 0.47

The increase under "Maintenance" was chiefly due to exceptional expenditure incurred in clearing and repairing heavy slips caused by abnormal rainfall. The cost of transshipping goods when the line was blocked by slips accounts for the increase under "Traffic."

The decrease under "General" was mainly due to the Chairman's remuneration having been discontinued, and that under "Special and miscellaneous" to the law charges having been less than in 1889.

The chief alterations in coaching fares and goods rates will be found on pages 122 and 125, Chapter VIII of Part I of the Administration Report.

Fares and rates.

Dibru Sadiya Railway (Metre gauge.)

29. The following table shows the general results of working as compared with the previous year:

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week, excluding steam-boat.	Percentage of net earnings on total capital outlay.
	Miles.	Miles.	R	R	R		R	
1889 . . .	78	120,198	4,64,018	3,38,871	1,25,147	73'03	114	2'27
1890 . . .	78	136,130	5,14,266	3,37,306	1,76,960	65'59	127	3'10
Increase or decrease . . .	...	+15,932	+50,248	-1,565	+51,813	-7'44	+13	+0'83
Percentage of increase or decrease . . .	...	+13'25	+10'83	-0'46	+41'40	...	+11'40	...

Under terms of the contract for the construction and maintenance of this line, the Government of India pays to the Assam Railways and Trading Company an annual subsidy equal to such sum as, with the net earnings, will yield a dividend of 5 per cent. per annum on the capital outlay on the main line and branches, subject to a maximum charge of ₹1,00,000. The net earnings of the year 1890, ₹1,76,960, having fallen short of the interest charges, ₹2,77,109, by ₹1,00,149, the maximum subsidy of ₹1,00,000 was paid to the Company.

The gross earnings under main heads, as compared with 1889, are shown in the following table:

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	58,085	57,884	-201
Goods	3,91,098	4,41,130	+50,032
Electric telegraph	6,628	7,448	+820
Steam-boat	1,500	...	-1,900
Sundries	6,307	7,804	+1,497
TOTAL	4,64,018	5,14,266	+50,248

Coaching.—The number of passengers of the various classes carried, including troops and police, and the earnings therefrom compare as follows:

YEAR.	FIRST CLASS.		SECOND CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		<i>R</i>		<i>R</i>		<i>R</i>		<i>R</i>
1889 . . .	1,848	4,685	1,682	2,242	74,924	42,858	78,454	49,785
1890 . . .	2,129	4,935	1,837	2,504	77,590	41,656	81,550	49,095
Increase or decrease . . .	+ 281	+ 250	+ 155	+ 262	+ 2,666	- 1,202	+ 3,102	- 690

The increase in number and decrease in earnings under third class was due to a great number of passengers having travelled short distances during 1890.

The average sum received for carrying a passenger one mile amounted to 4.50 pies against 4.45 pies in 1889.

The coaching earnings per passenger train-mile were *R*3.04 against *R*1.52.

Goods.—The following table compares the goods traffic during the years 1889 and 1890:

	1889.		1890.		Increase or decrease.	
	Tons.	<i>R</i>	Tons.	<i>R</i>	Tons.	<i>R</i>
General merchandise . . .	21,260	1,41,491	21,962	1,55,902	+ 702	+ 14,411
Coal for the public Revenue stores other than coal . . .	109,885	2,46,147	139,759	2,79,008	+ 29,874	+ 32,861
Live stock . . .	920	2,409	1,016	4,952	+ 96	+ 2,543
Rents, miscellaneous, &c. . .	9	477	51	882	+ 42	+ 405
	...	574	...	386	...	- 188
TOTAL . . .	132,074	3,91,098	162,788	4,41,130	+ 30,714	+ 50,032

The increase under "Coal for the public" was due to a considerable development of the Company's coal business.

The average sum received for carrying a ton of goods one mile amounted to 9.08 pies against 10.08 pies in 1889.

The goods earnings per goods train-mile were *R*3.77 against *R*4.77.

The working expenses of the railway during the years 1889 and 1890 are compared in the following table:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	<i>R</i>		<i>R</i>			
Maintenance . . .	1,31,533	28.35	1,22,894	23.90	- 8,639	- 6.57
Locomotive . . .	70,217	15.13	73,337	14.26	+ 3,120	+ 4.44
Carriage and wagon . . .	20,068	4.33	27,534	5.35	+ 7,466	+ 37.20
Traffic . . .	40,632	8.76	44,525	8.66	+ 3,893	+ 9.58
General . . .	69,413	14.96	67,219	13.07	- 2,194	- 3.16
Steam-boat . . .	4,963	1.06	...	...	- 4,963	- 100.00
Special and miscellaneous . . .	2,045	0.44	1,797	0.35	- 248	- 12.13
TOTAL . . .	3,38,871	73.03	3,37,306	65.59	- 1,565	- 0.46

Steam-boat.—No charge appears under this head owing to the revenue expenditure on the steamer *Wallace* having been included under "Maintenance."

No important changes were introduced in the rates and fares during the year under review.

Fares and rates.

Khámgaon and Amráoti State Railways (Standard gauge).

30. These lines have been constructed from the surplus revenues of the Berars, and are worked by the Great Indian Peninsula Railway Company under agreements entered into by the Government of India on behalf of the Hyderabad Administration.

Prior to the 1st January 1890 the charges by the Great Indian Peninsula Railway Company for working these lines were made at the same rate per train-mile as that incurred in working the Great Indian Peninsula Railway, in addition to which the Company received two-fifths of the net earnings.

The working expenses for the year 1890 have been calculated in accordance with the revised working agreements, the principal terms of which are as follows :

- (i) The gross receipts of the State railways are to be collected and treated as receipts of the Great Indian Peninsula Railway Company, and after deducting therefrom the working expenses referred to below, the balance is to be paid over to Government.
- (ii) The Railway Company is to retain for working and maintenance of the State railways, each half-year, the same percentage of gross receipts of the State railways as the Railway Company expend on the working and maintenance of the whole undertaking, including branches which the Railway Company work and maintain from time to time, with the addition of a sum of 5 per cent. upon the gross receipts of the State railways for the use of the Railway Company's rolling-stock.

The following table shows the general results of working as compared with the previous year :

	KHÁMGAON.				AMRÁOTI.			
	1889.	1890.	Increase or decrease.	Percentage of increase or decrease.	1889.	1890.	Increase or decrease.	Percentage of increase or decrease.
	Miles.	Miles.	Miles	Miles.	Miles.	Miles.	Miles.	Miles.
Mean mileage worked	7'50	7'50	...	...	5'50	5'50	...	...
Train-mileage	12,256	13,312	+ 1,056	+ 8'62	13,774	13,152	- 622	- 4'52
	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>
Gross earnings	65,372	55,289	- 10,083	- 15'42	1,02,028	1,01,501	- 527	- 0'51
Working expenses	42,844	29,197	- 13,647	- 31'85	60,351	55,248	- 5,103	- 8'46
Net earnings	22,528	26,092	+ 3,564	+ 15'82	41,677	46,253	+ 4,576	+ 10'99
Percentage of working expenses on gross earnings	65'54	52'81	- 12'73	...	59'15	54'43	- 4'72	...
Gross earnings per mean mile worked per week	168	142	- 26	- 15'48	357	355	- 2	- 0'56
Percentage of net earnings on capital outlay, including suspense	4'59	5'32	+ 0'73	...	9'35	10'39	+ 1'04	...

The gross earnings under main heads during 1889 and 1890 are given in the following table:

	KĀNGAON.			AMRĀOTI.		
	1889.	1890.	Increase or decrease.	1889.	1890.	Increase or decrease.
	₹	₹	₹	₹	₹	₹
Coaching	11,236	11,589	+ 353	24,402	26,554	+ 2,152
Goods	53,869	43,359	-10,510	77,076	74,322	-2,754
Electric telegraph	102	124	+ 22	545	625	+ 80
Sundries	165	217	+ 52	...	...	...
TOTAL	65,372	55,289	-10,083	1,02,023	1,01,501	-522

Particulars of the working expenses during the years 1889 and 1890 are given below:

	1889.				Expenses for maintenance and working, calculated at the same half-yearly percentage of gross receipts of the State railway as obtained on the undertaking.	1890.				Increase or decrease in amount.	
	KĀNGAON.		AMRĀOTI.			KĀNGAON.		AMRĀOTI.		KĀng- gaon.	AMRĀoti.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
Amount at the Great Indian Peninsula railway train-mileage rate of working.	27,826	42'57	31,272	30'65	26,432	47'81	49,288	48'56	-13,647	-5,209	
Two-fifths of the net earnings of the State railway retained by the Company.	15,018	22'97	28,300	27'74	2,763	5'00	5,073	5'00			
Interest on capital cost of additional short platform at Badnera.	779	0'76	885	0'87			...	+ 106
TOTAL	42,844	65'54	60,351	59'15	TOTAL	29,197	52'81	55,248	54'43	-13,647	-5,103

The decreases in the working expenses of both lines were chiefly due to the favourable terms of the new working agreement.

Bhopal-Itarsi State Railway (Standard gauge).

31. Thirteen miles of this railway situated in British territory is the property of the Government of India, the remainder, 44'11 miles, being the property of Her Highness the Begum of Bhopal.

The principal terms on which this line was worked by the Indian Midland Railway Company will be found on page 147, Chapter IV, of Part II of the Administration Report for 1889-90.

The following table shows the general results of working as compared with the previous year:

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Loss.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of loss on total capital outlay, including suspense.
1889	Miles. 57'11	Miles. 129,610	₹ 3,47,098	₹ 3,70,872	₹ 23,774	106'85	₹ 117	0'39
1890	57'11	153,608	3,84,814	4,57,479	72,665	118'88	130	1'16
Increase . . . . .	...	23,998	37,716	86,607	48,891	12'03	13	0'77
Percentage increase of . . . . .	...	18'52	10'87	23'35	205'65	...	11'11	...

The loss on the year's working is divisible between the Government of India and the Bhopal Durbar, in the proportion of the mileages in the British and Native territory (13 to 44); the loss to the Government of India was ₹16,573, and that to the Bhopal Durbar ₹56,092.

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase or decrease.
	₹	₹	₹
Coaching	1,19,890	1,43,097	+23,207
Goods	2,24,288	2,39,182	+14,894
Electric telegraph	2,446	2,167	-279
Sundries	474	368	-106
TOTAL	3,47,098	3,84,814	+37,716

The increase both in coaching and goods earnings was due to the opening of the entire Indian Midland railway system, and the consequent expansion of traffic.

Coaching.—The number of passengers of the various classes carried, including troops and police and the earnings therefrom, compare as follows:

	FIRST CLASS.		SECOND CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		₹		₹		₹		₹
1889	1,509	4,121	4,111	5,293	234,317	96,278	239,937	1,05,692
1890	2,464	6,835	6,682	8,691	239,946	1,09,169	249,092	1,24,695
Increase	955	2,714	2,571	3,398	5,629	12,891	9,155	19,003

Goods.—The following is the summary of the number of tons lifted and earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	₹	Tons.	₹	Tons.	₹
General merchandise	78,149	1,81,939	96,989	2,12,900	+18,840	+30,961
Military stores	90	482	83	372	-7	-110
Railway materials for construction	21,482	35,589	20,188	20,243	-1,294	-15,346
Coal for the public and construction	20	49	...	...	-20	-49
Coal for revenue only	4,027	4,753	1,054	516	-2,973	-4,237
Revenue stores other than coal	727	802	41,193	4,460	+40,466	+3,658
Live stock	39	188	10	111	-29	-77
Rents, miscellaneous, &c. . . . .	...	486	...	580	..	+94
TOTAL	104,534	2,24,288	159,517	2,39,182	+54,983	+14,894

The following is a statement of the working expenses as compared with those of the previous year:

	1889.		1890.		Increase in amount.	Percentage of increase.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
Maintenance	R 1,60,501	46.24	R 1,98,310	51.53	R 37,809	23.56
Other charges excepting the hire of rolling-stock	1,93,016	55.61	2,39,928	62.35	46,912	24.30
Five per cent. on gross earnings of the State railway for the hire of rolling-stock	17,355	5.00	19,241	5.00	1,886	10.87
TOTAL	3,70,872	106.85	4,57,479	118.88	86,607	23.35

The increase under "Maintenance" was due to heavy renewals of sleepers. "Other charges" also show increased outlay as compared with the previous year, but these can only fall with the growth of traffic on the Indian Midland railway.

The passenger fares and goods rates on the line were the same as those in force on the Indian Midland railway.

The Nizam's Guaranteed State Railway (Standard gauge).

32. The following paragraphs include the transactions connected with the working of the Bezvada extension railway leased to the Nizam's Guaranteed State Railway Company, but the net earnings and results calculated thereon refer to the Nizam's Guaranteed State railway only.

The mean mileage worked during the year was 353.77 miles against 348.80 miles in 1889. The increase was due to the opening of 44.97 miles from Bóna Kálu to Bezvada on the 10th February 1889.

The following table shows the general results of working as compared with the previous year:

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses. (a)	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay including suspense.
	Miles.	Miles.	R	R	R		R	
1889	348.80	601,022	23,34,133	15,61,620	7,72,513	66.90	129	2.15
1890	353.77	654,810	25,81,999	15,42,409	10,39,590	59.74	140	2.76
Increase or decrease	+4.97	+53,788	+2,47,866	-19,211	+2,67,077	-7.16	+11	+0.61
Percentage of increase or decrease	+1.42	+8.95	+10.62	-1.23	+34.57	...	+8.53	...

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	7,87,582	8,28,094	+40,512
Goods	14,56,856	16,83,446	+2,26,590
Electric telegraph	15,473	13,415	-2,058
Sundries	74,222	57,044	-17,178
TOTAL	23,34,133	25,81,999	+2,47,866

(a) Includes rent for the lease of the Bezvada extension railway, but excludes charges incurred direct by the State on that line.

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, compare as follows:

	FIRST CLASS.		SECOND CLASS.		THIRD CLASS BY MAIL TRAINS.		THIRD CLASS BY OTHER TRAINS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R		R
1889 . . .	7,238	52,221	33,119	60,242	215,950	1,42,506	744,184	4,40,917	1,000,491	6,95,886
1890 . . .	6,578	47,458	31,752	61,306	260,301	1,51,379	796,573	4,77,281	1,095,204	7,37,424
Increase or decrease . . .	-660	-4,763	-1,367	+1,064	+44,351	+8,873	+52,389	+36,364	+94,713	+41,538

The improvement in the third class traffic was principally due to an increase in the local traffic.

The average sum received for carrying a passenger one mile amounted to 2'33 pies against 2'35 pies in the previous year.

The coaching earnings per passenger train-mile were R3'24 against R3'03.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	169,234	11,53,623	172,304	10,99,053	+3,070	-54,570
Military stores	627	11,785	659	10,247	+32	-1,538
Railway materials for construction	40,138	29,023	4,362	2,468	-35,776	-26,555
Coal for the public and construction	28,598	1,74,329	75,468	4,71,994	+46,870	+2,97,665
Coal for revenue only	14,573	34,301	26,246	60,041	+11,673	+25,740
Revenue stores other than coal . .	274,512	41,675	105,479	30,590	-169,033	-11,085
Live stock	123	2,508	164	4,297	+41	+1,789
Rents, miscellaneous, &c. . . .	...	9,612	...	4,756	...	-4,856
TOTAL	527,805	14,56,856	384,682	16,83,446	-143,123	+2,26,590

The falling off in the total tonnage hauled with an increase in the earnings, as compared with the previous year, was principally due to a large decrease in the tonnage of revenue stores, which are carried at a nominal charge.

The decrease in the earnings from "General merchandise" was due to good crops in Hyderabad and Secunderabad which prevented the import of grain from Bezvada.

The increase under "Coal for the public and construction" was chiefly due to the carriage of coal for the Great Indian Peninsula Railway Company.

The average sum received for carrying a ton of goods one mile amounted to 7'24 pies against 8'00 pies in 1889.

The goods earnings per goods train-mile were R4'22 against R4'27.

The following table compares the working expenses* of the railway during the years 1889 and 1890 :

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	<i>R</i>		<i>R</i>		<i>R</i>	
Maintenance	6,45,394	27.65	5,69,967	22.07	-75,427	-11.69
Locomotive	3,45,604	14.81	3,94,689	15.29	+49,085	+14.20
Carriage and wagon	92,296	3.95	82,281	3.19	-10,015	-10.85
Traffic	2,06,894	8.86	2,14,044	8.29	+7,150	+3.46
General	2,37,523	10.18	2,44,014	9.45	+6,491	+2.73
Special and miscellaneous	33,900	1.45	37,414	1.45	+3,505	+10.34
TOTAL	15,61,620	66.90	15,42,409	59.74	-19,211	-1.23

Maintenance.—The decrease was chiefly owing to a permanent reduction in the numerical strength of the permanent-way gangs, and to less renewals of rails.

Locomotive.—The increase was mainly due to heavier repairs to locomotive engines and machinery, to extra train-mileage run, and to the carriage of a larger quantity of fuel for stock.

Carriage and wagon.—The decrease was due to lighter repairs to vehicles.

Fares and rates. No important changes were made in fares and rates during the year.

Rájpura-Bhátinda State Railway (Standard gauge).

33. This line is worked by the North Western railway. The principal terms of the revised working agreement, which is still under execution, will be found on page 155, Chapter IV, of Part II of the Administration Report for 1889-90.

From the date of opening of the extension from Patiála to Bhátinda, *viz.*, the 13th October 1889, separate accounts have been maintained for the Ráj-pura-Bhátinda State railway. The figures below against the year 1889 relate, therefore, to the period from the 13th October to the 31st December 1889 only. The transactions of the line from Ráj-pura to Patiála, prior to the 13th October 1889, are included with those of the North Western railway.

The following table shows the general results of working during 1889 and 1890 :

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	<i>R</i>	<i>R</i>	<i>R</i>		<i>R</i>	
1889	107.94	32,644	91,049	50,077	40,972	55.00	74	0.65
1890	107.94	145,029	5,66,946	3,11,820	2,55,126	55.00	101	3.92

The gross earnings under main heads were as follows :

	1889.	1890.
	<i>R</i>	<i>R</i>
Coaching	43,479	2,39,548
Goods	46,908	3,24,797
Electric telegraph	662	2,428
Sundries . . . . .	...	173
TOTAL	91,049	5,66,946

* Includes rent for the lease of the Bezvada extension railway, but excludes charges incurred direct by the State on that line.

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, were as under :

	FIRST CLASS.		SECOND CLASS.		INTERMEDIATE CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		₹		₹		₹		₹		₹
1889 . . .	149	743	267	495	783	696	59,517	35,440	60,816	37,374
1890 . . .	1,601	3,314	2,891	2,734	9,890	4,206	526,429	2,11,792	5,40,811	2,22,046

The average sum received for carrying a passenger one mile amounted to 2.50 pies against 2.58 pies in 1889.

The coaching earnings per passenger train-mile were ₹5.10 against ₹3.17.

Goods.—The following is a summary of the tonnage lifted and the earnings therefrom :

	1889.		1890.	
	Tons.	₹	Tons.	₹
General merchandise	24,778	38,101	115,437	3,03,949
Military stores	33	392	712	9,216
Railway materials for construction	5,392	7,366	17,266	4,101
Coal for the public and construction	290	179	5,860	1,957
Coal for revenue only	206	120	310	320
Revenue stores other than coal	1,598	384	16,648	3,786
Live stock	10	22	21	61
Rents, miscellaneous, &c. . . . .	...	344	...	1,407
TOTAL	32,307	46,908	156,254	3,24,797

Gram and other grains constitute the chief articles of traffic. Large quantities of gram are booked chiefly from Bhátinda to Meerut, Muzaffarnagar, Khátauli, and other stations on the North Western railway.

The average sum received for carrying a ton of goods one mile amounted to 7.21 pies against 5.58 pies in 1889.

The goods earnings per goods train-mile were ₹3.31 against ₹2.48.

The total working expenses, which are calculated at 55 per cent. of the Working expenses. gross earnings of the State railway, amounted to ₹3,11,820 against ₹50,077 in 1889.

Fares and rates. The fares and rates in force on the North Western railway apply to this line.

Jodhpore State Railway (Metre gauge).

34. The following table shows the general results of working compared with the previous year :

YEAR.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	₹	₹	₹			
1889 . . .	124.00	114,854	3,59,358	1,67,100	1,92,258	46.50	56	8.45
1890 . . .	124.00	116,324	3,708,26	1,74,634	1,96,192	47.09	58	8.63
Increase . . .	...	1,470	11,468	7,534	3,934	0.59	2	0.18
Percentage of increase . . .	...	1.28	3.19	4.51	2.05	...	3.57	...

The following table shows the gross earnings under main heads as compared with the previous year :

	1889.	1890.	Increase or decrease.
	₹	₹	₹
Coaching	1,62,127	1,63,058	+ 931
Goods	1,84,138	1,98,212	+ 14,074
Electric telegraph	6,797	6,692	—105
Sundries	6,296	2,864	—3,432
TOTAL	3,59,358	3,70,826	+ 11,468

Coaching.—The number of passengers of the various classes carried, including troops and police, and the earnings therefrom, compare as follows :

	FIRST CLASS.		SECOND CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		₹		₹		₹		₹
1889	615	3,425	2,290	3,988	297,018	1,39,130	299,923	1,46,543
1890	723	4,449	2,362	4,133	283,678	1,34,629	286,763	1,43,211
Increase or decrease	+ 108	+ 1,024	+ 72	+ 145	—13,340	—4,501	—13,160	—3,332

The earnings from " Other coaching " traffic amounted to ₹19,847, against ₹15,584 in 1889.

The average sum received for carrying a passenger one mile amounted to 2'10 pies, against 2'08 pies in 1889.

The coaching earnings per passenger train-mile were ₹2'92 against ₹2'52.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889 :

	1889.		1890.		DIFFERENCE.	
	Tons.	₹	Tons.	₹	Tons.	₹
General merchandise	35,999	1,81,191	37,310	1,81,585	+ 1,311	+ 394
Military stores . . . . .	...	2	7	73	+ 7	+ 71
Railway materials for construction . . . . .	...	...	17,504	14,840	+ 17,504	+ 14,840
Coal for the public and construction	292	1,078	47	152	—245	—926
Coal for revenue only	24	20	18	15	—6	—5
Revenue stores other than coal	1,400	709	365	237	—1,035	—472
Live stock	20	272	3	40	—17	—232
Rents, miscellaneous, &c. . . . .	...	866	...	1,270	...	+ 404
TOTAL	37,735	1,84,138	55,254	1,98,212	+ 17,519	+ 14,074

The earnings under " Railway materials for construction " were derived from the carriage of materials for the Jodhpore-Bikanir railway.

The average sum received for carrying a ton of goods one mile amounted to 12'10 pies against 15'37 pies in 1889.

The goods earnings per goods train-mile were ₹3'28 against ₹3'65.

Sundries.—The decrease was principally due to a falling off in the earnings from the mileage and demurrage of vehicles over foreign lines.

The following table compares the working expenses of the railway during the years 1889 and 1890:

	1889.		1890.		Increase or decrease in amount.	Percentage of increase or decrease.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	R		R			
Maintenance . . .	75,46	21'00	80,751	21'77	+ 5,305	+ 7'03
Locomotive . . .	58,239	16'21	59,071	15'93	+ 832	+ 1'43
Carriage and wagon . . .	4,165	1'16	3,922	1'06	- 243	- 5'83
Traffic . . .	19,167	5'33	19,458	5'25	+ 291	+ 1'52
General . . .	9,899	2'75	10,005	2'70	+ 106	+ 1'07
Special and miscellaneous . . .	184	0'05	1,427	0'38	+ 1,243	+ 675'54
TOTAL . . .	1,67,100	46'50	1,74,634	47'09	+ 7,534	+ 4'51

The increase under "Maintenance" was due to renewals of sleepers, and that under "Special and Miscellaneous" to extra mileage charges on foreign stock used for the carriage of materials for the Jodhpore-Bikanir railway.

The rates for horses, carriages, livestock, sheep, &c., were revised in accordance with the Regulations of the Railway Conference of 1888.

Fares and rates.

Bhavnagar-Gondal-Junagarh-Porbandar State Railway (Metre gauge).

35. This line has been constructed from the revenues of the Bhavnagar, Gondal, Junagarh, and Porbandar Native States.

The mean mileage worked during the year was 333'25 miles, against 274'71 miles in 1889. The increase was due to the opening of the Dhoraji-Porbandar section from the 1st October 1889.*

The mileages of the several sections were as follows:

Bhavnagar section (Bhavnagar to Wadhwan on the north, and from Dholas as far as Dhasa on the west)	Miles.	119'78
Junagarh section (Jetalsar to Junagarh including Junagarh quarry line)		70'00
Gondal-Porbandar section (Dhasa to Porbandar)		143'47

The following table shows the general results of working as compared with the previous year:

General results.

Year.	Mean mileage worked.	Train-mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earnings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R	
1889 . . .	274'71	473,588	13,80,416	7,80,585	5,99,831	56'55	97	3'69
1890 . . .	333'25	561,296	15,71,788	9,71,521	6,00,267	61'81	91	3'56
Increase or decrease . . .	+ 58'54	+ 87,708	+ 1,91,372	+ 1,90,936	+ 436	+ 5'26	- 6	- 0'13
Percentage of increase or decrease	+ 21'31	+ 18'52	+ 13'86	+ 24'86	+ 0'07	...	- 6'19	...

* Date of opening for goods traffic; the section was opened for passenger traffic on the 17th December 1889.

The division of net earnings amongst the proprietary States and the percentage on the total capital outlay incurred by each was as under:

	R	Per cent.
Bhavnagar	3,77,540	5.50
Junágarh	50,975	1.45
Gondal	1,25,279	2.67
Porbandar	46,473	2.62

The following table shows the gross earnings under main heads as compared with 1889:

	1889.	1890.	Increase or decrease.
	R	R	R
Coaching	7,01,976	8,28,561	+1,26,585
Goods	6,21,172	7,05,468	+84,296
Electric telegraph	10,638	11,267	+629
Sundries	46,630	26,492	-20,138
TOTAL	13,80,416	15,71,788	+1,91,372

Coaching.—The number of passengers of the various classes carried, including troops and police and season tickets, and the earnings therefrom, compare as follows:

	FIRST CLASS.		SECOND CLASS.		THIRD CLASS.		TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		R		R		R		R
1889	3,526	11,060	25,032	25,867	1,132,344	6,25,495	1,160,902	6,62,422
1890	3,644	12,684	25,435	30,911	1,295,727	7,34,229	1,324,806	7,77,824
Increase	118	1,624	403	5,044	163,383	1,08,734	163,904	1,15,402

The increases were mainly due to the extra mileage worked in 1890, and to ordinary growth of traffic on the Jetalsar-Veraval section.

The average sum received for carrying a passenger one mile was the same in both years, *viz.*, 2.84 pies.

The coaching earnings per passenger train-mile were R2.65 against R2.59 in 1889.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1889:

	1889.		1890.		Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	103,253	5,37,205	119,341	6,46,876	+16,088	+1,09,671
Railway materials for construction	63,399	66,919	42,884	32,877	-20,515	-34,042
Coal for the public and construction	1,328	4,298	2,252	6,603	+924	+2,305
Coal for revenue only	9,894	6,385	7,354	8,229	-2,540	-156
Revenue stores other than coal	3,843	3,285	10,177	8,229	+6,334	+4,944
Live stock	25	336	237	1,293	+212	+957
Rents, miscellaneous, &c. . . . .	...	744	...	1,361	...	+617
TOTAL	181,742	6,21,172	182,245	7,05,468	+503	+84,296

The increase in the goods earnings was chiefly due to the extra mileage worked.

The principal increase was under "Cotton, raw," which is the chief item in the goods traffic of the line. Owing to the crop being larger and of superior quality there was an improvement of 9,989 tons in the quantity carried and of ₹4,936 in earnings.

The principal decrease was under "Grain" and amounted to ₹6,284 in the earnings and to 2,201 tons in the weight carried. In 1888 the rainfall in Káthiáwár was very deficient and resulted in the almost total failure of the harvests in 1889, and consequently during the latter year large quantities of grain were imported by railway from foreign parts. The good rainfall in 1889 made the local outturn in 1890 sufficient for local needs, and the quantities carried by railway were thus less.

The decrease under "Railway materials for construction" was chiefly due to the completion of the Dhoráji-Porbandar section in the second-half of 1889.

The increase under "Revenue stores other than coal" was due to a greater number of Revenue ballast trains having been run for the Verával and Porbandar sections.

The average sum received for carrying a ton of goods one mile amounted to 8.68 pies, against 9.62 pies in 1889.

The goods earnings per goods train-mile were ₹2.84, against ₹3.07.

The following table compares the working expenses of the railway during the years 1889 and 1890:

	1889.		1890.		Increase in amount.	Percentage of increase.
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.		
	₹		₹		₹	
Maintenance	1,65,761	12.01	2,94,018	18.71	1,28,257	77.37
Locomotive	2,61,401	18.94	2,91,695	18.56	30,294	11.59
Carriage and wagon	28,856	2.09	29,013	1.84	157	0.054
Traffic	1,42,925	10.35	1,54,496	9.83	11,571	8.10
General	1,61,120	11.67	1,80,574	11.49	19,454	12.07
Special and miscellaneous	20,522	1.49	21,725	1.38	1,203	5.86
TOTAL	7,80,585	56.55	9,71,521	61.81	1,90,936	24.46

Maintenance.—The increase was due chiefly to the Dhoráji-Porbandar section, 69.12 miles, which was opened in October 1889, having been maintained by Revenue during the year, and also to heavy renewal of sleepers in the Bhávnagar section.

Locomotive.—The increase was mainly due to increased train-mileage run.

Traffic.—The increase was almost entirely due to additional station and train-staff engaged for working eleven extra stations on the Dhoráji-Porbandar section.

General.—The increased charges were due to extra staff engaged in the controlling offices, and to additional charges paid to the Government Telegraph Department for rent, maintenance, &c., in connection with the increased length of line. Again the credit received in 1889 from the Construction division for supervising control ceased in 1890 on the opening of the Dhoráji-Porbandar section.

There were no alterations in passenger fares. Rates for parcels, passengers' excess luggage, treasure and specie, horses, carriages, poultry, &c., by passenger trains, and insurance rates were revised during 1890 in accordance with the recommendations of the Railway Conference of 1888. Some alterations and additions to the goods classification and rules were made during the year to assimilate

Fares and rates.

with adjacent foreign railways. The following were the chief alterations in goods rates during the year:

Rate for full-pressed cotton.—The following alternative rates, *at owner's risk*, were introduced from the 1st September 1890 as an experimental measure, to remain in force till the 30th June 1891, when the cotton season is practically over:

In full-pressed bales, 4 pies per ton-mile, *plus* 8 annas per ton terminal.

In three-quarter-pressed bales, 6 pies per ton-mile, *plus* 8 annas per ton terminal.

These rates were conditional on the cotton being despatched at the convenience of the railway, and in covered or open wagons. The result of the experiment will be commented upon at the end of the present cotton season.

In April 1890 a reduction from $\text{R}0-1-2$ to $\text{R}0-0-11$ per maund ($\text{R}1-15-9$ to $\text{R}1-8-11$ per ton) was made in the rate for full-pressed bales from Ránpur to Wadhván Junction. This reduction led to satisfactory results.

CHAPTER V. SCHOOLS AND FINE FUNDS.

SECTION I.—SCHOOLS.

In the following statements are given details of the number of children of railway employes, and also of apprentices and workmen attending schools, together with information regarding the Government grants, railway grants, average school fees, and annual expenditure for the calendar year 1890 :

Railway schools.

Serial number.	RAILWAY.	Number of schools.	ATTENDANCE.				ANNUAL CONTRIBUTIONS.				Annual expenditure.
			CHILDREN.		APPRENTICES AND WORKMEN.		Government grant.	Railway grant.	School fees.	TOTAL.	
			Number on the rolls.	Average daily attendance.	Number on the rolls.	Average daily attendance.					
	STATE LINES WORKED BY COMPANIES.						<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>
I	East { European Indian { Native	(a) 14 29	298 909	231 744	49 1,484	39 811	5,857 2,107	(b) 10,955 3,798	6,846 9,751	(c) 24,480 (d) 17,152	24,529 18,015
III	Tirhoot Bengal and North-Western	2	34	27	...	...	...	1,231	429	1,660	1,702
V	Bengal-Nágpur	(e) 1	6	6	...	...	...	(f) 160	10	170	192
VI	Indian Midland	(g) 1	38	25	...	...	...	754	234	988	841
VIII	Rajputana-Malwa	(h) 9	247	220	25	22	3,698	11,195	5,578	20,471	(i) 21,861
XI	Southern Mahratta	1	38	27	...	...	148	600	550	1,298	1,077
XII	Southern Mahratta, Mysore section	1	14	8	...	...	...	116	64	180	180
	STATE LINES WORKED BY THE STATE.										
XVII	North { European Western { Native	3 19	84 85	66 76	26 1,072	12 422	2,784	(j) 4,371 5,484	7,213	14,368	(k) 14,672
XX	Oudh and Rohilkhand { European Native	2 3	37 12	31 11	...	...	...	909 444	439	1,348 444	5,484 909
XXI	Eastern Bengal (l)	6	22	8	226	68	...	1,176	...	1,176	1,176
XXVI	Burma	1	...	...	23	19	600	...	274	874	874
	LINES WORKED BY GUARANTEED COMPANIES.										
XXXII	Great Indian Peninsula	(m) 7	294	213	...	...	3,310	12,292	(n) 2,007	17,609	13,948
XXXIII	Bombay, Baroda and Central India	3	98	78	...	...	1,196	3,216	1,726	6,138	4,650
XXXIV	Madras (European)	8	347	279	...	...	3,116	7,216	2,662	12,994	(o) 13,919
	LINES OWNED AND WORKED BY NATIVE STATES.										
LIII	Bhánagar-Gondal-Junágarh-Porbandar	1	19	11	...	...	115	575	364	1,054	1,068

- (a) Includes the North Western and Oudh and Rohilkhand joint railway schools at Gháziabad and Aligarh.
 (b) Includes Rs300 and Rs600, the grants by the Oudh and Rohilkhand and North Western railways, respectively, to the joint railway schools at Aligarh and Gháziabad.
 (c) Includes Rs222 collected from other sources.
 (d) Includes Rs1,496 collected from other sources.
 (e) This school was started at Dongargarh in May 1889, and closed in September of the same year owing to the meagre attendance; it was re-opened from May 1890.
 (f) Paid from the Fine Fund.
 (g) This school was started at Jhánsi from the 16th April 1890.
 (h) Includes the joint railway school at Khandwa, which is also included in the number of schools shown against the Great Indian Peninsula railway.
 (i) The excess expenditure was met partly from school fees recovered from children of non-railway employes attending the railway schools at Mount Abu and Sirsa, and partly from the balance of funds in hand and the sale-proceeds of books, &c.
 (j) In addition to the railway grant to the European and Eurasian school at Lahore, a railway building is occupied for the school free of rent.
 (k) The excess expenditure was met from other sources.
 (l) Includes the Bengal Central railway.
 (m) Includes the joint railway school at Khandwa, which is also included in the number of schools shown against the Rajputana-Malwa State railway.
 (n) Includes fees from children of non-railway employes attending the joint railway school at Khandwa.
 (o) Includes Rs764, rental of building occupied by the railway school at Raichúr, paid to the Great Indian Peninsula railway. The total outlay for this school is divided between the two railways.

Local and district schools.

Serial number.	RAILWAY.	Number of schools.	AVERAGE DAILY ATTENDANCE.		Annual railway grant.
			Children.	Apprentices and workmen.	
STATE LINES WORKED BY COMPANIES.					R
I	East Indian	13	740	...	881
III	Tirhoot	1	22	...	360
VIII	Bengal and North-Western	6	246	...	1,702
STATE LINES WORKED BY THE STATE.					
XVII	North Western (a)	11	181	..	(b) 6,978
XX	Oudh and Rohilkhand	(c) 8	(d)	...	4,248
XXI	Eastern Bengal (e)	9	206	...	(f) 3,550
XXIII	Nalhāti	1	3	...	84
XXVI	Burma	10	(g)	...	1,286
LINES WORKED BY GUARANTEED COMPANIES.					
XXXII	Great Indian Peninsula	3	(h)	...	1,450
XXXIII	Bombay, Baroda and Central India	20	35	...	(i) 2,497

- (a) Excludes the joint railway school at Ghaziabad, which receives a contribution from the North Western railway. The particulars regarding this school are included with railway schools of the East Indian railway.
- (b) In addition to the railway grants to the European and Eurasian schools at Sukkur and Saharanpur, and to the St. Joseph's school at Sibi, railway buildings are occupied for these schools free of rent.
- (c) Excludes the joint railway school at Aligarh, which receives a contribution from the Oudh and Rohilkhand railway. The particulars relating to this school are included with railway schools of the East Indian railway.
- (d) Information not furnished; the number on the rolls was 21.
- (e) Includes the Bengal Central railway.
- (f) Includes a grant of Rs600 to the St. Paul's school, Calcutta, for an omnibus for carrying children.
- (g) The average daily attendance at the Infant and the Anglo-Vernacular schools, Insein, was 27. Information as to the average attendance at the remaining schools has not been furnished, the number on the rolls at these schools at the close of the year was 19.
- (h) Information not furnished; the number on the rolls was 133.
- (i) Includes boarding.

SECTION II.—FINE FUNDS.

2. The following table exhibits the transactions of the Fine Funds during 1890-91 on State railways worked by the State.

It will be seen that the assets of the Funds, including the balance at the close of the previous year, amounted to R1,19,868; the expenditure to R41,540; and the balance at the end of the year to R78,328:

Serial number.	RAILWAY.	RECEIPTS.				EXPENDITURE.			Balance at the end of 1890-91.
		Balance on 1st April 1890.	Fines.	Interest.	Total.	Disbursements.	Refunds.	Total.	
STATE LINES WORKED BY THE STATE.									
XVII	North Western	R 8,703	R 10,432	R 361	R 19,496	R 15,663	R 91	R 15,754	R 3,742
XX	Oudh and Rohilkhand	70,655	2,610	2,474	75,738	10,602	71	10,673	(a) 65,066
	Tirhoot (b)	352	645	...	997	710	71	781	216
XXI	Eastern Bengal	4,965	5,599	135	10,699	8,876	...	8,876	1,824
XXIII	Nalhāti	14	27	1	42	6	...	6	36
	Wardha Coal (c)	230	541	27	(d) 930	1,113	1	1,114	-184
XXIV	Cherra-Companyganj	146	50	10	206	46	...	46	160
XXV	Jorhāt	328	49	13	390	...	...	...	390
XXVI	Burma	5,454	5,721	194	11,369	4,186	104	4,290	7,078
	TOTAL	90,847	25,674	3,215	(d) 1,19,868	41,202	338	41,540	78,328

- (a) The large balance is due to R70,760 having been taken over by Government from the Oudh and Rohilkhand Guaranteed Railway Company.
- (b) Transactions from the 1st April to 30th June 1890, after which date the working of the line was transferred to the Bengal and North-Western Railway Company.
- (c) Includes the Warora colliery. Transactions refer to the period from the 1st April to 31st December 1890, after which date the working of the Wardha Coal State railway was transferred to the Great Indian Peninsula Railway Company.
- (d) Includes R132, the sale-proceeds of the Warora colliery garden.

The expenditure of the year is made up of—

	<i>R</i>
Disbursements	41,202
Refunds	338
TOTAL	41,540

3. Some details of the expenditure are given in the following statement :

Serial number.	RAILWAY.	Hospitals for sick employés.	Compassionate allowances.	Schools.	Institutes, reading-rooms, and libraries.	Railway gardens.	Sports.	Volunteers.	Miscellaneous.
		<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>
XVII	North Western	450	500	7,245	783	...	1,218	...	5,467
XX	Oudh and Rohilkhand	...	355	441	3,708	...	...	...	6,098
	Tirhoot . . . . .	...	...	10	700	...	...	...	...
XXI	Eastern Bengal . . . . .	...	287	3,565	2,696	...	...	...	2,264
	Wardha Coal . . . . .	...	...	...	315	710	88	...	...
XXIV	Cherra-Companyganj	...	46	...	...	...	...	...	...
XXVI	Burma . . . . .	...	48	1,679	1,220	240	...	550	449

R. A. SARGEANT, *Lieut.-Col., R.E.,*
Offg. Director General of Railways.

Calcutta, the 30th December 1891.

APPENDICES.

APPENDIX A.

INDIAN RAILWAYS.

Statistics of their working for the half-years ended the 30th June and the 31st December 1890.

PART I.

SUMMARY OF THE REVENUE ACCOUNTS.

CONTENTS.

HEADINGS.	NO. OF TABLE.	PAGE
GENERAL RESULTS	I	15—111
SUMMARY OF EARNINGS	II	14—7
DETAIL OF COACHING TRAFFIC	III	16—12
DETAIL OF GOODS TRAFFIC	IV	2—111
SUMMARY OF EXPENSES	V	14—171
DETAIL OF MAINTENANCE EXPENSES	VI	171—111
DETAIL OF LOCOMOTIVE EXPENSES	VII	111—117
DETAIL OF CARRIAGE AND WAGON EXPENSES	VIII	116—111
DETAIL OF TRAFFIC EXPENSES	IX	111—111
DETAIL OF GENERAL CHARGES	X	111—111
DETAIL OF SPECIAL AND MISCELLANEOUS EXPENDITURE	XI	111—111
STATEMENT OF ROLLING STOCK	XII	111—117
STATEMENT OF TRAIN-MILEAGE	XIII	116—111
NET EARNINGS AND INTEREST ON CAPITAL	XIV	1—11

STATISTICS OF INDIAN RAILWAYS.

PART I.

Summary of the Revenue Accounts of Indian Railways for the half-years ended the 30th June and the 31st December 1890.

No. I.

GENERAL RESULTS.

Serial number.	RAILWAY	1890.	Gauge.	Capital expended. (a)	Mean mileage open.	Total train-mileage.	Earnings.	Expenses.	Net earnings
	STANDARD GAUGE.			R			R	R	R
I	East Indian	1st half	Standard	35,27,72,232	(b)1,549½	4,229,747	2,33,63,127	74,97,238	1,58,65,8
		2nd half		(c)35,17,49,640	(b)1,549½	3,855,076	2,00,76,228	61,19,343	1,39,56,8
II	Patna-Gya	1st half	Standard	43,44,260	57½	61,102	2,58,130	(a)1,20,031	1,38,0
		2nd half		43,46,743	57½	54,017	2,59,357	(d)1,17,356	1,42,0
V	Bengal-Nágpur (e)	1st half	Standard	6,07,78,567	50¾	312,925	18,68,869	(d)1,17,356	1,42,0
		2nd half		6,22,72,468	586	295,740	9,95,709	12,78,842	-2,83,1
VI	Indian Midland	1st half	Standard	7,68,72,426	(f)696½	576,483	17,41,309	13,25,607	4,15,7
		2nd half		7,88,56,496	(f)696½	532,610	13,83,056	11,98,978	1,84,0
VII	Bhopal-Itársi (British section).	1st half	Standard	12,50,000	13	18,525	51,358	56,584	-5,2
		2nd half		12,85,077	13	16,506	36,406	47,753	-11,3
X	Dhond-Manmád	1st half	Standard	1,09,78,309	145½	(g)	(h)1,52,386	(i)6,408	1,45,9
		2nd half		1,09,81,595	145½	(g)	(h)1,23,556	(i)6,400	1,17,1
XIII	Bezváda Extension	1st half	Standard	13,62,984	(j)	(j)	(h)12,182	(i)1,520	10,6
		2nd half		13,90,830	(j)	(j)	(h)6,507	(i)851	5,6
XVII	North Western (k)	1st half	Standard	38,28,65,195	(l)2,395½	3,936,189	1,37,50,289	(m)89,16,306	48,33,9
		2nd half		38,45,02,813	(l)2,405	3,684,051	1,35,36,531	(n)82,25,047	53,11,4
XVIII	Amritsar-Pathánkot	1st half	Standard	56,80,973	(o)	(o)	(h)56,094	...	56,0
		2nd half		56,06,703	(o)	(o)	(h)56,121	...	56,1
XIX	Jammu and Kashmir (British section).	1st half	Standard	Included with the North Western railway.					
2nd half									
XX	Oudh and Rohilkhand	1st half	Standard	9,03,37,975	692½	1,191,251	41,76,015	18,85,859	22,90,11
		2nd half		9,04,18,812	692½	1,046,687	32,05,381	17,41,009	14,64,3
XXI	Eastern Bengal (p)	1st half	Standard	(q)8,54,90,443	749½	1,425,286	61,27,496	25,99,820	25,27,6
		2nd half		9,74,27,275	764	1,553,892	63,50,835	28,08,239	35,42,6
XXII	Bengal Central	1st half	Standard	94,81,119	125	146,828	3,35,967	2,02,810	1,33,11
		2nd half		95,95,077	125	146,814	3,31,836	2,19,087	1,12,7
XXXII	Great Indian Peninsula	1st half	Standard	54,48,253	45	47,288	1,85,526	92,204	93,3
		2nd half		54,48,253	45	46,040	1,41,210	1,15,152	26,0
XXXIII	Bombay, Baroda and Central India. (r)	1st half	Standard	26,87,40,656	1,288½	(s)4,972,953	2,20,63,591	(t)99,86,852	1,28,76,7
		2nd half		26,98,48,349	1,288½	(s)3,947,203	1,52,81,651	(u)90,08,131	62,73,5
XXXIV	Madras	1st half	Standard	9,25,71,754	461	1,276,910	78,44,246	29,42,213	49,02,0
		2nd half		9,29,15,870	461	1,032,690	50,96,125	24,99,980	25,96,1
XXXVI	Tárákeshwar	1st half	Standard	11,46,20,073	839½	1,187,558	47,22,838	25,04,946	22,17,8
		2nd half		11,49,41,050	839½	1,273,244	47,83,296	24,79,708	23,03,5
XLII	Khámgaon	1st half	Standard	17,28,583	22½	26,082	1,66,437	(d)83,510	82,9
		2nd half		17,23,778	22½	25,388	1,20,089	(d)58,733	61,3
XLIII	Amráoti	1st half	Standard	4,85,521	7½	(g)	(h)19,339	...	19,3
		2nd half		4,85,521	7½	(g)	(h)6,753	...	6,7
XLIV	Bhopal-Itársi (Native State section).	1st half	Standard	4,36,460	5½	(g)	(h)82,885	(i)442	32,4
		2nd half		4,36,460	5½	(g)	(h)14,253	(i)443	13,8
XLV	The Nizam's Guaranteed State.	1st half	Standard	48,48,484	44	62,701	1,73,828	1,91,514	-17,6
		2nd half		48,38,033	44	55,874	1,23,222	1,61,623	-38,4
XLVIII	The Gaekwar's Petlád (y)	1st half	Standard	3,66,76,053	353½	310,387	13,88,528	(w)8,00,152	5,88,3
		2nd half		3,68,35,942	353½	314,423	11,93,471	(x)7,42,257	4,51,2
L	Rájpura-Bhátinda	1st half	Standard	6,45,779	4½	3,034	9,771	3,970	5,8
		2nd half		6,47,824	13½	9,845	22,877	7,808	15,0
LI	Jammu and Kashmir (Native State section).	1st half	Standard	63,54,455	108	74,739	2,67,047	1,46,876	1,20,1
		2nd half		64,15,004	108	70,290	2,99,898	1,64,944	1,34,9
	TOTAL STANDARD GAUGE Carried over	1st half	...	1,61,58,30,422	10,10½	19,889,988	8,85,72,107	4,04,08,216	4,81,68,8
		2nd half	...	1,63,41,44,459	10,222	17,960,392	7,34,53,339	3,70,01,739	3,64,51,6

(a) Capital expended on open mileage charged to final heads, inclusive of steam boat and rolling-stock, but exclusive of suspense items.

(b) Includes 1 mile of the Rajputana-Malwa State railway and 23¼ miles of the Eastern Bengal State railway worked over by the East Indian railway.

(c) Decrease due to certain credits.

(d) Includes contribution to the East Indian Railway Provident Institution, 1th share of net earnings payable to the East Indian railway for working, and 5 per cent. for use of the East Indian railway rolling-stock in the case of the Tárákeshwar railway only.

(e) Includes the Ásanol-Guikera section. This remark applies to all the tables.

(f) Includes 18¼ miles of the East Indian, Oudh and Rohilkhand and Rajputana-Malwa railways worked over.

(g) Included with the Great Indian Peninsula railway.

(h) Represents the amount received as rent for the lease of this line.

(i) Expenditure incurred direct by the State.

(j) Included with the Nizam's Guaranteed State railway.

(k) Includes the figures of the Amritsar-Pathánkot and the Jammu and Kashmir railways, except in the case of the capital outlay.

(l) Includes 13 miles, Ghaziabad to Delhi, worked over by the North-Western railway.

(m) Includes Rs6,850 on account of rent of leased lines.

(n) Includes Rs5,217 on account of rent of leased lines.

(o) Included with the North Western railway.

(p) Includes the Northern Bengal, Dacca and Assam-Bihar (metre gauge) Kaunia-Dharila (2' 6" gauge) railways. This remark applies to all the tables.

(q) Exclusive of the capital outlay on the Assam-Bihar State railway, expenditure on which is shown under "Lines in course of construction."

(r) Excludes the Warora colliery. This remark applies to all the tables, except table No. XIV.

(s) Includes the Dhond-Manmád, Khámgaon and Amráoti State railways.

(t) Includes Rs2,04,810 on account of rent of leased lines.

(u) Includes Rs1,41,582 on account of rent of leased lines.

(v) Includes the Pátri branch. This remark applies to all the tables.

(w) Includes Rs12,182 on account of rent of leased line.

(x) Includes Rs6,507 on account of rent of leased line.

(y) Opened on the 6th May 1890.

A—continued.

STATISTICS OF INDIAN RAILWAYS (PART I)—continued.

Summary of the Revenue Accounts of Indian Railways for the half-years ended the 30th June and the 31st December 1890—concluded.

No. I—concluded.

GENERAL RESULTS—concluded.

Serial number	RAILWAY.	1890.	Gauge.	Capital expended. (a)	Mean mileage open.	Total train-mileage.	Earnings.	Expenses.	Net earnings.
				R			R	R	R
	Brought forward Standard Gauge.	1st half 2nd half	... ...	1,61,58,30,422 1,63,41,41,459	10,106½ 10,222	19,889,988 17,960,392	8,85,72,107 7,34,53,339	4,04,03,216 8,70,01,739	4,81,68,891 3,64,51,600
	NARROW GAUGE.								
III	Tirhoot	1st half 2nd half	} Metre	2,03,72,757 Included	272½ with the	374,776 Bengal and	13,21,206 North-Western	4,60,893 railway.	8,60,318 ...
	Bengal and North-Western.	1st half 2nd half		(b) 2,47,66,961 (b) 4,76,39,109	376 692½	349,689 674,023	13,05,176 19,75,209	5,91,941 9,75,394	7,13,235 9,99,815
	Bareilly-Pilibhit	1st half 2nd half		15,34,372 15,37,682	36 36	14,884 13,458	64,067 55,382	42,739 36,189	21,328 19,193
	Rajputana-Malwa.	1st half 2nd half		12,50,40,813 12,51,36,464	1,671½ 1,671½	2,900,614 2,347,216	98,52,666 75,75,614	45,56,001 42,29,754	62,96,665 33,45,860
XI	Southern Mahratta	1st half 2nd half	} Metre	9,02,20,013 9,09,53,991	984½ 1,042	880,640 866,118	22,96,918 21,74,177	17,84,325 17,12,034	5,12,593 4,62,143
XII	Southern Mahratta, Mysore section.	1st half 2nd half		1,39,33,823 1,40,88,649	296 296	233,029 285,714	5,22,260 6,64,038	4,06,278 5,18,339	1,15,982 1,45,719
	Vilupuram-Guntakal - Nellore-Tirupati section	1st half 2nd half	} Metre	62,20,832 62,26,218	83 83	68,621 68,253	1,21,439 1,21,163	1,04,269 85,971	17,170 35,192
	Vilupuram Tiruvannamalai section. (c)	1st half 2nd half		(d) 14,56,000 35,96,679	10½ 104½	8,610 81,605	19,949 1,94,312	13,436 1,37,193	6,512 57,119
	Lucknow-Sitapur-Seramau.	1st half 2nd half		(e) 35,64,011	104½	80,064	1,42,976	1,08,279	34,697
	Nalhāti	1st half 2nd half		3,20,855 3,20,910	27½ 27½	26,239 29,234	54,725 46,098	32,191 46,462	22,534 -364
	Cherra-Companyganj	1st half 2nd half	3,50,759 3,51,208	7½ 7½	7,158 7,171	6,464 11,028	10,795 9,552	-4,331 1,474	
	Jorbát	1st half 2nd half	7,21,434 7,21,851	28½ 26	11,873 11,499	25,736 36,231	28,305 27,499	-2,569 8,732	
	Burma (f)	1st half 2nd half	4,98,03,749 4,99,69,474	553 555½	831,883 766,091	30,40,531 24,30,901	15,67,759 15,55,482	14,72,772 8,75,419	
	Toungoo-Mandalay	1st half 2nd half	} Metre	Included with the Burma State railway		...	...	...	...
	South Indian (g)	1st half 2nd half		4,60,78,002 4,62,65,978	662½ 662½	1,036,146 1,194,229	30,03,183 31,59,778	17,50,517 18,04,011	12,52,666 13,55,767
	Deoghur	1st half 2nd half	} Metre	2,81,180 23,22,583	4½ (h) 67	13,436 42,344	26,095 1,69,157	15,180 89,578	10,915 79,579
	Rohilkhand-Kumaun (Company's section.)	1st half 2nd half		(A) 20,37,223 28,40,589	(i) 67 51	30,805 63,175	1,45,676 2,77,066	74,253 1,61,530	71,423 1,15,536
	Darjeeling-Himalayan	1st half 2nd half	} 2' 0"	28,50,547	51	64,774	2,99,370	1,82,012	1,17,358
	Dibru-Sadiya	1st half 2nd half		} Metre	56,06,189 57,06,682	78 78	71,696 64,434	2,61,353 2,52,913	1,79,043 1,58,263	82,310 94,650
	Thaton-Duyinzáik	1st half 2nd half	(j) 4,48,083		8 8	6,672 5,520	19,939 13,833	10,328 9,130	9,611 4,703
	The Gaekwar's Dabhoi	1st half 2nd half	} 2' 6"	16,95,661 17,37,574	60 71½	40,584 37,643	1,06,737 88,291	60,075 60,383	46,662 27,908
	The Gaekwar's Mehsána	1st half 2nd half		} Metre	9,12,948 9,19,835	27½ 27½	17,115 23,639	27,264 31,976	16,427 19,505	10,837 12,471
	Jodhpore	1st half 2nd half	} Metre		22,72,005 22,73,338	124 124	55,690 60,634	2,08,969 1,63,857	1,03,872 70,762	1,03,097 93,095
	Bhavnagar-Gondal-Junggarh-Porbandar.	1st half 2nd half		1,62,06,175 1,64,45,102	334 332½	349,866 211,430	9,72,024 5,99,764	5,49,894 4,21,627	4,22,130 1,78,137
	Morvi	1st half 2nd half	} 2' 6"	19,50,653 19,96,987	94 94	63,496 65,595	1,58,225 1,37,002	99,559 1,08,118	58,666 28,884
	TOTAL NARROW GAUGE	1st half 2nd half		...	41,67,67,652 42,26,76,925	5,946½ 6,069	7,527,795 6,916,154	2,40,07,417 2,01,45,248	1,27,43,512 1,22,26,455	1,12,03,905 79,18,783
	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR. (k)		...	2,05,71,02,564	16,177	52,307,765	20,62,04,201	10,23,90,102	10,38,14,009

(a) Capital expended on open mileage charged to final heads, inclusive of steam-boat and rolling-stock, but exclusive of suspense items.

(b) Excludes interest on capital during construction, ₹10,00,014.

(c) Not opened during the 1st half of 1890. This remark applies to all the tables.

(d) Figures taken from Part I of the Administration Report for 1890-91.

(e) Decrease chiefly due to the transfer of rolling-stock to the Lucknow-Bareilly railway.

(f) Includes the Toungoo-Mandalay Extension. This remark applies to all the tables.

(g) Includes the Pondicherry railway, except in the case of capital outlay, net earnings and earnings. The latter includes the amount received for working the Pondicherry railway.

(h) Decrease due to the sale of certain rolling-stock and plant to the Lucknow-Bareilly railway.

(i) Includes 12 miles of the Bareilly-Pilibhit railway worked over by the Company.

(j) Information not furnished.

(k) Includes the Deoghur railway, for which yearly figures are shown.

N.B.—This table excludes the transactions of the Pondicherry and West of India Port-truss railways, for which no revenue accounts are received. This remark applies to all the tables.

STATISTICS OF INDIAN RAILWAYS—(PART I)—continued.

No. II.

SUMMARY OF EARNINGS.

Half-years ended the 30th June and
the 31st December 1890.

[From No. VIII of Revenue Accounts.]

Serial number.	RAILWAY.	1890.	Coaching.	Goods.	Electric telegraph.	Steam-boat.	SUNDRIES.		TOTAL.
							Earnings from other lines for hire, mileage, and rents.	Other items.	
	STANDARD GAUGE.		₹	₹	₹	₹	₹	₹	₹
I	East Indian	1st half	74,85,783	1,54,35,703	36,535	32,164	1,02,602	2,70,340	2,33,63,127
		2nd half	69,18,866	1,26,82,098	32,428	32,082	1,56,868	2,53,886	2,00,76,228
II	Patna-Gya	1st half	1,74,240	81,549	1,147	...	...	1,194	2,58,130
		2nd half	1,92,439	64,960	1,098	...	...	860	2,59,357
V	Bengal-Nágpur	1st half	2,63,057	14,66,561	7,769	...	1,16,511	14,971	18,68,863
		2nd half	2,80,321	6,94,914	9,086	...	56,903	14,485	9,95,709
VI	Indian Midland	1st half	7,43,123	9,29,300	5,468	...	30,010	33,408	17,41,309
		2nd half	7,26,714	6,19,425	4,721	...	374	31,822	13,83,056
VII	Bhopal-Itársi (British section)	1st half	15,656	35,423	239	...	...	40	51,358
		2nd half	16,980	19,127	255	...	...	44	36,406
X	Dhend-Manmád	1st half	...	...	...	...	...	...	1,52,386
		2nd half	...	...	...	...	...	...	1,23,556
XIII	Bezwáda Extension	1st half	...	...	...	...	...	...	12,182
		2nd half	...	...	...	...	...	...	6,507
XVII	North Western	1st half	46,60,874	88,40,579	34,260	3,709	39,759	1,71,108	1,37,50,289
		2nd half	43,15,056	89,60,483	35,707	198	61,693	1,60,394	1,85,36,531
XVIII	Amritsar-Patháukot	1st half	...	...	...	...	...	...	56,094
		2nd half	...	...	...	...	...	...	56,121
XIX	Jammu and Kashmir (British section)	1st half	...	...	...	...	...	...	...
		2nd half	...	...	...	...	...	...	...
XX	Oudh and Rohilkhand	1st half	18,17,577	21,88,993	12,165	...	43,553	(a)1,13,727	41,76,015
		2nd half	15,77,877	15,31,166	12,292	...	...	(b)84,046	32,05,381
XXI	Eastern Bengal	1st half	19,48,796	26,55,446	13,900	4,06,932	23,780	78,242	51,27,496
		2nd half	17,60,924	40,85,221	14,781	4,03,001	14,849	72,109	63,59,885
XXII	Bengal Central	1st half	2,57,470	76,437	974	...	...	1,036	3,35,967
		2nd half	2,39,835	85,630	1,022	...	...	5,349	3,31,836
XXIII	Wardha Coal	1st half	23,419	1,06,010	610	...	49,281	6,206	1,85,526
		2nd half	19,750	87,654	420	...	28,385	5,101	1,41,210
XXXII	Great Indian Peninsula	1st half	45,49,155	1,81,22,155	32,809	...	541	1,58,931	2,28,63,591
		2nd half	42,26,898	1,08,16,694	28,955	...	3,582	2,05,522	1,52,81,651
XXXIII	Bombay, Baroda and Central India	1st half	22,70,081	54,51,720	20,728	...	44,191	57,526	78,44,246
		2nd half	21,41,312	28,38,292	16,087	...	65,241	45,193	50,96,125
XXXIV	Madras	1st half	18,65,830	25,65,458	9,504	...	12,711	2,69,335	47,22,838
		2nd half	18,98,640	27,90,776	8,986	...	14,486	70,388	47,83,296
XXXVI	Tárákeshwar	1st half	1,53,959	12,014	234	...	...	230	1,66,437
		2nd half	1,12,017	7,521	178	...	...	273	1,20,069
XLII	Khámgau	1st half	...	...	...	...	...	...	19,339
		2nd half	...	...	...	...	...	...	6,753
XLIII	Amráoti	1st half	...	...	...	...	...	...	32,885
		2nd half	...	...	...	...	...	...	14,253
XLIV	Bhopal-Itársi (Native State section)	1st half	52,990	1,19,894	810	...	...	184	1,73,828
		2nd half	57,471	64,738	863	...	...	150	1,23,222
XLV	The Nizam's Guaranteed State	1st half	4,36,642	9,14,580	7,249	...	9,290	20,767	13,88,528
		2nd half	3,91,452	7,68,866	6,166	...	9,268	17,721	11,93,471
XLVIII	The Gaekwar's Petlád	1st half	5,887	3,802	82	...	...	...	9,771
		2nd half	17,722	4,579	492	...	...	144	22,877
L	Rájpur-Bhátinda	1st half	1,17,648	1,48,139	869	...	...	72	2,67,047
		2nd half	1,21,900	1,76,359	1,538	...	...	101	2,99,898
LI	Jammu and Kashmir (Native State section)	1st half	...	...	...	...	...	...	4,849
		2nd half	...	...	...	...	...	...	8,921
TOTAL STANDARD GAUGE Carried over		1st half	2,68,42,187	5,91,54,512	1,85,372	4,42,805	4,72,229	11,97,267	8,85,72,107
		2nd half	2,50,16,194	4,62,38,603	1,75,015	4,35,281	4,04,547	9,67,588	7,34,53,339

(a) Includes ₹45,915 on account of profit on working the Lucknow-Sitapur-Seramau State railway.
(b) Includes ₹27,793 on account of profit on working the Lucknow-Sitapur-Seramau State railway.

A—continued.

STATISTICS OF INDIAN RAILWAYS—(PART I)—continued.

No. II—concluded.

SUMMARY OF EARNINGS—concluded.

[From No. VIII of Revenue Accounts.]

Half-years ended the 30th June and
the 31st December 1890.

Serial number.	RAILWAY.	1890.	Coaching.	Goods.	Electric telegraph.	Steam-boat.	SUNDRIES.		TOTAL.
							Earnings from other lines for hire, mileage, and rents.	Other items.	
			R	R	R	R	R	R	R
	Brought forward	1st half	2,68,42,187	5,91,54,512	1,85,372	4,42,805	4,72,229	11,97,267	8,86,72,107
	STANDARD GAUGE	2nd half	2,50,16,194	4,62,38,603	1,75,015	4,35,281	4,04,547	9,67,588	7,84,53,339
	NARROW GAUGE.								
III	Tirhoot	1st half	5,02,839	7,13,591	5,984	81,046	995	16,748	13,21,206
		2nd half	4,38,823	5,54,033	4,993	61,960	... (a)	11,788	10,71,597
	Bengal and North-Western	1st half	4,81,186	6,24,727	4,981	1,36,368	4,211	53,703	19,05,176
		2nd half	3,81,924	3,92,789	3,933	99,327	(b) 1,170	24,469	9,03,612
Bareilly-Pilibhit	1st half	26,164	33,071	1,155	...	2,096	1,581	64,067	
	2nd half	21,627	28,675	438	...	1,670	2,972	55,382	
VIII	Rajputana-Malwa	1st half	29,61,238	67,48,619	26,863	...	1,532	1,14,414	98,52,666
		2nd half	28,14,521	46,32,695	24,584	...	2,832	1,00,982	75,75,614
XI	Southern Mahratta	1st half	9,52,380	12,99,309	9,510	...	1,923	33,796	22,96,918
		2nd half	9,71,260	11,55,132	8,930	...	9,434	29,421	21,74,177
XII	Southern Mahratta, Mysore section	1st half	2,52,926	2,64,759	2,443	...	...	2,133	5,22,260
		2nd half	3,04,557	3,54,418	2,770	...	497	1,816	6,64,058
	Vilupuram-Guntakal—								
	Nellore-Tirupati section.	1st half	92,673	27,623	655	...	...	488	1,21,439
		2nd half	55,339	14,578	770	...	...	476	1,21,163
	Vilupuram-Tiruvannamalai section	1st half	17,434	2,478	...	...	...	36	19,948
	Lucknow-Sitapur-Seramau	1st half	95,961	(c) 96,253	1,365	...	...	793	1,94,312
		2nd half	73,626	(c) 67,207	1,222	...	...	921	1,42,976
XXIII	Nallati	1st half	33,435	19,679	417	...	...	2,194	54,725
		2nd half	28,752	16,555	389	...	...	102	46,098
XXIV	Cherra-Companyganj	1st half	973	5,419	56	...	...	16	6,464
		2nd half	1,000	9,729	97	...	...	200	11,026
XXV	Jorhat	1st half	5,246	19,567	...	...	...	929	25,736
		2nd half	5,046	30,629	...	...	...	556	36,231
XXVI	Burma	1st half	17,08,095	12,96,402	8,301	...	...	27,733	30,40,531
		2nd half	14,78,336	9,23,384	8,016	...	...	21,165	24,30,901
XXVII	Toungoo-Mandalay	1st half	Included with the Burma State railway			...	...	...	...
		2nd half				...	...	68,437	30,03,183
South Indian	1st half	15,69,284	13,55,867	9,595	...	...	15,899	57,126	31,69,778
	2nd half	15,53,682	15,23,202	9,869	...	...	...	...	...
XXXVII	Deoghur	1st half	23,941	1,971	...	...	...	183	26,095
		2nd half	...	...	...	...	...	...	...
XXXVIII	Rohilkhand Kumaon (Company's section)	1st half	86,820	49,951	757	...	...	(d) 31,629	1,69,157
		2nd half	89,807	35,220	733	...	...	(d) 19,918	1,45,476
XXXIX	Darjeeling-Himalayan	1st half	1,03,963	1,69,493	1,434	...	...	2,177	2,77,066
		2nd half	1,06,112	1,87,597	1,661	...	...	2,000	2,99,370
XL	Dibru-Sadiya	1st half	29,826	2,22,352	3,704	484	892	4,645	2,61,353
		2nd half	24,059	2,18,778	3,744	—484	275	2,491	2,52,913
XLI	Thalón-Duyinzāik	1st half	4,974	14,965	...	...	...	...	19,939
		2nd half	4,313	9,520	...	...	...	...	13,833
XLVI	The Gaekwar's Dabhoi	1st half	55,486	49,954	791	...	295	211	1,06,737
		2nd half	59,986	27,638	513	...	—171	325	88,291
XLVII	The Gaekwar's Mehsāna	1st half	19,049	8,215	...	...	...	...	27,284
		2nd half	16,436	15,527	...	...	...	18	31,976
LII	Jodhpore	1st half	89,000	1,12,039	3,458	...	1,808	666	2,06,909
		2nd half	74,058	86,173	3,255	...	165	226	1,63,857
LIII	Bhāvnagar-Gondal-Jundgarh-Porbandar	1st half	4,25,221	5,28,326	6,348	...	3,296	8,833	9,72,024
		2nd half	4,03,339	1,77,142	4,920	...	1,385	12,978	5,99,764
LIV	Morvi	1st half	82,374	73,255	2,476	...	...	120	1,58,225
		2nd half	92,727	37,442	2,378	...	...	4,455	1,37,002
	TOTAL NARROW GAUGE	1st half	95,79,112	1,37,32,438	90,293	2,17,848	16,546	3,71,180	2,40,07,417
		2nd half	90,52,764	1,05,20,841	83,195	1,60,353	33,156	2,94,434	2,01,45,243
	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	...	7,05,14,198	12,96,48,365	5,33,875	12,56,787	9,26,478	28,30,652	20,62,04,201

(a) Included with the Bengal North-Western railway.

(b) Includes the Tirhoot State railway.

(c) Excludes ballast train earnings due to the Oudh and Rohilkhand railway.

APPENDIX
STATISTICS OF INDIADETAIL
[From Abstract]

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	PASSENGERS.								
			FIRST CLASS.			SECOND CLASS.			THIRD OR INTERMEDIATE CLASS.		
			Single journey fare.	Number.	Earnings.	Single journey fare.	Number.	Earnings.	Single journey fare.	Number.	Earnings.
	STANDARD GAUGE.		Pies.		Rs.	Pies.		Rs.	Pies.		Rs.
I	East Indian	1st half	18-00	23,245	2,34,364	9-00	81,305	3,03,090	4-50	314,353	2,83,1
		2nd half	18-00	24,307	2,46,181	9-00	84,670	3,26,443	4-50	323,973	2,91,1
II	Patna-Gya	1st half	18-00	484	1,841	9-00	1,935	3,316	4-50	5,740	3,4
		2nd half	18-00	441	1,663	9-00	1,773	2,979	4-50	6,607	4,3
V	Bengal-Nágpur	1st half	18-00	1,539	4,904	8-00	10,123	7,590	3-00	20,860	8,1
		2nd half	18-00	2,428	9,842	8-00	9,887	9,241	3-00	20,821	8,1
VI	Indian Midland	1st half	12-00	3,350	26,619	6-00	7,639	26,625	...	...	...
		2nd half	12-00	3,127	25,808	6-00	15,536	45,657	(b)3-00	(b)66,712	(b)86,1
VII	Bhopal-Itársi (British section).	1st half	Included with the Bhopal-Itársi (Native State section)								
		2nd half	Included with the Bhopal-Itársi (Native State section)								
X	Dhond-Manmád	1st half	Included with the Great Indian Peninsula railway								
		2nd half	Included with the Great Indian Peninsula railway								
XIII	Bezváda Extension.	1st half	Included with the Nizam's Guaranteed State railway								
		2nd half	Included with the Nizam's Guaranteed State railway								
		1st half	{ 12-00 & 15-00 }	{ 23,434 }	{ 1,56,685 }	{ 6-00 & 8-00 }	{ 63,969 }	{ 1,87,308 }	{ 4-00 & 3-50 & 3-00 }	{ 223,013 }	{ 2,16,61 }
XVII	North Western	2nd half	12-00	21,805	1,55,658	6-00	57,890	1,69,345	3-00	124,764	1,53,41
XVIII	Amritsar-Patháńkot	1st half	Included with the North Western railway								
		2nd half	Included with the North Western railway								
XIX	Jammu and Kashmir (British section).	1st half	Included with the North Western railway								
		2nd half	Included with the North Western railway								
XX	Oudh and Rohilkhand	1st half	...	...	...	(d)9-00	(d)22,994	(d)87,438	4-00	50,137	63,1
		2nd half	...	...	...	(d)9-00	(d)20,351	(d)77,522	4-00	54,978	73,1
		1st half	{ 18-00 & 24-00 }	{ 19,906 }	{ 72,678 }	{ 9-00 & 12-00 }	{ 61,804 }	{ 74,758 }	{ 4-00 & 6-00 }	{ 499,167 }	{ 2,16,81 }
XXI	Eastern Bengal	2nd half	{ 18-00 & 24-00 }	{ 20,110 }	{ 65,301 }	{ 9-00 & 12-00 }	{ 64,410 }	{ 77,347 }	{ 4-00 & 6-00 }	{ 492,846 }	{ 2,15,06 }
XXII	Bengal Central	1st half	12-00	1,187	2,160	6-00	15,855	7,122	4-50	82,123	36,1
		2nd half	12-00	1,440	2,584	6-00	17,116	7,759	4-50	70,597	32,1
	Wardha Coal	1st half	18-00	140	404	5-00	216	306	4-00	890	1,1
		2nd half	18-00	141	349	9-00	168	254	4-00	653	1,1
XXXII	Great Indian Peninsula	1st half	12-00	35,551	1,80,894	6-00	238,927	2,93,652	(b)3-00	(b)283,729	(b)4,82,
		2nd half	12-00	34,638	2,07,268	6-00	275,971	3,05,407	(b)3-00	(b)301,851	(b)4,95,
XXXIII	Bombay, Baroda and Central India.	1st half	12-00	53,841	71,281	6-00	488,845	1,64,038	3-00	262,274	4,07,2
		2nd half	12-00	48,303	61,522	6-00	471,177	1,48,939	3-00	226,710	3,61,8
XXXIV	Mudras	1st half	12-00	8,052	82,738	6-00	36,035	1,03,349	...	...	...
		2nd half	12-00	8,808	76,276	6-00	38,309	96,739	...	...	...
XXXVI	Tárákeshwar	1st half	12-00	235	214	6-00	1,761	727	4-50	47,736	11,1
		2nd half	12-00	77	63	6-00	1,018	441	4-50	34,698	7,1
XLII	Khámgaon	1st half	Included with the Great Indian Peninsula railway								
		2nd half	Included with the Great Indian Peninsula railway								
XLIII	Amráoti	1st half	Included with the Great Indian Peninsula railway								
		2nd half	Included with the Great Indian Peninsula railway								
XLIV	Bhopal-Itársi (Native State section).	1st half	12-00	1,080	3,009	6-00	2,529	3,266	...	...	...
		2nd half	12-00	1,383	3,827	6-00	4,163	5,424	(b)3-00	(b)18,678	(b)9,1
XLV	The Nizam's Guaranteed State.	1st half	18-00	3,696	27,445	6-00	16,431	32,717	(b)2-50	(b)118,713	(b)74,1
		2nd half	18-00	2,852	20,013	6-00	15,321	28,589	(b)2-50	(b)141,589	(b)76,1
XLVIII	The Gaekwar's Petlád	1st half	...	...	...	...	...	...	...	...	...
		2nd half	...	...	...	...	...	...	...	...	...
		1st half	{ 12-00 & 15-00 }	{ 890 }	{ 1,861 }	{ 6-00 & 8-00 }	{ 1,565 }	{ 1,442 }	{ 4-00 & 3-50 & 3-00 }	{ 5,609 }	{ 1,91 }
L	Rájpura-Bhátinda	2nd half	12-00	711	1,453	6-00	1,326	1,292	3-00	4,281	2,21
LI	Jammu and Kashmir (Native State section)	1st half	Included with the North Western railway								
		2nd half	Included with the North Western railway								
	TOTAL STANDARD GAUGE Carried over	1st half	...	176,639	8,67,097	...	1,101,933	12,96,744	...	1,944,344	18,06,1
		2nd half	...	170,596	8,76,808	...	1,079,078	13,03,378	...	1,889,758	18,20,1

(b) Third class by mail trains.

(d) Upper class.

(e) Lower class.

(f) Between Dum-Dum and Duttapukur, 2-50 pies.

A—continued.

RAILWAYS—(PART I)—continued.

III.
COACHING TRAFFIC.
Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

GERS.			TOTAL.		Miscellaneous, including parcel, luggage, &c.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
FOURTH OR LOWEST CLASS.			Number.	Earnings.							
Single journey fares.	Number.	Earnings.	Number.	Earnings.							
Pics.		R		R	R	R	R	R		STANDARD GAUGE	
2:50	6,944,665	58,37,852	7,393,568	66,58,502	8,27,422	74,85,924	141	74,85,783	1st half	East Indian	I
2:50	6,049,649	52,51,847	6,482,599	61,16,434	8,02,524	69,18,958	92	69,18,866	2nd half		
2:50	346,604	1,60,311	354,763	1,68,907	5,393	1,74,340	...	1,74,240	1st half	Patna-Gya	II
2:50	339,257	1,74,975	348,078	1,87,931	4,508	1,92,439	...	1,92,439	2nd half		
2:50	509,619	2,23,610	542,141	2,44,232	18,825	2,63,057	...	2,63,057	1st half	Bengal-Nagpur	V
2:50	539,504	2,30,731	571,641	2,54,156	22,165	2,80,321	...	2,80,321	2nd half		
(a)	692,728	6,21,255	703,726	6,74,499	68,624	7,43,123	...	7,43,123	1st half	Indian Midland	VI
(a)	(c) 516,117	(c) 4,84,651	601,492	6,42,241	84,478	7,26,714	...	7,26,714	2nd half		
...	...	...	...	...	...	...	...	...	1st half	Bhopal-Itarsi (British section).	VII
...	...	...	...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	...	...	...	1st half	Dhond-Manmad.	X
...	...	...	...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	...	...	...	1st half	Bezwada Extension.	XIII
...	...	...	...	...	...	...	...	...	2nd half		
2:50	4,838,085	35,11,987	5,148,501	47,72,632	5,88,270	46,60,902	28	46,60,874	1st half	North Western	XVII
2:25 & 2:00									2nd half		
2:50									...		
2:25 & 2:00									...		
...	...	...	...	...	...	...	...	...	1st half	Amritsar-Fath-ankot	XVIII
...	...	...	...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	...	...	...	1st half	Jammu and Kashmir. (British section).	XIX
...	...	...	...	...	...	...	...	...	2nd half		
(e) 2:50	(e) 2,544,041	(e) 15,00,414	2,617,172	16,51,021	1,66,630	18,17,651	74	18,17,577	1st half	Oudh and Rohilkhand.	XX
(e) 2:50	(e) 2,216,111	(e) 12,76,634	2,291,440	14,28,030	1,49,854	15,77,884	7	15,77,877	2nd half		
...	3,462,918	13,58,286	4,043,795	17,22,618	2,26,178	19,48,796	...	19,48,796	1st half	Eastern Bengal	XXI
...									2nd half		
2:50	3,255,356	12,09,470	3,832,723	15,67,183	1,93,741	17,60,924	...	17,60,924	2nd half	Bengal Central	XXII
...									1st half		
(f) 3:00	622,715	2,04,045	723,880	2,49,961	7,509	2,57,470	...	2,57,470	1st half	Wardha Coal	XXIII
(f) 3:00	599,602	1,85,694	688,755	2,28,715	11,120	2,39,835	...	2,39,835	2nd half		
2:00	76,487	20,344	77,733	21,630	1,789	23,419	...	23,419	1st half	Great Indian Peninsula.	XXXII
2:00	71,608	17,413	72,570	18,419	1,331	19,750	...	19,750	2nd half		
(c) 2:50	(c) 5,698,210	(c) 28,69,543	6,306,417	38,26,198	7,22,957	45,49,155	...	45,49,155	1st half	Bombay, Baroda and Central India.	XXXIII
(c) 2:50	(c) 5,406,180	(c) 25,47,180	6,018,640	35,66,135	6,70,763	42,26,898	...	42,26,898	2nd half		
2:25 to 2:50	6,112,511	13,57,417	6,917,471	19,99,992	2,70,089	22,70,081	...	22,70,081	1st half	Madras	XXXIV
2:25 to 2:50									2nd half		
1:50 & 2:00	4,361,604	14,14,378	4,405,691	16,00,465	2,65,365	18,65,830	...	18,65,830	1st half	Tarakeshwar	XXXVI
1:50 & 2:00									2nd half		
(g) 2:00	554,277	1,39,080	604,009	1,51,960	1,999	1,53,959	...	1,53,959	1st half	Khámgaon	XLII
3:00	428,336	1,00,951	464,129	1,19,422	2,595	1,12,017	...	1,12,017	2nd half		
...	...	...	...	...	...	...	...	...	1st half	Amráoti	XLIII
...	...	...	...	...	...	...	...	...	2nd half		
(a)	117,999	54,987	121,008	61,262	7,384	68,646	...	68,646	1st half	Bhopal-Itarsi (Native State section).	XLIV
(a)	103,869	44,974	128,083	63,433	11,018	74,451	...	74,451	2nd half		
(c) 2:00	(c) 400,223	(c) 2,49,601	539,063	3,84,228	52,414	4,36,642	...	4,36,642	1st half	The Nizam's Guaranteed State.	XLV
(c) 2:00	(c) 396,350	(c) 2,27,680	556,142	3,53,196	38,256	3,91,452	...	3,91,452	2nd half		
...	...	...	...	...	...	5,887	...	5,887	1st half	The Guekwar's Petlad.	XLV.II
...	...	...	...	...	...	17,722	...	17,722	2nd half		
2:50	282,634	1,04,579	290,698	1,09,873	7,775	1,17,648	...	1,17,648	1st half	Rájputra-Bhát-inda.	LIX
2:50									2nd half		
2:25 & 2:00	243,795	1,07,214	250,113	1,12,174	9,726	1,21,900	...	1,21,900	2nd half	Jammu and Kashmir (Native State section).	LI
...									1st half		
...	...	...	...	...	...	...	...	...	1st half	TOTAL STANDARD GAUGE Carried over	
...	...	...	...	...	...	...	...	...	2nd half		
...	37,565,720	1,96,27,669	40,788,636	2,35,97,980	32,38,563	2,68,42,430	243	2,68,42,187	1st half		
...	35,191,913	1,78,57,397	38,331,343	2,18,57,895	31,40,676	2,50,16,293	99	2,50,16,194	2nd half		

(a) First 100 miles 2½ pics.
Next 100 " 2¼ "
Do. 200 " 2½ "
Above 400 " 2 "

(c) Third class by other than mail trains.
(g) The third class fare by mail trains was raised from 2 to 3 pics from the 1st October 1890.

APPENDIX
STATISTICS OF INDIANNo.
DETAIL OF

[From Abstract H of

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	PASSENGERS								
			FIRST CLASS.			SECOND CLASS.			THIRD OR INTERMEDIATE CLASS.		
			Single journey fare.	Number.	Earnings.	Single journey fare.	Number.	Earnings.	Single journey fare.	Number.	Earnings.
	Brought forward	1st half	Pies.		₹	Pies.	₹	Pies.	₹		
	STANDARD GAUGE	2nd half	...	176,639	8,67,097	...	1,101,933	12,96,744	...	1,941,344	
			...	170,596	8,76,808	...	1,079,076	13,03,378	...	1,839,758	
	NARROW GAUGE										
III	Tirhoot	1st half	18-00	4,514	14,042	9-00	4,697	7,759	4-50	5,879	4,654
		2nd half	Included with the Bengal and North-Western railway.								
	Bengal and North-Western.	1st half	15-00	2,616	7,878	9-00	4,254	6,839	4-00	4,206	2,887
		2nd half	15-00 & 18-00	7,848	20,036	9-00	9,249	13,716	4-00 & 4-50	11,016	7,900
Bareilly-Pilibhit	1st half	18-00	238	778	...	...	...	4-50	696	573	
	2nd half	18-00	140	422	...	...	...	4-50	692	534	
VIII	Rajputana-Malwa	1st half	15-00	7,733	71,671	8-00	32,547	1,11,756	3-00	114,677	1,35,308
		2nd half	15-00	8,045	56,439	8-00	31,452	81,783	3-00	108,078	1,16,942
XI	Southern Mahratta	1st half	12-00	5,685	31,006	6-00	14,534	31,467	...	...	...
		2nd half	12-00	5,806	33,350	6-00	17,833	41,091	...	...	...
XII	Southern Mahratta Mysore section.	1st half	Included with the Southern Mahratta railway.						...	...	...
		2nd half	Included with the Southern Mahratta railway.						...	...	...
	Villupuram-Guntakal-Nellore-Tirupati section.	1st half	12-00	341	886	6-00 & 4-00	1,745	1,167	...	...	...
		2nd half	12-00	390	812	4-00	1,970	1,177	...	...	...
	Villupuram-Tiruvannamalai section.	1st half	...	...	...	...	...	...	...	...	...
		2nd half	12-00	62	122	6-00 & 4-00	57	365	...	...	...
	Lucknow-Sitapur-Serana.	1st half	...	...	...	(a)9-00	(a)1,843	(a)4,033	4-00	2,536	1,984
		2nd half	...	...	...	(a)9-00	(a)1,802	(a)3,611	4-00	2,139	1,635
XXIII	Nalhāti	1st half	18-00	273	819	6-00	2,827	2,379	...	...	...
		2nd half	18-00	305	888	6-00	2,604	2,227	...	...	...
XXIV	Cherra-Companyganj	1st half	(a)27-00	(a)59	(a)58	...	...	...	...	...	...
		2nd half	(a)27-00	(a)70	(a)70	...	...	...	...	...	...
XXV	Jorhāt	1st half	(a)24-00	(a)944	(a)994	...	...	...	...	...	...
		2nd half	(a)24-00	(a)891	(a)881	...	...	...	...	...	...
XXVI	Burma	1st half	15-00	7,083	39,719	6-00	63,291	1,07,487	...	...	...
		2nd half	15-00	8,342	41,919	6-00	61,099	95,076	...	...	...
XXVII	Toungoo-Mandalay	1st half	Included with the Burma State railway						...	...	...
		2nd half	Included with the Burma State railway						...	...	...
	South Indian	1st half	12-00	8,115	25,981	4-00	60,997	53,687	...	...	...
		2nd half	12-00	7,423	27,016	4-00	66,604	55,397	...	...	...
XXXVII	Deoghur	1st half	(c)						(c)		
		2nd half	24-00	(c)635	(c)318	...	...	...	6-00	(c)185,613	(c)23,623
XXXVIII	Rohilkhand-Kumaun (Company's section)	1st half	(d)35-00	1,528	14,242	...	...	...	15-00	3,221	15,951
		2nd half	(d)35-00	1,758	16,584	...	...	...	15-00	3,227	16,255
XXIX	Darjeeling-Himalayan	1st half	(e)72-00	1,829	22,725	36-00	3,617	24,953	...	...	...
		2nd half	(e)72-00	1,770	21,138	36-00	4,039	27,653	...	...	...
XL	Dibrn-Sadiya	1st half	18-00	997	2,325	9-00	853	1,185	...	...	...
		2nd half	18-00	1,132	2,610	9-00	983	1,320	...	...	...
XLI	Thaton-Duyinzāik	1st half	...	...	...	...	...	...	...	...	...
		2nd half	...	...	...	...	...	...	...	...	...
XLVI	The Gaekwar's Dabhoi	1st half	...	...	...	(a)9-00	(a)2,143	(a)2,272	...	...	...
		2nd half	...	...	...	(a)9-00	(a)1,744	(a)1,965	...	...	...
XLVII	The Gaekwar's Mel-sāna.	1st half	...	...	...	...	...	...	...	...	...
		2nd half	...	...	...	...	...	...	...	...	...
LII	Jodhpore	1st half	18-00	370	2,497	6-00	1,244	2,159	...	...	...
		2nd half	18-00	353	1,952	6-00	1,118	1,974	...	...	...
LIII	Bhāvnagar-Gondal-Junāgarh-Porbandar.	1st half	12-00	2,107	7,205	6-00	14,186	16,343	...	...	...
		2nd half	12-00	1,537	5,479	6-00	11,248	14,569	...	...	...
LIV	Morvi	1st half	...	...	...	(a)9-00	(a)2,067	(a)5,820	...	...	...
		2nd half	12-00	39	148	(a)9-00	(a)3,093	(a)8,392	...	...	...
	TOTAL NARROW GAUGE.	1st half	...	44,432	2,42,826	...	210,845	3,79,306	...	131,216	1,61,357
		2nd half	...	45,961	2,29,846	...	215,424	3,50,316	...	125,152	1,43,275
	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	...	...	438,263	22,16,895	...	2,607,278	33,29,744	...	4,276,082	39,55,037

(a) Upper class.

(b) Lower class.

(c) Quoted from Part I of the Administration Report for 1890-91.

A—continued.

RAILWAYS—(PART I)—continued.

III—concluded.

COACHING TRAFFIC—concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

GERS.			TOTAL.		Miscellaneous, including parcel, luggage, &c.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
FOURTH OR LOWEST CLASS.			Number.	Earnings.							
Single journey fare.	Number.	Earnings.									
Pies.		R		R	R	R	R	R			
...	37,565,720	1,96,27,669	40,788,638	2,35,97,980	32,88,563	2,68,42,430	243	2,68,42,187	1st half	Brought forward STANDARD GAUGE NARROW GAUGE.	III
...	35,191,913	1,78,57,397	38,331,343	2,18,57,895	31,40,676	2,50,16,293	99	2,50,16,194	2nd half		
1-75	1,224,457	4,42,224	1,239,547	4,68,679	34,160	5,02,839	...	5,02,839	1st half	Tirhoot . . .	III
2-00	1,134,384	4,30,595	1,145,460	4,48,199	32,937	4,81,186	...	4,81,186	2nd half		
2-00 & 1-75	2,158,404	7,27,712	2,216,517	7,69,373	51,874	8,20,747	...	8,20,747	1st half	Bengal and North-Western.	III
2-00	72,142	22,481	73,076	23,832	2,332	26,164	...	26,164	2nd half		
2-00	66,425	19,192	67,257	20,148	1,479	21,627	...	21,627	1st half	Bareilly-Pilibhit	VIII
2-00 to 2-25	4,222,700	23,33,923	4,377,657	26,52,658	3,08,583	29,61,241	3	29,61,238	2nd half		
2-00 to 2-25	4,036,287	22,61,581	4,183,862	25,16,775	2,97,746	28,14,521	...	28,14,521	1st half	Rajputana-Malwa.	XI
2-50	1,947,981	10,27,809	1,968,200	10,90,282	1,15,024	12,05,306	2,52,920	9,52,380	2nd half		
2-50	2,079,127	10,80,619	2,102,766	11,55,960	1,20,757	12,76,817	3,04,557	9,71,260	1st half	Southern Maharratta.	XII
...	...	...	...	...	...	...	...	2,52,926	2nd half		
2-00	329,022	87,905	331,108	89,958	2,715	92,673	...	92,673	1st half	Villupuram-Guntakal—Nellore-Tirupati section.	VIII
2-00	330,410	80,869	332,770	82,858	2,431	85,339	...	85,339	2nd half		
2-00	55,279	16,796	55,917	17,283	151	17,434	...	17,434	1st half	Villupuram-Tiravannamalai section.	XII
(b) 2-00	276,285	84,727	280,864	90,744	5,217	95,961	...	95,961	2nd half		
(b) 2-00	232,400	63,903	236,341	69,149	4,502	73,651	25	73,626	1st half	Lucknow-Sitapur-Seramau.	XXIII
3-00	88,674	27,429	91,774	30,627	2,808	33,435	...	33,435	2nd half		
3-00	77,458	23,030	80,367	26,145	2,607	28,752	...	28,752	1st half	Nalhati . . .	XXIV
(b) 3-00	(b) 12,392	(b) 861	12,451	919	54	973	...	973	2nd half		
(b) 3-00	(b) 11,886	(b) 873	11,956	943	57	1,000	...	1,000	1st half	Cherra-Companyganj.	XXV
(b) 4-00	(b) 26,680	(b) 3,961	27,824	4,955	294	5,246	...	5,246	2nd half		
(b) 4-00	(b) 29,428	(b) 3,992	30,319	4,823	223	5,046	...	5,046	1st half	Jorbhat . . .	XXVI
3-00	2,660,441	14,68,711	2,730,815	16,15,917	2,291	17,08,198	103	17,08,095	2nd half		
3-00	2,436,584	12,62,597	2,506,075	13,99,592	78,778	14,78,370	34	14,78,336	1st half	Burma . . .	XXVII
...	...	...	...	...	...	...	...	...	2nd half		
2-00	3,969,601	14,16,593	4,038,719	14,96,261	73,023	15,69,284	...	15,69,284	1st half	Toungoo-Man-dalay.	XXVIII
2-00	8,911,507	13,99,359	3,985,534	14,81,772	71,910	15,53,682	...	15,53,682	2nd half		
...	...	...	186,248	23,941	...	23,941	...	23,941	1st half	Deoghur . . .	XXXVII
...	...	...	...	...	...	...	...	...	2nd half		
(d) 3-11	65,399	37,798	70,148	67,991	18,829	86,820	...	86,820	1st half	Rohilkhand-Kumaun (Company's section.)	XXXVIII
(d) 3-11	58,587	36,712	63,572	69,551	20,256	89,807	...	89,807	2nd half		
(e) 15-00	15,694	34,540	21,140	82,218	21,744	1,03,962	...	1,03,962	1st half	Darjeeling-Himalayan.	XXXIX
(e) 15-00	17,588	36,158	23,407	84,949	23,163	1,08,112	...	1,08,112	2nd half		
4-00	39,671	22,077	41,521	25,587	4,239	29,826	...	29,826	1st half	Dibra-Sadiya	XLI
4-00	37,920	19,578	40,035	23,508	4,551	28,059	...	28,059	2nd half		
...	...	...	...	...	...	4,974	...	4,974	1st half	Thaton-Duyin-zak.	XLII
...	...	...	...	...	...	4,313	...	4,313	2nd half		
(b) 3-00	(b) 169,905	(b) 51,366	172,043	53,638	1,848	55,486	...	55,486	1st half	The Gaekwar's Dabhoi.	XLVI
(b) 3-00	(b) 183,086	(b) 56,084	184,810	58,049	1,937	59,986	...	59,986	2nd half		
...	...	...	...	...	...	19,049	...	19,049	1st half	The Gaekwar's Mehsana.	XLVII
...	...	...	...	...	...	16,436	...	16,436	2nd half		
2-00	152,399	72,776	154,013	77,432	11,568	89,000	...	89,000	1st half	Jodhpore . . .	LII
2-00	131,279	61,853	132,750	65,775	8,279	74,058	...	74,058	2nd half		
2-75	677,291	3,71,392	693,584	3,94,940	30,281	4,25,221	...	4,25,221	1st half	Bhavnagar-Gondal-Junagarh-Porbandar.	LIII
2-75	618,437	3,62,837	631,222	3,82,885	20,454	4,03,339	...	4,03,339	2nd half		
(b) 3-33	(b) 91,730	(b) 68,527	93,797	74,347	8,027	82,374	...	82,374	1st half	Morvi . . .	LIV
(b) 3-00(e)	(b) 107,812	(b) 75,069	110,944	83,609	9,118	92,727	...	92,727	2nd half		
...	17,176,848	80,05,895	17,563,340	87,89,184	7,66,011	95,79,218	2,53,032	95,79,112	1st half	TOTAL NARROW GAUGE.	LIV
...	16,609,884	75,88,814	16,996,421	83,12,251	7,19,823	90,52,823	3,04,616	90,52,784	2nd half		
...	106,544,365	5,30,79,575	113,865,988	6,25,81,251	78,65,073	7,05,14,705	5,57,990	7,05,14,198	...	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	

(d) Average mileage fares.

(e) 3-75 pies by mail trains.

APPENDIX
STATISTICS OF INDIAN
No.

DETAIL OF

Half-years ended the 30th June and the 31st December 1890.

[From Abstract I of

Serial number.	RAILWAY.	1890.	GENERAL MERCHANDISE.		MILITARY STORES.		RAILWAY MATERIALS FOR CONSTRUCTION AND REVENUE STORES.	
			Ton-miles.	Earnings.	Ton-miles.	Earnings.	Ton-miles.	Earnings.
	STANDARD GAUGE.			₹		₹		₹
I	East Indian . . .	1st half	342,468,366	1,13,50,279	2,148,839	2,07,292	18,137,003	2,38,166
		2nd half	251,970,145	90,93,088	2,164,694	2,13,249	13,701,658	2,10,401
II	Patna-Gya . . .	1st half	1,843,135	76,229	...	...	90,485	2,400
		2nd half	1,559,745	63,738	...	...	12,902	162
V	Bengal-Nágpur . . .	1st half	14,689,219	9,72,804	9,698	1,310	7,251,624	3,55,361
		2nd half	10,454,233	5,81,054	6,799	1,257	3,545,214	1,10,440
VI	Indian Midland . . .	1st half	18,884,300	3,14,989	64,567	6,399	2,527,004	50,785
		2nd half	10,109,385	4,98,010	94,809	7,295	2,537,508	54,991
VII	Bhopal-Itársi (British section).	1st half	Included with the Bhopal-Itársi (Native State section).				...	...
		2nd half					...	...
X	Dhond-Manmád . . .	1st half	Included with the Great Indian Peninsula railway.				...	...
		2nd half					...	...
XIII	Bezváda Extension . . .	1st half	Included with the Nizam's Guaranteed State railway.				...	...
		2nd half					...	...
XVII	North Western . . .	1st half	221,813,972	77,22,460	3,619,460	2,43,080	28,662,109	5,08,914
		2nd half	258,905,505	80,06,281	1,546,477	1,52,274	34,618,661	5,44,252
XVIII	Amritsar-Pathánekot . . .	1st half	Included with the North Western railway.				...	...
		2nd half					...	...
XIX	Jammu and Kashmir (British section).	1st half					...	...
		2nd half					...	...
XX	Oudh and Rohilkhand . . .	1st half	57,992,855	18,49,575	180,958	15,752	5,826,231	90,451
		2nd half	84,998,224	12,65,081	149,507	12,913	5,085,680	77,959
XXI	Eastern Bengal . . .	1st half	47,917,427	23,62,970	18,937	1,865	6,223,119	1,38,627
		2nd half	69,066,426	38,39,521	8,431	610	6,290,046	1,18,751
XXII	Bengal Central . . .	1st half	1,958,631	61,519	361	120	23,805	470
		2nd half	2,238,146	77,983	136	76	17,700	251
XXXII	Wardha Coal . . .	1st half	749,158	45,817	...	...	19,507	318
		2nd half	367,691	24,088	...	...	267,270	3,883
XXXIII	Great Indian Peninsula . . .	1st half	937,487,504	1,69,98,346	725,127	78,851	24,366,090	4,43,886
		2nd half	195,137,318	96,73,588	570,414	60,153	28,926,124	5,17,878
XXXIV	Bombay, Baroda and Central India . . .	1st half	106,542,088	50,50,146	183,192	15,486	3,314,233	69,046
		2nd half	52,806,725	25,24,077	120,227	11,146	4,067,110	82,702
XXXV	Madras . . .	1st half	58,048,047	24,11,705	202,148	25,661	3,966,052	88,849
		2nd half	65,873,952	26,11,345	190,985	28,619	3,869,506	84,917
XXXVI	Tárákeshwar . . .	1st half	207,320	10,210	...	...	27,882	1,001
		2nd half	132,782	7,520	...	...	120	6
XLII	Khámgaon . . .	1st half	Included with the Great Indian Peninsula railway.				...	...
		2nd half					...	...
XLIII	Amráoti . . .	1st half					...	...
		2nd half					...	...
XLIV	Bhopal-Itársi (Native State section).	1st half	3,776,336	1,45,841	3,962	290	329,870	8,657
		2nd half	1,439,823	67,060	805	81	702,876	16,046
XLV	The Nizam's Guaranteed State.	1st half	11,784,208	6,17,451	42,733	5,365	669,795	11,990
		2nd half	8,827,601	4,81,603	37,083	4,882	1,316,836	21,067
XLVIII	The Gaekwar's Petlád . . .	1st half	...	...	...	...	...	...
		2nd half	...	...	...	...	...	...
L	Rájpura- Bhátinda . . .	1st half	3,467,169	1,35,057	34,448	4,362	460,277	6,639
		2nd half	4,467,517	1,68,892	38,474	4,854	68,510	1,248
LI	Jammu and Kashmir (Native State section).	1st half	Included with the North Western railway.				...	...
		2nd half					...	...
	TOTAL STANDARD GAUGE. Carried over.	1st half	1,229,630,235	5,06,25,398	7,234,425	6,05,773	101,894,586	20,15,560
		2nd half	968,355,218	3,89,82,324	4,928,841	4,97,409	105,127,721	16,24,074

A—continued.

RAILWAYS—(PART I)—continued.

IV.

GOODS TRAFFIC.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

COAL.		Miscellaneous.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
Ton-miles.	Earnings.							
	₹	₹	₹	₹	₹			
160,542,750	35,74,648	66,829	1,54,36,954	1,251	1,54,35,703	1st half	} East Indian . . .	I
139,512,289	30,54,012	1,11,997	1,26,82,742	644	1,26,82,098	2nd half		
86,486	2,541	379	81,549	...	81,549	1st half	} Patna-Gya . . .	II
28,352	787	273	64,960	...	64,960	2nd half		
3,958,679	1,93,519	3,567	14,66,561	...	14,66,561	1st half	} Bengal-Nágpur . . .	V
4,898,551	1,81,458	1,585	6,34,914	...	6,34,914	2nd half		
3,335,549	54,747	2,380	9,29,300	...	9,29,300	1st half	} Indian Midland . . .	VI
3,527,804	56,665	2,464	6,19,425	...	6,19,425	2nd half		
...	...	...	...	...	...	1st half	} Bhopal-Itársi (British Section).	VII
...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	1st half	} Dhond-Manmád . . .	X
...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	1st half	} Bezváda Extension . . .	XIII
...	...	...	...	...	...	2nd half		
16,504,746	3,22,836	43,289	88,40,579	...	88,40,579	1st half	} North Western . . .	XVII
10,537,960	2,12,421	45,276	89,60,504	21	89,60,483	2nd half		
...	...	...	...	...	...	1st half	} Amritsar-Patbánot . . .	XVIII
...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	1st half	} Jammu and Kashmir (British section).	XIX
...	...	...	...	...	...	2nd half		
15,261,512	2,24,704	8,517	21,88,999	6	21,88,993	1st half	} Oudh and Rohilkhand . . .	XX
11,421,763	1,68,798	6,415	15,31,166	...	15,31,166	2nd half		
7,379,976	1,93,926	18,458	26,55,846	...	26,55,846	1st half	} Eastern Bengal . . .	XXI
5,596,679	1,10,795	15,544	40,85,221	...	40,85,221	2nd half		
680,021	13,916	462	76,487	...	76,487	1st half	} Bengal Central . . .	XXII
372,405	7,075	245	85,630	...	85,630	2nd half		
2,545,400	59,721	154	1,06,010	...	1,06,010	1st half	} Wardha Coal . . .	...
2,515,548	59,555	128	87,654	...	87,654	2nd half		
20,573,246	5,11,799	89,273	1,81,22,155	...	1,81,22,155	1st half	} Great Indian Peninsula . . .	XXXII
18,804,523	4,77,155	87,920	1,08,16,694	...	1,08,16,694	2nd half		
10,211,795	1,89,266	1,37,776	54,51,720	...	54,51,720	1st half	} Bombay, Baroda and Central India.	XXXIII
2,725,085	52,247	1,68,120	28,38,292	...	28,38,292	2nd half		
626,284	19,830	19,413	25,65,458	...	25,65,458	1st half	} Madras . . .	XXXIV
1,524,399	46,117	19,778	27,90,776	...	27,90,776	2nd half		
21,744	689	114	12,014	...	12,014	1st half	} Tárukeshwar . . .	XXXVI
568	23	72	7,621	...	7,621	2nd half		
...	...	...	...	...	...	1st half	} Khámgaon . . .	XLII
...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	1st half	} Amráoti . . .	XLIII
...	...	...	...	...	...	2nd half		
7,053	100	429	1,55,317	...	1,55,317	1st half	} Bhopal-Itársi (Native State section).	XLIV
29,359	416	262	83,865	...	83,865	2nd half		
11,363,209	2,75,470	4,304	9,14,580	...	9,14,580	1st half	} The Nizam's Guaranteed State.	XLV
10,444,621	2,56,565	4,749	7,68,866	...	7,68,866	2nd half		
...	...	...	3,802	...	3,802	1st half	} The Gaekwar's Petlád . . .	XLVIII
...	...	...	4,579	...	4,579	2nd half		
84,899	1,714	666	1,48,438	...	1,48,438	1st half	} Rájputra-Bhátinda . . .	L
31,217	563	802	1,76,359	...	1,76,359	2nd half		
...	...	...	...	...	...	1st half	} Jammu and Kashmir (Native State section).	LI
...	...	...	...	...	...	2nd half		
253,183,449	55,19,426	3,85,810	5,91,55,769	1,267	5,91,54,512	1st half	} TOTAL STANDARD GAUGE. Carried over.	...
211,971,098	46,84,652	4,65,630	4,62,39,268	665	4,62,38,603	2nd half		

APPENDIX
STATISTICS OF INDIAN

No.

DETAIL OF

Half-years ended the 30th June and the 31st December 1890.

[From Abstract I of

Serial number.	RAILWAY.	1890.	GENERAL MERCHANDISE.		MILITARY STORES.		RAILWAY MATERIALS FOR CONSTRUCTION AND REVENUE STORES.	
			Ton-miles.	Earnings.	Ton-miles.	Earnings.	Ton-miles.	Earnings.
	Brought forward STANDARD GAUGE.	1st half 2nd half	1,229,630,235 968,356,218	5,06,25,398 3,89,82,924	7,234,425 4,928,841	6,05,773 4,97,409	101,894,586 105,127,721	20,15,560 16,24,074
	NARROW GAUGE.							
III	Tirhoot	1st half 2nd half	15,250,642 Included with the Bengal and North-Western railway.	6,23,210 ...	1,220 ...	133 ...	1,991,998 ...	53,681 ...
	Bengal and North-Western.	1st half 2nd half	17,971,060 24,812,100	5,97,055 8,84,288	... ...	... ...	410,826 1,986,622	7,912 42,885
	Bareilly-Pilibhit	1st half 2nd half	635,052 539,985	32,067 27,047	45 2	4 ...	44,235 70,504	891 1,498
VIII	Rajputana-Malwa	1st half 2nd half	163,674,153 107,299,790	64,04,366 43,69,063	641,276 560,837	64,269 58,354	4,512,122 3,878,385	82,975 68,039
	Southern Mahratta	1st half 2nd half	25,775,797 25,586,699	13,66,153 13,62,145	45,247 60,674	4,840 7,232	6,796,564 7,945,491	1,62,601 1,34,433
XI	Southern Mahratta, Mysore section.	1st half 2nd half	} Included with the Southern Mahratta railway.		...	...	...	...
XII	Vilupuram-Guntakal-Nellore-Tirupati section	1st half 2nd half	581,314 826,512	25,034 32,089	146 33	13 3	111,621 107,339	2,356 2,288
	Vilupuram-Tiruvannamalai section.	1st half 2nd half	... 25,271	... 1,072	... ...	... ...	... 55,804	... 1,301
	Lucknow-Sitapur-Sera- mau.	1st half 2nd half	2,622,820 1,693,533	88,324 62,511	4,788 2,748	438 210	312,879 212,474	7,332 5,847
XXIII	Nalhati	1st half 2nd half	162,409 103,073	13,281 7,689	2 ...	1 ...	8,484 47,365	128 672
XXIV	Cherra-Companyganj	1st half 2nd half	66,698 125,535	5,250 9,388	......	......	......	......
XXV	Jorhat	1st half 2nd half	37,593 58,813	18,365 29,423	... ...	... ...	4,359 604	863 114
XXVI	Burma	1st half 2nd half	25,274,678 20,077,929	11,81,423 8,44,098	181,589 149,752	9,737 13,693	15,092,112 7,133,260	77,193 33,369
XXVII	Toungoo-Mandalay	1st half 2nd half	} Included with the Burma State railway.		...	...	...	...
	South Indian	1st half 2nd half	32,334,715 36,254,453	12,71,159 14,14,929	12,103 9,670	1,663 1,213	3,154,313 4,030,149	68,418 85,522
XXXVII	Deoghur	1st half 2nd half	(c) 31,636 (c) 1,971	(c) 1,971...	......	......	......	......
XXXVIII	Rohilkhand-Kumaun (Company's section).	1st half 2nd half	919,223 576,853	41,637 33,155	21,932 6,371	2,134 611	300,025 62,350	6,998 1,321
XXXIX	Darjeeling-Himalayan	1st half 2nd half	... ...	... 1,76,022	... ...	... 695	... ...	... 711
XL	Dibru-Sadiya	1st half 2nd half	372,367 424,770	72,996 82,905	... ...	... ...	16,660 9,320	2,605 2,347
XLI	Thaton-Duyinzak	1st half 2nd half	... ...	14,965 9,520	......	......	......	......
XLVI	The Gaekwar's Dabhoi	1st half 2nd half	608,826 376,271	48,486 25,321	... ...	... ...	40,280 124,545	1,242 1,994
XLVII	The Gaekwar's Mehsana	1st half 2nd half	......	......	......	......	......	......
LII	Jodhpore	1st half 2nd half	1,382,313 888,891	1,09,953 71,632	382 28	68 5	64,429 805,844	1,166 13,912
LIII	Bhavnagar-Gondal-Janagarh-Porbandar.	1st half 2nd half	6,951,917 2,729,312	4,86,534 1,60,342	... ...	... ...	3,810,271 1,495,237	28,761 12,345
LIV	Morvi	1st half 2nd half	690,129 437,130	72,891 36,333	... ...	... ...	... 7,202	... 277
	TOTAL NARROW GAUGE	1st half 2nd half	295,311,706 222,836,920	1,24,73,149 96,28,972	858,780 790,015	83,300 82,016	36,671,178 27,772,495	5,04,122 4,08,946
	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	...	2,716,165,715	11,17,12,414	13,812,011	12,68,498	271,465,980	45,52,702

(a) Excludes Rs. 621 on account of ballast train
(b) Excludes " 1,123 on account of ballast
(c) Quoted from Part I of the

A—continued.

RAILWAYS—(PART I)—continued.

IV—concluded.

GOODS TRAFFIC—concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

COAL.		Miscellaneous.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
Ton-miles.	Earnings.							
253,183,449	R 55,19,428	R 3,85,810	R 5,91,55,769	R 1,257	R 5,91,54,512	1st half	Brought forward STANDARD GAUGE.	
211,971,098	46,64,652	4,65,630	4,62,39,268	665	4,62,38,603	2nd half		
1,044,475	27,347	9,223	7,13,594	...	7,13,594	1st half	NARROW GAUGE.	
...	...	...	...	...	...	2nd half		
700,319	15,723	4,037	6,24,727	...	6,24,727	1st half	Tirhoot	III
625,874	13,004	6,645	9,46,822	...	9,46,822	2nd half		
104	15	94	33,071	...	33,071	1st half	Bengal and North-Western.	
80	12	117	28,675	...	28,675	2nd half		
8,804,577	1,73,347	23,692	67,48,619	...	67,48,619	1st half	Bareilly-Pilibhit.	
5,658,705	1,14,130	23,108	46,32,694	...	46,32,695	2nd half		
900,293	21,406	9,087	15,64,067	2,64,758	12,99,309	1st half	Rajputana-Malwa	VIII
388,254	10,463	5,227	15,09,560	3,54,417	11,55,132	2nd half		
...	...	...	...	...	{ 2,64,758	1st half	Southern Mahratta	XI
...	...	...	...	...	{ 3,54,418	2nd half		
...	...	...	...	...	...	1st half	Southern Mahratta, Mysore section.	XII
...	...	...	...	...	...	2nd half		
...	...	220	27,623	...	27,623	1st half	Villupuram-Guntakal—Nellore-Tirupati section.	
2,079	50	148	34,578	...	34,578	2nd half		
...	...	...	...	...	...	1st half	Villupuram-Tiruvannamalai section.	
4,999	105	...	2,478	...	2,478	2nd half		
1,258	18	762	96,874	...	(a) 96,253	1st half	Lucknow-Sitapur-Seramau.	
...	...	237	68,805	475	(b) 67,207	2nd half		
84,208	5,132	137	18,679	...	18,679	1st half	Nalhati	XXIII
160,103	8,375	119	16,855	...	16,855	2nd half		
2,225	125	44	5,419	...	5,419	1st half	Cherra-Companyganj	XXIV
4,621	833	2	9,728	...	9,729	2nd half		
1,653	333	1	19,567	...	19,567	1st half	Jorhát	XXV
5,146	1,088	4	30,629	...	30,629	2nd half		
101,585	2,302	25,747	12,96,402	...	12,96,402	1st half	Burma	XXVI
649,287	11,108	21,273	9,23,561	177	9,23,384	2nd half		
...	...	...	...	...	...	1st half	Toungoo-Mandalay	XXVII
...	...	...	...	...	...	2nd half		
510,190	10,850	3,888	13,55,978	111	13,55,867	1st half	South Indian	
851,010	18,115	3,423	15,23,202	...	15,23,202	2nd half		
(c) 947	...	...	1,971	...	1,971	1st half	Deoghur	XXXVII
104	15	167	49,951	...	49,951	2nd half		
80	11	122	35,220	...	35,220	1st half	Rohilkhand-Kumaun (Company's section).	XXXVIII
...	...	...	1,69,493	...	1,69,493	2nd half		
...	9,146	1,023	1,87,597	...	1,87,597	1st half	Darjeeling-Himalayan	XXXIX
...	...	...	...	...	...	2nd half		
4,467,495	1,46,270	481	2,22,352	...	2,22,352	1st half	Dibru-Sadiya	XL
4,035,828	1,32,738	787	2,18,777	...	2,18,778	2nd half		
...	...	...	14,965	...	14,965	1st half	Thaton-Duyinzáik	XLI
...	...	...	9,520	...	9,520	2nd half		
2,160	85	141	49,954	...	49,954	1st half	The Gaskwar's Dabhoi	XLVI
11,102	211	112	27,638	...	27,638	2nd half		
...	...	...	8,215	...	8,215	1st half	The Gaskwar's Mehsána	XLVII
...	...	...	15,527	...	15,527	2nd half		
841	22	830	1,12,039	...	1,12,039	1st half	Jodhpore	LII
3,087	145	479	86,173	...	86,173	2nd half		
464,281	11,071	960	5,28,326	...	5,28,326	1st half	Bhévsnagar-Gondal-Junágarh-Portbandar.	LIII
139,193	3,761	694	1,77,142	...	1,77,142	2nd half		
2,353	166	198	73,255	...	73,255	1st half	Morvi	LIV
11,864	492	341	37,443	...	37,442	2nd half		
17,088,121	4,14,232	80,659	1,37,33,170	2,64,869	1,37,32,438	1st half	TOTAL NARROW GAUGE.	
12,551,312	3,23,292	63,861	1,05,22,614	3,55,069	1,05,20,841	2nd half		
494,794,927	1,09,21,602	9,95,960	12,96,52,792	6,21,860	12,96,48,365	...	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	

earnings due to the Oudh and Rohilkhand railway.
train earnings due to the Oudh and Rohilkhand railway.

APPENDIX
STATISTICS OF INDIAN

No.

SUMMARY OF

[From No. VIII of

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	Maintenance of way, works and stations.	Locomotive expenses.	Carriage and wagon expenses.	Traffic expenses.
	STANDARD GAUGE.		R	R	R	R
I	East Indian	1st half	24,42,586	18,67,450	6,00,496	14,97,685
		2nd half	14,35,419	16,83,536	5,85,565	14,17,211
II	Patna-Gya	1st half	27,284	20,857	6,711	16,727
		2nd half	18,778	22,045	7,651	18,544
V	Bengal-Nágpur	1st half	3,49,595	2,53,501	52,490	1,44,153
		2nd half	5,29,907	2,81,640	77,559	1,20,946
VI	Indian Midland	1st half	4,29,872	3,68,414	98,711	1,70,265
		2nd half	3,92,660	3,36,605	82,756	1,67,303
VII	Bhopal-Itársi (British section)	1st half	Included with the Bhopal-Itársi (Native State section).			
X	Dhond-Manmád	1st half	Included with the Great Indian Peninsula railway.			
		2nd half	..			
XIII	Bezváda Extension	1st half	Included with the Nizam's Guaranteed State railway.			
		2nd half	..			
XVII	North Western	1st half	28,44,650	31,35,104	9,26,383	11,40,515
		2nd half	24,59,681	26,36,242	11,66,917	11,39,805
XVIII	Amritsar-Pathánkot	1st half	Included with the North Western railway.			
		2nd half	..			
XIX	Jammu and Kashmir (British section)	1st half	Included with the North Western railway.			
		2nd half	..			
XX	Oudh and Rohilkhand	1st half	5,89,583	5,23,010	1,71,488	3,39,749
		2nd half	5,61,946	4,46,761	1,21,038	3,38,347
XXI	Eastern Bengal	1st half	6,45,171	5,73,370	1,79,567	5,80,276
		2nd half	6,91,427	5,61,852	2,38,802	6,34,362
XXII	Bengal Central	1st half	41,325	46,536	14,738	46,411
		2nd half	60,441	42,202	17,904	46,872
XXXII	Wardha Coal	1st half	19,724	26,102	14,721	13,529
		2nd half	44,050	25,550	15,823	10,112
XXXII	Great Indian Peninsula	1st half	23,28,256	39,61,770	10,31,815	14,68,044
		2nd half	24,53,600	33,39,742	9,15,684	13,16,357
XXXIII	Bombay, Baroda and Central India	1st half	8,17,192	10,51,239	3,29,470	4,21,079
		2nd half	7,80,542	8,14,834	2,56,574	3,80,799
XXXIV	Madras	1st half	7,01,884	8,72,886	2,23,425	4,03,973
		2nd half	5,81,046	8,80,560	3,34,092	4,16,714
XXXVI	Tárákeswar	1st half	17,409	13,298	4,277	10,669
		2nd half	8,586	10,075	3,507	8,478
XLII	Khámgaon	1st half	Included with the Great Indian Peninsula railway.			
		2nd half	..			
XLIII	Amráoti	1st half	Included with the Great Indian Peninsula railway.			
		2nd half	..			
XLIV	Bhopal-Itársi (Native State section)	1st half	1,02,808	55,125	14,772	25,469
		2nd half	95,502	41,185	10,871	21,981
XLV	The Nizam's Guaranteed State	1st half	3,20,361	1,92,823	40,812	1,06,852
		2nd half	2,49,606	2,01,866	41,469	1,07,192
XLVIII	The Gaekwar's Petlád	1st half	...	1,309	410	525
		2nd half	...	3,658	1,151	1,709
L	Rájpura-Bhátinda	1st half	41,957	52,798	18,144	21,397
		2nd half	45,115	62,663	26,564	28,935
LI	Jammu and Kashmir (Native State section).	1st half	Included with the North Western railway.			
		2nd half	..			
TOTAL STANDARD GAUGE. Carried over		1st half	1,17,19,657	1,30,05,592	37,28,430	64,06,318
		2nd half	1,03,58,306	1,13,84,316	39,03,857	61,75,667

- (a) Expenditure incurred direct by the State.
(b) Includes Rs60,830, being the amount paid to the State as rent
(c) Includes Rs65,217, being the amount paid to the State as rent
(d) Includes Rs2,04,810, being the amount paid to the State as rent
(e) Includes Rs1,44,562, being the amount paid to the State as
(f) Includes Rs12,182, being the amount paid to the State as
(g) Includes Rs6,507, being the amount paid to the State as rent

A—continued.

RAILWAYS—(PART I)—continued.

V.

EXPENSES.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

General charges.	Steam-boat service.	Special and miscellaneous expenses.	TOTAL	1890.	RAILWAY.	Serial number.
R	R	R	R		Standard Gauge.	
9,53,718	39,297	96,006	74,97,238	1st half	} East Indian	I
8,70,723	39,654	86,935	61,19,343	2nd half		
11,100	...	37,352	1,30,031	1st half	} Patna-Gya	II
11,904	...	38,434	1,17,356	2nd half		
2,10,412	...	24,123	10,38,274	1st half	} Bengal-Nágpur	V
2,34,400	...	34,380	12,78,842	2nd half		
1,99,866	...	53,479	13,25,607	1st half	} Indian Midland	VI
1,98,445	...	21,209	11,98,978	2nd half		
...	1st half	} Bhopal-Itársi (British section)	VII
(a) 6,408	(a) 6,408	2nd half		
(a) 6,400	(a) 6,400	1st half	} Dhond-Manmád	X
...	2nd half		
(a) 1,520	(a) 1,520	1st half	} Bezwáda Extension	XIII
(a) 85	(a) 851	2nd half		
6,19,161	35,054	1,54,689	(b) 89,16,386	1st half	} North-Western	XVII
5,67,070	47,040	1,43,075	(c) 82,25,047	2nd half		
...	1st half	} Amritsar-Patháukot	XVIII
...	2nd half		
2,24,693	...	37,336	18,85,859	1st half	} Jammu and Kashmir (British section)	XXI
2,16,340	...	56,627	17,41,059	2nd half		
2,53,070	2,90,743	77,823	25,99,820	1st half	} Oudh and Rohilkhand	XX
2,55,092	3,31,996	94,708	28,08,239	2nd half		
48,233	...	5,567	2,02,810	1st half	} Eastern Bengal	XXI
43,743	...	7,925	2,19,087	2nd half		
15,618	...	2,515	92,204	1st half	} Bengal Central	XXII
17,125	...	2,482	1,15,152	2nd half		
6,39,454	...	3,62,903	(d) 99,86,852	1st half	} Wardha Coal	XXIII
6,30,590	...	2,07,696	(e) 90,08,131	2nd half		
2,72,239	...	50,994	29,42,213	1st half	} Great Indian Peninsula	XXXII
2,52,651	...	34,650	24,99,980	2nd half		
2,82,380	...	20,398	25,04,946	1st half	} Bombay, Baroda and Central India	XXXIII
2,68,506	...	26,780	24,79,708	2nd half		
7,074	...	30,783	88,510	1st half	} Madras	XXXIV
5,452	...	22,635	58,733	2nd half		
...	1st half	} Tárakeshwar	XXXVI
(a) 442	(a) 442	2nd half		
(a) 443	(a) 443	1st half	} Khámgaon	XLII
29,905	...	20,019	2,48,098	2nd half		
26,067	...	10,775	2,09,881	1st half	} Amráoti	XLIII
1,20,841	...	6,281	(f) 8,00,152	2nd half		
1,23,173	...	12,444	(g) 7,42,257	1st half	} Bhopal-Itársi (Native State section)	XLIV
339	...	1,387	3,970	2nd half		
1,134	...	156	7,808	1st half	} The Nizam's Guaranteed State	XLV
10,579	...	3,001	1,46,876	2nd half		
11,144	...	523	1,64,944	1st half	} The Gaekwar's Petlád	XLVIII
...	2nd half		
...	1st half	} Rájpora-Bhátinda	L
...	2nd half		
...	1st half	} Jammu and Kashmir (Native State section).	LI
...	2nd half		
39,07,047	3,65,094	9,93,456	4,04,03,216	1st half	} TOTAL STANDARD GAUGE. Carried over.	
37,41,253	4,18,690	8,03,364	3,70,01,739	2nd half		

of leased lines not shown in any of the preceding columns.
of leased lines not shown in any of the preceding columns.
of leased lines not shown in any of the preceding columns.
rent of leased lines not shown in any of the preceding columns.
rent of leased line not shown in any of the preceding columns.
of leased line not shown in any of the preceding columns.

APPENDIX
STATISTICS OF INDIAN

No.

SUMMARY OF

[From No. VIII of

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	Maintenance of way, works and stations.	Locomotive expenses.	Carriage and wagon expenses.	Traffic expenses.
	Brought forward STANDARD GAUGE	1st half 2nd half	R 1,17,19,657 1,03,58,306	R 1,30,05,592 1,13,84,316	R 37,28,430 39,03,857	R 64,06,318 61,75,667
	NARROW GAUGE.					
III	Tirhoot	1st half 2nd half	77,826 Included with the Bengal and North-Western railway.	1,14,019	28,533	1,00,461
	Bengal and North-Western	1st half 2nd half	1,22,665 1,97,998	1,36,785 2,33,026	21,316 57,523	1,16,930 1,89,105
	Bareilly-Pilibhit	1st half 2nd half	12,677 6,449	7,187 6,569	1,643 1,876	7,870 8,401
	VIII Rajputana-Malwa	1st half 2nd half	7,39,564 6,63,847	18,41,251 15,39,781	6,54,961 7,51,633	6,93,934 6,48,331
	XI Southern Mahratta	1st half 2nd half	6,05,494 5,94,988	5,30,220 4,76,603	91,422 87,683	2,61,467 2,51,301
	XII Southern Mahratta, Mysore section	1st half 2nd half	1,36,406 1,80,134	1,20,841 1,42,572	20,762 26,515	58,216 75,784
	Vilupuram-Gantakal--					
	Nellore-Tirupati section	1st half 2nd half	25,260 27,449	25,206 24,727	5,827 4,838	9,494 9,381
	Vilupuram-Tiruvannamalai section	1st half 2nd half	... 3,550	... 4,071	... 797	... 1,544
	Lucknow-Sitapur-Seraman	1st half 2nd half	27,359 23,621	......	......	......
XXIII	Nalhati	1st half 2nd half	12,235 22,208	4,042 9,155	1,814 1,621	7,186 6,996
XXIV	Cherra-Companyganj	1st half 2nd half	1,233 1,307	4,511 2,901	708 749	2,280 2,415
XXV	Jorhat	1st half 2nd half	7,688 7,427	6,298 7,770	2,575 1,403	7,128 7,121
XXVI	Burma	1st half 2nd half	4,52,059 5,15,815	5,10,247 4,49,650	1,18,055 1,16,418	2,89,752 2,70,079
XXVII	Toungoo-Mandalay	1st half 2nd half	... ... 5,64,244 5,84,991	... ... 6,19,170 6,43,683	... ... 1,43,127 1,25,940	... ... 2,33,221 2,44,146
XXXVII	Deogbur	1st half 2nd half	3,283	4,601	387	4,331
XXXVIII	Rohilkhand-Kumann (Company's section)	1st half 2nd half	21,045 12,380	18,911 14,990	4,065 4,316	19,865 19,121
XXXIX	Darjeeling-Himalayan	1st half 2nd half	34,718 42,440	54,952 57,874	15,704 16,468	23,078 32,517
XL	Dibru-Sadiya	1st half 2nd half	61,598 61,298	38,904 34,433	16,328 11,206	23,037 21,489
XLI	Thaton-Duyinzak	1st half 2nd half	1,170 1,104	2,977 2,859	2,692 1,689	3,489 3,443
XLVI	The Gaekwar's Dabhoi	1st half 2nd half	21,849 19,817	18,785 21,671	2,690 3,759	10,627 9,538
XLVII	The Gaekwar's Mehsana	1st half 2nd half	4,504 4,454	5,095 6,499	1,812 3,173	1,920 2,737
LII	Jodhpore	1st half 2nd half	59,159 21,592	27,895 31,176	1,712 2,210	9,711 9,747
LIII	Bhavnagar-Gondal-Junagarh-Porbandar	1st half 2nd half	1,65,542 1,28,475	1,77,814 1,13,881	15,450 13,564	85,832 68,664
LIV	Morvi	1st half 2nd half	25,703 23,816	29,292 36,464	5,705 6,120	18,450 18,374
	TOTAL NARROW GAUGE	1st half 2nd half	31,79,996 31,45,160	42,94,402 38,60,355	11,56,901 12,39,501	19,83,948 19,00,234
	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR		2,84,06,402	3,25,49,266	1,00,29,076	1,64,70,498

A—continued.

RAILWAYS—(PART I)—continued.

V—concluded.

EXPENSES—concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

General charges.	Steam-boat service.	Special and miscellaneous expenses.	TOTAL.	1890.	RAILWAY.	Serial number.
R 39,07,047 37,41,253	R 8,65,094 4,18,690	R 9,93,456 8,03,364	R 4,04,03,216 3,70,01,739	1st half 2nd half	} Brought forward STANDARD GAUGE. NARROW GAUGE.	
76,520	52,497	11,037	4,60,893	1st half 2nd half		} Tirhoot . . . . .	III
1,20,331	64,870	9,044	5,91,941	1st half 2nd half	} Bengal and North-Western	
1,79,975	1,08,399	9,368	9,75,394	1st half 2nd half		} Bareilly-Pilibhit
8,729	...	4,633	42,739	1st half 2nd half	} Rajputana-Malwa . . . . .			VIII
8,538	...	4,356	36,189	1st half 2nd half		} Southern Mahratta . . . . .	XI
5,52,632	...	73,659	45,56,001	1st half 2nd half	} Southern Mahratta, Mysore section . . . . .			XII
5,52,594	...	73,568	42,29,754	1st half 2nd half		} Villupuram-Guntakal— Nellore-Tirupati section
2,86,603	...	9,119	17,84,325	1st half 2nd half	} Villupuram-Tiruvannamalai section	
2,84,217	...	17,242	17,12,034	1st half 2nd half		} Lucknow-Sitapur-Seramau
67,824	...	2,229	4,06,278	1st half 2nd half	} Nalhāti . . . . .			XXIII
83,558	...	9,776	5,18,339	1st half 2nd half		} Cherra-Companyganj . . . . .	XXIV
7,420	...	31,062	1,04,269	1st half 2nd half	} Jorhāt . . . . .			XXV
7,193	...	12,383	85,971	1st half 2nd half		} Burma . . . . .	XXVI
1,184	...	2,290	13,436	1st half 2nd half	} Toungoo-Mandalay . . . . .			XXVII
...	...	(a) 1,09,834	1,37,193	1st half 2nd half		} South Indian
...	...	(a) 84,658	1,08,279	1st half 2nd half	} Deoghur . . . . .			XXXVII
6,488	...	426	32,191	1st half 2nd half		} Rohilkhand-Kumana (Company's section) . . . . .	XXXVIII
6,353	...	124	46,462	1st half 2nd half	} Darjeeling-Himalayan . . . . .			XXXIX
1,979	...	84	10,795	1st half 2nd half		} Dibru-Sadiya . . . . .	XL
2,057	...	123	9,552	1st half 2nd half	} Thaton-Duyinzik . . . . .			XLI
4,365	...	251	28,305	1st half 2nd half		} The Gaekwar's Dabhoi . . . . .	XLVI
3,343	...	435	27,499	1st half 2nd half	} The Gaekwar's Mehrana . . . . .			XLVII
1,70,226	...	27,420	15,67,759	1st half 2nd half		} Jodhpore . . . . .	LII
1,88,143	...	20,372	15,55,482	1st half 2nd half	} Bhavnagar-Gondal-Junagarh-Porbandar . . . . .			LIII
...	1st half 2nd half		} Morvi . . . . .	LIV
1,82,275	...	3,480	17,50,517	1st half 2nd half	} TOTAL NARROW GAUGE.	
1,85,472	...	19,779	18,04,011	1st half 2nd half		} TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.
2,578	15,180	1st half 2nd half		
21,777	...	3,915	89,573	1st half 2nd half		
19,689	...	3,757	74,253	1st half 2nd half		
26,870	...	6,208	1,61,530	1st half 2nd half		
25,273	...	7,440	1,82,012	1st half 2nd half		
36,316	1,636	1,226	1,79,043	1st half 2nd half		
30,903	-1,636	570	1,56,263	1st half 2nd half		
...	10,328	1st half 2nd half		
35	9,130	1st half 2nd half		
6,124	60,075	1st half 2nd half		
5,598	60,383	1st half 2nd half		
1,529	...	1,567	16,427	1st half 2nd half		
2,332	...	310	19,505	1st half 2nd half		
5,360	...	35	1,03,872	1st half 2nd half		
4,645	...	1,392	70,762	1st half 2nd half		
92,682	...	12,574	5,49,894	1st half 2nd half		
87,892	...	9,151	4,21,627	1st half 2nd half		
18,975	...	1,434	99,559	1st half 2nd half		
19,128	...	4,216	1,08,118	1st half 2nd half		
16,95,025	1,19,003	3,14,237	1,27,43,512	1st half 2nd half		
16,93,132	1,06,763	2,81,310	1,22,26,455	1st half 2nd half		
1,10,93,035	10,09,550	23,92,367	10,23,90,102	...		

Wagon and Traffic Departments, also the General Charges and Special and Miscellaneous expenses, which are not shown separately.

APPENDIX
STATISTICS OF INDIAN
No.
SUMMARY OF
[From No. VIII of

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	Maintenance of way, works and stations.	Locomotive expenses.	Carriage and wagon expenses.	Traffic expenses.
			₹	₹	₹	₹
	Brought forward STANDARD GAUGE	1st half	1,17,19,657	1,30,05,592	37,28,430	64,06,316
		2nd half	1,03,58,306	1,13,84,316	39,03,857	61,75,667
	NARROW GAUGE.	1st half	77,826	1,14,019	28,533	1,00,461
		2nd half	Included with the Bengal and North-Western railway.	21,316	...	...
III	Tirhoot	1st half	1,22,665	1,36,785	57,523	1,16,980
		2nd half	1,97,998	2,33,026	1,643	1,89,105
	Bengal and North-Western	1st half	12,677	7,187	1,643	7,870
		2nd half	6,449	6,569	1,876	8,401
	Bareilly-Pilibhit	1st half	7,39,564	18,41,251	6,54,961	6,93,984
		2nd half	6,63,847	15,39,781	7,51,633	6,48,331
VIII	Rajputana-Malwa	1st half	6,05,494	5,30,220	91,422	2,61,467
XI	Southern Mahratta	1st half	5,94,988	4,76,603	87,683	2,51,301
		2nd half	1,36,406	1,20,841	20,762	58,216
XII	Southern Mahratta, Mysore section	1st half	1,80,134	1,42,572	26,515	75,784
		2nd half	...	...	...	...
	Villupuram-Guntakal—	1st half	25,260	25,206	5,827	9,494
		2nd half	27,449	24,727	4,838	9,381
	Nellore-Tirupati section	1st half	...	...	...	...
		2nd half	3,550	4,071	797	1,544
	Villupuram-Tiruvannamalai section	1st half	27,359	...	...	...
		2nd half	23,621	...	...	...
	Luoknow-Sitapur-Seraman	1st half	12,235	4,042	1,814	7,186
		2nd half	22,208	9,155	1,621	6,996
XXIII	Nalhati	1st half	1,238	4,511	708	2,280
		2nd half	1,307	2,901	749	2,415
XXIV	Cherra-Companyganj	1st half	7,688	6,298	2,575	7,128
		2nd half	7,427	7,770	1,403	7,121
XXV	Jorhat	1st half	4,52,059	5,10,247	1,18,055	2,89,752
		2nd half	5,15,815	4,49,650	1,16,418	2,70,079
XXVI	Burma	1st half	5,64,244	6,19,170	1,43,127	2,33,221
		2nd half	5,84,991	6,43,683	1,25,940	2,44,146
XXVII	Toungoo-Mandalay	1st half	Included with the Burma State railway.	...	...	...
		2nd half	...	...	...	...
	South Indian	1st half	3,283	4,601	387	4,331
		2nd half	21,045	18,911	4,065	19,865
XXXVII	Deogbur	1st half	12,380	14,990	4,316	19,121
		2nd half	34,718	54,952	15,704	23,078
XXXVIII	Rohilkhand-Kumaun (Company's section)	1st half	42,440	57,874	16,468	32,517
		2nd half	61,596	38,904	16,328	23,037
XXXIX	Darjeeling-Himalayan	1st half	61,298	34,433	11,206	21,489
		2nd half	1,170	2,977	2,692	3,489
XL	Dibru-Sadiya	1st half	1,104	2,859	1,689	3,443
		2nd half	21,849	18,785	2,690	10,627
XLI	Thaton-Duyinzsik	1st half	19,817	21,671	3,759	9,538
		2nd half	4,504	5,095	1,812	1,920
XLVI	The Gaskwar's Dabhoi	1st half	4,454	6,499	3,173	2,737
		2nd half	59,159	27,895	1,712	9,711
XLVII	The Gaskwar's Mehsana	1st half	21,592	31,176	2,210	9,747
		2nd half	1,65,542	1,77,814	15,450	85,832
LII	Jodhpore	1st half	1,28,475	1,13,881	13,564	68,664
		2nd half	25,703	29,292	5,705	18,450
LIII	Bhavnagar-Gondal-Junagarh-Porbandar	1st half	23,816	36,464	6,120	18,374
		2nd half	31,79,996	42,94,402	11,56,901	19,83,948
LIV	Morvi	1st half	31,45,160	38,60,355	12,39,501	19,00,234
		2nd half	2,84,06,402	3,25,49,266	1,00,29,076	1,64,70,498
TOTAL NARROW GAUGE		1st half	31,79,996	42,94,402	11,56,901	19,83,948
		2nd half	31,45,160	38,60,355	12,39,501	19,00,234
TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR			2,84,06,402	3,25,49,266	1,00,29,076	1,64,70,498

A—continued.

RAILWAYS—(PART I)—continued.

V—concluded.

EXPENSES—concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

General charges.	Steam-boat service.	Special and miscellaneous expenses.	TOTAL.	1890.	RAILWAY.	Serial number.
R 39,07,047 37,41,253	R 3,65,094 4,18,690	R 9,98,456 8,03,364	R 4,04,03,216 3,70,01,739	1st half 2nd half	} Brought forward STANDARD GAUGE. NARROW GAUGE.	
76,520	52,497	11,037	4,60,393	1st half 2nd half		} Tirhoot . . . . .	} III
1,20,931	64,870	9,044	5,91,941	1st half 2nd half	} Bengal and North-Western	
1,79,975	1,08,399	9,368	9,75,394	1st half 2nd half		} Bareilly-Pilibhit
8,729	...	4,633	42,739	1st half 2nd half	} Rajputana-Malwa . . . . .			} VIII
8,538	...	4,356	36,189	1st half 2nd half		} Southern Mahratta . . . . .	} XI
5,52,632	...	73,659	45,56,001	1st half 2nd half	} Southern Mahratta, Mysore section . . . . .			} XII
6,52,594	...	73,568	42,29,754	1st half 2nd half		} Villupuram-Guntakal—
2,66,603	...	9,119	17,84,326	1st half 2nd half	} Nellore-Tirupati section	
2,84,217	...	17,242	17,12,034	1st half 2nd half		} Villupuram-Tiruvannamalai section
67,824	...	2,229	4,06,278	1st half 2nd half	} Lucknow-Sitapur-Seraman	
83,558	...	9,776	5,18,339	1st half 2nd half		} Nalhāti . . . . .	} XXIII
7,420	...	31,062	1,04,269	1st half 2nd half	} Cherra-Companyganj . . . . .			} XXIV
7,193	...	12,383	85,971	1st half 2nd half		} Jorbāt . . . . .	} XXV
1,184	...	2,290	19,436	1st half 2nd half	} Burma . . . . .			} XXVI
...	...	(a) 1,09,834	1,37,193	1st half 2nd half		} Toungoo-Mandalay . . . . .	} XXVII
...	...	(a) 84,658	1,08,279	1st half 2nd half	} South Indian	
6,488	...	426	32,191	1st half 2nd half		} Deoghur . . . . .	} XXXVII
6,353	...	124	46,462	1st half 2nd half	} Rohilkhand-Kumaun (Company's section) . . . . .			} XXXVIII
3,979	...	84	10,795	1st half 2nd half		} Darjeeling-Himalayan . . . . .	} XXXIX
2,057	...	123	9,552	1st half 2nd half	} Dibru-Sadiya . . . . .			} XL
4,365	...	251	28,305	1st half 2nd half		} Thaton-Duyinzāik . . . . .	} XLI
3,343	...	435	27,499	1st half 2nd half	} The Gaekwar's Dabhoi . . . . .			} XLVI
1,70,226	...	27,420	15,67,759	1st half 2nd half		} The Gaekwar's Mehsāna . . . . .	} XLVII
1,83,143	...	20,372	15,55,432	1st half 2nd half	} Jodhpore . . . . .			} LII
...	1st half 2nd half		} Bhavnagar-Gondal-Junāgūrh-Porbandar . . . . .	} LIII
1,82,275	...	8,480	17,50,517	1st half 2nd half	} Morvi . . . . .			} LIV
1,85,472	...	19,779	18,04,011	1st half 2nd half		} TOTAL NARROW GAUGE.
2,578	15,180	1st half 2nd half	} TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	
21,777	...	3,915	89,578	1st half 2nd half		
19,689	...	3,757	74,253	1st half 2nd half		
26,870	...	6,208	1,61,530	1st half 2nd half		
25,273	...	7,440	1,82,012	1st half 2nd half		
86,316	1,636	1,226	1,79,043	1st half 2nd half		
30,903	-1,636	570	1,56,263	1st half 2nd half		
...	10,328	1st half 2nd half		
35	9,130	1st half 2nd half		
6,124	60,075	1st half 2nd half		
5,598	60,383	1st half 2nd half		
1,629	...	1,567	16,427	1st half 2nd half		
2,332	...	310	19,505	1st half 2nd half		
5,360	...	35	1,03,872	1st half 2nd half		
4,645	...	1,392	70,762	1st half 2nd half		
92,682	...	12,574	5,49,894	1st half 2nd half		
87,892	...	9,151	4,21,627	1st half 2nd half		
18,975	...	1,434	99,559	1st half 2nd half		
19,128	...	4,216	1,08,118	1st half 2nd half		
16,95,025	1,19,003	3,14,237	1,27,43,512	1st half 2nd half		
16,93,132	1,06,763	2,81,310	1,22,26,455	1st half 2nd half		
1,10,93,035	10,09,550	23,92,367	1,02,30,102	...		

Wagon and Traffic Departments, also the General Charges and Special and Miscellaneous expenses, which are not shown separately.

APPENDIX
STATISTICS OF INDIAN
No.

DETAIL OF EXPENSES FOR MAINTENANCE

Half-years ended the 30th June and the 31st December 1890.

[From Abstract A of

Serial number.	RAILWAY.	1890.	General	Maintenance	Repairs	Conservancy of
			superintendence.	of permanent-way.	of bridges, &c.	rivers.
	STANDARD GAUGE.		₹	₹	₹	₹
I	East Indian	1st half	3,13,449	15,39,316	6,11,362	...
		2nd half	2,83,193	8,36,373	80,987	...
II	Patna-Gya	1st half	} Included with the East Indian railway.			...
		2nd half				...
V	Bengal-Nágpur	1st half	1,09,049	1,53,583	48,669	...
		2nd half	1,20,919	2,18,802	1,30,516	...
VI	Indian Midland	1st half	87,563	2,76,259	26,875	...
		2nd half	81,374	2,38,622	29,639	...
VII	Bhopal-Itársi (British section)	1st half	} Included with the Bhopal-Itársi (Native State section)			...
		2nd half				...
X	Dhond-Manmád	1st half	} Included with the Great Indian Peninsula railway.			...
		2nd half				...
XIII	Bezváda Extension	1st half	} Included with the Nizam's Guaranteed State railway.			...
		2nd half				...
XVII	North Western	1st half	3,50,209	15,22,713	3,19,961	1,65,932
		2nd half	3,42,176	12,95,603	2,05,973	82,281
XVIII	Amritsar-Patháńkot	1st half	} Included with the North Western railway.			...
		2nd half				...
XIX	Jammu and Kashmir (British section)	1st half	}			...
		2nd half				...
XX	Oudh and Rohilkhand	1st half	69,582	4,17,019	14,769	2,833
		2nd half	76,318	3,47,854	39,140	8,038
XXI	Eastern Bengal	1st half	1,01,434	3,92,288	51,889	1,806
		2nd half	1,11,536	4,20,488	77,922	1,399
XXII	Bengal Central	1st half	12,711	24,784	1,847	500
		2nd half	12,365	29,863	12,485	453
XXXII	Wardha Coal	1st half	2,643	10,145	5,945	...
		2nd half	2,669	36,822	1,021	...
XXXIII	Great Indian Peninsula	1st half	2,14,153	12,20,201	2,41,922	...
		2nd half	2,13,402	13,07,463	2,56,327	...
XXXIV	Bombay, Baroda and Central India	1st half	99,719	3,94,168	1,39,544	...
		2nd half	98,397	4,08,263	1,07,748	...
XXXV	Madras	1st half	1,28,426	3,21,625	1,96,929	...
		2nd half	1,31,344	2,32,276	1,60,989	...
XXXVI	Táakeshwar	1st half	} Included with the East Indian railway.			...
		2nd half				...
XLII	Khámgaon	1st half	} Included with the Great Indian Peninsula railway.			...
		2nd half				...
XLIII	Amráoti	1st half	}			...
		2nd half				...
XLIV	Bhopal-Itársi (Native State section)	1st half	9,425	86,345	2,295	...
		2nd half	8,021	73,834	1,202	...
XLV	The Nizam's Guaranteed State	1st half	41,590	2,48,577	8,235	...
		2nd half	41,286	1,63,252	17,977	...
XLVIII	The Gaekwar's Petlád (a)	1st half	...	...	...	...
		2nd half	...	...	...	...
L	Rájpura-Bhátinda	1st half	} Included with the North Western railway.			...
		2nd half				...
LI	Jammu and Kashmir (Native State section).	1st half	} Included with the North Western railway.			...
		2nd half				...
	TOTAL STANDARD GAUGE. Carried over.	1st half	15,39,953	66,07,023	16,70,242	1,71,071
		2nd half	15,25,030	56,09,115	11,21,991	92,171

A—continued.

RAILWAYS—(PART I)—continued.

VI.

OF WAY, WORKS, AND STATIONS.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

Repairs of stations and buildings.	Other charges.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
R	R	R	R	R			
2,13,761	2,22,371	29,00,759	4,58,173	24,42,586	1st half	STANDARD GAUGE.	I
90,631	1,96,379	14,89,563	54,144	14,35,419	2nd half		
...	...	...	...	27,234	1st half	} East Indian	II
...	...	...	...	18,778	2nd half		
21,153	17,141	3,49,595	...	3,49,595	1st half	} Patna-Gya	V
24,765	34,905	5,29,907	..	5,29,907	2nd half		
15,059	24,116	4,29,872	...	4,29,872	1st half	} Bengal-Nágpur	VI
20,518	22,447	3,92,660	...	3,92,660	2nd half		
...	...	...	...	...	1st half	} Indian Midland	VII
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Bhopal-Itárai (British section)	X
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Dhond-Manmád	XIII
...	...	...	...	...	2nd half		
2,15,168	3,12,624	28,86,607	41,957	28,44,650	1st half	} Bezvada Extension	XVII
1,95,699	3,83,059	25,04,796	45,115	24,59,681	2nd half		
...	...	...	...	...	1st half	} North Western	XVIII
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Amritsar-Pathánkot	XIX
...	...	...	...	...	2nd half		
26,426	58,954	5,89,583	...	5,89,583	1st half	} Jammu and Kashmir (British section).	XX
16,757	74,039	5,61,946	...	5,61,946	2nd half		
95,401	68,045	7,10,863	65,692	6,45,171	1st half	} Oudh and Rohilkhand	XXI
73,498	81,912	7,66,755	75,328	6,91,427	2nd half		
270	1,377	41,489	164	41,325	1st half	} Eastern Bengal	XXII
3,683	1,792	60,441	...	60,441	2nd half		
314	677	19,724	...	19,724	1st half	} Bengal Central	XXIII
574	2,934	44,050	...	44,050	2nd half		
1,42,350	5,09,979	23,28,605	949	23,28,256	1st half	} Wardha Coal	XXXII
1,83,274	5,43,367	24,53,833	233	24,53,600	2nd half		
78,583	1,05,178	8,17,192	...	8,17,192	1st half	} Great Indian Peninsula	XXXIII
65,593	80,541	7,60,542	...	7,60,542	2nd half		
66,432	71,722	7,85,134	83,250	7,01,884	1st half	} Bombay, Baroda and Central India	XXXIV
1,23,482	82,778	7,30,869	1,79,323	5,51,046	2nd half		
...	...	...	...	17,409	1st half	} Madras	XXXVI
...	...	...	...	8,586	2nd half		
...	...	...	...	...	1st half	} Tárakeshwar	XLII
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Khámgaon	XLIII
...	...	...	...	...	2nd half		
1,522	3,221	1,02,808	...	1,02,808	1st half	} Amráoti	XLIV
2,611	3,834	95,502	...	95,502	2nd half		
6,169	15,790	3,20,361	...	3,20,361	1st half	} Bhopal-Itárai (Native State section).	XLV
6,356	20,735	2,49,606	...	2,49,606	2nd half		
...	...	...	...	...	1st half	} The Nizam's Guaranteed State	XLVIII
...	...	...	...	...	2nd half		
...	...	...	...	41,957	1st half	} The Guékwar's Petlád (a)	L
...	...	...	...	45,115	2nd half		
...	...	...	...	...	1st half	} Rájputra-Bhátinda	LI
...	...	...	...	...	2nd half		
8,82,608	14,11,695	1,22,82,592	6,49,585	1,17,19,657	1st half	} Jammu and Kashmir (Native State section).	LII
7,57,441	15,34,722	1,06,40,470	3,54,843	1,03,58,306	2nd half		
...	...	...	...	...	1st half	} TOTAL STANDARD GAUGE. Carried over.	
...	...	...	...	...	2nd half		

Contractor during the half-year.

APPENDIX
STATISTICS OF INDIAN
No.

DETAIL OF EXPENSES FOR MAINTENANCE

Half-years ended the 30th June and the 31st December 1890.

[From Abstract A of

Serial number.	RAILWAY.	1890.	General superintendence.	Maintenance of permanent-way.	Repairs of bridges, &c.	Conservancy of rivers.
			R	R	R	R
	Brought forward STANDARD GAUGE	1st half	15,39,958	66,07,023	16,70,242	1,71,071
	NARROW GAUGE.	2nd half	15,25,030	56,09,115	11,21,991	92,171
III	Tirhoot	1st half	19,650	47,793	1,864	...
		2nd half	Included with the Bengal and North-Western railway.			...
	Bengal and North-Western	1st half	27,478	39,689	16,918	5,172
		2nd half	44,158	1,24,546	21,017	1,826
Bareilly-Pilibhit	1st half	1,498	5,265	5,003	...	
	2nd half	1,550	3,348	705	...	
VIII	Rajputana-Malwa	1st half	1,70,766	4,52,931	—2,432	...
		2nd half	1,63,184	3,53,487	32,675	...
XI	Southern Mahratta	1st half	1,35,304	4,56,565	45,903	...
		2nd half	1,29,139	4,93,775	34,962	...
XII	Southern Mahratta, Mysore section	1st half	Included with the Southern Mahratta railway.			...
		2nd half	Included with the Southern Mahratta railway.			...
	Villupuram-Guntakal— Nellore-Tirupati section	1st half	11,386	12,083	346	...
		2nd half	13,004	11,553	1,132	...
	Villupuram-Tiruvannamalai section	1st half	...	...	...	...
		2nd half	715	2,608	...	...
	Lucknow-Sitapur-Seramau	1st half	9,347	12,893	447	...
		2nd half	8,934	11,567	429	...
XXIII	Nalhati	1st half	2,217	8,631	158	...
		2nd half	2,162	21,042	331	...
XXIV	Cherra-Companyganj	1st half	...	1,076	88	...
		2nd half	...	1,090	111	...
XXV	Jorhat	1st half	1,177	4,752	249	...
		2nd half	615	5,649	731	...
XXVI	Burma	1st half	67,062	2,78,421	35,223	12,185
		2nd half	67,984	3,75,709	22,484	6,990
XXVII	Toungoo-Mandalay	1st half	Included with the Burma State railway.			...
		2nd half	Included with the Burma State railway.			...
	South Indian	1st half	76,918	3,37,837	11,897	...
		2nd half	83,635	3,62,135	26,979	...
XXXVII	Deoghur	1st half	...	...	...	...
XXXVIII	Rohilkhand-Kumaun (Company's section)	1st half	3,007	13,056	845	...
		2nd half	2,961	6,293	247	...
XXXIX	Darjeeling-Himalayan	1st half	7,919	14,757	5,307	...
		2nd half	10,179	17,861	21,402	...
XL	Dibrú-Sadiya	1st half	6,433	46,119	3,743	...
		2nd half	7,110	41,333	1,810	...
XLI	Thaton-Dujinzák	1st half	...	1,170	...	...
		2nd half	...	1,104	...	...
XLVI	The Gaekwar's Dabhoi	1st half	3,242	12,584	4,857	...
		2nd half	3,132	10,000	4,224	...
XLVII	The Gaekwar's Mehasna	1st half	1,059	3,445	...	...
		2nd half	1,069	3,385	...	...
LII	Jodhpore	1st half	2,228	51,221	2,397	...
		2nd half	2,349	16,527	989	...
LIII	Bhavnagar-Gondal-Junagarh-Porbandar	1st half	28,577	1,19,950	807	...
		2nd half	28,534	85,337	777	...
LIV	Morvi	1st half	3,319	21,119	1,096	...
		2nd half	4,752	18,378	403	...
	TOTAL NARROW GAUGE	1st half	5,78,605	19,41,387	1,34,716	17,357
		2nd half	5,75,164	19,71,727	1,71,408	8,816
	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	...	42,18,752	1,61,29,252	30,98,357	2,89,415

A—continued.

RAILWAYS—(PART I)—continued.

VI—concluded.

OF WAY, WORKS, AND STATIONS—concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

Repairs of stations and buildings.	Other charges.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
R		R	R	R			
8,82,608	14,11,695	1,22,82,592	6,49,585	1,17,19,657	1st half	Brought forward STANDARD GAUGE.	
7,57,441	15,34,722	1,06,41,470	3,54,643	1,03,58,306	2nd half		
5,280	5,568	80,165	2,339	77,826	1st half	NARROW GAUGE.	
...	...	...	...	...	2nd half		
15,607	17,793	1,22,665	...	1,22,665	1st half	Tirhoot	III
13,063	13,721	2,18,329	20,331	1,97,998	2nd half		
393	578	12,677	...	12,677	1st half	Bengal and North-Western	
317	529	6,449	...	6,449	2nd half		
47,233	71,016	7,39,564	...	7,39,564	1st half	Rajputana-Malwa	VIII
49,429	60,072	6,63,847	...	6,63,847	2nd half		
23,607	75,501	7,41,900	1,36,406	6,05,494	1st half	Southern Mahratta	XI
31,873	85,373	7,75,122	1,80,134	5,94,988	2nd half		
...	...	...	...	1,36,406	1st half	Southern Mahratta, Mysore section	XII
...	1,80,134	2nd half		
531	914	25,260	...	25,260	1st half	Villupuram-Guntakal— Nellore-Tirupati section	
1,250	510	27,449	...	27,449	2nd half		
...	227	3,550	...	3,550	1st half	Villupuram-Tiruvannamalai section.	
...	...	...	...	...	2nd half		
1,461	3,211	27,359	...	27,359	1st half	Lucknow-Sitapur-Seraman	
995	1,696	23,621	...	23,621	2nd half		
283	958	12,247	12	12,235	1st half	Nalhati	XXIII
460	1,160	25,155	2,947	22,208	2nd half		
69	...	1,233	...	1,233	1st half	Cherra-Companyganj	XXIV
106	...	1,307	...	1,307	2nd half		
983	527	7,688	...	7,688	1st half	Jorbhat	XXV
239	193	7,427	...	7,427	2nd half		
12,353	46,795	4,52,059	...	4,52,059	1st half	Burma	XXVI
11,221	31,427	5,15,815	...	5,15,815	2nd half		
...	...	...	...	...	1st half	Toungoo-Mandalay	XXVII
...	2nd half		
18,231	1,22,929	5,67,812	3,568	5,64,244	1st half	South Indian	
18,519	94,904	5,86,172	1,181	5,84,991	2nd half		
...	...	3,283	...	3,283	1st half	Deoghur	XXXVII
...	2nd half		
1,967	2,170	21,045	...	21,045	1st half	Rohilkhand-Kumaun (Company's section).	XXXVIII
2,017	862	12,380	...	12,390	2nd half		
4,194	2,541	34,718	...	34,718	1st half	Darjeeling-Himalayan	XXXIX
2,528	1,803	53,768	11,328	42,440	2nd half		
2,136	5,132	63,563	1,967	61,596	1st half	Dibra-Sadiya	XL
10,001	1,800	62,054	756	61,298	2nd half		
...	...	1,170	...	1,170	1st half	Thalou-Duyinzaiik	XLI
...	...	1,104	...	1,104	2nd half		
844	322	21,849	...	21,849	1st half	The Gaekwar's Dabhoi	XLVI
847	1,614	19,817	...	19,817	2nd half		
...	...	4,504	...	4,504	1st half	The Gaekwar's Mehsana	XLVII
...	...	4,454	...	4,454	2nd half		
1,112	2,201	59,159	...	59,159	1st half	Jodhpore	LII
715	1,012	21,592	...	21,592	2nd half		
4,718	11,490	1,65,542	...	1,65,542	1st half	Bhavnagar-Gondal-Junagarh-Porbandar.	LIII
4,428	9,399	1,28,475	...	1,28,475	2nd half		
145	24	25,703	...	25,703	1st half	Morvi	LIV
117	166	23,816	...	23,816	2nd half		
1,46,147	3,69,670	31,87,882	1,44,292	31,79,996	1st half	TOTAL NARROW GAUGE.	
1,48,120	3,06,468	31,81,703	2,16,677	31,45,160	2nd half		
19,34,316	36,22,555	2,92,95,930	13,65,197	2,84,06,402	...	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	

APPENDIX
STATISTICS OF INDIAN
No.
DETAIL OF LOCOMOTIVE

Half-years ended the 30th June and the 31st December 1890.

[From Abstract B of

Serial number.	RAILWAY.	1890.	General superintendence.	Wages of drivers and firemen, fuelling, cleaning engines, &c.	Fuel.	Water.	Oil, tallow, and other stores.
			R	R	R	R	R
STANDARD GAUGE.							
I	East Indian	{ 1st half 2nd half	2,38,073 2,21,438	5,71,247 5,36,791	2,08,064 1,69,698	29,345 25,619	90,172 1,13,131
II	Patna-Gya	{ 1st half 2nd half	Included with the East Indian railway.			...	...
V	Bengal-Nágpur	{ 1st half 2nd half	28,858 33,424	45,174 89,600	69,346 51,806	6,929 5,847	9,189 9,331
VI	Indian Midland	{ 1st half 2nd half	32,799 34,850	92,540 82,401	1,64,849 1,34,861	14,330 12,897	20,461 17,879
VII	Bhopal-Itárai (British section)	{ 1st half 2nd half	Included with the Indian Midland railway.			...	...
X	Dhond-Manmád	{ 1st half 2nd half	Included with the Great Indian Peninsula railway.			...	...
XIII	Bezváda Extension	{ 1st half 2nd half	Included with the Nizam's Guaranteed State railway.			...	...
XVII	North Western	{ 1st half 2nd half	1,89,554 1,72,863	6,19,071 5,80,699	11,59,725 9,35,830	53,015 48,299	83,472 92,607
XVIII	Amritsar-Patháukot	{ 1st half 2nd half	Included with the North Western railway.			...	...
XIX	Jammu and Kashmir (British section).	{ 1st half 2nd half	Included with the North Western railway.			...	...
XX	Oudh and Rohilkhand	{ 1st half 2nd half	48,898 52,605	75,999 73,403	1,77,353 1,29,291	8,467 7,684	25,853 18,894
XXI	Eastern Bengal	{ 1st half 2nd half	62,115 62,092	1,55,062 1,61,088	1,47,487 1,47,851	14,948 15,481	48,507 48,481
XXII	Bengal Central	{ 1st half 2nd half	Included with the Eastern Bengal railway.			...	...
	Wardha Coal	{ 1st half 2nd half	3,278 3,748	5,030 4,369	8,517 7,705	748 569	851 849
XXXII	Great Indian Peninsula	{ 1st half 2nd half	1,77,057 1,77,874	8,44,721 7,33,348	14,35,061 10,76,739	83,589 77,711	1,27,730 1,13,627
XXXIII	Bombay, Baroda and Central India	{ 1st half 2nd half	58,005 55,808	2,02,643 1,71,466	4,13,582 3,10,511	24,527 21,276	36,277 30,579
XXXIV	Madras	{ 1st half 2nd half	52,107 47,335	1,62,465 1,74,913	3,12,109 3,43,776	11,527 12,255	20,265 23,808
XXXVI	Tárakeshwar	{ 1st half 2nd half	Included with the East Indian railway.			...	...
XLII	Kháungon	{ 1st half 2nd half	Included with the Great Indian Peninsula railway.			...	...
XLIII	Amráoti	{ 1st half 2nd half	Included with the Great Indian Peninsula railway.			...	...
XLIV	Bhopal-Itárai (Native State section).	{ 1st half 2nd half	Included with the Indian Midland railway.			...	...
XLV	The Nizam's Guaranteed State	{ 1st half 2nd half	14,113 17,840	39,697 36,762	58,317 53,933	8,555 7,340	5,554 7,731
XLVIII	The Gaekwar's Petlád	{ 1st half 2nd half	Included with the Bombay, Baroda and Central India railway.			...	...
L	Rájpura-Bhátinda	{ 1st half 2nd half	Included with the North Western railway.			...	...
LI	Jammu and Kashmir (Native State section).	{ 1st half 2nd half	Included with the North Western railway.			...	...
TOTAL STANDARD GAUGE. Carried over.		{ 1st half 2nd half	9,04,857 8,79,677	28,13,649 25,94,840	41,54,400 33,62,001	2,55,980 2,34,978	4,63,331 4,76,917

(a) The difference between the figures in columns "Total" and "Net Total" represents the expenditure incurred by the East India railway for working

A—continued.

RAILWAYS—(PART I)—continued.

VII.

EXPENSES.

[Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890

Maintenance and renewal of locomotive engines and machinery.	Other charges.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
R	R	R	R	R			
5,46,886	2,50,874	19,34,661	67,211	18,67,450	1st half	STANDARD GAUGE.	I
4,90,442	1,87,076	17,44,195	60,359	16,83,836	2nd half		
...	...	...	...	{ 20,857	1st half	} Patna-Gya	II
...	...	...	...	22,045	2nd half		
50,723	21,370	2,31,589	...	(a) 2,53,501	1st half	} Bengal-Nágpur	V
95,075	18,319	2,53,402	...	(a) 2,81,640	2nd half		
61,321	37,239	4,23,539	55,125	3,68,414	1st half	} Indian Midland	VI
56,153	41,749	3,80,790	44,185	3,36,605	2nd half		
...	...	...	...	...	1st half	} Bhopal-Itársi (British section)	VII
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Dhond-Manmád	X
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Bezváda Extension	XIII
8,14,132	2,68,933	31,87,902	52,798	31,35,104	2nd half		
6,45,201	2,15,406	26,88,905	52,663	26,36,242	1st half	} North Western	XVII
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Amritsar-Patháukot	XVIII
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Jammu and Kashmir (British section).	XIX
...	...	...	...	...	2nd half		
84,016	1,02,424	5,23,010	...	5,23,010	1st half	} Oudh and Rohilkhand	XX
83,066	81,818	4,46,761	...	4,46,761	2nd half		
1,73,967	63,865	6,60,951	87,581	5,73,370	1st half	} Eastern Bengal	XXI
1,63,116	45,896	6,44,005	82,153	5,61,852	2nd half		
...	...	...	...	{ 46,536	1st half	} Bengal Central	XXII
...	...	...	...	42,202	2nd half		
7,649	29	26,102	...	26,102	1st half	} Wardha Coal	XXIII
8,262	48	25,550	...	25,550	2nd half		
6,16,355	6,67,257	39,51,770	...	39,51,770	1st half	} Great Indian Peninsula	XXXII
6,28,884	5,31,759	33,39,742	...	33,39,742	2nd half		
1,70,577	1,46,937	10,52,548	1,309	10,51,239	1st half	} Bombay, Baroda and Central India	XXXIII
1,51,095	77,757	8,18,492	3,658	8,14,834	2nd half		
2,43,355	71,058	8,72,886	...	8,72,886	1st half	} Madras	XXXIV
2,26,275	52,354	8,80,716	156	8,80,560	2nd half		
...	...	...	...	{ 13,298	1st half	} Tárakeshwar	XXXVI
...	...	...	...	10,075	2nd half		
...	...	...	...	...	1st half	} Khámgaon	XLII
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Amráoti	XLIII
...	...	...	...	...	2nd half		
...	...	...	...	{ 55,125	1st half	} Bhopal-Itársi (Native State section).	XLIV
...	...	...	...	44,185	2nd half		
37,909	28,588	1,92,823	...	1,92,823	1st half	} The Nizam's Guaranteed State	XLV
39,333	38,927	2,01,866	...	2,01,866	2nd half		
...	...	...	...	{ 1,309	1st half	} The Gaekwar's Petlád	XLVIII
...	...	...	...	3,658	2nd half		
...	...	...	...	{ 52,798	1st half	} Rájpara-Bhátinda	L
...	...	...	...	52,663	2nd half		
...	...	...	...	...	1st half	} Jammu and Kashmir (Native State section).	LI
...	...	...	...	...	2nd half		
28,06,980	16,58,574	1,30,57,781	2,64,024	1,30,05,592	1st half	} TOTAL STANDARD GAUGE. Carried over.	
25,86,902	12,89,109	1,14,24,424	2,43,174	1,13,84,316	2nd half		

the Asansol-Goalkera section, the details of which are included with the figures of the former line.

APPENDIX
STATISTICS OF INDIAN

No

DETAIL OF

[From Abstract B o

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	General superintendence.	Wages of drivers and firemen, fuelling, cleaning engines, &c.	Fuel.	Water.	Oil, tallow, and other stores.
			R	R	R	R	R
	Brought forward STANDARD GAUGE.	1st half	9,04,857	28,13,649	41,54,410	2,55,980	4,63,331
		2nd half	8,79,677	25,94,840	33,62,001	2,34,978	4,76,917
	NARROW GAUGE.	1st half	15,944	33,239	29,322	2,756	8,062
		2nd half	Included with the Bengal and North-Western railway.				
III	Tirhoot	1st half	17,907	29,118	57,717	3,247	5,197
		2nd half	30,837	58,589	79,664	6,601	13,343
	Bengal and North-Western	1st half	1,458	1,497	2,433	153	323
		2nd half	1,663	1,486	1,697	104	304
	Bareilly-Pilibhit	1st half					
		2nd half					
VIII	Rajputana-Malwa	1st half	1,54,832	3,71,630	8,02,537	35,889	49,900
		2nd half	1,52,027	3,24,164	6,25,894	34,625	41,564
XI	Southern Mahratta	1st half	64,845	1,07,590	2,53,791	17,695	14,364
		2nd half	67,807	1,07,574	2,59,008	17,613	15,520
XII	Southern Mahratta, Mysore section	1st half	Included with the Southern Mahratta railway.			...	...
		2nd half					
	Villupuram-Guntakal—	1st half	Included with the South Indian railway.			...	...
		2nd half					
	Nellore-Tirupati section	1st half	Included with the South Indian railway.			...	...
		2nd half					
	Villupuram-Tiruvannamalai section.	1st half	Included with the South Indian railway.			...	...
		2nd half					
	Lucknow-Sitapur-Seramau	1st half	Shown under Special and Miscellaneous expenses.			...	...
		2nd half					
XXIII	Nalhati	1st half	1,147	720	945	142	281
		2nd half	1,240	651	1,160	163	259
XXIV	Cherra-Companyganj	1st half	402	659	2,112	...	180
		2nd half	402	540	1,007	...	78
XXV	Jorhat	1st half	1,522	916	1,525	243	456
		2nd half	896	1,028	1,146	281	278
XXVI	Burma	1st half	44,182	1,12,059	2,20,948	17,525	23,791
		2nd half	51,614	1,04,055	1,70,877	14,301	25,059
XXVII	Toungoo-Mandalay	1st half	Included with the Burma State railway.			...	...
		2nd half					
	South Indian	1st half	50,015	1,04,730	2,37,218	10,654	19,597
		2nd half	47,854	1,09,370	2,98,924	11,068	20,065
XXXVII	Deoghur	1st half	...	...	...	...	...
		2nd half					
XXXVIII	Rohilkhand-Kumaun (Company's section).	1st half	3,614	3,877	6,806	382	879
		2nd half	3,768	3,393	3,940	360	705
XXXIX	Darjeeling-Himalayan	1st half	2,018	12,441	17,960	412	2,723
		2nd half	2,125	12,058	21,610	395	2,289
XL	Dibru-Sadiya	1st half	4,771	6,803	8,681	1,564	3,172
		2nd half	4,369	6,315	7,227	1,098	2,191
XLI	Thaton-Duyinzak	1st half	...	942	592	...	465
		2nd half					
XLVI	The Gaekwar's Dabhoi	1st half	456	3,547	8,370	1,150	757
		2nd half	456	3,245	8,159	1,306	677
XLVII	The Gaekwar's Mehsana	1st half	Included with the Rajputana-Malwa railway.			...	...
		2nd half					
LII	Jodhpore	1st half	1,820	2,524	18,630	968	1,375
		2nd half	1,864	2,822	20,215	932	954
LIII	Bhavnagar-Gondal-Junagarh-Porbandar.	1st half	14,423	34,399	95,993	3,125	5,199
		2nd half	12,986	24,656	50,394	3,287	3,358
LIV	Morvi	1st half	1,609	4,005	15,213	1,627	2,169
		2nd half	2,056	4,334	19,358	2,572	2,262
	TOTAL NARROW GAUGE	1st half	3,80,965	8,30,696	17,65,443	97,532	1,38,890
		2nd half	3,81,554	7,64,515	15,70,080	94,666	1,28,906
TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.			25,47,053	70,03,500	1,08,71,934	6,83,156	12,08,044

A—continued.

RAILWAYS (PART I)—continued.

VII—concluded.

LOCOMOTIVE EXPENSES—concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

Maintenance and renewal of locomotive engines and machinery.	Other charges.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
R 28,06,980 25,86,902	R 16,58,574 12,89,109	1,30,57,781 1,14,24,424	R 2,64,024 2,43,174	R 1,30,05,592 1,13,84,316	1st half 2nd half	Brought forward STANDARD GAUGE.	
						NARROW GAUGE.	
15,817	8,987	1,14,127	108	1,14,019	1st half 2nd half	Tirhoot	III
11,680	11,919	1,36,785	...	1,36,785	1st half	Bengal and North-Western	
92,252	11,758	2,33,041	18	2,33,026	2nd half	Bareilly-Pilibhit	
1,323	...	7,187	...	7,187	1st half		
1,255	...	6,569	...	6,569	2nd half		
2,79,425	1,52,083	18,46,346	5,095	18,41,251	1st half	Rajputana-Malwa	VIII
2,76,675	91,431	15,46,280	6,499	15,39,781	2nd half		
94,115	93,601	6,51,061	1,20,841	5,30,220	1st half	Southern Mahratta	XI
98,617	53,546	6,19,175	1,42,572	4,76,603	2nd half		
...	...	...	...	1,20,841	1st half	Southern Mahratta, Mysore section	XII
...	...	...	...	1,42,572	2nd half		
...	...	...	...	25,208	1st half	Villupuram-Guntakal—	
...	...	...	...	24,727	2nd half	Nellore Tirupati section.	
...	...	...	...	4,071	1st half	Villupuram-Tiruvannamalai section.	
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	Lucknow-Sitapur-Seraman	
...	...	...	...	...	2nd half		
803	4	4,042	...	4,042	1st half	Nalhati	XXIII
5,634	18	9,155	...	9,155	2nd half		
1,147	11	4,511	...	4,511	1st half	Cherra-Companyganj	XXIV
870	4	2,901	...	2,901	2nd half		
1,228	408	6,298	...	6,298	1st half	Jorhat	XXV
8,965	176	7,770	...	7,770	2nd half		
62,443	29,299	5,10,247	...	5,10,247	1st half	Burma	XXVI
62,980	20,964	4,49,650	...	4,49,650	2nd half		
...	...	...	...	...	1st half	Toungoo-Mandalay	XXVII
...	...	...	...	...	2nd half		
1,83,088	94,307	6,49,609	80,439	6,19,170	1st half	South Indian	
1,13,900	77,847	6,78,528	31,845	6,43,683	2nd half		
...	...	4,601	...	4,601	1st half	Deoghur	XXXVII
...	...	18,911	...	18,911	2nd half		
3,353	...	14,990	...	14,990	1st half	Robilkhand-Kumana (Company's section).	XXXVIII
2,319	...	54,952	...	54,952	2nd half		
12,108	7,290	54,952	...	54,952	1st half	Darjeeling-Himalayan	XXXIX
11,948	7,611	58,034	160	57,874	2nd half		
13,713	...	38,904	...	38,904	1st half	Dibra-Sadiya	XL
13,238	...	34,433	...	34,433	2nd half		
978	...	2,977	...	2,977	1st half	Thaton-Duyinzdik	XLI
...	...	2,859	...	2,859	2nd half		
3,273	1,232	18,785	...	18,785	1st half	The Gaekwar's Dabhoi	XLVI
6,787	1,041	21,671	...	21,671	2nd half		
...	...	...	...	5,095	1st half	The Gaekwar's Mehsana	XLVII
...	...	...	...	6,499	2nd half		
2,578	...	27,895	...	27,895	1st half	Judhpore	LII
4,388	1	31,176	...	31,176	2nd half		
16,135	9,140	1,77,814	...	1,77,814	1st half	Bhavnagar-Gondal-Junagarh-Porbandar.	LIII
17,731	1,469	1,13,881	...	1,13,881	2nd half		
4,658	11	29,292	...	29,292	1st half	Morvi	LIV
5,400	482	36,464	...	36,464	2nd half		
6,57,865	4,08,352	42,99,743	1,56,483	42,94,402	1st half	TOTAL NARROW GAUGE.	
6,57,852	2,66,348	38,68,580	1,84,094	38,60,355	2nd half		
67,09,599	36,22,388	3,26,53,129	8,47,775	3,25,49,266	...	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	

APPENDIX
STATISTICS OF INDIAN
No.
DETAIL OF CARRIAGE

Half-years ended the 30th June and the 31st December 1890.

[From Abstract C of

Serial number.	RAILWAY.	1890.	General superintendence.	REPAIRS AND RENEWALS OF VEHICLES AND MACHINERY.		Cleaning and oiling.
				Coaching.	Goods.	
			R	R	R	R
STANDARD GAUGE.						
I	East Indian	{ 1st half 2nd half	58,355 53,552	96,950 93,838	(a) 4,16,584 (b) 4,06,206	38,060 43,060
II	Patna-Gya	{ 1st half 2nd half	Included with the East Indian railway.			...
V	Bengal-Nágpur	{ 1st half 2nd half	7,275 8,225	9,941 7,186	13,193 38,794	14,945 13,101
VI	Indian Midland	{ 1st half 2nd half	10,929 11,616	47,120 33,288	37,043 31,954	18,178 16,397
VII	Bhopal-Itársi (British section)	{ 1st half 2nd half	Included with the Indian Midland railway.			...
X	Dhond-Manmád	{ 1st half 2nd half	Included with the Great Indian Peninsula railway.			...
XIII	Bezváda Extension	{ 1st half 2nd half	Included with the Nizam's Guaranteed State railway.			...
XVII	North Western	{ 1st half 2nd half	55,683 76,726	4,34,337 3,11,381	3,23,740 6,73,328	1,08,936 1,04,562
XVIII	Amritsar-Pathánkot	{ 1st half 2nd half	Included with the North Western railway. ...			...
XIX	Jammu and Kashmir (British section)	{ 1st half 2nd half	Included with the Eastern Bengal railway.			...
XX	Oudh and Rohilkhand	{ 1st half 2nd half	9,092 9,870	45,423 52,114	92,823 38,748	23,734 19,940
XXI	Eastern Bengal	{ 1st half 2nd half	35,985 36,312	94,510 1,13,295	1,20,368 1,48,828	28,202 29,117
XXII	Bengal Central	{ 1st half 2nd half	Included with the Eastern Bengal railway.			...
	Wardha Coal	{ 1st half 2nd half	2,034 2,319	970 86	9,110 9,583	2,607 3,832
XXXII	Great Indian Peninsula	{ 1st half 2nd half	52,940 52,000	3,37,580 2,94,692	4,14,727 3,84,633	1,26,363 1,22,672
XXXIII	Bombay, Baroda and Central India	{ 1st half 2nd half	25,264 23,344	79,094 75,854	1,72,547 1,24,689	30,874 24,889
XXXIV	Madras	{ 1st half 2nd half	14,400 18,134	80,431 81,754	91,092 1,95,958	28,894 29,388
XXXVI	Tárakeshwar	{ 1st half 2nd half	Included with the East Indian railway. ...			...
XLII	Khámgaon	{ 1st half 2nd half	Included with the Great Indian Peninsula railway.			...
XLIII	Amráoti	{ 1st half 2nd half	Included with the Great Indian Peninsula railway.			...
XLIV	Bhopal-Itársi (Native State section)	{ 1st half 2nd half	Included with the Indian Midland railway. ...			...
XLV	The Nizam's Guaranteed State	{ 1st half 2nd half	6,868 7,632	18,180 14,810	8,024 11,581	7,638 7,446
XLVIII	The Gaskwar's Petlád	{ 1st half 2nd half	Included with the Bombay, Baroda and Central India railway.			...
L	Rájpura-Bhátinda	{ 1st half 2nd half	Included with the North Western railway.			...
LI	Jammu and Kashmir (Native State section).	{ 1st half 2nd half	Included with the North Western railway.			...
TOTAL STANDARD GAUGE. Carried over		1st half	2,78,825	12,44,536	16,99,251	4,28,431
		2nd half	2,99,730	10,78,298	20,64,302	4,14,424

(a) Includes R577 on account of repairs and renewals of station machinery.
(b) Includes R436 on account of repairs and renewals of station machinery.

A—continued.

RAILWAYS—(PART I)—continued.

VIII.

AND WAGON EXPENSES.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

Other charges.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
R	R	R	R			
8,278	6,18,227	17,731	6,00,496	1st half	STANDARD GAUGE.	
8,765	6,05,421	19,856	5,85,565	2nd half	East Indian	I
...	...	...	6,711	1st half	Patna-Gya	II
394	45,748	...	7,651	2nd half		
1,564	68,870	...	(c) 52,490	1st half	Bengal-Nággpur	V
			(e) 77,559	2nd half		
213	1,13,483	14,772	98,711	1st half	Indian Midland	VI
372	98,627	10,871	82,756	2nd half		
...	...	...	...	1st half	Bhopal-Itárai (British section)	VII
...	...	...	...	2nd half		
...	...	...	...	1st half	Dhond-Manmád	X
...	...	...	...	2nd half		
...	...	...	...	1st half	Bezváda Extension	XIII
21,831	9,44,527	18,144	9,26,383	2nd half		
27,464	11,98,481	26,564	11,66,917	1st half	North Western	XVII
...	...	...	...	2nd half		
...	...	...	...	1st half	Amritsar-Pathámkot	XVIII
...	...	...	...	2nd half		
416	1,71,488	...	1,71,488	1st half	Jammu and Kashmir (British section)	XIX
366	1,21,038	...	1,21,038	2nd half		
6,594	2,85,659	1,06,092	1,79,567	1st half	Oudh and Rohilkhand	XX
11,874	3,39,426	1,00,624	2,38,802	2nd half		
...	...	...	14,738	1st half	Eastern Bengal	XXI
...	...	...	17,904	2nd half		
...	14,721	...	14,721	1st half	Bengal Central	XXII
...	15,823	...	15,823	2nd half		
1,02,230	10,33,840	2,025	10,31,815	1st half	Wardha Coal	XXXII
64,857	9,18,854	3,170	9,15,684	2nd half		
22,101	8,29,880	410	8,29,470	1st half	Bombay, Baroda and Central India	XXXIII
8,879	2,57,656	1,151	2,56,504	2nd half		
11,974	2,26,791	3,366	2,23,425	1st half	Madras	XXXIV
12,846	3,38,080	3,988	3,34,092	2nd half		
...	...	...	4,277	1st half	Tárakeshwar	XXXVI
...	...	...	3,507	2nd half		
...	...	...	...	1st half	Khámgaon	XLII
...	...	...	...	2nd half		
...	...	...	...	1st half	Amráoti	XLIII
...	...	...	...	2nd half		
...	...	...	14,772	1st half	Bhopal-Itárai (Native State section)	XLIV
...	...	...	10,871	2nd half		
102	40,812	...	40,812	1st half	The Nizam's Guaranteed State	XLV
...	41,469	...	41,469	2nd half		
...	...	...	410	1st half	The Gaekwar's Petlád	XLVIII
...	...	...	1,151	2nd half		
...	...	...	18,144	1st half	Rájputra-Bhátinda	L
...	...	...	26,564	2nd half		
...	...	...	...	1st half	Jammu and Kashmir (Native State section).	LI
...	...	...	...	2nd half		
1,74,133	38,25,176	1,62,540	37,28,430	1st half	TOTAL STANDARD GAUGE. Carried over.	
1,36,990	39,93,744	1,66,224	39,03,857	2nd half		

(c) The difference between the figures in columns "Total" and "Net Total" represents the expenditure incurred by the East Indian railway for working the Asansol-Guilkerá section, the details of which are included with the figures of the former line.

APPENDIX
STATISTICS OF INDIAN
No.
DETAIL OF CARRIAGE
[From Abstract C of

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	General superintendence.	REPAIRS AND RENEWALS OF VEHICLES AND MACHINERY.		Cleaning and oiling.
				Coaching.	Goods.	
			R	R	R	R
	Brought forward STANDARD GAUGE	1st half 2nd half	2,78,825 2,99,730	12,44,536 10,78,298	16,99,251 20,64,302	4,28,431 4,14,424
	NARROW GAUGE.					
III	Tirhoot	1st half 2nd half	5,694 Included with the Bengal and North-Western railway.	5,050 5,031	11,301 4,258	6,073 5,024
	Bengal and North-Western	1st half 2nd half	6,059 10,596	5,031 16,518	4,258 19,019	5,024 9,443
	Bareilly-Pilibhit	1st half 2nd half	486 526	431 314	353 389	349 322
VIII	Rajputana-Malwa	1st half 2nd half	36,843 35,461	1,71,998 2,12,808	3,53,088 4,17,993	68,412 67,642
XI	Southern Mahratta	1st half 2nd half	21,000 21,460	35,756 35,122	41,091 43,063	13,577 14,065
XII	Southern Mahratta, Mysore section	1st half 2nd half	} Included with the Southern Mahratta railway.			...
	Vilupuram-Guntakal—					
	Nellore-Tirupati section	1st half 2nd half	} Included with the South Indian railway.			...
	Vilupuram-Tiruvandámalai section	1st half 2nd half	} Included with the South Indian railway.			...
	Lucknow-Sitapur-Seraman	1st half 2nd half	} Shown under Special and Miscellaneous expenses.			...
XXIII	Nalhati	1st half 2nd half	577 620	659 578	392 235	186 188
XXIV	Cherra-Companyganj	1st half 2nd half	102 102	354 364	132 162	120 131
XXV	Jorhat	1st half 2nd half	372 224	220 94	1,545 661	434 424
XXVI	Burma	1st half 2nd half	10,550 12,726	36,522 40,094	51,731 40,031	17,063 16,353
XXVII	Toungoc-Mandalay	1st half 2nd half	} Included with the Burma State railway.			...
	South Indian	1st half 2nd half	11,772 12,072	49,581 42,197	64,767 56,860	12,551 12,659
XXXVII	Deoghur	1st half 2nd half	...	...	...	...
XXXVIII	Rohilkhand-Kumaun (Company's section)	1st half 2nd half	1,204 1,194	1,066 708	867 869	867 735
XXXIX	Darjeeling-Himalayan	1st half 2nd half	1,891 1,978	4,840 5,500	7,428 7,700	1,545 1,450
XL	Dibru-Sadiya	1st half 2nd half	1,170 1,170	2,189 1,922	7,909 5,403	5,060 2,630
XLI	Thaton-Duyinzáik	1st half 2nd half	...	802	} Included with coaching.	
XLVI	The Gaekwar's Dabhoi	1st half 2nd half	152 152	190 726	1,192 1,862	1,154 1,014
XLVII	The Gaekwar's Mehsána	1st half 2nd half	} Included with the Rajputana-Malwa railway.			...
LII	Jodhpore	1st half 2nd half	480 480	235 623	304 479	693 628
LIII	Bhánagar-Gondal-Junágarh-Porbandar	1st half 2nd half	4,808 4,329	4,062 4,387	2,791 1,896	3,119 2,941
LIV	Morvi	1st half 2nd half	1,222 1,728	1,273 1,537	857 833	2,084 1,706
	TOTAL NARROW GAUGE	1st half 2nd half	1,04,382 1,04,818	3,20,259 3,63,492	5,50,006 6,97,445	1,38,920 1,32,331
	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	...	7,87,755	30,06,585	49,11,004	11,14,106

—continued.

RAILWAYS—(PART I)—continued.

VIII—concluded.

AND WAGON EXPENSES—concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

Other charges.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
R	R	R	R			
1,74,133	38,25,176	1,62,540	37,28,430	1st half	Brought forward STANDARD GAUGE.	
1,36,990	39,93,744	1,66,224	39,03,857	2nd half		
415	28,533	...	28,533	1st half	NARROW GAUGE.	
...	...	...	...	2nd half		
944	21,316	...	21,316	1st half	Tirhoot	III
1,947	57,523	...	57,523	2nd half		
24	1,643	...	1,643	1st half	Bengal and North-Western	}
825	1,876	...	1,876	2nd half		
26,432	6,56,773	1,812	6,54,961	1st half	Rajputana-Malwa	VIII
20,902	7,54,806	3,173	7,51,633	2nd half		
760	1,12,184	20,762	91,422	1st half	Southern Mahratta	XI
487	1,14,197	26,514	87,683	2nd half		
...	...	...	20,762	1st half	Southern Mahratta, Mysore section.	XII
...	26,515	2nd half		
...	...	...	5,927	1st half	Vilupuram-Guntakal—	
...	...	...	4,838	2nd half		Nellore-Tirupati section.
...	...	...	797	1st half	Vilupuram-Tiruvannamalai section.	
...	...	...	...	2nd half		
...	...	...	...	1st half	Lucknow-Sitapur-Seramau	
...	...	...	...	2nd half		
...	1,814	...	1,814	1st half	Nalhati	XXIII
...	1,621	...	1,621	2nd half		
...	708	...	708	1st half	Cherra-Companyganj	XXIV
...	749	...	749	2nd half		
4	2,575	...	2,575	1st half	Jorhat	XXV
...	1,403	...	1,403	2nd half		
2,189	1,18,055	...	1,18,055	1st half	Burma	XXVI
7,214	1,16,418	...	1,16,418	2nd half		
...	...	...	...	1st half	Toungoo-Mandalay	XXVII
...	2nd half		
11,788	1,50,459	7,332	1,43,127	1st half	South Indian	}
9,129	1,32,917	6,977	1,25,940	2nd half		
...	387	...	387	1st half	Deoghur	XXXVII
...	2nd half		
61	4,065	...	4,065	1st half	Rohilkhand-Kumaun (Company's section)	XXXVIII
810	4,316	...	4,316	2nd half		
...	15,704	...	15,704	1st half	Darjeeling-Himalayan	XXXIX
...	16,628	160	16,468	2nd half		
...	16,328	...	16,328	1st half	Dibra-Sadiya	XL
81	11,206	...	11,206	2nd half		
1,281	2,692	...	2,692	1st half	Thaton-Dayinzaiik	XLI
...	1,689	...	1,689	2nd half		
2	2,690	...	2,690	1st half	The Gaekwar's Dabhoi	XLVI
6	3,759	...	3,759	2nd half		
...	...	...	1,812	1st half	The Gaekwar's Mehsana	XLVII
...	3,173	2nd half		
...	1,712	...	1,712	1st half	Jodhpore	LII
...	2,210	...	2,210	2nd half		
670	15,450	...	15,450	1st half	Bhavnagar-Gondal-Junagarh-Porbandar	LIII
11	13,564	...	13,564	2nd half		
269	5,705	...	5,705	1st half	Morvi	LIV
316	6,120	...	6,120	2nd half		
44,839	11,58,406	29,906	11,56,901	1st half	TOTAL NARROW GAUGE.	}
41,227	12,41,002	36,824	12,39,501	2nd half		
3,97,189	1,02,18,715	3,95,494	1,00,29,076		TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	

APPENDIX
STATISTICS OF INDIAN

No.

DETAIL OF

[From Abstract D of

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	General superintendence.	Station staff.	Train staff.	Fuel, lighting and general stores.	Clothing.	Printing, stationery and tickets.	Charges for delivery and collection of goods.
			R	R	R	R	R	R	R
STANDARD GAUGE.									
I	East Indian	{ 1st half 2nd half	2,12,016 2,09,072	8,55,138 7,96,790	2,75,290 2,48,604	91,297 1,13,290	16,790 15,289	60,021 55,064	1,800 1,886
II	Patna-Gya	{ 1st half 2nd half	Included with the East Indian railway.				...	...	...
V	Bengal-Nágpur	{ 1st half 2nd half	28,396 27,710	46,043 39,216	12,040 10,393	15,169 7,126	204 193	14,640 5,441	......
VI	Indian Midland	{ 1st half 2nd half	32,660 31,744	80,388 78,727	28,128 28,923	23,657 29,996	2,976 1,307	15,408 14,715	1,287 -1,015
VII	Bhopal-Itárei (British section)	{ 1st half 2nd half	Included with the Indian Midland railway.				...	...	...
X	Dhond-Manmád	{ 1st half 2nd half	Included with the Great Indian Peninsula railway.				...	...	...
XIII	Bezváda Extension	{ 1st half 2nd half	Included with the Nizam's Guaranteed State railway.				...	...	...
XVII	North Western	{ 1st half 2nd half	1,61,438 1,62,146	5,52,220 5,53,454	2,30,658 2,21,195	1,44,826 1,26,768	2,248 24,644	43,001 46,492	20 120
XVIII	Amritsar-Pathánkot	{ 1st half 2nd half	Included with the North Western railway.				...	...	...
XIX	Jammu and Kashmir (British section);	{ 1st half 2nd half	Included with the North Western railway.				...	...	...
XX	Ondh and Rohilkhand	{ 1st half 2nd half	45,553 46,693	1,57,272 1,56,279	50,006 51,025	36,830 30,330	-4,749 7,317	26,635 23,197	1,212 640
XXI	Eastern Bengal	{ 1st half 2nd half	84,559 89,537	3,68,044 4,08,464	62,114 68,321	64,620 63,197	8,954 10,324	30,581 25,703	1,991 5,506
XXII	Bengal Central	{ 1st half 2nd half	Included with the Eastern Bengal railway.				...	...	...
	Wardha Coal	{ 1st half 2nd half	... ...	4,560 4,684	1,232 1,220	2,150 -110	74 2	1,219 799	......
XXXII	Great Indian Peninsula	{ 1st half 2nd half	1,38,369 1,42,335	6,40,069 5,96,636	4,08,836 3,34,026	1,75,108 1,38,212	10,339 16,961	42,929 48,410	3,351 3,315
XXXIII	Bombay, Baroda and Central India.	{ 1st half 2nd half	52,842 48,530	2,19,050 2,03,022	40,522 37,999	48,764 47,118	6,455 4,819	24,613 22,703	3,288 3,096
XXXIV	Madras	{ 1st half 2nd half	59,742 59,470	1,90,363 1,95,283	47,586 48,532	52,877 57,236	5,028 8,867	35,156 35,627	1,294 1,275
XXXVI	Tárákeshwar	{ 1st half 2nd half	Included with the East Indian railway.				...	...	...
XLII	Khámgnon	{ 1st half 2nd half	Included with the Great Indian Peninsula railway.				...	...	...
XLIII	Amráoti	{ 1st half 2nd half	Included with the Great Indian Peninsula railway.				...	...	...
XLIV	Bhopal-Itárei (Native State section).	{ 1st half 2nd half	Included with the Indian Midland railway.				...	...	...
XLV	The Nizam's Guaranteed State	{ 1st half 2nd half	18,010 20,032	47,529 47,829	14,364 14,104	9,926 9,117	1,435 1,141	9,376 9,111	......
XLVIII	The Gaekwar's Petlád	{ 1st half 2nd half	Included with the Bombay, Baroda and Central India railway.				...	...	...
L	Rájputra-Bhátinda	{ 1st half 2nd half	Included with the North Western railway.				...	...	...
LI	Jammu and Kashmir (Native State section).	{ 1st half 2nd half	Included with the North Western railway.				...	...	...
TOTAL STANDARD GAUGE.		{ 1st half 2nd half	8,33,585 8,37,269	31,55,626 30,80,384	11,65,776 10,63,742	6,65,224 6,22,289	59,252 90,864	3,03,579 2,87,262	14,243 14,973
Carried over.									

(e) The difference between the figures in columns "Total" and "Net Total" represents the expenditure incurred by the East

A—continued.

RAILWAYS—(PART I)—continued.

IX.

TRAFFIC EXPENSES.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

Miscellaneous expenses.	Payments to other lines for expenses at joint stations.	Other charges.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
R	R	R	R	R	R			
26,514	269	2,911	15,42,046	44,361	14,97,635	1st half	STANDARD GAUGE.	
22,375	260	2,875	14,65,955	48,744	14,17,211	2nd half		East Indian I
...	...	...	...	...	16,727	1st half		
733	9,758	315	1,27,298	...	18,544	2nd half	Patna-Gya II	
514	8,442	188	99,223	...	(a) 1,44,163	1st half	Bengal-Nágpur V	
...	...	...	...	...	(a) 1,20,946	2nd half		
453	10,554	273	1,95,734	25,469	1,70,265	1st half	Indian Midland VI	
512	3,850	525	1,89,284	21,981	1,67,303	2nd half		
...	...	...	...	...	...	1st half	Bhopal-Itárai (British section).	VII
...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	1st half	Dhond-Manmád X	
...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	1st half	Bezváda Extension XIII	
...	...	...	...	...	...	2nd half		
1,584	12,959	11,958	11,60,912	20,397	11,40,515	1st half	North Western XVII	
1,874	18,797	13,450	11,68,740	28,935	11,39,805	2nd half		
...	...	...	...	...	...	1st half	Amritsar-Patháukot XVIII	
...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	1st half	Jammu and Kashmir (British section).	XIX
...	...	...	...	...	...	2nd half		
120	17,137	235	3,39,749	...	3,39,749	1st half	Oudh and Rohilkhand XX	
353	22,034	279	3,38,347	...	3,38,347	2nd half		
8,085	2	2,874	6,26,824	46,548	6,80,276	1st half	Eastern Bengal XXI	
4,915	...	5,862	6,81,329	46,967	6,34,362	2nd half		
...	...	...	...	...	46,411	1st half	Bengal Central XXII	
...	...	...	...	...	46,872	2nd half		
268	4,026	...	13,529	...	13,529	1st half	Wardha Coal	
248	3,268	1	10,112	...	10,112	2nd half		
6,118	20,548	27,377	14,68,044	...	14,68,044	1st half	Great Indian Peninsula XXXII	
6,119	17,221	13,122	13,16,357	...	13,16,357	2nd half		
1,080	19,160	5,830	4,21,604	525	4,21,079	1st half	Bombay, Baroda and Central India.	XXXIII
1,080	14,088	653	3,82,508	1,709	3,80,799	2nd half		
2,840	...	9,109	4,03,995	22	4,03,973	1st half	Madras XXXIV	
3,369	...	7,147	4,16,806	92	4,16,714	2nd half		
...	...	...	...	...	10,689	1st half	Tárákeshwar XXXVI	
...	...	...	...	...	8,478	2nd half		
...	...	...	...	...	...	1st half	Khámgaon XLII	
...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	1st half	Amráoti XLIII	
...	...	...	...	...	...	2nd half		
...	...	...	...	...	25,469	1st half	Bhopal-Itárai (Native State section).	XLIV
...	...	...	...	...	21,981	2nd half		
753	5,413	46	1,06,852	...	1,06,852	1st half	The Nizam's Guaranteed State.	XLV
609	5,192	57	1,07,192	...	1,07,192	2nd half		
...	...	...	...	...	525	1st half	The Gaekwar's Petlád XLVIII	
...	...	...	...	...	1,709	2nd half		
...	...	...	...	...	20,397	1st half	Rájpurá-Bhátinda L	
...	...	...	...	...	28,935	2nd half		
...	...	...	...	...	...	1st half	Jammu and Kashmir (Native State section).	LI
...	...	...	...	...	...	2nd half		
48,548	99,826	60,928	64,06,587	1,37,322	64,06,318	1st half	TOTAL STANDARD GAUGE.	
42,268	93,152	43,659	61,75,853	1,48,428	61,75,667	2nd half		Carried over.

Indian railway for working the Ásansol-Guilkera section, the details of which are included with the figures of the former line.

APPENDIX
STATISTICS OF INDIAN
No.
DETAIL OF
[From Abstract D of

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	General superintendence.	Station staff.	Train staff.	Fuel, lighting and general stores.	Clothing.	Printing, stationery and tickets.	Charges for delivery and collection of goods.	
			R	R	R	R	R	R	R	
	Brought forward STANDARD GAUGE.	1st half	8,33,585	31,55,626	11,65,776	6,65,224	59,252	3,03,579	14,243	
		2nd half	8,37,269	30,80,384	10,63,742	6,22,280	93,864	2,87,262	14,973	
	NARROW GAUGE.									
III	Tirhoot	1st half	14,283	49,796	12,685	11,131	1,601	8,227	...	
		2nd half	Included with the Bengal and North-Western railway.							...
	Bengal and North-Western	1st half	14,349	30,559	10,890	—10,145	403	9,875	9,289	
		2nd half	29,110	81,489	24,218	25,627	1,497	9,831	811	
	Bareilly-Pilibhit	1st half	2,302	3,389	619	300	17	477	...	
		2nd half	2,562	3,476	695	337	13	642	...	
VIII	Rajputana-Malwa	1st half	1,18,472	3,05,990	1,06,132	88,997	8,723	37,371	40	
		2nd half	1,17,105	2,84,860	92,394	77,261	16,632	34,028	56	
XI	Southern Mahratta	1st half	54,894	1,35,960	39,265	40,616	6,929	30,700	...	
		2nd half	54,812	1,40,119	37,801	40,401	8,050	33,946	...	
XII	Southern Mahratta, Mysore section.	1st half	Included with the Southern Mahratta railway.							...
		2nd half	Included with the Southern Mahratta railway.							...
	Vilupuram-Guntakal—									
	Nellore-Tirupati section	1st half	Included with the South Indian railway.							...
		2nd half	Included with the South Indian railway.							...
	Vilupuram-Tiruvannamalai section.	1st half	...	...	...	...	...	...	...
		2nd half	Included with the South Indian railway.							...
	Lucknow-Sitapur-Seramau	1st half	Shown under Special and Miscellaneous expenses.							...
		2nd half	Shown under Special and Miscellaneous expenses.							...
XXIII	Nalhati	1st half	1,914	3,117	496	334	93	920	...	
		2nd half	1,282	3,340	523	415	41	451	...	
XXIV	Cherra-Companyganj	1st half	128	1,931	160	...	...	41	...
		2nd half	...	2,228	180	7	...	...	...
XXV	Jorhat	1st half	1,368	4,341	354	733	...	138	...	
		2nd half	1,423	4,732	355	88	...	506	...	
XXVI	Burma	1st half	33,808	1,73,719	36,899	29,552	1,955	14,041	...	
		2nd half	33,935	1,43,314	34,338	29,929	—285	22,326	...	
XXVII	Toungoo-Mandalay	1st half	Included with the Burma State railway.							...
		2nd half	Included with the Burma State railway.							...
	South Indian	1st half	30,513	1,24,665	25,188	26,629	29	16,358	18	
		2nd half	28,602	1,24,378	26,123	29,454	11,661	21,044	...	
XXXVII	Deoghur	1st half	...	...	...	...	...	...	...
		2nd half	...	...	...	...	...	...	...
XXXVIII	Robilkhand-Kumaun (Company's section).	1st half	5,688	8,415	1,358	1,088	40	1,144	...	
		2nd half	5,817	7,928	1,357	785	29	1,433	...	
XXXIX	Darjeeling-Himalayan	1st half	3,157	9,259	2,559	1,988	...	1,891	...	
		2nd half	3,434	9,880	2,588	3,728	201	1,093	...	
XL	Dibru-Sadiya	1st half	4,253	8,704	2,098	1,586	...	3,817	2,311	
		2nd half	4,171	8,706	1,915	1,785	237	2,806	2,093	
XLI	Thaton-Dnyinzak	1st half	...	3,031	...	...	...	...	...
		2nd half	...	...	...	...	...	...	...
XLVI	The Gaekwar's Dabhoi	1st half	608	5,123	837	584	177	768	...	
		2nd half	608	4,578	730	1,332	93	591	...	
XLVII	The Gaekwar's Mehsana	1st half	Included with the Rajputana-Malwa railway.							...
		2nd half	Included with the Rajputana-Malwa railway.							...
LII	Jodhpore	1st half	2,801	4,710	265	768	...	1,170	...	
		2nd half	2,961	4,409	266	571	...	1,482	...	
LIII	Bhavnagar-Gondal-Junagarh-Porbandar	1st half	14,163	41,134	7,241	9,764	1,187	7,696	...	
		2nd half	12,315	29,340	5,578	7,674	1,189	6,057	...	
LIV	Morvi	1st half	1,824	6,335	1,323	1,846	...	2,011	3,902	
		2nd half	2,569	6,268	1,372	1,771	56	1,823	4,250	
	TOTAL NARROW GAUGE	1st half	3,03,925	9,20,178	2,48,289	2,26,056	21,154	1,36,645	15,560	
		2nd half	3,00,706	8,65,145	2,30,333	2,21,213	39,414	1,38,059	7,210	
	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR	...	22,75,485	80,21,333	27,08,140	17,34,773	2,10,684	8,65,545	51,986	

A—continued.

RAILWAYS—(PART I)—continued.

IX—concluded.

TRAFFIC EXPENSES—concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

Miscellaneous expenses.	Payments to other lines for expenses at joint stations.	Other charges.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
R	R	R	R	R	R			
48,548	99,826	60,928	64,06,587	1,37,322	64,06,318	1st half	Brought forward STANDARD GAUGE.	
42,268	93,152	43,659	61,75,853	1,48,428	61,75,667	2nd half		
							NARROW GAUGE.	
1,313	1,232	213	1,00,481	20	1,00,461	1st half	Tirhoot	III
708	507	30,205	1,16,930	...	1,16,930	2nd half		
2,102	202	14,230	1,89,117	12	1,89,105	1st half	Bengal and North-Western	III
122	703	41	7,870	...	7,870	2nd half		
127	600	49	8,401	...	8,401	1st half	Bareilly-Pilibhit	III
						2nd half		
4,441	24,079	1,609	6,95,854	1,920	6,93,934	1st half	Rajputana-Malwa	VIII
4,582	22,193	1,957	6,51,068	2,737	6,48,331	2nd half		
1,843	7,977	1,499	3,19,683	58,216	2,61,467	1st half	Southern Mahratta	XI
2,136	8,569	1,251	3,27,085	75,784	2,51,301	2nd half		
...	...	...	...	...	58,216	1st half	Southern Mahratta, Mysore section.	XII
					75,784	2nd half		
...	...	...	...	...	9,494	1st half	Villupuram-Guntakal—	
					9,381	2nd half		
...	...	...	...	...	...	1st half	Nellore-Tirupati section.	
					1,544	2nd half		
...	...	...	...	...	...	1st half	Villupuram-Tiruvannamalai section.	
					...	2nd half		
...	...	...	...	...	...	1st half	Lucknow-Sitapur-Seraman	
					...	2nd half		
40	860	12	7,186	...	7,186	1st half	Naháti	XXIII
46	873	25	6,996	...	6,996	2nd half		
...	...	...	2,280	...	2,280	1st half	Cherra-Companyganj	XXIV
...	...	...	2,415	...	2,415	2nd half		
18	...	176	7,128	...	7,128	1st half	Jorhát	XXV
14	...	8	7,121	...	7,121	2nd half		
678	...	—900	2,89,752	...	2,89,752	1st half	Burma	XXVI
1,474	...	48	2,70,079	...	2,70,079	2nd half		
...	...	...	...	...	...	1st half	Toungoo-Mandalay	XXVII
					...	2nd half		
1,313	1,742	16,302	2,42,757	9,536	2,33,221	1st half	South Indian	
1,944	1,697	9,693	2,55,096	10,950	2,44,146	2nd half		
...	...	...	4,331	...	4,331	1st half	Deoghur	XXXVII
					...	2nd half		
300	1,728	104	19,865	...	19,865	1st half	Rohilkhand-Kumaon (Company's section).	XXXVIII
287	1,374	111	19,121	...	19,121	2nd half		
252	3,528	(a)444	23,078	...	23,078	1st half	Darjeeling-Himalayan	XXXIX
7,904	3,247	(a)444	32,517	...	32,517	2nd half		
293	...	1	23,063	26	23,037	1st half	Dibru-Sadiya	XL
115	...	7	21,835	346	21,489	2nd half		
270	...	188	3,489	...	3,489	1st half	Thaton-Duyinzáik	XLI
...	...	...	3,443	...	3,443	2nd half		
...	2,590	...	10,627	...	10,627	1st half	The Gaekwar's Dabhoi	XLVI
...	1,556	...	9,538	...	9,538	2nd half		
...	...	...	...	...	1,920	1st half	The Gaekwar's Mehsána	XLVII
					2,737	2nd half		
2	...	...	9,711	...	9,711	1st half	Jodhpore	LII
58	...	...	9,747	...	9,747	2nd half		
1,665	3,042	—60	85,832	...	85,832	1st half	Bhánagar-Gondal-Junggarh-Forbandar.	LIII
1,719	2,821	1,371	68,664	...	68,664	2nd half		
229	...	980	18,450	...	18,450	1st half	Morvi	LIV
150	...	115	18,374	...	18,374	2nd half		
13,487	47,928	50,814	19,84,036	69,718	19,63,948	1st half	TOTAL NARROW GAUGE	
22,658	43,132	29,304	19,00,617	89,829	19,00,234	2nd half		
1,26,961	2,84,038	1,84,705	1,64,71,424	4,45,297	1,64,70,498	...	(TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.(b))	

APPENDIX
STATISTICS OF INDIAN
No
DETAIL OF
[From Abstract E of

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	Home expenditure or general administration.	Agent's office.	Audit, accounts and pay office.	Stores department.	Medical department.	Rents and miscellaneous.	Police.
	STANDARD GAUGE.		R	R	R	R	R	R	R
I	East Indian	{ 1st half 2nd half	1,74,371 1,29,782	70,583 66,050	2,18,165 1,99,791	71,833 79,210	60,690 59,805	74,666 57,681	66,040 65,115
II	Patna-Gya	{ 1st half 2nd half	Included with the East Indian railway.				...	...	...
V	Bengal-Nágpur	{ 1st half 2nd half	59,154 55,833	33,132 41,185	26,223 30,939	11,269 13,405	14,143 13,154	15,433 15,949	8,698 10,475
VI	Indian Midland	{ 1st half 2nd half	56,422 54,677	34,954 32,862	54,838 57,542	14,699 13,750	8,002 7,894	9,902 8,320	7,331 ^c 6,202
VII	Bhopal-Itársi (British section).	{ 1st half 2nd half	Included with the Indian Midland railway.				...	...	...
X	Dhond-Manmád	{ 1st half 2nd half	Included with the Great Indian Peninsula railway.				...	...	...
XIII	Bezváda Extension	{ 1st half 2nd half	Included with the Nizam's Guaranteed State railway.				...	...	...
XVII	North Western	{ 1st half 2nd half	59,582 ...	52,776 57,446	1,62,866 1,55,612	51,405 47,659	31,973 31,955	26,525 36,958	27,154 30,066
XVIII	Amritsar-Pathámkot	{ 1st half 2nd half	Included with the North Western railway.				...	...	...
XIX	Jammu and Kashmir (British section).	{ 1st half 2nd half	Included with the North Western railway.				...	...	...
XX	Oudh and Rohilkhand	{ 1st half 2nd half	9,488 ...	25,863 22,730	70,537 76,462	13,774 14,949	12,758 12,067	13,540 10,999	17,167 17,608
XXI	Eastern Bengal	{ 1st half 2nd half	13,537 ...	38,027 36,833	80,014 79,168	11,617 11,446	14,984 16,744	19,546 15,893	2,393 15,490
XXII	Bengal Central	{ 1st half 2nd half	18,509 16,480	3,631 3,317	3,300 3,300	312 312	449 456	1,009 815	......
	Wardha Coal	{ 1st half 2nd half	... ...	7,693 7,802	2,660 4,269	560 447	617 510	1,603 1,350	354 401
XXXII	Great Indian Peninsula	{ 1st half 2nd half	49,150 52,012	46,493 47,888	1,52,885 1,53,657	52,413 53,308	29,946 30,671	37,109 28,434	65,145 64,653
XXXIII	Bombay, Baroda and Central India	{ 1st half 2nd half	27,719 24,162	17,711 16,827	73,495 68,407	27,649 27,822	13,512 13,531	27,470 24,330	27,408 24,177
XXXIV	Madras	{ 1st half 2nd half	33,417 31,806	29,326 30,144	74,140 74,527	10,453 10,906	18,464 18,023	13,166 6,954	23,116 23,508
XXXVI	Tárákeshwar	{ 1st half 2nd half	Included with the East Indian railway.				...	...	...
XLII	Khámgaon	{ 1st half 2nd half	Included with the Great Indian Peninsula railway.				...	...	...
XLIII	Amráoti	{ 1st half 2nd half	Included with the Great Indian Peninsula railway.				...	...	...
XLIV	Bhopal-Itársi (Native State section).	{ 1st half 2nd half	Included with the Indian Midland railway.				...	...	...
XLV	The Nizam's Guaranteed State.	{ 1st half 2nd half	26,321 29,361	8,166 10,019	28,127 28,352	7,328 6,237	6,123 7,507	9,760 7,942	15,252 12,845
XLVIII	The Gaekwar's Petlád	{ 1st half 2nd half	Included with the Bombay, Baroda and Central India railway.				...	...	...
L	Rájputra-Bhátinda	{ 1st half 2nd half	Included with the North Western railway.				...	...	...
LI	Jammu and Kashmir (Native State section).	{ 1st half 2nd half	Included with the North Western railway.				...	...	...
	TOTAL STANDARD GAUGE Carried over.	{ 1st half 2nd half	5,28,200 3,94,113	3,68,825 3,72,908	9,47,250 9,32,026	2,73,312 2,79,511	2,11,661 2,12,322	2,49,729 2,15,625	2,60,058 2,70,540

(a) The difference between the figures in columns "Total" and "Net Total" represents the expenditure incurred by the East

(b) Expenditure incurred

(c) Includes Rs21,021 charged by the Eastern Bengal railway for working the Bengal Central

(d) Includes Rs19,056 charged by the Eastern Bengal railway for working the Bengal Central

A—continued.

RAILWAYS—(PART I)—continued.

X.

GENERAL CHARGES.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

Advertising.	Electric telegraph.	Other charges.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
							STANDARD GAUGE.	
R	R	R	R	R	R			
2,176	2,43,629	2,463	9,84,616	30,898	9,53,718	1st half	} East Indian	I
2,266	2,41,024	1,991	9,02,715	81,992	8,70,723	2nd half		
...	...	...	...	...	11,100	1st half	} Patna-Gya	II
...	...	...	...	...	11,904	2nd half		
462	30,095	4	1,98,613	...	(a) 2,10,412	1st half	} Bengal-Nágpur	V
62	38,097	95	2,19,194	...	(a) 2,34,400	2nd half		
1,149	42,468	6	2,29,771	29,905	1,99,866	1st half	} Indian Midland	VI
737	42,526	2	2,24,512	26,067	1,98,445	2nd half		
...	...	...	...	...	...	1st half	} Bhopal-Itársi (British section).	VII
...	...	...	...	...	...	2nd half		
...	...	...	...	...	(b) 6,408	1st half	} Dhond-Manmád	X
...	...	...	...	...	(b) 6,400	2nd half		
...	...	...	...	...	(b) 1,520	1st half	} Bezváda Extension	XIII
...	...	...	...	...	(b) 851	2nd half		
2,426	2,12,199	2,834	6,29,740	10,579	6,19,161	1st half	} North Western	XVII
1,805	2,15,000	1,713	5,78,214	11,144	5,67,070	2nd half		
...	...	...	...	...	...	1st half	} Amritsar-Pathánkot	XVIII
...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	1st half	} Jammu and Kashmir (British section).	XIX
...	...	...	...	...	...	2nd half		
819	61,228	19	2,24,693	...	2,24,693	1st half	} Oudh and Rohilkhand	XX
1,220	60,291	14	2,16,340	...	2,16,340	2nd half		
943	92,618	412	2,74,091	21,021	2,53,070	1st half	} Eastern Bengal	XXI
2,733	95,831	244	2,74,387	19,295	2,55,092	2nd half		
2	...	...	27,212	...	(c) 48,233	1st half	} Bengal Central	XXII
7	...	...	24,687	...	(d) 43,743	2nd half		
9	2,257	—110	15,613	...	15,613	1st half	} Wardha Coal . . . . .	...
...	2,526	20	17,125	...	17,125	2nd half		
2,881	1,83,632	19,800	6,39,454	...	6,39,454	1st half	} Great Indian Peninsula	XXXII
4,045	1,81,482	14,440	6,30,590	...	6,30,590	2nd half		
929	45,887	10,798	2,72,578	339	2,72,239	1st half	} Bombay, Baroda and Central India.	XXXIII
796	47,668	6,065	2,53,785	1,134	2,52,651	2nd half		
2,180	65,243	19,162	2,89,197	6,817	2,82,380	1st half	} Madras	XXXIV
2,067	62,516	14,366	2,74,582	6,376	2,68,506	2nd half		
...	...	...	...	...	7,074	1st half	} Tárakeshwar	XXXVI
...	...	...	...	...	5,452	2nd half		
...	...	...	...	...	...	1st half	} Khámgaon	XLI
...	...	...	...	...	...	2nd half		
...	...	...	...	...	(b) 442	1st half	} Amráoti	XLIII
...	...	...	...	...	(b) 443	2nd half		
...	...	...	...	...	29,905	1st half	} Bhopal-Itársi (Native State section).	XLIV
...	...	...	...	...	26,067	2nd half		
606	18,307	351	1,20,841	...	1,20,841	1st half	} The Nizam's Guaranteed State.	XLV
319	20,501	90	1,23,173	...	1,23,173	2nd half		
...	...	...	...	...	339	1st half	} The Gaekwar's Petlád	XLVIII
...	...	...	...	...	1,134	2nd half		
...	...	...	...	...	10,579	1st half	} Rájputra-Pbátinda	L
...	...	...	...	...	11,144	2nd half		
...	...	...	...	...	...	1st half	} Jammu and Kashmir (Native State section).	LI
...	...	...	...	...	...	2nd half		
14,082	9,97,563	55,739	39,06,419	99,559	39,07,047	1st half	} TOTAL STANDARD GAUGE.	
16,057	10,07,462	39,040	37,39,604	95,008	37,41,253	2nd half		

Indian railway for working the Ásansol-Goilkera section, the details of which are included with the figures of the former line. direct by the State. railway. The details of this amount are included with the figures of the former line. railway. The details of this amount are included with the figures of the former line.

APPENDIX
STATISTICS OF INDIAN

No

DETAIL OF

Half-years ended the 30th June and the 31st December 1890.

[From Abstract E c

Serial number.	RAILWAY.	1890.	Home expenditure or general administration.	Agent's office.	Audit, accounts and pay office.	Stores department.	Medical department.	Rents and miscellaneous.	Police.	
			R	R	R	R	R	R	R	
III	Brought forward STANDARD GAUGE	1st half	5,28,200	3,68,825	9,47,250	2,73,312	2,11,661	2,49,729	2,60,058	
		2nd half	3,94,113	3,72,908	9,32,026	2,79,511	2,12,322	2,15,625	2,70,540	
	NARROW GAUGE.	Tirhoot	1st half	523	10,319	30,323	4,647	3,104	3,663	1,243
			2nd half	Included with the Bengal and North-Western railway.
		Bengal and North-Western	1st half	32,708	22,524	28,582	4,672	3,624	2,060	1,138
			2nd half	43,777	21,438	38,951	6,365	6,041	6,950	9,768
Bareilly-Pilibhit	1st half	2,993	805	2,605	256	181	644	...		
	2nd half	2,595	849	2,561	278	198	775	...		
VIII	Rajputana-Malwa	1st half	1,05,919	25,985	1,06,066	37,886	23,174	24,953	51,760	
		2nd half	1,08,494	26,463	1,13,753	36,915	23,901	16,474	49,920	
XI	Southern Mahratta	1st half	90,665	20,599	58,350	19,500	14,111	22,409	25,008	
		2nd half	91,337	25,558	60,949	21,692	14,835	20,863	27,062	
XII	Southern Mahratta, Mysore section.	1st half	} Included with the Southern Mahratta railway.			...	...	...	...
		2nd half	}			...	...	...	...
	Villupuram-Guntakal-Nellore-Tirupati section	1st half	} Included with the South Indian railway.			...	...	...	...
		2nd half	}			...	...	...	...
	Villupuram-Tiruvannamalai section.	1st half	} Included with the South Indian railway.			...	...	...	...
		2nd half	}			...	...	...	...
	Lucknow-Sitapur-Seramau.	1st half	} Shown under Special and Miscellaneous expenses.			...	...	...	...
		2nd half	}			...	...	...	...
XXIII	Nalhati	1st half	...	2,686	2,085	429	235	351	37	
		2nd half	...	2,569	2,175	290	186	240	145	
XXIV	Cherra-Companyganj	1st half	...	180	700	...	297	417	...	
		2nd half	...	194	864	...	323	291	...	
XXV	Jorbhat	1st half	...	802	1,950	363	20	213	...	
		2nd half	...	1,420	373	348	35	318	...	
XXVI	Burma	1st half	...	23,903	54,711	22,589	5,703	11,239	1,667	
		2nd half	...	22,712	51,923	37,379	6,266	9,882	6,289	
XXVII	Toungoo-Mandalay	1st half	} Included with the Burma State railway.			...	...	...	...
		2nd half	}			...	...	...	...
	South Indian	1st half	30,182	20,377	49,142	13,067	7,442	11,085	...	
		2nd half	26,280	20,250	49,365	13,136	8,025	11,573	8,631	
XXXVII	Deoghur	1st half	...	...	...	...	...	...	...
		2nd half	...	...	...	...	...	...	...
XXXVIII	Rohilkhand-Kumaun (Company's section).	1st half	7,372	1,985	6,426	636	449	1,590	405	
		2nd half	5,933	1,931	5,812	631	448	1,744	563	
XXXIX	Darjeeling-Himalayan	1st half	11,671	3,064	4,922	...	1,736	1,108	(a)	
		2nd half	4,416	10,856	5,576	...	1,738	1,623	(a)	
XL	Dibru-Sadiya	1st half	15,600	6,112	5,926	1,790	1,455	2,858	...	
		2nd half	12,051	6,018	4,717	1,670	1,389	2,496	...	
XLI	Thaton-Duyinzak	1st half	...	...	...	...	...	...	...
		2nd half	...	...	...	...	...	...	...
XLVI	The Gaskwar's Dabhoi	1st half	...	608	1,608	152	300	321	1,257	
		2nd half	...	608	1,617	153	300	344	964	
XLVII	The Gaskwar's Mehsana	1st half	} Included with the Rajputana-Malwa railway.			...	...	...	...
		2nd half	}			...	...	...	...
LII	Jodhpore	1st half	...	...	3,109	396	210	10	11
		2nd half	...	...	2,470	382	210	10	45
LIII	Bhavnagar-Gondal-Junagarh-Forbandar.	1st half	...	15,093	23,514	4,078	5,125	4,988	16,034	
		2nd half	...	14,221	23,503	3,732	5,026	4,734	13,543	
LIV	Morvi	1st half	...	5,414	2,710	2,251	198	2,782	2,316	
		2nd half	...	6,124	3,773	1,349	460	1,584	2,315	
	TOTAL NARROW GAUGE	1st half	2,97,633	1,60,456	3,82,729	1,12,712	67,364	91,591	1,00,876	
		2nd half	2,94,883	1,61,211	3,67,804	1,24,322	69,381	79,901	1,19,245	
	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR. . . . .	...	15,14,829	10,63,400	26,29,809	7,89,857	5,60,728	6,36,846	7,50,719

(a) Shown under

A—continued.

RAILWAYS—(PART I)—continued.

X—concluded.

GENERAL CHARGES—concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

Advertising.	Electric telegraph.	Other charges.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
₹	₹	₹	₹	₹	₹			
14,022	9,97,563	55,739	99,06,419	99,559	99,07,047	1st half	Brought forward STAND- ARD GAUGE.	
16,057	10,07,462	39,040	37,39,604	96,008	37,41,253	2nd half		
34	22,833	—46	76,643	123	76,520	1st half	NARROW GAUGE.	
...	...	...	...	...	...	2nd half		
23	23,712	388	1,20,331	...	1,20,331	1st half	Tirhoot	III
168	46,381	260	1,80,099	124	1,79,975	2nd half		
56	1,189	...	8,729	...	8,729	1st half	Bengal and North-Western	
62	1,220	...	8,538	...	8,538	2nd half		
931	1,77,368	119	5,54,161	1,529	5,52,632	1st half	Rajputana-Malwa	VIII
1,396	1,76,795	815	5,54,926	2,332	5,52,594	2nd half		
2,583	98,763	2,439	3,54,427	67,824	2,86,603	1st half	Southern Mahratta	XI
1,224	1,00,572	36,83	3,87,775	83,558	2,84,217	2nd half		
...	...	...	...	...	67,824	1st half	Southern Mahratta, My- sore section.	XII
...	...	...	...	...	83,558	2nd half		
...	...	...	...	...	7,420	1st half	Villupuram-Guntakal— Nellore-Tirupati section	
...	...	...	...	...	7,193	2nd half		
...	...	...	...	...	1,184	1st half	Villupuram-Tiruvannā- malai section.	
...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	1st half	Lucknow-Sitapur-Seraman	
...	...	...	...	...	...	2nd half		
...	665	...	6,488	...	6,488	1st half	Nalhati	XXIII
50	703	...	6,358	...	6,358	2nd half		
...	385	...	1,979	...	1,979	1st half	Cherra-Companyganj	XXIV
...	385	...	2,057	...	2,057	2nd half		
...	1,017	...	4,365	...	4,365	1st half	Jorhat	XXV
...	849	...	3,343	...	3,343	2nd half		
993	47,901	1,520	1,70,226	...	1,70,226	1st half	Burma	XXVI
292	48,785	220	1,83,148	...	1,83,148	2nd half		
...	...	...	...	...	...	1st half	Toungoo-Mandalay	XXVII
...	...	...	...	...	...	2nd half		
833	45,914	11,668	1,89,705	7,430	1,82,275	1st half	South Indian	
1,358	47,821	7,415	1,93,876	8,404	1,86,472	2nd half		
...	...	...	2,578	...	2,578	1st half	Deoghur	XXXVII
...	...	...	...	...	...	2nd half		
285	2,629	...	21,777	...	21,777	1st half	Robilkhand-Kumann(Com- pany's section).	XXXVIII
135	2,492	...	19,689	...	19,689	2nd half		
207	3,542	620	26,870	...	26,870	1st half	Darjeeling-Himalayan	XXXIX
371	3,465	...	28,047	2,774	25,273	2nd half		
...	2,575	...	36,316	...	36,316	1st half	Dibru-Sadiya	XL
...	2,549	13	30,903	...	30,903	2nd half		
...	...	...	85	...	85	1st half	Thaton-Duyinzák	XLI
...	...	...	...	...	...	2nd half		
82	1,796	...	6,124	...	6,124	1st half	The Gaekwar's Dabhoi	XLVI
...	1,612	...	5,598	...	5,598	2nd half		
...	...	...	...	...	1,529	1st half	The Gaekwar's Mehsāna	XLVII
...	...	...	...	...	2,332	2nd half		
...	1,624	...	5,360	...	5,360	1st half	Jodhpore	LII
...	1,528	...	4,645	...	4,645	2nd half		
334	23,515	1	92,682	...	92,682	1st half	Bhāvnagar-Gondal-Junā- garh-Forbandar.	LIII
119	22,743	266	87,892	...	87,892	2nd half		
32	3,272	...	18,975	...	18,975	1st half	Morvi	LIV
99	3,424	...	19,128	...	19,128	2nd half		
6,393	4,58,700	16,704	16,95,158	76,906	16,95,025	1st half	TOTAL NARROW GAUGE.	
5,274	4,61,329	12,672	16,96,057	97,192	16,93,132	2nd half		
41,806	29,25,054	1,24,155	1,10,39,816	3,69,665	1,10,39,035	...	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	

Traffic expenses.

APPENDIX
STATISTICS OF INDIAN
No.

SPECIAL AND MISCELL

[From Abstract G of

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	Law charges.	Compensation.	Rates and taxes.	Payments to other lines.	
			R	R	R	R	
STANDARD GAUGE.							
I	East Indian	1st half 2nd half	6,112 7,746	7,482 9,375	23,295 27,698	5,267 ...	
II	Patna-Gya	1st half 2nd half	Included with the East Indian railway.				...
V	Bengal-Nágpur	1st half 2nd half	106 317	-750 35	... 45	3,184 2,630	
VI	Indian Midland	1st half 2nd half	3,184 610	690 542	478 493	34,063 -3,118	
VII	Bhopal-Itárai (British section)	1st half 2nd half	Included with the Indian Midland railway.				...
X	Dhond-Manmád	1st half 2nd half	Included with the Great Indian Peninsula railway.				...
XIII	Bezváda Extension	1st half 2nd half	Included with the Nizam's Guaranteed State railway.				...
XVII	North Western	1st half 2nd half	476 506	8,949 6,437	4,936 4,807	(c)51,661 (c)40,668	
XVIII	Amritsar-Pathánkot	1st half 2nd half	Included with the North Western railway.				...
XIX	Jammu and Kashmir (British section)	1st half 2nd half	...				4,289 25,459
XX	Oudh and Rohilkhand	1st half 2nd half	50 40	507 1,451	... ...	4,289 25,459
XXI	Eastern Bengal	1st half 2nd half	99 928	15,089 24,041	14,330 18,812	-16,805 17,141	
XXII	Bengal Central	1st half 2nd half	42 87	... ...	... ...	... ...
	Wardha Coal	1st half 2nd half	... ...	26 109	... ...	2,073 2,072
XXXII	Great Indian Peninsula	1st half 2nd half	5,294 4,157	23,182 2,426	22,736 21,323	2,89,630 1,67,448	
XXXIII	Bombay, Baroda and Central India	1st half 2nd half	2,388 42	1,997 894	14,334 13,217	20,974 15,591	
XXXIV	Mudras	1st half 2nd half	950 2,173	1,947 5,932	7,020 10,042	2,252 7,542	
XXXVI	Tárakeshwar	1st half 2nd half	Included with the East Indian railway.				...
XLII	Khámgaon	1st half 2nd half	Included with the Great Indian Peninsula railway.				...
XLIII	Amráoti	1st half 2nd half	Included with the Great Indian Peninsula railway.				...
XLIV	Bhopal-Itárai (Native State section)	1st half 2nd half	Included with the Indian Midland railway.				...
XLV	The Nizam's Guaranteed State	1st half 2nd half	601 3,657	55 481	... 355	1,123 1,134	
XLVIII	The Gaekwar's Petlád	1st half 2nd half	Included with the Bombay, Baroda and Central India railway.				...
L	Rájputra-Bhátinda	1st half 2nd half	Included with the North Western railway.				...
LI	Jammu and Kashmir (Native State section).	1st half 2nd half	Included with the North Western railway.				...
TOTAL STANDARD GAUGE. Carried over.		1st half 2nd half	19,302 20,263	59,164 51,723	87,129 96,792	4,32,645 2,76,567	

(a) The difference between the figures in columns "Total" and "Net Total" represents the expenditure incurred by the East Indian railway for working this railway, the details of which are included with the figures of the former line.

(b) The difference between the figures in columns "Total" and "Net Total" represents the expenditure incurred by the East Indian railway for working the Asansol-Goalkera section, the details of which are included with the figures of the former line.

(c) The payments made to the East Indian railway for use of the line from Gháziabad to Delhi were as follows:—

1st half R36,869.
2nd half R30,320.

(d) Includes R5,525 charged by the Eastern Bengal railway for working the Bengal Central railway. The details of this amount are included with the figures of the former line.

A—continued.

RAILWAYS—(PART I)—continued.

XI.

LANEIOUS EXPENDITURE.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

Other charges.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
R	R	R	R			
STANDARD GAUGE.						
57,302	99,458	3,452	96,006	1st half	East Indian	I
45,946	90,765	3,830	86,935	2nd half		
36,268	37,293	...	(a) 37,352	1st half	Patna-Gya	II
37,293	37,293	...	(a) 38,434	2nd half		
3,671	6,211	...	(b) 28,123	1st half	Bengal-Nárapur	V
3,125	6,152	...	(b) 34,390	2nd half		
28,833	67,298	8,759	58,479	1st half	Indian Midland	VI
25,476	24,008	2,794	21,029	2nd half		
...	...	...	...	1st half	Bhopal-Itárai (British section)	VII
...	...	...	...	2nd half		
...	...	...	...	1st half	Dhond-Manmád	X
...	...	...	...	2nd half		
...	...	...	...	1st half	Bezváda Extension	XIII
91,668	1,57,690	3,001	1,54,689	2nd half		
91,180	1,43,698	623	1,43,075	1st half	North Western	XVII
...	...	...	...	2nd half		
...	...	...	...	1st half	Amritsar-Patháukot	XVIII
...	...	...	...	2nd half		
...	...	...	...	1st half	Jammu and Kashmir (British section)	XIX
32,490	37,336	...	37,336	2nd half		
29,677	56,627	...	56,627	1st half	Oudh and Robilkhand	XX
36,825	83,148	5,525	77,623	2nd half		
40,394	1,01,316	6,608	94,708	1st half	Eastern Bengal	XXI
...	42	...	(d) 5,567	2nd half		
1,230	1,317	...	(e) 7,925	1st half	Bengal Central	XXII
418	2,515	...	2,515	2nd half		
311	2,492	...	2,492	1st half	Wardha Coal	XXIII
41,343	3,82,185	19,283	3,62,903	2nd half		
13,022	2,08,376	780	2,07,596	1st half	Great Indian Peninsula	XXXII
...	...	...	...	2nd half		
11,364	51,057	63	50,994	1st half	Bombay, Baroda and Central India	XXXIII
5,062	34,806	156	34,650	2nd half		
8,235	20,404	6	20,398	1st half	Madras	XXXIV
6,842	32,581	3,791	28,790	2nd half		
30,101	30,101	...	(a) 30,783	1st half	Tárákeshwar	XXXVI
22,119	22,119	...	(a) 22,635	2nd half		
...	...	...	...	1st half	Khámgaon	XLII
...	...	...	...	2nd half		
...	...	...	...	1st half	Amrdoti	XLIII
...	...	...	...	2nd half		
11,260	11,260	...	(f) 20,019	1st half	Bhopal-Itárai (Native State section)	XLIV
7,981	7,981	...	(f) 10,775	2nd half		
4,502	6,281	...	6,281	1st half	The Nizam's Guaranteed State	XLV
6,817	12,444	...	12,444	2nd half		
...	1,324	...	(h) 1,387	1st half	The Gaekwar's Petlád	XLVIII
...	...	...	156	2nd half		
...	...	...	3,001	1st half	Rájpura-Bhátinda	L
...	...	...	623	2nd half		
...	...	...	...	1st half	Jammu and Kashmir (Native State section).	LI
...	...	...	...	2nd half		
3,94,278	9,92,518	40,088	9,93,456	1st half	TOTAL STANDARD GAUGE. Carried over.	
3,86,525	7,81,870	18,482	8,09,364	2nd half		

e) Includes Rs.608 charged by the Eastern Bengal railway for working the Bengal Central railway. The details of this amount are included with the figures of the former line.
 f) Includes Rs.759 charged by the Indian Midland railway for working the Bhopal-Itárai State railway. The details of this amount are included with the figures of the former line.
 g) Includes Rs.2,794 charged by the Indian Midland railway for working the Bhopal-Itárai State railway. The details of this amount are included with the figures of the former line.
 h) Includes Rs.63 charged by the Bombay, Baroda and Central India railway for working this railway, the details of which are included with the figures of the former line.

APPENDIX
STATISTICS OF INDIAN

No.
SPECIAL AND MISCEL

[From Abstract of

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	Law charges.	Compensation.	Rates and taxes.	Payments to other lines.
			R	R	R	R
III	Brought forward STANDARD GAUGE	1st half	19,802	59,104	87,129	4,32,645
		2nd half	20,269	51,723	96,792	2,76,567
	NARROW GAUGE.					
	Tirhoot	1st half	—165	147	1,548	4,115
		2nd half	Included with the Bengal and North-Western railway.			—
	Bengal and North-Western	1st half	1,892	518	420	595
2nd half		640	2,218	1,632	956	
Bareilly-Pilibhit	1st half	—	35	6	—	
	2nd half	—	140	41	—	
VIII	Rajputana-Malwa	1st half	781	3,959	101	18,674
		2nd half	3,663	3,292	2,347	15,129
XI	Southern Mahratta	1st half	868	2,681	2,565	144
		2nd half	1,189	6,977	6,862	4,723
XII	Southern Mahratta, Mysore section.	1st half	Included with the Southern Mahratta railway.			—
		2nd half				—
	Vilopuram-Guntakal—					
	Nellore-Tirupati section	1st half	Included with the South Indian railway.			—
		2nd half				—
	Vilupuram-Tiruvannamalai section	1st half	Included with the South Indian railway.			—
		2nd half				—
	Lucknow-Sitapur-Seraman	1st half	—	—	—	—
		2nd half	—	—	—	—
XXIII	Nalhati	1st half	—	127	124	—
		2nd half	—	82	—	—
XXIV	Cherra-Companyganj	1st half	—	—	—	—
		2nd half	33	—	—	—
XXV	Jorhat	1st half	—	17	10	—
		2nd half	—	158	23	—
XXVI	Burma	1st half	103	1,081	9,085	—
		2nd half	—	699	7,956	—
XXVII	Toungoo-Mandalay	1st half	Included with the Burma State railway.			—
		2nd half				—
	South Indian	1st half	145	2,183	8,824	1,347
		2nd half	165	1,424	16,461	1,292
XXXVII	Deoghur	1st half	—	—	—	—
		2nd half	—	—	—	—
XXXVIII	Rohilkhand-Kumaon (Company's section)	1st half	—	84	15	2,816
		2nd half	—	314	92	2,330
XXXIX	Darjeeling-Himalayan	1st half	839	184	3,516	—
		2nd half	81	2,289	3,576	—
XL	Dibru-Sadiya	1st half	1,077	113	86	—
		2nd half	624	10	86	—
XLI	Thatón-Duyinzák	1st half	—	—	—	—
		2nd half	—	—	—	—
XLVI	The Gaekwar's Dabhoi	1st half	—	—	—	—
		2nd half	—	—	—	—
XLVII	The Gaekwar's Mehsana	1st half	Included with the Rajputana-Malwa railway.			1,363
		2nd half				—
LII	Jodhpore	1st half	—	35	—	—
		2nd half	—	14	—	1,378
LIII	Bhavnagar-Gondal-Junágarh-Porbandar	1st half	—	436	—	1,821
		2nd half	66	336	—	1,375
LIV	Morvi	1st half	66	312	—	—
		2nd half	—	3,133	—	—
	TOTAL NARROW GAUGE	1st half	5,556	11,807	21,250	30,375
		2nd half	6,311	21,006	39,056	27,245
	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	...	51,432	1,43,700	2,44,227	7,66,532

(a) The difference between the figures in columns "Total" and "Net Total" represent the expenditure incurred by the South Indian railway for working this railway; the details are included with the figures of the former line.

-continued.

ALWAYS—(PART I)—continued.

I—concluded.

ANEOUS EXPENDITURE—concluded.

venue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

Other charges.	TOTAL.	Deductions.	NET TOTAL.	1890.	RAILWAY.	Serial number.
R	R	R	R			
3,94,278	9,92,518	40,088	9,92,458	1st half	Brought forward STANDARD GAUGE.	
3,36,525	7,81,870	18,492	8,08,364	2nd half		
					NARROW GAUGE.	
5,392	11,037	...	11,037	1st half	Tirhoot	III
...	...	...	...	2nd half		
5,624	9,044	...	9,044	1st half	Bengal and North-Western	III
3,920	9,368	...	9,368	2nd half		
4,592	4,633	...	4,633	1st half	Bareilly-Pilibhit	III
4,175	4,356	...	4,356	2nd half		
50,498	73,863	204	73,659	1st half	Rajputana-Malwa	VIII
49,477	73,878	310	73,568	2nd half		
5,090	11,848	2,229	9,119	1st half	Southern Mahratta	XI
7,317	27,018	9,776	17,242	2nd half		
...	...	...	2,229	1st half	Southern Mahratta, Mysore section.	XII
...	...	...	9,776	2nd half		
30,717	30,717	...	(a) 31,062	1st half	Villupuram-Guntakal—	
11,659	11,659	...	(a) 12,383	2nd half		Nellore-Tirupati section
...	...	...	...	1st half	Villupuram-Tiruvannamalai section	
2,171	2,171	...	(a) 2,280	2nd half		
...	...	...	(b) 1,08,834	1st half	Lucknow-Sitapur-Seramau	
...	...	...	(b) 84,658	2nd half		
175	426	...	426	1st half	Nalhati	XXIII
92	124	...	124	2nd half		
84	84	...	84	1st half	Cherra-Companyganj	XXIV
90	123	...	123	2nd half		
224	251	...	251	1st half	Jorhat	XXV
254	435	...	435	2nd half		
17,151	27,420	...	27,420	1st half	Burma	XXVI
11,687	20,372	...	20,372	2nd half		
...	...	...	...	1st half	Toungoo-Mandalay	XXVII
...	...	...	...	2nd half		
1,326	8,828	345	8,480	1st half	South Indian	XXVII
1,280	20,622	843	19,779	2nd half		
...	...	...	...	1st half	Deoghar	XXXVII
...	...	...	...	2nd half		
1,000	3,915	...	3,915	1st half	Rohilkhand-Kumaun (Company's section)	XXXVIII
961	3,757	...	3,757	2nd half		
1,669	6,208	...	6,208	1st half	Darjeeling-Himalayan	XXXIX
1,494	7,440	...	7,440	2nd half		
...	1,226	...	1,226	1st half	Dibru-Sadiya	XL
...	570	...	570	2nd half		
...	...	...	...	1st half	Thaton-Duyinzak	XLI
...	...	...	...	2nd half		
...	...	...	...	1st half	The Gackwar's Dabhoi	XLVI
...	...	...	...	2nd half		
...	1,369	...	(c) 1,567	1st half	The Gackwar's Mehsana	XLVII
...	...	...	810	2nd half		
...	35	...	35	1st half	Jodhpore	LII
...	1,392	...	1,392	2nd half		
10,817	12,574	...	12,574	1st half	Bhavnagar-Goudal-Junagarh-Porbandar	LIII
7,374	9,151	...	9,151	2nd half		
1,056	1,434	...	1,434	1st half	Morvi	LIV
1,033	4,216	...	4,216	2nd half		
1,35,415	2,04,408	2,778	3,14,237	1st half	TOTAL NARROW GAUGE.	
1,03,034	1,86,652	10,929	2,81,310	2nd half		
9,69,252	21,75,443	72,277	23,92,367	...	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	

(b) Represents the expenses of the Locomotive, Carriage and Wagon and Traffic Departments, also the General Charges and Special and Miscellaneous expenses, which are not shown separately.
(c) The difference between the figures in columns "Total" and "Net Total" represents the expenditure incurred by the Rajputana-Malwa railway of which are included with the figures of the former line.

APPENDIX
STATISTICS OF INDIAN
No.
STATEMENT OF
[From No. XII of

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	LOCOMOTIVES.			COACHING.	
			Total stock on the list.	Average number spared or hired out.	Average number constantly under repair.	Total stock on the list.	Average number constantly under repair.
	STANDARD GAUGE.						
I	East Indian	{ 1st half 2nd half	576 576	... 36·00	80·00 79·00	1,218 1,218	75·55 77·43
II	Patna-Gya	{ 1st half 2nd half	Worked by the East Indian railway.			...	...
V	Bengal-Nágpur	{ 1st half 2nd half	59 65	13·00 13·00	11·43 17·16	109 113	8·33c 14·55
VI	Indian Midland	{ 1st half 2nd half	(a)92 (a)92	... ...	11·00 14·00	227 253	32·00 28·00
VII	Bhopal-Itársi (British section).	{ 1st half 2nd half	Worked by the Indian Midland railway.			...	...
X	Dhond-Munmád	{ 1st half 2nd half	Worked by the Great Indian Peninsula railway.			...	...
XIII	Bezváda Extension	{ 1st half 2nd half	Worked by the Nizam's Guaranteed State railway.			...	...
XVII	North Western	{ 1st half 2nd half	(d)590 (d)590	49·00 48·00	97·23 115·60	(d)1,507 (d)1,507	156·82 194·62
XVIII	Amritsar-Patháukot	{ 1st half 2nd half	Worked by the North Western railway.			...	...
XIX	Jammu and Kashmir (British section).	{ 1st half 2nd half	Worked by the North Western railway.			...	...
XX	Oudh and Rohilkhand	{ 1st half 2nd half	156 156	... 1·00	22·14 24·32	409 439	69·82 37·34
XXI	Eastern Bengal	{ 1st half 2nd half	168 178	... ...	36·14 31·02	730 743	72·79 95·63
XXII	Bengal Central	{ 1st half 2nd half	Included with the Eastern Bengal railway.			...	...
	Wardha Coal	{ 1st half 2nd half	7 7	... ...	1·32 1·63	6 6	1·03 0·08
XXXII	Great Indian Peninsula	{ 1st half 2nd half	570 594	... ...	145·00 154·00	1,066 1,058	132·00 121·00
XXXIII	Bombay, Baroda and Central India.	{ 1st half 2nd half	127 127	... ...	20·00 24·00	(e)419 (e)429	34·00 50·00
XXXIV	Madras	{ 1st half 2nd half	151 151	... ...	42·00 42·00	588 610	25·00 35·00
XXXVI	Tárákeshwar	{ 1st half 2nd half	Worked by the East Indian railway.			...	...
XLII	Khámgaon	{ 1st half 2nd half	Worked by the Great Indian Peninsula railway.			...	...
XLIII	Amráoti	{ 1st half 2nd half	Worked by the Great Indian Peninsula railway.			...	...
XLIV	Bhopal-Itársi (Native State section).	{ 1st half 2nd half	Worked by the Indian Midland railway.			...	...
XLV	The Nizam's Guaranteed State.	{ 1st half 2nd half	30 30	... ...	7·03 10·04	107 109	6·65 6·12
XLVIII	The Gaekwar's Petlád	{ 1st half 2nd half	Worked by the Bombay, Baroda and Central India railway.			...	...
L	Rájpara-Bhátinda	{ 1st half 2nd half	Worked by the Bombay, Baroda and Central India railway.			...	...
LI	Jammu and Kashmir (Native State section).	{ 1st half 2nd half	Worked by the North Western railway.			...	...
	TOTAL STANDARD GAUGE. Carried over.	{ 1st half 2nd half	2,526 2,566	62·00 98·00	473·29 512·77	6,386 6,485	613·99 659·77

(a) Includes 5 ballast (construction) engines.

(b) Includes 42 composite brake-vans (3rd class) and 12 construction brake-vans.

(c) Includes 16 composite brake-vans (3rd class) and 12 construction brake-vans.

A—continued.

RAILWAYS—(PART I)—continued.

XII.

ROLLING STOCK.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

VEHICLES.						1890.	RAILWAY.	Serial number.
GOODS.		BRAKE-VANS.		TOTAL.				
Total stock on the list.	Average number constantly under repair.	Total stock on the list.	Average number constantly under repair.	Vehicle stock on the list.	Average number of vehicles constantly under repair.			
8,954	367.16	341	30.41	10,513	473.12	1st half	} STANDARD GAUGE.	I
8,954	282.13	341	19.42	10,513	378.98	2nd half			East Indian . . . . .
...	...	...	...	...	...	1st half	} Patna-Gya	II
...	2nd half		
1,446	110.59	68	3.94	1,623	122.86	1st half	} Bengal-Nágpur	V
1,448	92.09	66	4.85	1,627	111.49	2nd half		
1,599	173.00	(b)80	19.00	1,906	224.00	1st half	} Indian Midland	VI
1,906	88.00	(c)80	6.00	2,239	122.00	2nd half		
...	...	...	...	...	...	1st half	} Bhopal-Itársi (British section).	VII
...	2nd half		
...	...	...	...	...	...	1st half	} Dhond-Manmád	X
...	2nd half		
...	...	...	...	...	...	1st half	} Bezváda Extension	XIII
...	2nd half		
(d)9,852	498.06	513	60.88	(d)11,872	715.76	1st half	} North Western	XVII
(d)9,852	534.61	513	52.94	(d)11,872	782.17	2nd half		
...	...	...	...	...	...	1st half	} Amritsar-Pathámkot	XVIII
...	2nd half		
...	...	...	...	...	...	1st half	} Jammu and Kashmir (British section).	XIX
...	2nd half		
4,384	230.97	120	18.19	4,913	313.98	1st half	} Oudh and Rohilkhand	XX
4,384	194.35	120	13.61	4,943	245.30	2nd half		
3,605	135.28	119	13.68	4,454	221.75	1st half	} Eastern Bengal	XXI
3,682	247.01	119	11.91	4,544	354.55	2nd half		
...	...	...	...	...	...	1st half	} Bengal Central	XXII
...	2nd half		
405	8.36	4	0.05	415	9.44	1st half	} Wardha Coal	
405	9.17	4	0.02	415	9.27	2nd half		
7,783	463.00	558	40.00	9,407	635.00	1st half	} Great Indian Peninsula	XXXII
7,799	404.00	566	60.00	9,423	585.00	2nd half		
3,557	221.00	84	5.00	4,060	260.00	1st half	} Bombay, Baroda and Central India	XXXIII
3,557	168.00	84	7.00	4,070	225.00	2nd half		
3,049	152.00	159	6.00	3,796	183.00	1st half	} Madras	XXXIV
3,032	159.00	164	7.00	3,806	201.00	2nd half		
...	...	...	...	...	...	1st half	} Tárakeshwar	XXXVI
...	2nd half		
...	...	...	...	...	...	1st half	} Khámgaon	XLII
...	2nd half		
...	...	...	...	...	...	1st half	} Amráoti	XLIII
...	2nd half		
...	...	...	...	...	...	1st half	} Bhopal-Itársi (Native State section).	XLIV
...	2nd half		
635	20.10	44	1.15	786	27.90	1st half	} The Nizam's Guaranteed State.	XLV
656	22.05	44	2.52	809	30.69	2nd half		
...	...	...	...	...	...	1st half	} The Guékwar's Petlád	XLVIII
...	2nd half		
...	...	...	...	...	...	1st half	} Rájputra-Rhátinda	L
...	2nd half		
...	...	...	...	...	...	1st half	} Jammu and Kashmir (Native State section).	LI
...	2nd half		
45,269	2,379.52	2,090	198.30	53,745	3,191.81	1st half	} TOTAL STANDARD GAUGE.	
45,675	2,200.41	2,101	185.27	54,261	3,045.45	2nd half			Carried over.

(d) Excludes 4 engines, 12 coaching and 21 goods vehicles belonging to the Ferozepore Steam Tramway, and 19 engines, 8 coaching and 51 goods vehicles belonging to the narrow gauge line, both lines having been closed and the entire stock laid by as spare during the half-year.

(e) Includes 26 third class carriages with brakes.

APPENDIX
STATISTICS OF INDIAN
No.
STATEMENT OF
[From No. XII of

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	LOCOMOTIVES.			COACHING.	
			Total stock on the list.	Average number spared or hired out.	Average number constantly under repair.	Total stock on the list.	Average number constantly under repair.
III	Brought forward STANDARD GAUGE.	1st half	2,526	62·00	473·29	6,386	613·99
		2nd half	2,566	98·00	512·77	6,485	659·77
	NARROW GAUGE.						
	Tirhoot	1st half	45	...	4·73	159	2·25
		2nd half	Included with the Bengal and North-Western railway.				...
	Bengal and North-Western .	1st half	80	...	8·50	163	19·53 ^(c)
		2nd half	100	...	12·50	322	23·93
	Baroilly-Pilibhit	1st half	Worked by the Rohilkhand-Kumaun railway.				...
2nd half							
VIII	Rajputana-Malwa	1st half	415	...	116·75	1,292	104·80
		2nd half	414	...	120·72	1,292	142·49
XI	Southern Mahratta	1st half	178	48·00	31·86	465	29·65
		2nd half	177	42·00	42·48	472	33·79
XII	Southern Mahratta, Mysore section.	1st half	42	6·00	6·22	103	6·67
		2nd half	42	5·00	9·15	131	7·76
	Villupuram-Guntakul— Nellore-Tirupati section	1st half	10	...	1·15	40	...
		2nd half	10	...	1·84	40	0·16
	Villupuram-Tiruvannamalai section.	1st half	...	...	...	(a)	...
		2nd half	50	...	...	...	...
	Lucknow-Sitapur-Seramau	1st half	12	...	1·01	64	2·72
		2nd half	12	...	0·97	64	5·44
XXIII	Nalhati	1st half	5	...	1·63	11	1·13
		2nd half	5	...	2·09	11	...
XXIV	Cherra-Companyganj	1st half	4	...	0·13	4	0·07
		2nd half	4	...	0·17	4	0·08
XXV	Jorhat	1st half	7	...	1·00	9	...
		2nd half	7	...	1·00	10	1·00
XXVI	Burma	1st half	107	1·00	7·73	524	25·52
		2nd half	107	...	17·37	524	57·46
XXVII	Toungoo-Mandalay	1st half	Included with the Burma State railway.			...	...
		2nd half					
	South Indian	1st half	124	1·00	23·29	479	43·40
		2nd half	124	...	17·33	518	28·34
XXXVII	Deoghur	1st half	(c) 2		...	(c) 10	...
		2nd half					
XXXVIII	Rohilkhand-Kumaun (Company's section).	1st half	8	...	1·93	45	3·97
		2nd half	8	...	2·45	45	2·87
XXXIX	Darjeeling-Himalayan	1st half	16	...	(e)	48	(e)
		2nd half	16	...	(e)	48	(e)
XL	Dibru-Sadiya	1st half	11	...	1·00	13	2·00
		2nd half	11	...	1·00	13	2·00
XLI	Thaton-Duyinzai	1st half	3	...	...	8	...
		2nd half	3	...	...	8	...
XLVI	The Gaekwar's Dabhoi	1st half	6	...	1·00	30	1·00
		2nd half	6	...	1·00	30	1·00
XLVII	The Gaekwar's Mehsana	1st half	Worked by the Rajputana-Malwa railway.			...	...
		2nd half					
LII	Jodhpore (e)	1st half	...	...	...	...	...
		2nd half	...	...	...	...	...
LIII	Bhavnagar-Gondal-Junagarh-Porbandar	1st half	33	...	2·79	163	4·39
		2nd half	33	...	3·41	176	7·43
LIV	Morvi	1st half	10	...	...	31	...
		2nd half	10	...	...	33	...
	TOTAL NARROW GAUGE	1st half	1,096	54·00	210·72	3,651	247·10
		2nd half	1,139	47·00	233·46	3,741	313·75
TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR. . . . .		...	3,707	145·00	746·23	10,236	978·52

(a) No passenger carriages were ready when this section was opened for traffic.

(b) Brake-vans and

(c) Figures taken from Part I of the Administration

(d) Includes 6 brake-vans, with

(e) Information not

A—continued.

RAILWAYS—(PART I)—continued.

XII—concluded.

ROLLING STOCK—concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

VEHICLES.						1890.	RAILWAY.	Serial number.
GOODS.		BRAKE-VANS.		TOTAL.				
Total stock on the list.	Average number constantly under repair.	Total stock on the list.	Average number constantly under repair.	Vehicle stock on the list.	Average number of vehicles constantly under repair.			
45,269	2,379.52	2,090	198.30	53,745	3,191.51	1st half	Brought forward STANDARD GAUGE.	
45,875	2,200.41	2,101	185.27	54,261	3,045.45	2nd half		
889	36.22	31	2.01	1,079	40.48	1st half	NARROW GAUGE.	
...	...	...	...	...	...	2nd half		
1,155	32.96	36	3.00	1,854	55.49	1st half	Tirhoot	III
2,051	74.57	67	6.50	2,440	105.00	2nd half		
...	...	...	...	...	...	1st half	Bengal and North-Western .	
...	...	...	...	...	...	2nd half		
7,280	471.81	279	32.46	8,851	609.07	1st half	Bareilly-Pilibhit	
7,280	537.88	279	17.61	8,851	697.98	2nd half		
3,510	306.15	133	7.46	4,508	343.26	1st half	Rajputana-Malwa	VIII
3,910	396.71	150	10.93	4,532	441.43	2nd half		
694	22.72	30	0.23	827	29.62	1st half	Southern Mahratta, Mysore section.	XII
695	28.12	30	2.76	856	38.64	2nd half		
212	...	8	...	260	...	1st half	Villupuram-Guntakal—	
212	...	8	...	260	0.16	2nd half		
250	...	1	...	251	...	1st half	Nellore-Tirupati section . .	
257	5.95	(b)11	0.55	332	9.22	2nd half		
283	18.70	(b)11	0.48	358	24.62	1st half	Villupuram-Tiruvannamalai section.	
28	0.36	2	...	41	1.49	2nd half		
28	0.34	2	0.05	41	0.39	1st half	Lucknow-Sitapur-Seraman . .	
139	4.09	...	...	143	4.16	2nd half		
139	3.28	...	...	143	3.36	1st half	Nalhati	XXIII
71	...	...	...	80	...	2nd half		
71	2.00	...	...	81	3.60	1st half	Cherra-Companyganj	XXIV
2,818	106.63	111	2.61	3,453	134.76	2nd half		
2,818	235.01	111	3.22	3,453	295.69	1st half	Jorhat	XXV
...	...	...	...	...	...	2nd half		
2,175	106.53	97	12.32	2,751	162.25	1st half	Burma	XXVI
2,175	62.83	97	5.79	2,790	96.96	2nd half		
(c) 8	...	(c) 2	...	(c) 20	...	1st half	Toungoo-Mandalay	XXVII
183	3.17	(d)12	1.24	240	8.38	2nd half		
133	9.70	(d)12	0.70	240	13.27	1st half	South Indian	XXVIII
144	(e) ...	...	...	192	(e) ...	2nd half		
147	(e) ...	...	...	195	(e) ...	1st half	Deoghur	XXXVII
439	4.00	12	1.00	464	7.00	2nd half		
520	5.00	12	...	545	7.00	1st half	Rohilkhand-Kumaun (Company's section).	XXXVIII
41	...	1	...	50	...	2nd half		
41	...	1	...	50	...	1st half	Darjeeling-Himalayan	XXXIX
187	1.00	6	...	223	2.00	2nd half		
187	1.00	6	...	223	2.00	1st half	Dibru-Sadiya	XL
...	...	...	...	...	...	2nd half		
...	...	...	...	...	...	1st half	Thaton-Duyinzak	XLI
866	14.80	36	2.49	1,065	21.18	2nd half		
866	2.77	36	4.07	1,078	40.27	1st half	The Gaekwar's Dathoi	XLVI
100	...	4	...	135	...	2nd half		
97	...	4	...	134	...	1st half	The Gaekwar's Mehsana	XLVII
21,588	1,115.89	809	65.37	26,048	1,426.36	2nd half		
21,953	1,403.91	827	52.11	26,521	1,769.77	1st half	TOTAL NARROW GAUGE.	
67,636	3,604.32	2,930	237.98	80,802	4,815.22	2nd half		
						...	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	

It is worked with the rolling-stock of the South Indian railway.
 Post Office.
 Report for 1890-91.
 postal compartments.
 furnished.

APPENDIX
STATISTICS OF INDIAN
No.
STATEMENT OF
[From No. XIV

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	TRAIN-MILES.			
			Passengers.	Goods.	Mixed.	Light.
STANDARD GAUGE.						
I	East Indian	{ 1st half 2nd half	663,962 662,124	2,079,451 1,636,046	1,330,994 1,427,659	155,340 129,247
II	Patna-Gya	{ 1st half 2nd half	189 1,026	2,413 380	58,482 52,440	18 171
V	Bengal-Nágpur	{ 1st half 2nd half	612 ...	110,488 69,350	200,092 225,797	1,733 593
VI	Indian Midland	{ 1st half 2nd half	170,661 177,771	149,414 85,020	251,913 263,506	4,495 6,313
VII	Bhopal-Itárai (British section)	{ 1st half 2nd half	} Included with the Bhopal-Itárai (Native State Section).			
X	Dhond-Manmád	{ 1st half 2nd half	} Included with the Great Indian Peninsula railway.			
XIII	Bezváda Extension	{ 1st half 2nd half	} Included with the Nizam's Guaranteed State railway.			
XVII	North Western	{ 1st half 2nd half	391,206 394,533	2,048,093 1,779,939	1,424,709 1,453,879	72,181 55,700
XVIII	Amritsar-Patháukot	{ 1st half 2nd half	} Included with the North Western railway.			
XIX	Jammu and Kashmir (British section)	{ 1st half 2nd half	} ...			
XX	Oudh and Rohilkhand	{ 1st half 2nd half	224,390 222,504	268,329 243,537	666,221 556,557	32,311 24,089
XXI	Eastern Bengal	{ 1st half 2nd half	290,028 288,039	440,505 577,211	686,080 676,579	8,673 12,063
XXII	Bengal Central	{ 1st half 2nd half	22,584 27,611	... 1,060	124,244 118,039	... 104
	Wardha Coal	{ 1st half 2nd half	... ...	14,708 12,920	32,580 33,120	......
XXXII	Great Indian Peninsula	{ 1st half 2nd half	1,356,626 1,411,915	3,084,236 2,084,893	376,409 356,387	155,682 94,008
XXXIII	Bombay, Baroda and Central India	{ 1st half 2nd half	599,643 625,251	632,973 362,699	43,899 44,308	396 432
XXXIV	Madras	{ 1st half 2nd half	372,923 404,603	388,252 374,166	425,460 472,539	20,923 21,936
XXXVI	Tárákeswar	{ 1st half 2nd half	572 ...	474 ...	25,036 25,388	......
XLII	Kháungon	{ 1st half 2nd half	} Included with the Great Indian Peninsula railway.			
XLIII	Amráoti	{ 1st half 2nd half	} ...			
XLIV	Bhopal-Itárai (Native State section)	{ 1st half 2nd half	21,383 23,672	32,003 18,919	25,669 27,225	2,172 2,366
XLV	The Nizam's Guaranteed State	{ 1st half 2nd half	67,545 56,488	122,217 74,047	150,412 183,888	213 ...
XLVIII	The Gaekwar's Petláá	{ 1st half 2nd half	} (b) (b) (b) (b)			
L	Rájputra-Bhátinda	{ 1st half 2nd half	461 773	27,993 22,198	44,707 45,443	1,578 1,871
LI	Jammu and Kashmir (Native State section).	{ 1st half 2nd half	} Included with the North Western railway.			
	TOTAL STANDARD GAUGE. Carried over.	{ 1st half 2nd half	4,182,784 4,296,510	9,381,548 7,342,385	5,866,907 5,962,759	455,715 348,893

(a) Excludes the mileage run by ballast trains.
(b) Information not furnished.

A—continued.

RAILWAYS—(PART I)—continued.

XIII.

TRAIN-MILEAGE.

of Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

TRAIN-MILES AFTER APPORTIONING MIXED AND LIGHT MILEAGE.		Total Train-mileage.	Assisting, shunting and miscellaneous mileage.	Total engine-mileage.	1890.	RAILWAY.	Serial number.
Coaching.	Goods.						
STANDARD GAUGE.							
1,723,144	2,506,603	4,229,747	743,709	4,973,456	1st half	} East Indian	
1,773,922	2,081,154	3,855,076	719,814	4,574,890	2nd half		
40,056	21,046	61,102	3,130	64,232	1st half	} Patna-Gy	II
37,725	16,292	54,017	4,084	58,101	2nd half		
56,993	225,932	312,925	88,120	351,045	1st half	} Bengal-Nággpur	V
105,887	189,853	295,740	27,735	828,475	2nd half		
275,813	300,670	576,483	60,814	637,297	1st half	} Indian Midland	VI
301,923	230,787	532,610	29,106	561,716	2nd half		
...	...	...	...	...	1st half	} Bhopal-Itársi (British section)	VII
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Dhond-Manmád	X
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Bezwáda Extension	XIII
...	...	...	...	...	2nd half		
1,358,856	2,577,333	3,936,189	402,993	4,339,182	1st half	} North Western	XVII
1,325,167	2,358,884	3,684,051	406,339	4,090,390	2nd half		
...	...	...	...	...	1st half	} Amritsar-Pathánekot	XVIII
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Jammu and Kashmir (British section).	XIX
...	...	...	...	...	2nd half		
516,652	674,599	1,191,251	244,852	1,436,103	1st half	} Oudh and Rohilkhand	XX
513,946	532,741	1,046,687	206,224	1,252,911	2nd half		
631,335	793,951	1,425,286	311,100	1,736,386	1st half	} Eastern Bengal	XXI
644,932	908,960	1,553,892	370,164	1,924,056	2nd half		
94,933	51,895	146,828	13,802	160,630	1st half	} Bengal Central	XXII
97,002	49,812	(a) 146,814	15,225	162,039	2nd half		
10,110	37,178	47,288	3,995	51,283	1st half	} Wardha Coal	
11,067	34,973	46,040	2,526	48,566	2nd half		
1,567,547	3,405,406	4,972,953	641,614	5,614,567	1st half	} Great Indian Peninsula	XXXII
1,621,901	2,325,302	3,947,203	530,741	4,477,944	2nd half		
614,971	661,939	1,276,910	144,310	1,421,220	1st half	} Bombay, Baroda and Central India	XXXIII
645,449	367,241	1,032,690	95,783	1,128,473	2nd half		
542,994	644,564	1,187,558	216,550	1,404,108	1st half	} Madras	XXXIV
575,101	698,143	1,273,244	233,183	1,506,427	2nd half		
23,557	2,525	26,082	2,476	28,558	1st half	} Tárakeshwar	XXXVI
23,774	1,614	25,388	1,716	27,104	2nd half		
...	...	...	...	...	1st half	} Khámgaon	XLII
...	...	...	...	...	2nd half		
...	...	...	...	...	1st half	} Amráoti	XLIII
...	...	...	...	...	2nd half		
30,359	50,867	81,226	...	81,226	1st half	} Bhopal-Itársi (Native State section)	XLIV
35,681	36,701	72,382	...	72,382	2nd half		
132,614	207,773	340,387	38,760	379,147	1st half	} The Nizam's Guaranteed State	XLV
123,266	191,157	314,423	36,433	350,856	2nd half		
(b)	(b)	3,034	...	3,034	1st half	} The Gaekwar's Petlád	XLVIII
		9,845	672	10,517	2nd half		
23,984	50,755	74,739	6,015	80,754	1st half	} Rájputra-Bhátinda	L
23,031	47,259	70,290	7,275	77,565	2nd half		
...	...	...	...	...	1st half	} Jammu and Kashmir (Native State section).	LI
...	...	...	...	...	2nd half		
7,673,918	12,213,036	19,889,988	2,872,240	22,762,228	1st half	} TOTAL STANDARD GAUGE. Carried over.	
7,859,674	10,090,873	17,960,392	2,687,020	20,647,412	2nd half		

APPENDIX
STATISTICS OF INDIAN
No.
STATEMENT OF
[From No. XIV

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	TRAIN-MILES.			
			Passengers.	Goods.	Mixed.	Light.
	Brought forward STANDARD GAUGE	1st half	4,182,784	9,981,548	5,866,907	455,715
		2nd half	4,296,510	7,812,385	5,962,759	348,893
	NARROW GAUGE.	1st half	4,346	86,866	269,915	13,649
		2nd half	...	...	...	...
III	Tirhoot	1st half	...	40,519	304,448	4,722
		2nd half	9,014	67,018	584,179	13,812
	Bengal and North-Western	1st half	465	1,317	13,032	70
		2nd half	...	210	13,248	...
VIII	Rajputana-Malwa	1st half	374,720	1,872,041	1,097,395	56,458
		2nd half	373,377	822,718	1,123,766	27,355
XI	Southern Mahratta	1st half	154,245	233,110	480,084	13,201
		2nd half	168,374	188,021	502,450	7,273
XII	Southern Mahratta, Mysore section	1st half	72,467	48,599	109,896	2,127
		2nd half	113,085	57,087	113,624	1,918
	Villupuram-Guntakal—	1st half	148	2,607	65,687	179
		2nd half	76	1,378	66,677	122
	Nellore-Tirupati section	1st half	...	...	...	...
		2nd half	504	1,890	6,216	...
	Villupuram-Tiruvannamalai section	1st half	599	3,888	76,020	1,098
		2nd half	68	1,912	77,280	804
XXIII	Nalhati	1st half	191	6,319	19,729	...
		2nd half	163	9,110	19,961	...
XXIV	Cherra-Companyganj	1st half	38	337	6,783	...
		2nd half	15	...	7,156	...
XXV	Jorhat	1st half	967	1,234	9,672	...
		2nd half	1,227	22	10,250	...
XXVI	Burma	1st half	229,522	241,124	335,034	26,203
		2nd half	223,973	116,154	402,592	23,372
XXVII	Toungoo-Mandalay	1st half	...	...	...	...
		2nd half	...	...	...	...
	South Indian	1st half	236,675	338,103	443,996	18,367
		2nd half	250,243	451,687	467,415	24,884
XXXVII	Deoghur	1st half	...	...	...	...
		2nd half	...	...	...	...
XXXVIII	Rohilkhand-Kumaun	1st half	1,252	7,517	30,780	2,795
		2nd half	1,085	3,146	24,756	1,819
XXXIX	Darjeeling-Himalayan	1st half	18,983	44,192	...	...
		2nd half	18,768	46,006	...	...
XL	Dibru-Sadiya	1st half	...	43,460	28,236	...
		2nd half	...	35,537	28,897	...
XLI	Thaton-Duyinzak	1st half	(a)	(a)	(a)	(a)
		2nd half	(a)	(a)	(a)	(a)
XLVI	The Gaskwar's Dabhoi	1st half	1,370	16,858	21,636	20
		2nd half	2,553	8,316	26,537	237
XLVII	The Gaskwar's Mehsana	1st half	(a)	(a)	(a)	(a)
		2nd half	(a)	(a)	(a)	(a)
LII	Jodhpore	1st half	576	6,826	48,224	64
		2nd half	552	11,186	48,896	...
LIII	Bhavnagar-Gondal-Junggarh-Porbandar	1st half	74,884	117,719	151,891	5,378
		2nd half	42,614	22,079	144,657	2,080
LIV	Morvi	1st half	145	24,445	32,906	...
		2nd half	16,630	14,373	34,592	...
	TOTAL NARROW GAUGE	1st half	1,171,093	2,637,020	3,551,564	144,331
		2nd half	1,222,321	1,857,849	3,703,149	103,676
TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.		...	10,872,708	21,218,802	19,084,379	1,052,615

(a) Information not furnished.

(b) Quoted from Part I of the Administration Report for 1890-91.

A—continued.

RAILWAYS—(PART I)—continued.

XIII—concluded.

TRAIN-MILEAGE—concluded.

of Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

TRAIN-MILES AFTER APPORTIONING MIXED AND LIGHT MILEAGE.		Total Train-mileage.	Assisting, shunting and miscellaneous mileage.	Total engine-mileage.	1890.	RAILWAY.	Serial number.
Coaching.	Goods.						
7,673,918 7,859,674	12,213,036 10,090,873	19,889,988 17,960,392	2,872,240 2,687,020	22,762,228 20,647,412	1st half } 2nd half }	Brought forward STANDARD GAUGE.	
128,004 ...	246,772 ...	374,776 ...	97,616 ...	472,392 ...	1st half } 2nd half }	NARROW GAUGE. Tirhoot	III
137,160 311,498	212,529 362,525	349,689 674,023	53,257 142,058	402,946 816,081	1st half } 2nd half }	Bengal and North-Western	
5,786 5,437	9,098 7,991	14,884 18,458	2,616 1,578	17,500 15,036	1st half } 2nd half }	Bareilly-Pilibhit	
1,005,567 1,004,676	1,895,047 1,342,540	2,900,614 2,347,216	879,027 822,332	3,279,641 2,669,543	1st half } 2nd half }	Rajputana-Malwa . . . . .		VIII
369,433 387,745	511,207 478,373	880,640 866,118	68,205 74,910	948,845 941,028	1st half } 2nd half }	Southern Mahratta	XI
117,187 149,184	115,842 136,530	233,029 285,714	16,344 22,115	249,373 307,829	1st half } 2nd half }	Southern Mahratta, Mysore section. Villupuram-Guntakal—	XII
47,542 43,546	21,079 24,707	68,621 68,253	7,216 7,581	75,837 75,834	1st half } 2nd half }	Nellore-Tirupati section	
4,151	4,459	8,610	1,193	9,803	1st half } 2nd half }	Villupuram-Tiruvannamalai section.	
18,831 30,846	62,774 29,218	81,605 80,064	4,612 5,944	86,217 86,008	1st half } 2nd half }	Lucknow-Sitapur-Seraman	
14,193 14,456	12,046 14,778	26,239 29,234	2,104 1,468	28,343 30,703	1st half } 2nd half }	Nalhati	XXIII
579 272	6,579 6,899	7,158 7,171	239 287	7,397 7,458	1st half } 2nd half }	Cherra-Companyganj	XXIV
4,700 5,108	7,173 6,391	11,873 11,499	... ...	11,873 11,499	1st half } 2nd half }	Jorhat	XXV
397,227 417,061	434,656 349,030	831,883 766,091	136,318 130,323	968,201 896,414	1st half } 2nd half }	Burma	XXVI
...	...	...	...	...	1st half } 2nd half }	Toungoo-Mandalay	XXVII
453,323 485,761	582,823 708,468	1,036,146 1,194,229	206,795 214,894	1,242,941 1,409,123	1st half } 2nd half }	South Indian	
...	...	13,436	...	13,436	1st half } 2nd half }	Deoghur	XXXVII
16,536 15,671	25,808 15,134	42,344 30,805	5,108 2,529	47,452 33,334	1st half } 2nd half }	Rohilkhand-Kumaun	XXXVIII
18,983 18,768	44,192 46,066	63,175 64,774	(a) (a)	63,175 64,774	1st half } 2nd half }	Darjeeling-Himalayan	XXXIX
9,412 9,632	62,284 54,802	71,696 64,434	(a) (a)	71,696 64,434	1st half } 2nd half }	Dibru-Sadiya	XL
(a)	(a)	6,672 5,520	(a) (a)	6,672 5,520	1st half } 2nd half }	Thaton-Duyinzak	XLI
16,520 22,153	24,064 15,490	40,584 37,643	316 374	40,900 38,017	1st half } 2nd half }	The Gaekwar's Dabhoi	XLVI
(a)	(a)	17,115 23,639	2,321 1,841	19,436 25,480	1st half } 2nd half }	The Gaekwar's Mehsana	XLVII
26,384 29,470	29,306 31,164	55,690 60,634	2,920 2,943	58,610 63,577	1st half } 2nd half }	Jodhpore	LII
170,144 142,906	179,722 68,524	349,866 211,430	18,528 7,477	368,394 218,907	1st half } 2nd half }	Bhavnagar-Gondal-Junagarh-Porbandar.	LIII
34,037 45,663	29,459 19,932	63,496 65,595	1,350 3,830	64,846 69,425	1st half } 2nd half }	Morvi	LIV
2,991,548 3,164,034	4,512,460 3,722,961	7,527,795 6,916,154	1,004,892 943,677	8,532,687 7,859,831	1st half } 2nd half }	TOTAL NARROW GAUGE.	
21,689,174	30,589,330	52,307,765	7,507,829	59,815,594	...	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR.	

STATISTICS OF INDIAN RAILWAYS—(PART I)—continued.

No. XIV.

NET EARNINGS COMPARED WITH INTEREST ON CAPITAL.

[From Nos. VIII and XVII of the Revenue Accounts.]

Half-years ended the 30th June
and the 31st December 1890.

Serial number.	RAILWAY.	1890.	Interest on capital.	Net earnings of the half-year.	DIFFERENCE.	
					Excess.	Deficient.
			R	R	R	R
	STANDARD GAUGE.					
I	East Indian	1st half	(a) 1,23,27,246	1,58,65,890	35,38,644	...
		2nd half	(a) 1,23,15,789	1,39,56,885	16,41,096	...
II	Patna-Gya	1st half	86,913	1,38,009	51,186	...
		2nd half	86,910	1,42,001	55,091	...
V	Bengal-Nágpur	1st half	17,09,912	8,30,595	...	8,79,317
		2nd half	16,78,939	-2,83,133	...	19,62,072
VI	Indian Midland	1st half	17,44,306	4,15,702	...	13,28,604
		2nd half	16,49,904	1,84,077	...	14,65,827
VII	Bhopal-Itánsi (British section)	1st half	25,000	-5,226	...	30,226
		2nd half	25,351	-11,347	...	36,698
X	Dhond-Manmád	1st half	2,19,793	1,45,978	...	73,815
		2nd half	2,19,836	1,17,156	...	1,02,680
XIII	Bezváda Extension	1st half	26,993	10,662	...	16,331
		2nd half	27,538	5,656	...	21,882
XVII	North Western	1st half	92,56,187	48,33,903	...	44,22,284
		2nd half	91,21,233	53,11,484	...	38,09,749
XVIII	Amritsar-Pathánskot	1st half	1,12,404	56,094	...	56,310
		2nd half	1,12,249	56,121	...	56,128
XIX	Jammu and Kashmir (British section)	1st half	} Included with the North Western railway.		...	...
		2nd half			...	...
XX	Oudh and Rohilkhand	1st half	22,61,453	22,90,156	28,703	...
		2nd half	21,61,656	14,64,322	...	6,97,334
XXI	Eastern Bengal	1st half	24,71,824	25,27,676	55,852	...
		2nd half	24,38,436	35,42,646	11,04,210	...
XXII	Bengal Central	1st half	2,39,957	1,33,157	...	1,06,800
		2nd half	2,13,427	1,12,749	...	1,00,678
	Wardha Coal (b)	1st half	1,41,173	1,88,226	47,053	...
		2nd half	1,40,124	86,776	...	53,348
XXXII	Great Indian Peninsula	1st half	(a) 66,58,075	1,28,76,739	62,18,664	...
		2nd half	(a) 64,77,786	62,73,520	...	2,04,266
XXXIII	Bombay, Baroda and Central India	1st half	(a) 22,89,477	49,02,033	26,12,556	...
		2nd half	(a) 23,64,459	25,96,145	2,31,686	...
XXXIV	Madras	1st half	28,83,565	22,17,892	...	6,65,673
		2nd half	28,84,051	23,03,588	...	5,80,463
XXXVI	Tárakeshwar	1st half	} Information not furnished.		...	...
		2nd half			...	...
XLII	Khámgaon	1st half	9,815	19,339	9,524	...
		2nd half	9,812	6,753	...	3,059
XLIII	Amráoti	1st half	8,909	32,443	23,534	...
		2nd half	8,906	13,810	4,904	...
XLIV	Bhopal-Itánsi (Native State section)	1st half	97,503	-17,687	...	1,15,190
		2nd half	99,095	-38,405	...	1,37,500
XLV	The Nizam's Guaranteed State	1st half	(c) 8,92,623	5,88,376	...	3,04,247
		2nd half	(c) 10,46,745	4,51,214	...	5,95,531
XLVIII	The Gaekwar's Petlád	1st half	3,725	5,801	2,076	...
		2nd half	12,937	15,069	2,132	...
L	Rájpura-Bhátinda	1st half	1,27,682	1,20,171	...	7,511
		2nd half	1,29,979	1,34,954	4,975	...
LI	Jammu and Kashmir (Native State section)	1st half	20,557	4,849	...	15,708
		2nd half	24,047	8,921	...	15,126
	TOTAL STANDARD GAUGE. Carried over.	1st half	(d) 4,36,15,093	(d) 4,81,80,869	45,65,776	...
		2nd half	(d) 4,32,49,209	(d) 3,64,50,962	...	67,98,247

(a) Includes contribution to Provident Fund.

(b) Includes the Warora Colliery.

(c) Includes contribution to Sinking Fund.

(d) Excludes the Tarakeshwar railway.

A—continued.

STATISTICS OF INDIAN RAILWAYS—(PART I)—concluded.

No. XIV—concluded.

NET EARNINGS COMPARED WITH INTEREST ON CAPITAL—concluded.

[From Nos. VIII and XVII of the Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1890.

Serial number.	RAILWAY.	1890.	Interest on capital.	Net earnings of the half-year.	DIFFERENCE.	
					Excess.	Deficient.
			R	R	R	R
	Brought forward STANDARD GAUGE	1st half	4,36,15,093	4,81,80,869	45,65,776	...
		2nd half	4,32,49,209	3,64,50,962	...	67,98,247
	NARROW GAUGE.					
III	Tirhoot	1st half	4,58,189	8,60,313	4,02,124	...
		2nd half	4,56,018	4,60,653	4,635	...
	Bengal and North-Western	1st half	5,51,341	7,13,235	1,61,894	...
		2nd half	5,52,903	5,39,162	...	13,741
	Bareilly-Pilibhit	1st half	30,683	21,328	...	9,355
		2nd half	30,720	19,193	...	11,527
VIII	Rajputana-Malwa	1st half	(a)30,65,012	52,96,665	22,31,653	...
		2nd half	(a)26,78,463	33,45,860	6,67,377	...
XI	Southern Mahratta	1st half	(b)16,30,083	5,12,593	...	11,17,490
		2nd half	(b)15,38,728	4,62,143	...	10,76,585
XII	Southern Mahratta, Mysore section	1st half	(a)(c)3,65,744	1,15,982	...	2,49,762
		2nd half	(a)(c)3,50,378	1,45,720	...	2,04,658
	Villupuram-Guntakal—					
	Nellore-Tirupati section	1st half	1,26,790	17,170	...	1,09,620
		2nd half	1,26,288	35,192	...	91,096
	Villupuram-Tiruvannamalai section	1st half	...	...	...	...
		2nd half	2,77,638	6,512	...	2,71,126
		1st half	78,504	67,119	...	21,385
	Lucknow-Sitapur-Seramau	2nd half	72,821	34,697	...	38,124
XXIII	Nalhati	1st half	6,827	22,534	15,707	...
		2nd half	6,709	—364	...	7,073
XXIV	Cherra-Companyganj	1st half	15,335	—4,331	...	19,666
		2nd half	15,436	1,474	...	13,962
XXV	Jorhat	1st half	14,790	—2,569	...	17,359
		2nd half	14,820	8,732	...	6,088
XXVI	Burma	1st half	10,19,311	14,72,772	4,53,461	...
		2nd half	10,26,800	8,75,419	...	1,51,381
XXVII	Toungoo-Mandalay	1st half	Included with the Burma State railway.			...
		2nd half				...
	South Indian	1st half	11,26,230	12,52,666	1,26,436	...
		2nd half	11,26,230	13,55,767	2,29,537	...
XXXVII	Deoghur	1st half	Information not furnished.			...
		2nd half				...
XXXVIII	Rohilkhand-Kumaun (Company's section)	1st half	1,24,163	1,51,002	26,839	...
		2nd half	...	...	...	...
XXXIX	Darjeeling-Himalayan	1st half	Information not furnished.			...
		2nd half				...
XL	Dibru-Sadiya	1st half	1,36,455	82,310	...	54,145
		2nd half	...	...	...	...
XLI	Thaton-Duyinzaiik	1st half	Information not furnished.			...
		2nd half				...
XLVI	The Gaekwar's Dubhoi	1st half	33,166	46,662	13,496	...
		2nd half	34,601	27,908	...	6,693
XLVII	The Gaekwar's Mehsana	1st half	Information not furnished.			...
		2nd half				...
LII	Jodhpore	1st half	3,87,185	4,22,130	34,945	...
		2nd half	...	...	...	...
LIII	Bhavnagar-Gondal-Junagarh-Porbandar	1st half	3,34,576	1,78,137	...	1,56,439
		2nd half	...	...	...	...
LIV	Morvi	1st half	39,013	58,666	19,653	...
		2nd half	39,940	28,884	...	11,056
	TOTAL NARROW GAUGE	1st half	(d) 90,84,658	(d) 1,09,45,245	(d) 18,60,587	...
		2nd half	(e) 86,83,089	(e) 75,25,453	...	(e) 11,57,636
	TOTAL STANDARD AND NARROW GAUGES FOR THE YEAR. . . . .	...	(f) 10,47,56,212	(f) 10,32,53,531	...	15,02,681

(a) Includes share of surplus profits payable to the working company.

(b) Includes contribution to Provident Fund and interest on advance by the Secretary of State.

(c) Includes contribution to Provident Fund.

(d) Excludes the Deoghur, Rohilkhand-Kumaun, Darjeeling-Himalayan, Thaton-Duyinzaiik, the Gaekwar's Mehsana and Jodhpore railways.

(e) Excludes the Deoghur, Rohilkhand-Kumaun, Darjeeling-Himalayan, Dibru-Sadiya, Thaton-Duyinzaiik, the Gaekwar's Mehsana and Jodhpore railways.

(f) Includes the Rohilkhand-Kumaun railway, for which yearly figures are shown.

APPENDIX A—continued.

INDIAN RAILWAYS.

Statistics of their Working for the half-years ended the 30th June and the 31st December 1890.

PART II.

SUMMARY OF ANALYSIS OF WORKING.

CONTENTS.

HEADINGS.	NO. OF TABLE.	PAGE
DESCRIPTION OF RAILWAY WORKED	I	liv—lv
FINANCIAL RESULTS	II	ib.
OUTLAY, EARNINGS AND EXPENSES	III	liv—lv
DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC	IV	lvi—lvii
COACHING TRAFFIC	V	lvi—lxii
GOODS TRAFFIC	VI	lxii—lxv
DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE	VII	lxiv—lxv
WORKING EXPENSES	VIII	lxvi—lxxv
MAINTENANCE OF WAY, WORKS AND STATIONS	A	lxvi—lxvii
LOCOMOTIVE EXPENSES	B	lxviii—lxxi
CARRIAGE AND WAGON EXPENSES	C	lxx—lxxi
TRAFFIC EXPENSES	D	lxxii—lxxiii
GENERAL CHARGES	E	lxxiv—lxxv
SPECIAL AND MISCELLANEOUS	G	ib.
EXTRACTS FROM TABLES PRINTED AS APPENDICES TO THE ANALYSES	IX	lxxvi—lxxix

APPENDIX
STATISTICS OF INDIAN

Half-years ended the 30th June and the 31st December 1890.

Progressive number.	HEADINGS.	1890.	STATE LINES WORKED BY COMPANIES.					STATE LINES WORKED BY THE STATE.				LINES XXXII. Great Indian Peninsula. (a)
			I. East Indian. (a)	V. Bengal-Nagpur. (b)	VI. Indian Midland. (d)	XVII. North Western. (e)	XX. Oudh and Rohilkhand.	XXI. Eastern Bengal.		XXXII. Great Indian Peninsula. (a)		
								Standard Gauge. (i)	Metre and 2' 6" Gauges.			
No. I.												
DESCRIPTION OF RAILWAY WORKED.												
1	Gauge of Railway	{ 1st half 2nd "	5' 6" 5' 6"	5' 6" 5' 6"	5' 6" 5' 6"	5' 6" 5' 6"	5' 6" 5' 6"	5' 6" 5' 6"	(j) 3' 3 3/4" (k) 3' 3 3/4"	5' 6" 5' 6"		
2	Mean mileage worked Miles	{ 1st half 2nd "	1,629'11 1,629'11	380'17 438'45	753'65 753'65	2,503'28 2,512'95	692'55 692'55	360'45 374'30	514'37 514'61	1,446'07 1,443'05		
3	Number of stations No.	{ 1st half 2nd "	188 188	51 51	72 78	337 336	102 104	93 93	75 75	202 203		
4	Total length of the following gradients:—											
	(a) 1/10 and less Miles	{ 1st half 2nd "	... ...	... ...	... ...	32'32 33'32	... ...	... ...	... ...	19'31 19'31	
	(b) 1/11 to 1/10 "	{ 1st half 2nd "	4'04 4'04	... ...	6'75 6'75	84'41 82'54	... ...	... ...	... ...	2'36 2'36	
	(c) 1/11 to 1/10 "	{ 1st half 2nd "	12'46 12'46	9'83 8'04	4'20 4'20	82'06 85'31	... ...	... ...	0'07 0'07	62'10 62'10	
	(d) 1/11 to 1/10 "	{ 1st half 2nd "	93'04 93'04	156'24 143'67	199'00 199'00	88'77 85'73	5'04 5'04	0'55 0'55	10'21 10'21	492'22 492'22		
	(e) 1/11 to 1/10 "	{ 1st half 2nd "	101'33 101'33	48'88 48'87	67'32 67'32	103'88 102'56	18'05 18'05	1'09 1'09	7'11 7'11	202'45 202'45		
5	Steepest gradient worked—											
	(a) Length "	{ 1st half 2nd "	0'98 0'98	1'93 1'93	2'40 2'40	0'55 0'55	0'40 0'40	(j) 0'14	(m) 1'21	5'85 5'85		
	(b) Inclination "	{ 1st half 2nd "	1/10 1/10	1/10 1/10	1/10 1/10	1/10 1/10	1/10 1/10	(k) 1/10	(n) 1/10	1/10 1/10		
No. II.												
FINANCIAL RESULTS.												
6	Percentage of net earnings (including steam-boat traffic) on capital outlay Per cent.	{ 1st half 2nd "	4'35 3'83	1'69 —0'48	0'51 0'22	(l) 1'22 (l) 1'34	2'48 1'58	2'57 4'26	2'58 2'59	4'67 2'26		
7	Percentage of net earnings on paid-up capital "	{ 1st half 2nd "	... ...	1'06 (c) —0'32	0'50 0'21	... ...	... ...	... ...	... ...	4'64 2'29	
No. III.												
OUTLAY, EARNINGS AND EXPENSES.												
<i>(Exclusive of Steam-boat Service.)</i>												
8	Capital outlay per mile open R	{ 1st half 2nd "	2,22,748 2,22,810	1,08,362 1,09,686	1,13,490 1,16,419	(g) 1,57,419 (h) 1,57,961	1,30,443 1,30,559	2,13,196 2,13,904	78,842 80,530	2,08,609 2,09,471		
9	Total earnings per mile open, per week "	{ 1st half 2nd "	561 482	172 68	100 79	215 212	232 178	323 431	151 156	608 407		
10	Total working expenses per mile open, per week "	{ 1st half 2nd "	185 151	86 89	80 72	138 127	105 97	164 172	73 77	264 236		
11	Total earnings per train-mile "	{ 1st half 2nd "	5'50 5'20	6'54 3'33	2'99 2'55	3'49 3'69	3'50 3'06	3'68 4'35	2'70 2'83	4'60 3'87		
12	Total working expenses per train-mile "	{ 1st half 2nd "	1'81 1'63	3'28 4'36	2'39 2'33	2'24 2'21	1'58 1'66	1'87 1'73	1'30 1'39	1'99 2'24		
13	Net earnings per train-mile "	{ 1st half 2nd "	3'69 3'57	3'26 —1'03	0'60 0'22	1'25 1'48	1'92 1'40	1'81 2'62	1'40 1'44	2'61 1'63		
14	Cost per 1,000 gross ton-miles moved (freight and dead-weight) "	{ 1st half 2nd "	4'61 4'40	8'89 13'86	7'91 8'72	7'18 6'63	4'99 5'85	6'98 5'78	7'90 8'52	6'82 8'26		
15	Percentage of total working expenses upon total earnings Per cent.	{ 1st half 2nd "	32'92 31'31	50'23 130'92	80'02 91'29	63'99 59'83	45'16 54'32	50'70 39'77	48'13 49'29	43'34 58'00		
16	Percentage of total working expenses upon total earnings, excluding from both sides of the account the charges for carriage of revenue stores "	{ 1st half 2nd "	31'62 30'06	49'53 132'78	79'44 90'90	62'64 58'11	43'27 52'20	49'58 38'77	47'04 48'15	41'26 55'44		
<i>(Inclusive of Steam-boat Service.)</i>												
17	Percentage of total working expenses on total earnings (for details, see Table No. VII) Per cent.	{ 1st half 2nd "	33'04 31'46	50'23 130'92	80'02 91'29	64'22 60'17	45'16 54'32	51'26 41'87	51'35 51'93	43'34 58'00		

(a) Includes the Patna-Gya and Tarakeswar railways.
 (b) Excludes the Asansol-Goukera section, excepting Table A.
 (c) Includes the Asansol-Goukera section.
 (d) Includes the Bhopal-Itarsi railway, excepting items 6, 7, and 8.
 (e) Includes the Amritsar-Pathankot, Rajpura-Bhatinda and Jammu and Kashmir railways, except where otherwise stated.
 (f) Excludes the Rajpura-Bhatinda railway and the Kashmir section of the Jammu and Kashmir line.
 (g) Calculated on 2,401'59 miles, including lines not worked, but excluding the Rajpura-Bhatinda, Amritsar-Pathankot and durbar section of the Jammu and Kashmir railway.
 (h) Calculated on 2,403'72 miles, including lines not worked, but excluding Rajpura-Bhatinda, Amritsar-Pathankot and Kashmir section of the Jammu and Kashmir railway.
 (i) Includes the Bengal Central railway, excepting items 6 and 8.
 (j) On the Eastern section only. For the other sections as follows:—
 Calcutta and South-Eastern Miles.
 Bengal Central Miles.
 (k) For the Eastern section only. For the other sections as follows:—
 Calcutta and South-Eastern 1 in 300 | Bengal Central 1 in 300
 (l) Includes the Kaunia-Dharilla railway, 2' 6" gauge.

A—continued.
RAILWAYS—(Part II).

Half-years ended the 30th June and the 31st December 1890.

GAUGE.			METRE GAUGE.										1890.	Progressive number.
WORKED BY GUARANTEED COMPANIES.		LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	STATE LINES WORKED BY COMPANIES.					STATE LINES WORKED BY THE STATE.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED BY NATIVE STATES.			
XXXIII. Bombay, Baroda and Central India (p)	XXXIV. Madras.	XLV. The Nizam's Guaranteed State. (q)	III. Tirhoot.	VIII. Bengal and North-Western. (r)	XI. Rajputana-Malwa.	XXVI. Southern Mahratta. (s)	Burma. (t)	South Indian. (u)	XXXVIII. Rohilkhand-Kumaun. (v)	LIII. Bhavnagar-Gondal-Junagarh-Forbandar.				
5' 6"	5' 6"	5' 6"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	1st half .	1	
5' 6"	5' 6"	5' 6"	...	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	2nd ,, .		
460'90	839'30	353'77	272'53	376'00	1,671'83	1,280'37	553'00	662'46	103'00	333'90	1st half .	2		
460'90	839'30	353'77	...	692'62	1,671'83	1,338'08	555'77	662'46	103'00	(w) 332'62	2nd ,, .			
84	129	43	47	62	232	174	90	104	14	48	1st half .	3		
84	133	44	...	114	232	176	90	104	14	51	2nd ,, .			
0	...	...	...	...	3'40	2'04	...	...	...	...	1st half .	4
...	...	...	...	...	3'40	2'94	...	...	...	...	2nd ,, .	
1'35	17'99	...	...	...	0'23	48'37	...	...	4'84	...	1st half .	5
1'35	17'99	...	...	...	0'23	48'37	...	...	4'84	...	2nd ,, .	
0'24	48'09	84'04	...	...	18'75	421'47	...	10'85	6'12	0'15	1st half .	6
0'24	48'09	83'79	...	...	18'75	421'47	...	10'85	6'12	0'15	2nd ,, .	
5'83	197'14	105'37	3'10	...	298'68	190'62	44'28	100'55	3'44	90'88	1st half .	7		
5'83	197'14	111'65	...	0'53	298'68	190'62	44'28	100'55	3'44	90'88	2nd ,, .			
12'90	123'86	20'03	2'98	...	137'82	78'48	44'48	65'58	4'43	42'97	1st half .	8		
12'90	123'86	18'09	...	...	137'82	78'48	44'48	65'58	4'43	42'97	2nd ,, .	
1'35	0'80	4'20	0'24	0'08	3'40	2'94	1'36	2'54	3'00	0'15	1st half .	9		
1'35	0'80	2'52	...	4'16	3'40	2'94	1'36	2'54	3'00	0'15	2nd ,, .			
75	75	100	100	75	75	75	100	100	75	100	1st half .	10		
75	75	100	...	75	75	75	100	100	75	100	2nd ,, .			
5'14	1'89	1'57	4'09	2'82	4'06	0'59	2'87	2'53	2'53	2'54	1st half .	11		
2'72	1'95	1'20	...	2'07	2'57	0'56	1'71	2'73	2'29	1'06	2nd ,, .			
5'11	1'87	1'55	...	2'59	...	0'57	...	2'55	2'51	...	1st half .	12		
2'71	1'94	1'19	...	...	...	0'55	...	2'76	2'25	...	2nd ,, .	
2,00,848	1,36,567	1,08,475	74,213	61,831	74,793	77,854	90,061	70,390	42,384	(x) 49,259	1st half .	13		
2,01,595	1,36,949	1,09,011	...	65,200	74,880	78,408	89,873	70,077	39,285	(x) 49,961	2nd ,, .			
654	216	151	175	120	227	85	211	175	87	112	1st half .	14		
425	219	130	...	101	174	82	168	184	75	69	2nd ,, .			
250	115	85	58	54	105	66	109	102	49	63	1st half .	15		
211	114	70	...	48	97	64	108	105	41	49	2nd ,, .			
6'14	3'98	4'08	3'31	3'34	3'40	2'53	3'05	2'91	4'08	2'78	1st half .	16		
4'93	3'76	3'80	...	2'69	3'23	2'46	3'17	2'65	4'54	2'83	2nd ,, .			
2'34	2'11	2'32	1'09	1'51	1'57	1'97	1'88	1'69	2'32	1'57	1st half .	17		
2'44	1'95	2'34	...	1'29	1'80	1'94	1'94	1'51	2'49	1'99	2nd ,, .			
3'80	1'87	1'76	2'22	1'83	1'83	0'56	1'77	1'22	1'76	1'21	1st half .	18		
2'49	1'81	1'46	...	1'40	1'43	0'52	1'14	1'14	2'05	0'84	2nd ,, .			
6'42	6'73	7'70	4'91	5'97	7'65	12'69	7'74	9'73	10'11	9'08	1st half .	19		
8'06	6'81	7'92	...	6'45	9'24	12'45	9'51	8'87	11'61	12'82	2nd ,, .			
38'13	53'04	56'75	32'93	46'09	46'24	77'03	51'56	58'09	56'73	56'57	1st half .	20		
49'57	51'84	61'64	...	47'80	55'83	78'80	63'99	56'95	54'93	70'30	2nd ,, .			
37'00	52'20	56'41	32'37	44'55	45'06	76'78	50'67	57'27	55'59	56'03	1st half .	21		
48'68	59'98	60'99	...	47'30	54'96	77'95	63'45	55'98	54'89	70'08	2nd ,, .			
38'13	53'04	56'75	34'88	45'35	46'24	77'03	51'56	58'09	56'73	56'57	1st half .	22		
49'57	51'84	61'64	...	49'38	55'83	78'80	63'99	56'95	54'93	70'30	2nd ,, .			

(m) On the Northern Bengal only. For the other sections as follows:—

Dacca	0'64	Assam-Behar.	1'62
Kaunia-Dharila	0'07		

(n) On the Northern Bengal only. For the other sections as follows:—

Dacca	1 in 200	Assam-Behar.	1 in 250
Kaunia-Dharila	1 in 100		

(b) Includes the Dhond-Manmad, Khamsaon and Amraoti railways, excepting item 8.

(p) Includes the Patri branch.

(q) Includes the Bezvada extension, excepting item 6.

(r) The figures for the second half 1890 include the Tirhoot State railway, excepting items 4 and 5.

(s) Includes the Southern Mahratta railway, Mysore section.

(t) Includes the Toungoo-Mandalay extension.

(u) Includes the Pondicherry railway, excepting items 6, 7, and 8.

(v) Includes the Bareilly-Pilibhit State railway.

(w) Decrease due to correction of mileage, &c.

(x) Calculated on the mileage, excluding the State mileage in Dock Estates and Quarry Lines constructed and maintained by the States themselves.

Half-years ended the 30th June and the 31st December 1890.

Progressive number.	HEADINGS.	1890.	STATE LINES WORKED BY COMPANIES.			STATE LINES WORKED BY THE STATE.				LINKS XXII. Great Indian Peninsula.	
			I. East Indian.	V. Bengal-Nagpur.	VI. Indian Midland.	XVII. North Western.	XX. Oudh and Rohilkhand.	XXI. Eastern Bengal.			
								Standard Gauge.	Metre and 2' 6" Gauges.		
No. IV.											
DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC.											
18	Total Working Expenses for both coaching and goods traffic (a) R	{ 1st half 2nd "	75,04,472 61,05,866	8,30,357 9,97,180	15,03,595 13,73,621	87,46,258 80,69,646	17,55,678 16,44,721	14,46,006 15,86,461	9,54,924 10,10,761	97,17,268 86,25,509	
Proportions, dividing expenditure in ratio of gross ton-mileage (freight and dead-load).											
19	Coaching "	{ 1st half 2nd "	20,67,407 19,95,986	1,52,537 2,58,527	5,84,911 6,74,071	24,63,027 21,49,684	5,96,773 6,86,057	6,25,886 5,08,386	2,94,746 3,29,587	21,94,354 26,60,520	
20	Goods "	{ 1st half 2nd "	54,37,065 41,09,880	6,77,820 7,38,653	9,18,684 6,99,550	62,83,231 59,19,962	11,58,905 9,58,664	8,20,120 10,78,075	6,60,178 6,81,174	75,22,914 59,64,989	
Multiplier for converting results based on the ton-mileage division of expenses into results based on a train-mileage division.											
	Coaching "	{ 1st half 2nd "	1'50 1'43	1'44 1'32	1'20 1'14	1'22 1'35	1'28 1'18	1'25 1'46	1'22 1'22	1'40 1'33	
	Goods "	{ 1st half 2nd "	0'81 0'79	0'90 0'89	0'87 0'87	0'91 0'87	0'86 0'87	0'81 0'79	0'90 0'89	0'88 0'85	
No. V.											
COACHING TRAFFIC.											
GROSS RECEIPTS AND TRAIN-MILEAGE—											
21	Receipts from coaching traffic R	{ 1st half 2nd "	78,13,982 72,23,321	2,18,097 2,09,963	8,11,769 8,01,164	47,78,522 44,30,956	18,17,577 15,77,877	14,02,573 12,51,489	8,03,694 7,49,270	45,49,155 42,26,898	
22	Coaching train-miles run No.	{ 1st half 2nd "	1,786,757 1,835,422	68,550 79,773	306,172 337,594	1,382,840 1,348,198	516,652 513,946	445,292 449,673	280,976 292,261	1,567,547 1,621,901	
23	Average coaching receipts per train-mile R	{ 1st half 2nd "	4'37 3'94	3'18 2'63	2'65 2'37	3'46 3'29	3'52 3'07	3'15 2'78	2'86 2'56	2'90 2'01	
UNITS AND UNIT-MILEAGE—											
Number of units carried one mile—											
24	1st class Unit-miles	{ 1st half 2nd "	3,082,254 3,186,833	43,157 96,057	505,292 532,430	2,623,663 2,696,823	(d) 1,865,337 (e) 1,653,798	723,684 681,096	437,612 328,447	3,182,301 3,659,303	
25	2nd " "	{ 1st half 2nd "	9,885,110 10,400,271	241,638 220,422	1,063,440 2,254,495	8,533,153 7,515,708		1,769,494 1,893,456	1,007,088 950,932	13,484,565 14,926,538	
26	3rd or Intermediate class "	{ 1st half 2nd "	16,534,019 16,864,194	502,481 474,867	(b) 6,107,662	15,038,797 9,884,544		3,030,697 3,545,953	12,636,775 12,143,719	3,649,267 3,510,214	(b) 30,943,217 (b) 31,784,270
27	4th or Lowest " "	{ 1st half 2nd "	470,143,709 424,278,211	14,459,310 13,688,969	51,117,535 (c) 49,034,619	279,410,418 253,680,931		(e) 115,234,107 (e) 98,045,518	72,341,141 63,016,601	45,474,091 41,532,060	(c) 227,063,293 (c) 202,471,292
28	Total passenger unit-mileage "	{ 1st half 2nd "	499,645,092 454,729,509	15,246,586 14,480,315	52,686,267 48,929,206	305,606,031 273,778,006	120,130,141 103,245,269	87,471,094 77,734,872	50,568,058 46,327,653	274,673,376 252,841,403	
29	Other coaching traffic . Ton-miles	{ 1st half 2nd "	5,433,472 5,122,878	57,875 62,255	390,341 527,694	3,121,529 3,593,440	969,723 747,011	571,392 450,473	327,536 284,561	3,911,993 3,180,909	
Average sum received for carrying a unit one mile—											
30	1st class Pies	{ 1st half 2nd "	14'73 14'94	15'10 12'24	11'26 10'09	11'46 11'04	(d) 9'00 (e) 9'00	11'58 12'49	13'69 13'78	10'91 10'88	
31	2nd " "	{ 1st half 2nd "	5'97 6'09	4'99 5'60	5'40 4'35	4'21 4'30		5'53 5'61	5'89 6'01	4'18 3'93	
32	3rd or Intermediate class "	{ 1st half 2nd "	3'47 3'46	2'73 2'75	(b) 3'00	2'78 3'00		4'00 4'00	2'98 3'00	3'04 3'16	(b) 2'99 (b) 3'00
33	4th or Lowest " "	{ 1st half 2nd "	2'51 2'50	2'48 2'47	(c) 2'54 (c) 2'54	2'47 2'47		(e) 2'50 (e) 2'50	2'55 2'56	2'53 2'56	(c) 2'43 (c) 2'42
34	Average for all classes "	{ 1st half 2nd "	2'68 2'71	2'56 2'60	2'68 2'77	2'61 2'63	2'64 2'66	2'75 2'79	2'73 2'75	2'67 2'70	
35	Other coaching traffic per ton-mile "	{ 1st half 2nd "	29'49 30'34	48'95 43'62	37'39 34'74	36'65 35'78	32'98 38'51	50'40 51'24	49'07 57'12	35'48 40'49	

(a) Excluding steam-boat expenses, and after deducting telegraph and sundry receipts and leaving only the balance of payments to other lines for mileage, &c.

A—continued.
RAILWAYS—(Part II)—continued.

Half-years ended the 30th June and the 31st December 1890.

GAUGE.			METRE GAUGE.										1890.	Progressive number.
WORKED BY GUARANTEED COMPANIES.		LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	STATE LINES WORKED BY COMPANIES.					STATE LINES WORKED BY THE STATE.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED AND WORKED BY NATIVE STATES.			
XXXIII. Bombay, Baroda and Central India.	XXXIV. Madras.		XLV. The Nizam's Guaranteed State.	III.		VIII.	XI.	XXVI.	South Indian.	XXXVIII.	LIII.			
			Tirhoot.	Bengal and North-Western.	Rajputana-Malwa.	Southern Mahratta.	Burma.		Rohilkhand-Kumaun.	Bhavnagar-Gondal-Jundgarh-Porbandar.				
28,92,004 24,49,070	22,23,855 23,92,792	7,58,831 7,10,730	3,84,668 ...	4,67,791 8,20,834	44,13,193 41,01,350	21,48,864 21,88,295	15,31,725 15,26,301	16,86,735 17,45,789	95,099 84,713	5,33,392 4,02,355	1st half 2nd "	18		
8,48,763 11,07,937	8,68,725 8,83,719	2,47,207 2,31,251	1,35,058 ...	1,64,619 3,44,534	11,05,636 13,71,920	8,30,509 9,09,645	5,35,363 6,36,724	7,07,052 6,82,434	36,254 39,025	2,10,097 2,48,227	1st half 2nd "		19	
20,43,241 13,41,133	13,55,130 15,09,073	5,11,624 4,79,479	2,49,610 ...	3,03,172 4,76,320	33,07,557 27,29,436	13,18,355 12,78,650	9,96,362 8,89,577	9,79,683 10,63,355	58,845 45,688	3,23,295 1,54,128	1st half 2nd "	20		
1'64 1'38	1'17 1'22	1'20 1'20	0'97 ...	1'11 1'10	1'38 1'28	1'13 1'12	1'37 1'30	1'04 1'04	1'02 1'04	1'23 1'10	1st half 2nd "		21	
0'73 0'68	0'89 0'87	0'91 0'90	1'01 ...	0'94 0'93	0'87 0'86	0'92 0'91	0'80 0'78	0'97 0'97	0'99 0'97	0'85 0'85	1st half 2nd "	22		
22,70,082 21,41,312	18,65,830 18,98,661	4,36,642 3,91,452	5,02,839 ...	4,81,186 8,20,747	29,61,238 28,14,521	12,05,306 12,75,817	17,08,095 14,78,336	15,79,880 15,64,473	1,12,983 1,11,435	4,25,221 4,03,339	1st half 2nd "		23	
614,971 645,449	542,994 575,101	132,614 123,266	128,004 ...	137,160 311,498	1,005,567 1,004,676	486,620 536,929	397,227 417,061	453,323 485,761	22,322 21,138	170,144 142,906	1st half 2nd "	24		
3'60 3'32	3'44 3'30	3'29 3'18	3'93 ...	3'51 2'63	2'91 2'80	2'48 2'38	4'30 3'54	3'49 3'22	5'06 5'27	2'50 2'82	1st half 2nd "		25	
1,365,918 1,165,896	1,362,136 1,441,483	353,492 239,666	132,519 ...	93,536 195,997	1,041,166 809,839	526,839 561,019	606,981 598,615	462,872 442,823	94,975 105,704	129,532 99,663	1st half 2nd "	26		
6,943,658 5,997,204	3,723,581 4,105,191	1,586,607 1,224,711	146,264 ...	132,847 259,046	5,228,279 2,555,199	1,141,485 1,507,799	5,011,454 4,224,508	2,623,054 2,717,680	...	602,111 539,466	1st half 2nd "		27	
26,064,397 23,160,501	...	(b) 5,718,935 (b) 5,907,016	171,559 ...	122,212 320,278	8,659,690 7,484,305	...	...	...	228,618 230,904	...	1st half 2nd "	28	
110,414,305 109,303,278	161,837,582 165,079,087	(c) 23,961,686 (c) 21,837,288	48,443,304 ...	41,337,153 75,012,608	224,102,898 217,160,114	79,016,741 86,809,311	93,999,645 80,808,634	137,000,944 135,377,610	4,491,749 4,108,881	25,931,136 25,332,634	1st half 2nd "		29	
144,788,278 139,626,879	166,923,299 170,625,761	31,620,720 29,248,681	48,893,646 ...	41,685,748 75,788,019	239,032,033 228,009,457	80,685,065 88,878,129	99,618,080 85,631,757	140,086,870 138,538,113	4,815,342 4,445,499	26,662,779 25,971,703	1st half 2nd "	30		
1,619,599 1,485,147	1,320,004 1,256,471	247,074 169,136	159,908 ...	120,819 217,023	1,776,020 1,722,853	421,708 482,031	317,471 251,799	254,628 247,247	54,057 52,367	150,609 88,945	1st half 2nd "		31	
10'02 9'97	11'66 10'16	14'91 14'80	30'34 ...	16'17 19'63	13'22 13'39	11'30 11'41	12'56 13'44	10'85 11'81	30'38 30'89	10'68 10'56	1st half 2nd "	32		
4'54 4'77	5'33 4'52	3'96 4'48	10'18 ...	9'88 10'17	4'10 6'15	5'29 5'23	4'12 4'32	3'95 3'94	...	5'21 5'19	1st half 2nd "		33	
3'00 3'00	...	(b) 2'50 (b) 2'50	5'21 ...	4'54 4'74	3'00 3'00	...	...	...	13'88 13'96	...	1st half 2nd "	34	
2'36 2'35	1'68 1'72	(c) 2'00 (c) 2'00	1'75 ...	2'00 1'86	2'00 2'00	2'50 2'39	3'00 3'00	2'00 2'00	2'58 2'61	2'75 2'75	1st half 2nd "		35	
2'65 2'62	1'84 1'86	2'33 2'32	1'84 ...	2'06 1'95	2'13 2'12	2'59 2'50	3'11 3'14	2'06 2'07	3'66 3'87	2'84 2'83	1st half 2nd "	36		
32'02 30'07	38'60 37'60	40'73 43'43	41'02 ...	52'42 45'45	33'36 33'18	52'37 48'10	55'81 60'04	55'34 56'10	75'14 79'69	38'60 44'15	1st half 2nd "		37	

(b) Third class by mail trains.

(c) Third class by other than mail trains.

(d) Called "Upper."

(e) Called "Lower."

Half-years ended the 30th June and the 31st December 1890.

STANDARD

Progressive number.	HEADINGS.	1890.	STATE LINES WORKED BY COMPANIES.			STATE LINES WORKED BY THE STATE.				LINES COM
			I. East Indian.	V. Bengal-Nággpur.	VI. Indian Midland.	XVII. North Western.	XX. Oudh and Rohilkhand.	XXI. Eastern Bengal.		XXXII. Great Indian Peninsula.
								Standard Gauge.	Metre and 2' 6" Gauges.	
No. V.—COACHING TRAFFIC—<i>contd.</i>										
UNITS AND UNIT-MILEAGE—<i>concl'd.</i>										
Average number of units in a train—										
36	1st class No.	1st half	1'73	0'63	1'65	1'90	(c) 3'61	1'63	1'56	2'03
		2nd "	1'74	1'20	1'58	2'00		1'51	1'12	2'26
37	2nd " "	1st half	5'53	3'52	3'47	6'17	(c) 3'22	3'97	3'58	8'60
		2nd "	5'66	2'76	6'68	5'58		4'21	3'25	9'20
38	3rd or Intermediate class "	1st half	9'25	7'33	(a) 18'09	10'88	5'87	28'38	12'99	(a) 19'74
		2nd "	9'19	5'95	(a) 18'09	7'33		6'90	27'01	12'03	(a) 19'60
39	4th or Lowest " "	1st half	263'13	210'93	(b) 166'96	202'05	(d) 223'04	162'46	161'84	(b) 144'85
		2nd "	231'16	171'60	(b) 118'62	188'16		(d) 190'77	140'14	142'11	(b) 124'83
40	Total passenger units "	1st half	279'64	222'41	172'08	221'00	232'52	196'44	179'97	175'22
		2nd "	247'75	181'51	144'97	203'07		200'89	172'87	158'51	155'89
41	Other coaching traffic Tons	1st half	3'04	0'84	1'27	2'26	1'88	1'28	1'17	2'50
		2nd "	2'79	0'78	1'56	2'67		1'45	1'00	0'97	1'96
VEHICLES AND VEHICLE-MILEAGE—										
Number of coaching vehicles hauled one mile—										
42	1st class Vehicle-miles	1st half	3,058,027	105,145	580,058	2,108,555	(c) 1,079,628	503,580	556,308	2,678,758
		2nd "	3,170,509	87,230	610,589	1,932,518		(c) 1,135,025	489,837	497,246	2,876,506
43	2nd " "	1st half	3,287,784	105,129	532,662	2,032,798	(c) 1,135,025	586,077	488,369	3,354,196
		2nd "	3,412,106	130,707	572,637	1,898,598		(c) 1,135,025	716,817	474,695	3,439,361
44	3rd or Intermediate class "	1st half	2,284,096	61,217	(a) 571,117	1,638,670	700,255	909,370	637,432	(a) 2,019,158
		2nd "	2,424,723	54,910	(a) 571,117	1,630,480		898,005	929,460	636,225	(a) 1,946,811
45	4th or Lowest " "	1st half	20,526,735	642,092	(b) 2,481,260	12,305,855	(d) 5,167,673	3,811,199	3,247,193	(b) 10,180,295
		2nd "	20,568,384	680,645	(b) 2,084,492	11,051,351		(d) 4,610,303	3,599,666	3,414,425	(b) 10,065,515
46	Other vehicles "	1st half	3,677,471	52,755	691,211	2,819,500	1,226,091	973,870	391,067	2,732,906
		2nd "	3,760,514	54,822	657,601	2,980,679		1,153,395	811,486	397,104	2,401,637
47	Brake-vans "	1st half	4,142,755	114,485	654,726	2,727,030	908,819	483,651	327,448	3,190,074
		2nd "	4,254,100	132,859	559,070	2,674,563		938,862	497,381	452,558	3,282,945
48	Total "	1st half	36,977,768	1,080,823	4,939,917	23,632,408	9,082,466	7,267,747	5,648,717	24,155,387
		2nd "	37,590,336	1,141,173	5,055,506	22,168,189		8,735,590	7,044,647	5,872,253	24,012,775
Average number of vehicles in a coaching train—										
49	1st class No.	1st half	1'71	1'53	1'89	1'52	(c) 2'09	1'13	1'98	1'71
		2nd "	1'73	1'09	1'81	1'43		(c) 2'21	1'09	1'70	1'77
50	2nd " "	1st half	1'84	1'53	1'74	1'47	(c) 2'21	1'32	1'74	2'14
		2nd "	1'86	1'64	1'70	1'41		(c) 2'21	1'59	1'62	2'12
51	3rd or Intermediate class "	1st half	1'28	0'89	(a) 1'69	1'19	1'36	2'04	2'27	(a) 1'29
		2nd "	1'32	0'69	(a) 1'69	1'21		1'75	2'07	2'18	(a) 1'20
52	4th or Lowest " "	1st half	11'49	9'37	(b) 8'10	8'90	(d) 10'00	8'56	11'56	(b) 6'49
		2nd "	11'20	8'53	(b) 6'17	8'20		(d) 8'97	8'01	11'68	(b) 6'21
53	Other vehicles "	1st half	2'06	0'77	2'26	2'04	2'37	2'19	1'39	1'74
		2nd "	2'05	0'69	1'95	2'21		2'24	1'80	1'36	1'48
54	Brake-vans "	1st half	2'32	1'67	2'14	1'97	1'76	1'08	1'16	2'04
		2nd "	2'32	1'66	1'66	1'98		1'83	1'11	1'55	2'02
55	Total "	1st half	20'70	15'76	16'13	17'09	17'58	16'32	20'10	15'41
		2nd "	20'48	14'30	14'98	16'44		17'00	15'67	20'09	14'80
Average earnings per coaching vehicle per mile—										
56	1st class Pies	1st half	14'84	6'20	9'81	14'38	(c) 15'55	16'64	10'77	12'97
		2nd "	15'01	13'48	9'32	15'61		(c) 15'55	17'37	9'10	13'83
57	2nd " "	1st half	17'94	11'46	10'77	17'87	(c) 13'11	16'71	12'14	16'81
		2nd "	18'56	9'45	17'13	17'26		(c) 13'11	14'83	12'03	17'05
58	3rd or Intermediate class "	1st half	25'09	22'37	(a) 32'05	25'71	17'31	41'32	17'41	(a) 45'84
		2nd "	24'09	23'82	(a) 32'05	18'33		15'79	39'23	17'46	(a) 48'91
59	4th or Lowest " "	1st half	57'41	55'78	(b) 52'33	56'42	(d) 55'75	48'47	35'48	(b) 54'12
		2nd "	51'64	49'77	(b) 48'78	57'05		(d) 53'17	44'90	31'12	(b) 48'60
60	Other vehicles "	1st half	43'57	53'71	21'11	40'57	26'08	29'57	41'00	50'79
		2nd "	41'33	49'53	27'88	43'14		24'94	28'44	40'93	53'62

(a) Third class by mail trains.

(b) Third class by other than mail trains.

A-continued.

RAILWAYS—(Part II)—continued.

Half-years ended the 30th June and the 31st December 1890.

GAUGE.			METRE GAUGE.										1890.	Progressive number.
WORKED BY GUARANTEED COMPANIES.		LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	STATE LINES WORKED BY COMPANIES.				STATE LINES WORKED BY THE STATE.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED AND WORKED BY NATIVE STATES.				
XXXIII.	XXXIV.		XLV.	III.		VIII.	XI.	XXVI.	South Indian.	XXXVIII.	LIII.			
Bombay, Baroda and Central India.	Madras.	The Nizam's Guaranteed State.	Tirhoot.	Bengal and North-Western.	Rajputana-Malwa.	Southern Mahratta.	Burma.		Rohilkhand-Kumaun.	Bharnagar-Gondal-Junagarh-Forbandar.				
2'22 1'81	2'51 2'51	2'67 2'11	1'04 ...	0'68 0'63	1'04 0'81	1'08 1'04	1'53 1'44	1'02 0'91	4'25 5'00	0'76 0'70	1st half . 2nd ,, .	36		
11'20 9'29	6'86 7'14	11'96 9'93	1'14 ...	0'97 0'83	5'20 2'54	2'35 2'81	12'62 10'13	5'79 5'59	...	3'54 3'77	1st half . 2nd ,, .		37	
42'38 35'88	...	(a) 43'12 (a) 47'92	1'34 ...	0'89 1'03	8'61 7'45	...	...	...	10'24 10'92	...	1st half . 2nd ,, .	38
179'55 169'34	298'04 287'04	(b) 180'63 (b) 177'32	378'45 ...	301'38 240'81	222'86 216'15	162'38 161'68	236'64 193'76	302'21 278'69	201'23 194'38	152'41 177'27	1st half . 2nd ,, .		39	
235'44 216'32	307'41 296'69	238'44 237'28	381'97 ...	303'92 243'30	237'71 226'95	165'81 165'53	250'79 205'32	309'02 285'19	215'72 210'30	156'71 181'74	1st half . 2nd ,, .	40		
2'63 2'30	2'43 2'18	1'86 1'37	1'25 ...	0'88 0'70	1'77 1'71	0'87 0'90	0'80 0'60	0'56 0'51	2'42 2'48	0'89 0'62	1st half . 2nd ,, .		41	
590,454 605,545	881,992 812,428	355,114 246,421	298,823 ...	270,883 579,266	1,495,537 1,466,224	623,550 649,461	675,079 730,534	568,327 577,044	74,077 84,717	221,563 193,728	1st half . 2nd ,, .	42		
957,603 1,004,835	1,027,218 875,258	341,549 239,436	257,051 ...	263,569 524,413	1,439,869 1,421,684	713,434 795,577	1,150,342 1,340,261	984,024 1,049,479	...	230,888 213,988	1st half . 2nd ,, .		43	
732,937 727,113	...	...	116,181 ...	308,081 263,845	881,737 842,082	...	...	...	43,495 36,877	...	1st half . 2nd ,, .	44
4,096,100 4,420,575	6,004,698 6,164,805	1,193,820 1,187,867	2,781,916 ...	3,097,039 5,875,625	12,903,019 13,118,089	4,168,466 4,429,738	6,642,852 6,756,128	6,337,533 6,747,504	303,366 268,523	1,819,554 1,745,467	1st half . 2nd ,, .		45	
801,511 763,481	870,618 749,724	222,465 203,060	156,944 ...	76,941 238,178	1,373,341 1,290,962	464,651 510,361	733,493 490,703	1,404,370 1,467,370	20,401 11,730	67,500 87,450	1st half . 2nd ,, .	46		
776,859 803,229	1,199,980 1,268,878	285,502 296,648	577,374 ...	229,193 605,249	2,718,906 2,773,957	1,079,722 1,226,801	748,177 795,395	58,636 69,948	42,171 40,603	452,758 376,794	1st half . 2nd ,, .		47	
7,955,464 8,324,778	9,084,506 9,871,093	2,398,450 2,173,432	4,128,289 ...	4,245,706 8,086,576	20,812,409 20,912,998	7,049,823 7,611,938	9,949,943 10,113,081	9,352,890 9,911,345	483,510 442,450	2,792,263 2,617,427	1st half . 2nd ,, .	48		
0'96 0'94	1'63 1'41	2'67 2'00	2'33 ...	1'97 1'86	1'49 1'46	1'28 1'21	1'70 1'75	1'25 1'19	3'32 4'01	1'30 1'36	1st half . 2nd ,, .		49	
1'56 1'56	1'89 1'52	2'57 1'94	2'01 ...	1'92 1'68	1'43 1'42	1'47 1'48	2'89 3'21	2'17 2'16	...	1'36 1'50	1st half . 2nd ,, .	50		
1'19 1'13	0'91 ...	2'25 0'85	0'88 0'84	1'95 1'74	...	1st half . 2nd ,, .		51	
6'66 6'85	11'06 10'72	9'00 9'64	21'73 ...	22'58 18'86	12'83 13'06	8'57 8'25	16'72 16'20	13'98 13'89	13'59 12'70	10'69 12'21	1st half . 2nd ,, .	52		
1'31 1'18	1'60 1'30	1'67 1'65	1'23 ...	0'56 0'77	1'37 1'28	0'95 0'95	1'85 1'18	3'10 3'02	0'91 0'56	0'40 0'61	1st half . 2nd ,, .		53	
1'26 1'24	2'21 2'21	2'15 2'40	4'04 ...	1'67 1'94	2'70 2'76	2'22 2'29	1'88 1'91	0'13 0'14	1'89 1'92	2'66 2'64	1st half . 2nd ,, .	54		
12'94 12'90	18'39 17'16	18'06 17'63	32'25 ...	30'95 25'96	20'70 20'82	14'49 14'18	25'04 24'25	20'63 20'40	21'66 20'93	16'41 18'32	1st half . 2nd ,, .		55	
23'18 19'19	18'01 18'03	14'84 15'59	9'02 ...	5'58 6'64	9'20 7'39	9'55 9'86	11'30 11'02	8'83 9'07	38'95 38'54	6'24 5'43	1st half . 2nd ,, .	56		
32'89 28'46	19'32 21'22	18'39 22'92	5'79 ...	4'98 5'02	14'90 11'04	8'47 9'92	17'94 13'62	10'54 10'21	...	13'59 13'72	1st half . 2nd ,, .		57	
106'68 95'56	...	...	7'69 ...	1'80 5'76	29'46 26'66	...	...	...	72'94 87'17	...	1st half . 2nd ,, .	58
63'63 58'09	45'22 46'08	52'12 49'23	30'52 ...	26'69 23'78	34'73 33'10	47'34 46'84	42'45 35'88	43'21 40'10	38'15 39'97	39'19 39'91	1st half . 2nd ,, .		59	
64'70 58'50	58'52 63'01	45'23 36'17	41'79 ...	82'32 41'41	43'14 44'28	47'53 45'43	24'16 30'82	10'03 9'45	190'14 355'78	86'14 44'91	1st half . 2nd ,, .	60		

(c) Called "Upper."

(d) Called "Lower."

Half-years ended the 30th June and the 31st December 1890.

STANDARD

Progressive number.	HEADINGS.	1890.	STATE LINES WORKED BY COMPANIES.			STATE LINES WORKED BY THE STATE.				LINE COI XXXII. Great Indian Peninsula.
			I. East Indian.	V. Bengal-Nágpur.	VI. Indian Midland.	XVII. North Western.	XX. Oudh and Rohilkhand.	XXI. Eastern Bengal.		
								Standard Gauge.	Metre and 2' 6" Gauges.	
No. V.—COACHING TRAFFIC — <i>contd.</i> VEHICLES AND VEHICLE-MILEAGE — <i>contd.</i> Carrying capacity hauled one mile (excluding brakes)—										
61	1st class Seats	1st half	38,070,423	1,261,602	9,002,763	32,052,125	(c) 16,220,698 (c) 21,492,864	7,034,860	3,859,186	42,860,128
		2nd "	39,471,750	1,307,438	8,578,489	28,846,967		6,907,984	3,637,130	46,024,096
62	2nd "	1st half	77,813,503	1,892,310	10,741,827	45,674,490	(c) 21,492,864	9,963,309	4,952,079	97,569,511
		2nd "	80,782,344	1,960,605	9,029,126	43,774,371		12,185,889	4,762,319	99,996,503
63	3rd or Intermediate class	1st half	121,922,443	2,409,711	(a) 28,555,805	52,355,507	23,412,149 29,633,719	54,562,200	16,573,232	(a) 94,966,426
		2nd "	128,718,438	2,554,009	(a) 28,555,805	52,093,836		29,633,719	55,767,600	16,541,850	(a) 91,500,117
64	4th or Lowest	1st half	1,205,680,388	31,685,126	141,709,364	647,249,977	(d) 300,937,479 (d) 271,672,238	219,106,649	107,190,741	(b) 478,463,861
		2nd "	1,211,682,328	32,914,099	(b) 113,731,036	582,421,819		209,670,020	112,913,879	(b) 473,079,205
65	Other vehicles Tons	1st half	45,574,879	182,760	1,915,464	26,270,045	14,572,058 15,415,694	5,956,527	982,989	7,619,575
		2nd "	47,419,048	153,628	1,846,329	29,567,604		4,813,646	952,034	6,668,718
Percentage of freight upon capacity hauled—										
66	1st class Per cent.	1st half	8'10	3'42	5'61	8'19	(c) 11'50 (c) 7'69	10'29	11'34	7'12
		2nd "	8'07	7'35	6'21	9'35		9'56	9'03	7'95
67	2nd "	1st half	12'70	12'77	9'90	18'68	(c) 11'50 (c) 7'69	17'76	20'34	13'82
		2nd "	12'87	11'24	2'97	17'17		15'54	19'97	14'93
68	3rd or Intermediate class	1st half	13'56	20'85	...	28'72	12'94 11'97	23'16	22'02	(a) 32'61
		2nd "	13'10	18'59	(a) 21'39	18'97		21'78	21'26	(a) 34'74
69	4th or Lowest	1st half	38'09	45'63	36'07	43'17	(d) 38'29 (d) 36'09	33'02	42'42	(b) 47'46
		2nd "	35'02	41'59	(b) 35'20	43'56		30'06	36'78	(b) 42'80
70	Other vehicles	1st half	11'92	31'67	20'38	11'88	6'65 4'85	9'59	33'32	51'34
		2nd "	10'80	40'52	28'58	12'15		9'36	29'87	47'70
WEIGHT OF TRAIN AND TON-MILEAGE — Gross ton-mileage of all coaching trains—										
71	Freight Ton-miles	1st half	35,733,170	979,229	3,592,997	21,733,500	8,252,145 7,007,879	5,883,995	3,399,266	20,789,378
		2nd "	32,742,128	939,325	3,529,833	20,278,308		5,179,678	3,096,377	18,796,296
72	Dead weight	1st half	413,103,410	16,184,056	79,358,216	321,341,334	111,303,390 110,305,095	83,830,409	33,902,683	300,917,166
		2nd "	420,865,355	17,706,760	73,732,438	304,069,616		82,849,616	35,597,532	303,373,973
73	Total	1st half	448,836,580	17,163,285	73,951,213	343,074,834	119,555,535 117,312,974	89,714,404	37,301,949	321,706,544
		2nd "	453,607,483	18,646,085	77,262,271	324,347,924		88,029,294	38,693,909	322,170,269
Average weight of a coaching train—										
74	Freight Tons	1st half	20'00	14'28	11'73	15'72	15'97 13'64	13'21	12'10	13'26
		2nd "	17'84	11'78	10'46	15'04		11'52	10'59	11'59
75	Dead weight	1st half	231'20	236'09	229'80	232'37	215'43 214'62	188'26	120'66	191'97
		2nd "	229'30	221'96	218'46	225'54		184'24	121'80	187'05
76	Total	1st half	251'20	250'37	241'53	248'09	231'40 228'26	201'47	132'76	205'23
		2nd "	247'14	233'74	228'92	240'58		195'76	132'39	198'64
COST OF WORKING AND PROFIT —										
77	Average cost of hauling a coaching train one mile R	1st half	1'16	2'23	1'91	1'78	1'16 1'33	1'41	1'05	1'40
		2nd "	1'09	3'24	2'00	1'59		1'13	1'13	1'64
78	Average cost of hauling a coaching vehicle with its load one mile Pies	1st half	12'09	30'30	26'21	22'62	14'02 16'89	17'71	10'63	20'10
		2nd "	11'50	49'23	28'78	21'17		14'91	11'68	24'64
79	Per passenger unit Pies	1st half	0'71	1'83	1'83	1'36	0'84 1'13	1'21	1'04	1'30
		2nd "	0'76	3'26	2'29	1'30		1'13	1'27	1'74
80	Other traffic per ton	1st half	7'43	25'21	41'12	18'25	13'60 19'49	24'89	12'94	16'33
		2nd "	7'58	39'67	32'61	15'72		22'20	16'27	21'95
81	Average profit on working a coaching train one mile R	1st half	3'21	0'95	0'74	1'70	2'36 1'74	1'74	1'81	1'50
		2nd "	2'85	-0'61	0'37	1'70		1'65	1'43	0'97
Average profit on working a coaching vehicle one mile—										
82	1st class Pies	1st half	2'75	-24'10	-16'40	-8'24	(c) 1'53 (c) -3'78	-1'07	0'14	-7'11
		2nd "	3'51	-35'75	-19'46	-5'56		2'46	-2'58	-10'81
83	2nd "	1st half	5'85	-18'84	-15'44	-4'75	(c) 1'53 (c) -3'78	-1'00	1'51	-3'29
		2nd "	7'06	-39'78	-11'65	-3'91		-0'08	0'35	-7'59
84	3rd or Intermediate class	1st half	13'00	-7'93	...	3'09	3'29 -1'10	23'61	6'78	(a) 25'74
		2nd "	12'59	-25'41	(a) 3'27	-2'84		24'32	5'78	(a) 24'27
85	4th or Lowest	1st half	45'32	25'48	26'12	33'80	(d) 41'73 (d) 36'28	30'76	24'85	(b) 34'02
		2nd "	40'14	0'54	(b) 20'00	35'88		29'99	19'44	(b) 23'94
86	Other vehicles	1st half	31'48	23'41	-5'10	17'05	12'06 8'05	11'86	30'37	30'64
		2nd "	29'83	0'30	-0'90	21'97		13'53	29'25	28'15

(a) Third class by mail trains.

(b) Third class by other than mail trains.

A—continued.

RAILWAYS—(Part. II)—continued.

Half-years ended the 30th June and the 31st December 1890.

GAUGE.			METRE GAUGE.										1890.	Progressive number.
WORKED BY GUARANTEED COMPANIES.		LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	STATE LINES WORKED BY COMPANIES.					STATE LINES WORKED BY THE STATE.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED AND WORKED BY NATIVE STATES.			
XXXIII. Bombay, Baroda and Central India.	XXXIV. Madras.		XLV. The Nizam's Guaranteed State.	III. Tirhoot.	VIII. Bengal and North-Western.	XI. Rajputana-Malwa.	Southern Mahratta.					XXVI. Burma.			South Indian.	XXXVIII. Rohilkhand-Kumaun.	LIII. Bhavnagar-Gondal-Junagarh-Porbandar.
11,445,422 9,712,912	10,616,687 10,515,980	5,681,184 3,952,821	3,643,797 ..	2,149,816 5,920,287	15,703,139 15,497,988	5,606,733 6,007,463	7,010,605 7,483,250	7,341,088 7,488,731	888,924 1,016,604	2,660,539 2,474,265	1st half 2nd "	61		
41,871,210 44,252,933	34,096,376 28,688,983	6,013,188 4,183,118	4,054,893 ..	2,108,552 6,073,342	17,928,363 17,771,050	8,844,507 9,829,624	20,127,988 23,128,200	26,639,456 25,029,641	.. ..	4,795,147 4,318,789	1st half 2nd "		62
50,816,250 40,999,130	.. ..	.. ..	2,555,982 ..	9,481,026 7,387,660	21,390,940 20,428,909	.. ..	.. ..	.. ..	1,043,884 988,176	.. ..	1st half 2nd "	63	
256,949,989 275,022,513	329,656,957 338,513,350	73,415,104 71,545,782	87,429,948 ..	98,032,912 185,760,732	420,427,484 427,231,964	154,724,348 169,807,570	234,824,818 242,274,750	224,591,168 232,390,016	9,707,712 8,576,008	59,758,107 55,364,256	1st half 2nd "		64	
2,709,107 2,580,566	4,460,661 3,736,527	2,377,007 2,004,749	493,638 ..	241,635 1,302,167	3,817,888 3,588,874	1,156,981 1,357,560	2,845,953 1,904,160	4,523,147 4,726,631	75,574 35,364	616,054 413,738	1st half 2nd "	65		
11'93 12'00	12'83 13'71	6'22 6'57	3'64 ..	4'35 3'31	6'63 5'23	9'40 9'34	8'66 8'00	6'30 5'91	10'68 10'40	4'87 4'03	1st half 2nd "		66	
16'58 13'55	10'92 14'31	26'39 29'28	3'61 ..	6'30 4'27	29'05 14'38	12'91 15'34	24'00 18'27	9'85 10'86	.. ..	12'56 12'49	1st half 2nd "	67	
51'60 46'32	.. ..	.. ..	6'71 ..	1'29 4'34	40'48 36'64	.. ..	.. ..	.. ..	21'90 23'37	.. ..	1st half 2nd "		68
42'97 39'74	49'09 48'77	40'43 38'81	55'41 ..	42'17 40'38	53'30 50'83	51'07 51'12	40'03 33'35	61'00 58'25	46'27 47'91	43'39 45'76	1st half 2nd "	69		
59'78 57'55	29'59 33'63	10'39 8'20	32'39 ..	50'00 16'67	46'52 48'61	36'45 35'51	11'16 13'22	5'63 5'23	71'54 67'53	24'45 21'50	1st half 2nd "		70	
10,500,406 10,029,340	11,464,359 11,633,779	2,100,189 1,958,938	3,101,753 ..	2,628,362 4,777,325	16,264,154 15,486,918	5,306,715 5,867,315	6,419,059 5,498,139	8,730,816 8,631,600	346,787 323,325	1,767,599 1,662,026	1st half 2nd "	71		
121,692,164 127,380,770	117,512,679 118,197,353	29,906,507 27,237,815	24,409,049 ..	24,945,206 48,645,103	128,284,323 133,007,880	60,140,870 67,218,440	62,785,705 61,423,697	63,931,279 68,286,224	3,237,438 3,038,058	19,285,575 17,705,787	1st half 2nd "		72	
132,192,570 137,410,110	128,977,038 129,831,132	32,006,696 29,196,753	27,510,802 ..	27,573,568 53,422,428	144,548,477 148,494,798	65,447,585 73,085,755	69,204,764 66,921,836	72,662,095 76,917,824	3,584,225 3,361,383	21,053,174 19,367,813	1st half 2nd "	73		
17'07 15'34	21'11 20'23	16'52 15'89	24'23 ..	19'16 15'34	16'17 15'41	10'91 10'93	16'16 13'18	19'26 17'77	15'54 12'82	10'39 11'63	1st half 2nd "		74	
197'88 197'35	216'42 205'52	225'51 220'97	190'69 ..	181'87 156'16	127'57 132'39	123'39 125'19	158'06 147'28	141'03 140'57	145'03 143'72	113'35 123'90	1st half 2nd "	75		
214'05 212'89	237'53 225'75	242'03 236'86	214'92 ..	201'03 171'50	143'74 147'80	134'50 136'12	174'22 160'46	160'29 158'34	160'57 156'54	123'74 135'53	1st half 2nd "		76	
1'38 1'72	1'60 1'54	1'86 1'88	1'06 ..	1'20 1'11	1'10 1'37	1'71 1'69	1'35 1'53	1'56 1'40	1'62 1'85	1'23 1'74	1st half 2nd "	77		
22'70 28'28	18'99 19'72	22'46 23'66	7'18 ..	7'87 8'84	11'73 14'52	26'71 27'35	11'17 13'12	14'61 13'31	15'77 18'65	17'24 21'27	1st half 2nd "		78	
1'02 1'39	0'90 0'91	1'40 1'41	0'51 ..	0'74 0'85	0'82 1'06	1'85 1'83	0'95 1'35	0'84 0'82	1'39 1'61	1'46 1'76	1st half 2nd "	79		
9'79 12'72	12'17 11'81	12'74 18'04	7'15 ..	5'65 8'96	9'81 11'95	25'01 24'00	25'30 27'22	71'07 71'46	4'68 6'46	9'52 20'70	1st half 2nd "		80	
2'31 1'60	1'84 1'76	1'43 1'30	2'87 ..	2'31 1'52	1'84 1'43	0'77 0'69	2'95 2'01	1'93 1'82	3'44 3'42	1'27 1'08	1st half 2nd "	81		
0'48 -9'09	-0'98 -1'69	-7'62 -8'07	1'84 ..	-2'29 -2'20	-2'53 -7'13	-17'16 -17'49	0'13 -2'10	-5'78 -4'24	23'18 19'89	-11'00 -15'84	1st half 2nd "		82	
10'10 0'18	0'33 1'50	-4'07 -0'74	-1'39 ..	-2'89 -3'82	3'17 -3'48	-18'24 -17'43	6'77 0'50	-4'07 -3'10	.. ..	-3'65 -7'55	1st half 2nd "	83	
83'98 67'28	.. ..	.. ..	0'51 ..	-6'07 -3'08	17'73 12'14	.. ..	.. ..	.. ..	57'17 68'52	.. ..	1st half 2nd "		84
40'93 29'81	26'23 26'36	29'66 25'57	23'34 ..	18'82 14'94	23'00 18'58	20'63 19'49	31'28 22'76	28'60 26'79	22'38 21'32	21'95 18'64	1st half 2nd "	85		
42'00 30'22	39'53 43'29	22'77 12'51	34'61 ..	74'45 32'57	31'41 29'76	20'82 18'08	12'99 17'70	-4'58 -3'86	183'37 337'13	68'90 23'64	1st half 2nd "		86	

(c) Called "Upper."

(d) Called "Lower."

Half-years ended the 30th June and the 31st December 1890.

Progressive number.	HEADINGS.	1890.	STATE LINES WORKED BY THE STATE.						LINES COM.	
			STATE LINES WORKED BY COMPANIES.			STATE LINES WORKED BY THE STATE.				
			I. East Indian.	V. Bengal-Nágpur.	VI. Indian Midland.	XVII. North Western.	XX. Oudh and Rohilkhand.	XXI. Eastern Bengal.		XXXII. Great Indian Peninsula.
					Standard Gauge.	Metre and 2'6" Gauges.				
No. V.—COACHING TRAFFIC										
<i>—concl'd.</i>										
COST OF WORKING AND PROFIT—concl'd.										
Average profit on working a coaching unit one mile—										
87	Per passenger unit Pies	{ 1st half 2nd "	1'07 1'95	0'73 —0'66	0'85 0'48	1'25 1'33	1'80 1'53	1'54 1'60	1'69 1'48	1'37 0'96
88	Other traffic per ton "	{ 1st half 2nd "	22'06 22'76	23'74 3'95	—3'73 2'13	18'40 20'06	19'38 19'02	25'51 29'04	36'13 40'85	19'15 18'54
No. VI. GOODS TRAFFIC.										
GROSS RECEIPTS AND TRAIN-MILEAGE—										
89	Receipts from goods traffic R	{ 1st half 2nd "	1,55,29,266 1,27,54,679	13,45,233 4,92,234	10,84,616 7,03,290	89,89,017 91,36,843	21,88,993 15,31,166	15,34,409 28,64,017	11,97,924 13,06,834	1,81,22,155 1,08,16,694
90	Goods train-miles run No.	{ 1st half 2nd "	2,530,175 2,099,060	191,426 154,189	351,537 267,488	2,628,088 2,406,143	674,599 532,741	377,963 514,653	467,883 444,119	3,405,406 2,325,302
91	Average goods receipts per train-mile R	{ 1st half 2nd "	6'14 6'08	7'03 3'19	3'09 2'63	3'42 3'80	3'24 2'87	4'06 5'56	2'56 2'94	5'32 4'65
UNITS AND UNIT-MILEAGE—										
92	Tons of goods carried one mile . Ton-miles	{ 1st half 2nd "	525,938,015 409,724,124	23,003,477 15,929,775	28,949,547 18,447,508	274,762,178 310,338,744	79,277,000 51,668,382	35,685,772 57,451,045	28,519,181 26,142,563	383,854,761 244,153,670
93	Average sum received for carrying a ton one mile Pies	{ 1st half 2nd "	5'67 5'98	11'23 5'93	7'19 7'32	6'28 5'65	5'30 5'69	8'26 9'57	8'06 9'60	9'06 8'51
94	Average number of tons in a Train Tons	{ 1st half 2nd "	207'87 195'19	120'17 103'31	82'35 68'97	104'55 128'98	117'52 96'99	94'42 111'63	60'95 58'86	112'72 105'00
VEHICLES AND VEHICLE-MILEAGE—										
Number of goods vehicles hauled one mile—										
95	Loaded Vehicle-miles.	{ 1st half 2nd "	63,032,495 52,059,903	3,279,269 1,840,919	5,648,463 3,624,231	40,321,292 40,419,015	12,366,409 8,922,940	6,586,447 9,584,013	9,560,673 8,978,517	53,671,965 36,213,170
96	Empty "	{ 1st half 2nd "	24,570,551 17,898,919	2,098,257 1,376,553	3,068,508 2,212,650	17,105,822 16,330,237	5,558,927 3,827,945	2,400,146 5,205,954	2,186,074 2,415,857	22,764,140 13,374,052
97	Brake-vans "	{ 1st half 2nd "	2,125,799 1,728,327	365,831 275,179	517,052 387,270	2,991,340 2,856,727	1,035,377 843,706	376,382 515,985	512,690 432,356	6,673,204 4,429,104
98	Total "	{ 1st half 2nd "	89,728,845 71,687,209	5,743,357 3,492,651	9,234,023 6,224,151	60,418,454 59,605,979	18,960,713 13,593,691	9,362,975 15,305,952	12,259,439 11,826,730	83,109,305 54,016,332
Average number of vehicles on a goods train—										
99	Freight vehicles No.	{ 1st half 2nd "	34'62 33'33	28'09 20'87	24'80 21'82	21'85 23'59	26'57 23'93	23'78 28'74	25'11 25'66	22'45 21'33
100	Brake-vans "	{ 1st half 2nd "	0'84 0'82	1'91 1'78	1'47 1'45	1'14 1'19	1'54 1'59	0'99 1'00	1'09 0'97	1'06 1'00
101	Total "	{ 1st half 2nd "	35'46 34'15	30'00 22'65	26'27 23'27	22'99 24'78	28'11 —25'52	24'77 29'74	26'20 26'63	24'41 23'23
102	Average earnings per goods vehicle per mile (excluding brakes) . Pies	{ 1st half 2nd "	34'04 35'00	48'03 29'37	23'89 23'13	30'05 30'91	23'45 23'06	32'78 37'18	19'58 22'02	45'52 41'88
103	Carrying capacity hauled one mile (excluding brakes) . Tons	{ 1st half 2nd "	979,037,865 783,800,452	56,585,595 34,266,074	93,639,167 62,215,012	572,556,696 566,913,614	180,324,890 128,647,550	87,173,312 144,252,361	64,972,107 62,639,937	767,441,333 503,398,784
104	Percentage of freight upon capacity hauled Per cent.	{ 1st half 2nd "	53'72 52'27	40'65 46'49	30'92 29'65	47'99 54'74	43'96 40'16	40'94 39'83	43'89 41'73	50'02 48'56
105	Average load of a goods vehicle (including both loaded and empty) . Tons	{ 1st half 2nd "	6'00 5'86	4'28 4'95	3'32 3'16	4'78 5'47	4'42 4'05	3'97 3'88	2'43 2'29	5'02 4'92
106	Average load of a loaded goods vehicle "	{ 1st half 2nd "	8'34 7'87	7'01 8'65	5'13 5'09	6'81 7'68	6'41 5'79	5'42 5'99	2'98 2'91	7'15 6'74
WEIGHT OF TRAIN AND TON-MILEAGE—										
Gross ton-mileage of all goods trains—										
107	Freight Tons.	{ 1st half 2nd "	525,938,015 409,724,124	23,003,477 15,929,775	28,949,547 18,447,508	274,762,178 310,338,744	79,277,000 51,668,382	35,685,772 57,451,045	28,519,181 26,142,563	383,854,761 244,153,670
108	Dead-weight "	{ 1st half 2nd "	654,455,787 524,286,252	53,263,772 37,344,987	87,201,191 61,735,202	600,428,487 582,875,174	152,894,167 112,259,241	81,870,126 129,221,640	55,030,670 53,828,218	719,053,390 478,164,375
109	Total "	{ 1st half 2nd "	1,180,393,802 934,010,376	76,267,249 53,274,762	116,150,738 80,182,710	875,190,665 893,213,918	232,171,167 163,927,623	117,555,898 186,673,285	83,549,851 79,970,781	1,102,908,151 722,318,045

A—continued.

RAILWAYS—(Part II)—continued.

Half-years ended the 30th June and the 31st December 1890.

GAUGE.			METRE GAUGE.										1890.	Progressive number.
WORKED BY GUARANTEED COMPANIES.		LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	STATE LINES WORKED BY COMPANIES.				STATE LINES WORKED BY THE STATE.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED AND WORKED BY NATIVE STATES.				
XXXIII. Bombay, Baroda and Central India.	XXXIV. Madras.		XLV. The Nizam's Guaranteed State.	III. Tirhoot.	VIII. Bengal and North-Western.	XI. Rajputana-Malwa.	Southern Mahratta.	XXVI. Burma.	South Indian.	XXXVIII. Rohilkhand-Kumaun.	LIII. Bhavnagar-Gondal-Junagarh-Forbandar.			
1'63 1'23	0'94 0'95	0'93 0'91	1'33 ...	1'32 1'10	1'31 1'06	0'74 0'67	2'16 1'79	1'22 1'25	2'27 2'26	1'38 1'07	1st half 2nd "	87		
22'23 17'35	26'43 25'79	27'99 25'39	33'87 ...	46'77 36'49	23'55 21'23	27'36 24'10	30'51 32'82	—15'73 —15'36	70'46 73'23	29'08 23'45	1st half 2nd "		88	
54,51,720 28,38,292	25,65,458 27,90,776	9,14,580 7,68,866	7,13,594 ...	6,24,727 9,46,822	67,48,620 46,32,695	15,64,667 15,09,550	12,96,402 9,23,384	13,69,999 15,30,576	83,022 63,895	5,28,326 1,77,142	1st half 2nd "	89		
661,939 387,241	644,564 698,143	207,773 191,157	246,772 ...	212,529 362,525	1,895,047 1,342,540	627,049 614,903	434,656 349,030	582,823 708,468	34,906 23,125	179,722 68,524	1st half 2nd "		90	
8'24 7'33	3'98 4'00	4'40 4'02	2'89 ...	2'94 2'61	3'56 3'45	2'49 2'45	2'98 2'65	2'35 2'16	2'38 2'76	2'94 2'59	1st half 2nd "	91		
121,513,361 61,397,385	62,929,247 71,528,813	23,880,933 20,635,577	18,288,335 ...	19,156,197 27,519,329	177,772,862 117,371,443	33,527,255 33,985,501	40,694,767 28,069,386	36,456,943 41,347,675	1,920,850 1,256,224	11,231,134 4,377,981	1st half 2nd "		92	
8'61 8'88	7'83 7'49	7'35 7'15	7'49 ...	8'26 6'61	7'29 7'58	8'06 8'53	6'12 6'32	7'22 7'11	8'30 9'77	9'03 7'77	1st half 2nd "	93		
183'57 158'55	97'63 102'46	114'94 107'95	74'11 ...	90'13 75'91	93'81 87'42	53'47 55'27	93'63 80'42	62'55 58'36	55'03 54'32	62'49 63'89	1st half 2nd "		94	
19,958,816 11,011,607	11,330,734 12,047,343	2,700,902 2,591,229	5,007,633 ...	4,357,035 6,517,487	36,758,268 26,287,028	9,244,112 9,200,158	10,662,956 7,733,453	8,819,951 10,006,270	450,218 344,602	3,067,674 1,087,388	1st half 2nd "	95		
5,861,867 2,542,810	2,375,767 2,756,662	1,466,120 1,479,207	2,157,728 ...	2,861,167 2,609,758	9,141,132 6,226,797	2,541,720 2,287,707	7,256,362 4,862,272	3,081,183 4,136,864	260,248 146,988	1,610,280 596,828	1st half 2nd "		96	
587,396 320,113	1,270,499 1,380,284	394,846 330,392	93,038 ...	332,982 642,501	1,592,183 998,116	1,135,201 1,108,013	834,868 687,139	420,265 493,888	65,399 40,110	119,284 21,835	1st half 2nd "	97		
26,408,079 13,874,530	14,977,000 16,184,289	4,561,958 4,400,828	7,258,399 ...	6,551,184 9,769,746	47,491,583 33,511,941	12,921,033 12,595,878	18,754,186 13,282,864	12,321,399 14,637,022	775,865 531,700	4,797,238 1,706,051	1st half 2nd "		98	
39'01 35'00	21'26 21'20	20'06 21'29	29'03 ...	29'26 25'18	24'22 24'22	18'80 18'68	41'23 36'09	20'42 19'46	20'35 21'26	26'03 24'58	1st half 2nd "	99		
0'89 0'83	1'97 1'98	1'90 1'73	0'38 ...	1'57 1'77	0'84 0'74	1'81 1'80	1'92 1'97	0'72 0'70	1'87 1'73	0'66 0'32	1st half 2nd "		100	
39'90 35'83	23'23 23'18	21'96 23'02	29'41 ...	30'83 26'95	25'06 24'96	20'61 20'48	43'15 38'06	21'14 20'66	22'22 22'99	26'69 24'90	1st half 2nd "	101		
40'54 40'20	35'94 36'19	42'14 36'27	19'12 ...	19'29 19'92	28'23 27'36	25'48 25'23	33'89 14'08	22'10 20'78	22'44 24'06	21'68 20'19	1st half 2nd "		102	
264,159,263 139,193,232	126,735,657 137,760,756	41,274,035 40,595,585	41,857,253 ...	43,078,123 58,227,290	292,557,354 203,027,066	72,268,722 70,443,815	108,297,240 76,697,083	70,851,719 84,477,292	4,262,796 2,949,540	25,354,511 9,212,661	1st half 2nd "	103		
46'00 44'11	49'65 51'92	57'86 50'83	43'69 ...	44'47 47'26	60'77 57'81	46'39 48'24	37'58 36'60	51'46 48'95	45'06 42'59	44'30 47'52	1st half 2nd "		104	
4'71 4'53	4'59 4'83	5'73 5'07	2'55 ...	3'08 3'02	3'87 3'61	2'84 2'96	2'27 2'23	3'06 2'92	2'70 2'56	2'40 2'60	1st half 2nd "	105		
6'09 5'58	5'35 5'94	8'84 7'96	3'65 ...	4'40 4'22	4'84 4'46	3'63 3'69	3'82 3'63	4'13 4'13	4'27 3'65	3'66 4'03	1st half 2nd "		106	
121,513,361 61,397,385	62,929,247 71,528,813	23,880,933 20,635,577	18,288,335 ...	19,156,197 27,519,329	177,772,862 117,371,443	33,527,255 33,985,501	40,694,767 28,069,386	36,456,943 41,347,675	1,920,850 1,256,224	11,231,134 4,377,981	1st half 2nd "	107		
196,715,713 104,934,375	138,262,827 150,175,735	42,547,063 39,901,457	32,556,517 ...	31,624,981 46,337,326	254,650,273 178,059,034	70,364,678 68,748,140	88,101,913 65,428,088	64,222,812 78,504,020	3,896,874 2,679,107	21,165,286 7,647,837	1st half 2nd "		108	
318,229,074 166,331,760	201,192,074 221,704,548	66,427,996 60,537,034	50,844,852 ...	50,781,178 73,856,665	432,423,135 295,430,477	103,891,933 102,733,641	128,796,680 93,497,474	100,670,755 119,851,695	5,817,724 3,935,331	32,396,420 12,025,818	1st half 2nd "	109		

APPENDIX
STATISTICS OF INDIAN

Half-years ended the 30th June and the 31st December 1890.

Progressive number.	HEADINGS.	1890.	STATE LINES WORKED BY COMPANIES.			STATE LINES WORKED BY THE STATE.			
			I. East Indian.	V. Bengal- Nággpur.	VI. Indian Midland.	XVII. North Western.	XX. Ondh and Rohilkhand.	XXI. Eastern Bengal.	
								Standard Gauge.	Metre and 2'6" Gauges.
STANDARD									
No. VI.—GOODS TRAFFIC—concl'd.									
WEIGHT OF TRAIN AND TON-MILEAGE—concl'd.									
Average weight of a goods train—									
110	Freight Tons	{ 1st half 2nd "	207'87 195'19	120'17 103'31	82'35 68'96	104'55 128'98	117'52 96'99	94'41 111'63	60'95 58'86
111	Dead-weight "	{ 1st half 2nd "	258'66 249'77	278'25 242'20	248'06 230'80	228'47 242'25	226'64 210'72	216'61 251'08	117'62 121'20
112	Total "	{ 1st half 2nd "	466'53 444'96	398'42 345'51	330'41 299'76	333'02 371'23	344'16 307'71	311'02 362'71	178'57 180'06
COST OF WORKING AND PROFIT—									
113	Average cost of hauling a goods train one mile R	{ 1st half 2nd "	2'15 1'96	3'54 4'79	2'61 2'62	2'39 2'46	1'72 1'80	2'17 2'09	1'41 1'53
114	Average cost of hauling a goods vehicle with its load one mile Pies	{ 1st half 2nd "	11'92 11'28	24'20 44'08	20'24 23'01	21'01 20'03	12'41 14'44	17'52 14'00	10'79 11'48
115	Average cost of hauling a goods unit (vis., one ton) one mile "	{ 1st half 2nd "	1'98 1'93	5'66 8'90	6'09 7'28	4'39 3'66	2'81 3'56	4'41 3'60	4'44 5'00
115a	Average cost of hauling a goods unit one mile, including interest on capital ex- pended on open line at the rate of 5 pct cent. per annum "	{ 1st half 2nd "	4'40 4'81	14'16 20'15	13'17 16'78	9'46 8'27	6'50 8'59	9'33 7'31	9'16 10'13
116	Average profit on working a goods train one mile R	{ 1st half 2nd "	3'99 4'12	3'49 -1'60	0'48 0'01	1'03 1'34	1'52 1'07	1'89 3'47	1'15 1'41
117	Average profit on working a goods vehi- cle with its load one mile Pies	{ 1st half 2nd "	22'12 23'72	23'83 -14'71	3'65 0'12	9'04 10'88	11'04 8'62	15'26 23'18	8'79 10'54
118	Average profit on working a goods unit (vis., one ton) one mile "	{ 1st half 2nd "	3'69 4'05	5'57 -2'97	1'10 0'04	1'89 1'99	2'49 2'13	3'85 5'97	3'62 4'60
No. VII.									
DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE.									
PERCENTAGE TO TOTAL EARNINGS—									
119	Coaching Traffic Per cent.	{ 1st half 2nd "	32'85 35'31	12'83 26'97	41'28 51'93	34'09 32'07	43'52 49'23	43'00 28'44	36'51 32'84
120	Goods Traffic "	{ 1st half 2nd "	65'28 62'35	79'12 63'23	55'16 45'59	64'12 66'03	52'42 47'77	47'04 65'08	54'41 57'27
121	Sundries, including Telegraph "	{ 1st half 2nd "	1'73 2'18	8'05 9'80	3'56 2'48	1'76 1'90	4'06 3'00	2'91 1'89	1'05 1'09
122	Steam-boat Earnings "	{ 1st half 2nd "	0'14 0'16	... ...	... ...	0'03 ...	... ...	7'05 4'59	8'03 8'80
	TOTAL "	{ 1st half 2nd "	100 100	100 100	100 100	100 100	100 100	100 100	100 100
PERCENTAGE OF WORKING EXPENSES UPON TOTAL EARNINGS—									
123	Maintenance Per cent.	{ 1st half 2nd "	10'46 7'15	14'38 47'83	27'09 31'64	20'59 18'10	14'12 17'53	11'34 8'77	14'37 16'03
124	Locomotive Expenses "	{ 1st half 2nd "	7'99 8'39	13'62 32'55	21'54 24'69	22'74 19'43	12'52 13'94	11'44 8'68	11'21 9'74
125	Carriage and Wagon Expenses "	{ 1st half 2nd "	2'57 2'92	2'69 8'85	5'77 6'07	6'74 8'63	4'11 3'78	4'28 4'04	2'49 3'47
126	Traffic Expenses "	{ 1st half 2nd "	6'41 7'06	7'49 12'74	9'95 12'27	8'28 8'45	8'14 10'55	12'58 10'31	9'83 9'97
127	General Charges "	{ 1st half 2nd "	4'08 4'34	11'68 28'16	11'68 14'55	4'49 4'18	5'38 6'75	5'69 4'37	5'26 4'67
128	Miscellaneous Expenses "	{ 1st half 2nd "	1'36 1'41	0'37 0'79	3'99 2'07	1'13 1'04	0'89 1'77	1'80 1'77	1'10 1'08
129	Steam-boat Expenses "	{ 1st half 2nd "	0'17 0'19	... ...	... ...	0'25 0'34	... ...	4'13 3'93	7'09 6'97
130	TOTAL WORKING EXPENSES "	{ 1st half 2nd "	33'04 31'46	50'23 130'92	80'02 91'29	64'22 60'17	45'16 54'32	51'26 41'87	51'35 51'93

A—continued.

RAILWAYS—(Part II)—continued.

Half-years ended the 30th June and the 31st December 1890.

GAUGE.				METRE GAUGE.										1890.	Progressive number.
LINES WORKED BY GUARANTEED COMPANIES.			LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	STATE LINES WORKED BY COMPANIES.				STATE LINES WORKED BY THE STATE.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED AND WORKED BY NATIVE STATES.				
XXXII.	XXXIII.	XXXIV.		III.	VIII.	XI.	XXVI.	XXXVII.	LIII.						
Great Indian Peninsula.	Bombay, Baroda and Central India.	Madras.	The Nizam's Guaranteed State.	Tirhoot.	Bengal and North-Western.	Rajputana Malwa.	Southern Mahratta.	Burma.	South Indian.	Rohilkhand-Kumaun.	Bhavnagar-Gondal-Junagarh-Forbandar.				
112'72 105'00	183'57 158'35	97'63 102'45	114'94 107'95	74'11 ...	90'13 75'91	93'81 87'42	53'47 55'27	93'63 80'42	62'55 58'36	55'03 54'32	62'40 63'89	1st half . 2nd ,, .	} 110		
211'15 205'63	297'18 270'98	214'51 215'11	204'77 208'74	131'93 ...	148'80 127'82	134'38 132'63	112'21 111'80	202'69 187'46	110'19 110'81	111'64 115'86	117'77 111'61	1st half . 2nd ,, .		} 111	
323'87 310'63	480'75 429'53	312'14 317'56	319'71 316'69	206'04 ...	238'93 203'73	228'19 220'05	165'68 167'07	296'32 267'88	172'74 169'17	166'67 170'18	180'26 175'50	1st half . 2nd ,, .	} 112		
2'21 2'57	3'09 3'46	2'10 2'16	2'46 2'51	1'01 ...	1'42 1'31	1'75 2'03	2'10 2'08	2'29 2'55	1'68 1'50	1'60 1'98	1'80 2'25	1st half . 2nd ,, .		} 113	
18'90 23'10	15'19 19'00	18'98 19'57	23'57 22'62	6'69 ...	9'36 10'02	13'84 16'12	21'48 21'37	10'68 13'56	15'81 14'44	15'90 17'84	13'27 17'57	1st half . 2nd ,, .	} 114		
3'76 4'69	3'23 4'19	4'13 4'05	4'11 4'46	2'62 ...	3'04 3'32	3'57 4'46	7'55 7'22	4'70 6'08	5'16 4'94	5'88 6'98	5'53 6'76	1st half . 2nd ,, .		} 115	
6'43 8'47	5'89 8'29	9'58 9'04	9'38 10'60	6'11 ...	6'89 8'00	6'21 8'00	16'97 16'12	8'64 11'20	8'94 8'45	12'04 15'13	9'78 13'79	1st half . 2nd ,, .	} 115a		
3'11 2'08	5'15 3'87	1'88 1'34	1'94 1'51	1'88 ...	1'52 1'30	1'81 1'42	0'39 0'37	0'69 0'10	0'67 0'66	0'69 0'78	1'14 0'34	1st half . 2nd ,, .		} 116	
26'62 18'78	25'35 21'20	16'06 16'62	18'57 13'65	12'43 ...	9'93 9'90	14'39 11'24	4'00 3'86	3'21 0'52	6'29 6'34	6'54 7'12	8'41 2'62	1st half . 2nd ,, .	} 117		
5'30 3'82	5'38 4'69	3'70 3'44	3'24 2'69	4'87 ...	3'22 3'29	3'72 3'12	1'41 1'31	1'42 0'24	2'06 2'17	2'42 2'79	3'50 1'01	1st half . 2nd ,, .		} 118	
19'90 27'66	28'94 42'02	39'51 39'70	31'44 32'80	38'06 ...	36'87 41'55	30'05 37'15	42'75 44'95	56'18 60'81	52'42 49'39	48'44 55'42	43'75 67'25	1st half . 2nd ,, .	} 119		
79'26 70'78	69'50 55'69	54'32 58'34	65'87 64'42	54'01 ...	47'86 47'93	68'50 61'15	55'48 53'19	42'64 37'99	45'46 48'31	35'60 31'78	54'35 29'54	1st half . 2nd ,, .		} 120	
0'84 1'56	1'56 2'29	6'17 1'96	2'69 2'78	1'80 ...	4'82 2'35	1'45 1'70	1'77 1'86	1'18 1'20	2'12 2'30	15'96 12'80	1'90 3'21	1st half . 2nd ,, .	} 121		
...	6'13 ...	10'45 8'17	1st half . 2nd ,, .		} 122	
100 100	100 100	100 100	100 100	100 100	100 100	100 100	100 100	100 100	100 100	100 100	100 100	1st half . 2nd ,, .	} 123		
10'18 16'06	10'42 14'93	14'86 11'52	23'07 20'92	5'89 ...	9'40 10'02	7'50 8'76	26'32 27'31	14'87 21'22	18'72 18'47	14'46 9'36	17'03 21'42	1st half . 2nd ,, .		} 123	
17'29 21'85	13'40 15'99	18'48 18'41	13'89 16'91	8'63 ...	10'48 11'80	18'60 20'33	23'09 21'82	16'78 18'50	20'55 20'32	11'19 10'72	18'29 18'99	1st half . 2nd ,, .	} 124		
4'51 5'99	4'20 5'03	4'73 6'99	2'94 3'47	2'16 ...	1'63 2'91	6'65 9'92	3'98 4'02	3'88 4'79	4'75 3'98	2'44 3'08	1'59 2'26	1st half . 2nd ,, .		} 125	
6'42 8'61	5'37 7'47	8'56 8'71	7'70 8'98	7'60 ...	8'96 9'57	7'04 8'56	11'34 11'52	9'53 11'11	7'74 7'71	11'89 13'69	8'83 11'45	1st half . 2nd ,, .	} 126		
2'80 4'13	3'47 4'96	5'98 5'61	8'70 10'32	5'79 ...	9'22 9'11	5'61 7'29	12'57 12'96	5'60 7'53	6'05 5'85	13'08 14'04	9'54 14'65	1st half . 2nd ,, .		} 127	
2'14 1'36	1'27 1'19	0'43 0'60	0'45 1'04	0'84 ...	0'69 0'48	0'75 0'97	0'63 1'17	0'90 0'84	0'28 0'62	3'67 4'04	1'29 1'53	1st half . 2nd ,, .	} 128		
...	3'97 ...	4'97 5'49	1st half . 2nd ,, .		} 129	
43'34 58'00	38'13 49'57	53'04 51'84	56'75 61'64	34'88 ...	45'35 49'38	46'24 55'83	77'93 78'80	51'56 63'99	58'09 56'95	56'73 54'93	56'57 70'30	1st half . 2nd ,, .	} 130		

APPENDIX
STATISTICS OF INDIAN
No. VIII.—WORKING

TABLE A.—MAINTENANCE OF WAY.

Half-years ended the 30th June and the 31st December 1890.

Progressive number.	HEADINGS.	1890.	STATE LINES WORKED BY COMPANIES.			STATE LINES WORKED BY THE STATE.			
			I. East Indian.	V. Bengal- Nágpur. (a)	VI. Indian Midland.	XVII. North Western.	XX Oudh and Rohil- khand.	XXI. Eastern Bengal.	
								Standard Gauge.	Metre and 2'6" Gauges.
	Mean age of Lines on the 31st December 1890, years	...	27'5	3'5	3'0	13'0	15'5	21'0	8'0
	PER MILE OF LINE MAINTAINED.								
131a	General Superintendence (including office expenses) R	1st half 2nd "	195'31 177'70	216'44 206'34	132'05 121'72	140'88 137'45	100'47 110'20	164'92 156'86	106'34 126'68
132a	Maintenance and renewal of Permanent-way "	1st half 2nd "	959'16 521'15	304'83 373'37	493'70 425'42	612'56 520'44	602'15 501'99	618'66 664'12	377'31 391'70
133a	Repairs of Bridges, &c. "	1st half 2nd "	380'94 50'46	96'60 222'72	39'72 42'07	128'72 82'74	21'32 56'51	77'40 113'63	50'23 93'03
134a	Conservancy of Rivers "	1st half 2nd "	... ...	... ...	... ...	66'75 33'05	4'09 12'61	1'57 1'56	3'38 2'46
135a	Repairs of Stations and Buildings "	1st half 2nd "	133'10 56'47	41'98 42'26	22'58 31'49	86'56 78'62	38'16 24'20	141'74 92'72	86'67 82'54
136a	Other Charges (net) "	1st half 2nd "	-118'77 105'68	34'02 59'57	37'22 43'95	125'76 153'86	85'13 106'91	22'46 2'65	-8'80 14'34
137a	Total Maintenance, &c. "	1st half 2nd "	1,549'83 911'46	693'87 904'26	725'27 664'65	1,161'23 1,006'16	851'32 811'42	1,026'75 1,031'54	615'13 710'75
	PER MILE OF TRACK, INCLUDING SIDINGS.								
131b	General Superintendence (including office expenses) R	1st half 2nd "	126'02 114'55	191'78 185'81	118'93 109'03	115'66 111'64	86'20 95'64	119'97 114'02	93'47 110'27
132b	Maintenance and renewal of Permanent-way "	1st half 2nd "	618'86 335'92	270'11 336'21	444'64 381'12	502'89 422'74	516'59 435'67	450'04 482'74	331'61 340'99
133b	Repairs of Bridges, &c. "	1st half 2nd "	245'79 32'53	85'59 200'53	35'77 37'70	105'67 67'21	18'29 49'05	56'31 82'60	44'15 80'99
134b	Conservancy of Rivers "	1st half 2nd "	... ...	... ...	... ...	54'80 26'85	3'51 10'07	1'14 1'13	2'97 2'15
135b	Repairs of Stations and Buildings "	1st half 2nd "	85'94 36'40	37'20 38'05	20'33 28'21	71'06 63'85	32'74 21'00	103'11 67'40	76'17 71'86
136b	Other Charges (net) "	1st half 2nd "	-76'63 68'11	30'15 53'64	33'53 39'39	103'25 124'98	73'03 92'78	16'33 1'93	-7'74 12'49
137b	Total Maintenance, &c. "	1st half 2nd "	999'98 587'51	614'83 814'26	653'20 595'45	953'33 817'27	730'36 704'21	746'90 749'82	540'63 618'75
	PER TOTAL TRAIN-MILE.								
131c	General Superintendence (including office expenses) Annas	1st half 2nd "	1'16 1'16	5'57 6'54	2'36 2'36	1'40 1'46	0'93 1'17	1'16 0'97	1'17 1'42
132c	Maintenance and renewal of Permanent-way "	1st half 2nd "	5'70 3'40	7'85 11'84	8'83 8'27	6'07 5'52	5'60 5'31	4'33 4'12	4'15 4'38
133c	Repairs of Bridges, &c. "	1st half 2nd "	2'27 0'33	2'49 7'06	0'71 0'80	1'28 0'88	0'20 0'60	0'54 0'71	0'55 1'04
134c	Conservancy of Rivers "	1st half 2nd "	... ...	... ...	... ...	0'66 0'35	0'04 0'12	0'01 0'01	0'04 0'03
135c	Repairs of Stations and Buildings "	1st half 2nd "	0'79 0'37	1'08 1'34	0'40 0'62	0'86 0'84	0'36 0'26	0'99 0'57	0'95 0'92
136c	Other Charges (net) "	1st half 2nd "	-0'70 0'69	0'88 1'89	0'66 0'86	1'25 1'63	0'79 1'13	0'16 0'02	-0'10 0'15
137c	Total Maintenance, &c. "	1st half 2nd "	9'22 5'95	17'87 28'67	12'96 12'91	11'52 10'68	7'92 8'59	7'19 6'40	6'76 7'94
	PER 1,000 GROSS TON-MILES.								
131d	General Superintendence (including office expenses) R	1st half 2nd "	0'10 0'21	1'04 1'41	0'51 0'57	0'29 0'28	0'20 0'27	0'29 0'21	0'45 0'55
132d	Maintenance and renewal of Permanent-way "	1st half 2nd "	0'95 0'60	1'47 2'55	1'91 1'98	1'25 1'06	1'19 1'24	1'07 0'90	1'61 1'70
133d	Repairs of Bridges, &c. "	1st half 2nd "	0'38 0'06	0'47 1'53	0'15 0'20	0'26 0'17	0'04 0'14	0'13 0'16	0'21 0'40
134d	Conservancy of Rivers "	1st half 2nd "	... ...	... ...	... ...	0'13 0'07	0'01 0'03	... ...	0'02 0'01
135d	Repairs of Stations and Buildings "	1st half 2nd "	0'13 0'06	0'20 0'29	0'09 0'15	0'18 0'16	0'07 0'06	0'25 0'13	0'37 0'36
136d	Other Charges (net) "	1st half 2nd "	-0'12 0'12	0'17 0'41	0'14 0'20	0'26 0'32	0'17 0'26	0'04 ...	-0'04 0'06
137d	Total Maintenance, &c. "	1st half 2nd "	1'53 1'05	3'35 6'19	2'80 3'10	2'37 2'06	1'68 2'00	1'78 1'40	2'62 3'08

(a) The figures entered in this table include the Asansol-Goalkera section.

A-continued.
RAILWAYS—(Part II)—continued,
EXPENSES.
WORKS, AND STATIONS.

Half-years ended the 30th June and the 31st December 1890

GAUGE.				METRE GAUGE.										1890.	Progressive number.
LINES WORKED BY GUARANTEED COMPANIES.			LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	STATE LINES WORKED BY COMPANY.				STATE LINES WORKED BY THE STATE.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED AND WORKED BY NATIVE STATES.				
XXXII.	XXXIII.	XXXIV.	XLV.	III.		VIII.	XL.	XXVI.	South Indian.	XXXVIII.	LIII.				
Great Indian Peninsula.	Bombay, Baroda and Central India.	Madras.	The Nizam's Guaranteed State.	Tirhoot.	Bengaland North-Western.	Rajputana-Malwa.	Southern Mahratta.	Burma.	South Indian.	Rohilkhand-Kumaun.	Bhavnagar Gondal-Junagarh-Porbandar.				
26'5	24'5	26'5	8'0	6'5		11'5	4'5	7'0	17'5	6'0	6'5				
148'03 147'51	216'36 213'48	153'01 156'49	118'60 117'74	72'10 ...	73'07 63'75	102'14 97'61	105'67 96'51	121'31 122'32	116'11 126'25	49'50 49'57	86'86 86'69	1st half 2nd "	131a		
843'45 903'77	855'20 885'79	383'21 276'75	708'86 465'55	175'37 ...	105'58 179'82	270'92 214'43	356'61 369'01	503'48 676'02	509'97 546'65	201'32 105'95	364'59 259'26	1st half 2nd "		132a	
167'23 177'18	302'76 233'77	234'64 191'81	23'49 51'26	6'84 ...	44'99 30'34	1'45 19'54	35'85 26'13	63'70 40'45	17'96 40'73	64'27 10'46	2'45 2'36	1st half 2nd "	133a		
...	...	...	...	...	13'75 2'64	...	...	22'03 12'58	...	...	...	1st half 2nd "		134a
98'16 91'97	170'50 142'32	79'15 147'13	17'59 18'12	19'41 ...	41'51 18'86	28'27 29'57	22'34 23'82	22'33 20'19	27'52 27'95	25'28 25'64	14'34 13'45	1st half 2nd "	135a		
352'52 375'60	228'20 174'75	113'74 115'63	45'03 59'12	11'85 ...	47'33 9'54	42'49 35'93	58'97 63'81	84'62 56'55	180'18 141'48	30'21 15'28	34'92 28'55	1st half 2nd "		136a	
1,609'39 1,696'03	1,773'02 1,650'11	836'27 656'55	913'57 712'79	285'57 ...	326'23 285'87	442'37 397'08	579'44 579'28	817'47 928'11	851'74 883'06	370'58 206'90	503'16 390'31	1st half 2nd "	137a		
100'57 99'17	160'21 158'15	128'69 131'27	107'76 106'97	62'73 ...	66'05 56'69	89'34 85'36	97'46 88'55	103'36 103'48	103'65 112'47	45'27 45'34	77'26 77'61	1st half 2nd "		131b	
573'04 607'57	633'27 656'18	322'28 232'15	644'09 423'00	152'58 ...	95'43 159'90	236'96 187'52	328'90 338'57	428'95 571'90	455'22 486'98	184'12 96'89	324'30 232'10	1st half 2nd "	132b		
113'61 119'11	224'19 173'18	197'33 160'90	21'34 46'58	5'95 ...	40'67 26'98	1'27 17'09	33'06 23'97	54'26 34'22	16'03 36'28	58'77 9'57	2'18 2'12	1st half 2nd "		133b	
...	...	...	...	...	12'43 2'34	...	...	18'77 10'64	...	...	...	1st half 2nd "	134b	
66'69 61'82	126'25 105'43	66'57 123'42	15'97 16'47	16'89 ...	37'52 16'77	24'74 25'86	20'61 21'89	19'03 17'08	24'57 24'90	23'13 23'44	12'76 12'04	1st half 2nd "		135b	
239'50 252'49	168'98 129'45	11'55 96'99	40'92 53'73	10'31 ...	42'77 8'48	37'16 31'42	54'39 58'54	72'09 47'85	160'83 126'03	27'63 13'98	31'07 25'56	1st half 2nd "	136b		
1,093'41 1,140'16	1,312'90 1,222'39	703'32 550'75	830'08 646'75	248'46 ...	294'87 254'20	386'93 347'25	534'42 531'48	606'46 785'17	660'30 786'66	338'92 189'22	447'57 349'43	1st half 2nd "		137b	
0'69 0'87	1'25 1'52	1'73 1'65	1'95 2'09	0'84 ...	1'26 1'05	0'94 1'12	1'95 1'79	1'29 1'42	1'19 1'12	1'24 1'63	1'30 2'17	1st half 2nd "	131c		
3'92 5'30	4'94 6'33	4'33 2'92	11'69 8'31	2'04 ...	1'82 2'95	2'50 2'44	6'56 6'86	5'35 7'85	5'21 4'85	5'13 3'49	5'49 6'48	1st half 2nd "		132c	
0'78 1'04	1'75 1'67	2'65 2'02	0'38 0'91	0'08 ...	0'77 0'50	0'01 0'23	0'66 0'49	0'68 0'47	0'19 0'36	1'65 0'34	0'04 0'06	1st half 2nd "	133c		
...	...	...	...	...	0'24 0'04	...	...	0'23 0'15	...	...	...	1st half 2nd "		134c
0'46 0'54	0'98 1'02	0'90 1'55	0'49 0'33	0'23 ...	0'71 0'31	0'26 0'34	0'41 0'44	0'24 0'24	0'28 0'25	0'65 0'84	0'22 0'33	1st half 2nd "	135c		
1'64 2'20	1'32 1'24	0'15 1'22	0'75 1'06	0'13 ...	0'81 0'15	0'39 0'40	1'08 1'19	0'90 0'64	1'84 1'26	0'76 0'51	0'52 0'71	1st half 2nd "		136c	
7'49 9'95	10'24 11'78	9'46 6'92	15'06 12'70	3'32 ...	5'61 4'70	4'08 4'53	10'66 10'77	8'69 10'77	8'71 7'84	9'43 6'81	7'57 9'75	1st half 2nd "	137c		
0'15 0'20	0'22 0'32	0'39 0'37	0'42 0'46	0'25 ...	0'35 0'35	0'30 0'38	0'80 0'73	0'34 0'42	0'44 0'43	0'49 0'62	0'53 0'91	1st half 2nd "		131d	
0'85 1'25	0'88 1'34	0'97 0'66	2'52 1'82	0'61 ...	0'51 0'98	0'78 0'81	2'70 2'81	1'40 2'34	1'95 1'84	1'95 1'32	2'24 2'73	1st half 2nd "	132d		
0'17 0'25	0'31 0'35	0'60 0'46	0'08 0'20	0'02 ...	0'22 0'17	0'01 0'07	0'27 0'20	0'18 0'14	0'07 0'14	0'62 0'13	0'02 0'02	1st half 2nd "		133d	
...	...	...	...	...	0'07 0'01	...	...	0'06 0'04	...	...	...	1st half 2nd "	134d	
0'10 0'13	0'17 0'22	0'20 0'35	0'07 0'07	0'07 ...	0'20 0'10	0'09 0'11	0'16 0'18	0'06 0'07	0'11 0'09	0'25 0'32	0'09 0'14	1st half 2nd "		135d	
0'36 0'52	0'23 0'27	0'03 0'27	0'16 0'23	0'04 ...	0'22 0'05	0'12 0'13	0'45 0'49	0'24 0'21	0'69 0'47	0'28 0'19	0'22 0'30	1st half 2nd "	136d		
1'63 2'35	1'81 2'50	2'13 1'57	3'25 2'78	0'99 ...	1'57 1'56	1'28 1'50	4'38 4'41	2'28 3'22	3'26 2'97	3'59 2'58	3'10 4'10	1st half 2nd "		137d	

A—continued.
RAILWAYS—(Part II)—continued.
EXPENSES—continued.
EXPENSES.

Half-years ended the 30th June and the 31st December 1890.

GAUGE.				METRE GAUGE.									1890.	Progressive number.
LINES WORKED BY GUARANTEED COMPANIES.				STATE LINES WORKED BY COMPANIES.				STATE LINES WORKED BY THE STATE.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED AND WORKED BY NATIVE STATES.			
XXXII.	XXXIII.	XXXIV.	XLV.	III.	VIII.	XI.	XXVI.	South Indian.	XXXVIII.	LIII.				
Great Indian Peninsula.	Bombay, Baroda and Central India.	Madras.	The Nizam's Guaranteed State.	Tirhoot.	Bengal and North-Western.	Rajputana-Malwa.	Southern Mahratta.	Burma.	South Indian.	Rohilkhand-Kumaun.	Bhavnaga Gondal-Junagarh Porbandar.			
12'44 10'98	17'45 17'67	...	6'14 6'26	5'32 ...	11'60 8'70	21'68 20'46	...	22'26 16'27	16'19 18'04	...	28'29 23'50	1st half 2nd "	}	
...	...	5'27 5'24	...	...	...	...	6'15 6'10	...	...	6'23 4'76	...	1st half 2nd "		}
0'57 0'72	0'73 0'86	0'70 0'60	0'67 0'91	0'68 ...	0'82 0'73	0'86 1'04	0'93 0'94	0'85 1'08	0'74 0'61	1'42 1'96	0'66 0'98	1st half 2nd "	}	
2'72 2'97	2'54 2'66	2'19 2'20	1'87 1'87	1'42 ...	1'32 1'39	2'05 2'21	1'55 1'49	2'15 2'17	1'55 1'40	1'50 1'77	1'57 1'87	1st half 2nd "		}
4'62 4'37	5'18 4'81	4'20 4'32	2'74 2'75	1'25 ...	2'64 1'89	4'43 4'27	3'72 3'60	4'25 3'56	3'52 3'83	2'58 2'04	4'36 3'81	1st half 2nd "	}	
0'27 0'31	0'31 0'33	0'16 0'15	0'40 0'37	0'12 ...	0'15 0'16	0'20 0'24	0'25 0'25	0'34 0'30	0'16 0'14	0'15 0'19	0'14 0'25	1st half 2nd "		}
0'41 0'46	0'45 0'47	0'27 0'30	0'26 0'39	0'34 ...	0'24 0'32	0'27 0'28	0'21 0'22	0'46 0'52	0'29 0'26	0'34 0'36	0'24 0'26	1st half 2nd "	}	
1'98 2'55	2'14 2'34	3'28 2'84	1'78 2'00	0'67 ...	0'54 0'77	1'54 1'88	1'35 1'36	1'20 1'32	1'97 1'46	1'31 1'47	0'74 1'34	1st half 2nd "		}
2'15 2'16	1'82 1'15	0'96 0'66	1'34 1'98	0'39 ...	0'55 0'27	0'81 0'58	1'34 0'74	0'56 0'44	1'33 0'92	...	0'42 0'11	1st half 2nd "	}	
12'72 13'54	13'17 12'62	11'76 11'07	9'06 10'27	4'87 ...	6'26 5'53	10'16 10'50	9'35 8'60	9'81 9'39	9'55 8'62	7'30 7'79	8'13 8'62	1st half 2nd "		}
51'97 55'66	41'58 38'11	...	62'54 61'33	32'96 ...	31'86 30'43	28'58 29'20	...	26'72 30'68	30'43 29'75	...	21'59 22'72	1st half 2nd "	}	
...	...	111'71 115'47	...	...	...	...	84'69 82'51	...	...	58'08 60'94	...	1st half 2nd "		}
0'50 0'63	0'65 0'79	0'60 0'50	0'60 0'82	0'54 ...	0'71 0'61	0'75 0'92	0'87 0'87	0'73 0'92	0'62 0'52	1'25 1'80	0'63 0'95	1st half 2nd "	}	
2'41 2'62	2'28 2'43	1'85 1'86	1'68 1'68	1'13 ...	1'15 1'15	1'81 1'95	1'44 1'38	1'85 1'86	1'29 1'19	1'33 1'61	1'49 1'80	1st half 2nd "		}
4'09 3'85	4'65 4'40	3'56 3'65	2'46 2'46	0'99 ...	2'29 1'56	3'92 3'76	3'45 3'32	3'65 3'05	2'93 3'25	2'28 1'87	4'14 3'68	1st half 2nd "	}	
0'24 0'28	0'28 0'30	0'13 0'13	0'36 0'33	0'09 ...	0'13 0'13	0'17 0'21	0'24 0'23	0'29 0'26	0'13 0'12	0'13 0'17	0'13 0'24	1st half 2nd "		}
0'36 0'40	0'41 0'44	0'23 0'25	0'24 0'35	0'27 ...	0'21 0'26	0'24 0'22	0'19 0'20	0'39 0'45	0'24 0'22	0'29 0'33	0'23 0'25	1st half 2nd "	}	
1'76 2'25	1'92 2'14	2'77 2'40	1'59 1'80	0'54 ...	0'47 0'63	1'37 1'66	1'25 1'25	1'04 1'12	1'65 1'24	1'15 1'35	0'70 1'29	1st half 2nd "		}
1'90 1'90	1'64 1'05	0'81 0'56	1'21 1'77	0'30 ...	0'47 0'23	0'72 0'51	1'25 0'68	0'48 0'37	1'11 0'77	...	0'40 0'11	1st half 2nd "	}	
11'26 11'93	11'83 11'55	9'95 9'35	8'14 9'21	3'86 ...	5'43 4'57	8'98 9'23	8'69 7'93	8'43 8'03	7'97 7'31	6'43 7'13	7'72 8'32	1st half 2nd "		}
46'03 49'06	37'36 34'88	...	56'14 54'96	26'15 ...	27'65 25'13	25'28 25'07	...	22'96 26'22	25'37 25'22	...	20'50 21'94	1st half 2nd "	}	
...	...	94'48 97'60	...	...	...	...	78'72 76'10	...	...	51'17 55'77	...	1st half 2nd "		}

APPENDIX
STATISTICS OF INDIAN
No. VIII.—WORKING
TABLE B.—LOCOMOTIVE

Half-years ended the 30th June and the 31st December 1890.

Progressive number.	HEADINGS.	1890.	STANDARD						
			STATE LINES WORKED BY COMPANIES.			STATE LINES WORKED BY THE STATE.			
			I. East Indian.	V. Bengal-Nagpur.	VI. Indian Midland.	XVII. North Western.	XX. Oudh and Rohilkhand.	XXI. Eastern Bengal.	
						Standard Gauge.	Metre and 2' 6" Gauges.		
PER 1,000 GROSS TON-MILES.									
138c	General Superintendence (including office expenses) R	{ 1st half 2nd "	0'15 0'16	0'31 0'46	0'17 0'22	0'16 0'14	0'14 0'19	0'16 0'12	0'23 0'24
139c	Running Expenses "	{ 1st half 2nd "	0'35 0'38	0'48 0'55	0'49 0'52	0'51 0'47	0'22 0'26	0'46 0'37	0'50 0'49
140c	Fuel† "	{ 1st half 2nd "	0'13 0'12	0'74 0'72	0'87 0'86	0'95 0'77	0'51 0'46	0'42 0'36	0'50 0'42
141c	Water "	{ 1st half 2nd "	0'02 0'02	0'07 0'08	0'07 0'08	0'04 0'04	0'02 0'03	0'04 0'03	0'05 0'05
142c	Oil, Tallow and other Stores "	{ 1st half 2nd "	0'06 0'08	0'10 0'13	0'11 0'11	0'07 0'08	0'07 0'07	0'13 0'12	0'14 0'14
143c	Maintenance and renewal of Locomotives and Machinery "	{ 1st half 2nd "	0'33 0'35	0'54 1'32	0'32 0'36	0'67 0'53	0'24 0'29	0'65 0'43	0'32 0'37
144c	Other Charges (net) "	{ 1st half 2nd "	0'13 0'12	0'23 0'26	0'20 0'27	0'22 0'18	0'29 0'29	—0'06 —0'05	0'30 0'16
145c	Total Locomotive Expenses "	{ 1st half 2nd "	1'17 1'23	2'47 3'52	2'23 2'42	2'62 2'21	1'49 1'59	1'80 1'38	2'04 1'87
†	Fuel consumed in terms of { coal lbs. wood "	{ 1st half 2nd " { 1st half 2nd "	144'07 147'64	213'79 228'76	172'37 177'01	155'54 139'06	147'02 138'80	190'10 169'82	208'84 200'72
PER TOTAL TRAIN-MILE.									
146a	General Superintendence (including office expenses) Annas	{ 1st half 2nd "	0'22 0'22	0'45 0'50	0'27 0'31	0'22 0'32	0'12 0'15	Table C.—Carriage	
147a	Repairs and renewals of Coaching Vehicles "	{ 1st half 2nd "	0'36 0'38	0'61 0'49	1'15 0'88	1'73 1'33	0'61 0'80	0'44 1'48	0'29 0'53
148a	Repairs and renewals of Goods Vehicles "	{ 1st half 2nd "	1'54 1'65	0'81 2'65	0'89 0'84	1'29 2'87	1'25 0'59	2'07 2'10	0'29 0'49
149a	Cleaning and oiling "	{ 1st half 2nd "	0'14 0'18	0'92 0'90	0'44 0'43	0'44 0'45	0'32 0'30	0'34 0'30	0'23 0'23
150a	Other Charges (net) "	{ 1st half 2nd "	0'01 ...	0'02 0'11	0'01 0'01	0'09 0'11	... 0'01	—1'68 —1'29	0'04 0'15
151a	Total Carriage and Wagon Expenses "	{ 1st half 2nd "	2'27 2'43	2'81 4'71	2'76 2'47	3'77 5'08	2'30 1'85	2'71 2'95	1'17 1'72
PER 1,000 VEHICLE MILES RUN BY HOME VEHICLES.									
146b	General Superintendence (including office expenses) R	{ 1st half 2nd "	0'45 0'48	0'62 0'98	0'71 1'04	0'66 0'90	0'28 0'44	1'42 0'99	0'75 0'83
147b	Repairs and renewals of Coaching Vehicles (a) "	{ 1st half 2nd "	2'62 2'28	7'28 4'95	8'98 6'39	16'25 12'20	4'93 5'85	10'95 12'52	2'58 4'00
148b	Repairs and renewals of Goods Vehicles (a) "	{ 1st half 2nd "	4'49 5'80	1'26 5'58	3'68 5'40	5'57 11'33	3'99 2'89	12'30 8'70	1'15 1'95
149b	Cleaning and oiling "	{ 1st half 2nd "	0'29 0'39	1'26 1'56	1'19 1'47	1'28 1'23	0'73 0'89	1'10 0'85	0'60 0'60
150b	Other Charges (net) "	{ 1st half 2nd "	0'01 ...	0'03 0'18	0'01 0'03	0'26 0'32	0'01 0'02	—5'44 —3'58	0'10 0'38
151b	Total Carriage and Wagon Expenses "	{ 1st half 2nd "	4'72 5'37	3'87 8'19	7'42 8'41	11'13 14'05	5'28 5'42	8'77 8'21	3'06 4'47

(a) These two items are calculated respectively upon the coaching and goods vehicle mileage.

A—continued.
RAILWAYS—(Part II)—continued.
EXPENSES—continued.
EXPENSES—concluded.

Half-years ended the 30th June and the 31st December 1890.

GAUGE.				METRE GAUGE.								1890.	Progressive number.
LINES WORKED BY GUARANTEED COMPANIES.			LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	STATE LINES WORKED BY COMPANIES.			STATE LINES WORKED BY THE STATE.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED AND WORKED BY NATIVE STATES.			
XXXII.	XXXIII.	XXXIV.	XLV.	III.		VIII.	XI.	XXVI.	South Indian.	XXXVIII.	I.III.	1st half .	2nd ,, .
Great Indian Peninsula.	Bombay, Baroda and Central India.	Madras.	The Nizam's Guaranteed State.	Tirhoot.	Bengal and North-Western.	Rajputana-Malwa.	Southern Mahratta.	Burma.		Rohilkhand-Kumaun.	Bhavnagar-Gondal-Junagarh-Forbandar.		
0'12 0'17	0'13 0'18	0'16 0'13	0'14 0'20	0'20 ...	0'23 0'24	0'27 0'35	0'38 0'39	0'22 0'32	0'28 0'23	0'54 0'74	0'27 0'41	138c	
0'59 0'70	0'45 0'56	0'49 0'30	0'41 0'41	0'43 ...	0'37 0'46	0'65 0'73	0'64 0'61	0'56 0'65	0'58 0'53	0'57 0'67	0'64 0'79	139c	
1'01 1'03	0'92 1'02	0'95 0'98	0'59 0'60	0'38 ...	0'74 0'63	1'39 1'41	1'53 1'47	1'12 1'06	1'31 1'46	0'98 0'77	1'79 1'61	140c	
0'06 0'07	0'05 0'07	0'03 0'03	0'09 0'08	0'04 ...	0'04 0'05	0'06 0'08	0'10 0'10	0'09 0'09	0'06 0'05	0'06 0'07	0'06 0'10	141c	
0'09 0'11	0'08 0'11	0'06 0'07	0'06 0'09	0'10 ...	0'07 0'11	0'09 0'09	0'08 0'09	0'12 0'16	0'11 0'10	0'13 0'14	0'10 0'11	142c	
0'43 0'60	0'38 0'50	0'74 0'64	0'38 0'44	0'20 ...	0'15 0'25	0'48 0'62	0'56 0'55	0'32 0'39	0'74 0'55	0'50 0'56	0'30 0'56	143c	
0'47 0'51	0'32 0'24	0'21 0'15	0'29 0'43	0'11 ...	0'15 0'09	0'25 0'19	0'55 0'31	0'15 0'13	0'49 0'35	...	0'17 0'05	144c	
2'77 3'19	2'33 2'68	2'64 2'50	1'96 2'25	1'46 ...	1'75 1'83	3'19 3'47	3'84 3'52	2'58 2'80	3'57 3'27	2'78 2'95	3'33 3'63	145c	
181'41 210'34	117'89 129'59	...	216'05 214'89	157'67 ...	142'19 161'14	143'69 154'37	...	112'26 146'51	181'92 180'58	...	141'30 152'99	146c	
...	...	401'79 418'23	...	...	...	...	557'00 540'56	...	...	353'50 369'70	...	147c	
and Wagon Expenses.													
0'17 0'21	0'32 0'36	0'19 0'23	0'32 0'39	0'24 ...	0'28 0'25	0'20 0'24	0'30 0'29	0'21 0'27	0'17 0'16	0'47 0'62	0'22 0'33	148c	
1'08 1'19	0'99 1'18	1'08 1'03	0'86 0'76	0'22 ...	0'23 0'39	0'95 1'45	0'51 0'49	0'70 0'83	0'74 0'54	0'42 0'37	0'19 0'33	149c	
1'33 1'55	2'16 1'93	1'23 2'46	0'38 0'58	0'48 ...	0'19 0'45	1'95 2'85	0'59 0'60	0'99 0'83	0'96 0'73	0'34 0'45	0'13 0'15	150c	
0'41 0'50	0'39 0'38	0'39 0'37	0'36 0'38	0'26 ...	0'23 0'22	0'38 0'46	0'20 0'20	0'33 0'34	0'18 0'16	0'34 0'39	0'14 0'22	151c	
0'33 0'26	0'27 0'12	0'12 0'11	...	0'02 ...	0'04 0'05	0'13 0'12	0'01 0'01	0'04 0'16	0'16 0'10	0'02 0'41	0'03 ...	152c	
3'32 3'71	4'13 3'97	3'01 4'20	1'92 2'11	1'22 ...	0'97 1'36	3'61 5'12	1'61 1'59	2'27 2'43	2'21 1'69	1'59 2'24	0'71 1'03	153c	
0'37 0'76	0'74 0'98	0'58 0'71	0'96 1'14	0'49 ...	0'57 0'59	0'53 0'65	1'02 1'05	0'37 0'54	0'52 0'47	1'34 1'76	0'63 1'00	154c	
13'99 12'27	9'91 9'01	8'02 8'39	7'63 6'83	1'24 ...	1'18 1'93	8'20 10'14	4'99 4'55	3'67 3'96	5'14 3'97	3'10 2'30	1'46 1'68	155c	
6'05 7'06	6'55 8'10	6'18 12'28	1'68 2'57	1'50 ...	0'66 2'03	7'41 12'36	3'04 3'36	2'75 3'01	5'00 3'77	1'57 2'36	0'58 1'11	156c	
1'37 1'80	0'90 1'05	1'17 1'14	1'08 1'12	0'52 ...	0'47 0'53	1'00 1'23	0'66 0'69	0'60 0'70	0'56 0'49	0'97 1'08	0'41 0'68	157c	
1'11 0'95	0'63 0'32	0'35 0'34	0'01 ...	0'03 ...	0'09 0'11	0'36 0'32	0'04 0'02	0'07 0'31	0'45 0'30	0'07 1'16	0'09 ...	158c	
11'18 13'44	9'60 10'77	9'02 13'00	5'68 6'21	2'47 ...	1'99 3'21	9'55 13'71	5'43 5'50	4'11 4'97	6'60 5'12	4'53 6'34	2'04 3'14	159c	

all other items in the table being calculated upon the aggregate of both coaching and goods vehicle mileage.

APPENDIX
STATISTICS OF INDIAN

No. VIII.—WORKING

TABLE D.—

Half-years ended the 30th June and the 31st December 1890.

Progressive number.	HEADINGS.	1890.	STATE LINES WORKED BY COMPANIES.			STATE LINES WORKED BY THE STATE.			
			I East Indian.	V Bengal- Nágpur.	VI Indian Midland.	XVII. North Western.	XX. Oudh and Rohilkhand.	XXI. Eastern Bengal.	
								Standard Gauge.	Metre and 2'6" Gauges.
PER TOTAL, TRAIN-MILE.									
152a	General Superintendence (including office expenses) Annas	1st half 2nd "	0'79 0'85	1'75 1'90	0'80 0'85	0'64 0'69	0'61 0'71	0'92 0'87	0'79 0'80
153a	Station Staff "	1st half 2nd "	3'17 3'24	2'83 2'68	1'95 2'08	2'20 2'36	2'11 2'39	4'81 4'66	2'47 2'28
154a	Train Staff "	1st half 2nd "	1'02 1'01	0'74 0'71	0'68 0'77	0'92 0'94	0'67 0'78	0'77 0'75	0'48 0'51
155a	Fuel, Lighting, Water and General Stores "	1st half 2nd "	0'34 0'46	0'93 0'43	0'58 0'79	0'58 0'54	0'49 0'46	0'84 0'71	0'45 0'44
156a	Clothing "	1st half 2nd "	0'06 0'06	0'01 0'01	0'07 0'03	0'01 0'11	0'07 0'11	0'16 0'13	0'01 0'05
157a	Printing, Stationery and Tickets "	1st half 2nd "	0'22 0'22	0'90 0'37	0'37 0'39	0'17 0'20	0'36 0'36	0'34 0'27	0'28 0'20
158a	Charges for delivery and collection of goods, &c. "	1st half 2nd "	... 0'01	... ...	0'03 —0'03	... ...	0'02 0'01	0'04 0'09	......
159a	Miscellaneous Expenses "	1st half 2nd "	0'10 0'09	0'05 0'04	0'01 0'01	0'01 0'01	... 0'01	0'08 0'04	0'09 0'05
160a	Payments to other Lines "	1st half 2nd "	... ...	0'60 0'58	0'26 0'10	0'05 0'08	0'23 0'34	......	......
161a	Other Charges (net) "	1st half 2nd "	—0'05 —0'07	0'02 0'01	0'01 0'01	0'05 0'05	... ...	0'01 ...	0'05 0'11
162a	Total Traffic Expenses "	1st half 2nd "	5'65 5'87	7'83 6'79	4'76 5'00	4'63 4'58	4'56 5'17	7'97 7'52	4'62 4'94
PER CENT. ON TRAFFIC EARNINGS.									
(Abstracts H and I of Revenue Accounts.)									
152b	General Superintendence (including office expenses)† Per cent.	1st half 2nd "	0'91 1'05	1'82 3'95	1'72 2'11	1'17 1'19	1'14 1'50	1'61 1'28	1'86 1'78
153b	Station Staff "	1st half 2nd "	3'66 3'99	2'95 5'58	4'24 5'23	4'01 4'08	3'93 5'03	8'42 6'82	5'79 6'22
154b	Train Staff "	1st half 2nd "	1'18 1'24	0'77 1'48	1'48 1'92	1'68 1'63	1'25 1'64	1'35 1'09	1'12 1'14
155b	Fuel, Lighting, Water and General Stores "	1st half 2nd "	0'39 0'37	0'97 1'02	1'25 1'99	1'05 0'93	0'92 0'97	1'48 1'04	1'05 0'99
156b	Clothing "	1st half 2nd "	0'07 0'08	0'01 0'03	0'16 0'09	0'02 0'18	0'12 0'23	0'28 0'19	0'04 0'12
157b	Printing, Stationery and Tickets "	1st half 2nd "	0'26 0'28	0'93 0'77	0'81 0'58	0'31 0'34	0'66 0'75	0'61 0'40	0'64 0'45
158b	Charges for delivery and collection of goods, &c. "	1st half 2nd "	0'01 0'01	... ...	0'07 —0'07	... ...	0'03 0'03	0'07 0'13	......
159b	Miscellaneous Expenses "	1st half 2nd "	0'11 0'11	0'05 0'07	0'02 0'03	0'01 0'01	... 0'01	0'13 0'06	0'20 0'12
160b	Payments to other Lines "	1st half 2nd "	... ...	0'62 1'20	0'56 0'26	0'09 0'14	0'43 0'71	......	......
161b	Other Charges (net) "	1st half 2nd "	—0'06 —0'10	0'02 0'03	0'01 0'04	0'09 0'10	... 0'01	0'02 0'01	0'11 0'24
162b	Total Traffic Expenses "	1st half 2nd "	6'53 7'23	8'14 14'13	10'32 12'58	8'43 8'60	8'48 10'88	13'97 11'02	10'81 11'06
†	General Superintendence per cent. on traffic earnings (including steam-boat) Per cent.	1st half 2nd "	0'91 1'04	1'82 3'95	1'72 2'11	1'17 1'20	1'14 1'50	1'49 1'22	1'71 1'62

A-continued.
RAILWAYS—(Part II)—continued.
EXPENSES—continued.
TRAFFIC EXPENSES.

Half-years ended the 30th June and the 31st December 1890.

GAUGE.				METRE GAUGE.								1890.	Progressive number.
LINES WORKED BY GUARANTEED COMPANIES.			LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	STATE LINES WORKED BY COMPANIES.				STATE LINES WORKED BY THE STATE.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED AND WORKED BY NATIVE STATES.		
XXXII. Great Indian Peninsula.	XXXIII. Bombay, Baroda & Central India.	XXXIV. Madras.		XLV. The Nizam's Guaranteed State.	III. Tirhoot.	Bengal and North-Western.	VIII. Rajputana-Malwa.	XI. Southern Mahratta.	XXVI. Burma.	South Indian.	XXXVIII. Rohilkhand-Kumaun.			LIII. Bhavnagar-Gondal-Junagarh-Porbandar.
0'44 0'58	0'67 0'75	0'80 0'75	0'85 1'02	0'61 ...	0'66 0'69	0'65 0'80	0'79 0'76	0'65 0'71	0'45 0'37	2'23 3'02	0'65 0'93	1st half . 2nd ,, .	152a
2'06 2'42	2'75 3'15	2'57 2'45	2'23 2'43	2'13 ...	1'40 1'93	1'69 1'94	1'95 1'95	3'34 3'10	1'85 1'60	3'30 4'12	1'88 2'27	1st half . 2nd ,, .	
1'30 1'35	0'51 0'58	0'64 0'61	0'67 0'72	0'54 ...	0'50 0'58	0'59 0'63	0'56 0'52	0'71 0'72	0'37 0'33	0'52 0'71	0'33 0'42	1st half . 2nd ,, .	154a
0'56 0'56	0'61 0'73	0'71 0'72	0'47 0'46	0'47 ...	0'46 0'61	0'49 0'53	0'58 0'56	0'57 0'62	0'40 0'38	0'39 0'41	0'45 0'58	1st half . 2nd ,, .	155a
0'03 0'07	0'08 0'07	0'07 0'11	0'07 0'06	0'07 ...	0'02 0'04	0'05 0'12	0'10 0'11	0'04 —0'01	... 0'15	0'02 0'02	0'03 0'09	1st half . 2nd ,, .	156a
0'14 0'20	0'31 0'35	0'47 0'45	0'44 0'46	0'35 ...	0'45 0'23	0'21 0'23	0'44 0'47	0'27 0'47	0'24 0'27	0'45 0'75	0'35 0'46	1st half . 2nd ,, .	157a
0'01 0'01	0'04 0'05	0'02 0'02	... ...	... ...	0'43 0'02	... ...	... ...	... ...	... ...	... ...	... ...	1st half . 2nd ,, .	158a
0'02 0'03	0'01 0'02	0'04 0'04	0'04 0'03	0'06 ...	0'03 0'05	0'02 0'03	0'03 0'03	0'01 0'03	0'02 0'03	0'12 0'15	0'08 0'13	1st half . 2nd ,, .	159a
0'07 0'07	0'24 0'22	... ...	0'25 0'27	0'05 ...	0'02 ...	0'13 0'15	0'12 0'12	... ...	0'03 0'02	0'68 0'71	0'14 0'21	1st half . 2nd ,, .	160a
0'09 0'05	0'06 —0'02	0'12 0'09	... ...	0'01 ...	1'38 0'34	... —0'01	0'02 0'02	—0'02 ...	0'24 0'12	0'04 0'06	... 0'10	1st half . 2nd ,, .	161a
4'72 5'34	5'28 5'90	5'44 5'24	5'02 5'45	4'29 ...	5'35 4'49	3'83 4'42	4'59 4'54	5'57 5'04	3'60 3'27	7'75 9'95	3'93 5'19	1st half . 2nd ,, .	162a
0'61 0'95	0'68 0'97	1'35 1'27	1'33 1'73	1'18 ...	1'30 1'65	1'22 1'57	1'98 1'97	1'13 1'41	0'99 0'89	4'08 4'78	1'49 2'12	1st half . 2nd ,, .	152b
2'82 3'97	2'84 4'08	4'30 4'16	3'52 4'12	4'09 ...	2'76 4'61	3'15 3'83	4'91 5'03	5'78 6'18	4'06 3'86	6'02 6'50	4'31 5'15	1st half . 2nd ,, .	153b
1'78 2'22	0'53 0'75	1'07 1'04	1'06 1'21	1'04 ...	0'98 1'37	1'09 1'24	1'42 1'36	1'23 1'43	0'82 0'81	0'96 1'11	0'76 0'96	1st half . 2nd ,, .	154b
0'77 0'92	0'63 0'95	1'19 1'22	0'74 0'79	0'92 ...	0'92 1'45	0'92 1'04	1'47 1'45	0'98 1'25	0'87 0'91	0'71 0'64	1'02 1'32	1st half . 2nd ,, .	155b
0'05 0'11	0'09 0'10	0'11 0'19	0'11 0'10	0'13 ...	0'04 0'08	0'09 0'32	0'25 0'29	0'06 —0'01	... 0'36	0'03 0'03	0'12 0'21	1st half . 2nd ,, .	156b
0'19 0'32	0'32 0'46	0'79 0'76	0'69 0'79	0'67 ...	0'89 0'56	0'38 0'46	1'11 1'22	0'47 0'93	0'53 0'65	0'82 1'18	0'81 1'04	1st half . 2nd ,, .	157b
0'02 0'02	0'04 0'06	0'03 0'03	... ...	... ...	0'84 0'05	... ...	... ...	... ...	... ...	... ...	... ...	1st half . 2nd ,, .	158b
0'03 0'04	0'01 0'02	0'07 0'07	0'06 0'05	0'11 ...	0'06 0'12	0'05 0'06	0'06 0'07	0'02 0'06	0'04 0'06	0'22 0'24	0'18 0'30	1st half . 2nd ,, .	159b
0'09 0'11	0'25 0'28	... ...	0'40 0'45	0'10 ...	0'05 0'01	0'25 0'30	0'29 0'31	... ...	0'06 0'05	1'24 1'13	0'32 0'49	1st half . 2nd ,, .	160b
0'12 0'09	0'06 —0'02	0'21 0'15	... ...	0'02 ...	2'72 1'80	... —0'01	0'05 0'04	—0'03 ...	0'53 0'29	0'07 0'09	—0'01 0'24	1st half . 2nd ,, .	161b
6'48 8'75	5'45 7'65	9'12 8'89	7'91 9'24	8'26 ...	10'57 10'70	7'15 8'71	11'54 11'74	9'64 11'25	7'90 7'88	14'15 15'70	9'00 11'83	1st half . 2nd ,, .	16b
0'61 0'95	0'68 0'97	1'35 1'27	1'33 1'73	1'10 ...	1'15 1'51	1'22 1'57	1'98 1'97	1'13 1'41	0'99 0'89	4'08 4'78	1'49 2'12	1st half . 2nd ,, .	f

APPENDIX
STATISTICS OF INDIAN
No. VIII.—WORKING

TABLE E.—

Half-years ended the 30th June and the 31st December 1890.

Progressive number.	HEADINGS.	1890.	STATE LINES WORKED BY COMPANIES.			STATE LINES WORKED BY THE STATE.				
			I.	V.	VI.	XVII.	XX.	XXI.		
			East Indian.	Bengal-Nággpur.	Indian Midland.	North Western.	Oudh and Rohilkhand.	Eastern Bengal.	Metro and 2'6" Gauges.	
PER TOTAL TRAIN-MILE.										
1630	Home Expenditure <i>Annas</i>	{ 1st half 2nd ,,	(a) { 0'65 0'53	3'64 3'82	(a) { 1'37 1'45	0'24 ...	0'13 ...	0'33 0'16	Included with standard gauge.	
1640	Agent's Office—Salaries and Expenses ,,	{ 1st half 2nd ,,	0'26 0'27	2'04 2'82	0'85 0'87	0'21 0'24	0'35 0'35	0'42 0'38		
1650	Audit, Accounts, and Pay Offices ,, . . .	{ 1st half 2nd ,,	0'81 0'82	1'62 2'11	1'34 1'52	0'65 0'66	0'95 1'17	0'84 0'77		
1660	Stores Department ,, . . .	{ 1st half 2nd ,,	0'27 0'32	0'69 0'91	0'36 0'36	0'20 0'20	0'19 0'23	0'12 0'11		
1670	Medical ,,	{ 1st half 2nd ,,	0'22 0'24	0'87 0'90	0'19 0'21	0'13 0'13	0'17 0'18	0'16 0'16		
1680	Rents and Miscellaneous ,, . . .	{ 1st half 2nd ,,	0'28 0'23	0'95 1'09	0'24 0'22	0'10 0'16	0'18 0'17	0'21 0'15		
1690	Police	{ 1st half 2nd ,,	0'24 0'26	0'53 0'72	0'18 0'17	0'11 0'13	0'23 0'27	0'03 0'15		
1700	Advertising	{ 1st half 2nd ,,	0'01 0'01	0'03 ...	0'03 0'02	0'01 0'01	... 0'02	0'01 0'03		
1710	Electric Telegraph	{ 1st half 2nd ,,	0'90 0'98	1'85 2'61	1'03 1'12	0'85 0'92	0'82 0'92	0'94 0'90		
1720	Other Charges (net)	{ 1st half 2nd ,,	—0'04 —0'05	... 0'01	... ...	0'01 0'01	... ...	... ...
1730	Total General Charges	{ 1st half 2nd ,,	3'60 3'61	12'22 14'99	5'59 5'94	2'51 2'46	3'02 3'31	3'06 2'81		
PER CENT. ON TOTAL EARNINGS.										
1630	Home Expenditure <i>Per cent.</i>	{ 1st half 2nd ,,	(a) { 0'73 0'63	3'48 7'17	(a) { 2'87 3'54	0'42 ...	0'23 ...	0'59 0'25		
1640	Agent's Office—Salaries and Expenses ,,	{ 1st half 2nd ,,	0'30 0'32	1'95 5'29	1'78 2'13	0'38 0'41	0'62 0'71	0'76 0'60		
1650	Audit, Accounts, and Pay Offices ,, . . .	{ 1st half 2nd ,,	0'92 0'98	1'54 3'97	2'78 3'73	1'16 1'13	1'69 2'38	1'52 1'23		
1660	Stores Department ,,	{ 1st half 2nd ,,	0'30 0'39	0'66 1'72	0'75 0'89	0'37 0'35	0'33 0'47	0'22 0'18		
1670	Medical ,,	{ 1st half 2nd ,,	0'26 0'29	0'83 1'69	0'41 0'51	0'23 0'23	0'31 0'38	0'28 0'26		
1680	Rents and Miscellaneous ,, . . .	{ 1st half 2nd ,,	0'31 0'28	0'91 2'05	0'51 0'54	0'19 0'27	0'32 0'34	0'38 0'25		
1690	Police	{ 1st half 2nd ,,	0'28 0'32	0'51 1'35	0'37 0'40	0'19 0'22	0'41 0'55	0'04 0'23		
1700	Advertising	{ 1st half 2nd ,,	... 0'01	0'03 0'01	0'06 0'05	0'02 0'01	... 0'04	0'02 0'04		
1710	Electric Telegraph	{ 1st half 2nd ,,	1'03 1'18	1'77 4'89	2'15 2'76	1'51 1'55	1'47 1'88	1'69 1'43		
1720	Other Charges (net)	{ 1st half 2nd ,,	—0'05 —0'06	... 0'01	... ...	0'02 0'01	... ...	0'01 ...
1730	Total General Charges.	{ 1st half 2nd ,,	4'08 4'34	11'68 28'15	11'68 14'55	4'49 4'18	5'38 6'75	5'51 4'47		
PER CENT. ON GROSS EARNINGS.										
174	Law Charges <i>Per cent.</i>	{ 1st half 2nd ,,	0'03 0'04	0'01 0'04	0'16 0'04	0'01 ...	... ...	... 0'02
175	Compensation	{ 1st half 2nd ,,	0'03 0'04	—0'04 ...	0'03 0'04	0'06 0'05	0'01 0'05	0'28 0'36		
176	Rates and Taxes	{ 1st half 2nd ,,	0'10 0'14	... 0'01	0'03 0'03	0'04 0'03	... ...	0'26 0'28	
177	Payments to other Lines	{ 1st half 2nd ,,	0'02 ...	0'18 0'34	2'30 0'32	0'37 0'29	0'10 0'79	0'31 0'25		
178	Other Charges (net)	{ 1st half 2nd ,,	0'23 0'21	0'22 0'40	1'47 1'64	0'65 0'66	0'78 0'93	0'67 0'63		
179	Total Special and Miscellaneous Expenses	{ 1st half 2nd ,,	0'41 0'43	0'37 0'79	3'09 2'07	1'13 1'03	0'89 1'77	1'52 1'54		

(a) Includes cost of Government controlling establishment.

A—continued.

RAILWAYS—(Part II)—continued.

EXPENSES—concluded.

GENERAL CHARGES.

Half-years ended the 30th June and the 31st December 1890.

GAUGE.

METRE GAUGE.

LINES WORKED BY GUARANTEED COMPANIES.				LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	STATE LINES WORKED BY COMPANIES.								1890.	Progressive number.
XXXII.	XXXIII.	XXXIV.	XLV.	III.		VIII.	XI.	XXVI.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED AND WORKED BY NATIVE STATES.			
Great Indian Peninsula.	Bombay, Baroda and Central India.	Madras.	The Nizam's Guaranteed State.	Tirhoot.	Bengal and North-Western.	Rajputana-Malwa.	Southern Mahratta.	Burma.	South Indian.	XXXVIII. Rohilkhand-Kumaun.	LIII. Bhavnagar-Gondal-Junagarh-Porbandar.			
0'16	0'35	0'45	1'26	0'02	1'50	0'58	1'30	...	0'45	2'90	...	1st half	} 163a	
0'21	0'37	0'40	1'49	...	(a) 1'04	0'74	1'27	...	0'34	3'08	...	2nd "		
0'15	0'22	0'40	0'38	0'44	1'03	0'14	0'30	0'46	0'30	0'78	0'69	1st half	} 164a	
0'19	0'26	0'38	0'51	...	0'31	0'18	0'35	0'47	0'26	1'01	1'08	2nd "		
0'09	0'92	1'00	1'33	1'29	1'30	0'59	0'84	1'05	0'73	2'52	1'07	1st half	} 165a	
0'62	1'06	0'94	1'45	...	0'92	0'77	0'84	1'07	0'03	3'03	1'78	2nd "		
0'17	0'35	0'14	0'35	0'20	0'21	0'21	0'28	0'43	0'20	0'25	0'19	1st half	} 166a	
0'22	0'43	0'14	0'32	...	0'15	0'25	0'30	0'78	0'17	0'33	0'28	2nd "		
0'10	0'17	0'25	0'29	0'13	0'17	0'13	0'20	0'11	0'11	0'18	0'23	1st half	} 167a	
0'12	0'21	0'22	0'38	...	0'14	0'16	0'21	0'13	0'10	0'23	0'38	2nd "		
0'12	0'34	0'17	0'46	0'16	0'14	0'14	0'32	0'22	0'16	0'62	0'23	1st half	} 168a	
0'12	0'38	0'09	0'41	...	0'16	0'11	0'29	0'20	0'15	0'91	0'36	2nd "		
0'21	0'34	0'31	0'71	0'05	0'05	0'29	0'36	0'03	...	0'11	0'73	1st half	} 169a	
0'26	0'37	0'29	0'65	...	0'23	0'34	0'38	0'13	0'11	0'20	1'02	2nd "		
0'01	0'01	0'03	0'03	...	...	...	0'04	0'02	0'01	0'10	0'02	1st half	} 170a
0'02	0'01	0'02	0'02	...	...	0'01	0'02	0'01	0'02	0'07	0'01	2nd "	
0'59	0'57	0'88	0'86	0'98	1'09	0'98	1'42	0'92	0'68	1'07	1'08	1st half	} 171a	
0'74	0'74	0'79	1'04	...	1'11	1'22	1'40	1'02	0'61	1'34	1'72	2nd "		
0'06	0'14	0'17	0'01	—0'01	0'02	—0'01	0'03	0'03	0'17	...	...	1st half	} 172a
0'06	0'08	0'10	...	...	0'01	—0'01	0'05	0'01	0'09	...	0'02	2nd "	
2'06	3'41	3'80	5'68	3'26	3'51	3'05	5'09	3'27	2'81	8'53	4'24	1st half	} 173a	
2'56	3'91	3'37	6'27	...	4'27	3'77	5'11	3'82	2'48	10'20	6'65	2nd "		
0'22	0'35	0'71	1'93	0'04	2'51	1'08	3'22	...	0'96	4'44	...	1st half	} 163b	
0'34	0'47	0'66	2'46	...	(a) 2'21	1'43	3'22	...	0'79	4'24	...	2nd "		
0'20	0'23	0'63	0'59	0'78	1'73	0'26	0'73	0'79	0'65	1'20	1'55	1st half	} 164b	
0'31	0'33	0'63	0'84	...	1'09	0'35	0'90	0'93	0'61	1'38	2'37	2nd "		
0'67	0'94	1'57	2'02	2'30	2'19	1'08	2'07	1'80	1'57	3'87	2'42	1st half	} 165b	
1'01	1'34	1'56	2'38	...	1'98	1'50	2'15	2'11	1'49	4'16	3'92	2nd "		
0'23	0'35	0'22	0'53	0'35	0'36	0'38	0'69	0'74	0'42	0'38	0'42	1st half	} 166b	
0'35	0'55	0'23	0'52	...	0'32	0'49	0'76	1'54	0'40	0'45	0'62	2nd "		
0'13	0'17	0'39	0'44	0'24	0'27	0'24	0'50	0'19	0'24	0'27	0'53	1st half	} 167b	
0'20	0'27	0'38	0'63	...	0'31	0'31	0'52	0'25	0'24	0'32	0'84	2nd "		
0'16	0'35	0'28	0'71	0'27	0'22	0'25	0'79	0'37	0'35	0'96	0'51	1st half	} 168b	
0'19	0'48	0'14	0'67	...	0'35	0'22	0'74	0'41	0'35	1'26	0'79	2nd "		
0'29	0'35	0'49	1'10	0'09	0'09	0'53	0'89	0'05	...	0'17	1'65	1st half	} 169b	
0'42	0'47	0'49	1'08	...	0'49	0'66	0'96	0'26	0'26	0'28	2'26	2nd "		
0'01	0'01	0'05	0'04	...	0'01	0'01	0'09	0'03	0'03	0'15	0'03	1st half	} 170b	
0'03	0'02	0'04	0'03	...	0'01	0'02	0'04	0'01	0'04	0'10	0'02	2nd "		
0'80	0'58	1'38	1'32	1'73	1'81	1'80	3'50	1'58	1'46	1'64	2'42	1st half	} 171b	
1'19	0'93	1'31	1'71	...	2'35	2'33	3'54	2'01	1'45	1'85	3'79	2nd "		
0'09	0'14	0'26	0'02	—0'01	0'03	—0'02	0'09	0'05	0'37	...	...	1st half	} 172b
0'09	0'10	0'17	...	...	...	—0'02	0'13	0'01	0'22	...	0'04	2nd "	
2'80	3'47	5'98	8'70	5'79	9'22	5'61	12'57	5'60	6'05	13'08	9'53	1st half	} 173b	
4'13	4'96	5'61	10'32	...	9'11	7'29	12'96	7'53	5'85	14'04	14'65	2nd "		
Miscellaneous Expenses.														
0'02	0'03	0'02	0'04	—0'01	0'15	0'01	0'03	...	0'01	...	...	1st half	} 174
0'03	...	0'05	0'31	...	0'03	0'05	0'04	...	...	...	0'01	2nd "	
0'02	0'03	0'04	...	0'01	0'04	0'04	0'09	0'04	0'07	0'05	0'04	1st half	} 175	
0'01	0'02	0'12	0'04	...	0'11	0'04	0'24	0'03	0'04	0'23	0'06	2nd "		
0'10	0'18	0'15	...	0'12	0'03	...	0'09	0'30	0'12	0'01	...	1st half	} 176	
0'14	0'26	0'21	0'03	...	0'08	0'03	0'24	0'33	0'50	0'07	...	2nd "		
1'27	0'27	0'05	0'08	0'31	0'05	0'18	0'01	...	0'04	1'21	0'14	1st half	} 177	
1'10	0'31	0'16	0'09	...	0'05	0'20	0'17	...	0'04	1'19	0'23	2nd "		
0'18	0'14	0'17	0'33	0'41	0'42	0'52	0'18	0'56	0'04	2'40	1'11	1st half	} 178	
0'08	0'09	0'06	0'57	...	0'20	0'65	0'26	0'48	0'04	2'55	1'23	2nd "		
1'59	0'65	0'43	0'45	0'84	0'69	0'75	0'40	0'90	0'28	3'67	1'29	1st half	} 179	
1'36	0'68	0'60	1'04	...	0'47	0'97	0'95	0'84	0'62	4'04	1'53	2nd "		

Half-years ended the 30th June and the 31st December 1890.

Progressive number.	HEADINGS.	1890.	STATE LINES WORKED BY COMPANIES.			STATE LINES WORKED BY THE STATE.			
			I.	V.	VI.	XVII.	XX.	XXI. Eastern Bengal :	
			East Indian.	Bengal-Nágpur.	Indian Midland.	North Western.	Oudh and Rohilkhand.	Standard Gauge.	Metre and 2' 6" Gauges.
FROM APPENDIX I.									
180	Average number of Locomotives on the Line <i>No.</i>	1st half 2nd "	556 533	46 52	87 87	539 525	155 155	92 97	74 79
181	Average miles run per Locomotive per diem <i>Miles</i>	1st half 2nd "	50'34 47'52	34'23 25'60	45'63 41'99†	45'30 43'11	51'19 43'93	62'52 68'75	63'91 59'09
182	lbs. coal per engine-mile (coal-burning engines)— Coaching <i>lbs.</i>	1st half 2nd "	40'00 37'75	...	...	...	...	(a) 35'55 (a) 35'00	(b) 30'19 (b) 29'75
183	Goods <i>"</i>	1st half 2nd "	51'50 49'50	64'39 52'63	45'61 43'95	42'87 40'62	36'01 31'16	(a) 45'20 (a) 44'98*	(b) 36'75 (b) 35'55
184	Mixed <i>"</i>	1st half 2nd "	42'21 39'61	73'74 72'96	...	...	...	(a) 36'05 (a) 33'78	(b) 31'10 (b) 30'20
185	lbs. wood per engine-mile (wood-burning engines)— Coaching <i>lbs.</i>	1st half 2nd "	...	...	...	...	...	...	...
186	Goods <i>"</i>	1st half 2nd "	...	...	...	...	...	...	...
187	Mixed <i>"</i>	1st half 2nd "	...	...	...	...	...	...	...
188	Average gross weight of traips— Coaching <i>Tons</i>	1st half 2nd "	172'85 165'72	57'72 ...	128'64 124'75	183'96 173'22	166'43 172'71	135'13 142'84	94'27 94'94
189	Goods <i>"</i>	1st half 2nd "	447'62 432'65	268'06 171'38	287'49 263'60	286'10 337'32	303'63 241'49	288'54 374'32	177'20 180'57
190	Mixed <i>"</i>	1st half 2nd "	237'39 233'68	291'29 250'20	244'44 222'53	185'45 186'72	242'75 219'41	179'18 186'53	120'42 114'39
191	Average through speed of trains— Coaching <i>Miles per hour</i>	1st half 2nd "	26'33 24'60	17'50 ...	21'83 22'53	17'23 18'94	22'08 21'27	(a) 20'07 (a) 20'07	(b) 19'28 (b) 19'28
192	Goods <i>"</i>	1st half 2nd "	12'15 12'85	10'21 10'76	13'58 13'98	10'73 11'00	9'11 9'07	(a) 10'90 (a) 10'88*	(b) 10'73 (b) 10'73
193	Mixed <i>"</i>	1st half 2nd "	18'29 18'81	13'16 12'90	15'18 15'49	15'85 15'88	14'18 15'10	(a) 13'93 (a) 13'93	(b) 12'27 (b) 12'27
FROM APPENDIX II.									
194	Average mileage <i>per diem</i> of coaching vehicles, including brakes <i>Miles</i>	1st half 2nd "	198,885 198,638	7,563 7,830	28,872 28,949	147,426 136,828	51,040 48,030	39,984 38,593	32,589 33,085
195	Goods ditto ditto <i>"</i>	1st half 2nd "	502,578 396,817	30,533 17,200	49,504 32,485	318,624 309,472	104,588 73,811	51,897 82,878	66,351 63,105
	Average lead of passengers <i>"</i>	1st half 2nd "	59'82' 62'34	33'11 31'86	63'88 67'07	56'19 55'32	45'90 45'06	...	28'96 27'44
	Average lead of goods <i>"</i>	1st half 2nd "	210'77 203'84	82'77 65'02	81'94 52'22	156'75 192'79	116'62 95'05	...	107'44 126'21
	Total tonnage of goods lifted <i>"</i>	1st half 2nd "	2,493,548 1,938,836	277,920 245,004	302,812 353,178	1,752,111 1,609,057	679,680 543,474	...	397,551 662,295

(a) Eastern section only. For the Southern and Central sections the figures are as follows:—

Progressive No.	Headings.		Southern section.	Central section.
182	Coaching	1st half 2nd "	50'25 50'15	37'09 36'55
183	Goods	1st half 2nd "	49'05* 48'25*	...
184	Mixed	1st half 2nd "	51'15 51'20	45'15 37'90 36'85
191	Coaching	1st half 2nd "	13'63 13'63	15'58 15'38
192	Goods	1st half 2nd "	10'14* 10'02*	...
193	Mixed	1st half 2nd "	12'07 12'07	11'37 13'62 13'62

* Include the speed of, and consumption by, ballast trains.

† Calculated on the engine-mileage, including 39,141 miles run for shunting purposes on joint account at Itá, si.

A—continued.
RAILWAYS—(Part II)—continued.

X.
IS APPENDICES TO THE ANALYSES.

Half-years ended the 30th June and the 31st December 1890.

GAUGE.				METRE GAUGE.									1890.	Progressive number.
LINES WORKED BY GUARANTEED COMPANIES.			LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	STATE LINES WORKED BY COMPANIES.				STATE LINES WORKED BY THE STATE.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED AND WORKED BY NATIVE STATES.			
XXXII.	XXXIII.	XXXIV.	XLV.	III.	VIII.	XI.	XXVI.	South Indian.	XXXVIII.	LII.				
Great Indian Peninsula.	Bombay, Baroda and Central India.	Madras.	The Nizam's Guaranteed State.	Tirhoot.	Bengal and North-Western.	Rajputana-Malwa.	Southern Mahratta.	Burma.	South Indian.	Rohilkhand-Kumaun.	Bhavnagar-Gondal-Junagadh-Porbandar.			
570	127	151	30	45	50	415	155	106	119	8	33	1st half .	180	
594	127	151	30	...	100	414	159	106	124	8	33	2nd ,, .		
54'43	61'96	51'38	69'82	58'00	44'52	43'92	42'71	50'46	57'71	44'86	61'68	1st half .	181	
40'97	48'74	54'22	63'56	...	44'35	35'38	42'69	45'96	61'76	32'86	36'05	2nd ,, .		
0 46'03 49'06	30'83	...	38'55	17'32	27'65 25'13	17'78	...	...	21'08	...	20'50 21'94	1st half .	182
	31'29	...	40'01	...		19'08	...	26'12	24'03	...		2nd ,, .		
	42'05	...	66'73	22'92		26'42	...	22'96	27'73	...		1st half .		
	39'83	...	60'95	...		26'84	...	22'42	25'63	...		2nd ,, .		
...	33'64	...	55'25	27'95	...	20'28	...	...	27'11	...	...	1st half .	184
	29'57	...	57'05	...	...	20'64	...	28'15	26'61	...	...	2nd ,, .	
...	...	94'48 97'60	...	...	...	...	75'40	...	...	...	...	1st half .	185
...	74'07		2nd ,, .
...	...	94'48 97'60	...	...	...	...	87'60	...	...	...	...	1st half .	186
...	83'02		2nd ,, .
...	...	94'48 97'60	...	...	...	...	75'40	...	...	51'17	...	1st half .	187
...	74'07	55'77	...		2nd ,, .
146'63	154'79	145'91	143'07	131'05	...	93'47	75'66	138'99	106'71	...	82'88	1st half .	188	
139'94	151'48	131'03	130'06	...	142'73	94'00	72'63	126'25	109'47	...	77'73	2nd ,, .		
266'12	433'72	279'36	264'88	168'42	211'57	189'61	215'85	284'00	115'11	...	163'25	1st half .	189	
252'78	387'08	291'57	302'35	...	174'67	184'17	210'12	256'46	127'47	...	171'60	2nd ,, .		
...	214'74	251'07	245'53	176'11	148'69	122'95	164'98	186'99	163'36	125'29	105'93	1st half .	190	
...	177'27	252'23	254'17	...	158'49	120'83	352'80	176'43	155'99	125'85	123'07	2nd ,, .		
23'18	18'88	19'04	18'69	14'14	...	17'56	15'83	16'02	16'00	...	18'00	1st half .	191	
23'19	19'03	19'60	19'23	...	14'14	17'98	15'83	16'02	16'00	...	18'16	2nd ,, .		
11'60	13'17	11'76	10'33	10'35	12'85	8'85	9'71	11'37	9'25	...	7'66	1st half .	192	
11'66	12'97	11'00	10'60	...	11'60	9'22	9'71	11'37	9'25	...	9'49	2nd ,, .		
15'87	12'06	12'98	14'35	11'15	12'88	13'41	12'31	14'31	12'00	12'48	12'17	1st half .	193	
15'98	12'87	12'52	12'19	...	12'02	13'60	12'31	14'31	12'00	13'50	11'50	2nd ,, .		
33,455	44,021	55,153	13,217	23,300	23,481	115,255	39,441	55,032	51,168	2,642	15,427	1st half .	194	
30,504	45,322	53,547	11,780	...	46,637	113,474	41,904	55,038	54,775	2,411	14,225	2nd ,, .		
59,167	145,901	82,857	25,244	40,799	36,427	262,846	71,465	103,640	68,726	4,323	26,504	1st half .	195	
93,567	75,405	88,166	23,980	...	50,889	183,006	68,576	72,223	78,839	2,892	9,272	2nd ,, .		
43'55	20'93	37'89	58'66	39'44	36'39	54'60	40'99	36'48	34'69	33'62	38'44	1st half .	196	
42'01	20'03	39'18	52'59	...	34'19	54'50	42'27	34'17	34'76	33'98	41'15	2nd ,, .		
245'77	156'75	111'48	134'23	78'77	103'31	241'01	101'20	104'14	68'46	34'67	90'15	1st half .	197	
219'55	156'93	113'48	99'75	...	93'70	239'09	105'71	124'00	64'75	38'47	75'92	2nd ,, .		
158,084	767,137	563,701	177,749	232,170	184,710	737,023	331,208	389,869	526,055	55,403	124,529	1st half .	198	
108,816	380,523	629,714	206,769	...	292,683	490,176	321,465	225,887	635,406	32,654	57,479	2nd ,, .		

(b) Northern and Behar sections only. For the other sections the figures are as follows:—

Progressive No.	Headings.	Dacca section.		Kaunia-Dharla State railway.	
		lb	lb	lb	lb
182	Coaching	1st half .	24'88	27'09	
		2nd ,, .	24'40	25'70	
183	Goods	1st half .	23'26*	28'03	
		2nd ,, .	23'90	26'15*	
184	Mixed	1st half .	26'15	28'00	
		2nd ,, .	25'48	25'95	
Miles per hour.					
191	Coaching	1st half .	16'39	12'00	
		2nd ,, .	16'39	12'00	
192	Goods	1st half .	12'05*	11'61	
		2nd ,, .	13'23	8'84*	
193	Mixed	1st half .	13'58	10'53	
		2nd ,, .	13'58	10'53	

* Include the speed of, and consumption by, ballast trains.

APPENDIX
STATISTICS OF INDIAN

No.

EXTRACT FROM TABLES PRINTED

Half-years ended the 30th June and the 31st December 1890.

Progressive Number.	HEADINGS.	1890.	STATE LINES WORKED BY COMPANIES.						STATE LINES WORKED BY THE STATE.	
			L. East Indian.	V. Bengal- Nágpur.	VI. Indian Midland. (d)	XVII. North Western (e)	XX. Oudh and Rohilkhand.	XXI. Eastern Bengal.		
								Standard Gauge. (g)	Metre and 2' 6" Gauges.	
FROM APPENDIX IV.										
Average age of rails—										
196	Steel Years	1st half 2nd "	6'5	1'0	1'5	6'0	5'5	4'5	3'5	
			7'0	1'5	2'0	6'5	6'0	5'0	4'0	
197	Iron "	1st half 2nd "	25'0	2'5	11'5	17'0	17'5	20'0	11'5	
			25'5	3'0	12'0	17'5	17'5	20'0	11'5	
Proportion removed per mile of rail—										
198	Steel Per mile	1st half 2nd "	...	0'00004	0'002	0'023	...	...	...
			...	0'00004	0'00002	0'002	0'006	...	0'01	
199	Iron "	1st half 2nd "	0'065	0'027	0'042	0'007	0'017	0'030	0'05	
			0'042	0'002	0'001	0'088	0'119	0'005	0'05	
FROM APPENDIX V.										
Average age of sleepers—										
200	Wood Years	1st half 2nd "	8'0	(b) 4'0	9'0	(b) 9'5	15'0	9'0	(b) 6'5	
			8'5	(b) 4'5	9'5	(b) 9'5	15'5	9'0	(b) 7'0	
201	Iron "	1st half 2nd "	(a)	(c) 1'0	1'5	9'0	(f) 13'5	5'5	(h) 8'0	
			(a)	(c) 1'5	2'0	9'5	14'5	5'5	(h) 8'5	
Percentage of removals—										
202	Wood Per cent.	1st half 2nd "	4'56	(b) 0'005	3'707	(b) 3'57	1'29	2'96	(b) 1'11	
			2'38	(b) 0'52	3'86	(b) 3'73	0'64	2'26	(b) 1'29	
203	Iron "	1st half 2nd "	0'36	(c) 0'02	0'284	0'32	0'91	1'89	...	
			0'29	(c) 0'01	0'006	3'64	1'81	3'53	(h) 0'66	

(a) The average age of "D.O." iron sleepers during the first and second halves of 1890 was 6'0 and 6'5 years respectively. The average age of other iron sleepers has not been furnished.
 (b) Excludes longitudinal wooden sleepers.
 (c) Steel sleepers.
 (d) Excludes the Bhopal-Itarsi railway.
 (e) Excludes the Rájputra-Bhátinda railway.
 (f) Excludes steel transverse sleepers.
 (g) Excludes the Bengal Central railway.
 (h) Excludes steel sleepers.

A—concluded.

RAILWAYS—(Part II)—concluded.

IX—concluded.

AS APPENDICES TO THE ANALYSES—concluded.

Half-years ended the 30th June and the 31st December 1890.

GAUGE.				METRE GAUGE.										1890.	Progressive number.
LINES WORKED BY GUARANTEED COMPANIES.			LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.	STATE LINES WORKED BY COMPANIES.				STATE LINES WORKED BY THE STATE.	LINES WORKED BY GUARANTEED COMPANIES.	ASSISTED COMPANIES.	LINES OWNED AND WORKED BY NATIVE STATES.				
XXXII. Great Indian Peninsula. (i)	XXXIII. Bombay, Baroda, and Central India.	XXXIV. Madras.	XLV. The Nizam's Guaranteed State.	III. Tirhoot.		VIII. Bengal and North-Western. (h)	XI. Rajputana-Malwa.	XI. Southern Mahratta. (o)	XXVI. Burma.	South Indian. (k)	XXXVIII. Rohilkhand-Kumaun.	LIII. Bhāvnagar-Gondal-Jundgarh-Porbandar.			
8'5 9'0	4'0 4'5	13'0 13'0	3'5 4'0	7'0 7'0	6'0 6'5	6'5 7'0	3'5 4'0	4'5 4'0	5'5 5'5	6'0 6'5	6'5 7'0	1st half 2nd "	} 196		
24'0 24'5	22'0 22'5	22'0 22'5	14'5 15'0	12'5 6'5	...	11'0 11'5	19'5 20'0	14'0 14'5	18'5 18'5	6'0 6'5	...	1st half 2nd "		} 197	
0'002 0'007	...	0'00005 0'00001	0'010 0'002	0'00014 0'00007	...	0'0001 0'004	0'00009 0'00051	0'015 ...	0'004 0'008	...	0'0001 0'0002	1st half 2nd "	} 198		
0'044 0'032	0'039 0'048	0'017 0'018	0'025 0'049	0'06 0'08	...	0'022 0'050	0'00006 0'00081	...	0'060 0'070	...	...	1st half 2nd "		} 199
(j) (j)	(k)10'5 (k)10'5	(l)0'0 (l)9'5	9'0 9'0	8'0 8'5	5'5 6'0	(b)8'0 (b)8'5	4'0 (b)4'5	10'0 10'0	(b)14'5 (b)14'5	5'0 4'5	7'0 6'5	1st half 2nd "	} 200		
(j) (j)	12'0 12'0	20'0 20'5	(m)16'5 (m)17'0	7'0 7'5	...	6'5 7'0	(k)3'5 (k)4'0	...	(f)10'5 (f)10'0	...	(q)0'5 (q)1'0	1st half 2nd "		} 201	
5'15 5'86	(k)4'35 (k)5'16	(l)2'04 (l)6'35	11'70 5'13	0'83 0'89	0'15 0'11	(b)2'04 (b)2'05	5'82 (b)6'71	1'19 1'72	(b)2'22 (b)8'68	7'68 1'00	5'20 10'39	1st half 2nd "	} 202		
1'09 0'87	1'64 1'85	0'22 0'12	(m)2'39 (m)2'63	0'03 0'01	...	0'59 0'80	0'03 0'01	...	(f)3'13 (f)0'01	...	(q)0'008 (p)0'85	1st half 2nd "		} 203	

(i) Excludes the Dhond-Manmād, Khāmgāon and Amrāoti railways.
(j) Information not furnished.
(k) Excludes Adams' No. 2 creosoted sleepers.
(l) Excludes creosoted pine sleepers.
(m) Excludes steel pea-pod sleepers.
(n) Excludes the Tirhoot Section.
(o) Excludes the Mysore Section.
(p) Excluding Pondicherry railway.
(q) The figures shown are for steel sleepers. Moore's cast-iron sleepers have been excluded.

Statement showing the general results of working of the

Serial No.	RAILWAY.	MEAN MILEAGE WORKED—MILES.						
		1886.	1887.	1888.	1889.	1890.	1886.	1887.
I	East Indian	(a) 1,518	(b) 1,538	(b) 1,540	(b) 1,552	(c) 1,550	1,38,50,498	1,40,63,917
III	{ Tirhoot	241	250	262	273	} 671	6,53,490	7,70,056
	{ Bengal and North-Western	306	376	376	376		6,63,963	7,77,283
V	Bengal-Nággpur	149	149	(d) 179	(e) 300	(f) 546	2,26,108	2,20,529
VI	Indian Midland	31	42	128	575	697	41,871	58,974
VIII	Rajputana-Malwa	1,664	1,664	1,664	1,667	1,672	56,96,960	56,56,951
XI	Southern Mahratta	341	671	(y) 854	} 1,124	} 1,309	5,39,366	11,55,268
XII	Southern Mahratta, (Mysore section).	140	140	140			2,90,699	2,95,704
XVII	North Western	(h) 1,864	(i) 2,212	(i) 2,440	(j) 2,383	(k) 2,400	(l) 83,40,511	(m) 79,68,505
XX	Oudh and Rohilkhand	681	688	692	693	693	26,85,513	29,40,787
XXI	{ Eastern Bengal	234	} 635	670	709	} 757	19,34,753	} 31,10,175
	{ Northern Bengal	249					7,61,117	
XXVI	Burma	327	330	369	535	554	13,93,744	17,40,082
XXXII	Great Indian Peninsula	1,501	1,501	1,501	1,444	1,445	78,85,564	80,77,460
XXXIII	Bombay, Baroda and Central India.	461	461	461	461	461	38,86,050	39,41,755
XXXIV	Madras	860	833	839	839	839	33,27,011	33,51,018
	South Indian	(s) 662	(t) 686	(t) 745	(t) 745	(u) 751	25,42,673	(v) 27,25,418
XLV	The Nizam's Guaranteed State	185	208	290	(x) 349	(x) 354	5,47,823	5,65,858
LIII	Bhánagar-Gondal-Junágarh-Porbandar.	193	193	198	275	333	5,14,641	5,16,885

(a) Includes 3 miles of the Rajputana-Malwa State railway worked over.
 (b) Includes 23 miles of the Eastern Bengal State railway and 3 miles of the Rajputana-Malwa State railway worked over.
 (c) Includes 23 miles of the Eastern Bengal State railway and 1 mile of the Rajputana-Malwa State railway worked over.
 (d) Includes the Katni-Umaria branch from the 1st April 1888.
 (e) Includes the Ásansol-Purulia section.
 (f) Includes the Ásansol-Goalkera section.
 (g) Includes 13 miles of the East Indian railway between Gháziabad and Delhi worked over and the Amritsar-Pathánekot railway.
 (h) Includes 13 miles of the East Indian railway between Gháziabad and Delhi worked over and the Amritsar-Pathánekot and Rájputana-Bhátinda State railways.
 (i) Includes 13 miles of the East Indian railway between Gháziabad and Delhi worked over and the Amritsar-Pathánekot and Rájputana-Bhátinda State railways, the latter up to 12th October 1889 only.
 (j) Includes the Amritsar-Pathánekot and Jammu and Kashmir railways, and 20.48 miles of foreign lines (13 miles of the East Indian railway, Gháziabad to Delhi, and 7.48 miles of the Chenab (Khanki) Wier branch) worked over.

B.

principal railways during the years 1886—1890.

EARNINGS—RUPEES.								Serial No.
COACHING.			Goods.					
1888.	1889.	1890.	1886.	1887.	1888.	1889.	1890.	
1,45,24,861	1,48,26,514	1,44,04,649	3,19,25,862	3,12,20,728	3,01,86,941	2,94,64,256	2,81,17,801	I
7,79,760	8,16,104	} 18,04,772 {	6,70,967	7,73,059	8,43,979	8,72,747	} 22,85,143 {	III
8,08,403	8,66,875		9,82,158	8,84,445	10,92,330	10,49,173		
(d) 2,76,338	(e) 3,80,567	(f) 5,43,378	11,85,044	11,37,155	(d) 12,71,635	(e) 14,82,236	(f) 21,01,475	V
2,04,587	11,09,605	14,69,837	49,434	1,14,474	4,31,481	15,37,840	15,48,725	VI
57,76,730	60,16,333	57,75,759	1,23,67,806	1,05,87,867	1,25,91,097	1,36,73,491	1,13,81,314	VIII
(y) 15,75,863	} 21,37,011 {	} 24,81,123 {	10,66,965	16,81,722	(y) 21,20,071	} 26,80,905 {	} 30,73,617 {	XI
3,19,195			1,70,951	2,10,125	2,42,890			
(m) 85,47,530	(n) 87,31,938	(o) 89,75,931	(l) 1,62,80,663	(m) 1,25,18,711	(n) 1,66,42,598	(n) 1,87,98,297	(o) 1,78,01,062	XVI I
32,20,607	34,07,831	33,95,454	34,09,992	32,96,502	34,33,383	37,38,722	37,20,159	XX
34,10,103	36,43,839	37,09,721	28,78,183	} 55,18,208 {	62,21,155	64,46,104	67,41,067	XXI
			16,49,802					
18,38,460	29,02,195	31,86,431	12,10,786	15,35,286	14,63,254	17,10,793	22,19,785	XXVI
86,38,960	87,46,965	87,76,053	3,09,98,368	3,14,75,441	3,20,11,504	2,79,43,119	2,89,38,849	XXXII
40,70,157	43,42,090	44,11,394	93,81,161	79,53,618	84,07,068	86,49,481	82,90,012	XXXIII
36,33,005	37,17,890	37,64,490	44,57,842	46,20,847	46,65,304	52,04,228	53,56,233	XXXIV
(v) 30,22,330	(v) 32,32,129	(w) 33,18,412	23,10,126	(v) 23,48,371	(v) 25,41,908	(v) 26,00,436	(w) 29,43,747	
6,91,622	(x) 7,87,582	(x) 8,28,094	7,95,599	9,36,326	10,00,301	(x) 14,56,856	(x) 16,83,446	XLV
5,16,984	7,01,977	8,28,561	4,26,644	4,37,895	5,27,840	6,21,172	7,05,468	LIII

(l) Includes the Amritsar-Pathankot State railway.
 (m) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State railways.
 (n) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State railways, the latter up to 12th October 1889 only.
 (o) Includes the Amritsar-Pathankot and Jammu and Kashmir railways.
 (s) Includes the Pondicherry branch, 8 miles.
 (t) Includes the Pondicherry branch, 8 miles, and the Nellore branch of the Villupuram-Guntakal State railway.
 (u) Includes the Pondicherry branch, 8 miles, and the Nellore branch and the Villupuram-Tiruvannamalai section (88 miles) of the Villupuram-Guntakal State railway.
 (v) Includes the Nellore branch of the Villupuram-Guntakal State railway.
 (w) Includes the Nellore branch and Villupuram-Tiruvannamalai section of the Villupuram-Guntakal State railway.
 (x) Includes the Bezvada extension.
 (y) Includes the Bellary-Kistna railway.

Statement showing the general results of working of the

Serial No.	RAILWAY.	STEAM-BOAT SERVICE—RUPRES.					EARNINGS
		1886.	1887.	1888.	1889.	1890.	1886.
I	East Indian	34,579	27,786	45,691	44,256	64,246	8,59,913
III	Tirhoot	1,35,193	1,38,171	1,26,549	1,58,036	3,78,701	38,988
	Bengal and North-Western	1,67,974	1,80,910	2,17,361	1,94,935		39,979
V	Bengal-Nágpur . . . . .	...	...	...	...	...	13,369
VI	Indian Midland . . . . .	...	...	...	...	...	1,033
VIII	Rajputana-Malwa . . . . .	...	...	...	...	...	2,49,240
XI	Southern Mahratta . . . . .	...	...	...	...	...	28,587
XII	Southern Mahratta (Mysore section) . . . . .	...	...	...	...	...	7,624
XVII	North Western	2,24,955	77,641	1,21,374	67,667	3,907	(b) 4,58,720
XX	Oudh and Rohilkhand . . . . .	...	...	...	...	...	4,09,903
XXI	Eastern Bengal	3,08,266	5,97,378	6,72,064	7,65,492	8,09,933	82,157
	Northern Bengal	2,38,527					38,259
XXVI	Burma . . . . .	...	...	...	...	...	53,425
XXXII	Great Indian Peninsula . . . . .	...	...	...	...	...	3,73,975
XXXIII	Bombay, Baroda and Central India . . . . .	...	...	...	...	...	2,38,424
XXXIV	Madras . . . . .	...	...	...	...	...	1,81,245
	South Indian . . . . .	...	...	...	...	...	(c) 67,377
XLV	The Nizam's Guaranteed State . . . . .	...	...	...	...	...	37,655
LIII	Bhávnagar-Gondal-Junagarh-Porbandar . . . . .	...	...	...	...	...	24,094

(a) Includes the Katni-Umaria branch from 1st April 1888.

(b) Includes the Amritsar-Pathankot State railway.

(c) Includes the Amritsar-Pathankot and the Rájpurá-Bhátinda State railways.

(d) Includes the Amritsar-Pathankot State railway for the whole year and the Rájpurá-Bhátinda railway up to the 12th October 1889.

(e) Includes the Amritsar-Pathankot and Jammu and Kashmir railways.

(f) Includes the amount received for working the Pondicherry branch.

B—continued.

principal railways during the years 1886—1890—continued.

—concl.

SUNDRIES, INCLUDING TELEGRAPH—RUPEES.				TOTAL—RUPEES.					Serial No.
1887.	1888.	1889.	1890.	1886.	1887.	1888.	1889.	1890.	
7,53,231	6,79,408	6,22,875	8,52,659	4,66,70,852	4,60,65,662	4,54,36,901	4,49,57,901	4,34,39,355	I
41,669	56,995	49,788	1,32,976	14,98,638	17,22,955	18,07,283	18,96,675	46,01,591	III
1,01,364	91,449	1,00,841		18,54,074	19,44,002	22,09,543	22,11,824		
12,017	(a) 35,300	1,78,141	2,19,725	14,24,521	13,69,701	(a) 15,83,293	20,40,944	28,64,578	V
1,363	20,768	74,712	1,05,803	92,338	1,74,811	6,56,836	27,22,157	31,24,365	VI
2,83,385	2,46,887	2,40,181	2,71,208	1,83,14,006	1,65,28,203	1,86,14,714	1,99,30,005	1,74,28,280	VIII
1,74,200	(m) 1,42,682	1,09,961	1,02,674	16,34,918	30,11,190	(m) 38,38,616	49,27,877	56,57,413	XI
7430	8,573			4,69,274	5,13,259	5,70,658			
(c) 3,68,488	(c) 3,83,910	(d) 5,10,936	(e) 5,05,921	(b) 2,53,04,849	(a) 2,09,33,345	(a) 2,56,95,412	(d) 2,81,08,838	(e) 2,72,86,820	XVII
4,08,924	4,23,063	3,93,130	2,65,783	65,05,408	66,46,213	70,77,053	75,39,683	73,81,397	XX
2,04,638	2,15,888	3,21,239	2,17,661	52,93,359	94,30,399	1,05,19,210	1,11,76,674	1,14,78,382	XXI
				26,87,705					
48,894	74,504	77,275	65,216	26,57,955	33,24,262	33,76,218	46,90,263	54,71,432	XXVI
3,74,567	4,08,755	3,78,731	4,30,340	3,92,57,907	3,99,27,468	4,10,59,219	3,70,68,815	3,81,45,242	XXXII
2,69,482	2,61,708	2,42,800	2,38,965	1,35,05,635	1,21,64,855	1,27,38,933	1,32,34,371	1,29,40,371	XXXIII
2,00,671	2,32,744	1,88,777	3,85,411	79,66,098	81,72,536	85,31,053	91,10,895	95,06,135	XXXIV
(j) 71,308	(j) 94,444	(j) 1,06,813	(k) 1,63,351	(i) 49,20,176	(j) 51,45,097	(j) 56,58,682	(j) 59,39,378	(k) 64,25,511	
46,707	84,152	(l) 89,695	(l) 70,459	13,81,077	15,48,891	17,76,075	(l) 23,34,133	(l) 25,81,999	XLV
26,047	75,436	57,268	37,759	9,65,379	9,80,827	11,20,260	13,80,417	15,71,788	LIII

(j) Includes the amount received for working the Pondicherry branch and the Nellore branch of the Villupuram-Guntakal State railway.

(k) Includes the amount received for working the Pondicherry branch, the Nellore branch and the Villupuram-Tiruvannamalai section of the Villupuram-Guntakal railway.

(l) Includes the Bezvada extension.

(m) Includes the Bellary-Kistna railway.

Statement showing the general results of working of the

Serial No.	RAILWAY.	EXPEN										
		MAINTENANCE, PER MILE OF TRACK, INCLUDING SIDINGS—RUPEES.					Total per train-mile—Annas.					Loco
		1886.	1887.	1888.	1889.	1890.	1886.	1887.	1888.	1889.	1890.	1886.
I	East Indian	2,318	1,897	2,157	2,274	1,618	7'64	6'69	7'19	7'07	7'03	(a)0'82
III	Tirhoot	940	613	640	531	528	6'53	5'94	6'22	5'95	5'54	1'82
	Bengal and North-Western	684	501	599	570		7'06	6'45	6'45	6'15		2'48
V	Bengal-Nágpur	1,946	1,045	(b)930	1,246	1,432	11'00	11'72	(b)12'27	16'32	14'07	3'32
VI	Indian Midland	399	974	735	1,002	1,091	7'25	8'87	13'19	11'11	10'17	(d)
VIII	Rajputana-Malwa	1,076	974	1,030	886	734	9'93	10'00	9'61	9'90	10'31	4'34
XI	Southern Mahratta	843	752	(t)1,021	995	1,066	8'91	8'36	(t)8'58	9'11	8'97	4'93
XII	Southern Mahratta (Mysore section).	529	983	1,269			8'98	8'90	9'09			3'96
XVII	North Western	(g)1,595	(h)1,738	(h)1,845	(h)2,087	(i)1,814	(g)12'61	(h)13'78	(h)13'58	(h)12'96	(i)12'12	(h)4'47
XX	Oudh and Rohilkhand	1,133	1,213	1,244	1,043	1,435	9'70	9'10	9'06	7'54	6'93	3'54
XXI	Eastern Bengal	3,130	1,870	1,428	1,330	1,410	9'66	8'23	7'02	6'96	6'10	2'59
	Northern Bengal	1,776					6'83					2'54
XXVI	Burma	1,412	1,284	1,518	1,868	1,482	9'45	9'26	8'86	9'80	9'61	3'54
XXXII	Great Indian Peninsula	2,229	2,324	2,319	2,215	2,234	12'80	12'90	13'06	14'21	13'08	3'88
XXXIII	Bombay, Baroda and Central India.	3,065	2,487	2,912	2,662	2,535	11'58	11'95	12'35	13'96	12'93	4'35
XXXIV	Madras	1,307	1,480	1,401	1,547	1,254	11'66	12'64	10'81	11'78	11'40	4'56
	South Indian	1,730	(q)1,920	(q)2,027	(q)1,982	(r)1,435	7'84	(q)7'66	(q)8'67	(q)9'41	(r)8'87	2'52
XLV	The Nizam's Guaranteed State.	1,097	1,213	1,142	(s)1,686	(s)1,477	8'61	11'94	10'79	(s)9'20	(s)9'64	3'29
LIII	Bhávnapar-Gondal-Junágarh-Porbandar.	514	467	462	563	797	7'90	8'04	7'23	8'83	8'31	3'04

(a) Includes the branch lines worked by the Undertaking. In 1889 the Ásansol-Purulia and in 1890 the Ásansol-Goilkera section of the Bengal-Nágpur railway is also included.

(b) Includes the Katni-Umaria branch from the 1st April 1888.

(c) Excludes the section of the Bengal-Nágpur railway worked by the East Indian railway, viz., in 1889 from Ásansol to Purulia and in 1890 from Ásansol to Goilkera.

(d) Included with the East Indian railway.

(e) Includes the Bhopal-Itársi State railway.

(f) Includes the Gaeikwar's Mehsána railway.

(g) Includes the Amritsar-Pathánot State railway.

B—continued.

principal railways during the years 1886—1890—continued.

MOTIVE.				CARRIAGE AND WAGON.																Serial No.
of fuel per train-mile—Annas.				Repairs per train-mile—Annas.					Per train-mile—Annas.					Repairs of stock per train-mile—Annas.						
1887.	1888.	1889.	1890.	1886.	1887.	1888.	1889.	1890.	1886.	1887.	1888.	1889.	1890.	1886.	1887.	1888.	1889.	1890.		
(a)0'75	(a)0'83	(a)0'73	(a)0'72	(a)2'62	(a)1'75	(a)1'97	(a)2'00	(a)1'98	2'53	2'20	2'12	2'36	2'35	(a)2'13	(a)1'80	(a)1'71	(a)1'94	(a)1'94	I	
1'70	1'93	1'53	} 1'91	0'95	1'09	0'93	0'98	} 0'68	1'26	1'37	1'53	1'84	} 1'23	0'65	0'83	0'87	1'10	} 0'70	III	
2'14	2'32	2'35		0'66	0'57	1'10	0'80		1'10	1'16	0'93	1'13		0'46	0'56	0'40	0'54			
3'38	(b)3'66	(c)4'68	(c)3'92	2'56	3'25	(b)3'29	(c)5'34	(c)4'72	2'89	3'30	(b)3'13	2'76	3'42	2'08	2'51	(b)2'47	(c)1'73	(c)2'24	V	
(d)	5'17	(e)5'00	(e)3'80	(d)	(d)	1'39	(e)1'13	(e)1'49	2'41	2'96	2'85	2'13	2'62	(d)	(d)	1'65	(e)1'35	(e)1'89	VI	
4'15	4'40	(f)4'59	(f)4'32	1'60	1'79	1'47	(f)1'37	(f)1'68	1'94	2'12	1'86	2'21	4'29	1'41	1'49	1'35	(f)1'62	(f)3'50	VIII	
3'80	(g)3'89	} 3'87	} 3'66	0'47	0'69	(g)0'83	} 1'20	} 1'36	0'86	0'80	(g)1'13	} 1'50	} 1'60	0'47	0'45	(g)0'67	} 0'94	} 1'09	XI	
3'94	4'10			1'26	1'18	1'27			1'77	1'36	1'55			0'40	0'65	0'80				
(h)4'45	(h)4'29	(h)4'38	(j)4'32	(h)2'67	(h)2'96	(h)3'30	(h)3'56	(j)3'01	(g)4'20	(h)3'75	(h)3'64	(h)3'93	(i)4'40	(h)3'35	(h)2'77	(h)2'77	(h)3'16	(j)3'59	XVII	
3'48	3'43	2'74	2'19	1'66	1'37	1'49	1'37	1'19	2'56	2'30	2'20	2'08	2'09	1'94	1'62	1'57	1'61	1'64	XX	
} 2'33	} 2'08	} 1'54	} 1'45	3'16	} 2'60	} 2'03	} 2'42	} 1'65	3'89	} 2'68	} 2'98	} 2'02	} 2'25	3'04	} 2'27	} 2'83	} 2'27	} 2'33	XXI	
				0'88					1'66					0'82					2'37	
3'92	3'84	4'19	3'92	2'06	1'44	1'12	1'24	1'26	2'39	2'43	1'99	1'84	2'35	1'64	1'86	1'36	1'25	1'69	XXVI	
3'98	4'41	4'65	4'51	2'53	2'49	2'21	2'62	2'23	4'05	3'77	3'53	4'09	3'49	2'97	2'70	2'54	2'93	2'57	XXXII	
4'08	4'67	5'22	4'99	1'90	2'12	1'90	2'24	2'23	3'82	3'97	4'24	3'66	4'06	2'92	3'08	3'25	2'73	3'13	XXXIII	
3'93	3'74	4'29	4'26	2'88	4'31	3'07	3'18	3'05	3'33	5'00	4'40	4'85	3'62	2'51	3'95	3'43	3'75	2'92	XXXIV	
(q)2'61	(q)3'25	(q)3'45	(r)3'66	1'77	(q)1'57	(q)1'71	(q)1'94	(r)1'61	3'40	(q)2'24	(q)1'94	(q)2'35	(r)1'89	2'56	(q)1'68	(q)1'45	(q)1'79	(r)1'44		
4'68	3'39	(s)3'06	(s)2'74	1'08	1'93	1'62	(s)1'62	(s)1'89	1'84	2'36	2'07	(s)2'46	(s)2'01	1'09	1'78	1'34	(s)1'75	(s)1'29	XLV	
3'01	3'36	4'60	4'16	1'17	1'27	0'95	1'04	0'97	1'87	1'60	0'95	0'97	0'83	1'16	1'01	0'49	0'50	0'37	LIII	

(h) Includes the Amritsar-Pathankot and the Rájpura-Bhátinda State railways.
 (i) Includes the Amritsar-Pathankot and Jammu and Kashmir railways.
 (j) Includes Amritsar-Pathankot, Rájpura-Bhátinda and Jammu and Kashmir railways.
 (k) Includes the Nellore branch of the Villupuram-Guntakal State railway.
 (l) Includes the Nellore branch and the Villupuram-Tiruvannámalaí section of the Villupuram-Guntakal railway.
 (m) Includes the Bezvada extension.
 (n) Includes the Bellary-Kistna railway.
 * Calculated on 7,815,685 train-miles, which include 36,603 train-miles run for construction purposes and taken into account in the analysis of working for the first half, 1889, under "Locomotive expenses" only.

Statement showing the general results of working of the

Serial No.	RAILWAY.	TRAFFIC, PER CENT. OF TRAFFIC EARNINGS.					GENERAL, PER CENT. OF GROSS EARNINGS, EXCLUDING STEAM-BOAT.					EXPEN		
												STEAM		
		1886.	1887.	1888.	1889.	1890.	1886.	1887.	1888.	1889.	1890.	1886.	1887.	1888.
I	East Indian	6'44	6'53	6'59	6'63	6'85	3'83	4'33	4'22	4'27	4'20	19,275	1,38,162	74,322
III	Tirhoot	15'72	15'82	13'51	11'70	9'94	11'57	10'91	9'06	8'34	8'92	1,07,897	1,07,639	1,02,421
	Bengal and North-Western.	9'51	11'14	10'27	10'20		10'39	14'54	12'95	12'68		95,851	1,05,346	1,54,952 ^c
V	Bengal Nagpur	8'46	9'55	(a)	12'95	10'02	8'06	10'02	(a)	10'20	15'97	15'53	...	...
VI	Indian Midland	7'08	7'06	13'83	10'89	11'18	21'05	15'11	16'77	13'29	12'75	...	...	...
VIII	Rajputana-Malwa	8'64	8'48	7'79	7'17	7'82	6'05	6'83	6'09	5'54	6'31	...	...	...
XI	Southern Mahratta	12'45	12'20	(a)	12'45	12'53 11'64	12'23	12'44	(a)	12'73	13'23 12'77	...	...	...
XII	Southern Mahratta (Mysore section).	8'43	9'76	9'25			11'85	11'71	12'73					
XVII	North Western	(b)	(c)	(c)	(d)	(e)	(b)	(c)	(c)	(d)	(e)	2,13,590	1,86,987	2,09,571
XX	Oudh and Rohilkhand	9'79	9'73	9'76	9'47	9'58	7'13	7'10	7'55	5'78	5'97	...	...	...
XXI	Eastern Bengal.	13'66	11'23	11'39	10'99	11'62	5'57	5'35	4'55	4'43	4'77	2,12,435	3,67,312	4,87,117
	Northern Bengal	7'63					6'94					1,51,413		
XXVI	Burma	12'39	11'30	14'23	12'41	10'36	8'13	6'30	7'02	6'76	6'46	...	...	...
XXXII	Great Indian Peninsula.	6'63	6'87	6'90	7'46	7'38	3'17	3'12	3'11	3'47	3'37	...	...	...
XXXIII	Bombay, Baroda and Central India.	6'04	6'31	6'15	6'11	6'31	4'28	4'56	4'13	3'86	4'06	...	...	...
XXXIV	Madras	9'83	9'67	9'66	8'97	8'99	6'16	5'89	5'83	5'83	5'80	...	...	...
	South Indian	8'67	(h)	(h)	(h)	(l)	7'52	(h)	(h)	(h)	(l)	...	...	...
XLV	The Nizam's Guaranteed State.	9'54	9'40	10'30	(m)	(m)	7'84	10'28	10'74	(m)	(m)	...	...	...
LIII	Bhavnagar-Gondal-Junagarh-Porbandar.	11'14	11'39	11'70	10'80	10'07	13'37	13'96	11'26	11'67	11'49	...	...	...

(a) Includes the Katni-Umaria branch from the 1st April 1888.
 (b) Includes the Amritsar Pathankot State railway.
 (c) Includes the Amritsar-Pathankot and the Rajpura-Bhatinda State railways.
 (d) Includes the Amritsar-Pathankot State railway for the whole year and the Rajpura-Bhatinda State railway up to the 12th October 1889.
 (e) Includes the Amritsar-Pathankot and Jammu and Kashmir State railways.

B—continued.

principal railways during the years 1886—1890—continued.

DITURE—concluded.

BOAT—RUPEES.		MISCELLANEOUS, PER CENT. OF GROSS EARNINGS, EXCLUDING STEAM-BOAT.					TOTAL—RUPEES.					Serial No
1889.	1890.	1886.	1887.	1888.	1889.	1890.	1886.	1887.	1888.	1889.	1890.	
57,308	78,951	0'44	0'51	0'45	0'78	0'42	1,61,44,628	1,46,02,513	1,51,06,225	1,55,48,840	1,36,16,581	
1,09,553	2,25,766	1'06	3'39	2'37	1'42	0'70	9,97,449	10,27,230	10,08,407	9,18,429	20,28,228	II
1,09,963		1'36	1'14	0'82	0'87		10,44,885	11,06,997	12,20,699	11,57,860		
...	...	0'85	0'96	(n) 1'03	1'05	2'18	8,90,492	8,09,453	(n) 10,65,832	16,37,783	23,17,115	V
...	...	1'19	18'00	2'37	3'20	2'55	74,926	1,40,941	4,76,407	21,26,108	25,24,585	V
...	...	0'63	0'67	0'63	0'81	0'84	93,58,031	84,02,731	89,82,987	91,32,787	87,85,756	VII
...	...	0'54	0'65	(o) 0'45	0'52	0'68	11,41,593	20,01,831	(o) 29,05,750	37,44,228	44,20,975	X
...	...			0'55			0'31	0'11	2,77,046				3,71,115	4,35,273
1,24,147	82,094	(b) 0'76	(c) 0'89	(p) 0'87	(d) 0'86	(e) 1'09	(b) 1,33,39,242	(c) 1,52,25,803	(e) 1,74,12,706	(d) 1,79,22,075	(e) 1,71,41,434	XVI
...	...	1'66	1'37	6'01	1'12	1'27	36,44,653	35,10,964	40,61,048	33,35,606	36,26,918	XI
5,88,378	6,22,739	3'41	1'84	1'77	1'34	1'62	32,24,405	49,25,617	49,93,786	49,85,048	54,08,059	XX
...	...						0'49					
...	...	1'16	0'87	0'89	0'77	0'87	17,14,684	17,65,961	21,04,257	31,16,711	31,23,241	XXV
...	...	1'02	0'90	1'20	1'59	1'51	1,82,50,182	1,87,01,348	1,92,80,263	1,90,59,340	1,89,94,983	XXXI
...	...	1'07	0'84	0'79	0'78	0'66	55,52,879	50,96,040	56,19,575	56,17,117	54,42,193	XXXII
...	...	0'50	0'42	0'59	0'42	0'52	47,36,854	52,92,507	50,09,408	53,72,474	49,84,654	XXXI'
...	...	0'42	(k) 0'36	(k) 0'37	(k) 0'51	(l) 1'15	34,44,262	(k) 35,56,368	(k) 40,26,991	(k) 41,76,267	(l) 37,58,204	
...	...	2'17	2'40	1'49	(m) 0'70	(m) 0'73	6,86,553	9,95,986	10,18,608	(n) 15,61,620	(n) 15,42,409	XL
...	...	2'34	1'19	1'93	1'48	1'38	5,50,230	5,38,724	5,66,585	7,80,585	9,71,521	LII

(k) Includes the Nellore branch of the Villupuram-Guntakal State railway.
 (l) Includes the Nellore branch and the Villupuram-Tiruvannamalai section of the Villupuram-Guntakal State railway.
 (m) Includes the Bezvada extension.
 (n) Includes the Bezvada extension but excludes the charges incurred direct by the State.
 (o) Includes the Bellary-Kistna railway.

Statement showing the general results of working of the

Serial No.	RAILWAY.	RESULTS EXCLUSIVE OF												
		GROSS EARNINGS PER TRAIN-MILE—RUPEES.					EXPENDITURE PER TRAIN-MILE—RUPEES.					NET EARNINGS MILE—		
		1886.	1887.	1888.	1889.	1890.	1886.	1887.	1888.	1889.	1890.	1886.	1887.	1888.
I.	East Indian	5'20	5'36	5'46	5'46	5'36	1'80	1'70	1'81	1'88	1'67	3'40	3'66	3'65
III.	Tirhoot	2'67	2'63	2'68	3'05	3'02	1'74	1'53	1'44	1'42	1'29	0'93	1'10	1'24
	Bengal and North-Western	2'36	2'53	2'65	2'68		1'33	1'44	1'42	1'39		1'03	1'09	1'22
V.	Bengal-Nágpur	3'88	3'64	(b) 2'87	3'89	4'71	2'43	2'15	(b) 1'93	3'12	3'81	1'45	1'49	(b) 0'94
VI.	Indian Midland	3'78	4'62	4'11	2'93	2'82	3'07	3'72	2'98	2'29	2'28	0'71	0'90	1'13
VIII.	Rajputana-Malwa	2'99	3'18	3'07	3'16	3'32	1'53	1'62	1'48	1'45	1'67	1'46	1'56	1'59
XI.	Southern Mahratta	2'34	2'40	(e) 2'31	2'60	2'50	1'63	1'60	(e) 1'74	1'98	1'95	0'71	0'80	(e) 0'57
XII.	Southern Mahratta (Mysore section).	3'17	2'98	3'25			1'87	2'16	2'48			1'30	0'82	0'77
XVII.	North Western	(f) 4'15	(g) 3'39	(g) 3'46	(h) 3'62	(i) 3'58	(f) 2'17	(g) 2'45	(g) 2'33	(h) 2'30	(i) 2'25	(f) 1'98	(g) 0'94	(g) 1'13
XX.	Oudh and Rohilkhand	3'14	3'46	3'44	3'49	3'29	1'76	1'83	1'67	1'54	1'62	1'38	1'63	1'47
XXI.	Eastern Bengal	4'36	4'03	3'88	3'90	3'58	2'68	2'08	1'78	1'65	1'61	0'68	1'95	2'10
	Northern Bengal	3'34													1'72	1'62
XXVI.	Burma	3'19	3'69	3'14	3'29	3'42	2'06	1'96	1'96	2'19	1'95	1'13	1'73	1'18
XXXII.	Great Indian Peninsula	4'56	4'50	4'46	4'48	4'28	2'12	2'11	2'09	2'30	2'13	2'44	2'39	2'37
XXXIII.	Bombay, Baroda and Central India.	5'91	5'56	5'46	5'71	5'60	2'43	2'33	2'41	2'42	2'36	3'48	3'23	3'05
XXXIV.	Madras	3'50	3'52	3'56	3'84	3'86	2'08	2'28	2'10	2'26	2'03	1'42	1'24	1'47
	South Indian	2'54	(n) 2'50	(n) 2'57	(n) 2'71	(o) 2'70	1'78	(n) 1'73	(n) 1'83	(n) 1'91	(o) 1'58	0'76	(n) 0'77	(n) 0'74
XLV.	The Nizam's Guaranteed State.	3'56	3'63	3'90	3'88	3'94	1'77	2'33	2'24	2'60	2'36	1'79	1'30	1'66
LIII.	Bhánagar Gondal-Junágarh- Porbandar.	3'23	3'28	2'91	2'91	2'80	1'84	1'80	1'47	1'64	1'73	1'39	1'48	1'44

(b) Includes the Katni-Umaria branch from the 1st April 1888.

(c) Includes the capital expenditure on the Katni-Umaria branch.

(e) Includes the Bellary-Kistna railway.

(f) Includes the Amritsar-Pathánkot State railway.

(g) Includes the Amritsar-Pathánkot and Rájputa-Bhátinda State railways.

(h) Includes the Amritsar-Pathánkot State railway for the whole year and the Rájputa-Bhátinda State railway up to the 12th October 1889.

B—continued.

principal railways during the years 1886—1890—continued.

STEAM-BOAT SERVICE.							CAPITAL EXPENDED ON OPEN LINE, INCLUSIVE OF ROLLING-STOCK AND STEAM-BOAT, BUT EXCLUDING SUSPENSE—RUPEES.					Serial No.
PER TRAIN—RUPEES.		AVERAGE GROSS EARNINGS PER MILE PER WEEK—RUPEES.					1886.	1887.	1888.	1889.	1890.	
1889.	1890.	1886.	1887.	1888.	1889.	1890.						
3'58	3'69	591	576	567	557	538	34,48,69,250	35,08,09,927	35,04,52,693	35,17,58,908	35,17,49,640	I
1'63	...	109	122	133	122	121	1,65,61,802	1,87,97,019	2,04,51,849	2,07,00,031	2,28,51,202	III
1'20	1'73	106	90	113	103		2,13,44,760	2,31,01,334	2,44,79,993	2,46,86,064	2,47,87,907	
0'37	0'90	184	177	(b) 170	131	101	1,13,41,687	1,25,79,706	(c) 2,90,27,605	3,49,61,327	6,22,72,468	V
0'64	0'54	57	80	99	91	86	28,37,761	32,92,854	1,22,84,140	7,42,50,955	7,88,56,496	VI
1'71	1'65	212	191	215	230	200	12,37,35,981	12,38,95,213	12,43,12,627	12,48,93,585	12,51,86,464	VIII
0'62	0'55	92	86	(e) 86	84	83	3,41,78,801	6,10,38,163	(e) 7,20,11,558	9,49,14,758	10,50,42,640	XI
		64	71	78			62,88,348	63,11,425	68,83,123			
(h) 1'32	(i) 1'33	(f) 259	(g) 182	(g) 201	(h) 226	(i) 220	28,69,82,642	31,94,11,451	37,10,68,811	37,47,52,493	38,28,65,195	XVII
1'95	1'67	184	186	197	209	205	7,98,90,880	8,88,68,152	8,91,57,048	9,01,38,067	9,04,18,812	XX
2'25	1'97	402	268	283	282	271	4,84,30,841	8,40,97,566	8,70,76,194	9,48,69,043	9,74,27,275	XXI
		189					2,22,33,112					
1'10	1'47	156	194	176	169	190	2,78,96,233	2,80,70,159	3,38,20,621	4,94,14,183	4,99,69,474	XXVI
2'18	2'15	501	510	524	491	508	26,15,08,121	26,34,35,584	26,66,74,869	26,83,25,816	26,98,48,349	XXXII
3'29	3'24	563	507	531	552	540	9,08,84,931	9,14,90,160	9,18,78,575	9,24,52,414	9,21,07,465	XXXIII
1'58	1'83	178	189	196	209	218	11,27,84,058	11,07,01,322	11,30,73,456	11,42,76,811	11,49,41,050	XXXIV
(n) 0'80	(o) 1'12	143	(n) 144	(n) 146	(n) 153	(o) 165	4,44,36,217	4,51,69,182	4,57,15,607	4,59,58,914	4,62,65,978	
1'28	1'59	143	143	118	129	140	2,71,49,342	2,69,71,143	3,31,14,508	3,50,85,528	3,68,35,942	XLV
1'27	1'07	96	98	109	97	91	95,04,998	96,11,085	(g) 93,82,335	1,58,40,843	1,64,45,102	LIII

(i) Includes the Amritsar-Pathankot, and Jammu and Kashmir State Railways.
 (n) Includes the Nellore branch of the Villupuram-Guntakal State railway.
 (o) Includes the Nellore branch and the Villupuram-Tiruvannamalai section of the Villupuram-Guntakal State railway.
 (g) Excludes the Jetalsar-Junagar h section.

Statement showing the general results of working of the

Serial No.	RAILWAY.	NET EARNINGS—RUPES.				
		1886.	1887.	1888.	1889.	1890.
I	East Indian	3,05,26,224	3,14,63,149	3,03,30,676	2,94,09,061	2,98,22,775
III	Tirhoot	5,01,189	6,95,725	7,98,876	9,78,246	25,73,364
	Bengal and North-Western	8,09,189	8,37,005	9,88,844	10,53,664	
V	Bengal-Nágpur	5,34,029	5,60,248	(c) 5,17,461	4,03,161	5,47,463
VI	Indian Midland	17,412	33,870	1,80,429	5,96,049	5,99,780
VIII	Rajputana-Malwa	89,55,975	81,25,472	96,31,727	1,07,97,218	86,42,525
XI	Southern Mahratta	(d) 4,93,325	(d) 10,32,745	(f) 9,32,866	(d) 11,83,649	(g) 12,24,074
XII	Southern Mahratta (Mysore section)	(d) 1,92,228	(d) 1,42,144	(d) 1,35,385		
XVII	North Western	1,19,65,607	57,07,542	82,82,706	1,01,86,759	1,01,45,387
XX	Oudh and Rohilkhand	28,60,755	31,35,249	30,16,005	42,04,077	37,54,478
XXI	Eastern Bengal	19,78,954	45,04,782	55,25,424	61,91,626	60,70,323
	Northern Bengal	12,67,373				
XXVI	Burma	9,43,271	15,58,302	12,71,961	15,73,552	23,48,191
XXXII	Great Indian Peninsula	2,10,07,725	2,12,26,120	2,17,78,956	1,80,09,475	1,91,50,259
XXXIII	Bombay, Baroda and Central India	79,52,756	70,68,815	71,19,358	76,17,254	74,98,178
XXXIV	Madras	32,29,244	28,80,029	35,21,645	37,38,421	45,21,480
	South Indian	14,75,914	16,09,557	16,72,271	16,88,131	26,08,432
XLV	The Nizam's Guaranteed State	6,94,524	5,52,905	7,57,467	7,72,513	10,39,590
LIII	Bhávnagar-Gondal-Junágarh-Porbandar	4,15,149	4,42,103	5,53,675	5,99,832	6,00,267

(c) Includes the Katni-Umaria branch from the 1st April 1888.
 (d) Net earnings before paying contribution to Provident Fund.
 (e) Includes the Bellary-Kistna railway. Net earnings before paying contribution to Provident Fund.
 (f) Net earnings after paying contribution to Provident Fund.
 (g) Calculated on working expenses, excluding contribution to Provident Fund.
 (h) Includes the Bellary-Kistna railway. Calculated on working expenses, excluding contribution to Provident Fund.

B—concluded.

principal railways during the years 1886—1890—concluded.

PERCENTAGE OF WORKING EXPENSES TO GROSS EARNINGS.					PER CENT. OF NET EARNINGS PER ANNUM ON CAPITAL EXPENDITURE ON OPEN LINE, INCLUDING STEAM-BOAT, BUT EXCLUDING SUSPENSE.					Serial No.
1886.	1887.	1888.	1889.	1890.	1886.	1887.	1888.	1889.	1890.	
34'59	31'70	33'25	34'59	31'35	8'85	8'97	8'65	8'36	8'48	I
66'56	59'62	55'80	48'42	44'08	3'03	3'70	3'91	4'73	5'39	III
56'36	56'94	55'25	52'35		3'79	3'62	4'04	4'27		
62'51	59'10	(c) 67'32	80'25	80'89	4'71	4'45	(c) 1'78	1'15	0'88	V
81'14	82'62	72'53	78'10	80'80	0'51	1'03	1'47	0'80	0'76	VI
51'10	50'84	48'26	45'82	50'41	7'24	6'56	7'75	8'65	6'90	VIII
(h) 69'83	(h) 64'98	(f) 75'70	(h) 75'98	(k) 78'36	(l) 1'44	(l) 1'69	(m) 1'30	(l) 1'25	(o) 1'17	XI
(h) 50'04	(h) 72'31	(h) 76'28			(l) 3'06	(l) 2'25	(l) 1'97			
52'71	72'73	67'77	63'76	62'82	4'17 ●	1'79	2'23	2'72	2'64	XVII
56'02	52'83	57'38	44'24	49'14	3'58	3'53	3'38	4'66	4'15	XX
61'97	52'23	47'47	44'60	47'12	4'09	5'36	6'35	6'52	6'23	XXI
52'85					5'70					
64'51	53'12	62'33	66'45	57'08	3'38	5'55	3'76	3'18	4'70	XXVI
46'49	46'84	46'36	51'41	49'80	8'03	8'06	8'17	6'71	7'10	XXXII
41'12	41'89	44'11	42'44	42'06	8'75	7'73	7'75	8'24	8'07	XXXIII
59'46	64'76	58'72	58'97	52'44	2'86	2'60	3'11	3'27	3'93	XXXIV
70'00	68'42	69'17	70'30	57'50	3'32	3'56	3'66	3'67	5'64	
49'71	64'30	57'35	66'90	59'74	2'56	2'05	2'29	2'20	2'83	XLV
57'00	54'93	50'58	56'55	61'81	4'37	4'60	(s) 5'90	5'79	3'65	LIII

(h) Calculated on working expenses, including contribution to Provident Fund.
 (i) Contribution to Provident Fund treated as part of net earnings.
 (j) Includes the Bellary-Kistna railway. Contribution to Provident Fund treated as part of net earnings.
 (k) Contribution to Provident Fund treated as part of working expenses.
 (l) Calculated on the outlay on the Bhavnagar-Gondal section only, as a small portion of the Jetalsar-Veraval section was open for traffic for only four months.

Statement showing the mileage, age, cost and general results

[Steam boat earnings and expenses, and suspense items]

Serial Number.	RAILWAY.	Miles open at end of year.	Mean mileage open during year.	Mean age of line at end of year.	Capital outlay at end of year.	Cost per mile open.	Gross earnings.	Working expenses.	Net earnings.	PERCENTAGE ON CAPITAL COST.			Gross earnings per mean mile open per week.	REMARKS.
										Gross earnings.	Working expenses.	Net earnings.		
	STANDARD GAUGE.			Years.	₹	₹	₹	₹	₹					
	STATE LINES WORKED BY COMPANIES.		(a)											
I	East Indian	1,525'44	1,525'44	27'47	35,15,04,792	2,30,428	4,33,75,109	1,35,37,629	2,98,37,480	12'34	3'85	8'49	(b)538	
II	Patna-Gya	57'20	57'20	11'64	43,46,743	75,992	5,17,487	2,37,387	2,80,100	11'90	5'46	6'44	174	
V	Bengal-Nágpur	586'01	544'92	3'48	6,22,72,468	1,06,265	28,64,578	23,17,116	5,47,462	4'60	3'72	0'88	101	
VI	Indian Midland	677'35	677'35	3'23	7,88,56,496	1,16,419	31,24,365	25,24,585	5,99,780	3'96	3'20	0'76	(d)86	
VII	Bhopal-Itársi (British section)	13'00	13'00	8'23	12,85,077	98,852	87,764	1,04,337	-16,573	6'83	8'12	-1'29	130	
X	Dhond-Manmád	145'5	(e)	12'74	1,09,81,595	75,475	2,75,942	12,808	2,63,134	...	...	2'40	...	
XIII	Bezvada Extension	21'47	(h)	1'89	13,90,830	64,780	(f)18,689	(g)2,371	16,318	...	...	1'17	...	
	STATE LINES WORKED BY THE STATE.		(f)		(i)	(i)	(h)	(h)		(l)	(l)		(m)	
XVII	North Western	2,392'50	2,379'70	12'98	37,94,18,928	1,58,587	2,72,82,913	1,70,59,339	1,02,23,574	7'06	4'41	2'69	2'9	
XVIII	Amritsar-Patháñkot	64'79	(n)	6'89	56,06,703	86,537	1,12,214	...	1,12,214	...	...	2'00	...	
XIX	Jammu and Kashmir (British section)	8'49	(n)	0'80	2,74,90	32,296	(n)	(n)	(n)	(n)	(n)	(n)	(n)	
XX	Oudh and Rohilkhand	692'55	692'55	15'72	9,04,18,812	1,30,559	73,81,396	36,26,918	37,54,478	8'16	4'01	4'15	205	
XXI	Eastern Bengal (Eastern and Southern sections)	249'29	242'36	21'06	5,33,24,258	2,13,905	65,62,757	27,85,194	37,77,563	12'30	5'22	7'08	521	
XXII	Bengal Central	125'01	125'01	7'20	95,95,077	76,754	6,67,803	4,21,897	2,45,906	6'96	4'40	2'56	103	
	Wardha Coal (o)	45'00	45'00	14'66	54,48,253	1,21,072	3,26,736	2,07,355	1,19,381	6'00	3'81	2'19	140	
	LINES WORKED BY GUARANTEED COMPANIES.		(p)							(q)	(q)			
XXXII	Great Indian Peninsula	1,288'24	1,444'56	26'34	26,98,48,349	2,09,471	3,81,45,242	1,89,94,983	1,91,50,259	13'54	6'74	7'10	508	
XXXIII	Bombay, Baroda and Central India	460'90	460'90	24'34	9,29,15,870	2,01,597	1,29,40,371	54,42,193	74,98,178	13'93	5'86	8'07	540	
XXXIV	Madras	839'30	839'30	26'70	11,49,41,050	1,36,949	95,06,134	49,84,654	45,21,480	8'27	4'34	3'93	218	
XXXVI	Tárakeshwar	22'23	22'23	6'00	17,28,778	77,768	2,86,526	1,42,243	1,44,283	16'57	8'23	8'34	248	
	LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.		(e)				(f)							
XLII	Khámgaon	7'50	(e)	20'83	4,85,521	64,736	(f)26,092	...	26,092	...	...	5'37	...	
XLIII	Amráoti	5'50	(e)	19'87	4,36,460	79,356	(f)47,138	(g)885	46,253	...	...	10'60	...	
XLIV	Bhopal-Itársi (Native State section)	44'11	44'11	6'12	48,58,033	1,10,815	2,97,050	3,53,142	-36,092	6'07	7'22	-1'15	130	
XLV	The Nizam's Guaranteed State	329'20	353'77	8'04	3,68,35,942	1,11,895	25,81,999	15,42,408	10,39,591	6'75	4'03	2'82	140	
XLVIII	The Gaekwar's Patlád	13'35	8'81	0'66	6,47,824	48,526	32,649	11,779	20,870	5'04	1'82	3'22	71	
	LINES OWNED BY NATIVE STATES AND WORKED BY STATE RAILWAY AGENCY.		(n)				(f)							
LI	Rajpura-Bhatinda	107'94	107'94	1'94	64,15,004	59,431	5,66,946	3,11,820	2,55,126	8'84	4'86	3'98	101	
	Jammu and Kashmir (Native State section)	15'92	(n)	0'80	11,19,846	70,342	(f)13,771	...	13,771	...	...	1'23	...	
	TOTAL AND AVERAGE	9,737'79	9,584'15	17'37	1,58,49,86,898	1,62,767	15,70,41,671	7,46,21,043	8,24,20,628	9'91	4'71	5'20	315	

- (a) Excludes 1 mile of the Rajputana-Malwa railway and 23'24 miles of the Eastern Bengal State railway worked over by the Company.
(b) Calculated on total mean mileage worked 1,540'68 miles.
(c) Excludes 15'30 miles of the East Indian, 2'89 miles of the Rajputana-Malwa, and 1 mile of the Oudh and Rohilkhand railway worked over by the Company.
(d) Calculated on total mean mileage worked, 696'54 miles.
(e) Included with the Great Indian Peninsula railway.
(f) Represents the amount received as rent for the lease of this line.
(g) Expenditure incurred direct by the State.
(h) Included with the Nizam's Guaranteed State railway.
(i) Includes 112'16 miles either temporarily closed or constructed but not opened, the outlay on which is included with the outlay on the open length.
(j) Excludes 13 miles of the East Indian railway and 7'48 miles of the Chenab (Khanki) Weir branch worked over.
(k) Includes the Amritsar-Patháñkot State railway for the whole year and the Jammu and Kashmir railway from the 15th March to the 31st December 1890.
(l) North Western and Amritsar-Patháñkot and Jammu and Kashmir railways combined.
(m) Calculated on the total mean mileage worked, 2,400'18 miles.
(n) Included with the North Western railway.
(o) Excludes the Warora Colliery.
(p) Includes the mileage of the branch lines worked by the Company.
(q) Great Indian Peninsula, Dhond-Manmád, Khámgaon and Amráoti railways combined.
(r) The Nizam's Guaranteed State and Bezvada Extension railways combined.

DIX C.

of working of Indian railways for the year 1890.

have been excluded from the following figures.]

Serial number.	RAILWAY.	Miles open at end of year.	Mean mileage open during year.	Mean age of line at end of year.	Capital outlay at end of year.	Cost per mile open.	Gross earnings.	Working expenses.	Net earnings.	PERCENTAGE ON CAPITAL COST.			Gross earnings per mean mile open per week.	REMARKS.	
										Gross earnings.	Working expenses.	Net earnings.			
METRE AND OTHER NARROW GAUGES.															
STATE LINES WORKED BY COMPANIES.															
III	Tirhoot	322'53	294'57	7'31	2,22,98,798	69,137	42,22,890	18,02,460	24,20,430	9'27	3'96	5'31	121	Metre gauge.	
	Bengal and North-Western	376'00	376'00	5'73	2,32,45,569	61,823									
	Bareilly-Pilibhit	36'00	36'00	6'17	15,37,682	42,713	1,19,451	78,930	40,521	7'77	5'13	2'64	64		
VIII	Rajputana-Malwa	1,671'83	1,671'69	11'30	12,51,86,464	74,880	1,74,28,281	87,85,756	86,42,525	13'92	7'02	6'90	300		
XI	Southern Mahratta	1,043'70	1,013'82	4'42	9,09,53,991	87,146	44,71,095	34,96,359	9,74,736	4'91	3'84	1'07	85		
XII	Southern Mahratta, Mysore section	296'00	296'00	4'78	1,40,88,649	47,597	11,86,318	9,24,617	2,61,701	8'42	6'56	1'86	77		
	Vilupuram-Guntakal-Nellore-Tirupati section	82'94	82'94	3'30	62,26,219	75,069	2,42,601	1,90,239	52,362	3'90	3'06	0'84	56		
	Vilupuram Tiruvannamalai section	42'45	5'23	0'12	14,36,000	33,828	19,948	13,436	6,512	1'39	0'94	0'45	73		
STATE LINES WORKED BY THE STATE.															
XXI	Lucknow-Sitapur-Saran	104'59	104'59	3'81	35,64,011	34,076	3,37,288	2,45,471	91,817	9'46	6'88	2'58	62		
	Eastern Bengal	514'61	514'49	8'28	4,14,41,446	80,530	41,05,691	20,00,127	21,05,564	9'91	4'83	5'08	153		
XXIII	Nalhati	27'25	27'25	27'04	3,20,919	11,777	1,00,823	78,653	22,170	31'42	24'51	6'91	71		
XXIV	Cherra-Companyganj	7'50	7'50	4'55	3,46,692	46,226	17,490	20,346	-2,356	5'05	5'87	-0'82	45		
XXV	Jorhat	28'40	27'28	5'58	7,21,851	25,417	61,967	55,815	6,162	8'58	7'73	0'85	44		
XXVI	Burma	336'00	334'53	9'86	2,94,09,504	87,528	36,40,862	20,58,993	15,90,869	12'41	7'00	5'41	210		
XXVII	Toungoo-Mandalay	220'00	220'00	2'12	2,05,59,970	93,454	18,21,570	10,64,248	7,57,322	8'86	5'18	3'68	159		
LINES WORKED BY GUARANTEED COMPANIES.															
	South Indian	654'61	654'61	17'49	4,62,65,978	70,677	61,62,961	35,54,528	26,08,433	13'32	7'68	5'64	181		
ASSISTED COMPANIES.															
XXXVII	Deoghur	4'79	4'79	7'88	2,81,180	58,701	26,095	15,180	10,915	9'28	5'40	3'88	105		
XXXVIII	Rohilkhand-Kumaun	55'00	55'00	6'25	20,37,223	37,040	3,14,834	1,63,831	1,51,003	15'45	8'04	7'41	90		
XXXIX	Darjeeling-Himalayan	51'00	51'00	10'12	28,50,547	55,893	5,76,436	3,43,541	2,32,895	20'22	12'05	8'17	217		
XL	Dibru-Sadiya	78'00	78'00	6'99	56,75,818	72,767	5,14,266	3,37,306	1,76,960	9'66	5'94	3'12	127		
XLI	Thaton Duzinzak	8'00	8'00	5'89	4,48,083	56,010	33,773	19,458	14,315	7'53	4'34	3'19	81		
LINES OWNED BY NATIVE STATE AND WORKED BY COMPANIES.															
XLVI	The Gaekwar's Dabhoi	71'66	65'83	11'01	17,37,574	24,247	1,95,027	1,20,457	74,570	11'22	6'93	4'29	57		
XLVII	The Gaekwar's Mehsana	27'73	27'73	3'34	9,19,835	33,171	59,241	35,933	23,308	6'44	3'91	2'53	41		
LINES OWNED AND WORKED BY NATIVE STATES.															
LII	Jodhpore	124'00	124'00	5'39	22,73,338	18,333	3,70,826	1,74,634	1,96,192	16'31	7'68	8'63	58		
LIII	Bhavnagar-Gondal-Junagarh-Forbandar	329'16	333'25	6'54	1,64,45,102	49,961	15,71,788	9,71,521	6,00,267	9'56	5'91	3'65	91		
LIV	Morvi	94'00	94'00	3'37	19,96,988	21,245	2,95,227	2,07,677	87,550	14'78	10'40	4'38	60		
	Total and average	6,607'75	6,508'10	8'52	46,22,69,431	69,959	4,79,05,749	2,67,59,506	2,11,46,243	10'36	5'79	4'57	141		
	Total and average, Guaranteed and Assisted	3,462'07	3,618'39	23'29	53,69,92,876	1,55,107	6,85,06,638	3,39,97,917	3,45,08,721	12'76	6'33	6'43	363		
	Total and average, State	12,883'47	12,473'86	11'24	1,51,02,63,453	1,17,225	13,64,40,782	6,73,82,632	6,90,58,150	9'03	4'46	4'57	209		
	GRAND TOTAL AND AVERAGE	16,345'54	16,092'25	13'79	1,04,72,56,329	1,25,209	20,49,47,420	10,13,80,549	10,35,66,871	10'01	4'95	5'06	244		

(a) Excludes interest on capital during construction (R10,90,014).

(b) Calculated on the amount paid by the State for the purchase of the line and subsequent expenditure incurred thereon.

(c) Includes the amount received for working the Pondicherry railway, the expenses of which are included with those of the South Indian railway.

(d) Calculated upon 67 miles, including 12 miles of the Bareilly-Pilibhit State railway worked over by the Rohilkhand-Kumaun railway.

APPENDIX D.

Indian Railways constructed and in progress on 31st March 1891.

INDEX.

Name of Railway.	Classification.	Serial No.	Name of Railway.	Classification.	Serial No.
Amráoti	Line owned by Native State and worked by Company	XLIII	Madras	Line worked by Guaranteed Company	XXXIV
Amritsar-Pathánekot	State Line worked by the State	XVIII	Máyavaram-Mutupet	State Line worked by Company	XVI
Bengal and North-Western*	State Line worked by Company	III	Míanwáli-Mari	State Line worked by the State	XXIX
Bengal Central*	State Line worked by the State	XXII	Morvi	Line owned and worked by Native State	LIV
Benga'-Nágpur	State Line worked by Company	V	Mu Valley	State Line worked by the State	XXXI
Bezváda Extension	State Line worked by Company	XIII	Nalháti	State Line worked by the State	XXIII
Bhávnapur-Gondal-Junágarh-Parbandar	Line owned and worked by Native States	LIII	Nílgeri	Assisted Company	XLIA
Bhopal-Itársi	Line owned by Native State and worked by Company	XLIV	Nizam's Guaranteed State.	Line owned by Native State and worked by Company	XLV
Bombay, Baroda and Central India	Line worked by Guaranteed Company	XXXIII	North Western	State Line worked by the State	XVII
Burma	State Line worked by the State	XXVI	Oudh and Rohilkhand	State Line worked by the State	XX
Cherra-Companyganj	State Line worked by the State	XXIV	Patna Gya	State Line worked by Company	II
Darjeeling-Himalayan	Assisted Company	XXXIX	Pondicherry	Foreign Line	LVII
Delhi-Umballa-Kalka	Assisted Company	XXXV			
Deoghur	Assisted Company	XXXVII			
Dhond-Manmád	State Line worked by Company	X	Rájpura-Bhátinda	Line owned by Native State and worked by State Railway agency	L
Díbru-Sadiya	Assisted Company	XL	Rajputana-Malwa	State Line worked by Company	VIII
East Coast	State Line worked by the State	XXX	Rohilkhand-Kumaun, (Company's Section)	Assisted Company	XXXVIII
Eastern Bengal	State Line worked by the State	XXI	Rohilkhand-Kumaun (Lucknow-Bareilly Section).	State Line worked by Company	IV
East Indian	State Line worked by Company	I	Sind-Pishin (Chaman Extension).	State Line worked by the State	XXVIII
Gaekwar's Dabhoi	Line owned by Native State and worked by Company	XLVI	Southern Mahratta	State Line worked by Company	XI
Gaekwar's Mehsána	Line owned by Native State and worked by Company	XLVII	Southern Mahratta (Mysore Section).	State Line worked by Company	XII
Gaekwar's Petlád	Line owned by Native State and worked by Company	XLVIII	South Indian	State Line worked by Company	XIV
Godhra-Rutlam	State Line worked by Company	XV			
Great Indian Peninsula	Line worked by Guaranteed Company	XXXII	Tárákeshwar	Assisted Company	XXXVI
Hyderabad-Umakot	State Line worked by the State	XXIXA	Thatón-Duyinzáik	Assisted Company	XLI
Indian Midland	State Line worked by Company	VI	Tirhoot	State Line worked by Company	III
Jammu and Kashmir	Line owned by Native State and worked by State Railway agency	LI	Toungoo-Mandalay	State Line worked by the State	XXVII
Jodhpore	Line owned and worked by Native State	LII			
Jodhpore-Bikanir	Line owned and worked by Native State	LV	Wardha Coal	State Line worked by Company	IX
Jorhát	State Line worked by the State	XXV	West of India Portuguese.	Foreign Line	LVI
Khámgaon	Line owned by Native State and worked by Company	XLII			
Kolhápúr	Line owned by Native State and worked by Company	XLIX			

* Although for convenience classed among the State Railways, this line is the property of the Bengal and North-Western Railway Company. Bengal Central Railway

APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total Mileage.	Date of opening for public traffic.
1	<p>East Indian— Miles.</p> <p>STANDARD GAUGE.</p> <p><i>Main line—</i></p> <p>Howrah to Khána Junction 74½</p> <p>Khána Junction to Luckeeserai Junction 250½</p> <p>Luckeeserai Junction to Allahabad 303½</p> <p>Allahabad to Delhi 390½</p> <p style="text-align: right;">1,018½</p> <p><i>Chord line—</i></p> <p>Khána Junction to Sítarámpur Junction 62½</p> <p>Sítarámpur Junction to Luckeeserai Junction 123½</p> <p style="text-align: right;">186½</p> <p><i>Branches—</i></p> <p>Bhadreswar Junction (17½ miles from Howrah) to the river bank (<i>Bhadreswar branch</i>) 2½</p> <p>Hooghly Junction (23½ miles from Howrah) to Naihati on the Eastern Bengal State railway (<i>Hooghly bridge branch</i>) 4½</p> <p>Ondál Junction (41½ miles from Khána Junction on the Chord Line) to Toposi (<i>Singharon branch</i>) 7½</p> <p>Sítarámpur Junction (62½ miles from Khána Junction on the Chord Line) to Barákar (<i>Barákar branch</i>) 5½</p> <p>Madhupur Junction (108½ miles from Khána Junction on the Chord Line) to Kurhurbaree Collieries (<i>Kurhurbaree branch</i>) 26½</p> <p>Tinpahár Junction (194½ miles from Howrah <i>via</i> the Loop Line) to Rajmehal (<i>Rajmehal branch</i>) 7½</p> <p>Jamálpur Junction (297½ miles from Howrah <i>via</i> the Loop Line) to Monghyr (<i>Monghyr branch</i>) 5½</p> <p>Mokameh Junction (282 miles from Howrah <i>via</i> the Chord Line) to the river bank (<i>Mokameh branch</i>) 2½</p> <p>Bankipore Junction (337½ miles from Howrah <i>via</i> the Chord Line) to Junction with the Patna-Gya State railway (<i>Gya State railway branch</i>) ½</p> <p>Carried over 62½ 1,205</p>	<p>Miles.</p> <p><i>Main line—</i></p> <p>Howrah to Hooghly 15-8-54* 23½</p> <p>Hooghly to Pundooah 1-9-54* 14½</p> <p>Pundooah to Khána Junction 3-2-55* 36½</p> <p>Khána Junction to River Adjai 3-10-58 19</p> <p>River Adjai to Sainthia 3-9-59 25½</p> <p>Sainthia to Tinpahár 15-10-60 76½</p> <p>Tinpahár to Bhágalpur 1-11-61 69½</p> <p>Bhágalpur to Jamálpur 10-2-62 32½</p> <p>Jamálpur to Luckeeserai 17-11-62 28½</p> <p>Luckeeserai to Dinapore 17-11-62* 82</p> <p>Dinapore to Moghal Sarai 22-12-62* 125½</p> <p>Moghal Sarai to Mirzapur 1-1-64 39½</p> <p>Mirzapur to south bank, Jumna 4-4-64 52½</p> <p>Jumna Bridge to Allahabad 15-8-65 3</p> <p>Allahabad to Cawnpore 3-3-59 119½</p> <p>Cawnpore to Etáwah 1-7-61 86½</p> <p>Etáwah to Shikohabad 13-11-61 34½</p> <p>Shikohabad to Tándla Junction 1-4-62 22½</p> <p>Tándla Junction to Aligarh 1-3-63 48½</p> <p>Aligarh to Chola (Bulandshahr Road) 1-4-64 35½</p> <p>Chola to Delhi (S. Bank Jumna) 1-8-64 41½</p> <p>Delhi Terminus 1-1-67 1½</p> <p style="text-align: right;">1,018½</p> <p><i>Chord line—</i></p> <p>Khána Junction to Raneegunge 3-2-55* 46</p> <p>Raneegunge to Siátsol 21-7-63* 1½</p> <p>Siátsol to Sítarámpur 1-1-65* 15½</p> <p>Sítarámpur to Luckeeserai Junction 1-1-71* 123½</p> <p style="text-align: right;">186½</p> <p><i>Branches—</i></p> <p>Bhadreswar branch 6-12-82 2½</p> <p>Hooghly bridge branch 15-3-87* 4½</p> <p>Singharon branch—</p> <p>Ondál to Babasole 1-5-64 2</p> <p>Babasole to Mangalpur 1-1-63 2½</p> <p>Mangalpur to Toposi 2-2-63 2½</p> <p>Barákar branch 1-1-65 5½</p> <p>Kurhurbaree branch 1-1-71 26½</p> <p>Rajmehal branch 15-10-60 7½</p> <p>Monghyr branch 10-4-62 5½</p> <p>Mokameh branch 1-5-83 2½</p> <p>Gya State railway branch 2-6-79 ½</p> <p style="text-align: right;">62½</p> <p>Carried over { 1,205 62½</p>	

* These are the dates of opening the original single line which has

D—continued.

WAYS

on 31st March 1891.

LINES

Companies.

Details of construction.	REMARKS.																
<p>The earthwork and bridges generally are for a double line, except the superstructure of iron bridges. The line was originally laid almost entirely with wooden sleepers; but cast-iron plate sleepers have been since introduced, and these, as well as wooden sleepers, are used for renewals. The rails vary in weight from 74lbs to 82lbs per yard. The line is double from Howrah to Moghal Sarai.</p> <p>The Singharon branch is a single line throughout. The rails are laid on transverse timber sleepers and cast-iron bowl and plate sleepers.</p> <p>The Kurhurbaree branch is constructed for a single line. The width of formation in the embankments is 16 feet. On the Jubbulpore branch the land and earthwork are for a double line, but only one track is laid. The bridges and viaducts are also for a double line, but in girder bridges and viaducts the girders on the down side have not been erected. On the first 54 miles, rails, 82lbs to the yard, have been used; the rest of the line has rails 74lbs to the yard. The rails are generally laid on wooden sleepers of creosoted fir and sal.</p> <p>The rest of the branches are laid with a single track, but the formation generally is for a double line. The rails are laid on wooden cross-sleepers.</p> <p>The length of road laid with an additional sleeper per pair of rails is 1,974 miles, leaving 10·15 miles of very short branches which it is not considered necessary to provide with additional sleepers.</p> <p>The length of road relaid with steel rails up to the 31st December 1890 was 1,150·71 miles, as follows:—</p> <table> <thead> <tr> <th></th> <th>Miles.</th> </tr> </thead> <tbody> <tr> <td>Howrah District</td> <td>179·10</td> </tr> <tr> <td>Chord Line</td> <td>267·50</td> </tr> <tr> <td>Dinapore District</td> <td>207·29</td> </tr> <tr> <td>Allahabad „</td> <td>321·00</td> </tr> <tr> <td>Delhi „</td> <td>175·82</td> </tr> <tr> <td></td> <td><hr/></td> </tr> <tr> <td></td> <td>1,150·71</td> </tr> </tbody> </table>		Miles.	Howrah District	179·10	Chord Line	267·50	Dinapore District	207·29	Allahabad „	321·00	Delhi „	175·82		<hr/>		1,150·71	<p>The experimental line from Howrah to Raneeunge was commenced in January 1851. The first section, 23½ miles, was opened on 15th August 1854.</p> <p>The Chord line was commenced in February 1866, and was opened on 1st January 1871. This line diminishes the distance between Howrah and the Upper Provinces by 64 miles.</p> <p>The commencement of work on the Hooghly bridge branch (4½ miles) was sanctioned on the 14th January 1884. The bridge was completed and opened for traffic on 15th March 1887.</p> <p>The Jubbulpore branch was commenced under contract in February 1863, and was completed in 3½ years.</p> <p>There is a branch, ¾ of a mile, from Patna (331½ miles from Howrah <i>via</i> the Chord Line) to the Ganges bank, which is treated as a siding in the mileage returns. It is laid with two tracks on wooden cross-sleepers, and was opened on 17th November 1882.</p> <p>The Mokameh branch was originally only 1½ miles in length, and was used for goods traffic only. When the terminus of the Tirhoot State railway was changed from opposite Barh to opposite Mokameh, this branch was extended about ¾ths of a mile and opened to passenger traffic on 1st May 1883.</p> <p>The branch from Bankipore to Digha Ghát has been constructed to connect by a ferry across the Ganges with the Bengal and North-Western railway at Paleza Ghát near Sonapore. Sanction to construction was given on 30th July 1884, and the branch was opened to traffic on the 2nd April 1885.</p> <p>A branch line, 5 miles in length, has been made by the Alipur Coal Company, connecting their collieries with the East Indian railway at mile 144½.</p> <p>A branch line of railway has been constructed by the Beerbhoom Coal Company from their colliery at Borraah to a point on the East Indian railway. It was opened for coal traffic at the end of February 1885.</p> <p>The east Indian railway was acquired by the State from the late Guaranteed Company on 1st January 1880.</p> <p>On the 1st of January 1889 the Dildárnagar-Gházípur State railway was incorporated with the East Indian railway.</p> <p>The Gwalior branch (Sindia State railway), formerly worked by the East Indian railway, was acquired by the Indian Midland Railway Company on 1st March 1889, and is now worked by that Company.</p> <p>The East Indian Railway Company works under agreement the State branch to Gya; also the Tarakeshwar and the Delhi-Umballa-Kalka railways. The terms on which these branch lines are worked will be found in Appendices J, N and H, Part II of the Railway Administration Reports for 1883-84, 1887-88 and 1888-89, respectively.</p>
	Miles.																
Howrah District	179·10																
Chord Line	267·50																
Dinapore District	207·29																
Allahabad „	321·00																
Delhi „	175·82																
	<hr/>																
	1,150·71																

since been doubled. For dates of opening the double lines. see p. xviii.

APPENDI
RAI
Constructed and in progre.
STATI
Worked b

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
I	<p>East Indian—concl'd. Brought forward . 62½ 1,205</p> <p>STANDARD GAUGE.</p> <p><i>Branches—concl'd.</i></p> <p>Bankipore Junction (337½ miles from Howrah <i>via</i> the Chord Line) to Digha Ghát (<i>Digha Ghát branch</i>) . 5½</p> <p>Dildárnagar (433 miles from Howrah <i>via</i> the Chord Line on the East Indian railway) to Tári Ghát on the Ganges opposite Gházipur . 12</p> <p>Naini Junction (559½ miles from Howrah <i>via</i> the Chord Line, or 4½ miles east of Allahabad) to Jubbulpore (<i>Jubbulpore branch</i>) . 223½</p> <p>Allahabad Junction (564½ miles from Howrah <i>via</i> the Chord Line) to Fort (<i>Allahabad Fort branch</i>) . 2½</p> <p>Cawnpore Junction (684½ miles from Howrah <i>via</i> the Chord Line) to the corn market in the city (<i>Cawnpore City branch</i>) . ½</p> <p>Túndla Junction (827½ miles from Howrah <i>via</i> the Chord Line) to Agra (<i>Agra branch</i>) . 13½</p> <p>TOTAL . 320½</p>	1,525½	<p>Brought forward . 1,205</p> <p>62½</p> <p><i>Branches—concl'd.</i></p> <p>Dígha Ghát branch . 2-4-85 5½</p> <p>Dildárnagar to Gházipur . 5-10-80 12</p> <p>Jubbulpore branch . 1-8-67 223½</p> <p>Allahabad Fort branch . 3-3-59 2½</p> <p>Cawnpore City branch . 15-2-79 ½</p> <p>Agra branch . 1-4-62 13½</p> <p>320½</p> <p><i>Double—Main line and branches.</i></p> <p>Howrah to Serampore . 10-3-57 11½</p> <p>Serampore to Chandernagore . 1-2-58 8½</p> <p>Chandernagore to Hooghly . 1-5-58 3½</p> <p>Hooghly to Magra . 1-10-58 5½</p> <p>Magra to Pundooah . 25-2-59 8½</p> <p>Pundooah to Burdwan . 1-10-59 28½</p> <p>Burdwan to Khána . 1-1-59 8½</p> <p>Khána to Durgapur . 1-6-70 31½</p> <p>Durgapur to Raneegunge . 2-9-70 14½</p> <p>Raneegunge to Sítarámpur . 19-12-70 16½</p> <p>Sítarámpur to Luckeeserai . 1-1-71 124½</p> <p>Luckeeserai to Burhee . 22-6-70 9½</p> <p>Burhee to Barh . 22-2-68 27</p> <p>Barh to Futwah . 1-11-68 25½</p> <p>Futwah to Dinapore . 20-3-67 19½</p> <p>Dinapore to Bihta . 13-8-68 10½</p> <p>Bihta to Arrah . 28-3-70 13½</p> <p>Arrah to Buxar . 13-8-68 42½</p> <p>Buxar to Dildárnagar . 15-4-82 22½</p> <p>Dildárnagar to Zamánia . 20-5-82 8½</p> <p>Zamánia to Sakaldiha . 20-9-82 16½</p> <p>Sakaldiha to Moghal Sarai . 10-8-82 11½</p> <p>Hooghly bridge branch . 15-3-87 4½</p> <p>TOTAL DOUBLE LINE . 474½</p> <p>TOTAL OPEN MILEAGE . 1,525½</p>
II	<p>Patna-Gya—</p> <p>STANDARD GAUGE.</p> <p>Bankipore (337½ miles from Howrah, on the Main Line of the East Indian railway) to Gya . 57½</p>	57½	<p>Bankipore to Jehanabad . 21-4-79 28</p> <p>Jehanabad to Gya . 2-6-79 29½</p> <p>TOTAL OPEN MILEAGE . 57½</p>

D—continued.

WAYS

on 31st March 1891.

LINES

Companies.

Details of construction.	REMARKS.
<p>The first 29 miles of the line are laid with rails, 64 lbs per yard, on the existing metalled road, with deviations in places. For the remainder a new alignment has been adopted.</p>	<p>This line was constructed by the State. The survey was carried out under orders issued by the Government of Bengal in April 1877, and the construction was commenced on 13th February 1878.</p> <p>The line was worked by State Agency from the date of opening up to 1st January 1883, on which date the working was made over to the East Indian Railway Company. The terms of the agreement will be found in Appendix J, Part II of the Railway Administration Report for 1883-84.</p>

APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
III	Tirhoot— METRE GAUGE.		
	<i>Main line—</i> Semaria Ghát on the opposite bank of the Ganges, 4 miles below Mokameh, to Bettiah	145½	<i>Main line—</i> Semaria to Dalsinghsarai . . . 1-5-83 22½ Dalsinghsarai to Samastipur . . . 1-11-75 14½ Samastipur to Mozufferpore . . . 24-2-77 32 Mozufferpore to Motiharee . . . 1-2-83 49½ Motiharee to Bettiah 20-12-83 29 <hr/> 145½
	<i>Eastern branch—</i> Samastipur to Bháptiáhi 76½ Bháptiáhi to Pratápganj 14 Pratápganj to Khanwa Ghát 8 <hr/> 98½	98½	<i>Eastern branch—</i> Samastipur to Durbhunga . . . 1-11-75 23 Durbhunga to Jhanjharpur . . . 1-2-83 24 Jhanjharpur to Ghoghardiha— For goods traffic . . . 8-4-86 } For passenger traffic . . . 6-5-86 } 13 Ghoghardiha to Nirmala— For goods traffic . . . 8-4-86 } For passenger traffic . . . 1-11-86 } 6½ Nirmala to Bháptiáhi— For goods traffic . . . 15-11-87 } For passenger traffic . . . 1-1-88 } 10 Bháptiáhi to Pratápganj— For goods traffic . . . 1-10-88 } For passenger traffic . . . 1-1-89 } 14 Pratápganj to Khanwa Ghát 14-11-90 8 <hr/> 98½
	<i>Bairagnia branch—</i> Durbhunga to Bairagnia 57 <hr/> 57	57	<i>Bairagnia branch—</i> Durbhunga to Sitamarhi— For goods traffic . . . 1-7-90 } For passenger traffic . . . 1-11-90 } 42 <i>Sitamarhi to Riga—</i> For goods traffic . . . 1-1-91 6 <hr/> 48
	<i>Hajeepore branch—</i> Mozufferpore to Hajeepore . . . 33½ Anwarpur to Sonepore (Gunduk bridge) 3½ <hr/> 36½	36½	<i>Hajeepore branch—</i> Mozufferpore to Hajeepore .26-10-84 33½ Anwarpur to Sonepore— For goods traffic . . . 1-8-87 } For passenger traffic . . . 25-4-87 } 3½ <hr/> 36½
	TOTAL	338½	TOTAL OPEN MILEAGE . 329½
	Bengal and North-Western*— METRE GAUGE.		
	<i>Main line—</i> Sonopore opposite Patna, <i>via</i> Chupra, Sewan, and Gorakhpur, to Bahraich 273½ Bahraich to Naipálganj Road . . . 33½ <hr/> 307	307	<i>Main line—</i> Sonopore to Mankapur . . . 15-1-85 218½ Mankapur to Bahraich . . . 2-4-84 55 Bahraich to Naipálganj Road 15-12-86 33½ <hr/> 307
	Carried over	307	Carried over 307

* Although for convenience classed among the State Railways, this line is the property of the Bengal and North-Western Railway Company.

D—continued.

WAYS

on 31st March 1891.

LINES

Companies.

Details of construction.	REMARKS.
<p>The line is laid partly with iron rails, 40lbs. to the yard, and partly with steel rails, 41½lbs. to the yard, on transverse sleepers of sal, deodar, Denham-Olpherts' and Denham's iron sleepers. The country through which the line passes is easy.</p> <p>The line is fenced throughout with wire and stone posts.</p> <p><i>Bairagnia branch—</i> This branch is laid with second-hand iron rails, 60lbs. to the yard, received from the North Western railway. The sleepers used on it are of pynkado wood from Burma.</p>	<p>The Tirhoot line was started in February 1874 for the relief of famine, and was opened for grain traffic in April of that year, from the Ganges bank opposite Barh to Durbhunga. It was closed during the rainy season and opened again in November, and was permanently opened for public traffic on the 1st November 1875. The construction of the line from Dalsinghsarai to Semaria was sanctioned on the 3rd February 1882 in consequence of the silting up of the river Ganges and the formation of a bar opposite Barh. On the opening of this line the route <i>via</i> Bajitpur and the Barh branch was closed.</p> <p>The survey for the permanent line was ordered on the 8th December 1874, and its construction on 6th January 1876.</p> <p>With the opening of the section from Pratápganj to Khanwa Ghát, the construction of the Kosi extension project was brought to completion.</p> <p>The Gunduk bridge connects the Tirhoot State railway with the Bengal and North-Western railway. The working of this railway was transferred from State Agency to the Bengal and North-Western Railway Company from the 1st July 1890, from which date the two railways have been worked as one undertaking. The terms of working will be found in Appendix L, Part II of the Railway Administration Report for 1890-91.</p>
<p>The country traversed is generally flat, but being subject in many places to inundation, heavy banking has at these places been necessary. Between Kopa Sambota and Sonopore, and Gorakhpur and Maghar, the banking is especially heavy. As the line crosses the drainage of the country between the Gunduk and Gogra rivers, the bridging is in places heavy, and the Rapti bridge has been a difficult and expensive undertaking; on the Uska Bazar branch, the works, both earth work and bridging, are heavy.</p>	<p>The survey for this line was ordered on the 5th March 1881. The construction of the line was sanctioned on the 18th May 1882.</p> <p>From the 1st January 1883 it was handed over to a Limited Liability Company, with a free gift of land, but no guarantee.</p> <p>The line is connected with the Tirhoot State railway by means of the Gunduk bridge between Sonopore and Hajeepore, sanctioned on 19th October 1883.</p>

APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.		Date of opening for public traffic.	
		Miles.	Miles.		Miles.
III	Bengal and North-Western—concl'd. Brought forward METRE GAUGE.		307	Brought forward	307
	<i>Branches—</i>			<i>Uska Bazar branch—</i>	
	Gorakhpur to Uska Bazar (<i>Uska Bazar branch</i>)	39½		Gorakhpur to Uska Bazar . 15-12-86	39½
	Mankapur to Nawábganj and Ajodhya (<i>Ajodhya branch</i>)	20			
	Sonepore to Bunwárchak (<i>Loop line</i>)	9½		<i>Ajodhya branch—</i>	
	Chupra to Revelganj (<i>Revelganj branch</i>)	7		Mankapur to Nawábganj . 2-4-84	14
				Nawábganj to Ajodhya . 1-12-84	6
					20
	Gonda to Bahramghát (<i>Bahramghát branch</i>)	31½	107½	<i>Loop line—</i>	
				Sonepore to Bunwárchak . 15-1-85	9½
			TOTAL OPEN MILEAGE	375½	
	TOTAL		414½		
IV	Rohilkhand-Kumaun (Lucknow-Bareilly section)— METRE GAUGE.			<i>Lucknow—Gola Gokaran Náth section—</i>	
	<i>Lucknow-Gola Gokaran Náth section—</i>			Lucknow to Sitapur . 15-11-86	55½
	Lucknow (209 miles from Moghal Sarai, on the Oudh and Rohilkhand railway) to Sitapur, Kheri and Gola Gokaran Náth	104½		Sitapur to Lakhimpur . 15-4-87	28½
				Lakhimpur to Gola Gokaran Náth 15-12-87	21½
	<i>Gola Gokaran Náth—Pilibhit section—</i>				104½
	Gola Gokaran Náth to Pilibhit	58			
	<i>Dudwa branch—</i>			<i>Pilibhit-Bareilly section—</i>	
	Mailáni (118 miles from Lucknow) to Dudwa	26		Pilibhit to Bhojeepera . 15-11-84	24
				Bhojeepera to Bareilly . 12-10-84	12
	<i>Pilibhit-Bareilly section—</i>				36
Pilibhit to Bareilly (355 miles from Moghal Sarai, on the Oudh and Rohilkhand railway)	36	224½	TOTAL OPEN MILEAGE	140½	

D—continued.

WAYS

on 31st March 1891.

LINES

Companies.

Details of construction.	REMARKS.
<p>The line is laid with 41½ lbs steel rails on sleepers of sál and creosoted pine.</p> <p>The line is generally unfenced except in front of villages, and on each side of level-crossings, and near stations.</p>	<p>On the 1st November 1884, the Company took over the bridge-of-boats at Fyzabad from Government and removed it to the railway ferry at Ajodhya. During the rains this bridge is lifted and the ferry worked by a steamer.</p> <p>The branch from Gorakhpur to Uska Bazar, 39½ miles, was sanctioned on the 3rd August 1885, in substitution of a branch from Gorakhpur to Bánsi, 36 miles.</p> <p>During 1888 a preliminary survey was made for a branch line from Chupra to Revelganj, and the construction of the line was sanctioned by the Government of India in November 1889.</p> <p>The construction of the Gonda-Bahramghát branch was sanctioned in November 1889.</p> <p>Communication across the Ganges between Digha Ghát Station of the East Indian railway and Paleza Ghát Station of the Bengal and North-Western railway is maintained by means of a steam ferry.</p> <p>The working of the Tirhoot State railway was taken over by the Bengal and North-Western Railway Company from the 1st July 1890. The terms of working will be found in Appendix L. Part II of the Railway Administration Report for 1890-91.</p>
<p>The country traversed is flat, and there have been no engineering difficulties. Up to mile 99, 28 chains, 28 feet, the line is laid with 41½ lbs steel rails, and beyond that point with 56 lbs iron rails.</p> <p>The only bridge of any magnitude is that over the Gumti at Lucknow.</p> <p>The line is laid for a single track with 41½ lbs steel rails on sál sleepers.</p> <p>The line has been laid for a single track with 41½ lbs steel rails on deodar and sál sleepers. It is ballasted throughout, and fenced for the first 4½ miles from Bareilly; the remainder is unfenced.</p>	<p>The sanction of the Secretary of State to commencement of the work was received on the 8th October 1884, and orders for construction issued on the 13th November 1884.</p> <p>The line from Gola Gokaran Náth to Pilibhit was sanctioned by the Government of the North-Western Provinces and Oudh on 27th December 1889.</p> <p>Orders for the construction of the first 4½ miles from Bareilly were issued on the 17th March 1882, and for the remaining portion of the line on the 24th February 1883. The point of junction with the Rohilkhand-Kumaun Railway Company's system has been established at Bhojeepura, 12 miles from Bareilly.</p> <p>The Lucknow-Gola Gokaran Náth section and the Pilibhit-Bareilly section which were previously worked by the Oudh and Rohilkhand railway and by the Rohilkhand Kumaun Railway Company, respectively, were made over, together with the Gola Gokaran Náth-Pilibhit section, to the latter Company on the 1st January 1891. These sections now form one line, called the Lucknow-Bareilly section of the Rohilkhand Kumaun railway. The terms of working will be found in Appendix M, Part II of the Railway Administration Report for 1890-91.</p>

APPENDIX
RAIL

Constructed and in progress

STATE

Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
V	Bengal-Nágpur—		
	STANDARD GAUGE.		METRE GAUGE.
	<i>Main line—</i>		
	Ásansol (131½ miles from Howrah, on the Chord Line, East Indian railway) to Biláspur	371½	Nágpur to Tumsar— for goods traffic 6-4-80 } for passenger traffic— Nágpur to Kamptee (9 miles) 26-7-80 } 53 Kamptee to Tumsar (44 miles) 8-11-80 }
	Biláspur to Nágpur (519½ miles from Bombay, on the Nágpur Branch of the Great Indian Peninsula railway)	255½	Dowháli Junction to Tirora 21-2-81 13 Tirora to Gondia 18-5-81 18 Gondia to Amgaon 25-11-81 14 Amgaon to Ráj-Nándgaon— for goods traffic 16-12-82 } for passenger traffic 7-2-83 } 51
		627	Total mileage now converted to Standard gauge 145½*
			STANDARD GAUGE.
	<i>Main line—</i>		
	Ásansol to Damoodur— for coal traffic 12-6-89 } for passenger and goods traffic 15-12-89 } 4½		Damoodur to Purulia 15-12-89 42½
	Purulia to Chakardharpore— for goods traffic 22-1-90 } for passenger traffic 1-4-90 } 72		Chakardharpore to Goilkera— for goods traffic 15-5-90 } for passenger traffic 28-3-91 } 20½
	Goilkera to Sambalpur Road— for goods traffic 1-2-91 } for passenger traffic 28-3-91 } 104½		Sambalpur Road to Raigarh— for goods traffic 20-4-90 } for passenger traffic 1-8-90 } 44½
	Raigarh to Biláspur— for goods traffic 10-2-90 } for passenger traffic 24-3-90 } 82½		Biláspur to Raipur— for goods traffic 10-1-89 } for passenger traffic 14-2-89 } 68½
			Raipur to Ráj-Nándgaon 4-12-88 42 Ráj-Nándgaon to Nágpur 27-11-88 145½
	<i>Branches—</i>		627
	From (Damoodur) a point at 4.88 miles from Ásansol Junction to the mines of the Equitable Coal Company (<i>Sanctoria Coal branch</i>) Biláspur to Katni (<i>Katni branch</i>)	7 197½	<i>Sanctoria Coal branch—</i> Damoodur to the Sanctoria Coal Mine— for coal traffic 12-6-89 7 <i>Katni branch—</i> Biláspur to Birsinghpur— for goods traffic 1-2-91 } for passenger traffic 9-3-91 } 142½ Birsinghpur to Umaria— for goods traffic 11-5-90 } for passenger traffic 9-3-91 } 18½ Umaria to Katni 2-11-86 36½
		204½	204½
	TOTAL	831½	TOTAL OPEN MILEAGE 831½

* Excludes the branch line from Dowháli to Tumsar (3½ miles) which has been abandoned.

D—continued

WAYS

on 31st March 1891.

LINES

Companies.

Details of construction.	REMARKS.
<p>The old metre-gauge line from Nágpur to Ráj Nándgaon was constructed with rails, weighing 40lbs. per yard, laid on creosoted pine, sál, and teakwood sleepers. It has been converted to the standard gauge. This has necessitated the rebuilding of many bridges, the changing of girders and the flattening of curves.</p> <p>The rails are 75lbs. steel, flat-footed, laid on transverse steel sleepers. Owing to the large number of tributaries of the Mahanadi river, which the line crosses, the amount of bridging in the first 220 miles out of Raj-Nándgaon is exceptionally heavy.</p> <p>The Umaria-Katni section is laid with second-hand East Indian railway permanent-way on sál sleepers; 82lbs. rails along three-fourths of the distance, and 74lbs. rails along the remainder. The ruling gradient is 1 in 100. The curves are of 1,910 feet in radius and upwards. Earthwork is heavy, there being much rock-cutting. The only noteworthy bridge is over the Mahanadi which separates the Central Provinces from Rewah. This bridge consists of 4 spans of 100 feet, one of 80 feet, and one of 40 feet.</p>	<p>Sanction for construction of the standard-gauge line was received in July 1884, and orders were at once issued for the acquisition of land and commencement of earthwork. Owing to the negotiations for the formation of a Company to construct and work this line not having been completed, and to financial pressure, work had to be suspended in 1885, with the exception of the acquisition of land and preparation of estimates.</p> <p>In 1887 the Bengal-Nágpur Railway Company was formed under contract with the Secretary of State, and took over the metre-gauge Nágpur-Chhattisgarh State railway, which existed from Nágpur to Ráj-Nándgaon (149 miles). Of this length, 145½ miles have been converted to the standard gauge, and the Tumsar branch, 3½ miles, has been abandoned.</p> <p>The system extends from Ásansol on the East Indian Railway to Nágpur, the eastern terminus of the Great Indian Peninsula railway, with a branch (160½ miles) northwards from Biláspur to the Umaria Coal mines, where it joins the line from Umaria to Katni. There is another branch, 7 miles, from near Ásansol to the mines of the Equitable Coal Company.</p> <p>The Umaria-Katni line was taken over by the Company on the 1st April 1888.</p> <p>The dates of orders for survey and construction of the original metre-gauge line are as follows:—</p> <p style="text-align: center;"><i>Dates for survey.</i></p> <p>Nágpur to Dongargarh, 4th February 1871. Extension from Dongargarh, 11th September 1880.</p> <p style="text-align: center;"><i>Dates for construction.</i></p> <p>Nágpur to Dongargarh, 9th May 1878. Dongargarh to Ráj-Nándgaon, 15th March 1881.</p> <p>The line was opened through for goods traffic on 1st February 1891 and for passenger traffic on 28th March 1891. The tunnel at Saranda at mile 484 from Nágpur is, however, not yet ready, and at this place the traffic is being carried over a temporary diversion, about 1½ miles in length.</p> <p>The section from Ásansol to Goilkera, now worked by the East Indian railway, will be taken over by the Bengal-Nágpur Railway Company from 1st July 1891.</p>

APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
VI	Indian Midland— Miles.	Miles.	Miles.
	STANDARD GAUGE.		
	<i>Main line—</i>		<i>Main line—</i>
	Bhopal (57 miles from Itársi on the Bhopal-Itársi State railway) to Jhánsi	180½	Bhopal to Jhánsi 1-1-89 180½
	Jhánsi <i>via</i> Gwalior to Agra Cantonment	135	Jhánsi to Gwalior 1-3-89 60½
		315½	Gwalior to Hetampur 20-12-79 32½
			Hetampur to Dholpur 15-5-81 8½
			Dholpur to Agra Cantonment 10-1-78 33½
			315½
	<i>Branches—</i>		<i>Branches—</i>
	Jhánsi to Mánikpur (617½ miles from Howrah on the Jubbulpore Line of the East Indian railway) (<i>Mánikpur branch</i>)	180½	<i>Mánikpur branch—</i>
	Jhánsi to Cawnpore transfer sidings (684½ miles from Howrah on the East Indian railway) (<i>Cawnpore branch</i>)	135½	Jhánsi to Mau Ranipur 5-6-89 40
	Bína (143 miles from Itársi on the main line) to Saugor (<i>Saugor branch</i>)	46½	Mau Ranipur to Bándá 1-8-89 78½
		361½	Bándá to Mánikpur 15-2-89 62
			180½
			<i>Cawnpore branch—</i>
			Jhánsi to Chaunrah 1-2-88 95
			Chaunrah to Cawnpore 1-4-86 40½
			135½
			<i>Saugor branch—</i>
			Bína to Saugor 5-6-89 46½
	TOTAL	677½	TOTAL OPEN MILEAGE 677½
VII	Bhopal-Itársi (British section)—See No. XLIV		

D—continued.

WAYS

on 31st March 1891.

LINES

Companies.

Details of construction.	REMARKS.																																																													
<p>The main line and branches are constructed for a single line, with flat-footed steel rails, 80 lbs. to the yard, and oval pot sleepers, weighing 80lbs. each bowl, excepting the line from Cawnpore to the south bank of the Jumna river near Kálpi where the rails are 75 lbs. per yard, double-headed, on Denham-Olpherts' sleepers, with 20 feet width formation. There were no engineering difficulties on this section.</p> <p>From Bhopal to Jhánsi the ruling grade is 1 in 200; the chief bridges are—</p> <table border="1"> <thead> <tr> <th></th> <th>Spans.</th> <th>Feet.</th> </tr> </thead> <tbody> <tr> <td>Betwa (Makrari)</td> <td>9</td> <td>of 150</td> </tr> <tr> <td>Narain</td> <td>4</td> <td>„ 150</td> </tr> <tr> <td>Bína</td> <td>4</td> <td>„ 150</td> </tr> <tr> <td>Keotan</td> <td>5</td> <td>„ 100</td> </tr> <tr> <td>Newan</td> <td>8</td> <td>„ 60</td> </tr> <tr> <td>Betwa (Bhilsa)</td> <td>4</td> <td>„ 100 & 5 of 75.</td> </tr> </tbody> </table> <p>From Jhánsi to Gwalior the ruling grade is 1 in 150 with heavy rock cuttings in the Antri Pass and a bridge of 9 spans of 100 feet and 1 of 60 feet over the Sindh river.</p> <p>From Jhánsi to Mánikpur the ruling grade is 1 in 125; the principal bridges are—</p> <table border="1"> <thead> <tr> <th></th> <th>Spans.</th> <th>Feet.</th> </tr> </thead> <tbody> <tr> <td>Betwa (Sujanpura)</td> <td>13</td> <td>of 150 & 1 of 60</td> </tr> <tr> <td>Dhassan (Mau)</td> <td>13</td> <td>„ 100</td> </tr> <tr> <td>Ken</td> <td>1</td> <td>„ 250 & 12 of 100</td> </tr> <tr> <td>Bagain</td> <td>8</td> <td>„ 100</td> </tr> <tr> <td>Barwa</td> <td>1</td> <td>„ 100 & 4 of 40</td> </tr> <tr> <td>Paisuni</td> <td>4</td> <td>„ 100</td> </tr> <tr> <td>Ohan</td> <td>1</td> <td>„ 100 & 4 of 40.</td> </tr> </tbody> </table> <p>The Jumna bridge at Kálpi, 10 spans of 250 feet, is the only important work between Cawnpore and Jhánsi. It was finished in November 1887. The piers and abutments are built of sufficient width to take a second line of rails.</p> <p>The ruling grade on the Bína-Saugor branch is 1 in 100. The only important works on this length are the heavy cutting at Bahhát and the Dhassan bridge (4 spans of 100 feet).</p> <p>The line is fenced throughout, except on the Jhánsi-Mánikpur section, between Bándá and Jhánsi.</p> <p>The late Sindia State railway which has been taken over by the Indian Midland Railway Company extends from Agra Cantonment to Gwalior, and is laid with rails 60lbs per yard on transverse deodar sleepers. The principal work on this section is the bridge over the Chambal river.</p>		Spans.	Feet.	Betwa (Makrari)	9	of 150	Narain	4	„ 150	Bína	4	„ 150	Keotan	5	„ 100	Newan	8	„ 60	Betwa (Bhilsa)	4	„ 100 & 5 of 75.		Spans.	Feet.	Betwa (Sujanpura)	13	of 150 & 1 of 60	Dhassan (Mau)	13	„ 100	Ken	1	„ 250 & 12 of 100	Bagain	8	„ 100	Barwa	1	„ 100 & 4 of 40	Paisuni	4	„ 100	Ohan	1	„ 100 & 4 of 40.	<p>On the 2nd October 1885, the Indian Midland Railway Company, Limited, entered into a contract with the Secretary of State for the construction of this line, which embraces the original projects for the Bhopal-Jhánsi-Cawnpore, the Jhánsi-Gwalior and the Jhánsi-Mánikpur railways with the section from Bína to Saugor of the Biláspur-Itáwa State railway.</p> <p>The contract also provides for the possible extension from Saugor to a point on the East Indian railway at or near Katni.</p> <p>Work was started on the several sections of the Indian Midland railway on the dates given below:—</p> <table border="1"> <tbody> <tr> <td>Cawnpore-Kálpi section</td> <td>Oct. 1884</td> </tr> <tr> <td>Kálpi-Jhánsi section</td> <td>Jan. 1886</td> </tr> <tr> <td>Bhopal-Bhílsa section</td> <td>Mar. 1886</td> </tr> <tr> <td>Bhílsa-Básoda section</td> <td>Apl. 1886</td> </tr> <tr> <td>Jhánsi-Lalitpur section</td> <td>May. 1886</td> </tr> <tr> <td>Básoda-Lalitpur section</td> <td>June 1886</td> </tr> <tr> <td>Jhánsi-Gwalior section</td> <td>Aug. 1886</td> </tr> <tr> <td>Bína-Saugor section</td> <td>Aug. 1887</td> </tr> </tbody> </table> <p>The Jhánsi-Mánikpur section was originally sanctioned on 23rd August 1883, but work was stopped on 31st March 1885. A revised estimate was sanctioned on 25th January 1886, and work was resumed about that date.</p> <p>On the 1st January 1889 the Indian Midland Railway Company took over the working of the Bhopal-Itársi State railway. The terms on which this line is being worked have only been provisionally settled <i>Vide</i> page 147 of Part II of the Railway Administration Report for 1889-90.</p> <p>Under the provisions of the contract, the Indian Midland Railway Company has acquired the Sindia State railway and worked it from 1st March 1889. The supplementary contract for the transfer of this line is printed as Appendix H to Part II of the Railway Administration Report for 1890-91.</p>	Cawnpore-Kálpi section	Oct. 1884	Kálpi-Jhánsi section	Jan. 1886	Bhopal-Bhílsa section	Mar. 1886	Bhílsa-Básoda section	Apl. 1886	Jhánsi-Lalitpur section	May. 1886	Básoda-Lalitpur section	June 1886	Jhánsi-Gwalior section	Aug. 1886	Bína-Saugor section	Aug. 1887
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D—continued.

WAYS

on 31st March 1891.

LINES

Companies.

Details of construction.	REMARKS.																																														
<p>The line is constructed for a single track. Sufficient land has been taken up to admit of another track being laid hereafter if necessary.</p> <p>The rails originally used were 36lbs. and 40lbs. per yard, laid on transverse deodar and creosoted pine sleepers. The 36lbs. iron rails have nearly all been replaced by 41½lbs. steel rails. For future renewals, it has been decided to still further increase the weight of rails to a 50-lb section which has already been used in relaying certain lengths.</p> <p>The pine sleepers, which are perishing very fast, are being renewed with good deodar sleepers.</p> <p>The chief works on the Rajputana line are the Bánganga, Shallas, Dhúnd, Amanishah and Jumna bridges, and the descent of the Aravalli Range west of Ajmere.</p>	<p>The dates of orders for survey and construction are as follows:—</p> <p style="text-align: center;"><i>Dates for survey.</i></p> <table border="0"> <tr><td>Delhi and Agra to Nusseerabad</td><td>17-5-69</td></tr> <tr><td>Ajmere to Ahmedabad</td><td>1-11-72</td></tr> <tr><td>Khandwa to Indore</td><td>8-4-70</td></tr> <tr><td>Indore to Neemuch</td><td>6-3-71</td></tr> <tr><td>Neemuch to Nusseerabad</td><td>3-11-71</td></tr> <tr><td>Rewári to Hissar</td><td>10-3-81</td></tr> <tr><td>Hissar to Ferozepore</td><td>13-9-81</td></tr> </table> <p style="text-align: center;"><i>Dates for construction</i></p> <table border="0"> <tr><td>Delhi-Rewári section and Salt branch</td><td>1-3-70</td></tr> <tr><td>Rewári to Bándikui</td><td>14-8-72</td></tr> <tr><td>Agra to Phulera</td><td>20-10-7</td></tr> <tr><td>Phulera to Sámbar</td><td>8-4-73</td></tr> <tr><td>Phulera to Ajmere</td><td>9-4-73</td></tr> <tr><td>Ajmere to Nusseerabad</td><td>14-4-74</td></tr> <tr><td>Sámbar to Japog</td><td>14-7-75</td></tr> <tr><td>Ajmere to Nuseerabad</td><td>4-9-76</td></tr> <tr><td>Sámbar extension to Jhowra and extension of Japog siding</td><td>15-5-78</td></tr> <tr><td>Khandwa to Indore</td><td>8-1-72</td></tr> <tr><td>Indore to Rutlam, with branch to Ujjain</td><td>29-10-73</td></tr> <tr><td>Rutlam to Neemuch</td><td>5-10-77</td></tr> <tr><td>Neemuch to Nusseerabad</td><td>30-4-79</td></tr> <tr><td>Rewári to Hissar</td><td>13-9-81</td></tr> <tr><td>Hissar to Ferozepore</td><td>8-10-82</td></tr> <tr><td>Extension of Ujjain branch to Ujjain City</td><td>6-12-82</td></tr> </table>	Delhi and Agra to Nusseerabad	17-5-69	Ajmere to Ahmedabad	1-11-72	Khandwa to Indore	8-4-70	Indore to Neemuch	6-3-71	Neemuch to Nusseerabad	3-11-71	Rewári to Hissar	10-3-81	Hissar to Ferozepore	13-9-81	Delhi-Rewári section and Salt branch	1-3-70	Rewári to Bándikui	14-8-72	Agra to Phulera	20-10-7	Phulera to Sámbar	8-4-73	Phulera to Ajmere	9-4-73	Ajmere to Nusseerabad	14-4-74	Sámbar to Japog	14-7-75	Ajmere to Nuseerabad	4-9-76	Sámbar extension to Jhowra and extension of Japog siding	15-5-78	Khandwa to Indore	8-1-72	Indore to Rutlam, with branch to Ujjain	29-10-73	Rutlam to Neemuch	5-10-77	Neemuch to Nusseerabad	30-4-79	Rewári to Hissar	13-9-81	Hissar to Ferozepore	8-10-82	Extension of Ujjain branch to Ujjain City	6-12-82
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<p>The principal works on the Holkar railway are the ascent of the Vindhya Range, and the bridge over the Nerbudda River. The latter consists of 14 spans of 60 metres. The works generally are heavy.</p>	<p>The Maharaja Holkar lent the British Government 100 lakhs of rupees, at 4½ per cent. per annum, for the construction of the Khandwa-Indore section, and is entitled to a moiety of surplus profits.</p>																																														
<p>With the exception of the bridging, the works on the Sindia-Neemuch section are light.</p>	<p>The Maharaja Sindia lent the British Government 75 lakhs, at 4 per cent. per annum, for the construction of the Indore-Neemuch section and the branch to Ujjain.</p>																																														

APPENDIX
RAIL

Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
VIII	Rajputana-Malwa—concl'd.	Miles.	Miles.
	Brought forward	242½	713½
	METRE GAUGE.		
	MALWA SECTION—concl'd.		
	Main line—concl'd.		
	Neemuch to Ajmere	150½	
	Ujjain branch—		
	Fatehabad Junction (24½ miles from Indore) to Ujjain	12	
	Extension of Ujjain branch across the Sipra river to Ujjain City	2½	
		14½	
			407½
	CAWNPORE-ACHNERA SECTION.		
	Main line—		
	Cawnpore (683½ miles from Howrah, via the Chord line, on the East Indian railway) to Farukhabad	86½	
	Farukhabad to Háthras road Junction	101½	
	Háthras road Station (856½ miles from Howrah, on the East Indian railway) to the left bank of the Jumna opposite Muttra	29	
	Jumna bridge and approaches Right bank of the Jumna at Muttra to Achnera, a station on the Rajputana section, 16 miles from Agra	21½	
		239½	
	Branches—		
	Mandhana to Brahmávar (Brahmávar branch)	5	
Kásganj (153½ miles from Cawnpore City) to Soron (Soron branch)	9		
Muttra to Brindaban (Brindaban branch)	7½		
	21½		
		261	
REWÁRI-FEROZEPURE RAILWAY.			
Main line—			
Rewári (51½ miles from Delhi, via Hissar, Sirsa, Bhatinda and Faridkot) to Ferozepore	250½		
Fázilka branch—			
Kot Kapúra (212½ miles from Rewári) to Fázilka	50		
		290½	
		(a) 1,672½	
TOTAL			
			Miles.
Brought forward			713½
MALWA SECTION—concl'd.			242½
Main line—concl'd.			
Neemuch to Nimbahera	10-3-81	16½	
Nimbahera to Chitor	19-3-81	18	
Chitor to Nusseerabad	1-12-81	101	
Nusseerabad to Ajmere	14-2-76	14½	
		393	
Ujjain branch—			
Fatehabad to Ujjain	3-8-75	12	
Ujjain Branch extension across Sipra river to Ujjain City	1-3-84	2½	
		14½	
Total Malwa section		407½	
CAWNPORE-ACHNERA SECTION.			
Main line—			
Cawnpore to Kanauj	15-12-80	49½	
Kanauj to Farukhabad	1-2-81	36½	
Farukhabad to Kásganj	14-4-84	67½	
Kásganj to Háthras	1-7-84	34	
Háthras to Muttra	19-10-75	29	
Jumna bridge	1-7-84	1	
Muttra to Achnera	7-11-81	21½	
		239½	
Branches—			
Brahmávar branch	10-11-85	5	
Soron branch	4-1-85	9	
Brindaban branch	20-8-89	7½	
		21½	
Total Cawnpore-Achnera section		261	
REWÁRI-FEROZEPURE.			
Main line—			
Rewári to Hissar—			
for goods traffic	20-3-83	89	
for passenger traffic	1-5-83		
Hissar to Sirsa—			
for goods traffic	1-7-84	50½	
for passenger traffic	1-3-84		
Sirsa to Ferozepore	1-10-84	101½	
		240½	
Fázilka branch—			
Kot Kapúra to Fázilka	1-1-85	50	
Total Rewari-Ferozepore railway		290½	
			(a) 1,672½
TOTAL OPEN MILEAGE			

(a) The actual length of the Rajputana-Malwa Railway is 1671.829 miles, the difference being due to the length of

D—continued.

WAYS

on 31st March 1891.

LINES

Companies.

Details of construction.	REMARKS.
<p>The Sipra bridge consists of 6 spans of 150 feet girders, State railway type, laid on masonry piers.</p> <p>The Cawnpore-Farukhabad section is constructed for a single track, and is laid with steel rails, 40lbs. to the yard.</p> <p>The line from Farukhabad to Háthras road has been laid with 41½lbs. Bessemer steel rails.</p> <p>The Háthras-Muttra line is laid for a single track, and for 22 miles borders on the metalled road. Rails, 30lbs. to the yard, were originally laid on transverse sleepers of deodar. There are no works of any magnitude on this section. It has been relaid with 41½lbs. steel rails.</p> <p>The bridge over the Jumna consists of 7 spans of 150 feet on stone piers.</p> <p>The Muttra-Achnera section has been laid with steel rails, 41½lbs. to the yard.</p> <p>No engineering difficulties were encountered on the Rewári-Ferozepore line.</p> <p>The country through which the length from Sirsa to Ferozepore runs is exceedingly easy; the line is at present unfenced.</p> <p>The Fázilka branch is laid with steel rails and Denham-Olpherts' and Molesworth's iron sleepers; the line is unballasted and unfenced, except at stations.</p>	<p>The orders for survey of the Cawnpore-Farukhabad section issued on 27th November 1877, and for construction on 13th October 1878.</p> <p>The construction of the extension from Farukhabad to Háthras road was sanctioned on 13th July 1882.</p> <p>The section from Cawnpore to Kanauj was opened in December 1880 for local traffic only, and the entire line for public traffic in February 1881, a temporary bridge over the Kali Nadi being provided. This temporary bridge was replaced by a permanent one in 1881.</p> <p>The construction of the Brahmávar branch was sanctioned on the 18th March 1884.</p> <p>The construction of the Soron branch was sanctioned on the 16th March 1883.</p> <p>The survey of the line from Háthras to Muttra was ordered on 2nd March 1874, and that from Muttra to Achnera on 5th March 1878. The construction of the former section was ordered in April 1874, of the latter in February 1880, and of the bridge over the Jumna in July 1882.</p> <p>The principal portion of the earthwork of the Muttra-Achnera section was carried out as a famine relief work in 1878.</p> <p>The construction of the Muttra-Brindaban branch as an integral part of the Cawnpore-Achnera section was sanctioned on 4th May 1888. Owing to delay in making over the land, construction work was not commenced till October 1888.</p> <p>The Cawnpore-Achnera line was leased to the Bombay Baroda and Central India Railway Company on 1st October 1886, and is now considered as a part of the Rajputana-Malwa railway.</p> <p>The Rajputana-Malwa State railway, of which, for the present, the Rewari-Ferozepore railway, with its branch is to be considered as an integral part, was leased to the Bombay, Baroda and Central India Railway Company from 1st January 1885 until 30th June 1900. The terms of working will be found in Appendix J., Part II of the Railway Administration Report for 1884-85.</p>

Branch lines shown in this statement having been taken from centres of stations instead of from the starting points.

APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
IX	<p>Wardha Coal— Miles.</p> <p style="text-align: center;">STANDARD GAUGE.</p> <p>Wardha (471 miles from Bombay, on the Nágpur branch of the Great Indian Peninsula railway) to Warora coal pit <u>46½</u></p>	46½	<p style="text-align: right;">Miles.</p> <p>Wardha to 18½ miles . . . 1-2-74 . 18½</p> <p>18½ to 41st mile (for coal traffic only) . . . 24-12-75 . 22½</p> <p>41st mile to Warora coal pit (for coal traffic only) . . . 26-4-76 . 5½</p> <p>18½ to 21st mile, for public traffic 16-6-77 . 0</p> <p>21st mile to Warora (45th mile) for public traffic . . . 7-11-77 . 0</p> <p style="text-align: right;">TOTAL OPEN MILEAGE . <u>46½</u></p>
X	<p>Dhond-Manmád—</p> <p style="text-align: center;">STANDARD GAUGE.</p> <p>Dhond (166½ miles from Bombay, on the South-East line of the Great Indian Peninsula railway) to Manmád (161½ miles from Bombay, on the North-East line of the Great Indian Peninsula railway) <u>145½</u></p>	145½	<p>Dhond to Ahmednagar . . . 15-3-78 . 50½</p> <p>Ahmednagar to Manmád . . . 17-4-78 . 95</p> <p style="text-align: right;">TOTAL OPEN MILEAGE . <u>145½</u></p>
XI	<p>Southern Mahratta—</p> <p style="text-align: center;">METRE GAUGE.</p> <p><i>Main line—</i> Portuguese Frontier near Dhárwár <i>viá</i> Guntakal and Nandyál to the Kistna River opposite Bezváda 511½</p> <p><i>Branches—</i> Hubli to Harihar (<i>Harihar branch</i>) 81½</p> <p>Gadag to Hotgi (<i>Bijápur branch</i>) 172½</p> <p style="text-align: right;">Carried over . 254½ <u>511½</u></p>		<p><i>Main line—</i> Frontier to Castle Rock . . . 3-2-88 . 3½</p> <p>Castle Rock to Deuli . . . 15-6-87 . 2½</p> <p>Deuli to Dhárwár . . . 24-1-87 . 56</p> <p>Dhárwár to Háspet . . . 1-7-85 . 101½</p> <p>Háspet to Bellary . . . 24-3-84 . 40½</p> <p>Bellary to Guntakal . . . 17-5-87 . 30½</p> <p>Guntakal to Nandyál . . . 11-7-87 . 90½</p> <p>Nandyál to Cumbum . . . 15-6-90 . 63½</p> <p>Cumbum to Tadépalli . . . 3-10-89 . 121½</p> <p>Tadépalli to Kistna Canal . . . 27-10-90 . 1½</p> <p style="text-align: right;">511½</p> <p><i>Harihar branch—</i> Hubli to Harihar (Temporary station) . . . 18-10-86 } 81½</p> <p>Temporary station to Permanent station . . . 21-2-89 } 0</p> <p><i>Bijápur branch—</i> Gadag to Hotgi— for goods traffic . . . 1-8-84 } 172½</p> <p>for passenger traffic . . . 15-9-84 } 0</p> <p style="text-align: right;">Carried over . 765½</p>

D—continued.

WAYS

on 31st March 1891.

LINES

Companies.

Details of construction.	REMARKS.																																																							
<p>The line is constructed for a single track. The first 21 miles are laid with Great Indian Peninsula rails, 68 lbs. per yard, and the remainder with iron rails, 67 lbs. to the yard. The rails on the first 18½ miles are laid principally on creosoted pine sleepers, and on the rest of the line on teak and sal sleepers.</p>	<p>This line was constructed to carry coal from the Warora mines to the Great Indian Peninsula Railway, and also for the benefit of Hinganghat, a great cotton mart. The orders for the survey of the line were issued on 3rd January 1870. Sanction for the construction of the first 18 miles was given on 5th February 1872, and for the remainder on 1st April 1874. The line has been worked and maintained by the Great Indian Peninsula Railway Company, from 1st January 1891. The terms of working will be found in Appendix I, Part II of the Railway Administration Report for 1890-91.</p>																																																							
<p>The line is constructed for a single track; the rails are double-headed steel, 70 lbs. to the yard, laid on iron pot sleepers, weighing 94 lbs. each. The line, as originally constructed, was unfenced, but fencing is being provided gradually.</p>	<p>The dates of orders for survey and construction are 18th March 1876 and 25th August 1877, respectively. The object of this Chord line is to connect the railway systems of Northern and Southern India without the necessity of ascending and descending the great barrier of the Western Ghats. The line was put in hand for famine relief purposes in 1877, and was laid throughout before the rains of 1878. The line is worked and maintained under agreement by the Great Indian Peninsula railway. The terms of working will be found in Appendix W of the Railway Administration Report for 1881-82.</p>																																																							
<p>The permanent-way is of the ordinary State railway metre gauge type. The line is only partially fenced. The following are the large girder bridges:—</p> <table border="0"> <thead> <tr> <th></th> <th style="text-align: center;">Spans.</th> <th style="text-align: center;">Feet.</th> </tr> </thead> <tbody> <tr> <td colspan="3"><i>Main line—</i></td> </tr> <tr> <td>Tungabhadra river</td> <td style="text-align: center;">38</td> <td style="text-align: center;">of 60</td> </tr> <tr> <td>Borra Nalla</td> <td style="text-align: center;">10</td> <td style="text-align: center;">" 60</td> </tr> <tr> <td rowspan="3">Dorabavi Viaduct</td> <td style="text-align: center;">{ 1</td> <td style="text-align: center;">" 250</td> </tr> <tr> <td style="text-align: center;">{ 2</td> <td style="text-align: center;">" 150</td> </tr> <tr> <td style="text-align: center;">{ 1</td> <td style="text-align: center;">" 66½</td> </tr> <tr> <td colspan="3"><i>Harihar branch—</i></td> </tr> <tr> <td>Wardha river</td> <td style="text-align: center;">15</td> <td style="text-align: center;">of 100</td> </tr> <tr> <td>Tungabhadra river</td> <td style="text-align: center;">16</td> <td style="text-align: center;">" 60</td> </tr> <tr> <td colspan="3"><i>Bijapur branch—</i></td> </tr> <tr> <td>Bhima river</td> <td style="text-align: center;">14</td> <td style="text-align: center;">of 150</td> </tr> <tr> <td>Don river</td> <td style="text-align: center;">8</td> <td style="text-align: center;">" 100</td> </tr> <tr> <td>Kistna river</td> <td style="text-align: center;">21</td> <td style="text-align: center;">" 150</td> </tr> <tr> <td>Malprabha river</td> <td style="text-align: center;">12</td> <td style="text-align: center;">" 100</td> </tr> <tr> <td colspan="3"><i>Poona branch—</i></td> </tr> <tr> <td>Kistna</td> <td style="text-align: center;">14</td> <td style="text-align: center;">of 150</td> </tr> <tr> <td>Jugnoor Nalla</td> <td style="text-align: center;">11</td> <td style="text-align: center;">" 30</td> </tr> <tr> <td>Ghatprabha</td> <td style="text-align: center;">45</td> <td style="text-align: center;">" 40</td> </tr> </tbody> </table>		Spans.	Feet.	<i>Main line—</i>			Tungabhadra river	38	of 60	Borra Nalla	10	" 60	Dorabavi Viaduct	{ 1	" 250	{ 2	" 150	{ 1	" 66½	<i>Harihar branch—</i>			Wardha river	15	of 100	Tungabhadra river	16	" 60	<i>Bijapur branch—</i>			Bhima river	14	of 150	Don river	8	" 100	Kistna river	21	" 150	Malprabha river	12	" 100	<i>Poona branch—</i>			Kistna	14	of 150	Jugnoor Nalla	11	" 30	Ghatprabha	45	" 40	<p>The line from Hotgi, <i>via</i> Bijapur and Bagalkot to Gadag, was commenced as a famine relief work in April 1879. Work on this section and the Bellary-Hubli one was again started by Government in November 1881, but from the 1st October 1882 the system was made over to the Southern Mahratta Railway Company. The Bellary branch of the Madras railway from Bellary to Guntakal was made over to the Southern Mahratta Railway Company on the 1st February 1887, and was converted from broad to metre gauge on the 16th May 1887. The Bellary-Kistna railway was sanctioned for construction on the 26th September 1883. It was made over to the Southern Mahratta Railway Company on 1st January 1888.</p>
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APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
XI	Southern Mahratta—concl'd.		
	Brought forward . 254½ 511½		Brought forward . 765½
	METRE GAUGE.		
	Londa to Poona (Ghorepuri) (Poona branch) 278		<i>Poona branch—</i>
	532½	1,043½	Londa to Belgaum 21-3-87 33
			Belgaum to Miraj 22-12-87 85½
			Miraj to Koregaon 2-5-87 76
			Koregaon to Ghorepuri 18-11-86 82½
			Ghorepuri to Poona 4-10-90 1.
			278
			<i>Total Southern Mahratta 1,043½</i>
XII	MYSORE SECTION.		MYSORE SECTION.
	Mysore <i>via</i> Bangalore to Gubbi 140		Mysore to Mandya 25-2-82 27½
	Gubbi to Harihar 155½		Mandya to Chennapatna 20-3-81 23½
	Mysore to Nanjangúd 15½		Chennapatna to Bangalore 1-2-81 34½
	Bangalore to Mysore frontier 54	365	Bangalore to Tumkur 11-8-84 43
			Tumkur to Gubbi 26-12-84 11½
			Gubbi to Birur 12-8-89 76½
			Birur-Harihar 21-2-89 79
			<i>Total Mysore section 295½</i>
	TOTAL 1,408½		TOTAL OPEN MILEAGE 1 339½
XIII	Bezváda extension—		
	STANDARD GAUGE.		
	Hyderabad Frontier to Bezváda 21½	21½	Hyderabad Frontier to Bezváda 10-2-89 . 21½

D—continued.

WAYS

on 31st March 1891.

LINES

Companies.

Details of construction.	REMARKS.
<p><i>Main line—</i> The following are the tunnels on this line :— Bear's Rock 471 feet. Castle Rock 1,242 „ Nulla-Mulla Hills 1,569 „ The Ghât incline for 3½ miles from the Portuguese Frontier has been constructed for a double line up to formation level. The maximum gradient on the Ghât incline is 1 in 40, and on the rest of the line 1 in 100. On the Bellary-Kistna section, which is now included in the Southern Mahratta railway, main line, the ruling gradient is 1 in 100. A tunnel, 523 yards in length, occurs at the Nulla-Mulla Hills, the pass through which is 20 miles long, and comprises several heavy works. The rest of the line presents no difficulty.</p> <p>No works of special engineering difficulty occur on the Mysore section. The line has been laid for a single track with rails, 41½ lbs. per yard, spiked to wooden sleepers partly of creosoted pine and partly of teak, the width of formation being 14 feet. The sleepers on the Bangalore-Tumkur section are of creosoted pine. The road on the Tumkur to Gubbi length is fairly ballasted, and the permanent-way well laid: it has no steeper gradients than 1 in 100, nor curves sharper than 3,000 feet radius.</p>	<p>The dates of orders for survey and construction of the Mysore railway are as follows:— <i>Date for survey.</i> 1st April 1870. <i>Dates for construction.</i> Mysore line, 20th September 1877. Tumkur line, 6th October 1882. Tumkur to Gubbi, 18th January 1884.</p> <p>Earthwork between Bangalore and Chennapatna, 35 miles, was commenced for relief purposes during the famine of 1877-78. The transfer of the Mysore railway to the Southern Mahratta Railway Company was effected on the 1st July 1886. The terms of working will be found in Appendix L, Part II, of the Railway Administration Report for 1887-88.</p>
<p>The line runs through an open and fairly level country mainly composed of black cotton soil. It is constructed for a single track, and is laid with 66½ lbs. steel rails on pea-pod sleepers. There are no large bridges.</p>	<p>This line extends from the frontier of His Highness the Nizam's dominions to Bezvada. It is worked by the Nizam's Guaranteed State Railways Company as part of their system. For terms of working, see Appendix P, Part II, of the Railway Administration Report for 1889-90.</p>

APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
XIV	South Indian— METRE GAUGE.		MADRAS-TUTICORIN SECTION—
	MADRAS-TUTICORIN SECTION—		<i>Main line—</i>
	<i>Main line—</i>		Madras (Egmore) to Tindivanam 1-9-76
	Madras (Egmore) to Tuticorin 443½	443½	Tindivanam to Cuddalore 1-1-77
			Cuddalore to Porto Novo 1-7-77
			Porto Novo to Chidambaram 1-10-78
			Chidambaram to Coleroon 1-7-79
			Coleroon to Shiyáli 1-1-78
			Shiyáli to Májavaram 1-7-77
			Májavaram to Tanjore 15-2-77
			Tanjore to Trichinopoly Junction 11-3-62
			Trichinopoly to Madura 1-9-75
			Madura to Tuticorin 1-1-76
			443½
			<i>Branch—</i>
			Madras (Egmore) to Beach 1-1-79
			2½
			<i>Arkónam branch—</i>
			Chingleput to Wálajábád 1-8-80
			Wálajábád to Conjeeveram (new town) 1-1-81
		Conjeeveram (new town) to Arkónam 8-5-65	
		17½	
		39	
		<i>Pondicherry branch—</i>	
		Villupuram to Gingee River 16-12-79	
		16½	
		<i>Negapatam branch—</i>	
		Tanjore to Tiruvallúr 2-12-61	
		Tiruvallúr to Negapatam 15-7-61	
		14½	
		48	
		<i>Erode branch—</i>	
		Trichinopoly Junction to Fort 11-3-62	
		Trichinopoly Fort to Karúr 3-12-66	
		Karúr to Kodumudi 1-7-67	
		Kodumudi to Erode 1-1-68	
		23½	
		87½	
		<i>Tinnevelly branch—</i>	
		Maniyáchi to Tinnevelly 1-1-76	
		18½	
		654½	
		Total Madras-Tuticorin section 654½	
		VILLUPURAM-GUNTAKAL SECTION—	
		<i>Main line—</i>	
		Villupuram (98½ miles from Madras on the South Indian railway) <i>via</i> Dharmavaram to Guntakal (275½ miles from Madras, on the North-West line, Madras railway) 338	
		338	
		Carried over 338	
		654½	
		VILLUPURAM-GUNTAKAL SECTION—	
		<i>Main line—</i>	
		Villupuram to Tiruvannámalai 17-11-90	
		Tiruvannámalai to Pákala 18-3-91	
		95	
		137½	
		Carried over 137½	
		654½	
		137½	

D—continued.

WAYS

on 31st March 1891.

LINES.

Companies.

Details of construction.	REMARKS.
<p>The old line from Negapatam to Erode, 167 miles, which was constructed on the standard gauge, was converted to metre gauge in sections and on dates as under:— Negapatam to Trichinopoly, June and July 1875; Trichinopoly to Karúr, July 1879; Karúr to Erode, December 1879.</p> <p>Earthwork and bridges are for a single way only, except from Negapatam to Trichinopoly, where the foundations and superstructure of bridges have been built for a double way. On the old line, between Negapatam and Erode, the rails weighing 68 lbs. to the yard, are laid partly on iron pots and partly on wooden sleepers.</p> <p>About 29 miles of the Negapatam branch have been renewed with 50 lbs. bull-headed rails on cast-iron pot sleepers, and on the Arkónam-Conjeeveram line, 17½ miles in length, the rails, weighing 35½ lbs. to the yard, have also been renewed with 50 lbs. bull-headed rails.</p> <p>The remainder of the system, which was laid with 40·3 lbs. rails on creosoted pine sleepers, is being gradually renewed with 50 lbs. bull-headed rails on cast-iron pot sleepers, 270 miles having been laid on the main line up to 28th February 1891. Five and a half miles of 40·3 lbs. rails are laid on steel transverse sleepers, and 6¼ miles on pot sleepers.</p>	<p>The line from Negapatam to Erode was commenced in May 1859 by the late Great Southern of India Railway Company, and was completed on the standard gauge. The line from Arkónam to Little Conjeeveram was commenced on the 11th March 1864 by the Indian Tramway Company under the subsidy system, and was completed on the 3' 6" gauge.</p> <p>A 3 per cent. guarantee, accorded on the 1st January 1868, was subsequently included in the contract entered into with the late Carnatic Railway Company for the extension to Cuddalore. The line was converted to the metre gauge in July 1878.</p> <p>On 1st July 1874 the above two undertakings were amalgamated under the title of the South Indian Railway Company, and the whole system is now on the metre gauge.</p> <p>The estimates for the extensions from Trichinopoly to Tinnevely and Tuticorin were sanctioned on the 2nd March 1872, and those for the sections from Madras to Cuddalore and Cuddalore to Tanjore on the 25th February 1873 and the 12th June 1874, respectively. Since the opening of the line throughout between Madras and Tuticorin this has become the main line, with branches to Arkónam, Pondicherry, Negapatam, Erode, and Tinnevely.</p> <p>The estimate for the connecting link between Chingleput and Conjeeveram, the earthwork of which was completed by famine labour, was sanctioned in November 1879.</p> <p>The estimate for the Villupuram-Gingee river section was sanctioned in May 1879.</p> <p>The increased waterways and pitched causeways considered necessary from the results of the floods of November 1884 have now been completed.</p> <p>On 1st January 1891 the South Indian railway was purchased by the Secretary of State and handed over, together with the Villupuram-Guntakal State railway, to a new Company, called the South Indian Railway Company (Limited), the whole now forming the South Indian railway system.</p>
<p>On the Villupuram-Guntakal section, the ruling gradient is $\frac{1}{100}$. The country traversed is moderately easy, but the waterways are considerable, and include bridges over the Cheyár, Palar, Chitrávati, and Pennér rivers. The rails are of steel flat-footed, 41½ lbs. to the yard, laid on steel transverse sleepers of the "pea-pod" pattern. Second class rails are being laid in sidings. The Madras railway is crossed by an overbridge, 1½ miles to the west of Katpadi station, where extensive junction arrangements are in progress.</p>	<p>This line is required for famine protection purposes of certain districts which suffered severely in 1876-78. The construction of the Nellore branch from Tirupati to Nellore was sanctioned on the 15th November 1883, but for want of funds the work was suspended in May 1885 and was not resumed until November 1885. The portion of the line (301 miles) from Villupuram to Dharmavaram and Tirupati was sanctioned in November 1888 and work was commenced in January 1889.</p>

APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XIV	<p style="text-align: right;">Miles.</p> <p style="text-align: right;">Brought forward . 338</p> <p>South Indian—concl'd.</p> <p style="text-align: center;">METRE GAUGE.</p> <p>VILLUPURAM-GUNTAKAL SECTION—concl'd.</p> <p>Branches—</p> <p>Pákala to Nellore (<i>Nellore branch</i>) . 108½</p> <p>Dharmavaram to Hindupur (<i>Hindupur branch</i>) 46</p> <hr style="width: 10%; margin-left: auto; margin-right: 0;"/> <p style="text-align: right;">TOTAL</p>	<p style="text-align: right;">Miles.</p> <p style="text-align: right;">654½</p> <p style="text-align: right;">492½</p> <hr style="width: 10%; margin-left: auto; margin-right: 0;"/> <p style="text-align: right;">1,147½</p>	<p style="text-align: right;">Miles.</p> <p style="text-align: right;">654½</p> <hr style="width: 10%; margin-left: auto; margin-right: 0;"/> <p style="text-align: right;">137½</p> <p>VILLUPURAM-GUNTAKAL SECTION—concl'd.</p> <p><i>Nellore branch</i>—</p> <p>Pákala to Tirupati 18-3-91 26</p> <p>Tirupati to Nellore 15-9-87 82½</p> <hr style="width: 10%; margin-left: auto; margin-right: 0;"/> <p style="text-align: right;">108½</p> <p><i>Total Villupuram-Guntakal section</i> 246½</p> <hr style="width: 10%; margin-left: auto; margin-right: 0;"/> <p style="text-align: right;">TOTAL OPEN MILEAGE 900½</p>
XV	<p>Godhra-Rutlam—</p> <p style="text-align: center;">STANDARD GAUGE.</p> <p>Godhra (318½ miles from Bombay, on the Bombay, Baroda and Central India railway) to Rutlam (337½ miles from Ahmedabad, on the Malwa Section of the Rajputana-Malwa railway)</p>	113	
XVI.	<p>Máyavaram-Mutupet—</p> <p style="text-align: center;">METRE GAUGE.</p> <p><i>Tiruvallúr-Mutupet section—</i></p> <p>Tiruvallúr (a station on the Negapatam Branch of the South Indian railway) to Mutupet 29</p>	29	
TOTAL STATE LINES WORKED BY COMPANIES		8,652½	8,063½

D—continued.

WAYS

on 31st March 1891.

LINES

Companies.

Details of construction.	REMARKS.
<p>From the junction of the Nellore branch with the main line to Pákala station, the line is double. On the Nellore branch the ruling gradient is 1 in 100. Although the country is comparatively flat, the crossing of the drainage, as it approaches the sea, has necessitated high banks and large waterways. The Madras railway is crossed by an overbridge near Rénigunta, where a large station has been built. The rails are of steel, flat-footed, 41½ lbs. to the yard, laid partly on Denham-Olpherts' sleepers, and partly on wrought steel trough or pea-pod sleepers. The largest bridge is one of 7 spans of 100 feet over the Rallayeroo river.</p>	<p>The length between Dharmavaram and Guntakal (63 miles) was sanctioned in June 1889 and work was commenced almost immediately. The construction of the line is being carried out principally by Government Engineers under the direction of the Chief Engineer, South Indian railway. The length between Dharmavaram and Hindupur was sanctioned on 25th January 1891. This section, together with that from Guntakal to Dharmavaram, comprises the project originally known as the Hindupur extension. The Company works under agreement the portion (7½ miles) on the Pondicherry branch, lying within French territory, and known as the Pondicherry railway. The terms of working will be found in Appendix Q, Part II of the Railway Administration Report for 1890-91.</p>
	<p>Sanction to the commencement of work was given on the 29th October 1890, in anticipation of sanction to the revised estimates, and work was immediately started on the first section of 25 miles out of Godhra. This line, when completed, is to be worked by the Bombay, Baroda and Central India Railway Company.</p>
<p>The line traverses an easy country, the ruling gradient being $\frac{1}{100}$. It is proposed to use the 41½ lbs. flat-footed steel rails, released by laying the Villupuram-Guntakal State railway sidings with 2nd class rails taken from the South Indian railway. Pynkado transverse sleepers are to be used.</p>	<p>The funds for the line are provided, in nearly equal proportions, by the Tanjore District Board from a special cess, and by the Madras Government from provincial funds. The construction of this railway was sanctioned on 18th June 1890, and the work was commenced immediately by the South Indian Railway Company, under their additional Powers Act, 1888. The survey of an extension from Mutupet to Adrampatam was sanctioned in November 1890.</p>

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.
<p>From Gháziabad to Phillour the earthwork and the bridge foundations and superstructure are for a single line. The original 60lbs. bull-headed iron (steel faced) rails on wooden and cast-iron round pot sleepers are being renewed with steel rails, 143 miles having been relaid with 68lbs. double-headed, and 34 miles with 75lbs. flat-footed steel rails up to 31st March 1891.</p> <p>On the Phillour-Amritsar section the earthwork from Amritsar to the Beas (26 miles) is for a double line, the rest is for a single line. The bridge foundations and superstructure are for a single line, with some exceptions.</p> <p>The original Delhi section bull-headed 60lbs. rails have been renewed with the bull-headed 68lbs. rails with the exception of some short lengths on bridges.</p> <p>From Phillour to Amritsar the rails are laid on wooden sleepers for 46 miles, and on cast-iron (oval and round) pots for 28 miles. On the Beas and East Bayn bridges (aggregating 1½ miles) the rails are flat-footed 70lbs. steel laid on longitudinal timbers.</p> <p>From Amritsar to Lahore the earthwork and bridges are for a single line; 18½ miles have been relaid with bull-headed 68lbs. steel rails, of which 11¼ miles are on cast-iron pots and 7¼ miles on wooden sleepers; of the remaining 13¾ miles of the old Punjab section 68lbs. rails, 7 miles have been relaid with 75lbs. flat-footed rails on wooden sleepers, and the renewal of the remaining 6¾ miles is in progress.</p> <p>The line from Lahore to Pesháwar is constructed for a single track. From Lahore to the 25th mile the old flat-footed 60lbs. iron rails have been replaced by the double-headed 75lbs. steel rails on wooden sleepers, with the exception of ½ mile, from ½ to 1st mile, which has been relaid with 75lbs. flat-footed rails on wooden sleepers.</p> <p>From the 25th mile to Gujrát the rails are 75lbs. flat-footed steel, with the exception of the station-yards of Kámoke, Gujránwála, Ghakkar and Wazirabad, where the rails are of iron 60lbs. flat-footed, also excepting three lengths, making up 4¾ miles (which includes the Alexandra bridge) where flat-footed 62lbs. steel rails are used; the sleepers throughout are wooden.</p> <p>From Gujrát to Pesháwar the rails are flat-footed 62lbs. steel, with the exception of isolated lengths, making up 10¼ miles of double-headed 64lbs. steel rails, and 1 mile of 72lbs. double-headed, and 40.3 miles of 75lbs. flat-footed steel rails. The whole length is laid with wooden sleepers, except 1 mile (272-273) which is laid on cast-iron pots.</p> <p>The chief works on the Lahore-Pindi section are the bridges over the Ravi, Chenab, Jhelum and Sohan; the passage through the Salt Range north of the Jhelum; the heavy engineering works in the hilly districts between Jhelum and Ráwalpindi, where the original $\frac{1}{10}$ grades are now being improved to $\frac{1}{100}$; and the Taraki quarry.</p> <p>The chief works on the Pindi-Pesháwar section are the Indus (Attock) and Haro bridges, and the tunnels at the Margala pass and Indus approach.</p>	<p>The first period of the contract with the Sind, Punjab and Delhi railway having expired, the State assumed charge of the undertaking on the 1st January 1886, and amalgamated it with the Punjab Northern, the Indus Valley, the Sind-Sagar, and the Southern section of the Sind-Pishin State railways, to be worked as one Imperial system under the name of the North Western railway.</p> <p>The section from Gháziabad to Amritsar (first called the Delhi, and subsequently incorporated in the late Sind, Punjab and Delhi railway) was commenced early in 1864 under a system of petty contracts. On the 3rd May 1865 Messrs. Brassey & Co. entered into a contract for the construction of the line in five years. Of the entire length, 191¾ miles are in the Punjab, and 112 in the North Western Provinces.</p> <p>The line was opened out from both ends towards the Sutlej bridge. The completion of the Sutlej bridge caused an extra year to be added to the term of the contract, and delayed an earlier completion of the line.</p> <p>The section from Amritsar to Lahore was commenced on 8th February 1859.</p> <p>The Delhi section of the late Sind, Punjab and Delhi railway suffered during 1871 and 1872 considerable damage at the Beas, the Sutlej, and elsewhere, necessitating interruption to through communication for some time. The section between Amritsar and Jullundur also suffered severely during the floods of 1875.</p> <p>In August 1876 two piers of the Sutlej bridge were carried away, and through communication was not re-established till the middle of December.</p> <p>In August 1878 the line was again considerably damaged, and through communication stopped until 3rd October.</p> <p>In 1886 the line between Umballa and the Jumna river (mile 225) was much damaged by floods resulting in through communication being interrupted for three weeks.</p> <p>Again in 1887 heavy floods between Sirhind and Umballa resulted in through communication being interrupted for a week.</p> <p>The dates of orders for survey and construction of the Lahore-Pesháwar section are as follows:—</p> <p style="text-align: center;"><i>Dates for survey.</i></p> <p>Jhelum to Ráwalpindi, 8th November 1864. Ráwalpindi to Khusálgarh, September 1879. Lála Músa to Miani Junction, September 1877. Jhelum to Ráwalpindi, for improvement of grades, February 1885.</p> <p style="text-align: center;"><i>Dates for construction.</i></p> <p>Lahore to Jhelum 2-10-69 Jhelum to Ráwalpindi 17-9-77 Lála Músa to Miani Junction 24-7-78 Ráwalpindi to Khusálgarh Sept. 79 Ráwalpindi to Pesháwar 3-10-79 Miani Junction to Jhelum River 4-3-81 Miani Junction to Bhera 25-10-81 Miani Junction to Khewra 27-1-82 Wazirabad to Siálkot 19-4-83</p>

APPENDI
RAI
Constructed and in progre
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Worked t

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles
XVII	North Western—contd.		
	Brought forward . 613½		Brought forward . 613½
	STANDARD GAUGE.		
	MAIN LINE AND BRANCHES (COMMERCIAL)— <i>contd.</i>		MAIN LINE AND BRANCHES (COMMERCIAL)— <i>contd.</i>
	<i>Sialkot branch—</i>		<i>Sialkot branch—</i>
	Wazirabad to Sialkot 26½		Wazirabad to Sialkot 1-1-84 26½
	<i>Main line—</i>		<i>Main line—</i>
	Lahore to Khanpur 355½		Lahore to Mooltan 27-4-55 208 Mooltan to Muzaffarabad Junc- tion 21-8-70 7 Muzaffarabad Junction to Khan- pur 1-7-78 140½ <u>355½</u>
	Carried over 995½		Carried over 995½

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.
<p>The line from Wazirabad Junction to Siálkot is constructed for a single track. The rails are flat-footed iron, 60lbs. to the yard, spiked to transverse wooden sleepers.</p> <p>From Lahore to Ráewind the earthwork and bridges are for a single track.</p> <p>From Ráewind south distant signal to Muzaffarabad Junction (189½ miles) the earthwork and bridges are for a single line. The Punjab section double-headed 68lbs. iron rails have been in parts (making up 15½ miles) replaced with double-headed 68lbs. and flat-footed 75lbs. and 62lbs. steel rails, and in addition, 55 miles are being replaced with 75lbs. flat-footed steel rails, and the work is nearly completed; 91½ miles will be laid on round pots, 27½ miles on oval pots, 2½ miles on steel trough, and 67½ miles on wooden sleepers, when the renewals now in progress and almost complete are finished.</p> <p>Muzaffarabad to Khánpur (140½ miles) is constructed for a single track. The line was originally laid with flat-footed iron rails, 60lbs. to the yard, but 19½ miles have been replaced with 62lbs. and 67½ miles with 75lbs. steel flat-footed rails; the sleepers throughout are wooden, except on the 67½ miles, laid with 75lbs. flat-footed steel rails, where steel transverse sleepers have been used.</p> <p>On 1st January 1889 Muzaffarabad Junction was closed, and Sher Shah Junction was opened in connection with the Sind-Sagar loop.</p>	<p>Conversion of the Salt branch, afterwards designated the Sind-Sagar railway, eastern section, from metre to standard gauge . . . 27-11-84 Grades, Jhelum to Domeli Nov. 86 „ Soháwa to Gujar Khan 18-4-89</p> <p>It was originally intended to construct the line from Lahore to Pesháwar (formerly known as the Punjab Northern State railway) on the standard gauge; but the metre gauge was subsequently adopted, and 103 miles, from Lahore to Jhelum, were constructed on this gauge previous to September 1873, the alignment being on the Grand Trunk road. At the end of 1873 it was decided to adopt a separate bank for the Railway, and in July 1874 orders were given for the standard gauge to be reverted to. Of the metre gauge line, 62 miles (from Lahore to Wazirabad) were opened for traffic on 12th April 1875, the alignment of the Grand Trunk road being adhered to, and a further section between Wazirabad and Naurungabad was opened on the 10th April 1876. This last section was laid upon the standard gauge embankment, and the works on the Grand Trunk road between the points mentioned were abandoned. The final conversion of the main line of railway between Lahore and Jhelum from metre to standard gauge was made on 6th October 1878, and the works on the Grand Trunk road between Lahore and Wazirabad were then removed or abandoned, and the road restored to its legitimate purposes.</p> <p>In August 1874 the first engine was run through from Shahdara (5 miles from Lahore) to Wazirabad, and the metre-gauge line to that place was opened for traffic on 12th April 1875, including the bridge over the Ravi. The standard gauge line to Jhelum was completed and opened in October 1878. The completion and opening of the Attock bridge on the 24th May 1883 supplied the last link in a continuous chain of railway communication from Calcutta to Pesháwar, a distance of 1,555 miles.</p> <p>The section from Lahore to Mooltan and Sher Shah (formerly, with the section from Amritsar to Lahore, called the Punjab railway) was commenced on 8th February 1859.</p> <p>The dates of orders for survey and construction of the section from Muzaffarabad Junction to Khánpur are 30th October 1869 and 8th November 1871, respectively. This line was also commenced as a metre-gauge railway, and works had been well advanced when orders were received to adopt the standard gauge.</p>

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.		Date of opening for public traffic.	
		Miles.	Miles.	Miles.	Miles.
XVII	North Western—(contd.)				
	Brought forward	995½		Brought forward	995½
	STANDARD GAUGE.				
	MAIN LINE AND BRANCHES (COMMERCIAL)— <i>concl'd.</i>			MAIN LINE AND BRANCHES (COMMERCIAL)— <i>concl'd.</i>	
	<i>Main line—</i>			<i>Main line—</i>	
	Khánpur to Rohri 131½			Khánpur to Rohri 1-7-78 131½	
	Rohri to Sukkur 3½			Rohri to Sukkur 27-3-89 3½	
	Sukkur to Kotri 224½			Sukkur to Rádhan 1-10-78 78½	
		359½		Rádhan to Laki 27-10-78 71	
				Laki to Kotri 8-10-78 75	
					359½
	Kotri to Kurrachee Cantonment 102½			Kotri to Kurrachee Cantonment 13-5-61 102½	
	Kurrachee Cantonment to Kurrachee City 2½			Kurrachee Cantonment to Kurrachee City 13-5-61 2½	
	Kurrachee City to Kiámári (including Napier Mole line) 3½			Kurrachee City to Kiámári (<i>vid</i> Napier Mole line) for goods traffic 16-6-89 3½	
		108			108
	<i>Meean Meer chord line*—</i>				
	Meean Meer East to Meean Meer West* 2				
	<i>Ferozepore branch—</i>			<i>Ferozepore branch—</i>	
	Ráewind to Ganda Singhwála 23			Ráewind to Kasúr 15-4-83 16	
	Ganda Singhwála to Ganda Singh Bandar 2½			Kasúr to Ganda Singhwála 10-6-83 7	
	Ganda Singh Bandar to Ferozepore Cantonment 6½			Ganda Singhwála to Ganda Singh Bandar 15-12-83 2½	
	Ferozepore Cantonment to Ferozepore City 1½			Ganda Singh Bandar to Ferozepore Cantonment 8-5-87 6½	
		34½		Ferozepore Cantonment to Ferozepore City 1-10-88 1½	
			1,499		34½
				TOTAL MAIN LINE AND BRANCHES	1,497
	Carried over		1,499	Carried over	1,497

* This is a military line, and is not intended to be used for ordinary public traffic. The line was completed on 1st July 1888.

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.
<p>The section from Khánpur to Kotri is constructed for a single track and is laid with flat-footed iron rails 60lbs. and steel 62lbs. and 75lbs. to the yard on transverse sleepers of creosoted pine, deodar and steel. The chief works on this line are the bridge over the Indus between Sukkur and Rohri, and the cutting through the Laki Hills. The lengths relaid with 75lbs. and 62lbs. flat-footed steel rails up to 31st March 1891 are 167½ miles and 22½ miles, respectively.</p> <p>On the section from Kotri to Kurrachee (formerly the Sind Section of the Sind, Punjab and Delhi railway) the earthwork is for a single line; masonry of bridges is for a double line, superstructure for a single line, some of the piers of the Mulleer Viaduct for a double, and the rest for a single, line. The masonry viaduct at Bahrún is for a double line. Ordinary double-headed rails, 65lbs. to the yard, were originally laid on sleepers of creosoted pine, but they are being renewed with steel rails, 16½ miles having been relaid with 75lbs. flat-footed, and 31 miles with 68 lbs. double-headed steel rails, up to 31st March 1891.</p> <p>From Kurrachee Cantonment station to Kurrachee City station (2½ miles) the line is double.</p> <p>From Meean Meer East to Meean Meer West, with siding to Commissariat yard, the line is constructed of second-hand 68lbs. double-headed iron rails and second-hand wooden sleepers. The line is unballasted throughout and is fenced.</p> <p>The Ferozepore branch was originally laid with partly worn Delhi section bull-headed 60lbs. steel-faced rails on second class wooden sleepers. These have been replaced in miles 1 to 5 with 68lbs. bull-headed steel rails on cast-iron pot sleepers and in miles 13 to 23 inclusive with 75lbs. flat-footed steel rails on steel trough sleepers; the rails over the Kaiser-i-Hind bridge also are 75lbs. flat-footed steel.</p> <p>The line is half ballasted and fully fenced all the way to Ferozepore, and the banks and bridges have been made up to the full width of 20 feet for a single track. The old rail bridge across the Dehmu Creek has been replaced by 4 spans of 40 feet girders on brick piers, and from this to the Kaiser-i-Hind bridge, and thence on to Hassaniwála, the line is carried on a raised embankment through the old bed of the river.</p>	<p>The dates of orders for survey and construction of the section from Khánpur to Kotri are as follows:—</p> <p style="text-align: center;"><i>Date for survey.</i></p> <p>Khánpur to Kotri 30-10-69</p> <p style="text-align: center;"><i>Dates for construction.</i></p> <p>Khánpur to Rohri 8-11-71 Sukkur to Kotri 4-11-72</p> <p>The construction of the bridge over the Indus at Sukkur commenced in April 1883 and was completed in March 1889. The opening of this bridge has dispensed with the length Rohri to Rohri Bandar. The section Sukkur Bandar to Sukkur Main is retained for goods traffic and considered as a siding.</p> <p>This line (Khánpur to Kotri) was commenced as a metre gauge railway, and works had been well advanced when orders were received to adopt the standard gauge. The section from Kotri to Kurrachee was commenced on 29th April 1858. The extension of the line from Kurrachee City to Kiamári (2½ miles) was virtually completed on the 12th November 1887.</p> <p>The Meean Meer chord line has been constructed for troop traffic. The construction of a single line was sanctioned on 14th June 1887 and finished on 30th June 1888. The estimate for doubling the line was sanctioned on 4th October 1888 and work completed on 31st December 1890.</p> <p>The construction of the branch line from Ráewind to Ganda Singhwála was sanctioned on the 9th November 1882, and an extension of the branch from Ganda Singhwála to the boat bridge over the Sutlej opposite Ferozepore was sanctioned on 2nd October 1883. The Kaiser-i-Hind bridge over the Sutlej near Ferozepore was opened on 8th May 1887.</p>

APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.		Date of opening for public traffic.	
		Miles.	Miles.	Miles.	Miles.
XVII	North Western—contd.				
	Brought forward		1,499	Brought forward	1,497
	STANDARD GAUGE.				
	FRONTIER SECTION (MILITARY)—			FRONTIER SECTION (MILITARY)—	
	<i>Sind-Sagar railway and Khusálgarh branch—</i>				0
	<i>Khusálgarh branch—</i>			<i>Khusálgarh branch—</i>	0
	Golra Junction to Khusálgarh	70½		Golra Junction to Langar	60½
				Langar to Khusálgarh	9½
				Khusálgarh, new station	9½
					70½
	<i>Sind-Sagar railway—</i>			<i>Sind-Sagar railway—</i>	
	<i>Main line—</i>			<i>Main line—</i>	
	Lála Músa (82½ miles from Lahore) to Malakwál	45		Lála Músa to Malakwál	45
	Malakwál to Chenab West Bank	295		Malakwál to Bhakkar	174½
	Chenab West Bank to Chenab East Bank	1½		Bhakkar to Chenab West Bank	120½
	Chenab East Bank to Sher Shah	3½		Chenab West Bank to Chenab East Bank	1½
		344½		Chenab East Bank to Sher Shah	3½
					344½
	<i>Branches—</i>			<i>Branches—</i>	
	Malakwál to Bhera (<i>Bhera branch</i>)	17½		<i>Bhera branch—</i>	
				Malakwál to Bhera	17½
	<i>Khewra branch—</i>			<i>Khewra branch—</i>	
	Haranpur to Khewra Salt Mines	9		Haranpur to Khewra Salt Mines	9
	Khewra to Kalapani	3		Khewra to Kalapani— for coal traffic	3
		12			
	Kundián to Miánwáli (<i>Miánwáli branch</i>)	9		<i>Dera Gházi Khan branch—</i>	
	Mahmúd Kot to Gházi Ghât (<i>Dera Gházi Khan branch</i>)	10½		Mahmúd Kot to Gházi Ghât	10½
		48½			39½
				<i>Total Sind-Sagar railway and Khusálgarh branch</i>	455
	Carried over	464	1,499	Carried over	1,497
					455

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.										
<p>The Kaiser-i-Hind bridge consists of 27 spans of 150 feet new pattern steel girders on brick piers, 26½ feet by 14½ feet, with rounded cut-waters. The piers are built on wells, 23 feet in diameter, headed with Portland cement concrete. The railway is carried on the lower booms, and a cart road on the upper booms. Extensive protective works were made to train the river through the bridge.</p> <p>The line from Golra Junction to Khusálgarh is constructed for a single track.</p> <p>The rails are flat-footed steel, 62lbs. to the yard, spiked on transverse wooden sleepers.</p>											
<p>The Sind-Sagar, Eastern section (formerly known as the Salt Branch of the Punjab Northern State railway), was made chiefly for salt traffic, and was laid for a metre-gauge single track with 40lb rails. It has since been converted into a single standard gauge line. From Lála Músa Junction to Malakwál (45 miles) the rails are flat-footed steel, 75lbs. to the yard, laid on transverse wooden sleepers; and from Malakwál to Bhera (17½ miles) the rails are old iron flat-footed, 60lbs. to the yard, taken from the Main Line, laid on wooden sleepers.</p> <p>The rails used on the Sind-Sagar, Western section, are steel, 75lbs. per yard.</p> <p>About ¾ths of the line are laid with steel sleepers and the remainder with wooden sleepers.</p> <p>The ruling gradient on the main line is 1 in 200. On the Khewra branch there are gradients of ¾ of a mile each of 1 in 53 and 1 in 60, and ¼ a mile of 1 in 100.</p> <p>The sharpest curve on the Main line is 1°; on the branches, 2 000 feet is the sharpest, except on the Khewra Branch, where there are two curves of 4°.</p> <p>The earthwork is light throughout.</p> <p>The bridging is light. With the exception of the bridge over the river Jhelum between Malakwál and Haranpur, the longest on the Main line is a bridge of 10 spans of 40 feet on wells sunk 30 feet below the level of the bed of the river.</p> <p>On the Dera Gházi Khan branch over the Chitta Wah, a branch of the river Indus, there is a bridge of 2 spans of 100 feet, with rails on the bottom booms. The foundations are on wells sunk 30 feet below low-water level.</p> <p>Over the river Khewra, on the Khewra branch, is a bridge of 4 spans of 40 feet on a gradient of 1 in 53.</p> <p>The bridge over the Chenab at Ramuwála is of 17 spans of 200 feet on wells founded 107 feet below rail-level, and 77 feet below low-water.</p> <p>The Victoria bridge over the river Jhelum near Chak Nizam was opened on 16th May 1887. It consists of 17 spans of 150 feet steel girders, and is founded on single wells of 25 feet external diameter, and sunk 82 feet below lowest water-level.</p>	<p>The Sind-Sagar line connects the frontier stations of Dera Ismail Khan and Dera Gházi Khan with the Indian Railway systems.</p> <p>The orders for the survey were issued in October 1884, and in December 1884 the Government sanctioned the construction of the Jhelum bridge at Chak Nizam, and the work on the portion of the line (3½ miles) between Malakwál and the Jhelum river.</p> <p>Sanction to the construction of the branch from Kundían to Miánwáli was given on the 27th February 1886.</p> <p>The lines Darya Khan to Dera Ismail Khan ferry and Gházi Ghát to Dera Gházi Khan ferry were opened on 10th February 1888 and closed to traffic from May 1888.</p> <p>[The lines from Lála Músa to Malakwál and from Malakwál to Bhera have superseded the old metre-gauge line, <i>vis.</i> :—</p> <table> <tr> <td>Lála Músa to Miani on the Jhelum</td> <td></td> </tr> <tr> <td> opposite Pind Dádan Khán</td> <td>53½</td> </tr> <tr> <td>Miani to Bhera</td> <td>8½</td> </tr> <tr> <td>Miani to Khewra (abandoned)</td> <td>10</td> </tr> <tr> <td></td> <td style="border-top: 1px solid black;">72½</td> </tr> </table> <p>The dates of opening of the metre-gauge line were as follows :—</p> <p>Lála Músa to Bahá-uddín (28½ miles) on 1st January 1880.</p> <p>Bahá-uddín to Hariah (10½ miles) on 1st February 1880.</p> <p>Hariah to Miani (14½ miles) on 10th April 1880.</p> <p>Miani to Bhera (8½ miles) on 2nd February 1882.</p> <p>Miani to Khewra (10 miles) on 1st January 1883.]</p>	Lála Músa to Miani on the Jhelum		opposite Pind Dádan Khán	53½	Miani to Bhera	8½	Miani to Khewra (abandoned)	10		72½
Lála Músa to Miani on the Jhelum											
opposite Pind Dádan Khán	53½										
Miani to Bhera	8½										
Miani to Khewra (abandoned)	10										
	72½										

APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XVII	North Western—contd. Miles.	Miles.	Miles.
	Brought forward 464	1,499	Brought forward $\left. \begin{array}{l} 1,497 \\ 455 \end{array} \right\}$
	STANDARD GAUGE.		
	FRONTIER SECTION (MILITARY)—contd.		FRONTIER SECTION (MILITARY)—contd.
	Sind-Pishin railway—		Sind-Pishin railway—
	Main line—		Main line—
	Ruk Junction to Sibi . . . 133		Ruk to Sibi— for coaching traffic . . . 2-5-80 } for goods traffic . . . 1-7-80 } 133
	Sibi to Bostán . . . 134		
	Bostán to Gulistán . . . 30½		
	Gulistán to Kila Abdulla . . . 8	305½	
			Sibi to Sharigh— for goods and parcels traffic 20-3-87 } for coaching traffic . . . 28-8-87 } 73½
			Sharigh to Bostán . . . 28 8-87 60½
			Bostán to Kila Abdulla— for goods traffic . . . 25-1-88 } for coaching traffic . . . 8-2-88 } 38½
			Total Sind-Pishin railway . . . 305½
	Quetta loop—		Quetta loop—
	Sibi to Rindli . . . 16¾		Sibi to Pirchowki for military traffic on 11-10-80, and for general traffic from Sibi to Rindli (16¾ miles) on 1-5-82, and Rindli to Pirchowki (2½ miles) for goods traffic on 20-3-87. 19½
	Rindli to Hirók . . . 48½		
			Pirchowki to Hirók— for goods traffic . . . 20-3-87 } for coaching traffic . . . 1-4-87 } 46
			65½
	Carried over . 65½ 769½	1,499	Carried over $\left. \begin{array}{l} 1,497 \\ 760½ \\ 65½ \end{array} \right\}$

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.
<p>The wells of the Victoria bridge are continued as piers to girder bed-level. The brick steining is 5½ feet thick. All the wells are hearted with a 10-foot plug of Portland cement concrete, above which is ordinary semi-hydraulic lime concrete, the tops of the piers being finished off with solid brick masonry over the concrete.</p> <p>The girders are the ordinary triangulated type with rails on bottom booms. The cross-girders are lengthened out on each side to support two footways.</p> <p>Somewhat extensive protective works have been carried out to train the river through the bridge.</p>	
<p>The section from Ruk to Sibi (formerly the Sind-Pishin railway, Southern section) is a surface line laid for a single track with various types of rails, <i>vis.</i>, flat-footed 60 and 62lbs. per yard, and double-headed varying from 68 to 84lbs. per yard, on transverse sleepers of deodar. The buildings from Ruk to Jacobabad, and at Sibi, Bell-pat, Nuttall and Lindsay, which were of a temporary nature, have been replaced by permanent structures.</p>	<p>The dates of orders for survey and construction of the section from Ruk to Pirchowki are as follows:— Ruk Junction to Sibi, October 1879. Sibi to Pirchowki, September 1880.</p>
<p>From Sibi for a length of 40 miles the line is laid with double-headed rails, 75lbs. to the yard, on Denham-Olphert's sleepers. The remainder of the line is laid with flat-footed steel rails, 75lbs. to the yard, on steel trough sleepers.</p> <p>The line throughout has been constructed for a single track only, except from Gulistán to Kila Abdulla, which is double.</p>	
<p>Ruling gradients are— 1 in 200 between Sibi and Nárf. 1 in 67 between Nárf and Bábar Kachh. 1 in 60 between Bábar Kachh and Kóchálí. 1 in 64 between Kóchálí and Spintangi. 1 in 45 between Spintangi and Násák Frontier. 1 in 42 between Násák Frontier and Sharigh. 1 in 50 between Sharigh and Khost. 1 in 43 between Khost and Khanai. 1 in 80 between Khanai and Bostán. 1 in 100 between Bostán and Gulistán. 1 in 40 between Gulistán and Kila Abdulla.</p>	<p>Sanction for the construction of the Sibi-Quetta Section was given in July 1884. Bostán-Shebo, Shebo-Kila Abdulla and Gulistán in May 1885.</p>
<p>From Nárf (140th mile from Ruk Junction) to Spintangi (175th mile) and from Dirgi (224th mile) to Ghurkai (256th mile), 67 miles in all, work was exceptionally heavy on bridging, tunnelling and earthwork.</p>	<p>Regrading operations are in progress by which the ruling gradient between Sibi and Násák will be reduced to 1 in 55.</p>
<p>From Sibi to Rindli the line is of a permanent character with a bridge over the Nárf, but from Rindli to Hirók it is laid in the bed of the Bolán river; the bridges crossing the stream were originally formed of crib piers made of sleepers with 10-foot span openings, but have in most cases been replaced by causeways. The permanent-way varies and consists of the following:— East Indian railway 75lbs. steel rails and Denham-Olphert's sleepers. East Indian railway 80lbs. iron rails and wooden sleepers. Sind, Punjab and Delhi railway 68lbs. iron rails and wooden sleepers. Sind-Pishin State railway 75lbs. steel rails and Denham-Olphert's sleepers.</p>	<p>The line from Sibi to Pirchowki was ordered in September 1880. The lower section from Pirchowki to Hirók was commenced on 23rd April 1885 and completed on 19th November 1885.</p>

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
XVII	North Western—concl'd.		
	Brought forward 65½ 769½	1,499	1,497
	STANDARD GAUGE.		760½
			65½
	FRONTIER SECTION (MILITARY)—concl'd.		FRONTIER SECTION (MILITARY)—concl'd.
	Quetta loop—concl'd.		Quetta loop—concl'd.
	Hirók to Kolpur (high level line) 8		Kolpur to Quetta —
	Kolpur to Quetta 25		for goods traffic 20-3-87 } 25
	Quetta to Bostán 20½		for coaching traffic 1-4-87 }
			Quetta to Bostán 28-8-87 20½
			Total Quetta loop 110½
			TOTAL FRONTIER SECTION 871½
	Mithri chord line*—		
	From a new station, called Bolán Junction, 2 miles south of Sibi, to enable trains to proceed direct from Mithri to Rindli 1½	120½	
		889½	DOUBLE-MAIN LINE AND BRANCHES—(Commercial)—
			Main line—
			Kurrachee Cantonment to Kurrachee City 13-5-61 2½
	TOTAL	2,388½	TOTAL OPEN MILEAGE 2,368½
XVIII	Amritsar-Patháńkot—		
	STANDARD GAUGE.		
	Junction at about 1½ miles below Amritsar Station on the Main Line of the North Western railway, <i>via</i> Batála and Gurdáspur to Patháńkot 64½	64½	Junction with the North Western railway to Dinanagar 1-1-84 49½
			Dinanagar to Patháńkot 8-6-84 15½
			TOTAL OPEN MILEAGE 64½
XIX	Jammu and Kashmir (British section). See No. LI.		

This is a military line, and is not intended to be used for ordinary public traffic. This line was completed in November 1890.

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.																
<p>The line from Kótal Darwáza to Quetta was originally laid on the standard gauge, and the new high level line from Kolpur joins it about 2 miles from old Kótal Darwáza.</p> <p>The whole line from Hirók to Quetta is laid with 75 lbs. flat-footed rails on steel sleepers, the first mile above Hirók being also fitted with the Abt Rack.</p> <p>The ruling gradients are as follows:—</p> <table> <tr> <td>1 in 400 . . .</td> <td>Sibi to Rindli.</td> </tr> <tr> <td>1 in 56 . . .</td> <td>Rindli to Kirtá.</td> </tr> <tr> <td>1 in 64 . . .</td> <td>Kirtá to Lalaj.</td> </tr> <tr> <td>1 in 50 . . .</td> <td>Lalaj to New Bank.</td> </tr> <tr> <td>1 in 30 . . .</td> <td>New Bank to Mach.</td> </tr> <tr> <td>1 in 25 . . .</td> <td>Mach to Kolpur.</td> </tr> <tr> <td>1 in 100 . . .</td> <td>Kolpur to Quetta.</td> </tr> <tr> <td>1 in 100 . . .</td> <td>Quetta to Bostán.</td> </tr> </table>	1 in 400 . . .	Sibi to Rindli.	1 in 56 . . .	Rindli to Kirtá.	1 in 64 . . .	Kirtá to Lalaj.	1 in 50 . . .	Lalaj to New Bank.	1 in 30 . . .	New Bank to Mach.	1 in 25 . . .	Mach to Kolpur.	1 in 100 . . .	Kolpur to Quetta.	1 in 100 . . .	Quetta to Bostán.	<p>The Darwáza-Quetta section was commenced in August 1885 and completed in August 1886.</p> <p>The Quetta-Bostán section was completed in October 1886.</p> <p>The line from Hirók to Kótal Darwáza was originally laid on the metre gauge up the bed of the nullah as a temporary expedient for military purposes. It was commenced in August 1885, completed on 7th March 1886, and opened for goods and passenger traffic on 20th March and 1st April 1887, respectively, and has now been pulled up.</p> <p>The construction of the high level line (in lieu of the old metre gauge line) from Hirók to Kolpur was commenced in December 1887. It was passed for traffic in April 1889, but has never been opened in consequence of the damage done to it by the floods of 1889 and 1890, which have proved the necessity for its almost entire reconstruction. The whole of the line from Sibi to Quetta is at present closed.</p> <p>The Amritsar-Pathánkot, Jammu and Kashmir and Rájpura-Bhátinda railways are also worked by the North Western railway. The terms of working the first two lines will be found on page 88 of Part II of the Railway Administration Report for 1889-90 and Appendix S, Part II of the report for 1890-91, respectively. The terms of working the Rájpura-Bhátinda railway has not yet been finally settled.</p>
1 in 400 . . .	Sibi to Rindli.																
1 in 56 . . .	Rindli to Kirtá.																
1 in 64 . . .	Kirtá to Lalaj.																
1 in 50 . . .	Lalaj to New Bank.																
1 in 30 . . .	New Bank to Mach.																
1 in 25 . . .	Mach to Kolpur.																
1 in 100 . . .	Kolpur to Quetta.																
1 in 100 . . .	Quetta to Bostán.																
<p>The line diverges from the North Western railway at the 34th mile from Lahore, and 1½ miles from Amritsar station, with a curve of 3,500 feet radius, and runs practically along a watershed the whole way to Pathánkot, the only bridges of any importance being those which cross the Bari Doáb Canal and its branches. The line presented no engineering difficulties. The rise on the whole length between Amritsar and Pathánkot is 355 feet, the steepest gradient being 1 in 170, and the sharpest curve 2,300 feet radius.</p> <p>Steel rails, 62 lbs. to the yard, have been used.</p>	<p>The survey of this line was undertaken by the Government of the Punjab in 1879, and its construction was sanctioned on the 6th December 1881.</p> <p>The line is worked under agreement by the North Western railway. The terms of working are given on page 88 of Part II of the Railway Administration Report for 1889-90.</p>																

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.		Date of opening for public traffic.	
		Miles.	Miles.	Miles.	Miles.
XX	Oudh and Rohilkhand—				
	STANDARD GAUGE.				
	<i>Main Line—</i>			<i>Main line—</i>	
	Junction with the East Indian railway near Moghal Sarai through Benares, Akbarpur, Fyzabad, Bara Banki (late Nawabganj) Junction, Lucknow Junction, Sháhjahánpur, Bareilly and Chandausi Junction to Saháranpur	544½		Moghal Sarai to ¾th mile	3¼
				From ¾th mile over the Dufferin bridge to near Rájghát (Benares Ganges river station)	4¼
				From near Rájghát (Benares Ganges river station) to Benares Cantt.	1½
				Benares Cantt. to Sháhganj	56
				Sháhganj to Bilwái	7
				Bilwái to Málipur	9
				Málipur to Akbarpur	12
				Akbarpur to Fyzabad	36
				Fyzabad to Bara Banki	62
				Bara Banki to Lucknow	17
				Lucknow to Sandíla	30
				Sandíla to Hardoi	33
				Hardoi to Sháhjahánpur	39
				Sháhjahánpur to Farídpur	32
				Farídpur to Bareilly	12
				Bareilly to Ukka	6
				Ukka to Aonla	11
				Aonla to Chandausi	27
				Chandausi to Moradabad	27½
				Moradabad to Nagína	47¼
				Nagína to Najíbabad	13½
				Najíbabad to Saháranpur	58¼
					544½
	<i>Branches—</i>			<i>Branches—</i>	
	Ajodhya branch Junction (126¾ miles from Moghal Sarai Junction on the main line) to the right bank of the Gogra at Ajodhya	3¼		Ajodhya branch	3¼
	Bara Banki (late Nawabganj) Junction (191¼ miles from Moghal Sarai Junction on the main line) to Bahramghát (<i>Bahramghát branch</i>)	21½		Bahramghát branch—	
				Bara Banki to Bahramghát	21½
	Lucknow Junction (209 miles from Moghal Sarai Junction on main line) to the East Indian railway at Cawnpore Junction (<i>Cawnpore branch</i>)	45½		<i>Cawnpore branch—</i>	
				Lucknow to Cawnpore	42
	Chandausi Junction (398½ miles from Moghal Sarai Junction on the main line) to the East Indian railway at Aligarh Junction (<i>Aligarh branch</i>)	60½		Left bank Ganges to Junction with East Indian railway at Cawnpore	3¼
				Passenger approach to East Indian railway at Cawnpore	¼
	Lhaksar Junction (512¼ miles from Moghal Sarai Junction on the main line) to Hardwar (<i>Hardwar branch</i>)	17			45½
	Moradabad (425¾ miles from Moghal Sarai Junction on the main line) to Rámnagar (<i>Rámnagar branch</i>)	47*		<i>Aligarh branch—</i>	
				Aligarh to Rájghát	30
				Rájghát to Chandausi	30½
					60½
				<i>Hardwar branch—</i>	
				Lhaksar Junction to left bank Ganges Canal near Jawálapur	13½
				Left bank Ganges Canal near Jawálapur to Hardwar	3¼
					17
					739½
	TOTAL		739½	TOTAL OPEN MILEAGE	692½

* In abeyance.

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.		REMARKS.				
<p>Land is taken up for a double line, but the formation is for a single way; between Lucknow and Bara Banki (late Nawabganj) the masonry of bridges is constructed for a double line.</p> <p>The permanent-way at first adopted for the system was a 60lb. iron rail, laid partly on cast-iron oval bowl and partly on wrought iron saddle back sleepers. The Cawnpore branch was originally laid with 30lb. rails on corrugated iron pressure plates; these have since been entirely removed and a large number of steel bowl sleepers have been worked in; and the original iron rails have been replaced by 60lb. steel rails over 176.83 miles.</p> <p>On the Northern extension from Moradabad to Saharanpur and the Hardwar branch, 75lb. steel rails are laid on steel bowls, and since 1889, when the stock of 60lb. steel rails and 75lb. Northern extension type rails were exhausted, all renewals have been made with 75lb. steel rails of the Indian State railway pattern. Renewals of sleepers are made either with steel bowls still in stock or with cast-iron bowls locally made.</p> <p>The length of permanent-way of the different types as existing on 31st December 1890 is shown in the following table:—</p>		<p>The branch from Lucknow to Cawnpore, 45½ miles, was commenced in January 1864. Like the Nalhāti and Azimganj line, this branch was begun under subsidy by the Indian Branch Railway Company, but a guarantee was subsequently granted.</p> <p>In 1880 the Company was relieved from its obligation under the original contract to make a line of railway from Buxar to Akbarpur, 118½ miles, and it was agreed that in lieu thereof the Company should construct a bridge over the Ganges at Benares, and should form a junction with the East Indian railway at Moghal Sarai. The work was started in 1881 and the Dufferin bridge over the Ganges was opened for traffic on the 1st October 1887. The Oudh and Rohilkhand railway at the same time took over the Benares branch of the East Indian railway between Moghal Sarai Junction station and the "Dufferin" bridge.</p> <p>The construction of the Moradabad Saharanpur extension (119 miles) was sanctioned on the 29th August 1881, and the Oudh and Rohilkhand Railway Company commenced the work for Government, pending negotiations as to its incorporation in the general system of that Company. The inclusion of the Roorkee-Hardwar line (19 miles) in the extension was sanctioned on the 17th February 1883, but this route was subsequently abandoned in favour of that from Lhaksar to Hardwar (17 miles), sanction to which was given on 15th May 1883.</p> <p>Sanction to the construction of the Moradabad line and Hardwar branch, as an integral part of the Company's undertaking, was given on the 10th September 1883.</p> <p>Sanction to the construction of the Ajodhya branch (3½ miles) was given on 16th December 1884.</p> <p>A tramway, constructed at the expense of Messrs. Carew & Co., connects the Rosa Sugar Factory with the Oudh and Rohilkhand railway near Sháhjahánpur. This tramway is 3½ miles long, and is worked by manual power. It is used for goods traffic only.</p> <p>The Oudh and Rohilkhand railway was acquired by the State from the late Guaranteed Company on the 1st of January 1889.</p>				
<i>Rails.</i>						
Locality.	75lbs. East Indian Railway pattern double-headed iron-rail.	60lbs. flat-footed iron-rail.	60lbs. flat-footed steel-rail.	75lbs. flat-footed Indian State Railway steel-rail.	75lbs. flat-footed Oudh and Rohilkhand Railway pattern steel-rail.	TOTAL.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
From Moghal Sarai—zero to 3.02 miles .	3.02	...	...	...	...	3.02
From miles 3.02 to Moradabad, including Bahramghát, Cawnpore and Aligarh branches .	...	307.66	173.62	68.60	...	549.88
Ajodhya Ghát branch	...	...	3.21	...	...	3.21
Moradabad to Saharanpur and Hardwar branch .	...	...	...	...	136.44	136.44
TOTAL MILES	3.02	307.66	176.83	68.60	136.44	692.55
<i>Sleep. rs.</i>						
Cast-iron oval bowl.	Wrought-iron saddle.	Steel Macellan and Smith's Patent.	Wooden.	TOTAL.		
Miles.	Miles.	Miles.	Miles.	Miles.		
407.55	68.21	198.90	17.89	692.55		

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
XXI	Eastern Bengal—		
	EASTERN SECTION—		EASTERN SECTION—
	STANDARD GAUGE.		
	<i>Main line—</i>		<i>Main line—</i>
	Calcutta to Jagati Junction 107½		Calcutta to Ránaghat 29-9-62 . 45½
	Jagati Junction to 145th mile 37½	145	Ránaghat to Jagati Junction 15-11-62 . 62
			Jagati Junction to 145th mile 1-1-71 . 37½
			<u>145</u>
	<i>Branches—</i>		<i>Branches—</i>
	Jagati Junction to river Ganges (Kooshtea branch) 3½		Jagati Junction to river Gan- ges (Kooshtea branch) 16-2-64 . 3½
	Kooshtea loop line 1½		Kooshtea loop line 1-8-81 . 1½
	Canal Junction to Chitpore (<i>Chit- pore branch</i>) 2		Canal Junction to Chitpore (<i>Chitpore branch</i>) 25-8-73 . 1½
	Rajbári to Goalundo 4½		Portion in Chitpore yard for goods traffic 13-4-88 . ½
	Mile 145 to Puchoorea 4½	16½	Rajbári to Goalundo 10-6-87 . 4½
			Mile 145 to Puchoorea 1-4-90 . 4½
			<u>16½</u>
	<i>Porádaha branch—</i>		<i>Porádaha branch—</i>
	Porádaha (102½ miles from Cal- cutta) to Bhairámára on the right bank of the Ganges 12		Porádaha to Bhairámára 19-1-78 . 12
	Bhairámára to Golabnuggur (Dá- mukhdia Ghât station) 5½	17½	Bhairámára to Golabnuggur (Dámukhdia Ghât) 8-12-83 . 5½
			<u>17½</u>
		179½	Total Eastern section 179½
	SOUTHERN SECTION—		SOUTHERN SECTION—
	STANDARD GAUGE.		
	<i>Original line—</i>		<i>Original line—</i>
	Calcutta to Port Canning 28		Calcutta to Chámpaháti 2-1-62 . 15
			Chámpaháti to Port Canning 15-5-63 . 13
			<u>28</u>
	Carried over 28	179½	Carried over { 179½
			28

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.
<p>The land and earthwork are for a double line, as also the masonry of bridges and viaducts, but the girders put up are for a single line, and only one track laid, except from Calcutta to Naiháti, 23½ miles, which was doubled in 1886. The rails are double-headed, weighing 74lbs. per yard, except over 77 miles where the 74lb. rails have been replaced by steel 30' rails, weighing 73lbs. to the yard. The second track between Sealdah and Naiháti has been laid with double-headed steel rails, weighing 73lbs. per yard on Denham-Olphert's plate sleepers.</p> <p>The Goalundo extension embankment is for a single track only. All small bridges are built for a double line, and the inside piles and girders of screw-pile bridges are made strong enough for a double line. The permanent-way is similar to that on the main line.</p>	<p>The line from Calcutta to Kooshtea was commenced on 16th April 1859. The Kooshtea branch was opened for passenger traffic in 1868.</p> <p>The Goalundo extension was commenced in the cold season of 1865-66.</p> <p>The estimate for the Chitpore branch was sanctioned on 12th April 1873. The line was completed and opened for goods traffic on 25th August 1873, but the length was not included with the open mileage until 1874.</p> <p>There is a branch, ½ mile in length, at Shámnagar, which is treated as a siding. It was opened in April 1868.</p> <p>Owing to the encroachments of the river Ganges, it became necessary in 1882 to construct a diversion between the 147th mile and Goalundo; 3 miles of this were opened on the 9th, and the remainder on the 15th August 1882.</p> <p>In 1887 the terminus at the Goalundo end was removed from old Goalundo to a point north of Rajbári. The extension to Puchooora, 6 miles east of Rajbári, was opened for goods traffic in August 1887, and used for country-boat traffic only. It was opened for passenger traffic on 1st April 1890.</p> <p>The Kooshtea branch has been reduced from 4 to 3½ miles, owing to part of it having become a siding since the construction of the Kooshtea loop line.</p> <p>The rails on the portion of line from Kooshtea engineered to old Kooshtea, ¾th mile, have been taken up.</p> <p>The Eastern Bengal railway was acquired by the State from the late Guaranteed Eastern Bengal railway Company on 1st July 1884, and on the same date the Porádaha branch (17½ miles) of the Northern Bengal State railway was permanently amalgamated with the Eastern Bengal railway.</p>
<p>The Porádaha branch is laid with rails, 74lbs. to the yard, on iron pot sleepers.</p> <p>The Dámukdia Ghát extension has been laid on sál sleepers with second-hand rails, 74lbs. per yard, obtained from the East Indian railway.</p>	<p>Sanction to the construction of the Porádaha-Dámukdia and Dámukdia-Golabnuggur sections was given on 4th April 1876 and 22nd September 1883, respectively.</p> <p>A steam ferry in connection with the train plies on the Ganges between Golabnuggur and Sára Ghát.</p>
<p>The Calcutta to Canning section is laid with a single track, but sufficient land has been taken up for a double line, and portions of embankment have been formed for a double line. The masonry of the bridges is built for a double line, but the girders are laid for a single line only, except on the Tolley's Nullah and Píáli bridges, which are adapted to carry a double line of rails. The rails, 74lbs. to the yard, are laid generally on wooden sleepers; a short length, ¼ mile, has been laid with Greaves's bows.</p>	<p>The doubling of the line between Naiháti and Sealdah was sanctioned in July 1884 and completed in 1886.</p> <p>The line from Calcutta to Port Canning was constructed under guarantee. In consequence of its having been worked at a loss since its opening, the Company surrendered it to Government, under the provisions of the contract, on 1st April 1868.</p>

APPENDIX
RAIL

Constructed and in progress

STATE

Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XXI	Eastern Bengal—contd. Miles.	Miles.	Miles.
	Brought forward 28	497½	Brought forward } 179½
	SOUTHERN SECTION—concl'd.		28
	STANDARD GAUGE.		
	<i>Diamond Harbour line—</i>		SOUTHERN SECTION—concl'd.
	Sonárpur to Magra Hát 15		<i>Diamond Harbour line—</i>
	Magra Hát to Diamond Harbour . 12½		Sonárpur to Baruipur 10-6-82 5
	Diamond Harbour towards Hara		Baruipur to Magra Hát 18-12-82 10
	Fort ½		Magra Hát to Diamond Har-
	Junction with Eastern Section . . ½		bour 25-4-83 12½
	— 28½		Diamond Harbour towards
			Hara Fort 25-4-83 ½
			Junction with Eastern Sec-
			tion 15-8-85 ½
			— 28½
			—
	<i>Budge-Budge extension—</i>		
	Ballygunge (4½ miles from Sealdah		<i>Budge-Budge extension—</i>
	on the Southern section; to		Ballygunge to Budge-Budge—
	Budge-Budge 13½		for goods traffic 1-5-90 } 13½
	— 13½	69½	for passenger traffic 1-6-90 }
			— 13½
			<i>Total Southern section</i> 69½
			—
	NORTHERN SECTION—		
	METRE GAUGE.		NORTHERN SECTION—
	<i>Main line—</i>		<i>Main line—</i>
	Sára Ghát to Párbatipur Junc-		Sára to Atrai 19-1-78 38½
	tion 111½		Atrai to Jalpáiguri 28-8-74 134½
	Párbatipur Junction to Siliguri . 8¼		Jalpáiguri to Siliguri—
			for goods traffic 10-6-78 } 23
			for general traffic 1-11-78 }
			— 23
	<i>Rungpore branch—</i>	196	
	Párbatipur Junction to Rung-		<i>Rungpore branch—</i>
	pore 22½		Párbatipur Junction to Shám-
	Rungpore to Kaunia on the right		pur 19-5-78 15½
	bank of the Teesta 11½		Shámpur to Rungpore 2-7-78 7½
	— 34		Rungpore to Kaunia 1-6-79 11½
			— 34
			<i>Dinagepore branch—</i>
	<i>Dinagepore branch—</i>		Párbatipur to Chirirbandar 1-7-83 9
	Párbatipur to Dinagepore 19½		Chirirbandar to Dinagepore . 16-5-84 10½
			— 10½
			—
	Carried over 249½	249	Carried over } 249
			— 249½

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.
<p>With the exception of the Usti Khal bridge, 1 span of 100 feet, there are no large or difficult engineering works on the Diamond Harbour line. This line is laid for the first 2 miles with iron rails on wooden sleepers; the remaining length, 27 miles, being laid with new steel rails, 64lbs. to the yard, for 17 miles on ordinary iron pot sleepers, and for 10 miles on Denham's plate sleepers.</p>	<p>Orders for the Diamond Harbour survey were issued by the Government of Bengal in November 1878, and on 9th September 1880 sanction was accorded to the commencement of work on the Sonárpur to Magra Hát Section; on the 1st July 1884 the Calcutta and South Eastern Railway, 57 miles, was temporarily transferred from the control of the Government of Bengal to that of the Government of India. Since 1st April 1887 the Eastern Bengal and the Calcutta and South-Eastern railways have been re-transferred from "Imperial" to "Provincial," and having been amalgamated with the Northern Bengal, the Kaunia-Dharlla, the Dacca and the Assam-Bihar railways, are being worked as one combined system.</p> <p>The Beliagháta Station, the Calcutta terminus of the late Calcutta and South-Eastern State railway, has been permanently closed, and trains of the Southern section are now worked from the main station at Sealdah.</p>
<p>The Budge-Budge extension has been constructed for a double line between Ballygunge and Dock Junction, and for a single line only between Dock Junction and Budge-Budge. The laying of the second line is in progress. The only important work on this extension is the bridge over the Tolley's Nullah, the main span of which is 115 feet 10 inches. The rails are 73lbs. per yard and of steel throughout, mostly 30 feet in length, and the sleepers are almost entirely Denham and Olphert's.</p>	<p>Sanction to the construction of the Kidderpore Dock line, which formed a part of the projects for the accommodation of the traffic of the railways converging at Calcutta, was given in July 1886. The estimate amounting to Rs. 9,92,058, sanctioned for the work, included the doubling of the line from Sealdah to Ballygunge, and the construction of a branch line from the latter station to Tolley's Nullah which is crossed by a bridge. The extension to the docks undertaken by the Port Commissioners has been finished.</p> <p>Sanction to the construction of the Budge-Budge extension was given in November 1888 on an estimate amounting to Rs. 41,590.</p> <p>The Port Commissioners' Tramway from Tolley's Nullah to Akra Junction (4.63 miles) has been taken over and now forms part of the Budge-Budge extension.</p> <p>Sanction to the construction of the double line from Ballygunge to the Port Commissioners' Dock Junction No. 2 was given in November 1889.</p>
<p>Rails, 40lbs. to the yard, and sleepers of creosoted pine, sál, red gum and wrought and cast-iron, have been used. The bridging and embankments are heavy on the lower section.</p> <p>Iron rails, 40lbs. to the yard, are being replaced by steel rails, 50lbs. per yard from Sára northwards. 50½ miles of the 50lb rails are now laid.</p>	<p style="text-align: center;"><i>Dates of orders for survey.</i></p> <p>Trial survey on 20th January 1870. Final survey of main line on 7th November 1871. Rungpore Branch on 23rd March 1872. Extension to banks of the Teesta and on to Dhubri, 20th November 1875. Extension to Siliguri, 1875-76.</p> <p style="text-align: center;"><i>Date of orders for construction.</i></p> <p>Main line, 12th February 1874. The railway to Darjeeling starts from the Siliguri terminus, which is about 7 miles from the foot of the Darjeeling hills.</p>

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.		Date of opening for public traffic.	
		Miles.	Miles.		Miles.
XXI	Eastern Bengal—concl'd.				249
	Brought forward	249½	249		249½
	NORTHERN SECTION—concl'd.				
	2' 6" GAUGE.				
	<i>Kaunia-Dharlla branch—</i>				
	Teesta Junction to Dharlla	23½		18-7-81	18½
	Teesta Junction to Mogalhát	13½		6-2-82	13½
				1-7-84	4½
		37			37
			286½		286½
	<i>Total Northern section</i>				
	DACCA SECTION—				
	METRE GAUGE.				
	Náráyanganj Ghát to Mymensingh	86	86	4-1-85	10½
				1-8-85	20
				12-12-85	
				1-8-85	32½
				18-2-86	
				29-8-85	23½
					86
	<i>Total Dacca section</i>				
ASSAM-BEHAR SECTION—					
METRE GAUGE.					
<i>Main line—</i>					
Manihári to Katihár	15½		1-4-87	15½	
Katihár to Ráyganj	37½		1-7-89	37½	
Ráyganj to Dinagepore	31½		15-2-88	31½	
	84½			84½	
<i>Kosi branch—</i>					
Katihár to Kasba	22½		1-4-87	22½	
Kasba to Arariyá	21½		1-7-89	36½	
Arariyá to Forbesganj	15		1-1-91	13½	
Forbesganj to Debiganj	7½			72½	
Debiganj to Ancharághát	6½				
	72½			72½	
		157		157	
<i>Total Assam-Bihar section</i>					
DOUBLE—EASTERN SECTION—					
<i>Main line—</i>					
Calcutta to Naiháti			1-8-86	23½	
Canal Junction to Chitpore			21-3-87	4	
			13-4-88	1½	
				25½	
DOUBLE—SOUTHERN SECTION—					
<i>Main line—</i>					
Sealdah to Ballygunge			20-10-88	3½	
			19-9-90	½	
				4½	
TOTAL DOUBLE LINE				29½	
TOTAL OPEN MILEAGE		778½		778½	

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.
<p>The Kaunia-Dharlla branch has been laid without ballast. The rails are steel, weighing 25lbs. and 30lbs. to the yard, laid on sál sleepers.</p>	<p>The Kaunia-Dharlla branch was constructed by the Bengal Government out of Provincial revenues. Steam ferries over the Teesta and Dharlla, and between Jatrapur on the Brahmaputra and Dhubri, are worked in connection with the trains.</p>
<p>The Dacca section is laid with permanent-way material of the ordinary metre-gauge type, the rails being of steel, 41½lbs. to the yard, on sál sleepers. The work on the northern half of the line is heavy, but gradients are easy.</p>	<p>The construction of the line was sanctioned on the 11th August 1882. The original project included a branch from Dacca to Aircha, opposite Goalundo, 43 miles long, which has since been abandoned. The Dacca section is connected with the Eastern section by a ferry worked between Goalundo and Náráyananj Ghát.</p>
<p>The Assam-Bihar section consists of a single track line laid with 41½lbs. steel rails on sál and iron-wood sleepers; in a few places Denham-Olphert's sleepers are used. As a rule, the works are heavy and bridging very considerable, owing to the flooded country through which the line passes.</p>	<p>The line from Manihári through Katihár Junction to Dinagepore connects the East Indian railway at Sahebgunge with the Bengal system of railways at Dinagepore, a ferry being worked by the East Indian railway across the Ganges between Manihári and Sahebgunge. A branch line runs northwards from Katihár Junction through Purneah and Kasba towards Aircha Ghát on the Kosi, opposite the Eastern extension of the Tirhoot State railway system. The Assam-Bihar section of the Eastern Bengal State railway is connected with the terminal station on the Tirhoot State railway by a ferry across the Kosi river. The Bengal Central railway is also worked by the Eastern Bengal State railway under an agreement, the terms of which will be found in Appendix R, Part II, Railway Administration Report for 1890-91.</p>

APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
		Miles.	Miles.
XXII	<p>Bengal Central*—</p> <p style="text-align: center;">STANDARD GAUGE.</p> <p>Dum-Dum (4½ miles from Calcutta on the Eastern Section, Eastern Bengal State railway) <i>via</i> Baraset and Bongong to Kholna 104½</p> <p>Ránaghat (45½ miles from Calcutta on the Eastern section of the Eastern Bengal State railway) to Bongong 20½</p>	125	<p>Dum-Dum Junction to Dattapukur 2-4-83 . 14½</p> <p>Dattapukur to Gobardánga . 7-12-83 . 17</p> <p>Gobardánga to Bongong . 22-4-84 . 12</p> <p>Bongong to Kholna . . 16-2-84 . 61½</p> <p style="text-align: right;">104½</p> <p>Ránaghat to Bongong . 16-10-82 . 20½</p> <p style="text-align: right;">TOTAL OPEN MILEAGE . 125</p>
XXIII	<p>Nalháti—</p> <p style="text-align: center;">4' 0" GAUGE.</p> <p>Nalháti (144½ miles from Howrah on the loop line of the East Indian railway) to Azínganj 27½</p>	27½	<p>Nalháti to Azínganj . . 21-12-63 . 27½</p>
XXIV	<p>Cherra-Companyganj—</p> <p style="text-align: center;">2' 6" GAUGE.</p> <p>Companyganj to Thariághát 7½</p>	7½	<p>Companyganj to Thariághát . 16-6-86 . 7½</p>

* Although for convenience classed among State railways, this line is the property of the Bengal Central Railway Company.

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.
<p>The line is single throughout.</p> <p>The permanent-way consists of steel rails of the Vignole section, 62lbs. to the yard, laid on sleepers of creosoted pine. S&I sleepers are now being used for renewals instead of creosoted pine.</p> <p>At first the line was sand ballasted, and brick ballast was used at bridges, and in a few short lengths where the soil was bad, but since then it has been decided to ballast the portion of line between Dum-Dum Junction and Singia, including sidings, with brick; this work is partly completed and the rest will be done as soon as possible.</p> <p>The line is fenced throughout; iron gates are provided at level crossings.</p> <p>Viaducts and bridges are constructed for a single line.</p>	<p>The surveys were carried out by the Government of Bengal in 1877-78, and construction was commenced by the Company in March 1881.</p> <p>The original contract with the Company having been altered, a fresh guarantee of 3½ per cent. was given under the new contract with the Secretary of State, which came into force with retrospective effect from the 1st July 1885.</p> <p>The survey of the proposed extension of the Bengal Central railway from Singia to Madareepur has been completed and the high flood-levels were checked after last rainy season and were found correct.</p> <p>Estimates for additional waterways and for raising the line where necessary (owing to the floods of September 1890 having breached the line) have lately been sanctioned.</p> <p>The line is worked by the Eastern Bengal State railway under a working agreement with the Company, the terms of which will be found in Appendix R, Part II of the Railway Administration Report for 1890-91.</p>
<p>The road was formed by Government as for a first class metalled road, and one-half of the surface was made over to the Indian Branch Railway Company for a single track. The rails, which weigh 31lbs. to the yard, were originally laid on teak, s&I and pine sleepers. A small section of the line has been relaid with steel rails, 41½lbs. per yard. Two miles of 41½lb rails are laid on Denham-Olphert's pattern iron sleepers with Molesworth's wedges. All the pine sleepers have been removed and replaced with second-hand s&I sleepers.</p> <p>There is very little ballast on the line but sufficient considering the low rate of speed.</p>	<p>This line was constructed by the Indian Branch (afterwards the Oudh and Rohilkhand) Railway Company. It was purchased by the State on the 31st of March 1872 for a sum of £30,000.</p>
<p>This line is cross-sleepered. The rails are steel, Vignole's pattern, 25lbs. to the yard. The sleepers are steel having a central corrugation, with the convexity laid downwards.</p> <p>The foot of the rail, exteriorly, is held down by a clip, which is fastened to the sleeper by two bolts, and, interiorly, by a single flat hook with a horizontal shank, which passes under the rail and clip plate just mentioned, and has its end attached by means of a screw and nut to the nearest end of the sleepers.</p> <p>The interior hook is used mainly, therefore, to keep the line to gauge. The sleepers are 45 inches long and 8 are laid to each rail of 21 feet.</p>	<p>The hill inclines which were included in the "Total mileage" in the statement last published have been abandoned from 1st January 1891.</p>

APPENDI
RAI
Constructed and in progre
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Worked t

No.	Name and gauge of line, and mileage sanctioned	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles
XXV	<p>Jorhát—</p> <p style="text-align: center;">2' GAUGE.</p> <p><i>Main line—</i></p> <p>Gosáigáon to Titábar 18½</p> <p>Alternative cold weather section to steamer ghát 3½</p> <p><i>Mariani branch—</i></p> <p>Chenimara to Mariani <u>7</u></p>	28½	<p><i>Main line—</i></p> <p>Gosáigáon to Jorhát—</p> <p>for goods traffic . . . 15-12-84 } 9</p> <p>for passenger traffic . . 17-10-85 }</p> <p>Jorhát to Dhali river—</p> <p>for goods traffic . . . 15-12-84 } 9½</p> <p>for passenger traffic . . 26-2-88 }</p> <p>Dhali River to Titábar . . 16-7-87 } 1½</p> <p>Alternative cold weather section to steamer ghát 25-11-89 } 3½</p> <p style="text-align: right;"><u>21½</u></p> <p><i>Mariani branch—</i></p> <p>Chenimara Junction to Mariani—</p> <p>for goods traffic . . . 7-1-85 } 7</p> <p>for passenger traffic . . 26-2-88 }</p> <p style="text-align: right;"><u>28½</u></p> <p style="text-align: right;">TOTAL OPEN MILEAGE . 28½</p>
XXVI	<p>Burma—</p> <p style="text-align: center;">METRE GAUGE.</p> <p>Rangoon to Prome 161</p> <p>Rangoon to Toungoo 166</p> <p>Suburban lines <u>9</u></p>	336	<p>Rangoon to Prome . . . 2-5-77 161</p> <p>Rangoon to Pegu—</p> <p>for goods traffic . . . 4-2-84 } 46½</p> <p>for passenger traffic . . 26-2-84 }</p> <p>Pegu to Pyuntaza—</p> <p>for goods traffic . . . 4-2-84 } 41½</p> <p>for passenger traffic . . 10-7-84 }</p> <p>Pyuntaza to Nyaunglebin—</p> <p>for goods traffic . . . 4-2-84 } 5</p> <p>for passenger traffic . . 1-8-84 }</p> <p>Nyaunglebin to Toungoo . . 1-7-85 } 73</p> <p>Suburban lines—</p> <p>for goods traffic { 1-3-80 6</p> <p style="text-align: right;">15-7-90 3</p> <p style="text-align: right;"><u>336</u></p> <p>DOUBLE—</p> <p>Rangoon to Kemmendine . 30-10-89 3½</p> <p>Kemmendine to Insein . . 10-1-90 5½</p> <p style="text-align: right;"><u>9</u></p> <p style="text-align: right;">TOTAL OPEN MILEAGE . 336</p>

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.									
<p>The main line, branch line and station sidings are laid with steel rails 18lbs. to the yard, Vignole pattern, spiked down to, transverse wooden sleepers. The extension to Titábar and the branch are laid on the existing roads. The sharpest curve has a 400 feet radius, and the steepest gradient is 1 in 100.</p> <p>The alternative cold weather section from Gosáigáon to outer ghát is laid with steel rails, 14lbs. to the yard, Fowler's patent.</p>	<p>This line has been constructed out of Provincial revenues for the convenience of the numerous tea gardens in the neighbourhood of Jorhát. The extension to Titábar, with a branch along the Hatigarh Ali to Mariani, was sanctioned on 13th September 1883.</p> <p>The section from Gosáigáon to Baraghop (<i>river siding</i>, 5½ miles), which has been replaced by the alternative cold weather section to steamer ghat, is abandoned permanently. Three and a half miles of this siding have been lifted up to construct the chur line, the remaining 2 miles taken up to avoid being washed away by the river, as it has encroached upon the works so much this last season.</p>									
<p>The Irrawaddy line is laid for a double track with steel rails, 50lbs. to the yard, from Rangoon to Insein (9 miles) and for a single track with rails, 40lbs. to the yard, from Insein (9th mile) to Prome 161st mile.</p> <p>The bridging is heavy owing to the severe floods from the Irrawaddy river. The other works are light, as the country traversed is flat and low.</p> <p>The Sittang line is also laid for a single track with steel rails, 41½lbs. to the yard, on pynkado sleepers. The country traversed is similar to that through which the Irrawaddy line passes, except that there are about 50 miles of forest land on the Sittang line against about 27 miles on the Irrawaddy line. The bridging is also much heavier, there being on the Sittang line 15,730 lineal feet of waterway provided against 8,165 lineal feet on the Irrawaddy line.</p>	<p>The dates of orders for survey and construction are as follows:—</p> <table> <thead> <tr> <th></th> <th style="text-align: center;"><i>Dates for survey.</i></th> <th style="text-align: center;"><i>Dates for construction.</i></th> </tr> </thead> <tbody> <tr> <td>Rangoon to Prome</td> <td style="text-align: center;">16-10-69</td> <td style="text-align: center;">25-9-74</td> </tr> <tr> <td>Rangoon to Toungoo</td> <td style="text-align: center;">17-8-74</td> <td style="text-align: center;">23-5-81</td> </tr> </tbody> </table>		<i>Dates for survey.</i>	<i>Dates for construction.</i>	Rangoon to Prome	16-10-69	25-9-74	Rangoon to Toungoo	17-8-74	23-5-81
	<i>Dates for survey.</i>	<i>Dates for construction.</i>								
Rangoon to Prome	16-10-69	25-9-74								
Rangoon to Toungoo	17-8-74	23-5-81								

APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
XXVII	<p>Toungoo-Mandalay— METRE GAUGE. Toungoo (166 miles from Rangoon on the Sittang line) to Mandalay</p> <p style="text-align: right;">220</p>	<p>(a) 220</p>	<p>Toungoo to Thawutti— for goods traffic . . . 1-5-88 } for passenger traffic . . . 11-7-88 } 44</p> <p>Thawutti to Pyinmana— for goods traffic . . . 1-5-88 } for passenger traffic . . . 26-9-88 } 15</p> <p>Pyinmana to Yamèthin— for goods traffic . . . 15-11-88 } for passenger traffic . . . 1-3-89 } 49 Yamèthin to Mandalay . . . 1-3-89 . 112</p> <p style="text-align: right;">TOTAL OPEN MILEAGE 220</p>
XXVIII	<p>Sind-Pishin (Chaman extension) — STANDARD GAUGE. Kila Abdulla to Chaman</p>	32	
XXIX	<p>Miánwáli-Mari— STANDARD GAUGE. Miánwáli (9 miles from Kundián on the Sind-Sagar railway, <i>Miánwáli branch</i>) to Mari</p>	27	
XXIXA	<p>Hyderabad-Umarkot— STANDARD GAUGE. Gidu Bandar on the Indus near Hyderabad to the right bank of the Nara River</p>	77½	

(a) Excludes the branch from Meiktla Road station to Meiktla

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.																																				
<p>The permanent-way consists of 50lb steel flat-footed rails, with deep web fish-plates of Bessemer steel. The ballast on the southern 50 miles is chiefly burnt clay or laterite; on the remainder of the line it is either shingle or broken stone.</p> <p><i>Bridges—</i></p> <table border="0" style="margin-left: 20px;"> <thead> <tr> <th></th> <th style="text-align: right;">Spans.</th> <th style="text-align: right;">Feet.</th> </tr> </thead> <tbody> <tr> <td>Swa river</td> <td style="text-align: right;">3</td> <td style="text-align: right;">100</td> </tr> <tr> <td></td> <td style="text-align: right;">1</td> <td style="text-align: right;">40</td> </tr> <tr> <td>Nagalike</td> <td style="text-align: right;">3</td> <td style="text-align: right;">100</td> </tr> <tr> <td></td> <td style="text-align: right;">2</td> <td style="text-align: right;">40</td> </tr> <tr> <td>Sinthe</td> <td style="text-align: right;">4</td> <td style="text-align: right;">100</td> </tr> <tr> <td>Pyawbwè</td> <td style="text-align: right;">4</td> <td style="text-align: right;">100</td> </tr> <tr> <td>Samôn</td> <td style="text-align: right;">1</td> <td style="text-align: right;">150</td> </tr> <tr> <td></td> <td style="text-align: right;">2</td> <td style="text-align: right;">40</td> </tr> <tr> <td>Panlounç</td> <td style="text-align: right;">5</td> <td style="text-align: right;">60</td> </tr> <tr> <td>Myitngè</td> <td style="text-align: right;">4</td> <td style="text-align: right;">150</td> </tr> <tr> <td></td> <td style="text-align: right;">2</td> <td style="text-align: right;">40</td> </tr> </tbody> </table> <p>There are several other bridges with waterways up to 200 lineal feet. All girder bridges are provided with floors and hand-rails for military purposes. There are no great engineering difficulties, but much of the line is through thick jungle.</p>		Spans.	Feet.	Swa river	3	100		1	40	Nagalike	3	100		2	40	Sinthe	4	100	Pyawbwè	4	100	Samôn	1	150		2	40	Panlounç	5	60	Myitngè	4	150		2	40	<p>The orders for the survey were issued in March 1886. The construction of the line was sanctioned in October 1886, and work began on the first 60 miles from Toungoo in November 1886; on 40 miles from Mandalay southwards, in January 1887; on the section from mile 60 to mile 108, in April 1887; and on the remaining section from mile 108 to mile 180, in June 1887.</p> <p>Surveys have been made for a branch from Samôn, the 329th mile, to Myingyan, orders for which were issued in March 1890.</p>
	Spans.	Feet.																																			
Swa river	3	100																																			
	1	40																																			
Nagalike	3	100																																			
	2	40																																			
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	2	40																																			
Panlounç	5	60																																			
Myitngè	4	150																																			
	2	40																																			
<p>The extension from Kila Abdulla to Chaman is being constructed for a double line of railway, the ruling grade being 1 in 40, and the radius of the sharpest curve 819 feet. For 14 miles the work is heavy, including the main tunnel, the length of which is 2½ miles, and minor tunnels and arched cuttings aggregating 2,450 feet. The remaining 18 miles are comparatively easy.</p>	<p>The extension was commenced in November 1887. Main tunnel commenced April 1888.</p>																																				
<p>The construction is that usual for a single broad gauge line. The earthworks are light and the grades easy. The permanent-way is second-hand Indus Valley flat-footed 60lb rail laid on second class deodar sleepers, there being 9 sleepers to each 24-foot rail.</p>	<p>The problem of waterway is very complex, owing to the native system of damming the streams and forcing the water on to the land for irrigation. One of the stations is being built as a specimen "defensible post." The line is expected to be opened for traffic in October 1891.</p>																																				
	<p>The construction of this line was sanctioned on 5th March 1891. It is proposed to be worked by the North Western railway for 45 per cent. of the gross receipts, including the use of rolling-stock, plus actual cost of maintenance.</p>																																				

town, 13 miles, the construction of which has been postponed for the present.

APPENDIX
RAIL
Constructed and in progress
STATE
Worked by

No.	Name and gauge of line, and mileage sanctioned	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
XXX	<p>East Coast—</p> <p>STANDARD GAUGE.</p> <p>Bezváda, which is the terminus of the Bezváda extension railway, to Naraj, a village on the right bank of the Mahanuddy river, about 5 miles from Cuttack 504½</p>	504½	
XXXI	<p>Mu Valley—</p> <p>METRE GAUGE.</p> <p><i>Main line—</i></p> <p>Sagaing, right bank of the Irrawaddy, to Kawlin 144½</p> <p>Kawlin through Wuntho to Gyodoung 18</p> <p><i>Branches—</i></p> <p>Myohaung (3 miles south of Mandalay station on the Toungoo-Mandalay State railway) to the left bank of the Irrawaddy opposite Sagaing (<i>Myohaung branch</i>) 6</p> <p>Manle on the main line to Katha on the right bank of the Irrawaddy (<i>Katha branch</i>) 15</p>	<p>162½</p> <p>21</p> <p>183½</p>	
	Total State Lines worked by the State	5,540	4,648

D—continued.

WAYS

on 31st March 1891.

LINES

the State.

Details of construction.	REMARKS.														
<p>The works on the line present no special difficulty anywhere. The ruling gradient is 1 in 150. The permanent way to be of 70lb flat-bottomed rails on steel sleepers for 300 miles, and on timber for 200.</p> <p>The following are the important bridges:—</p> <table border="0"> <tr> <td>Kistna</td> <td>12 spans of 300'</td> </tr> <tr> <td>Anakápalle</td> <td>6 spans of 100'</td> </tr> <tr> <td>Beemasingha</td> <td>5 spans of 100'</td> </tr> <tr> <td>Nelamarla</td> <td>4 spans of 100'</td> </tr> <tr> <td>Saugulia</td> <td>6 spans of 150'</td> </tr> <tr> <td>Vainsdhara</td> <td>7 spans of 150'</td> </tr> <tr> <td>Rushikulya</td> <td>10 spans of 150'</td> </tr> </table> <p>The Godávari river will probably be bridged, but the scheme has not yet been worked out.</p>	Kistna	12 spans of 300'	Anakápalle	6 spans of 100'	Beemasingha	5 spans of 100'	Nelamarla	4 spans of 100'	Saugulia	6 spans of 150'	Vainsdhara	7 spans of 150'	Rushikulya	10 spans of 150'	<p>The survey was ordered in September 1889. The construction was sanctioned in July 1890, and it was decided to make the railway by State Agency. Work has been commenced generally all over the line. The survey is not yet quite completed as modifications in the first alignment between Ellore and Pithápura are now being investigated.</p> <p>The estimated cost of the line is 480 lakhs.</p>
Kistna	12 spans of 300'														
Anakápalle	6 spans of 100'														
Beemasingha	5 spans of 100'														
Nelamarla	4 spans of 100'														
Saugulia	6 spans of 150'														
Vainsdhara	7 spans of 150'														
Rushikulya	10 spans of 150'														
<p>Earthwork from Myohaung to Kawlin is practically finished. Bridge masonry about one-third finished. About 40 miles of rails are laid and 60 miles of track ballasted.</p> <p>All staff-quarters are finished and station buildings nearly finished.</p> <p>Buildings are generally of teak, and masonry of bridges is mostly of brick-work.</p> <p>The permanent-way consists of 41½lb flat-footed steel rails, laid on sleepers 6' x 8" x 4½" of teak, pyinkado, ingyin and theya</p> <p>The ballast is all of broken stone or shingle.</p> <p>The ruling gradient is 1 in 200, and the sharpest curve of 900 feet radius.</p> <p>The line is unfenced.</p>	<p>Construction of main line, Sagaing to Kawlin and Myohaung branch, was sanctioned on 17th October 1889, and construction commenced about 1st January 1890.</p> <p>Construction of extension, Kawlin to Gyodoung, was sanctioned on 6th February 1891, but construction has not yet been commenced owing to the Wuntho insurrection.</p> <p>The extension to Katha was sanctioned on 10th March 1891.</p> <p>The section from Sagaing to Shwebo (53½ miles) will be opened for traffic on 1st June 1891, and the Myohaung branch about 1st November 1891.</p>														

Constructed and in progress
LINES WORKED BY

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XXXII	Great Indian Peninsula—	Miles.	NORTH-EAST LINE—
	STANDARD GAUGE.		
	NORTH-EAST LINE—	Miles.	
	<i>Main line—</i>		<i>Main line—</i>
	Bombay to Kalyán Junction 33½		Bombay to Thána 18-4-53 20½
	Kalyán Junction to Bhusával Junction 242½		Thána to Kalyán 1-5-54 12½
	Bhusával Junction to Jubbulpore (point of junction with East Indian railway) 339½	615½	Kalyán to Vásind 1-10-55 16½
			Vásind to Ásangaon 6-2-60 3½
			Ásangaon to Kására 1-1-61 22
			Kására to Igatpuri (Thul Ghát) 1-1-65 0½
		Igatpuri to Násik 28-1-61 31½	
		Násik to Chálisgaon 1-10-61 87½	
		Chálisgaon to Jalgaon 6-10-62 57½	
		Jalgaon to Bhusával 20-5-63 15	
		Bhusával to Burhánpur 20-11-65 34½	
		Burhánpur to Khandwa 3-9-66 42½	
		Khandwa to Bir 17-2-68 21	
		Bir to Itársi 1-1-70 89½	
		Itársi to Sohágpur 1-2-70 30½	
		Sohágpur to Jubbulpore 8-3-70 121½	
		615½	
	<i>Branches—</i>		<i>Nágpur branch—</i>
	Bhusával Junction (276 miles from Bombay) to Nágpur (Nágpur branch) 244½		Bhusával Junction to Malkápur 20-5-63 31½
			Malkápur to Shegaon 24-10-64 32½
			Shegaon to Badnera 18-12-65 72½
			Badnera to Pulgaon 16-7-66 40½
			Pulgaon to Sindi 5-11-66 38½
			Sindi to Nágpur 20-2-67 29½
			244½
			<i>Mohpáni branch—</i>
	Gádarváda Junction (535½ miles from Bombay) to Mohpáni Coalfields (Mohpáni branch) 12½	872½	Gádarváda to Mohpáni— for coal traffic only 3-9-72 } 12½ for public traffic 1-1-81 }
	SOUTH-EAST LINE—		SOUTH-EAST LINE—
	<i>Main line—</i>		<i>Main line—</i>
	Kalyán Junction (33½ miles from Bombay) to Ráichúr (point of junction with the Madras railway) 408½		Kalyán to Palasdhari (Karjat) 12-5-56 30½
			Palasdhari to Khandála (Bhore Ghát) 14-5-63 13½
			Khandála to Lonávla (Bhore Ghát) 14-6-58 2½
			Lonávla to Poona 14-6-58 39½
			Poona to Diksál 15-12-58 64½
			Diksál to Bársi Road 23-10-59 50½
			Bársi Road to Mohol 20-1-60 28½
			Mohol to Sholápur 6-6-60 20½
			Sholápur to Gulbarga 1-2-70 70
			Gulbarga to the Kistna 1-12-70 73½
			Kistna to Ráichúr 1-5-71 15½
		416	408½
		1,288½	
	<i>Khopoli branch—</i>		<i>Khopoli branch—</i>
	Palasdhari (64 miles from Bombay) to Khopoli 7½		Palasdhari to Khopoli 12-5-56 7½
	Carried over	1,288½	Carried over 1,288½

D—continued.

WAYS

on 31st March 1891.

GUARANTEED COMPANIES.

Details of construction.	REMARKS.
<p>The North-East line to Khandwa, 350 miles 13·38 chains, 59·61 chains near Bāgra, 46 miles 34 chains from Kal-yān Junction to Lonāvla on the South-East line, and 61 miles 49·60 chains from Bhusával to Shegaon on the Nāgpur branch; in all 458 miles 76·59 chains are double. On the rest of the line generally the earth-work is for a single line, and the bridges and viaducts for a double line of rails.</p> <p>The rails originally laid were iron, weighing 68lbs. and 84lbs. per yard. These are now being gradually replaced by steel rails weighing 69lbs., 82lbs., and 86lbs. per yard.</p> <p>The sleepers originally laid were chiefly wooden sleepers which are now being in part replaced by iron bowls.</p> <p>A portion of the South-East line is laid with iron bowls.</p>	<p>The line from Bombay to Thána was commenced on the 31st October 1850, and that from Bhusával Junction to Malkápur towards the close of 1859.</p> <p>From Sholápur to Gulbarga the contractors commenced work on 3rd August 1865, and from Gulbarga to Ráichúr, 89½ miles, the contract was let in December 1865. The Kistna bridge on the Gulbarga-Ráichúr section was opened on 9th October 1873.</p> <p>The Khopoli branch is worked during fair weather only.</p>

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
XXXII	Great Indian Peninsula—concl'd.		
	Brought forward	1,288½	Brought forward . 1,288½
			DOUBLE—NORTH-EAST LINE—
			Bombay to Thána . . . 18-4-53 . . . 20½
			Thána to Kalyán 1-5-54 . . . 12½
			Kalyán to Vásind 22-10-66 . . . 16½
			Vásind to Atgaon 20-2-67 . . . 9½
			Atgaon to Kására 25-4-67 . . . 16
			Kására to Igatpuri 1-1-65 . . . 9½
			Igatpuri to Násik 10-1-69 . . . 31½
			Násik to Chálisgaon 10-1-69 . . . 27½
			Chálisgaon to Kajgaon 10-1-69 . . . 12
			Kajgaon to Páchora 17-3-69 . . . 16
			Páchora to Máheji 27-5-69 . . . 9½
			Máheji to Mhasával 6-3-73 . . . } 35
			Mhasával to Bhusával 6-6-73 . . . }
			Between Itársi and Sohágpur }
			Bhusával to Khandwa 11-1-89 . . . 74½
			351
			DOUBLE—SOUTH-EAST LINE—
			Kalyán to Palasdhari 25-7-70 . . . 30½
			Palasdhari to Khandála } Bhore Ghát { 14-5-63 . . . 13½
			Khandála to Lonávla } 14-6-58 . . . 2½
			46½
			DOUBLE—NÁGPUR BRANCH—
			Bhusával to Nálgaon 11-1-89 . . . 17
			Nálgaon to Shegaon 1-4-90 . . . 44½
			61½
			TOTAL DOUBLE LINE . . . 459
	TOTAL	1,288½	TOTAL OPEN MILEAGE . . 1,288½
XXXIII	Bombay, Baroda and Central India—		
	STANDARD GAUGE.		
	Main line—		Main line—
	Bombay (Colába) Terminus to Ahmedabad 309½		Colába to Marine lines . . . 18-1-70 . . . 2
	Extension to Viramgám Junction and Wadhván 80		Marine lines to Charni Road . . . 19-6-69 . . . ¾
	389½		Charni Road to Bellasis Road 13-9-68 . . . ¾
			Bellasis Road to Bukár 28-11-64 . . . 121
			Bulsár to Navsári 2-9-61 . . . 24½
			Navsári to Sachin 20-5-61 . . . 9½
			Sachin to Surat 18-3-61 . . . 9
			Surat to Amroli 19-11-60 . . . 2½
			Amroli to Anklesvar 10-2-60 . . . 28½
			Anklesvar to the Nerbudda 5-12-60 . . . } 5½
			Nerbudda to Broach 22-6-61 . . . }
			Broach to Baroda 9-1-61 . . . 43½
			Baroda to Dholia 22-4-61 . . . 11½
			Dholia to Mehmabad 3-9-62 . . . 33½
			Mehmabad to Ahmedabad 21-1-63 . . . 17½
			Ahmedabad to Sábarmati 1-1-70 . . . 3½
			Sábarmati to Sanand 24-5-71 . . . 13½
			Sanand to Viramgám 30-11-71 . . . 22½
			Viramgám to Wadhván 25-5-72 . . . 39½
	Carried over	389½	Carried over . . . 369½

D—continued.

WAYS

on 31st March 1891.

GUARANTEED COMPANIES.

Details of construction.	REMARKS.
	<p>This Company works, under agreement, the Dhond-Manmád railway, the Berar branches, and the Wardha Coal State railway. The terms on which the branch lines are worked will be found in Appendices W and K, J and I, Part II of the Railway Administration Reports for 1881-82 and 1890-91, respectively.</p>
<p>The line is double from Colába to Virár, 38½ miles; from Sachin to Amroli, 11¼ miles; and Bárejadi to Amedabad, 10¼ miles; in all 60 miles. On the rest of the line except the Nerbudda and Bassein valleys, the earth-work is for a single line, and the bridge piers and abutments for a double line; superstructure for a double line has only been provided in the Mahi viaducts. The Nerbudda viaduct had also a complete double line of superstructure before the disaster of 1876; but on the reconstruction of the destroyed portion, only a single line was provided on that part. Part of the double line on the standing portion was removed. The whole structure has, however, been superseded by an entirely new bridge which was opened on 16th May 1881. This bridge is constructed with piers for a double road, but only one set of girders has been erected.</p> <p>The line is laid with double-headed rails, weighing 68 and 69lbs. to the yard.</p> <p>The rails are laid generally on a wooden road, but in suitable places iron bowls have been used in renewing the wooden sleepers.</p> <p>The Wadhwan extension is laid with rails, 60lbs. to the yard, on iron bowl sleepers.</p>	<p>The section from Colába to Marine lines was commenced in May 1865.</p> <p>The estimates of the extension to Wadhwan were sanctioned on the 24th October 1870.</p>

Constructed and in progre
LINES WORKED B

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles
XXXIII	Bombay, Baroda and Central India—concl'd.		
	Brought forward . 389½		Brought forward . 389½
	STANDARD GAUGE.		
	<i>Godhra branch—</i>		<i>Godhra branch—</i>
	Anand Junction (269½ miles from Bombay) to Godhra 49½	438½	Anand to Dákor 8-4-74 . 16½
			Dákor to Rukhyal 6-1-75 . 1½
			Rukhyal to Hungari 6-12-76 . 9
			Hungari to Páli 29 1-77 . 4½
			Páli to Godhra 26-2-82 . 1
			49½
	<i>Páli branch—</i>		<i>Páli branch—</i>
	Páli in the Runn of Cutch to Viramgám Junction (349½ miles from Bombay) on the Wadhwan Extension of the Bombay, Baroda and Central India Railway 22½	22½	Páli to Viramgám 12-5-73 . 22½
			DOUBLE—MAIN LINE—
			Colába to Marine lines 18-1-70 . 2
			Marine lines to Charni Road 19-6-69 . ½
			Charni Road to Bellasis Road 13-9-68 . 1
			Bellasis Road to Máhim 20-7-65 . } 11½
			Máhim to Bándra 23-2-66 . }
			Bándra to Santa Cruz 23 5-66 . }
			Santa Cruz to Andheri 29-8-67 . }
			Andheri to Bháyndar 27-4 85 . 13½
			Bháyndar to Virár 1-10-85 . 10½
			Sachin to Kánkra Khádi 4-7-87 . 6
			Kánkra Khádi to Surat 5-6-68 . 2½
			Surat to Amroli 9-10-67 . 2½
			Bárejadi to Ahmedabad 2-6-87 . 10½
			TOTAL DOUBLE LINE 60
	TOTAL 460½		TOTAL OPEN MILEAGE 460½
XXXIV	Madras—		SOUTH-WEST LINE—
	STANDARD GAUGE.		<i>Main line—</i>
	SOUTH-WEST LINE—		Madras to Veyasarpady 7-4-73 . 2½
	<i>Main line—</i>		Veyasarpady to Arcot 1-7-56 . 63½
	Madras to Veyasarpady Junction 2½		Arcot to Kátpádi 7-5-57 . 15½
	Veyasarpady Junction to Arkónam Junction 40½		Kátpádi to Gudiyátam 19-5-58 . 15½
	Arkónam Junction to Calicut 37½		Gudiyátam to Ambúr 16-1-60 . 17
	414		Ambúr to Vániyambádi 1-2-60 . 10
	<i>Ráyapuram branch—</i>		Vániyambádi to Tirupatúr 23-5-60 . 14½
	Veyasarpady Junction to Ráyapuram 2½		Tirupatúr to Salem 1-2-61 . 70
	Carried over 416½	...	Salem to Sankaridrug 1-12-61 . 23½
			Sankaridrug to Pódanúr 12-5-62 . 71½
			Pódanúr to Pattámbi 14-4-62 . 64½
			Pattámbi to Kuttipuram 23-9-61 . 11½
			Kuttipuram to Tirúr 1-5-61 . 9½
			Tirúr to Kadalundi 12-3-61 . 16½
			Kadalundi to Calicut 2-1-68 . 9
			414
			<i>Ráyapuram branch—</i>
			Veyasarpady to Ráyapuram 1-7-56 . 2½
			Carried over 416½

D—continued.

WAYS

on 31st March 1891.

GUARANTEED COMPANIES.

Details of construction.	REMARKS.
<p>The formation and earthwork of the Godhra Branch are for a single line, and rails, weighing 60lbs to the yard, are laid on iron pot sleepers. The line is located on the Trunk road.</p> <p>The rails are flat-footed, weighing 4^olbs. per yard.</p>	<p>This line was constructed by the Bombay, Baroda and Central India Railway Company at the expense of the State, and is worked under agreement by that Company as part of their own system. The capital outlay incurred by the State was charged against the Civil Works Grant. The dates of orders for survey and construction are 26th May 1870 and 13th June 1871, respectively.</p> <p>The Gaekwar's Dabhoi, Mehsána and Peltád Railways are worked, under agreement, by this Company.</p> <p>The Rajputana Malwa State Railway has been leased to this Company from 1st January 1885 to 30th June 1900. The terms of the lease are given in Appendix J., Part II of the Railway Administration Report for 1884-85.</p>
<p>The embankments, except on the double line, are for a single track; but the foundations and superstructure of bridges and viaducts are for a double way, except on the Nilgiri branch, the Calicut extension, and in a few isolated instances. The rails, which vary in weight from 65 to 84lbs. per yard, are laid on iron pot sleepers.</p> <p>The section between Madras and Arkónam, 42½ miles, is double.</p> <p>The South-West line was originally laid with sleepers of indigenous woods, but an experiment was made of using stone blocks 2' 0" x 2' 0" x 1' 0" as sleepers. As the experiment proved to be unsatisfactory, the blocks were all removed in 1857.</p> <p>Jungle-wood sleepers were found to be very short-lived, and in 1861 it was decided to replace them by Greaves's patent cast-iron bowl sleepers, and this alteration has proved to be economical and in every way satisfactory.</p>	<p>Work was commenced on the South-West line on 9th June 1853. The main line originally commenced at Ráyapuram, but on the opening of the length between Veyasarpady Junction and the central station, this became a portion of the main line, and the old line, from the junction to Ráyapuram, became a branch.</p> <p>The extension of the South-West line from near Beypore to Calicut, which was sanctioned in August 1884, was opened for traffic on the 2nd of January 1888. The new line has cost about 19 lakhs of rupees, of which 1½ lakhs have been paid by the local authorities in consideration of the large bridges being made available for ordinary traffic. The line takes off at 2¼ miles short of Beypore, which length, together with Beypore station, has been abandoned.</p>

APPENDIX
RAIL

Constructed and in progress
LINES WORKED BY

No.	Name and gauge of line, and mileage sanctioned	Total mileage.		Date of opening for public traffic.	
		Miles.	Miles.	Miles.	Miles.
XXXIV	Madras—concl'd.				
	Brought forward	416½	...	Brought forward	416½
	STANDARD GAUGE.				
	SOUTH-WEST LINE—concl'd.			SOUTH-WEST LINE—concl'd.	
	Bangalore branch—			Bangalore branch—	0
	Jalárpét Junction (132 miles from Madras) to Bangalore Cantonment	84½		Jalárpét Junction to Bangalore Cantonment	1-8-64 84½
	Bangalore Cantonment to Bangalore City	2½		Bangalore Cantonment to City	1-7-82 2½
		87½			87½
	Nilgiri branch—			Nilgiri branch—	
	Pódanúr Junction (301½ miles from Madras) to Mettupálaiyam, at the foot of the hills	25½		Pódanúr Junction to Coimbatore	1-2-73 3½
				Coimbatore to Mettupálaiyam	31-8-73 22
					25½
	Pálghat branch—			Pálghat branch—	
	Olavakotu (332 miles from Madras) to Pálghat Town	2½		Olavakotu to Pálghat	2-1-88 2½
			53½		
	NORTH-WEST LINE—			NORTH-WEST LINE—	
	Main line—			Main line—	
	Arkónam Junction (42½ miles from Madras) to Guntakal	232½		Arkónam to Nagari	4-3-61 17
	Guntakal to Ráichúr (point of Junction with the Great Indian Peninsula railway)	75		Nagari to Puttúr	8-12-61 9½
				Puttúr to Rénigunta	15-9-62 14½
				Rénigunta to Reddipalle	1-10-64 28
				Reddipalle to Cuddapah	1-9-65 39½
				Cuddapah to Muddanúr	1-8-66 34½
				Muddanúr to Tadpatri	1-9-68 32½
				Tadpatri to Gooty	1-8-69 29½
			307½	Gooty to the Tungabhadra River	12-12-70 75½
				Tungabhadra to Ráichúr	15-3-71 17½
					307½
				DOUBLE—SOUTH-WEST LINE—	
				Madras to Veyasarpady Junction	7-4-73 2½
				Veyasarpady Junction to Perambúr	7-2-74 1½
				Perambúr to Ávadi	1-5-77 9½
				Ávadi to Tiruvallúr	20-7-77 12½
				Tiruvallúr to Arkónam	28-8-77 16½
					42½
	TOTAL		839½	TOTAL OPEN MILEAGE	839½
	Total Lines worked by Guaranteed Companies		2,508½		2,588½

D—continued.

WAYS

on 31st March 1891.

GUARANTEED COMPANIES.

Details of construction.	REMARKS.
	<p>The line from Bangalore Cantonment to Bangalore City, 2½ miles, was constructed as a part of the Mysore State railway, but was subsequently made over to the Madras Railway Company.</p> <p>The estimate, amounting to ₹1,39,535, for the construction of the Pálghat branch, was sanctioned on the 4th January 1887, and the branch was opened for traffic on the 2nd of January 1888.</p> <p>The station buildings at Pálghat town are at present of a temporary nature. The bridge over the Ponáni river is of four 64-foot girders, and is 16' 6" wide between railings, and carries the railway as well as a public road. The local authorities contributed ₹30,000 towards the construction of the bridge.</p> <p>The Bellary branch from Guntakal Junction to Bellary has been purchased by the Southern Mahratta Railway, and was handed over to that Company on the 1st February 1887.</p> <p>The new bridges over the Pennér and Chitrávati rivers, North-West line, consisting of 13 spans of 131 feet and 19 spans of 131 feet, respectively, were opened on the 1st October 1889 and 6th March 1890; that over the Pápaghni river, consisting of 15 spans of 131 feet, is in progress.</p> <p>Extensive works in connection with the Junction of this line with the Villupuram-Guntakal State railway at Kát pádi are in progress.</p>

APPENDIX
RAIL
Constructed and in progress
ASSISTED

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
XXXV	<p>Delhi-Umballa-Kalka—</p> <p style="text-align: center;">STANDARD GAUGE.</p> <p>Delhi on the East Indian railway, <i>via</i> Karnál and Umballa to Kalka</p>	162	Delhi to Kalka 1-3-91 162
XXXVI	<p>Tárakeshwar—</p> <p style="text-align: center;">STANDARD GAUGE.</p> <p>Seoraphuli (14 miles from Howrah on the East Indian railway) to Tárakeshwar in the Hooghly District</p>	22½	Seoraphuli to Tárakeshwar . . . 1-1-85 22½
XXXVII	<p>Deoghur—</p> <p style="text-align: center;">METRE GAUGE.</p> <p>Baidyanáth (200½ miles from Howrah on the Chord Line, East Indian railway) to Deoghur</p>	4½	Baidyanáth to Deoghur . . . 23-12-82 4½
XXXVIII	<p>Rohilkhand-Kumaun (Company's Section)—</p> <p style="text-align: center;">METRE GAUGE.</p> <p>Bhojeepera Junction (11½ miles from Bareilly on the Lucknow-Bareilly Section) to Káthgodám, at the foot of the Naini Tal Hills</p>	54½	Bhojeepera to Káthgodám . . 12-10-84 54½

D—continued.

WAYS

on 31st March 1891.

COMPANIES.

Details of construction.	REMARKS.
<p>The line is constructed and equipped on the standard of the East Indian railway. Rails, double-headed steel, 75 lbs. to the yard, are laid on Denham and Olphert's sleepers.</p>	<p>The Delhi-Umballa-Kalka Railway Company was formed in January 1889, and the capital share lists closed on the 26th of that month.</p> <p>A survey between Delhi and Umballa was completed during November and December 1888. The portion of the line between Umballa and Kalka had been previously surveyed under the orders of the Punjab Government, and the staking out of this length was at once taken in hand by the Company.</p> <p>The line is worked and maintained by the East Indian Railway Company under an agreement, the terms of which will be found in Appendix H, Part II of the Railway Administration Report for 1888-89.</p>
<p>The gradients and curves are easy, and the line is fenced and ballasted throughout. The transverse plate sleepers used are of cast-iron of the Denham-Olphert's latest pattern. The line is laid with rails and fastenings of wrought iron purchased from the East Indian railway.</p>	<p>The construction of this railway was sanctioned by the Secretary of State on 20th February 1883.</p> <p>This is one of the first railways constructed in India by private enterprise without the aid of any Government guarantee of interest on capital. The latter has been raised in this country by an association of European and Native gentlemen who have paid every expense connected with the construction of the line, excepting the cost of survey and the cost of acquiring the necessary land which has been given free by the Government of Bengal.</p> <p>This line is worked and maintained by the East Indian Railway Company under an agreement, the terms of which will be found in Appendix N, Part II of the Railway Administration Report for 1887-88.</p>
<p>The line passes over an undulating country. The sharpest curve has a radius of 2,640 feet and a length of 3,000 feet. The steepest gradient is 1 in 60 for a length of 800 feet. The permanent-way is laid with 36 lb steel rails on wooden sleepers. The line is ballasted throughout.</p>	<p>Messrs. Burn & Co., contractors, undertook the construction of this railway with capital raised locally without any guarantee, but with a free gift of land. They commenced work in October 1881.</p> <p>The Rohini branch (1½ miles), which had been constructed and opened for public traffic on the 1st July 1883, was closed with effect from the 1st November 1885 in consequence of the insufficiency of traffic.</p>
<p>The rails are of the metre gauge type, laid on sal sleepers. The line is unfenced throughout.</p> <p>From Káthgodám to Haldwáni, a distance of 175 chains, there is a continuous descending grade of 1 in 70; from Haldwáni to Lálkua it varies from 1 in 80 to 1 in 103; from Lálkua the grade is 1 in 146 for 71 chains, after which it becomes more moderate.</p>	<p>The line was originally projected by certain local capitalists, but was afterwards taken up and completed by a Company formed in England.</p> <p>The Government guaranteed 4 per cent. on a maximum capital of £200,000 during the construction of the line or until January 1885. The contract is dated 12th October 1882.</p> <p>The Local Government gives a subsidy of ₹40,000 per annum.</p> <p>This Company also works the Lucknow-Bareilly line. The terms of working will be found in Appendix M, Part II of the Railway Administration Report for 1890-91.</p>

APPENDIX
RAIL
Constructed and in progress
ASSISTED

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.		Date of opening for public traffic.		
		Miles.	Miles.	Miles.		
XXXIX	<p>Darjeeling-Himalayan— 2' GAUGE. Siliguri (317 miles from Calcutta on the Northern section of the Eastern Bengal State railway) to Kurseong and Darjeeling 51</p>	51	51	<p>Siliguri to Kurseong 23-8-80 31½ Kurseong to Sonáda 1-2-81 9½ Sonáda to Ghúm 5-4-81 5½ Ghúm to Darjeeling 4-7-81 3½ Darjeeling to Darjeeling Bazaar 16-6-86 ¼</p> <p style="text-align: right;">TOTAL OPEN MILEAGE 51</p>		
XL	<p>Dibru-Sadiya— METRE GAUGE. <i>Main line—</i> Dibrugarh on the bank of the Brahmaputra river, <i>viá</i> Tinsukia and Dum-Duma to Tálap 54½</p> <p><i>Makum branch—</i> Makum Junction, <i>viá</i> Digboy to Dihing bridge 23</p>	77½	77½	<p><i>Main line—</i> Lower Steamer Ghát, on the left bank of the Brahmaputra river, near Dibrugarh, eastward as far as the Dinjan stream, for goods traffic only in October 1882 (15 miles). Dibrugarh to Makum Junction 16-7-83. 38½ Makum Junction to Dum-Duma 2-5-84. 8 Dum-Duma to Tálap 5-2-85. 8</p> <p><i>Makum branch—</i> Makum Junction to Dihing bridge 2-5-84. 23</p> <p style="text-align: right;">TOTAL OPEN MILEAGE 77½</p>		
XLI	<p>Thatôn-Duyinzáik— 2' 6" GAUGE. From Thatôn to Duyinzáik on the Donedamie river 8</p>	8	8	<p>Thatôn to Duyinzáik 11-2-85 8</p>		
XLIA	<p>Nílgiri— GAUGE (<i>not decided</i>). Mettupálaiyam to Coonoor and Ootacamund 42</p>	42	42			
TOTAL ASSISTED COMPANIES		422	422	380		

D—continued.

WAYS

on 31st March 1891.

COMPANIES.

Details of construction.	REMARKS.
<p>The line is throughout single. The road has almost continuous curves and windings as it passes across the mountains, a radius of 60 feet being the sharpest curve, and 1 in 28 the steepest gradient.</p> <p>The line, originally laid with iron rails, 30lbs. to the yard on the plain portion, is now relaid with iron rails, 40lbs to the yard. Steel rails, 40lbs. to the yard, are laid on the hill road portion. Nine sleepers have been laid under the 40lb rails throughout. Half the width of the cart-road has been reserved for cart and other traffic.</p>	<p>This railway, which was originally known as the Darjeeling Steam Tramway, was constructed by a private Company with a Provincial guarantee from the Government of Bengal that the gross receipts shall be made up to R2,00,000 per annum.</p>
<p>Steel rails, 41½lbs. to the yard, are laid throughout the whole line.</p> <p>The main line is constructed on the existing Government road, except for 2¼ miles from the Ghât, 1¼ miles from Dibrugarh station east, 2 miles at the 43rd and 44th miles, and ½ mile from Dum-Duma river to Bisakopi, and all bridges, culverts, &c., which were in existence, have been utilised, as far as practicable, with such slight additions and alterations as were necessary with the following exceptions.—Dinjan river, Sessa river, Singlijan, Bor Hapjan, Dibru river, Bisakopi and Tiphak,—at which places timber bridges have been erected. The line is unfenced and unballasted.</p> <p>The extension to Tálap (8 miles) is nowhere fenced, except for a few yards at two or three level-crossings: it is wholly unballasted. The permanent-way is of the same description as on the main line.</p> <p>The Makum branch is cut entirely through thick forest, and has been partly ballasted with broken stone.</p>	<p>The contract with this Company, which was formed in England by Messrs. Shaw, Finlayson & Co., is dated 26th May 1880. Government has to pay an annual subsidy equal to such sum as, with the net earnings, will yield a dividend of 5 per cent. per annum on the capital outlay on the main line and branches, subject to a maximum charge of R1,00,000.</p>
<p>The rails are steel, Vignole section; the sleepers are of steel and wood. The line is ballasted and only partially fenced. There are no large bridges.</p>	<p>This line is constructed along the public road, which has been specially made in view to tramway communication being established. Its construction and working has been undertaken by Mr. G. E. L. Dawson. Burma originally guaranteed in 1883 a subsidy of R8,100 per annum for three years, but the amount was reduced from 11th February 1888 to R6,000 per annum, with a further guarantee for two years.</p>
	<p>This line is to be constructed by the Nilgiri Railway Company, formed in February 1886. Permission to proceed with the construction of the line was given on the 23rd June 1890, but construction operations have not yet been commenced.</p>

Constructed and in progress
LINES OWNED BY
and worked by

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.		Date of opening for public traffic.	
		Miles.	Miles.	Miles.	Miles.
	STANDARD GAUGE.				
XLII	Khámgaon— Jalamb Junction (332½ miles from Bombay on the Nágpur branch of the Great Indian Peninsula railway) to Khámgaon 7½	7½	7½	Jalamb to Khámgaon . . . 4-3-70 . . . 7½ TOTAL OPEN MILEAGE . . . 7½	7½
XLIII	Amráoti— Badnera Junction (412½ miles from Bombay on the Nágpur branch of the Great Indian Peninsula railway) to Amráoti 5½	5½	5½	Badnera to Amráoti . . . 16-2-71 . . . 5½ TOTAL OPEN MILEAGE . . . 5½	5½
XLIV	Bhopal-Itársi— STANDARD GAUGE. Itársi (463½ miles from Bombay on the North-East line of the Great Indian Peninsula railway) to Bhopal 57	57	57	Itársi to Hoshangabad . . . 1-6-82 . . . 11½ Hoshangabad to Bhopal . . . 18-11-84 . . . 45½ TOTAL OPEN MILEAGE . . . 57	57
XLV	The Nizam's Guaranteed State— STANDARD GAUGE. <i>Main line—</i> Wádi (375½ miles from Bombay on the South-East line, Great Indian Peninsula railway), <i>viá</i> Secunderabad to South-East frontier 310 <i>Branches—</i> Husain Ságar Junction (111½ miles from Wádi) to Hyderabad (<i>Hyderabad branch</i>) 3½ Dornakal to Singareni coal-fields (<i>Mineral branch</i>) 16½ Junction of new line to Trimulgherry (<i>Troop siding</i>) 2½ Warangal to Frontier near Chanda . . . 160*	492½	492½	<i>Main line—</i> Wádi Junction to Secunderabad and to junction of new line . . . 9-10-74 . . . 115½ Junction of new line to Warangal . . . 8-4-86 . . . 86½ Warangal to Dornakal . . . 1-1-88 . . . 52½ Dornakal to Bóna Kálu . . . 5-8-88 . . . 31½ Bóna Kálu to Frontier . . . 10-2-89 . . . 23½ 310 <i>Hyderabad branch—</i> Husain Ságar to Hyderabad 9-10-74 . . . 3½ <i>Mineral branch—</i> Dornakal to Singareni coal-fields 1-1-88 . . . 16½ <i>Troop siding—</i> Junction of new line to Trimulgherry 9-10-74 . . . 2½ 22½ TOTAL OPEN MILEAGE . . . 332½	332½

* In abeyance—under survey.

D—continued.

WAYS

on 31st March 1891.

NATIVE STATES

Companies.

Details of construction.	REMARKS.				
<p>The Khámgaon line has been constructed for a single track with a formation of 16 feet, and is laid with flat-footed rails, 60 lbs. to the yard, on oval bowl sleepers.</p> <p>The permanent-way used on the Amráoti line is of iron, the rails weighing 68lbs per yard.</p>	<p>The dates of orders for survey and construction are as follows:—</p> <table border="0"> <tr> <td style="text-align: center;"><i>Date for survey.</i></td> <td style="text-align: center;"><i>Dates for construction.</i></td> </tr> <tr> <td style="text-align: center;">8th April 1870.</td> <td style="text-align: center;">7th June 1869. 11th June 1870.</td> </tr> </table> <p>These branches have been constructed from the surplus revenues of the Berars, with a view to facilitate the transport of cotton from the cotton marts of Khámgaon and Amráoti. They are worked by the Great Indian Peninsula Railway Company under agreements, the terms of which will be found in Appendices J and K, Part II of the Railway Administration Report for 1890-91.</p>	<i>Date for survey.</i>	<i>Dates for construction.</i>	8th April 1870.	7th June 1869. 11th June 1870.
<i>Date for survey.</i>	<i>Dates for construction.</i>				
8th April 1870.	7th June 1869. 11th June 1870.				
<p>The line has been laid for a single track with 62lbs. steel rails. From Hoshangabad to Bhopal it is practically unfenced. The sleepers are partly of steel and partly of creosoted pine and other kinds of wood.</p> <p>The Ghát Section, Budni to Barkhera, which was originally laid with jungle-wood sleepers, was during the year 1890 relaid with Indian Midland Railway cast-iron oval pot sleepers, weighing 80lbs. per bowl.</p>	<p>The dates of orders for survey and construction are 4th June 1879 and 31st July 1880, respectively.</p> <p>The British Government has paid for the portion, 13 miles, in its territory, and a moiety of the cost of the bridge over the Nerbudda, or, in all, about 13 lakhs; the Begum of Bhopal has contributed 50 lakhs for the portion of the line in her dominions. Profits are to be shared between Her Highness the Begum and the British Government in proportion to the mileage constructed at the cost of either party. The line was constructed on contract by Messrs. Glover & Co., and is being worked by the Indian Midland Railway Company from 1st January 1889. The terms of working have only been provisionally settled—<i>vide</i> page 147 of Part II of the Railway Administration Report for 1889-90.</p>				
<p>The whole line from Wádi to His Highness the Nizam's frontier is constructed for a single track. About 65 miles are laid with double-headed 68lb iron rails† on cast-iron bowl sleepers obtained from the Great Southern of India Railway Company, 6 miles with Vignole's steel rails, 66½lbs. on Bessemer steel sleepers, and the remainder of the main line with 66½lb steel rails on steel pea-pod sleepers.</p> <p>Branch lines to Trimulgherry and the mines are laid with second-hand 60lb flat-footed rails on timber sleepers. The branches are also constructed for a single track.</p>	<p>The dates of orders for survey and construction are 30th October 1869 and 25th March 1871, respectively.</p> <p>The Government of the Nizam provided the capital, and the British Government constructed the line.</p> <p>The broad gauge was finally adopted on the 30th October 1871. To the end of 1878 the line was worked by the Great Indian Peninsula Railway Company with its own rolling-stock; from January 1879 to 31st December 1884 it was worked by the State agency, and from January 1885 by His Highness the Nizam's Guaranteed State Railways Company.</p> <p>This Company was formed for the purpose of acquiring and working the then existing line of 119½ miles and of constructing on the same (standard) gauge and working the new lines, 373 miles in length.</p> <p>The construction of the first section between Secunderabad and Warangal was commenced in November 1884 and completed in March 1886.</p> <p>The construction of the section from Warangal to Dornakal, 52½ miles, and the coal branch, 16½ miles, were commenced in May 1886. The extension between Dornakal and the Frontier, 55 miles in length, was commenced in January 1887 and completed in January 1889.</p> <p>This Company also work, under agreement, the Bezwála Extension as part of their own system. The terms of working will be found in Appendix P, Part II of the Railway Administration Report for 1889-90.</p>				

† These are about to be renewed with steel rails.

APPENDIX
RAIL
Constructed and in progress
LINES OWNED BY
and worked

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
XLVI	<p>The Gaekwar's Dabhoi—</p> <p style="text-align: center;">2' 6" GAUGE.</p> <p>Miyágám [228½ miles from Bombay (Colába), on the Bombay, Baroda and Central India railway] to Dabhoi 20</p> <p>Dabhoi to Báhádarpur 9½</p> <p>Báhádarpur to Bodeli 13</p> <p>Dabhoi to Chándod 10½</p> <p>Dabhoi to Vishvámitri 1½</p> <hr style="width: 10%; margin-left: 0;"/>	71½	<p>Miyágám to Dabhoi 8-4-73 20</p> <p>Dabhoi to Chándod 15-4-79 10½</p> <p>Dabhoi to Báhádarpur 17-9-79 9½</p> <p>Dabhoi to Goya Gate 1-7-80 17</p> <p>Goya Gate to Vishvámitri 24-1-81 1½</p> <p>Báhádarpur to Bodeli 16-6-90 13</p> <hr style="width: 10%; margin-left: 0;"/> <p style="text-align: right;">TOTAL OPEN MILEAGE 71½</p>
XLVII	<p>The Gaekwar's Mehsána—</p> <p style="text-align: center;">METRE GAUGE.</p> <p>Viramgám (40½ miles from Ahmedabad on the Bombay, Baroda and Central India rialway), <i>via</i> Mehsána to Kherálu 68</p> <p>Mehsána to Pátan 24½</p> <hr style="width: 10%; margin-left: 0;"/>	92½	<p>Viramgám to Mehsána 1-2-91 40½</p> <p>Mehsána to Vadnagar 21-3-87 20½</p> <p>Vadnagar to Kherálu 12-12-88 7</p> <hr style="width: 10%; margin-left: 0;"/> <p style="text-align: right;">TOTAL OPEN MILEAGE 68</p>
XLVIII	<p>The Gaekwar's Petlád—</p> <p style="text-align: center;">STANDARD GAUGE.</p> <p>Ánand (269½ miles from Bombay on the Bombay, Baroda and Central India railway) to Petlád 13½</p> <hr style="width: 10%; margin-left: 0;"/>	13½	<p>Ánand to Petlád 5-5-90 13½</p>

D—continued.

WAYS

on 31st March 1891.

NATIVE STATES

by Companies.

Details of construction.	REMARKS.												
<p>The rails used are flat-footed, 30½ lbs. to the yard, spiked to wooden sleepers. The width at formation level is 12 feet. The entire line is on embankment. There are a few small bridges, some of one 40 feet span and some of two 20 and 30 feet spans each, but the drainage of the country is mostly by small nullahs which are dry for the greater part of the year. There are no bridges specially constructed for cart traffic, but the carts use some of the nullahs to pass under the line.</p>	<p>The dates of orders for survey and construction are as follows:—</p> <table border="1"> <thead> <tr> <th></th> <th>Dates for survey.</th> <th>Dates for construction.</th> </tr> </thead> <tbody> <tr> <td>Miyágám to Dabhoi</td> <td>17-4-69</td> <td>21-3-72</td> </tr> <tr> <td>Dabhoi to Chándod and Báhádarpur</td> <td>6-6-77</td> <td>27-11-77</td> </tr> <tr> <td>Dabhoi to Baroda</td> <td>July 77</td> <td>29-1-79</td> </tr> </tbody> </table> <p>The line is the property of His Highness the Gaekwar of Baroda</p> <p>The Dabhoi-Báhádarpur line has been extended to Bodeli, 13 miles. The survey was ordered in February 1887 and construction sanctioned in September 1888. Work was commenced in November 1888 and completed on 16th June 1890.</p> <p>This line is worked and maintained by the Bombay, Baroda and Central India Railway Company. The terms of working will be found on page 150, Part II of the Railway Administration Report for 1889-90.</p>		Dates for survey.	Dates for construction.	Miyágám to Dabhoi	17-4-69	21-3-72	Dabhoi to Chándod and Báhádarpur	6-6-77	27-11-77	Dabhoi to Baroda	July 77	29-1-79
	Dates for survey.	Dates for construction.											
Miyágám to Dabhoi	17-4-69	21-3-72											
Dabhoi to Chándod and Báhádarpur	6-6-77	27-11-77											
Dabhoi to Baroda	July 77	29-1-79											
<p>The line is constructed for a single track. The rails are steel, 41½ lbs. to the yard, laid on transverse steel trough sleepers.</p> <p>The line runs through an easy country, and there have been no engineering difficulties.</p>	<p>The survey of the line from Mehsána to Vadnagar was commenced in May 1884 and construction in August 1886. In March 1887 the line was completed by the Bombay, Baroda and Central India Railway Company. The funds for this branch were supplied by His Highness the Gaekwar of Baroda.</p> <p>The construction of an extension from Visnagar to Vijápur, which was sanctioned on 18th April 1887, has been deferred for the present.</p> <p>The survey of the line from Vadnagar to Kherálu was commenced in April 1887 and the construction in June 1887. In December 1888 the extension was completed by the Bombay, Baroda and Central India Railway Company.</p> <p>Surveys of branch lines from Mehsána to Viramgám and Pátan were carried out during the early part of 1889 and construction of the lengths between Mehsána and Viramgam, 40½ miles, and Mehsána and Pátan, 24½ miles, were commenced in May and November 1889, respectively.</p> <p>This line is worked by the Bombay, Baroda and Central India Railway Company.</p>												
<p>The rails used are flat-footed, 66½ lbs. to the yard, 30 feet long, laid on steel sleepers with wrought iron keys. The width at formation level is 18 feet. The centre line is on embankment. There are a few bridges of one or two spans of 20 feet each, but the drainage of the country is mostly by nullahs.</p>	<p>The orders for the survey of this line were given in December 1887. Construction was sanctioned in December 1888; work commenced in January 1889 and was completed on 5th May 1890.</p> <p>The cost has been defrayed by His Highness the Gaekwar.</p> <p>This line is worked and maintained by the Bombay, Baroda and Central India Railway Company.</p>												

APPENDIX
RAIL
Constructed and in progress
LINES OWNED BY
and worked

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
XLIX	Kolhápur— METRE GAUGE. Kolhápur to Miraj (159½ miles from Poona on the Poona branch of the Southern Mahratta railway) 29½	29½	
	TOTAL LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES	769½	555½

D—continued.

WAYS

on 31st March 1891.

NATIVE STATES.

by Companies.

Details of construction.	REMARKS.
<p>The line is constructed for a single track. The rails are steel, 41½ lbs. to the yard, laid on steel sleepers. The ruling gradient is 1 in 100.</p> <p>The following important rivers are crossed :— Kistna river, 14 spans, 60' girders. Panchganga 10 „ 60' „</p>	<p>The Government of India authorised the commencement of work in February 1888.</p> <p>The cost is estimated at ₹22,72,520. The necessary funds will be provided by the Kolhápur Darbar, and the line, when completed, will be worked by the Southern Mahratta Railway Company.</p> <p>The line will be opened for traffic on 21st April 1891.</p>

APPENDIX
RAIL
Constructed and in progress
LINES OWNED BY
and worked by State

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
L	<p>Rájpura-Bhátinda—</p> <p style="text-align: right;">Miles.</p> <p style="text-align: center;">STANDARD GAUGE.</p> <p>Rájpura (179 miles from Delhi on the North Western railway, main line), via Patiala to Bhátinda 107½</p>	<p>Miles.</p> <p style="text-align: center;">107½</p>	<p style="text-align: right;">Miles.</p> <p>Rájpura to Patiala 1-11-84 . . . 15½ Patiala to Bhátinda 13-10-89 . . . 92 <hr style="width: 100px; margin-left: 0;"/>107½</p>
LI	<p>Jammu and Kashmir—</p> <p style="text-align: center;">STANDARD GAUGE.</p> <p>Siálkot (436½ miles from Delhi on the Siálkot branch of the North Western railway) to the left bank of the Tawi river near Jammu 24½</p>	<p>Miles.</p> <p style="text-align: center;">24½</p>	<p>Siálkot to the left bank of the Tawi river 15-3-90 . . . 24½</p>
<p>TOTAL LINES OWNED BY NATIVE STATES AND WORKED BY STATE RAILWAY AGENCY</p>		<p>132½</p>	

D—continued.

WAYS

on 31st March 1891.

NATIVE STATES

Railway Agency.

Details of construction.	REMARKS.
<p>The country traversed is eminently favourable. The line is practically a surface one for a single track with steel rails, 68lbs. per yard, laid on deodar sleepers.</p>	<p>The line from Rájpara to Patiala was constructed by the late Sind, Punjab and Delhi Railway Company at the expense of the Patiala Darbar. Sanction was given to it on the 7th December 1883. The extension to Bhátinda (92 miles) was surveyed in 1887, and construction was commenced in April 1888. The line is worked and maintained under an agreement by the North Western railway.</p>
<p>This line has been constructed according to the standard dimensions. The rails in the British section are second-hand 60lbs. iron ones taken out of the North Western railway, main line; those in the Kashmir State are 75lbs. flat-footed. The sleepers are of deodar, except where there are dips in the road to pass surface floods: steel transverse sleepers are used in such places. There are about 1,900 sleepers to the mile. The ballast used is of stone throughout and of excellent quality.</p>	<p>Sanction was given to the construction of this line on the 25th February 1888. It is 24.41 miles in length, of which 8.49 miles lie in British territory and 15.92 miles in Kashmir. The whole line has been constructed by the Kashmir Darbar. The Darbar has provided the capital for the portion of the line which lies within the Kashmir territory, and the Government of India for the outlay on the British section. The British section now forms an integral part of the main line of the North Western railway, and the Kashmir section is maintained and worked by the latter as a leased line under an agreement for five years. The terms of working will be found in Appendix S, Part II, of the Railway Administration Report for 1890-91.</p>

LINES OWNED AND WORKED

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
LII	<p>Jodhpore—</p> <p>METRE GAUGE.</p> <p><i>Main line—</i> Marwar Railway Junction (320 miles from Agra on the Rajputana-Malwa railway) to Marwar Páli 19 Marwar Páli to Lúni Junction 25 Lúni Junction to Jodhpore 20 ————— 64</p> <p><i>Pachpadra extension—</i> Lúni Junction to Pachpadra 59½</p>	123½	<p><i>Main line—</i> Marwar Railway Junction to Marwar Páli— for goods traffic 24-6-82 } for passenger traffic 27-7-82 } 19 Marwar Páli to Lúni Junction 17-6-84 25 Lúni Junction to Jodhpore 9-3-85 20 ————— 64</p> <p><i>Pachpadra extension—</i> Lúni Junction to Pachpadra 22-3-87 59½</p> <p>TOTAL OPEN MILEAGE 123½</p>
LIII	<p>Bhávnagar-Gondal-Junágarh-Porbandar—</p> <p>METRE GAUGE.</p> <p>Bhávnagar Bandar to Wadhván Junction 104½</p> <p>Dhola Junction (32 miles from Bhávnagar Bandar) to Porbandar Bandar 159</p> <p>Jetalsar Junction (112 miles from Bhávnagar Bandar) to Verával Bandar, including 2½ miles of Junágarh Quarry line 69½</p>	333½	<p>Bhávnagar to Wadhván 20-12-80 (a) 104½</p> <p>Dhola to Dhoráji 19-1-81 88½</p> <p>Dhoráji to Porbandar 17-12-89 69½</p> <p>Porbandar to Porbandar Bandar— for goods traffic 15-3-90 1</p> <p>Jetalsar to Junágarh 1-9-88 16</p> <p>Junágarh to Verával (including Junágarh Quarry line) 1-2-89 (b) 53½</p> <p>Verával to Verával Bandar— for goods traffic 1-12-90 ½</p> <p>TOTAL OPEN MILEAGE 333½</p>
LIV	<p>Morvi—</p> <p>2' 6" GAUGE.</p> <p><i>Main line—</i> Wadhván (389½ miles from Bombay on the Bombay, Baroda and Central India Railway), <i>via</i> Vánkáner to Morvi 68½</p> <p><i>Rájkot branch—</i> Vánkáner to Rájkot 25½</p>	93½	<p><i>Main line—</i> Wadhván to Dolia 11-3-86 24 Dolia to Vánkáner 20-11-86 27½ Vánkáner to Morvi 24-3-87 16½ ————— 68½</p> <p><i>Rájkot branch—</i> Vánkáner to Rájkot 1-1-90 25½</p> <p>TOTAL OPEN MILEAGE 93½</p>

(a) Of this the Bhávnagar Dock estate line (0.89 mile) is worked for goods traffic only.
 (b) Of this the Junágarh Quarry line (2.3 miles) is worked for goods traffic only.

D—continued.

WAYS

on 31st March 1891.

BY NATIVE STATES.

Details of construction.	REMARKS.
<p>The works are very light. The permanent-way consists of second-hand 36lbs. rails (obtained from the Rajputana-Malwa railway) laid for the first 19 miles on creosoted pine sleepers. On the remaining length of the main line the rails are laid on jungle-wood sleepers. On the Pachpadra extension the rails are new steel, 36lbs. to the yard, laid on transverse steel sleepers. There is a telegraph on the main line, but not on the Pachpadra extension. The line is unfenced.</p>	<p>This line has been constructed at the expense of, and is worked by, the Jodhpore State. The extension of a fair weather line to the Lúni river was sanctioned during 1883. The extension to Jodhpore was sanctioned during 1884. The Lúni river is crossed by a fair weather causeway. A further extension from Lúni to Pachpadra was sanctioned on the 31st December 1885, and opened on the 22nd March 1887.</p>
<p>The line from Bhávnagar to Wadhván and Dhoráji has been constructed for a single track with 41½lb flat-footed steel rails on half-round pine sleepers. The ruling gradient is practically 1 in 200, but there is a short length (½ mile) of 1 in 100 at Ránpur Bridge. The ruling gradient on the Jetalsar-Verával section is 1 in 150. The permanent-way consists of 41½lb flat-footed steel rails, laid on jungle-wood sleepers obtained locally from the Gir Forest. The permanent-way on the Dhoráji-Forbandar section consists of 41½lb flat-footed steel rails, laid on steel transverse sleepers. The ruling gradient on this section is 1 in 200.</p>	<p>The dates of orders for survey and construction of the Bhávnagar-Gondal section are 11th March 1878 and 19th March 1879, respectively. The line has been constructed for the Native States by the British Government, and is worked under the direction of a committee of management consisting of representatives of each of the proprietary States. The Political Agent in Káthiáwár is President of this committee of delegates. The portions from Bhávnagar to Wadhván on the north, and from Dhola as far as Dhasa on the west, have been constructed from the revenues of the Bhávnagar State, and that from Dhasa to Dhoráji from the revenues of the Gondal State. The survey of the Jetalsar-Verával section was ordered on the 3rd October 1885 and the construction on 24th December 1886. The line has been constructed at the expense of the Junágarh State, within whose territory it lies. The survey of the Dhoráji-Forbandar section was sanctioned by the Government of India on 1st November 1886 and commenced in March 1887. The construction was sanctioned on 24th January 1888. The line has been constructed at the joint expense of the Gondal and Forbandar States.</p>
<p>The line is laid on the existing bridged and metalled road for the first 24 miles as far as Dolia, and then runs along the line of unbridged and unmetalled road to Vánkáner and Morvi. The permanent-way consists of steel rails, weighing 19lbs. and 29lbs. to the yard, laid partly on patent steel and partly on timber sleepers. The main line was opened through its full length, 68½ miles, on 24th March 1887, being fully bridged and completed. The permanent-way on the Rájkot branch consists of 19lb rails laid on light sleepers, and curves have been laid with 29lb rails and sleepers, partly patent and partly timber.</p>	<p>Sanction was given on the 14th December 1883 to the construction of a line which the Thakur Sahib of Morvi had undertaken to build at his own expense from Wadhván to Rájkot. The scheme was afterwards modified, and the line was carried to Morvi, <i>via</i> Vánkáner, instead of to Rájkot. Plans and estimates for an extension to Rájkot were submitted to Government on the 20th February 1888. The extension line was completed and opened for traffic on the 1st January 1890.</p>

Constructed and in progress

LINES OWNED AND WORKED

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.		Date of opening for public traffic.
	Miles.	Miles.		Miles.
LV	Jodhpore-Bikanir— METRE GAUGE. <i>Main line—</i> Jodhpore to Jodhpore Frontier 123½ Jhodhpore Frontier to Bikanir town 45½ —————	169		
	TOTAL LINES OWNED AND WORKED BY NA- TIVE STATES	720		551

D - continued.

WAYS

on 31st March 1891.

BY NATIVE STATES.

Details of construction.	REMARKS.
<p>The permanent-way consists of 36lb steel rails laid for the first 20 miles out from Jodhpore on deodar sleepers, and beyond that on Rendel's steel Sleepers.</p>	<p>The expense of constructing this line will be defrayed by the Jodhpore and Bikanir Darbars, each paying for the portion in their own territory.</p> <p>The construction of the section from Jodhpore to Jodhpore Frontier was sanctioned on the 12th May 1890 and that of the section from Jodhpore Frontier to Bikanir Town on the 27th September 1890.</p> <p>The line from Jodhpore to Merta Road, 64½ miles, will be opened for traffic on the 8th April 1891, and the remaining portion probably in August 1891.</p>

APPENDIX
RAIL
Constructed and in progress
FOREIGN

No.	Name and gauge of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
LVI	West of India Portuguese— METRE GAUGE. Mormugao to the Portuguese Frontier . 51	51	Mormugao to Sonauli . . 17-1-87 41 Sonauli to Frontier . . . 3-2-88 10 TOTAL OPEN MILEAGE . 51
LVII	Pondicherry. METRE GAUGE. Gingee River (French Frontier) to Pondicherry 7½	7½	Gingee River to Pondicherry . 16-12-79 7½
	TOTAL FOREIGN LINES .	58½	58½

WAYS

on 31st March 1891.

LINES.

Details of construction.	REMARKS.
<p>The first 38 miles up to Collem station, on which the ruling gradient is 1 in 100, are constructed for a single line as regards the earthwork and iron superstructure, but for a double line as regards all bridges and culverts, and the remaining 13 miles with a maximum gradient of 1 in 40 for a double line of rails.</p> <p>The permanent-way throughout is of the 62lbs State railway type, with 10 sleepers to the rail. The sleepers used are creosoted pine, sal and teak.</p> <p>The locomotives are of one type, weighing 43½ tons when loaded. Two suffice to take a train up the Ghâts.</p> <p>On the Ghâts there are 12 tunnels and 2 covered ways and the masonry works are very heavy. The total work on the Ghât incline is not much less than that on the Bhoré Ghât on the Great Indian Peninsula Railway.</p>	<p>The West of India Portuguese line has been undertaken by a Company under a guarantee given in April 1881 by the Portuguese Government; it extends from Mormugao, in the Portuguese settlement of Goa, to the Portuguese frontier. The railway works were, in the first instance, given out on contract and work was commenced on 22nd February 1882. The contractors having, however, failed to make satisfactory progress, the works were taken over by the Company at the end of January 1884, and arrangements made to carry them on departmentally.</p> <p>The harbour and line to the 41st mile were opened for public traffic on the 17th January 1887, and the remaining Ghât Section of 10 miles on the 3rd February 1888.</p>
<p>The line is single, and is laid with 40·3lb iron rails on wooden sleepers, except over the Gingee bridge which was laid, when rebuilt, with 50lb steel rails on pot sleepers.</p>	<p>This line was undertaken by the Pondicherry Railway Company, Limited, under a concession made by the French Government.</p> <p>The bridge of seven spans of 150 feet each over the Gingee river was almost entirely washed away by the floods of December 1884; it was re-opened for traffic in September 1886.</p> <p>This line is worked and maintained by the South Indian Railway Company under an agreement, the terms of which will be found in Appendix Q, Part II of the Railway Administration Report for 1890-91.</p>

Statement showing the distribution of the mileage

PROGRESS.	Madras.	Bombay.	Bengal.	North-Western Provinces and Oudh.	Punjab.	Central Provinces.	Assam.	Burma.
STATE LINES WORKED BY COMPANIES.								
Opened for traffic	1,273½	911½	1,433¾	1,712½	368¾	713¾	...	...
In progress	275½	59½	16	115¾	...	...	...	...
Total length sanctioned	1,549	970½	1,449¾	1,828	368¾	713¾	...	...
STATE LINES WORKED BY THE STATE.								
Opened for traffic . . . . .	...	...	930½	799	1,491½	...	36	556
In progress	425½	...	79	(a) 47	(b) 38	...	...	183½
Total length sanctioned	425½	...	1,009½	846	1,529½	...	36	739½
LINES WORKED BY GUARANTEED COMPANIES.								
Opened for traffic	760	1,088	...	...	...	391	...	...
In progress . . . . .	...	...	...	...	...	...	...	...
Total length sanctioned	760	1,088	...	...	...	391	...	...
ASSISTED COMPANIES.								
Opened for traffic . . . . .	...	...	78	54½	162	...	77½	8
In progress	42	...	...	...	...	...	...	...
Total length sanctioned	42	...	78	54½	162	...	77½	8
LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES.								
Opened for traffic . . . . .	...	153	...	...	...	13	...	...
In progress . . . . .	...	54	...	...	...	...	...	...
Total length sanctioned . . . . .	...	207	...	...	...	13	...	...
LINES OWNED BY NATIVE STATES AND WORKED BY STATE RAILWAY AGENCY.								
Opened for traffic . . . . .	...	...	...	...	116½	...	...	...
In progress . . . . .	...	...	...	...	...	...	...	...
Total length sanctioned . . . . .	...	...	...	...	116½	...	...	...
LINES OWNED AND WORKED BY NATIVE STATES.								
Opened for traffic . . . . .	...	...	...	...	...	...	...	...
In progress . . . . .	...	...	...	...	...	...	...	...
Total length sanctioned . . . . .	...	...	...	...	...	...	...	...
FOREIGN LINES.								
Opened for traffic . . . . .	...	...	...	...	...	...	...	...
In progress . . . . .	...	...	...	...	...	...	...	...
Total length sanctioned . . . . .	...	...	...	...	...	...	...	...
TOTAL.								
Opened for traffic	2,033½	2,152½	2,442½	2,565¾	2,138½	1,117¾	113½	564
In progress	743	113½	95	162¾	38	...	...	183½
Total length sanctioned	2,776½	2,265½	2,537¾	2,728½	2,176½	1,117¾	113½	747½

(a) In abeyance.

(b) Of this 11 miles are constructed but not yet opened for public traffic.

E.

of railways by provinces on the 31st March 1891.

Hyderabad.	Mysore.	Rajputana.	Central India.	Baluchistan.	Sind.	Káthiáwár.	Berars.	Kashmir.	Portuguese Territory.	French Territory.	TOTAL.
35½	295½	647	671½	...	...	...	...	...	...	...	8,063½
...	69½	...	53½	...	...	...	...	...	...	...	589½
35½	365	647	725½	...	...	...	...	...	...	...	8,652½
...	...	...	...	371½	463½	...	...	...	...	...	4,648
...	...	...	...	(c) 41½	77½	...	...	...	...	...	89a
...	...	...	...	413	541	...	...	...	...	...	5,540
139½	57½	...	...	...	...	...	152	...	...	...	2,588½
...
139½	57½	...	...	...	...	...	152	...	...	...	2,588½
...	...	...	...	...	...	...	...	...	...	...	380
...	...	...	...	...	...	...	...	...	...	...	42
...	...	...	...	...	...	...	...	...	...	...	422
332½	...	...	44	...	...	...	13	...	...	...	555½
(a) 160	...	...	...	...	...	...	...	...	...	...	214
492½	...	...	44	...	...	...	13	...	...	...	769½
...	...	...	...	...	...	...	...	16	...	...	132½
...
...	...	...	...	...	...	...	...	16	...	...	132½
...	...	123½	...	...	...	427½	...	...	...	...	551
...	...	169	...	...	...	...	...	...	...	...	169
...	...	292½	...	...	...	427½	...	...	...	...	720
...	...	...	...	...	...	...	...	...	51	7½	58½
...
...	...	...	...	...	...	...	...	...	51	7½	58½
507½	353½	770½	715½	371½	463½	427½	165	16	51	7½	16,976½
160	69½	169	53½	41½	77½	...	...	...	...	...	1,906½
667½	422½	939½	769½	413	541	427½	165	16	51	7½	18,883½

(c) Of this 9½ miles are constructed, but not yet opened for public traffic.

APPENDIX F.

Table of railways constructed in or traversing Native States.

Serial No.	RAILWAY.	NATIVE STATES TRAVERSED.							
		Names of States.	COMMENCES AT		ENDS AT				
			Distance from Naini Junction.	Nearest Railway Station.	Distance from Naini Junction.	Nearest Railway Station.			
		Miles.	Feet.	Miles.	Feet.				
I	†EAST INDIAN	Rewah*	29	295	Shiurájpur	34	990	Bargarh.	
		Rewah*	43	2,715	Bargarh	46	3,012	Dabhaura.	
		Rewah*	47	372	Dabhaura	51	2,482	Dabhaura.	
		Rewah*	98	1,683	Jaitwár	112	3,241	Sutna.	
		Putter Kacher*	83	4,121	Majhgawán	84	1,510	Majhgawán.	
		Kothi*	84	1,510	Majhgawán	85	2,711	Majhgawán.	
		Kothi*	90	896	Majhgawán	91	321	Majhgawán.	
		Sohawal*	85	2,711	Majhgawán	87	3,990	Majhgawán.	
		Sohawal*	91	321	Majhgawán	95	5,156	Jaitwár.	
		Panna*	87	3,990	Majhgawán	90	896	Majhgawán.	
		Nagode*	95	5,156	Jaitwár	98	1,683	Jaitwár.	
		Nagode*	112	3,241	Sutna	128	2,099	Maihar.	
		Maihar*	128	2,099	Maihar	160	4,525	Jukehi.	
		Distance from Nágpur Junction.		Distance from Nágpur Junction.					
V	BENGAL-NÁGPUR	Khairagarh	114	3,960	Bortaláo	139	581	Musrá.	
		Nándgaon	139	581	Musrá	158	634	Muripár.	
		Sakti	302	...	Báráduár	311	1,901	Sakti.	
		Raigarh	311	1,901	Sakti	359	3,010	Kanika.	
		Gángpur	359	3,010	Kanika	365	4,858	Belpahár.	
		Gángpur	397	2,798	Bágdehi	403	1,584	Bámra.	
		Gángpur	421	1,901	Kumarkela	463	4,066	Manharpur.	
		Bámra	403	1,584	Bámra	419	4,752	Gárpos.	
		Banksai	519	4,224	Amda	524	3,696	Amda.	
		Dugni	528	1,584	Sini	531	1,584	Sini.	
		Rewah	329	4,910	Kahairi	431	1,742	Chandia.	
		Distance from Itársi Junction.		Distance from Itársi Junction.					
VI	INDIAN MIDLAND—	BHOPAL-JHÁNSI-AGRA SECTION.	Bhopal	56	5,023	Bhopal	87	3,105	Bhílsa.
			Gwalior	87	3,105	Bhílsa	116	3,160	Básoda.
			Kurwai	116	3,160	Básoda	117	1,096	Básoda.
			Gwalior	117	1,096	Básoda	120	2,756	Bágru.
			Kurwai	120	2,756	Bágru	122	216	Bágru.
			Gwalior	122	216	Bágru	128	2,206	Kalhar.
			Bhopal	128	2,206	Kalhar	129	5,206	Bawara.
			Kurwai	129	5,206	Bawara	131	3,186	Bawara.
			Kurwai	132	4,866	Bawara	137	4,316	Kethora.
			Orchha	212	129	Basai	213	3,534	Basai.
			Khaniadhána	213	3,534	Basai	217	2,539	Basai.
			Datia	248	1,961	Datia	266	4,990	Dabra.
			Gwalior	266	4,990	Dabra	334	1,591	Hetampur.
			Dholpur	334	1,591	Hetampur	353	4,745	Saiya.
	JHÁNSI-MÁNIKPUR SECTION	Orchha	242	477	Jhánsi	243	2,547	Jhánsi.	
		Orchha	244	1,097	Jhánsi	246	357	Barwa Ságar.	
		Orchha	246	3,937	Barwa Ságar	249	2,907	Barwa Ságar.	
		Orchha	252	437	Barwa Ságar	258	647	Teharka.	
		Orchha	258	4,287	Teharka	258	4,587	Teharka.	
		Orchha	260	1,087	Teharka	267	3,467	Teharka.	
		Alipura	286	2,217	Harpálpur	290	4,107	Harpálpur.	
		Alipura	292	3,927	Harpálpur	293	1,517	Harpálpur.	
		Ganouli	300	827	Jaitpur	301	1,327	Jaitpur.	
		Pahra	391	322	Tamliá	391	2,322	Tamliá.	
		Taraon	391	2,322	Tamliá	396	2,467	Chitukot.	
		JHÁNSI-CAWNPORE SECTION	Samther	263	4,907	Moth	268	1,617	Moth.
			Samther	276	4,317	Punch	279	2,877	Punch.
			Samther	281	767	Punch	284	3,277	Punch.

† The lands occupied by this line in the States marked with asterisks have been ceded to the British Government in full sovereignty, and therefore now form part of British India.

APPENDIX F—continued.

Table of railways constructed in or traversing Native States—continued.

Serial No.	RAILWAY.	NATIVE STATES TRAVERSED.								
		Names of States.	COMMENCES AT			ENDS AT				
			Distance from Delhi Junction.		Nearest Railway Station.	Distance from Delhi Junction.		Nearest Railway Station.		
Miles.	Feet.	Miles.	Feet.							
VIII	RAJPUTANA-MALWA— DELHI TO AHMEDABAD	Patandi	35	194	Játaoli	39	177	Játaoli.		
		Patandi	41	218	Játaoli	41	255	Játaoli.		
		Nábha	57	180	Báwal	68	5	Ajeráka.		
		Ulwur	68	5	Ajeráka	125	...	Baswa.		
		Jeypore	125	...	Baswa	245	3,100	Sáli.		
		Jeypore	245	4,460	Sáli	246	570	Sáli.		
		Jeypore	246	1,025	Sáli	247	2,645	Tilaunia.		
		Kishengurh	245	3,100	Sáli	245	4,460	Sáli.		
		Kishengurh	246	570	Sáli	246	1,025	Sáli.		
		Kishengurh	247	2,645	Tilaunia	249	1,173	Tilaunia.		
		Kishengurh	251	1,109	Tilaunia	261	217	Kishengurh.		
		Jodhpore	318	...	Sendra	431	4,070	Keshavganj.		
		Sirohee	431	4,070	Keshavganj	471	2,750	Maval.		
		Pálanpur	471	2,750	Maval	508	250	Chhápi.		
		Baroda	508	250	Chhápi	564	170	Kálol.		
					Distance from Phulera Junction.			Distance from Phulera Junction.		
			SAMBHAR BRANCH	Jeypore and Jodhpore	1	48	Phulera	6	7	Sámbar.
				Jodhpore	6	7	Sámbar	21	5,214	Kucháman Road.
					Distance from Agra Junction.			Distance from Agra Junction.		
			AGAR BRANCH	Bhurtpore	21	88	Ikran	58	119	Kherli.
				Ulwur	58	119	Kherli	67	83	Ghosrána.
				Ulwur	68	168	Ghosrána	69	150	Ghosrána.
				Ulwur	76	...	Hindaun Road	77	50	Rámpura.
				Ulwur	78	25	Rámpura	83	145	Biwai.
				Ulwur	85	...	Biwai	87	43	Biwai.
				Jeypore	67	83	Ghosrána	68	168	Ghosrána.
				Jeypore	69	150	Ghosrána	76	...	Hindaun Road.
				Jeypore	77	50	Rámpura	78	25	Rámpura.
				Jeypore	83	145	Biwai	85	...	Biwai.
				Jeypore	87	43	Biwai	93	2,758	Bándikui.
					Distance from Ajmere Junction.			Distance from Ajmere Junction.		
			MALWA SECTION (AJMERE TO KHANDWA).	Oodeypur	41	1,950	Barl	122	5,030	Shambhúpara.
				Oodeypur	125	5,090	Shambhúpara	127	1,250	Shambhúpara.
				Tonk	122	5,030	Shambhúpara	125	5,090	Shambhúpara.
				Tonk	127	1,250	Shambhúpara	138	2,200	Kesarpura.
				Tonk	143	2,700	Kesarpura	145	1,200	Neemuch.
				Sindia	138	2,200	Kesarpura	143	2,700	Kesarpura.
				Sindia	145	1,200	Neemuch	163	2,400	Malhárganh.
				Sindia	174	2,720	Tharod	205	5,130	Dhodhar.
				Sindia	249	3,900	Runija	258	3,160	Barnagar.
				Sindia	250	4,070	Barnagar	271	1,700	Chambal.
				Sindia	278	2,360	Fatehabad	281	3,600	Fatehabad.
				Holkar and Sindia combined.	282	2,900	Fatehabad	285	4,800	Fatehabad.
				Sindia	287	2,700	Ajnod	287	3,300	Ajnod.
				Holkar and Sindia combined.	288	1,700	Ajnod	289	2,800	Ajnod.
				Holkar and Sindia combined.	291	2,900	Ajnod	292	150	Ajnod.
				Sindia	292	150	Ajnod	294	150	Pália.
				Jaora	163	2,400	Malhárganh	170	1,700	Píplia.
				Jaora	171	4,980	Tharod	172	4,280	Tharod.
				Jaora	173	1,000	Tharod	173	1,650	Tharod.
				Jaora	205	5,130	Dhodhar	219	4,080	Námli.
				Holkar	170	1,700	Píplia	171	4,980	Tharod.
				Holkar	172	4,280	Tharod	173	1,500	Tharod.
				Holkar	173	1,650	Tharod	174	2,720	Tharod.
				Holkar	271	1,700	Chambal	278	2,360	Fatehabad.
				Holkar	281	3,600	Fatehabad	282	2,900	Fatehabad.
				Holkar	285	4,800	Fatehabad	287	2,700	Ajnod.

APPENDIX F—continued.

Table of railways constructed in or traversing Native States—continued.

Serial No.	RAILWAY.	NATIVE STATES TRAVERSED.							
		Names of States.	COMMENCES AT		ENDS AT				
			Distance from Ajmere Junction.	Nearest Railway Station.	Distance from Ajmere Junction.	Nearest Railway Station.			
		Miles.	Feet.			Miles.	Feet.		
VIII	RAJPUTANA-MALWA—concl'd. MALWA SECTION (AJMERE TO KHANDWA)—concl'd.	Holkar	287	3,300	Ajnod	288	1,700	Ajnod.	
		Holkar	289	2,800	Ajnod	291	2,900	Ajnod.	
		Holkar	294	150	Pália	355	...	Mortakka.	
		Holkar	358	1,200	Sanáwad	363	1,800	Nimar-Kheri.	
		Holkar	366	3,300	Nimar-Kheri	367	1,450	Nimar-Kheri.	
		Rutlam	219	4,080	Námli	222	3,050	Námli.	
		Rutlam	222	5,050	Námli	226	650	Námli.	
		Rutlam	229	550	Rutlam	235	400	Rutlam.	
		Rutlam	235	1,050	Rutlam	242	4,830	Naugánwán.	
		Rutlam	244	4,880	Naugánwán	246	4,930	Naugánwán.	
		Sailána	222	3,050	Námli	222	5,050	Námli.	
		Sailána	226	650	Námli	229	550	Rutlam.	
		Sailána	235	400	Rutlam	235	1,050	Rutlam.	
		Sailána	242	4,830	Naugánwán	244	4,880	Naugánwán.	
		Sailána	246	4,930	Naugánwán	249	600	Runija.	
		Dhár	249	600	Runija	249	3,900	Runija.	
		Dhár	258	3,160	Barnagar	259	4,070	Barnagar.	
				Distance from Fatehabad Junction.			Distance from Fatehabad Junction.		
			UJJAIN BRANCH	Sindia	Fatehabad	10	400	Ujjain.
		Holkar	10	400	Ujjain	10	2,700	Ujjain.	
		Sindia	10	2,700	Ujjain	14	1,500	Ujjain.	
			Distance from Rewári Junction.			Distance from Rewári Junction.			
	REWÁRI TO FEROEPCRE	Dujána	19	1,300	Kosli	19	3,350	Kosli.	
		Dujána	20	220	Kosli	22	430	Jhárli.	
		Jnd	29	2,975	Jhárli	45	2,000	Mánheru.	
		Patíála	164	2,100	Kalánwáli	190	2,330	Goniána.	
		Patíála	190	4,000	Goniána	191	300	Goniána.	
		Farídkot	190	2,330	Goniána	190	4,000	Goniána.	
		Farídkot	191	300	Goniána	195	2,400	Goniána.	
		Farídkot	203	2,475	Jaitu	231	2,200	Golehwála.	
		Nábha	195	2,400	Goniána	203	2,475	Jaitu.	
			Distance from Kot Kapúra Junction.			Distance from Kot Kapúra Junction.			
	FÁZILKA BRANCH	Faridkot . . . . .	...	...	Kot Kapúra	7	2,350	Bariwála.
			Distance from Cawnpore.			Distance from Cawnpore.			
	CAWNPORE TO ACHNERA	Bhurtpore	221	3,540	Bhainsa	225	384	Bhainsa.	
			Distance from Dhond Junction.			Distance from Dhond Junction.			
X	DHOND-MÁNMAĐ	Nizam's Domi- nions.	105	3,432	Puptámba	107	2,145	Samvatsar.	
			Distance from Portuguese Frontier.			Distance from Portuguese Frontier.			
XI	SOUTHERN MAHRATTA— MAIN LINE.	Nizam's Domini- ons.	126	3,813	Harlápúr	161	488	Munirabad.	
		Venkatagiri	395	4,488	Tarlupádu	405	3,549	Márkapur Road.	
		Venkatagiri	408	3,436	Márkapur Road	409	2,845	Gajjalakonda.	
		Venkatagiri	412	1,883	Gajjalakonda	429	3,300	Kurichédu.	

APPENDIX F—continued.

Table of railways constructed in or traversing Native States—continued.

Serial No.	RAILWAY.	NATIVE STATES TRAVERSED.							
		Names of States.	COMMENCES AT		ENDS AT				
			Distance from Londa Junction.	Nearest Railway Station.	Distance from Londa Junction.	Nearest Railway Station.			
XI	SOUTHERN MAHRATTA— concl'd. POONA BRANCH		Miles	Feet.		Miles.	Feet.		
		Kurundvād	26	1,125	Desur	28	4,325	Desur.	
		Sangli	37	4,150	Sulebhāvi	38	2,975	Sulebhāvi.	
		Sangli	41	2,625	Sulebhāvi	47	1,250	Suldhāl.	
		Kurundvād	49	3,375	Suldhāl	50	2,200	Suldhāl.	
		Kolhāpur	79	3,500	Chikodi Road	80	3,100	Chikodi Road.	
		Kurundvād	80	3,100	Chikodi Road	82	3,350	Raibag.	
		Kolhāpur	82	3,350	Raibag	88	4,125	Raibag.	
		Kolhāpur	91	50	Raibag	49	4,000	Kudchi.	
		Sangli	99	950	Kudchi	103	1,825	Shedbal.	
		Miraj	108	1,875	Shedbal	110	4,280	Shedbal.	
		Sangli	110	4,280	Shedbal	113	5,125	Miraj.	
		Miraj	113	5,125	Miraj	119	5,230	Miraj.	
		Sangli	123	1,900	Sangli	123	2,200	Sangli.	
		Miraj	123	2,000	Sangli	125	2,480	Sangli.	
		Sangli	125	2,480	Sangli	126	2,950	Sangli.	
		Sangli	127	1,600	Sangli	130	2,120	Ashta Road.	
		Aundh	142	1,800	Kundal Road	143	2,590	Kundal Road.	
		Sangli	143	2,575	Kundal Road	143	4,825	Kundal Road.	
		Aundh	144	2,825	Kundal Road	145	1,575	Takari.	
		Sangli	145	1,575	Takari	146	1,850	Takari.	
		Sangli	146	3,950	Takari	147	1,340	Takari.	
		Aundh	150	3,420	Takari	151	3,160	Shenoli.	
		Aundh	164	4,225	Karad	165	1,380	Karad.	
		Jamkhandi	169	3,250	Masur	171	1,675	Masur.	
		Phaltan	212	2,575	Wathar	224	140	Lonand.	
					Distance from Gadag Junction.		Distance from Gadag Junction.		
	BIJĀPUR BRANCH	Rāmdurg	21	2,030	Mallāpur	26	3,380	Ālūr.	
		Sāngli	149	3,980	Lachyān	153	5,250	Lachyān.	
		Akalkot	156	1,320	Lachyān	166	2,860	Tadval.	
			Distance from Hubli Junction.		Distance from Hubli Junction.				
	HARIHAR BRANCH	Jamkhandi	5	807	Kundgol	18	4,826	Gudgeri.	
		Miraj Mulla	18	4,826	Gudgeri	23	4,284	Yalvigi.	
		Savanūr	30	2,009	Hattimattur	30	2,656	Hattimattur.	
		Savanūr	37	588	Karajgi	38	4,558	Karajgi.	
XII	SOUTHERN MAHRATTA (MYSORE SECTION).	Mysore	81	1,320	Harihar	377	2,956	Mysore.	
			Distance from Kurrachee.		Distance from Kurrachee.				
XVII	NORTH WESTERN	Patiāla	951	808	Sānahwāl	955	1,668	Dorāha.	
		Patiāla	956	3,474	Dorāha	957	2,550	Dorāha.	
		Patiāla	963	375	Khanna	963	4,029	Khanna.	
		Patiāla	969	3,817	Khanna	970	4,023	Khanna.	
		Nābha	970	4,023	Khanna	970	5,037	Khanna.	
		Patiāla	970	5,037	Khanna	971	3,126	Sirhind.	
		Nābha	971	3,126	Sirhind	971	3,500	Sirhind.	
		Patiāla	971	3,500	Sirhind	1,002	3,892	Umballa City.	
		Kapurthala	882	3,803	East Bank Beas	893	1,133	Hamira.	
		Kapurthala	910	509	Jullundur Cantonment.	921	918	Phagwāra.	
		Bahawalpur	407	1,668	Reti	554	3,777	Adamwahan Bridge.	
		Kalāt	359	4,100	Jacobabad	Ends beyond limit of main line Section.		...	
					Distance from Sāra.		Distance from Sāra.		
		XXI	EASTERN BENGAL	Cooch Behar	157	2,253	Haldibāri	163	1,891	Mondalghāt.

APPENDIX F—continued.

Table of railways constructed in or traversing Native States—continued.

Serial No.	RAILWAY.	NATIVE STATES TRAVERSED.							
		Names of States.	COMMENCES AT		ENDS AT				
			Distance from Bombay.	Nearest Railway Station.	Distance from Bombay.	Nearest Railway Station.			
		Miles.	Feet.	Miles.	Feet.				
XXXII	†GREAT INDIAN PENINSULA	Akalkot* . . .	298	4,257	Tilate (crossing station).	315	2,970	Boroti.	
		Kurundvād . . .	315	2,970	Boroti . . .	324	478	Dudhni.	
		Nizam's Domi- nions.	324	478	Dudhni . . .	442	236	Ráichúr.	
		Hyderabad As- signed Districts.	300	1,402	Khámkhed . . .	452	825	Pulgaon.	
XXXIII	BOMBAY, BARODA AND CENTRAL INDIA— BOMBAY TO AHMEDABAD	Jawhár Raja . . .	72	2,587	Vángaoñ . . .	74	3,383	Vángaoñ.	
		Baroda . . .	134	2,290	Bilimora . . .	137	3,855	Amalsád.	
		Baroda . . .	137	5,157	Amalsád . . .	138	2,797	Amalsád.	
		Sachín . . .	142	2,230	Amalsád . . .	143	4,676	Vedcha.	
		Baroda . . .	148	1,942	Navsári . . .	156	2,134	Sachín.	
		Sachín . . .	156	2,134	Sachín . . .	160	4,446	Sachín.	
		Baroda . . .	177	1,994	Sáyan . . .	177	2,657	Sáyan.	
		Baroda . . .	182	4,237	Kim . . .	190	2,344	Pánoli.	
		Baroda . . .	217	4,285	Pálej . . .	218	3,980	Pálej.	
		Baroda . . .	219	4,898	Pálej . . .	258	3,140	Vásad.	
		Baroda . . .	286	1,296	Nadiád . . .	287	3,261	Mehmadabad.	
		AHMEDABAD TO WADHWÁN.	Bhojwa . . .	351	2,065	Viramgám . . .	351	3,085	Viramgám.
			Bajána . . .	357	3,960	Sábli Road . . .	359	1,760	Sábli Road.
			Bajána . . .	360	1,795	Sábli Road . . .	366	3,510	Lilápur Road.
Lakhtar . . .	366		3,510	Lilápur Road . . .	366	3,750	Lilápur Road.		
Lakhtar . . .	369		4,240	Lilápur Road . . .	378	4,170	Lakhtar.		
Wadhván . . .	378		4,170	Lakhtar . . .	389	3,020	Wadhván.		
PÁTRI BRANCH . . .	Bhojwa . . .	...	3,745	Viramgám . . .	4	2,818	Jhund.	
	Pátri . . .	6	3,829	Jhund . . .	9	2,326	Jhund.		
	Bajána . . .	9	2,336	Jhund . . .	11	196	Jhund.		
	Pátri . . .	11	196	Jhund . . .	20	2,340	Pátri.		
XXXIII	ÁNAND TO GODHRA	Pandu Mewas . . .	33	1,100	Sevalia . . .	34	3,540	Timba.	
		Baroda . . .	34	3,540	Timba . . .	36	460	Timba.	
XXXIV	MADRAS— SOUTH WEST LINE—BAN- GALORE BRANCH. NORTH WEST LINE	Mysore Terri- tory.	163	1,459	Kámasamudram	219	1,875	Bangalore City.	
		Nizam's Domi- nions.	333	5,170	Tungabhadra . . .	350	4,310	Ráichúr.	
XXXV	DELHI-UMBALLA-KALKA	Patiála . . .	130	5,130	Lalru . . .	136	2,150	Lalru.	
		Patiála . . .	137	4,140	Lalru . . .	138	4,410	Lalru.	
		Patiála . . .	154	3,800	Chandigarh . . .	160	3,700	Kalka.	
		Kalsia . . .	136	2,150	Lalru . . .	137	4,140	Lalru.	
		Kalsia . . .	138	4,410	Ghaggar . . .	142	3,900	Ghaggar.	
		Kalsia . . .	144	2,600	Ghaggar . . .	147	2,600	Ghaggar.	
XLII	KHÁNGAON . . .	Hyderabad As- signed Districts.	...		Jalamb . . .	7	2,889	Khámgaon.	

† The lands occupied by this line in the State marked with an asterisk have been ceded to the British Government in full sovereignty, and therefore now form part of British India.

APPENDIX F—continued.

Table of railways constructed in or traversing Native States—continued

Serial No.	RAILWAY.	Names of States.	NATIVE STATES TRAVERSED.			
			COMMENCES AT		ENDS AT	
			Distance from Badnera Junction.	Nearest Railway Station.	Distance from Badnera Junction.	Nearest Railway Station.
			Miles. Feet		Miles. Feet.	
XLIII	AMRÁOTI	Hyderabad As- signed Districts.	...	Budnera . . .	5 2,300	Amráoti.
			Distance from Itársi Junction.		Distance from Itársi Junction.	
XLIV	BHOPAL-ITÁRSI (NATIVE STATE SECTION).	Bhopal . . .	13 660	Hoshangabad .	56 5,023	Bhopal.
			Distance from Wádi Junction.		Distance from Wádi Junction.	
XLV	THE NIZAM'S GUARANTEED STATE.	Hyderabad . Hyderabad . Hyderabad . Hyderabad .	... 111 3,120 115 2,865 254 4,195	Wádi Husain Ságar . Trimuigherry . Dornakal .	309 4,915 115 58 117 3,884 271 855	Gangineni. Hyderabad Ter- minus. Trimulgherry Troops siding. Mineral Termi- nus.
			Distance from Miyágám Junction.		Distance from Miyágám Junction.	
XLVI	THE GAEKWAR'S DABHOI— MIYÁGÁM TO BODELI .	Baroda . . .	...	Miyágám . . .	42 1,051	Bodeli.
			Distance from Vishvámitri Junc- tion.		Distance from Vishvámitri Junc- tion.	
	VISHVÁMITRI TO CHÁNDOD	Baroda . . . Sankheda Mewas (Rewa Kántha Agency).	... 26 2,010	Vishvámitri Ten Taláv . . .	26 2,010 29 3,000	Ten Tálav. Chándod.
			Distance from Mehsána Junction.		Distance from Mehsána Junction.	
XLVII	THE GAEKWAR'S MEHSÁNA VIRANGÁM BRANCH . . . PÁTAN BRANCH KHERÁLU BRANCH . . .	Baroda . . . Mahi Kántha . . . Baroda Baroda . . . .	... 10 313	Mehsána . . . Jhotana Mehsána Mehsána	10 313 12 261 25 ... 27 25	Jhotana. Jhotana. Pátan. Kherálu.
			Distance from Anand Junction.		Distance from Anand Junction.	
XLVIII	THE GAEKWAR'S PETLÁD— ANAND TO PETLÁD . . .	Baroda . . .	6 420	Agás	13 1,860	Petlád.
			Distance from Miraj Junction.		Distance from Miraj Junction.	
XLIX	KOLHÁPUR	Miraj Senior State Kolhápúr State .	... 5 2,323	Miraj Shirol Road . . .	3 2,112 29 1,056	Miraj. Kolhápúr.
			Distance from Kurrachee.		Distance from Kurrachee.	
I	RÁJPURA-BHÁTINDA . . .	Patiála . . . Nábha Patiála Nábha Patiála	992 3,865 1,014 665 1,017 1,705 1,019 2,365 1,025 2,297	Rájpura Dhablán Dhablán Nábha Nábha	1,014 665 1,017 1,705 1,019 2,365 1,025 2,297 1,027 2,323	Dhablán. Dhablán. Dhablán. Nábha. Nábha.

APPENDIX F—continued.

Table of railways constructed in or traversing Native States—continued.

Serial No.	RAILWAY.	NATIVE STATES TRAVERSED.								
		Names of States.	COMMENCES AT		ENDS AT					
			Distance from Kurrachee.	Nearest Railway Station.	Distance from Kurrachee.	Nearest Railway Station.				
		Miles.	Feet.		Miles.	Feet.				
L	RÁJPURA-BHÁTINDA—concl'd.	Nábha . . .	1,027	2,323	Nábha . . .	1,028	1,726	Chintanwala.		
		Patiála . . .	1,028	1,726	Chintanwala . . .	1,033	1,199	Chintanwala.		
		Nábha . . .	1,033	1,199	Chintanwala . . .	1,035	1,526	Chintanwala.		
		Patiála . . .	1,035	1,526	Chintanwala . . .	1,073	4,340	Tappa.		
		Nábha . . .	1,075	908	Tappa . . .	1,080	2,286	Rámpura Phal.		
		Patiála . . .	1,080	2,286	Rámpura Phul . . .	1,081	3,078	Rámpura Phal.		
		Patiála . . .	1,093	2,117	Bhuchchu . . .	1,100	2,941	Bhátinda.		
LI	JAMMU AND KASHMIR (NATIVE STATE SECTION).	Kashmir . . .	920	2,640	Suchetgarh . . .	936	1,320	Tawi river.		
			Distance from Marwar Railway Junction.		Distance from Marwar Railway Junction.					
LII	JODHPORE	Jodhpore . . .	...	...	...	...	This line is entirely in the Native State of Jodhpore.	
LIII	BHÁVNAGAR-GONDAL-JUNÁGARH-PORBANDAR— BHÁVNAGAR TO WADHWÁN	Bhávnapar . . .	...	...	Bhávnapar . . .	3	3,900	Ghadechi.
		Bhávnapar . . .	5	1,500	Ghadechi . . .	9	2,920	Vartej.		
		Shampura Girasia . . .	9	2,920	Vartej . . .	10	4,380	Vartej.		
		Bhávnapar . . .	10	4,380	Vartej . . .	11	300	Vartej.		
		Bhojpura Girasia . . .	11	300	Vartej . . .	11	2,500	Sihor.		
		Bhávnapar . . .	11	2,500	Sihor . . .	18	1,900	Songad.		
		Songad Girasia . . .	18	1,900	Songad . . .	19	3,380	Songad.		
		Bhávnapar . . .	19	3,380	Songad . . .	25	2,900	Sanosra.		
		Vaori Girasia . . .	25	2,900	Sanosra . . .	28	1,800	Sanosra.		
		Bhávnapar . . .	28	1,800	Sanosra . . .	32	3,360	Dhola.		
		Wangdra Girasia . . .	32	3,360	Dhola . . .	33	1,850	Dhola.		
		Bhojavadar Girasia . . .	33	1,850	Dhola . . .	35	3,100	Dhola.		
		Chabbaria Girasia . . .	35	3,100	Dhola . . .	38	1,200	Ujalváv.		
		Bhávnapar . . .	38	1,200	Ujalváv . . .	38	2,700	Ujalváv.		
		Ramanka Girasia . . .	38	2,700	Ujalváv . . .	39	2,950	Ujalváv.		
		Chitravad Girasia . . .	39	2,950	Ujalváv . . .	40	4,280	Ujalváv.		
		Ahungpur Girasia . . .	40	4,280	Ujalváv . . .	43	2,700	Ningála.		
		Vala . . .	43	2,700	Ningála . . .	44	1,550	Ningála.		
		Ishwaria Girasia . . .	44	1,550	Ningála . . .	44	2,400	Ningála.		
		Bhávnapar . . .	44	2,400	Ningála . . .	60	4,420	Botád.		
		Chuda . . .	75	1,360	Ránpur . . .	82	2,100	Chuda.		
		Karol . . .	82	2,100	Chuda . . .	85	20	Chuda.		
		Limbdi . . .	85	20	Chuda . . .	93	1,530	Limbdi.		
		Wadhván . . .	93	1,530	Limbdi . . .	104	1,600	Wadhván City.		
			DHOLA TO PORBANDAR	Bhávnapar . . .	32	...	Dhola . . .	32	4,820	Dhola.
				Wangdra Girasia . . .	32	4,820	Dhola . . .	33	500	Dhola.
				Bhojavadar Girasia . . .	33	500	Dhola . . .	34	880	Dhola.
				Bhávnapar . . .	34	880	Dhola . . .	34	1,100	Dhola.
				Ingorala Girasia . . .	34	1,100	Dhola . . .	37	850	Jália.
				Limbda Girasia . . .	37	850	Jália . . .	40	2,000	Jália.
				Jalia Girasia . . .	40	2,000	Jália . . .	41	1,000	Jália.
				Bhávnapar . . .	41	1,000	Jália . . .	47	1,350	Dhasa.
Baroda . . .	47			1,350	Dhasa . . .	54	4,900	Láthi.		
Láthi . . .	54			4,900	Láthi . . .	58	2,520	Láthi.		
Jetpur . . .	58			2,520	Láthi . . .	63	480	Chital.		
Baroda . . .	63			480	Chital . . .	65	100	Chital.		
Jetpur . . .	65			100	Chital . . .	70	3,620	Chital.		
Kotra Pitha . . .	70			3,620	Chital . . .	73	2,930	Luni-dhár.		
Jetpur . . .	73			2,930	Luni-dhár . . .	78	1,700	Luni-dhár.		
Junágarh . . .	78	1,700	Luni-dhár . . .	78	3,950	Luni-dhár.				
Jetpur . . .	78	3,950	Luni-dhár . . .	87	5,110	Kunkáváv.				
Junágarh . . .	87	5,110	Kunkáváv . . .	91	3,860	Khákharya.				

APPENDIX F—concluded.

Table of railways constructed in or traversing Native States—concluded.

Serial No.	RAILWAY.	NATIVE STATES TRAVERSED.								
		Names of States.	COMMENCES AT		ENDS AT					
			Distance from Bhavnagar Bandar.	Nearest Railway Station.	Distance from Bhavnagar Bandar.	Nearest Railway Station.				
		Miles.	Feet.		Miles.	Feet.				
LIII.	BHÁVNAGAR-GONDAL-JUNÁGARH-PORBANDAR—concl'd. DHOLA TO PORBANDAR—concl'd.	Jetpur	91	3,860	Khákharya	94	2,400	Khákharya.		
		Junágarh	94	2,400	Khákharya	96	800	Vávdí.		
Bantwa		96	800	Vávdí	96	4,500	Vávdí.			
Junágarh		96	4,500	Vávdí	97	1,420	Vávdí.			
Bantwa		97	1,420	Vávdí	98	1,660	Vávdí.			
Junágarh		98	1,660	Vávdí	101	4,700	Vávdí.			
Jetpur		101	4,700	Vávdí	110	3,100	Jetalsar.			
Gondal		110	3,100	Jetalsar	112	4,100	Jetalsar.			
Junágarh		112	4,100	Jetalsar	117	1,200	Dhoraji.			
Gondal		117	1,200	Dhoraji	151	2,330	Jám Jodhpur.			
Navangar		151	2,330	Jám Jodhpur	173	300	Sakhpur.			
Porbandar		173	300	Sakhpur	189	5,150	Porbandar.			
			Distance from Jetalsar Junction.		Distance from Jetalsar Junction.					
		JETALSAR TO VIRÁVAL	Gondal	1	4,670	Jetalsar	1	4,670	Jetalsar.	
		Jetpur	4	2,055	Jetalsar	4	2,055	Choki.		
		Gondal	4	3,610	Choki	4	3,610	Choki.		
		Junágarh	40	5,010	Choki	40	5,010	Keshod.		
		Mangrol	47	1,050	Keshod	47	1,050	Mália.		
		Junágarh	47	1,050	Mália	67	980	Verával.		
		Distance from Wadhván Junction.		Distance from Wadhván Junction.						
LIV.	MORVI	Wadhván	1	...	Wadhván	2	1,440	Wadhván.		
		Kherali	2	1,440	Wadhván	4	1,440	Wadhván.		
		Múli	4	1,440	Wadhván	19	192	Múli.		
		Sáyla	19	192	Múli	31	2,280	Dolia.		
		Chotila	31	2,280	Dolia	33	72	Thán.		
		Lakhtar	33	72	Thán	42	408	Thán.		
		Vánkáner	42	408	Thán	59	3,420	Vánkáner.		
		Morvi	59	3,420	Vánkáner	63	500	Morvi terminus.		
				Vánkáner	51	4,800	Vánkáner	64	3,000	Sindhávar.
				Dhrob	64	3,000	Sindhávar	65	3,168	Sindhávar.
				Khoráná	65	3,168	Sindhávar	70	1,248	Khoráná.
				Gavoridar	70	1,248	Khoráná	73	3,384	Rájkot.
				Rájkot	73	3,384	Rájkot	77	1,728	Rájkot terminus.
				Distance from Marwar Railway Junction.		Distance from Marwar Railway Junction.				
LV.	JODHPORE-BIKANIR (MERTA ROAD-NÁGAUR SECTION).	Jodhpore	128	...	Merta Road	163	...	Nágaur.		

Details of Capital expenditure and mileage cost of State railways at the

MAIN HEAD AND SUB-HEAD.	STANDARD							
	STATE LINES CONSTRUCTED							
	PATNA-GYA. (37 MILES.) HALF-YEAR ENDING 30TH JUNE 1879.		DHOND-MANMAD. (145.50 MILES.) HALF-YEAR ENDING 30TH JUNE 1878.		LATE PUNJAB NORTH- ERN. (b) (415.5 MILES.) HALF-YEAR ENDING 30TH JUNE 1881.		LATE INDUS VALLEY.(b) (651 MILES.) HALF-YEAR ENDING 30TH JUNE 1882.	
	Total of each main of sub-head.	Cost per mile open.	Total of each sub- head.	Cost per mile open.	Total of each sub- head.	Cost per mile open.	Total of each sub- head.	Cost per mile open.
R	R	R	R	R	R	R	R	
I.—PRELIMINARY EXPENSES—	6,719	118	...	...	...	...	...	...
1. Survey Expenses . . . . .	...	...	22,545	155	3,32,006	748	8,01,420	1,231
2. Plant . . . . .	...	...	580	4	14,811	33	60,113	92
3. Establishment. . . . .	...	...	1,02,983	708	7,44,629	1,671	4,39,765	676
II.—LAND	56,396	989	30,359	209	8,33,480	1,871	3,17,344	487
III.—FORMATION—	...	...	...	...	...	...	...	...
1. Earthwork	1,95,559	3,431	9,47,608	6,513	77,23,051	17,336	66,23,820	10,175
2. Tunnels . . . . .	...	...	...	...	8,04,571	2,008	...	...
IV.—BRIDGEWORK—	...	...	...	...	...	...	...	...
1. Large bridges	95,581	1,767	57,175	393	1,91,97,672	43,092	1,33,42,769	20,496
2. Minor bridges.	1,47,443	2,587	14,285	98	20,00,858	4,491	35,06,507	5,386
V.—FENCING, &c.—	...	...	...	...	...	...	...	...
1. Fencing	826	14	115	1	4,62,226	1,038	1,16,785	179
2. Road crossings . . . . .	...	...	...	...	...	...	...	...
3. Mile and gradient posts)	13,096	230	1,191	8	2,78,277	625	3,36,679	517
VI.—ELECTRIC TELEGRAPH . . . . .	...	...	...	...	17,190	38	68,011	105
VII.—BALLAST AND PERMANENT- WAY—	...	...	...	...	...	...	...	...
1. Ballast	25,001	439	2,63,541	1,811	26,55,233	5,960	45,61,662	7,007
2. Permanent-way	15,15,140	26,581	36,47,121	25,066	1,19,90,892	33,650	2,13,70,558	32,328
VIII.—STATIONS AND BUILDINGS—	...	...	...	...	...	...	...	...
1. Stations and Offices	81,814	1,488	22,043	151	21,94,900	4,927	14,79,731	2,212
2. Workshops, store build- ings, &c.	2,056	56	1,107	8	8,24,816	1,851	8,14,428	1,251
3. Staff quarters	35,492	623	25,512	175	16,05,655	3,604	21,14,409	3,248
4. Station Machinery	63,057	1,110	3,09,915	254	15,43,374	3,464	15,88,816	2,440
IX.—PLANT—	...	...	...	...	...	...	...	...
1. Engineering	33,612	590	1,00,897	693	25,25,391	5,669	15,39,380	2,365
2. Locomotive . . . . .	...	...	...	...	4,25,579	955	30,669	47
3. Carriage and Wagon	2,372	41	...	...	3,385	8	22,946	35
4. Station and Office Fur- niture	9,825	172	5,351	37	2,02,503	454	2,93,527	451
X.—FERRIES, &c.—	...	...	...	...	...	...	...	...
1. Ferries . . . . .	...	...	...	...	...	...	...	...
2. Floating Bridges . . . . .	...	...	...	...	...	...	4,19,789	645
XI.—ROLLING-STOCK—	...	...	...	...	...	...	...	...
1. Locomotive . . . . .	...	...	1,64,427	1,130	26,03,789	5,845	40,44,662	6,213
2. Carriage and Wagon	28,922	507	98,165	675	46,32,350	10,398	67,24,473	10,329
XII.—GENERAL CHARGES—	...	...	...	...	...	...	...	...
1. Direction or General	47,115	6	31,176	216	12,09,163	2,714	14,85,028	2,281
2. Engineering	90,086	1,686	2,12,084	1,457	35,79,430	7,945	43,50,510	6,683
3. Stores	24,619	432	37,577	258	6,40,970	1,452	6,97,198	1,071
4. Audit and Account	12,231	215	24,294	167	4,55,550	1,022	4,38,078	673
5. Medical and Sanitation	802	15	14,690	101	1,15,691	260	2,38,306	300
Loss by Exchange . . . . .	...	...	...	...	...	...	...	...
TOTAL	(a) 24,97,130	(a) 43,809	(a) 58,60,956	(a) 40,281	(a) 7,25,48,225	(a) 1,62,847	(a) 7,76,88,880	(a) 1,19,337

(a) Less receipts on capital account.

(b) Now amalgamated with the North Western Railway.

G.

end of the half-year in which the last open section of each line was completed.

GUAGE.

BY THE STATE.

SIND-SAGAR (EASTERN SECTION), (b) (62½ MILES.) HALF-YEAR ENDING 30TH JUNE 1877.		SIND-SAGAR (WESTERN SECTION), (b) (31½ MILES.) HALF-YEAR ENDING 31ST DECEMBER 1877.		AMRITSAR-PATHAN-KOT. (64½ MILES.) HALF-YEAR ENDING 31ST DECEMBER 1884.		JAMMU AND KASHMIR (BRITISH SECTION),† (240 MILES.) HALF-YEAR ENDING 30TH JUNE 1880.		MAIN HEAD AND SUB-HEAD.
Total of each main head.	Cost per mile open.	Total of each main head.	Cost per mile open.	Total of each sub-head.	Cost per mile open.	Total of each main head.	Cost per mile open.	
R	R	R	R	R	R	R	R	
9	...	75,953	242	...	...	4,642	547	I.—PRELIMINARY EXPENSES—
...	...	...	...	6,131	95	...	...	1. Survey Expenses
...	...	...	...	38,238	590	...	...	2. Plant.
31,912	510	2,30,637	733	1,73,635	2,757	7,327	863	3. Establishment.
...	...	...	...	...	...	7,865	926	II.—LAND.
...	...	...	...	4,10,038	6,320	...	...	III.—FORMATION—
...	...	...	...	...	...	...	...	1. Earthwork.
1,44,122	2,306	40,28,071	12,803	...	...	5,635	664	2. Tunnels.
...	...	...	...	4,40,582	6,806	...	...	IV.—BRIDGEWORK—
...	...	...	...	...	...	...	...	1. Large bridges.
...	...	...	...	...	...	...	...	2. Minor bridges.
...	...	...	...	...	...	3,357	395	V.—FENCING, &C.—
...	...	...	...	1,19,272	1,841	...	...	1. Fencing.
...	...	...	...	22,208	343	...	...	2. Road crossings.
...	...	...	...	6,694	103	...	...	3. Mile and gradient posts.
11,16,158	17,958	90,55,497	28,793	...	...	1,64,457	19,371	VI.—ELECTRIC TELEGRAPH.
...	...	...	...	7,53,084	11,623	...	...	VII.—BALLAST AND PERMANENT-WAY—
...	...	...	...	21,03,253	32,463	...	...	1. Ballast.
1,14,236	1,828	1,26,231	3,581	...	...	31,436	3,703	2. Permanent-way.
...	...	...	...	2,56,155	3,951	...	...	VIII.—STATIONS AND BUILDINGS—
...	...	...	...	...	...	...	...	1. Stations and Offices.
...	...	...	...	1,10,016	1,698	...	...	2. Workshops, store buildings, &c.
...	...	...	...	1,74,868	2,099	...	...	3. Staff quarters.
7,389	118	2,65,822	845	...	...	1,258	148	4. Station Machinery.
...	...	...	...	2,435	38	...	...	IX.—PLANT—
...	...	...	...	...	...	...	...	1. Engineering.
...	...	...	...	...	...	...	...	2. Locomotive.
...	...	...	...	33,985	525	...	...	3. Carriage and Wagon.
...	...	8,628	27	...	...	...	...	4. Station and Office Furniture.
...	...	...	...	...	...	...	...	X.—FERRIES, &C.—
...	...	...	...	...	...	...	...	1. Ferries.
...	...	...	...	...	...	...	...	2. Floating Bridges.
2,50,408	4,007	15,47,971	4,922	...	...	...	...	XI.—ROLLING-STOCK—
...	...	...	...	1,33,102	2,079	...	...	1. Locomotive.
...	...	...	...	2,94,958	4,513	...	...	2. Carriage and Wagon.
9,077	160	6,16,151	1,959	...	...	15,144	1,784	XII.—GENERAL CHARGES—
...	...	...	...	1,38,330	2,135	...	...	1. Direction or General.
...	...	...	...	...	...	...	...	2. Engineering.
...	...	...	...	...	...	...	...	3. Stores.
...	...	...	...	...	...	...	...	4. Audit and Account.
91,170	1,459	12,11,660	3,853	...	...	...	...	5. Medical and Sanitation.
...	...	...	...	...	...	...	...	Loss by Exchange.
17,65,381	28,246	1,81,66,621	57,763	(a)	(a)	2,41,121	28,401	TOTAL.

† Funds were provided by the Government of India, but the line was constructed by the Kashmir Darbar.

Details of Capital expenditure and mileage cost of State railways at the

MAIN HEAD AND SUB-HEAD.	STANDARD STATE LINES							
	STATE LINES CONSTRUCTED BY THE STATE—concl.d.				STATE LINES			
	WARDHA COAL. (44 MILES.) (d) HALF-YEAR ENDING 31ST DECEMBER 1877.		DILDARNAGAR-GHAZI- PUR. (12 MILES.) HALF-YEAR ENDING 31ST DECEMBER 1880.		PÁTRI. (22½ MILES.) HALF-YEAR ENDING 30TH JUNE 1873.		BENGAL-NÁGPUR. (58½ MILES.) HALF-YEAR ENDING 30TH JUNE 1890.	
	Total of each sub- head.	Cost per mile open.	Total of each sub- head.	Cost per mile open.	Total of each main or sub-head.	Cost per mile open.	Total of each main head.	Cost per mile open.
R	R	R	R	R	R	R	R	
I.—PRELIMINARY EXPENSES—	...	...	...	...	9,008	407	14,83,480	2,531
1. Survey Expenses . . .	84,737	1,822	2,218	185	...	...	...	...
2. Plant . . . . .	...	...	...	...	...	...	...	...
3. Establishment . . .	6,905	140	...	...	...	...	...	...
II.—LAND	3,866	83	4,048	337	23,812	1,076	1,96,106	335
III.—FORMATION—	...	...	...	...	...	...	59,31,891	10,122
1. Earthwork	3,07,132	6,605	22,207	1,851	51,955	2,348	...	...
2. Tunnels . . . . .	...	...	...	...	...	...	...	...
IV.—BRIDGEWORK—	...	...	...	...	...	...	1,32,51,844	22,614
1. Large bridges . . .	10,06,784	21,651	26,674	2,223	1,00,959	4,562	...	...
2. Minor bridges . . .	...	...	27,399	2,283			...	...
V.—FENCING, &c.—	...	...	...	...	...	...	1,60,803	274
1. Fencing	1,96,595	4,228	2,992	249	...	...	...	...
2. Road crossings . . .	28,067	604	177	15	1,936	87	...	...
3. Mile and gradient posts							...	...
VI.—ELECTRIC TELEGRAPH—	1,382	30	...	...	17,326	783	...	...
VII.—BALLAST AND PERMANENT- WAY—	...	...	...	...	...	...	2,22,92,721	38,042
1. Ballast	3,05,050	6,560	46,135	3,845	49,893	2,255	...	...
2. Permanent-way . . .	17,30,803	37,222	3,01,381	25,115	4,65,947	21,055	...	...
III.—STATIONS AND BUILDINGS—	...	...	...	...	...	...	44,28,450	7,557
1. Stations and Offices .	91,647	1,971	29,965	2,497	4,999	226	...	...
2. Workshops, store build- ings, &c.	1,330	29	...	...	11,568	523	...	...
3. Staff quarters	76,166	1,638	3,343	279	11,192	506	...	...
4. Station Machinery . .	1,61,954	3,483	34,911	2,909	7,380	333	...	...
IX.—PLANT—	...	...	...	...	...	...	16,41,516	2,801
1. Engineering	1,50,776	3,242	4,388	365	375	17	...	...
2. Locomotive	20,198	434	...	...	...	...	...	...
3. Carriage and Wagon .	...	...	...	...	...	...	...	...
4. Station and Office Furni- ture	3,708	80	888	74	...	...	...	...
X.—FERRIES, &c.—	...	...	...	...	...	...	...	...
1. Ferries . . . . .	...	...	...	...	...	...	...	...
2. Floating Bridges . . .							...	...
XI.—ROLLING-STOCK—	3,025	65	...	...	...	...	(b) 69,89,082	11,927
1. Locomotive . . . . .	...	...	...	...	...	...	...	...
2. Carriage and Wagon .	...	...	...	...	...	...	...	...
XII.—GENERAL CHARGES—	...	...	...	...	...	...	37,49,489	6,398
1. Direction or General .	68,296	1,469	13,918	1,160	...	...	...	...
2. Engineering	2,93,905	6,322	37,902	3,166	46,284	2,091	...	...
3. Stores	23,015	495	1,360	113	7,134	322	...	...
4. Audit and Account . .	35,405	761	3,419	285	...	...	...	...
5. Medical and Sanitation .	4,265	92	...	...	...	...	...	...
Loss by Exchange . . . .	...	...	...	...	...	...	6,53,185	1,115
TOTAL	(a) & (e) 45,99,369	(a) 98,911	5,63,415	46,951	8,09,768	36,591	6,07,78,567	1,03,716

(a) Less receipts on capital account.
 (b) Represents the total value of rolling-stock, i.e., on both the open and unopen sections.
 (c) Includes Government supervision, audit and control and commission, &c., on loans.
 (d) Includes 1½ miles to pit's mouth.
 † Now amalgamated with the East Indian Railway.
 ‡ This now forms a part of the Bombay, Baroda and Central India Railway.

G—continued.

end of the half-year in which the last open section of each line was completed—contd.

GAUGE—contd.

CONSTRUCTED BY COMPANIES.

† INDIAN MIDLAND. (677.35 Miles.) HALF-YEAR ENDING 31ST DECEMBER 1889.		BEZVÁDA EXTENSION. (21.27 Miles.) HALF-YEAR ENDING 30TH JUNE 1889.		LATE SIND, PUNJAB AND DELHI.* (663.35 Miles.) HALF-YEAR ENDING 31ST DECEMBER 1870.		GUDH AND ROHIL- KHAND. (691.07 Miles.) HALF-YEAR ENDING 31ST DECEMBER 1887.		MAIN HEAD AND SUB-HEAD.
Total of each main head.	Cost per mile open.	Total of each main head.	Cost per mile open.	Total of each main or sub-head.	Cost per mile open.	Total of each main head.	Cost per mile open.	
R	R	R	R	R	R	R	R	
9,03,173	1,335	15,319	714	...	...	6,84,160	990	I.—PRELIMINARY EXPENSES—
...	...	...	...	4,76,295	718	...	...	1. Survey Expenses.
...	...	...	...	...	...	...	...	2. Plant.
...	...	...	...	...	...	...	...	3. Establishment.
4,93,480	728	47,008	2,189	63,133	95	1,47,461	213	II.—LAND.
...	...	...	...	...	...	...	...	III.—FORMATION—
...	...	...	...	56,60,637	8,535	...	...	1. Earthwork.
...	...	...	...	...	...	...	...	2. Tunnels.
...	...	...	...	...	...	...	...	IV.—BRIDGEWORK—
3,01,28,005	44,479	2,76,516	12,879	1,52,21,433	22,950	2,87,63,062	41,621	1. Large bridges.
...	...	...	...	...	...	...	...	2. Minor bridges.
...	...	...	...	...	...	...	...	V.—FENCING, &C.—
...	...	...	...	...	...	...	...	1. Fencing.
...	...	...	...	28,84,675	4,349	...	...	2. Road crossings.
...	...	...	...	4,04,816	610	...	...	3. Mile and gradient posts.
...	...	...	...	...	...	...	...	VI.—ELECTRIC TELEGRAPH.
...	...	...	...	7,08,907	1,069	46,128	67	
2,74,81,967	40,573	6,04,944	28,176	...	...	2,45,14,855	35,474	VII.—BALLAST AND PERMANENT- WAY—
...	...	...	...	46,84,475	7,063	...	...	1. Ballast
...	...	...	...	2,65,32,834	40,004	...	...	2. Permanent-way.
...	...	...	...	...	...	...	...	VIII.—STATIONS AND BUILDINGS—
50,61,580	7,473	2,58,221	12,027	...	...	91,14,451	13,189	1. Stations and Offices.
...	...	...	...	69,91,608	10,542	...	...	2. Workshops, store build- ings, &c.
...	...	...	...	27,27,176	4,112	...	...	3. Staff quarters.
...	...	...	...	14,58,718	2,199	...	...	4. Station Machinery.
...	...	...	...	49,677	75	...	...
...	...	...	...	...	...	...	...	IX.—PLANT—
3,79,558	560	8,990	419	12,61,606	1,902	19,62,808	2,840	1. Engineering.
...	...	...	...	...	...	...	...	2. Locomotive.
...	...	...	...	...	...	...	...	3. Carriage and Wagon.
...	...	...	...	...	...	...	...	4. Station and Office Fur- niture.
...	...	...	...	...	...	...	...	X.—FERRIES, &C.
...	...	...	...	48,98,454	386	...	...	1. Ferries.
...	...	...	...	...	...	...	...	2. Floating Bridges.
57,65,284	8,511	20,384	949	...	...	1,44,51,552	20,912	XI.—ROLLING-STOCK—
...	...	...	...	58,95,340	8,888	...	...	1. Locomotive.
...	...	...	...	1,06,73,511	16,093	...	...	2. Carriage and Wagon.
...	...	...	...	...	...	...	...	XII.—GENERAL CHARGES—
(e) 37,95,858	5,589	1,15,977	5,402	81,99,624	12,363	83,26,389	12,049	1. Direction or General.
...	...	...	...	...	...	...	...	2. Engineering.
...	...	...	...	...	...	...	...	3. Stores.
...	...	...	...	...	...	...	...	4. Audit and Account.
...	...	...	...	...	...	...	...	5. Medical and Sanitation.
...	...	...	...	...	...	...	...	Loss by Exchange.
2,52,050	372	...	...	...	...	...	...
7,42,50,955	1,09,620	(f) 13,47,359	62,755	9,87,92,919	1,48,952	(g) 8,88,68,152	1,28,595	TOTAL.

(e) Difference due to the credit under the head "Contingencies" not having been deducted from any of the main heads
(f) Includes Rs. 1,164 on account of receipts on capital account which cannot be deducted from the several main heads.
(g) Includes Rs. 8,57,286 on account of maintenance, commission on debentures, Nalhati Railway, and lines abandoned.
† Includes Sindia Railway, which was constructed by the State.
* Now amalgamated with the North Western Railway.

Details of Capital expenditure and mileage cost of State railways at the end

MAIN HEAD AND SUB-HEAD.	STANDARD GAUGE—concl'd.							
	NATIVE STATE LINES CONSTRUCTED BY GOVERNMENT OF INDIA.							
	KHÁMGAON, (7½ MILES.) HALF-YEAR ENDING 30TH JUNE 1870.		AMRÁOTI, (5½ MILES.) HALF-YEAR ENDING 30TH JUNE 1871.		BHOPAL-ITÁRSI, (57½ MILES.) HALF-YEAR ENDING 31ST DECEMBER 1884.		RAJPURA-BHÁTINDA, (107½ MILES.) (b) HALF-YEAR ENDING 31ST DECEMBER 1889.	
Total of each sub- head.	Cost per mile open.	Total of each sub-head.	Cost per mile open.	Total of each sub-head.	Cost per mile open.	Total of each sub- head.	Cost per mile open.	
R	R	R	R	R	R	R	R	
I.—PRELIMINARY EXPENSES—	...	...	...	...	...	...	...
1. Survey Expenses	369	49	1,117	203	...	12,112	112	
2. Plant . . . . .	...	...	...	...	...	5,976	55	
3. Establishment . . . . .	...	...	...	...	...	41,334	383	
II.—LAND . . . . .	...	...	2,450	446	13,152	230	(c) 14,758	1370
III.—FORMATION—	...	...	...	...	...	...	...
1. Earthwork	38,542	5,139	17,926	3,259	14,66,278	25,675	2,59,841	2,407
2. Tunnels . . . . .	...	...	...	...	...	...	...	...
IV.—BRIDGEWORK—	...	...	...	...	...	...	...
1. Large bridges	54,037	7,205	53,880	10,706	16,81,384	29,441	5,13,915	4,761
2. Minor bridges					1,67,168	2,927		
V.—FENCING, &c.—	...	...	...	...	...	...	...
1. Fencing	7,215	962	2,042	371	17,713	310	75,674	701
2. Road crossings	8	1	255	46	25,145	440	1,08,689	1,007
3. Mile and gradient posts								
VI.—ELECTRIC TELEGRAPH—	1,247	166	1,099	200	3,340	58	...	...
VII.—BALLAST AND PERMANENT- WAY—	...	...	...	...	...	...	...
1. Ballast	18,493	2,466	14,765	2,685	1,87,035	3,275	9,65,594	8,946
2. Permanent-way	2,56,936	34,258	2,58,552	47,009	14,54,617	25,470	29,28,299	27,129
VIII.—STATIONS AND BUILDINGS—	...	...	...	...	...	...	...
1. Stations and Offices	7,233	964	15,412	2,802	1,12,005	1,961	3,41,696	3,166
2. Workshops, store buildings, &c.	3,277	437	634	115	...	...	7,509	70
3. Staff quarters	6,057	808	1,171	213	53,322	934	1,86,936	1,732
4. Station Machinery	3,836	512	2,522	459	1,11,687	1,956	2,77,204	2,568
IX.—PLANT—	...	...	...	...	...	...	...
1. Engineering	3,096	413	2,636	479	3,752	66	47,910	444
2. Locomotive . . . . .	...	...	...	...	...	...	...	...
3. Carriage and Wagon . . . . .	...	...	...	...	...	...	...	...
4. Station and Office Furni- ture	76	10	176	32	2,553	45	35,644	330
X.—FERRIES, &c.—	...	...	...	...	...	...	...
1. Ferries . . . . .	...	...	...	...	...	...	...
2. Floating bridges								
XI.—ROLLING-STOCK—	...	...	...	...	...	...	...
1. Locomotive . . . . .	...	...	...	...	...	...	...
2. Carriage and Wagon	316	42	60	11	...	...	...
XII.—GENERAL CHARGES—	...	...	...	...	...	...	...
1. Direction or General . . . . .	...	...	...	...	1,11,768	1,957	37,123	344
2. Engineering	23,293	3,104	33,485	6,088	1,83,007	3,205	1,91,625	1,775
3. Stores	141	19	96	18	4,516	79	31,800	294
4. Audit and Account	792	106	4,077	741	34,231	599	1,383	13
5. Medical and Sanitation . . . . .	...	...	...	...	3,189	56	...	...
Loss by Exchange . . . . .	...	...	...	...	...	...	...	...
TOTAL	4,24,954	56,661	4,17,355	75,883	(a) 56,32,823	(a) 98,631	(a) 60,84,715	(a) 56,371

(a) Less receipts
(b) Of this 16 miles were constructed by the late
(c) Includes debit of ₹7,200 against
* Funds were provided and the line

G—continued.

of the half-year in which the last open section of each line was completed—contd.

METRE GAUGE.								MAIN HEAD AND SUB-HEAD.
STATE LINES CONSTRUCTED BY THE STATE.								
JAMMU AND KASHMIR (NATIVE STATE SECTION.) (15.92 MILES.) HALF-YEAR ENDING 30TH JUNE 1890.		TIRHOOT. (32.53 MILES.) HALF-YEAR ENDING 31ST DECEMBER 1890.		BAREILLY-PILIBHIT. (36 MILES.) HALF-YEAR ENDING 31ST DECEMBER 1884.		RAJPUTANA-MALWA. (1,411 MILES.) HALF-YEAR ENDING 30TH JUNE 1883.		
Total of each main head.	Cost per mile open.	Total of each main head.	Cost per mile open.	Total of each sub- head.	Cost per mile open.	Total of each sub- head.	Cost per mile open.	
R	R	R	R	R	R	R	R	
23,937	1,504	1,83,607	569	...	...	...	...	I.—PRELIMINARY EXPENSES—
...	...	...	...	—18	—1	5,05,727	358	1. Survey Expenses.
...	...	...	...	3,114	87	83,116	59	2. Plant.
...	...	...	...	47,523	1,320	16,11,838	1,142	3. Establishment.
...	...	7,51,702	2,331	36,034	1,003	8,36,218	593	II.—LAND.
33,896	2,129	10,21,501	3,167	...	...	...	...	III.—FORMATION—
...	...	...	...	93,080	2,586	62,20,489	4,409	1. Earthwork.
...	...	...	...	...	...	4,28,063	303	2. Tunnels.
2,33,246	14,651	39,18,293	12,149	...	...	...	...	IV.—BRIDGEWORK—
...	...	...	...	77,018	2,139	1,56,62,747	11,100	1. Large bridges.
...	...	...	...	73,694	2,047	40,92,720	2,901	2. Minor bridges.
1,818	114	8,64,757	2,681	...	...	...	...	V.—FENCING, &c.—
...	...	...	...	14,882	413	9,05,230	642	1. Fencing.
...	...	...	...	15,515	431	5,55,095	393	{ 2. Road crossings. 3. Mile and gradient posts.
...	...	...	...	...	...	15,972	11	VI.—ELECTRIC TELEGRAPH.
5,39,566	33,892	76,65,825	23,768	...	...	...	...	VII.—BALLAST AND PERMANENT- WAY—
...	...	...	...	72,592	2,016	38,68,803	2,742	1. Ballast.
...	...	...	...	5,68,905	15,803	2,78,76,953	19,756	2. Permanent-way.
1,05,946	6,655	29,60,595	9,179	...	...	...	...	VIII.—STATIONS AND BUILDINGS—
...	...	...	...	83,357	2,316	42,53,692	3,015	1. Stations and Offices.
...	...	...	...	12	...	18,08,935	1,282	2. Workshops, store buildings, &c.
...	...	...	...	33,740	937	46,80,834	3,317	3. Staff quarters.
...	...	...	...	77,264	2,146	33,91,100	2,403	4. Station Machinery.
54,461	3,421	5,91,904	1,835	...	...	...	...	IX.—PLANT—
...	...	...	...	14,169	394	10,21,797	724	1. Engineering.
...	...	...	...	...	...	6,81,691	483	2. Locomotive.
...	...	...	...	...	...	1,96,806	140	3. Carriage and Wagon.
...	...	...	...	4,159	116	5,84,665	414	4. Station and Office Furni- ture.
...	...	5,52,404	1,713	...	...	...	...	X.—FERRIES, &c.—
...	...	...	...	...	...	...	...	{ 1. Ferries. 2. Floating bridges.
...	...	22,99,082	7,128	...	...	...	...	XI.—ROLLING-STOCK—
...	...	...	...	...	...	64,84,266	4,596	1. Locomotive.
...	...	...	...	...	...	1,01,01,934	7,159	2. Carriage and Wagon.
66,598	4,183	13,36,762	4,145	...	...	...	...	XII.—GENERAL CHARGES—
...	...	...	...	18,195	505	14,56,740	1,032	1. Direction or General.
...	...	...	...	46,934	1,304	45,88,107	3,252	2. Engineering.
...	...	...	...	7,174	199	7,04,911	459	3. Stores.
...	...	...	...	5,113	142	5,62,788	399	4. Audit and Account.
...	...	...	...	...	...	2,56,498	182	5. Medical and Sanitation.
...	...	7,04,770	2,185	42,070	1,169	...	...	Loss by Exchange.
10,59,468	66,549	2,28,51,202	70,850	(a)	(a)	(a)	(a)	TOTAL.

on capital account.
Sind, Punjab and Delhi Railway Company.
Provincial grant of ₹10,000.
was constructed by the Kashmir Darbar.

Details of Capital expenditure and mileage cost of State railways at the end

MAIN HEAD AND SUB-HEAD.	STATE LINES CONSTRUCTED							
	*CAWNPORE-ACHNERA. (200.05 MILES.) HALF-YEAR ENDING 31ST DECEMBER 1889.		SOUTHERN MAHRATTA (MYSORE SECTION.) (a) (296 MILES.) HALF-YEAR ENDING 31ST DECEMBER 1889.		VILLUPURAM-GUNTA- KAL, (NELLORE- TIRUPATI SECTION), (85.77 MILES.) HALF-YEAR ENDING 31ST DECEMBER 1887.		LUCKNOW-SITAPUR- SERAMAU, (104.50 MILES.) HALF-YEAR ENDING 31ST DECEMBER 1887.	
	Total of each sub- head.	Cost per mile open.	Total of each main head.	Cost per mile open.	Total of each main head.	Cost per mile open.	Total of each main head.	Cost per mile open.
R	R	R	R	R	R	R	R	
I.—PRELIMINARY EXPENSES—	...	...	2,95,941	1,000	48,997	592	77,640	742
1. Survey Expenses . . .	12,744	49	...	...	...	...	...	...
2. Plant . . .	2,252	9	...	...	...	...	...	...
3. Establishment . . .	56,382	217	...	...	...	...	...	...
II.—LAND . . .	2,37,395	911	68,825	232	63,103	762	1,01,986	975
III.—FORMATION—	...	...	...	...	...	...	...	...
1. Earthwork . . .	5,13,612	1,970	...	...	...	...	...	...
2. Tunnels . . .	...	...	...	...	...	...	...	...
IV.—BRIDGEWORK—	...	...	...	...	...	...	...	...
1. Large bridges . . .	12,11,115	4,647	...	...	...	...	...	...
2. Minor bridges . . .	4,58,833	1,760	...	...	...	...	...	...
			43,05,769	14,546	23,07,686	27,881	5,20,644	4,978
V.—FENCING, &C.—	...	...	...	...	...	...	...	...
1. Fencing . . .	2,04,379	784	...	...	...	...	...	...
2. Road crossings . . .	...	...	...	...	...	...	...	...
3. Mile and gradient posts . . .	1,04,924	403	...	...	...	...	...	...
VI.—ELECTRIC TELEGRAPH . . .	2,469	9	...	...	...	...	...	...
VII.—BALLAST AND PERMANENT- WAY—	...	...	50,74,212	17,143	15,67,555	18,939	14,46,573	13,831
1. Ballast . . .	6,81,843	2,616	...	...	...	...	...	...
2. Permanent-way . . .	38,99,417	14,926	...	...	...	...	...	...
VIII.—STATIONS AND BUILDINGS—	...	...	9,21,417	3,113	3,79,981	4,591	3,54,682	3,391
1. Stations and Offices . . .	4,33,311	1,662	...	...	...	...	...	...
2. Workshops, store build- ings, &c.	1,17,724	452	...	...	...	...	...	...
3. Staff quarters . . .	3,27,500	1,256	...	...	...	...	...	...
4. Station Machinery . . .	4,12,999	1,585	...	...	...	...	...	...
IX.—PLANT—	...	...	2,82,087	953	2,02,639	2,448	1,02,424	979
1. Engineering . . .	15,085	58	...	...	...	...	...	...
2. Locomotive . . .	79,760	306	...	...	...	...	...	...
3. Carriage and Wagon . . .	46,599	179	...	...	...	...	...	...
4. Station and Office Furni- ture	63,781	244	...	...	...	...	...	...
X.—FERRIES, &C.—	...	...	...	...	...	...	...	...
1. Ferries . . .	...	...	...	...	...	...	...	...
2. Floating bridges . . .	...	...	...	...	...	...	...	...
XI.—ROLLING-STOCK—	...	...	29,87,381	7,052	4,92,065	5,945	7,05,295	6,743
1. Locomotive . . .	5,94,955	2,282	...	...	...	...	...	...
2. Carriage and Wagon . . .	10,65,690	4,089	...	...	...	...	...	...
XII.—GENERAL CHARGES—	...	...	8,64,580	2,921	5,59,694	6,762	1,63,832	1,567
1. Direction or General . . .	1,62,443	622	...	...	...	...	...	...
2. Engineering . . .	3,79,333	1,455	...	...	...	...	...	...
3. Stores . . .	38,160	147	...	...	...	...	...	...
4. Audit and Account . . .	39,234	151	...	...	...	...	...	...
5. Medical and Sanitation . . .	166	1	...	...	...	...	...	...
Loss by Exchange . . .	3,65,480	1,402	...	...	2,42,360	2,928	80	1
TOTAL	1,15,18,785	44,192	1,39,00,212	46,960	(b) 58,64,080	70,848	34,73,156	33,207

* This now forms a part of the Rajputana-Malwa Railway.

(a) Gubbi-Harihar section was constructed by the Southern Mahratta Railway Company.

(b) Includes Rs.631 on account of receipts on capital account which cannot be deducted from the several main heads.

G—continued.

of the half-year in which the last open section of each line was completed—contd.

GAUGE—contd.								MAIN HEAD AND SUB-HEAD.
BY THE STATE—contd.								
NORTHERN BENGAL. (240 MILES.) HALF-YEAR ENDING 30TH JUNE 1884.		DACCA. (86 MILES.) HALF-YEAR ENDING 30TH JUNE 1885.		ASSAM-BIHAR, (150.50 MILES.) HALF-YEAR ENDING 31ST DECEMBER 1890.		BURMA. (327 MILES.) HALF-YEAR ENDING 31ST DECEMBER 1885.		
Total of each main head.	Cost per mile open.	Total of each main head.	Cost per mile open.	Total of each sub- head.	Cost per mile open.	Total of each main head or sub-head.	Cost per mile open.	
R	R	R	R	R	R	R	R	
96,768	389	1,27,938	1,487	...	...	2,87,279	878	I.—PRELIMINARY EXPENSES—
...	...	...	...	88,703	567	...	...	1. Survey Expenses.
...	...	...	...	...	...	...	...	2. Plant.
...	...	...	...	...	...	...	...	3. Establishment.
8,15,722	3,276	4,46,381	5,190	3,18,580	2,036	2,71,658	831	II.—LAND.
...	...	...	...	...	...	...	...	III.—FORMATION—
...	...	...	...	13,63,596	8,713	32,40,803	9,911	1. Earthwork.
...	...	...	...	...	...	...	...	2. Tunnels.
...	...	...	...	...	...	...	...	IV.—BRIDGEWORK—
...	...	...	...	31,07,753	19,858	13,89,139	4,248	1. Large bridges.
57,17,876	22,963	13,68,484	15,913	4,35,158	2,780	31,21,404	9,545	2. Minor bridges.
...	...	...	...	...	...	...	...	V.—FENCING, &C.—
...	...	...	...	2,70,012	1,725	10,87,600	3,326	1. Fencing.
...	...	...	...	1,48,637	950	3,00,316	918	2. Road crossings.
...	...	...	...	...	...	...	...	3. Mile and gradient posts.
...	...	...	...	18,903	121	655	2	VI.—ELECTRIC TELEGRAPH.
54,77,900	22,000	17,22,430	20,028	...	...	...	...	VII.—BALLAST AND PERMANENT- WAY—
...	...	...	...	10,37,935	6,632	22,77,119	6,964	1. Ballast.
...	...	...	...	24,44,495	15,619	52,55,352	16,071	2. Permanent-way.
26,29,765	10,561	10,44,473	12,145	...	...	...	...	VIII.—STATIONS AND BUILDINGS—
...	...	...	...	3,24,569	2,074	12,96,933	3,966	1. Stations and Offices.
...	...	...	...	18,829	120	5,07,975	1,554	2. Workshops, store buildings, &c.
...	...	...	...	3,32,151	2,122	5,03,899	1,511	3. Staff quarters.
...	...	...	...	2,22,167	1,420	6,79,480	2,078	4. Station Machinery.
8,66,514	3,480	2,56,056	2,977	...	...	...	...	IX.—PLANT—
...	...	...	...	1,82,770	1,168	4,44,418	1,359	1. Engineering.
...	...	...	...	45,466	291	1,89,895	581	2. Locomotive.
...	...	...	...	287	2			3. Carriage and Wagon.
...	...	...	...	26,348	168	85,699	262	4. Station and Office Fur- niture.
4,7,048	1,795	...	...	...	...	...	...	X.—FERRIES, &C.—
...	...	...	...	10,417	67	...	...	1. Ferries.
...	...	...	...	...	...	...	...	2. Floating bridges.
24,46,682	9,826	7,04,760	8,195	...	...	35,62,697	10,895	XI.—ROLLING-STOCK—
...	...	...	...	1,75,721	1,123	...	...	1. Locomotive.
...	...	...	...	7,88,873	5,041	...	...	2. Carriage and Wagon.
21,94,569	8,814	3,47,809	4,044	...	...	...	...	XII.—GENERAL CHARGES—
...	...	...	...	1,82,507	1,166	2,27,935	697	1. Direction or General.
...	...	...	...	4,51,599	2,836	15,00,406	4,588	2. Engineering.
...	...	...	...	45,062	288	1,34,322	411	3. Stores.
...	...	...	...	48,281	308	1,44,798	443	4. Audit and Account.
...	...	...	...	18,953	121	22,311	68	5. Medical and Sanitation.
...	...	...	...	1,35,841	868	...	...	Loss by Exchange.
2,06,92,844	83,104	60,18,231	69,997	(c) 1,22,28,381	(c) 78,137	2,65,32,093	81,137	TOTAL.

(c) Less receipts on capital account.

Details of Capital expenditure and mileage cost of State railways at the

MAIN HEAD AND SUB-HEAD.	METRE GAUGE—concl'd.							
	STATE LINES CONSTD. BY THE STATE—concl'd.		STATE LINES CONSTRUC- TED BY COMPANIES.		NATIVE STATE LINES CON- STRUCTED BY GOVT. OF INDIA.		KAUNIA-DHARLA. (37'03 Miles, 2' 6" GAUGE.) HALF-YEAR ENDING 31ST DECEMBER 1884.	
	TOUNGOO-MANDALAY. (220 Miles.) HALF-YEAR ENDING 30TH JUNE 1889.		SOUTHERN MAHRATTA. (1,043'70 Miles.) HALF-YEAR ENDING 31ST DECEMBER 1890.		BHÁVNAGAR-GONDAL-JUNÁ- GARH-PORBANDAR. (339'16 Miles.) (a) HALF-YEAR ENDING 31ST DECEMBER 1890.			
	Total of each main head.	Cost per mlie open.	Total of each main head.	Cost per mlie open.	Total of each main head.	Cost per mlie open.	Total of each main head.	Cost per mlie open.
	R	R	R	R	R	R	R	R
I.—PRELIMINARY EXPENSES—	1,71,251	778	10,90,911	1,045	1,19,442	363	910	25
1. Survey Expenses . . . . .	...	...	...	...	...	...	...	...
2. Plant . . . . .	...	...	...	...	...	...	...	...
3. Establishment . . . . .	...	...	...	...	...	...	...	...
II.—LAND	3,16,081	1,437	10,25,442	982	...	...	14,432	390
III.—FORMATION—			1,88,17,573	18,030	16,74,017	5,086		
1. Earthwork . . . . .			...	...	...	...
2. Tunnels . . . . .			...	...	...	...
IV.—BRIDGEWORK—			1,83,66,507	17,597	41,19,819	12,516		
1. Large bridges . . . . .			...	...	...	...
2. Minor bridges . . . . .			...	...	...	...
	65,78,182	29,900					88,841	2,401
V.—FENCING, &c.—			13,47,110	1,291	71,451	217		
1. Fencing . . . . .			...	...	...	...
2. Road crossings . . . . .			...	...	...	...
3. Mile and gradient posts . . . . .			...	...	...	...
VI.—ELECTRIC TELEGRAPH . . . . .			...	...	10,425	32		
VII.—BALLAST AND PERMANENT- WAY—	57,83,275	26,288	2,15,49,213	20,647	49,16,242	14,935	4,98,680	13,478
1. Ballast . . . . .	...	...	...	...	...	...	...	...
2. Permanent-way . . . . .	...	...	...	...	...	...	...	...
VIII.—STATIONS AND BUILD- INGS—	18,22,563	8,284	94,23,387	9,029	21,49,764	6,531	21,470	580
1. Stations and Offices . . . . .	...	...	...	...	...	...	...	...
2. Workshops, store buildings, &c. . . . .	...	...	...	...	...	...	...	...
3. Staff quarters . . . . .	...	...	...	...	...	...	...	...
4. Station Machinery . . . . .	...	...	...	...	...	...	...	...
IX.—PLANT—	4,16,257	1,892	25,76,012	2,468	3,52,828	1,072	8,444	228
1. Engineering . . . . .	...	...	...	...	...	...	...	...
2. Locomotive . . . . .	...	...	...	...	...	...	...	...
3. Carriage and Wagon . . . . .	...	...	...	...	...	...	...	...
4. Station and Office Furniture . . . . .	...	...	...	...	...	...	...	...
X.—FERRIES, &c.—							1,20,677	3,261
1. Ferries . . . . .							...	...
2. Floating bridges . . . . .							...	...
XI.—ROLLING-STOCK—	33,94,051	15,429	99,03,576	9,489	21,57,548	6,555	1,60,637	4,342
1. Locomotive . . . . .	...	...	...	...	...	...	...	...
2. Carriage and Wagon . . . . .	...	...	...	...	...	...	...	...
XII.—GENERAL CHARGES—	14,67,669	6,671	63,63,170	6,097	8,73,566	2,654	8,291	224
1. Direction or General . . . . .	...	...	...	...	...	...	...	...
2. Engineering . . . . .	...	...	...	...	...	...	...	...
3. Stores . . . . .	...	...	...	...	...	...	...	...
4. Audit and Account . . . . .	...	...	...	...	...	...	...	...
5. Medical and Sanita- tion . . . . .	...	...	...	...	...	...	...	...
Loss by Exchange . . . . .	...	...	4,91,090	471	...	...	...	...
TOTAL	1,99,49,332	90,679	9,09,53,991	87,146	1,64,45,102	49,961	9,22,382	24,929

(a) Excludes 4'50 miles of State mileage in dock estates and quarry lines constructed and maintained by the States themselves.

G—concluded.

end of the half-year in which the last open section of each line was completed—concl'd.

SPECIAL GAUGES.						MAIN HEAD AND SUB-HEAD.
STATE LINES CONSTRUCTED BY THE STATE.						
NALHÁTI. (27 ²⁵ MILES, 4' GAUGE.) HALF-YEAR ENDING 31ST DECEMBER 1880.		CHERRA-COMPANYGANL. (7 ⁵ MILES, 2' 6" GAUGE.) HALF-YEAR ENDING 31ST DECEMBER 1886.		JORHÁT. (30 ⁶⁶ MILES, 2' GAUGE.) HALF-YEAR ENDING 31ST DECEMBER 1887.		
Total of each main head.	Cost per mile open.	Total of each sub-head.	Cost per mile open.	Total of each main head.	Cost per mile open.	
R	R	R	R	R	R	
...	...	...	...	388	13	I.—PRELIMINARY EXPENSES—
...	...	...	...	...	...	1. Survey Expenses.
...	...	...	...	...	...	2. Plant.
...	...	...	...	...	...	3. Establishment.
...	...	...	...	4,728	155	II.—LAND.
...	...	...	...	...	...	III.—FORMATION—
...	...	53,025	7,070	...	...	1. Earthwork.
...	...	...	...	...	...	2. Tunnels.
...	...	...	...	...	...	IV.—BRIDGEWORK—
...	...	12,745	1,699	...	...	1. Large bridges.
(b)	796	2,058	275	1,18,590	3,875	2. Minor bridges.
21,690		...	...	...	...	V.—FENCING, &c.—
...	...	...	...	...	...	1. Fencing.
...	...	...	...	...	...	{ 2. Road crossings.
...	...	...	...	...	...	{ 3. Mile and gradient posts.
...	...	...	...	...	...	VI.—ELECTRIC TELEGRAPH.
(b)	6,988	...	...	3,09,346	10,109	VII.—BALLAST AND PERMANENT-WAY—
1,90,420		...	...	...	...	1. Ballast.
...	...	78,933	10,524	...	...	2. Permanent-way.
...	...	...	...	...	...	VIII.—STATIONS AND BUILDINGS—
(b)	939	...	...	62,578	2,045	1. Stations and Offices.
25,600		2,012	268	...	...	2. Workshops, store buildings, &c.
...	...	5,444	726	...	...	3. Staff quarters
...	...	672	80	...	...	4. Station Machinery.
...	...	8,592	1,134	...	...	IX.—PLANT—
(b)	275	...	...	20,606	673	1. Engineering.
7,500		...	...	...	...	2. Locomotive.
...	...	914	126	...	...	3. Carriage and Wagon.
...	...	1,175	157	...	...	4. Station and Office Furniture.
...	...	...	...	...	...	X.—FERRIES, &c.—
...	...	1,000	133	...	...	{ 1. Ferries.
...	...	...	...	...	...	{ 2. Floating bridges.
(b)	1,835	...	...	1,18,901	3,886	XI.—ROLLING-STOCK—
50,000		...	...	...	...	1. Locomotive.
...	...	17,672	2,356	...	...	2. Carriage and Wagon.
...	...	20,611	2,748	...	...	XII.—GENERAL CHARGES—
(b)	1,101	23,253	3,101	36,622	1,197	1. Direction or General.
30,000		...	...	...	...	2. Engineering.
...	...	...	...	...	...	3. Stores.
...	...	...	...	...	...	4. Audit and Account.
...	...	...	...	...	...	5. Medical and Sanitation.
...	...	...	...	...	...	Loss by Exchange.
...	...	...	...	...	...	TOTAL.
3,25,210	11,934	(c) 2,30,408	30,721	6,71,759	21,953	

(b) Approximate.
(c) Includes Rs. 2,362 on account of percentage for establishment.

APPENDIX H.

This Indenture made the 18th day of March 1890, BETWEEN THE SECRETARY OF STATE IN COUNCIL OF INDIA (herein-after called the Secretary of State) of the one part, and THE INDIAN MIDLAND RAILWAY COMPANY, LIMITED (herein-after called the Company), of the other part, and supplemental to an Indenture made between the same parties, and dated the 2nd day of October 1885, which is herein-after referred to as the principal Contract, and to another Indenture made between the same parties, and dated the 25th day of January 1889, which is herein-after referred to as the Debenture Contract.

WHEREAS the projected railway mentioned in the principal Contract has been opened for public traffic between Jhansi and Gwalior.

AND WHEREAS the Sindia State Railway, which is in the principal Contract referred to as the line of Railway between Gwalior and Agra, and is hereinafter called the Sindia Railway, extends from Gwalior to a junction with the Rajputana-Malwa Railway near the Cantonment Station at Agra.

AND WHEREAS the Company having in exercise of the power in that behalf contained in the 58th section of the principal Contract required the Secretary of State to transfer to the Company, to be maintained and worked by the Company, the Sindia Railway, together with all the appurtenances thereof belonging to the Secretary of State, the Secretary of State on the 1st day of March 1889 transferred and handed over to the Company the said railway and appurtenances other than and except electric telegraphs and buildings, machinery, works, and appliances connected with the construction, maintenance, use, or working of electric telegraphs.

AND WHEREAS the capital outlay on the Sindia Railway to the 28th day of February 1889 was Rs 2,11,880-8-5, and the Secretary of State has fixed the sum of 736,950*l.* 8*s.* 10*d.* as the fair equivalent thereof, it being, when converted into rupee currency at the rate of 12½ rupees to the pound sterling mentioned in clause 36 (1) of the principal Contract, equal to the said capital outlay of Rs 2,11,880-8-5.

AND WHEREAS the Company has, with the sanction of the Secretary of State, in connection with the transfer of the Sindia Railway and for other purposes, raised a total sum of 754,421*l.* 16*s.* 6*d.* by the issue at a small premium of debentures for 754,100*l.*, bearing interest at 3½ per cent. per annum and to run for seven years, and has paid the said sum of 754,421*l.* 16*s.* 6*d.* into the Bank of England to the credit of the Secretary of State.

NOW THIS INDENTURE WITNESSETH, and it is hereby agreed and declared as follows:—

1. The Company shall as from the said 1st day of March 1889, and during the continuance of the principal Contract, maintain and work the Sindia Railway as part of its undertaking according to the provisions of the principal Contract and of these Presents.

2. The Secretary of State shall, during the continuance of the principal Contract, be and continue exclusively entitled to the electric telegraphs and buildings, machinery, works, and appliances, connected with the construction, maintenance, use and working of electric telegraphs along or upon the Sindia Railway, in the like manner, and with the like powers, and subject to the like provisions as are provided by the principal Contract with respect to electric telegraphs and buildings, machinery, works, and appliances connected with electric telegraphs established by the Secretary of State along or upon the projected railway mentioned in the same Contract, or any land or works belonging thereto.

3. If and whenever His Highness the Maharajah of Gwalior for the time being desires to travel over or upon the Sindia Railway, or any part thereof, the Company shall provide, free of cost, for the Maharajah and his suite all or such as shall be required of the following accommodation (that is to say):—one first-class carriage, one second-class carriage, one third-class carriage, and one luggage van, with all necessary and proper attendants.

4. The provisions of the Debenture Contract shall extend and be applicable to the debentures for 754,100*l.* so issued by the Company as aforesaid and to the principal

APPENDIX H.

CXCV

moneys and interest thereby secured, and to the moneys raised by the issue of the said debentures and paid into the Bank of England as herein-before recited.

In witness whereof SIR ALEXANDER JAMES ARBUTHNOT, K.C.S.I., C.I.E., and SIR ALFRED COMYNS LYALL, K.C.B., K.C.I.E., being two Members of the Council of India, have hereunto set their hands and seals, and the Indian Midland Railway Company, Limited, has hereunto caused its common seal to be affixed, the day and year first above written.

APPENDIX I.

Memorandum of Agreement, made the sixth day of May eighteen hundred and ninety, between the SECRETARY OF STATE FOR INDIA IN COUNCIL and the GREAT INDIAN PENINSULA RAILWAY COMPANY, for the working and maintenance of the Wardha Coal State Railway (hereinafter called the State Railway) by the Great Indian Peninsula Railway Company (hereinafter called the Railway Company).

1. Throughout this Agreement, unless otherwise stated, or unless there is something repugnant in the context, the following terms are to have the meanings set opposite to each of them respectively, Interpretation Clause.
- namely :—
- (a) Traffic includes everything that is carried over the State Railway.
Traffic.
 - (b) Coaching Traffic includes Passengers, Horses, Carriages, Dogs, Parcels, Luggage, and all that is booked at what are commonly known as Coaching Rates.
Coaching Traffic.
 - (c) Goods Traffic includes Coal, Material, and Merchandize of all kinds, also Cattle, Sheep, &c., and all that is booked at what are commonly known as Goods Rates.
Goods Traffic.
 - (d) Telegraph includes Posts, Wires, Batteries, Instruments (of the patterns in use, from time to time, on the Great Indian Peninsula Railway), and all that is necessary for working the Telegraph.
Telegraph.
 - (e) Capital Expenditure includes all expenditure of all kinds which amounts to more than one thousand rupees which would, under the rules in force, from time to time, on the Great Indian Peninsula Railway, be charged to the Capital account.
Capital.
 - (f) Revenue Expenditure includes all expenditure of all kinds of not more than one thousand rupees which would, under the rules in force, from time to time, on the Great Indian Peninsula Railway, be charged to the Revenue account.
Revenue.
 - (g.) Provided, as regards definitions *e* and *f*, that the total expenditure on minor works which may be charged against Revenue in any one half-year shall not exceed a sum of fifteen rupees per mile of the State Railway.
Limit of Expenditure.
 - (h) Stations include Sidings, Platforms (where necessary), Points, Sheds, Tank Houses, Wells, Water Cranes, Signals, Approaches, Roads, Buildings for Traffic purposes, Dwellings for the Traffic Station Staff, Furniture, Fittings, Lamps, and all other appliances that are required for working Traffic, &c., at Stations.
Stations.
 - (i) Locomotive Premises include Running Sheds, Repairing Shops, and all other appliances necessary for maintaining and keeping Rolling Stock in working order.
Locomotive Premises.
 - (k) Rolling Stock includes Engines, Travelling Cranes, Brake Vans, Water Tanks (on their own wheels), Pilot Trucks and all other Goods and Coaching vehicles which are necessary for working the Traffic of the Railway.
Rolling Stock.
 - (l) The term "State Railway" includes all Stations, Locomotive Premises, Dwellings for the Staff, Telegraph and Appliances, &c., which form part of the complete undertaking.
State Railway.
 - (m) Local Traffic and Telegraph Receipts are those which relate to Traffic and Telegrams which do not pass off the State Railway, and include the receipts for Traffic and Telegrams between Wardha and any station of the State Railway.
Local Traffic and Telegraph Receipts.
 - (n) Through Traffic and Telegraph Receipts are the share of the receipts due to the State Railway for Traffic and Telegrams which pass between stations of the State Railway, and stations of the Great Indian Peninsula and other Railways, beyond the Great Indian Peninsula Railway.
Through Traffic and Telegraph Receipts.

- (o) The Gross Receipts include the State Railway share of all Local and Through Traffic and Telegraph Receipts; all amounts received for rent which are to be collected under the rules in force, from time to time, on the Great Indian Peninsula Railway and all other sums received by the Railway Company for or on account of the State Railway.
2. (a) The State Railway as hereinbefore defined is to be taken charge of by the Railway Company to work and maintain State Railway. Railway Company from the first day of January eighteen hundred and ninety-one, and from that date it is, during the term of this Agreement, to continue to be worked and maintained by the Railway Company as part of its own undertaking in all respects, as if it actually belonged to the Railway Company, subject only to the same control of Government, through the Consulting Engineer to the Government of Bombay, as is in force upon the Great Indian Peninsula Railway itself, under their contract with Government, the intention being that the State Railway is to be considered and dealt with exactly as if it were the property of the Railway Company, except only as to the provision of funds for Capital Expenditure, which is to be made by Government as provided in clause three.
- (b) This agreement is to remain in force until it is cancelled by one year's notice which may be given by Government or the Railway Company at any time, but only so as to expire on either the thirtieth of June or the thirty-first of December in any year.
- (c) All previous Agreements between Government and the Railway Company, in regard to the Wardha Coal State Railway, are to be considered as having been cancelled after the date when the Railway Company take charge of the State Railway as provided in para. a of this clause.
3. Additional works as well as the provision of non-consumable stores for further equipment of stations on the State Railway, are to be sanctioned and paid for by Government as, and when, they are considered to be necessary by Government.
4. (a) The same Rates, Fares, Tolls, Conditions, Arrangements, &c., both for Public Traffic and for Troops, &c., are to be in force upon the State Railway as are in force, from time to time, upon the Great Indian Peninsula Railway, except in the case of coal, the charge for which is not to be reduced over the State line below the existing rate of 4½ pies per ton per mile without the sanction of Government.
- (b) The Railway Company agree to carry, over the Great Indian Peninsula Railway and over the State Railway, material, &c., required for Capital Works on State Railway. Capital Works upon the State Railway, at the same rate as is charged and under the same arrangement as is in force, from time to time, for material, &c., required for Capital Works upon their own Railway.
5. The Railway Company are to be responsible for all accidents, losses, or damages, of all kinds, upon the State Railway, to the Public, to the Traffic, to the Railway Company, to the way or works of the State Railway, and otherwise, except that, in the case of any accident or damage caused by the failure of way or works due to defective construction or extraordinary casualty, Government shall be responsible, and Government shall be responsible for the cost of repair and replacement of any way and works as well as for any accident or damage that the Company could not have prevented, which may result from any such failure.
6. The Railway Company are to provide and maintain all Rolling Stock that may be necessary for working the State Railway.
7. (a) The station, for Traffic purposes, at Wardha, including Dwellings for the Traffic Station Staff, at that place, is to be provided by the Railway Company.
- (b) All Locomotive Premises and Dwellings for the Staff of all Departments (exclusive of the Traffic Station Staff, for which see paragraph a of this clause) required at Wardha, are to be provided by, and at the cost of, the Railway Company, a payment being made to the Company by Government, proportionate to the requirements of the State Railway at that Junction, to cover interest, at the rate of five per cent. per annum, on the additional Capital outlay of the Company due to these requirements.
8. (a) The Railway Company are to maintain the State Railway in the same manner as they do their own railway, but any expenditure that would not be chargeable to Revenue under the Rules in force on

the Great Indian Peninsula Railway, or that may arise from extraordinary casualty as provided for in clause five, is to be borne by Government.

(b) The width for banks and cuttings at formation level which has been adopted on the State Railway is twenty feet, and the width of Ballast is ten feet with a depth of twenty inches. The Railway Company are not to be required to do more than maintain these respective standards.

9. The gross receipts of the State Railway, as hereinbefore defined are to be collected and treated as receipts of the Railway Company. But the balance, after deducting the payment to the Railway Company as defined in clause ten of this Agreement, is to be paid over to Government as soon after the end of each half-year as the accounts have been made up, and have been finally passed by Government.

10. The Railway Company is to be paid, for working and maintenance of the State Railway, the same percentage of gross receipts of the State Railway as the Railway Company expend on working and maintenance of the whole of the undertaking, including branches, which the Railway Company work and maintain from time to time, with the addition of a payment, for the use of the Railway Company's Rolling Stock, of a sum of five per cent. upon the gross receipts of the State Railway for each half-year.

11. All questions in dispute which may arise under this Agreement are to be settled by arbitration, in some way to be agreed between the Railway Company and Government, but failing such Agreement, either Government or the Railway Company may, within not less than three months, or more than six months, after notice given by either party to the other, appoint an arbitrator, whose decision shall be final.

12. This Agreement is to be subject to the sanction of the Government of India, and of the Board of Directors of the Railway Company.

[NOTE - The sanction of the Government of India to this Agreement was accorded in their letter No. 471 R. T., dated the 15th June 1891; and of the Board of Directors of the Railway Company in their letter No. 3, dated the 16th January 1891.]

APPENDIX J.

Memorandum of Agreement, made the sixth day of May eighteen hundred and ninety, between the SECRETARY OF STATE FOR INDIA IN COUNCIL, and the GREAT INDIAN PENINSULA RAILWAY COMPANY, for the working and maintenance of the Khámgaon State Railway (hereinafter called the State Railway) by the Great Indian Peninsula Railway Company (hereinafter called the Railway Company).

1. Throughout this Agreement, unless otherwise stated or unless there is something repugnant in the context, the following terms are to have the meanings set opposite to each of them respectively, namely:—
- Interpretation Clause.**
- Traffic.** (a) Traffic includes everything that is carried over the State Railway.
- (b) Coaching Traffic includes Passengers, Horses, Carriages, Dogs, Parcels, Luggage, and all that is booked at what are commonly known as Coaching Rates.
- Coaching Traffic.**
- (c) Goods Traffic includes Coal, Material, and Merchandize of all kinds, also Cattle, Sheep, &c., and all that is booked at what are commonly known as Goods Rates.
- Goods Traffic.**
- (d) Telegraph includes Posts, Wires, Batteries, Instruments (of the patterns in use, from time to time, on the Great Indian Peninsula Railway), and all that is necessary for working the Telegraph.
- Telegraph.**
- (e) Capital Expenditure includes all expenditure of all kinds which amounts to more than one thousand rupees which would, under the rules in force, from time to time, on the Great Indian Peninsula Railway, be charged to the Capital account.
- Capital.**
- (f) Revenue Expenditure includes all expenditure of all kinds of not more than one thousand rupees which would, under the rules in force from time to time, on the Great Indian Peninsula Railway, be charged to the Revenue account.
- Revenue.**
- (g) Provided, as regards definitions (e) and (f), that the total expenditure on minor works, which may be charged against Revenue in any one half-year, shall not exceed a sum of fifteen rupees per mile of the State Railway.
- Limit of Expenditure.**
- (h) Stations include Sidings, Platforms (where necessary), Points, Sheds, Tank Houses, Wells, Water Cranes, Signals, Approaches, Roads, Buildings for Traffic purposes, Dwellings for the Traffic Station Staff, Furniture, Fittings, Lamps, and all other appliances that are required for working Traffic, &c., at stations.
- Stations.**
- (i) Locomotive Premises include Running Sheds, Repairing Shops, and all other appliances necessary for maintaining and keeping Rolling Stock in working order.
- Locomotive Premises.**
- (j) Rolling Stock includes Engines, Travelling Cranes, Brake Vans, Water Tanks (on their own wheels), Pilot Trucks, and all other Goods and Coaching vehicles which are necessary for working the Traffic of the Railway.
- Rolling Stock.**
- (l) The term "State Railway" includes all Stations, Locomotive Premises, Dwellings for the Staff, Telegraph and Appliances, &c., which form part of the complete undertaking.
- State Railway.**
- (m) Local Traffic and Telegraph Receipts, are those which relate to Traffic and Telegrams which do not pass off the State Railway, and include the receipts for Traffic and Telegrams between Jalamb and Khámgaon.
- Local Traffic and Telegraph Receipts.**
- (n) Through Traffic and Telegraph Receipts are the share of the receipts due to the State Railway for Traffic Telegrams which pass between stations of the State Railway, and stations of the Great Indian Peninsula and other Railways beyond the Great Indian Peninsula Railway.
- Through Traffic and Telegraph Receipts.**

- (a) The Gross Receipts include the State Railway share of all Local and Through Traffic and Telegraph Receipts; all amounts received from time to time on the Great Indian Peninsula Railway), and all other sums received by the Railway Company for or on account of the State Railway.
2. (a) The Khámgaon State Railway is now in charge of the Railway Company and from the first day of January eighteen hundred and ninety, it is, during the term of this Agreement, to continue to be worked and maintained by the Railway Company under this Agreement, a part of his own undertaking in all respects as if it actually belonged to the Railway Company, subject only to the same control of Government, through the Consulting Engineer to the Government of Bombay, as is in force upon the Great Indian Peninsula Railway itself, under their contract with Government, the intention being that the State Railway is to be considered and dealt with exactly as if it were the property of the Railway Company, except only as to the provision of funds for Capital Expenditure, which has to be made by Government, as provided in clause three.
- (b) This Agreement is to remain in force until the time when Government have again the option of purchasing the G. I. P. Railway.
- (c) All previous Agreements between Government and the Railway Company, in regard to the Khámgaon State Railway, are to be considered as having been cancelled after the date of this Agreement as provided in para. (a) of this clause.
3. Additional works on the State Railway, as well as the provision of non-consumable Stores for the equipment of the State line and the station at Khámgaon are to be sanctioned and paid for by Government, as, and when, they are considered to be necessary by Government.
4. (a) The same Rates, Fares, Tolls, Conditions, Arrangements, &c., both for Public Traffic and for troops, &c., are to be in force upon the State Railway as are in force, from time to time, upon the Great Indian Peninsula Railway.
- (b) The Railway Company agree to carry over the Great Indian Peninsula Railway and over the State Railway, material, &c., required for Capital Works upon the State Railway, at the same rate as is charged and under the same arrangement as is in force, from time to time, for material, &c., required for Capital Works upon their own Railway.
5. The Railway Company are to be responsible for all accidents, losses, or damages, of all kinds, upon the State Railway, to the Public, to the Traffic, to the Railway Company, to the way or works of the State Railway, and otherwise, except that, in the case of any accident or damage caused by the failure of way or works due to defective construction or extraordinary casualty, Government shall be responsible, and Government shall be responsible for the cost of repair and replacement of any way and works and stock, as well as for any accident or damage of any kind that the Company could not have prevented, which may result from any such failure.
6. The Railway Company are to provide and maintain all Rolling Stock that may be necessary for working the State Railway.
7. (a) The Station, for Traffic purposes, at Jalamb, including dwellings for the Traffic Station Staff at that place, is to be provided by the Railway Company.
- (b) All Locomotive Premises and Dwellings for the Staff of all Departments (exclusive of the Traffic Station Staff, for which see paragraph (a) of this clause) required at Jalamb are to be provided by, and at the cost of, the Railway Company, a payment being made to the Company by Government proportionate to the requirements of the State Railway at that Junction, to cover interest, at the rate of five per cent. per annum, on the additional Capital outlay of the Company due to these requirements.
8. (a) The Railway Company are to maintain the State Railway in the same manner as they do their own Railway, but any expenditure that would not be chargeable to Revenue under the Rules in force on the Great Indian Peninsula Railway, or that may arise from extraordinary casualty as provided for in clause five, is to be borne by Government.

(b) The width for banks and cuttings at formation level, which has been adopted on the State Railway, is sixteen feet, and the width of Ballast is nine feet six inches, with a depth of ten inches. The Railway Company are not to be required to do more than maintain these respective standards.

9. The gross receipts of the State Railway, as hereinbefore defined, are to be collected and treated as receipts of the Railway Company. But the balance, after deducting the payment to the Railway Company, as defined in clause ten of this Agreement, is to be paid over to Government as soon after the end of each half-year as the accounts have been made up and have been finally passed by Government.

10. The Railway Company is to be paid, for working and maintenance of the State Railway, the same percentage of gross receipts of the State Railway as the Railway Company expend on working and maintenance of the whole of the undertaking, including branches which the Railway Company work and maintain, from time to time, with the addition of a payment for the use of the Railway Company's Rolling Stock, of a sum of five per cent. upon the gross receipts of the State Railway for each half-year.

11. All questions in dispute which may arise under this Agreement are to be settled by arbitration, in some way to be agreed between the Railway Company and Government, but failing such Agreement, either Government or the Railway Company may, within not less than three months, or more than six months, after notice given by either party to the other, appoint an Arbitrator, whose decision shall be final.

12. This agreement is to be subject to the sanction of the Government of India, and of the Board of Directors of the Railway Company.

[Note.—The sanction of the Government of India to this Agreement was accorded by their No. 329 B. T., dated 1st July 1890, and the sanction of the Board by their No. 19 of the 26th September 1890.]

APPENDIX K.

Memorandum of Agreement, made the sixth day of May eighteen hundred and ninety, between the SECRETARY OF STATE FOR INDIA in Council, and the GREAT INDIAN PENINSULA RAILWAY COMPANY, for the working and maintenance of the Amráoti State Railway (hereinafter called the State Railway) by the Great Indian Peninsula Railway Company (hereinafter called the Railway Company).

1. Throughout this Agreement, unless otherwise stated, or unless there is something repugnant in the context, the following terms are to have the meaning set opposite to each of them respectively, namely:—
- Interpretation Clause.**
- Traffic.** (a) Traffic includes everything that is carried over the State Railway.
- (b) **Coaching Traffic** includes Passengers, Horses, Carriages, Dogs, Parcels, Luggage, and all that is booked at what are commonly known as Coaching Rates.
- (c) **Goods Traffic** includes Coal, Material, and Merchandize of all kinds, also Cattle, Sheep, &c., and all that is booked at what are commonly known as Goods Rates.
- (d) **Telegraph** includes Posts, Wires, Batteries, Instruments (of the patterns in use, from time to time on the Great Indian Peninsula Railway), and all that is necessary for working the Telegraph.
- (e) **Capital Expenditure** includes all expenditure of all kinds which amounts to more than one thousand rupees which would, under the rules in force, from time to time, on the Great Indian Peninsula Railway, be charged to the Capital account.
- (f) **Revenue Expenditure** includes all expenditure of all kinds of not more than one thousand rupees which would, under the rules in force, from time to time, on the Great Indian Peninsula Railway, be charged to the Revenue account.
- (g) **Limit of Expenditure.** Provided, as regards definitions (e) and (f), that the total expenditure on minor works, which may be charged against Revenue in any one half-year, shall not exceed a sum of fifteen rupees per mile of the State Railway.
- (h) **Stations** include Sidings, Platforms (where necessary), Points, Sheds, Tank Houses, Wells, Water Cranes, Signals, Approaches, Roads, Buildings for Traffic purposes, Dwellings for the Traffic Station Staff, Furniture, Fittings, Lamps, and all other appliances that are required for working Traffic, &c., at stations.
- (i) **Locomotive Premises** include Running Sheds, Repairing Shops, and all other appliances necessary for maintaining and keeping Rolling Stock in working order.
- (k) **Rolling Stock** includes Engines, Travelling Cranes, Brake Vans, Water Tanks (on their own wheels), Pilot Trucks, and all other Goods and Coaching vehicles which are necessary for working the Traffic of the Railway.
- (l) **State Railway.** The term "State Railway" includes all Stations, Locomotive Premises, Dwellings for the Staff, Telegraph and Appliances, &c., which form part of the complete undertaking.
- (m) **Local Traffic and Telegraph Receipts.** Local Traffic and Telegraph Receipts are those which relate to Traffic and Telegrams which do not pass off the State Railway, and include the receipts for Traffic and Telegrams between Radnera and Amráoti.
- (n) **Through Traffic and Telegraph Receipts.** Through Traffic and Telegraph Receipts are the share of the receipts due to the State Railway for Traffic and Telegrams which pass between stations of the State Railway, and stations of the Great Indian Peninsula and other Railways beyond the Great Indian Peninsula Railway.

- (a) The Gross Receipts include the State Railway share of all Local and Through Traffic and Telegraph receipts; all amounts received for rent (which are to be collected under the rules in force, from time to time, on the Great Indian Peninsula Railway), and all other sums received by the Railway Company for or on account of the State Railway.
2. (a) The Amráoti State Railway is now in charge of the Railway Company, and from the first day of January eighteen hundred and ninety, it is, during the term of this Agreement, to continue to be worked and maintained by the Railway Company under this Agreement, as part of its own undertaking in all respects, as if it actually belonged to the Railway Company, subject only to the same control of Government, through the Consulting Engineer to the Government of Bombay, as is in force, upon the Great Indian Peninsula Railway itself, under their contract with Government, the intention being that the State Railway is to be considered and dealt with exactly as if it were the property of the Railway Company, except only as to the provision of funds for Capital Expenditure, which has been and is to be made by Government, as provided in clause three.
- (b) This Agreement is to remain in force until the time when Government have again the option of purchasing the Great Indian Peninsula Railway.
- (c) All previous Agreements between Government and the Railway Company in regard to the Amráoti State Railway are to be considered as having been cancelled after the date of this Agreement as provided in para. (a) of this clause.
3. Additional works on the State Railway, as well as the provision of non-consumable Stores for the equipment of the line and the station at Amráoti, are to be sanctioned and paid for by Government as, and when, they are considered to be necessary by Government.
4. (a) The same Rates, Fares, Tolls, Conditions, Arrangements, &c., both for Public Traffic and for Troops, &c., are to be in force upon the State Railway, as are in force, from time to time, upon the Great Indian Peninsula Railway. But the extra tolls, heretofore levied over the Amráoti Line, as per margin,* to be retained.
- (b) The Railway Company agree to carry, over the Great Indian Peninsula Railway and over the State Railway, material, &c., required for Capital Works upon the State Railway, and the same rate as is charged, and under the same arrangement as is in force, from time to time, for material, &c., required for Capital Works upon their own Railway.
5. The Railway Company are to be responsible for all accidents, losses, or damages of all kinds, upon the State Railway, to the public, to the Traffic, to the Railway Company, to the way or works of the State Railway, and otherwise, except that, in the case of any accident or damage caused by the failure of way or works due to defective construction or extraordinary casualty, Government shall be responsible, and Government shall be responsible for the cost of repair and replacement of any way and works and stock, as well as for any accident or damage of any kind that the Company could not have prevented which may result from any such failure.
6. The Railway Company are to provide and maintain all Rolling Stock that may be necessary for working the State Railway.
7. (a) The station, for Traffic purposes at Badnera, including Dwellings for the Traffic Station Staff at that place, is to be provided by the Railway Company.
- (b) All Locomotive Premises and Dwellings for the Staff of all Departments (exclusive of the Traffic Station Staff, for which see paragraph (a) of this clause) required at Badnera are to be provided by, and at the cost of, the Railway Company, a payment being made to the Company by Government, proportionate to the requirements of the State Railway at that Junction to cover interest, at the rate of five per cent. per annum, on the additional Capital outlay of the Company due to these requirements.
8. (a) The Railway Company are to maintain the State Railway in the same manner as they do their own Railway, but any expenditure that would not be chargeable to Revenue under the Rules in

force on the Great Indian Peninsula Railway, or that may arise from extraordinary casualty as provided for in clause five, is to be borne by Government.

(b) The width for banks and cuttings at formation level, which has been adopted on the State Railway, is sixteen feet, and the width of Ballast is nine feet six inches with a depth of eighteen inches. The Railway Company are not to be required to do more than maintain these respective standards.

9. The gross receipts of the State Railway, as hereinbefore defined, are to be collected and treated as receipts of the Railway Company. But the Earnings. balance, after deducting the payment to the Railway Company, as defined in clause ten of this agreement, is to be paid over to Government as soon after the end of each half-year as the accounts have been made up and have been finally passed by Government.

10. The Railway Company is to be paid for working and maintenance of the State Railway the same percentage of gross receipts of the State Railway, as the Railway Company expend on working and maintenance of the whole of the undertaking, including branches which the Railway Company work and maintain, from time to time, with the addition of a payment, for the use of the Railway Company's Rolling Stock, of a sum of five per cent. upon the gross receipts of the State Railway for each half-year.

11. All questions in dispute which may arise under this Agreement are to be settled by arbitration, in some way to be agreed between the Arbitration in case of dispute. Railway Company and Government, but failing such Agreement, either Government or the Railway Company may, within not less than three months, or more than six months, after notice given by either party to the other, appoint an Arbitrator, whose decision shall be final.

12. This agreement is to be subject to the sanction of the Government of India, and Sanction to Agreement. of the Board of Directors of the Railway Company.

[NOTE.—The sanction of the Government of India to this Agreement was accorded by their No. 329 R. F., dated 1st July 1890, and the sanction of the Board by their No. 15 of the 26th September 1890.]

APPENDIX L.

This Indenture, made the 18th day of July 1890, BETWEEN THE SECRETARY OF STATE IN COUNCIL OF INDIA of the one part, and the BENGAL AND NORTH-WESTERN RAILWAY COMPANY, LIMITED, a Joint Stock Company with limited liability, having its registered office in London, of the other part.

WITNESSETH and it is hereby agreed and declared as follows :—

Interpretation of Terms.

1. In this Contract—

- (1) The expression "the Secretary of State" means the Secretary of State in Council of India.
- (2) The expression "the Company" means the Bengal and North-Western Railway Company, Limited.
- (3) The expression "the original Contract" means the Indenture dated the 12th day of December 1882, and made between the Secretary of State of the one part and the Company of the other part, as supplemented by an Indenture dated the 22nd day of February 1886, and made between the same parties.
- (4) The expression "the Company's railway" means the railways situated in the tract of country between the rivers Gunduk and Gogra and the ferries in connection with the said railways worked by the Company on the 30th day of June 1890, with any improvements, alterations, and additions of whatever description that may from time to time be made by the Company in or to the said railways or ferries, either in accordance with the provisions of the original Contract, including the Bahram Ghat and Revelganj branches recently sanctioned by the Secretary of State, or by or with the subsequent sanction of the Secretary of State, but not so as to include any railways or works comprised in "the undertaking" as hereinafter defined: Provided always, that if the Secretary of State shall not concur with the Company in the inclusion in the expression "the Company's railway" for the purposes of this Contract of any extension or branch thereof of which he may hereafter sanction the construction by the Company, the same shall be worked by the Company as part thereof but subject to the special terms (if any) which may be agreed upon between the Secretary of State and the Company or otherwise determined pursuant to these presents for its being worked by the Company.
- (5) The expression "the Tirhoot Railway" means the lines of State railway, including any ferries in connection therewith, worked by the Secretary of State on the 30th day of June 1890, situated north of the River Ganges, and between the Rivers Kosi and Gunduk, including the bridge over the Gunduk and the extension of the State railway on the right bank thereof connecting the bridge with the Company's railway at the eastern boundary of the Sonapore Station.
- (6) The expression "the undertaking" means the Tirhoot Railway with any improvements, alterations, and additions of whatever description including ferries that may from time to time be made in or to the said railway by or with the sanction of the Secretary of State, but with the exception of the telegraphs and telegraphic appliances used or to be used thereon. The Sitamarhi branch and any extension or branch of the said railway in process of construction or sanctioned by the Secretary of State at the date of this Contract or any part thereof shall be accepted by the Company and included in the undertaking on being declared in a fit state for opening for public traffic: Provided always, that if the Company shall not concur with the Secretary of State in making any other extension or branch thereof under the provision in that behalf hereinafter contained

then the inclusion of each such extension or branch in the expression "the undertaking" shall be subject to the special terms (if any) which may be agreed upon between the Secretary of State and the Company or otherwise determined pursuant to these presents as to its working.

- (7) The expression "the open system" means and includes such portion of the undertaking and of the Company's railway as may for the time being have been opened for public traffic.
- (8) The expression "the gross earnings of the Company's railway" means and includes all receipts from coaching and merchandise traffic over the Company's railway exclusively, from the use of the telegraphs and the carriage of mails thereon, and all sums (except interest on the Company's capital balances) received in respect thereof as rents, tolls on bridges, and from all other sources, including ferries in connection therewith, the receipts from which are treated as revenue on Indian railways generally. It does not include the sums received by the Company from the Secretary of State in terms of sub-section 3 of section 46 hereof.
- (9) The expression "the gross earnings of the undertaking" means and includes all receipts from coaching and merchandise traffic over such portion of the undertaking as is for the time being opened for public traffic from the use of the telegraphs and the carriage of mails thereon, and all other sums received in respect thereof as rents, tolls on bridges, and from other sources, including ferries in connection therewith, the receipts from which are treated as revenue on Indian railways generally.
- (10) The expression "working expenses," when not qualified or limited, means and includes the expenses of maintaining and working the open system, including roadways and ferries in connection therewith, of which expenses one account only is to be kept.

Duration of Contract.

2. This Contract shall continue in force for a period of time, commencing upon the 1st day of July 1890, and terminating on the 31st day of December 1904, subject to the provisions hereinafter contained for determining the same.

As to the railways to be transferred to the Company and matters connected therewith.

3. On the 1st day of July 1890, the Secretary of State shall hand over to the Company for the purposes of this Contract the Tirhoot Railway, together with all works connected therewith then made or in progress, and the rolling-stock, plant, and machinery then used thereon, or appropriated or in course of construction therefor, together with copies of all plans, specifications, and working drawings of the works, rolling-stock, and other equipments, but with the exception of the telegraphs and all telegraphic appliances belonging to the said railway, which shall remain vested in the Secretary of State. And thereafter the Secretary of State shall, in like manner, hand over to the Company any extension or branch, the construction of which shall have been decided upon by him at the date of this Contract or any part thereof, as and when declared to be fit for opening for public traffic. As from such date or dates of transfer the Company shall manage, maintain, and work the said railways.

4. As soon as may be after the said 1st day of July 1890 an inventory No. 1 of the Tirhoot Railway, plant, and machinery, and of the plans, specifications, and working drawings, and an inventory No. 2 of the rolling-stock, of the Tirhoot Railway to be so handed over as aforesaid as on the said 1st day of July 1890, shall be made and signed by or on behalf of the Secretary of State and the Company, and the value of the same (including the land occupied or used by or for the purposes of the railway) at cost price, including in each case exchange on all payments made in England in part of the said cost as shown in the accounts of the said railway, shall be entered as to inventory No. 1 in Part I, and as to inventory No. 2 in Part II of the Capital Account of the undertaking as hereinafter provided. A third inventory No. 3 of the rolling-stock for working the Company's railway provided by and at the expense of the Company shall be similarly made and signed, and the value of the same at cost-price as shown in the books of the Company shall be entered in Part II, of the Capital Account of the undertaking as hereinafter provided.

5. On the said 1st day of July 1890, or as soon after as may be the Secretary of State shall deliver to the Company and the Company shall accept for the purposes of this Con-

tract all serviceable stores belonging to the Tirhoot Railway that may be in hand or in the course of delivery on the said 1st day of July 1890, except such, if any, as belong to the telegraphs or telegraphic appliances or to the extensions or branches referred to in section 3. An inventory No. 4 of the same shall be made with all reasonable expedition and signed by or on behalf of the Secretary of State and the Company, with the value at cost price including exchange on all payments made in England in part of the said cost as shown in the accounts of the said railway. And on the said date, or as soon after as may be, the Company shall deliver to the Secretary of State an inventory No. 5 of all serviceable stores appertaining to the Company's railway at that date, with their value at cost-price as shown in the books of the Company. The stores included in inventories Nos. 4 and 5 shall be entered in the Joint Stores Accounts as hereinafter provided, to which also shall be carried on the transfer to the open system of any extension or branch duly sanctioned by the Secretary of State either of the undertaking or of the Company's railway the value of the serviceable stores appertaining to any such extension or branch.

As to Land.

6. The Secretary of State shall from time to time at the reasonable request of the Company provide any additional land which he shall consider requisite for additions to or alterations and improvements in the undertaking made with his sanction from time to time, and shall allow the Company to have possession during the continuance of this Contract of the land so provided. The Company shall from time to time, with the sanction of the Secretary of State, as soon as practicable, go out of possession of and relinquish to the Secretary of State such of the land of which the Company shall have been allowed possession under this Contract for the purposes of the undertaking as shall have from time to time become unnecessary to be retained possession of by the Company for any of the purposes of this Contract. And as often as in the opinion of the Secretary of State it shall appear to be unnecessary that the Company shall retain possession of any particular land of which the Company shall have been allowed possession under this section the Secretary of State shall certify such his opinion to the Company. Upon receipt of such certificate, or so soon thereafter as may be, the Company shall state in writing whether it acquiesces in the opinion of the Secretary of State or whether it objects thereto, and, if so, the grounds of its objection. If no objection is stated by the Company, or if the grounds of its objection (if any) are not in the opinion of the Secretary of State sufficient, the Company shall, upon the requisition of the Secretary of State, forthwith relinquish to him the land in question, and the Secretary of State shall be exclusively entitled to possession thereof.

As to Telegraphs.

7. The Secretary of State may from time to time construct and provide such new or additional telegraphs and telegraphic appliances as he shall think fit along or upon the railways for the time being comprised in the undertaking or any part or parts thereof, or any land or works belonging thereto, and may maintain and work the existing telegraphs and telegraphic appliances and all or any of such new or additional telegraphs and telegraphic appliances as he shall think fit, and it shall be lawful for him from time to time to erect, maintain, make, do, and execute on any part of the said railways, land, or works all such buildings, machinery, works, acts, and things as he shall consider necessary or proper in relation to the maintenance, construction, use, and working of the said existing and new or additional telegraphs and telegraphic appliances, but so that due regard be had to the convenience of the working of the undertaking in respect of the time and place of such erections, maintenance, making, and execution. The Company shall at all times furnish the Secretary of State with such free passes over all or any part of the railways comprised in the undertaking and over all or any part of the Company's railway as he may require for persons employed by him in or about or in connection with the maintenance, construction, working, or inspection of the said telegraphs and telegraphic appliances or any buildings or works appertaining thereto.

8. The Secretary of State shall from time to time allow the Company to have the exclusive use of such of the said telegraphs and telegraphic appliances as he shall from time to time consider proper to be used by the Company for the purpose of safely or efficiently working the railways comprised in the undertaking, and shall keep the same telegraphs and telegraphic appliances in good repair and in good working order and condition. And the Company shall upon demand pay into such Government Treasury in India as shall from time to time be appointed for the purpose by the Secretary of State

the amount which the Secretary of State shall from time to time require the Company to pay in respect of the charges made by the Government Telegraph Department for rent, maintenance, and inspection of the telegraphs and telegraphic appliances of which the Company shall for the time being be allowed to have the exclusive use. All amounts paid by the Company under this provision shall be included amongst working expenses.

9. The Company, if so directed by the Secretary of State, shall, in working any telegraphs or telegraphic appliances of which they shall for the time being be allowed to have the exclusive use under the last preceding section, observe the rules as to working telegraphs and telegraphic appliances for the time being in force in the case of State Railway Telegraphs, or such rules as the Secretary of State may from time to time prescribe for the Company's observance, and if so directed by the Secretary of State shall account in such manner as shall be prescribed by the rules for the time being in force in the case of the State Railway Telegraphs, or as the Secretary of State shall require, for the receipts derived from the working of telegraphs and telegraphic appliances.

As to Police.

10. The Secretary of State shall provide and maintain for the purposes of so much of the undertaking as shall for the time being have been opened for public traffic such a force of police as the Company with the approval of the Secretary of State shall from time to time require; and if the Secretary of State shall consider that any addition to the force is required for the preservation of law and order for the purposes of the undertaking, his determination on that point shall be final, and such addition shall be made accordingly. The cost of providing and maintaining the force of police required for the purposes aforesaid shall be defrayed in the following manner; that is to say, three-tenths shall be borne by the Secretary of State, and the remaining seven-tenths shall be included in working expenses.

11. If the Company shall so desire, the Secretary of State will provide at the sole cost of the undertaking such a force of police as with the approval of the Secretary of State the Company shall from time to time require for the protection of so much of the undertaking (if any) as shall for the time being be under construction by the Company.

As to Additions to or Alterations and Improvements in the Undertaking.

12. The Secretary of State shall have power to determine the situation and dimensions of and the particulars of all additions to or alterations and improvements in the stations, station yards, offices, warehouses, houses for employes, conveniences and works to be constructed or carried out from time to time in connection with, or as part of, the undertaking.

13. The Company shall with due diligence equip the undertaking with all such additional rolling-stock, plant, and machinery as shall from time to time in the opinion of the Secretary of State be necessary for the purpose of working the undertaking, and shall make such alterations or improvements in the equipment as may in his opinion be required from time to time; and if the Secretary of State shall be of opinion that the Company shall at any time have failed duly to perform its obligations under this section he may himself from time to time complete or alter or improve the equipment of the undertaking or any part thereof in respect of all or any of the particulars specified in this section.

As to the Maintenance and Management of the Undertaking.

14. The Company shall keep the undertaking in good repair, in good working condition, and fully supplied with rolling-stock, plant, and machinery to the satisfaction of the Secretary of State. If the Company shall fail for the space of one calendar month to comply with any requirement in writing of the Secretary of State in regard to the matters aforesaid, or any of them, the Secretary of State may enter on the undertaking and execute all such works and provide all such rolling-stock, plant, and machinery as may in his opinion be required for the purposes of the undertaking.

15. The Company shall keep the rolling-stock, plant, and machinery belonging or appropriated to the use of the undertaking in good repair and in good working condition to the satisfaction of the Secretary of State.

16. The Company shall maintain a sufficient staff for the purposes of the undertaking to the satisfaction of the Secretary of State, and shall, if required so to do by the Secretary of State, continue all or any of the Government staff now engaged for the purposes of the Tirhoot Railway in their present employments, and fill up vacancies occurring from

time to time in such staff and for filling which there shall be no suitable persons or person available among those for the time being employed on the open system from the Government Service, and no such person now engaged, unless he is now liable to be discharged by the Manager of the Tirhoot Railway on his own responsibility, shall be discharged from his employment by the Company if after notice of the intention of the Company so to discharge him, the Secretary of State shall object to such discharge. The debit of any contributions on account of pensions and furlough allowances which the Secretary of State may require to be paid to him on behalf of such persons shall follow the incidence of the debit of the salaries of such persons severally.

17. The Secretary of State may from time to time, by notice in writing, require the Company to carry out any alteration or improvement in the undertaking, or any addition thereto, that may in his opinion be necessary for the safety of passengers, or for the safety of the public, or for the effectual working of the undertaking. Such notice shall specify the alteration, improvement, or addition required, and shall also in general terms describe the works to be executed for the purpose of carrying out such alteration, improvement, or addition. On receiving any such notice, the Company shall with all reasonable speed commence and proceed to execute the works described therein. The Secretary of State shall provide any land that may be required for the purposes aforesaid, and shall supply the funds necessary for the purchase of such land and for the execution of such works, and the cost of such land, and of such of the said works as shall be properly chargeable to capital, shall be charged in Part I of the Capital Account of the undertaking, and the cost of all other such works shall be charged as working expenses. If in any case the Company shall neglect to proceed with the proposed works, or fail to complete the same to the satisfaction of the Secretary of State, the Secretary of State may enter on the undertaking and execute the said works, and charge the cost of the same, as if done by the Company.

As to the Use and Working of the Undertaking and the Conveyance of Traffic.

18. The Company shall cause to be run on so much of the undertaking as shall for the time being have been opened for public traffic so many trains, at such times, and at such rates of speed between such places, and with such conveniences and accommodations as the Secretary of State shall from time to time require.

19. The Secretary of State may from time to time require the Company to carry out any alteration or improvement in the working of the undertaking which may in his opinion be necessary for the safety of passengers, or for the safety of the public, or for the safe and effectual working of the undertaking.

20. The Secretary of State shall have power from time to time, during the continuance of this Contract, to fix and vary both maximum and minimum rates (which, for goods, shall, until otherwise fixed, be as follows, *vis.*, maximum 1 pie, minimum $\frac{1}{10}$ th pie, per maund per mile) with a reasonable difference between them, for the carriage of through passengers and goods over the Company's railway, and of all passengers and goods, through and local, over the undertaking, and the fares and rates to be charged by the Company for the carriage of such passengers and goods shall not exceed the maximum and shall not be less than the minimum rates so fixed; and the Company, in respect of all passengers and goods derived from or delivered to the undertaking, or any railway in connection therewith, and which may be carried over the Company's railway or any part thereof, or any foreign railway in connection with the Company's railway, shall book through between all stations comprised in the undertaking and all stations on the Company's railway, and shall charge not more than the same mileage rates for the distance which such passengers or goods shall be carried over the Company's railway, or any part thereof, as shall be charged on the undertaking.

21. All stores required for use on the Company's railway or any part thereof, and on the undertaking or any part thereof, shall be carried at the same mileage rates over the Company's railway and over the undertaking, such rates being the same as those in force for the time being on other metre-gauge State railways.

22. All services which the Secretary of State shall require the Company to perform, on so much of the undertaking as shall for the time being have been opened for public traffic for the Post Office, the Military Department, the Police Department, or any other department of the State, or for high Government officials (including in such services the conveyance of mails as defined by the Post Office Act or Acts for the time being in force in India, the conveyance of the Post Office servants when on duty, the conveyance of troops or sailors, military and naval establishments, horses and other animals used for military purposes, guns, military stores and equipments, the conveyance of police, prisoners, and paupers, the conveyance of telegraph stores, instruments, officers, and work-

men, and of any public stores whatever, including stores for State railways) shall be performed by the Company on the same general conditions and at the same rates as may for the time being be in force on other metre-gauge State railways, subject to the provisions as to free passes contained in the 7th section of this Contract.

23. The Company shall convey over the undertaking or so much thereof as shall for the time being have been opened for public traffic, gold and silver bullion and coin, and copper coin, belonging to the Secretary of State, and the persons in charge thereof, at special rates to be from time to time approved by the Secretary of State.

24. The Company shall from time to time, upon the requisition of the Secretary of State, give the precedence to the demands of the Secretary of State over all other traffic on the undertaking or so much thereof as shall for the time being have been opened for public traffic.

25. No undue or unreasonable preference or advantage to or in favour of any particular person or Company, or any particular description of traffic in any respect whatsoever, shall be made or given by the Company, nor shall any particular person or Company be subjected by the Company to any undue or unreasonable prejudice or disadvantage in any respect whatsoever. The Secretary of State shall have absolute power for the purposes of this section to decide whether any preference, advantage, prejudice, or disadvantage is undue or unreasonable.

As to Receipts, Payments, and Expenditure.

26. All moneys whatsoever which shall during the continuance of this Contract be received by or on behalf of the Company in respect of the undertaking or pursuant to this Contract, either in England or India, or elsewhere (including all moneys received from the use and working of the telegraphs and telegraphic appliances, of which the Company shall for the time being be allowed to have the exclusive use, but excepting interest on the Company's Capital balances and any moneys which shall be paid to the Company by the Secretary of State pursuant to section 46 of this Contract), and the gross earnings of the Company's railway shall at such times and in such manner as the Secretary of State may from time to time direct, and without deduction, be paid as to moneys received in England into the Bank of England to the credit of the Secretary of State, and as to moneys received in India or elsewhere into some Government Treasury in India to be from time to time approved for the purpose by the Secretary of State.

27. Of the moneys mentioned in the last preceding section, and not the subject of the exception therein contained, such as shall arise from the sale of any property forming part of the undertaking sold for any purpose other than that of purchasing property of the same or similar character in the place thereof shall be treated as received on account of capital; the residue shall be treated as received on account of revenue; Provided always that no sale of any property forming part of the undertaking for any purpose other than that of purchasing property of the same or similar character in the place thereof, shall be made without the sanction of the Secretary of State.

28. All moneys which the Company shall with the sanction of the Secretary of State from time to time require for the purposes of this Contract shall be supplied to the Company 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.

29. No moneys shall be expended by the Company, whether on or in connection with the Company's railway or the undertaking, or either on account of capital or revenue account, without the previous sanction of the Secretary of State, and all moneys expended by the Company on account of the undertaking or in pursuance of this Contract shall from time to time be stated and submitted to the Secretary of State for his sanction, and as between the Company and the Secretary of State shall be allowed only so far as the same shall from time to time have been sanctioned by the Secretary of State.

As to Additional Capital.

30. Any additional capital which the Secretary of State and the Company may from time to time agree is required for the purposes of this Contract may be raised by the Company, or may be advanced to the Company by the Secretary of State at his option upon terms to be agreed upon between the Secretary of State and the Company.

As to Accounts and Audit.

31. The Company shall keep all such accounts relating to the undertaking and all such accounts as between the Company and the Secretary of State as the Secretary of

State shall from time to time require, and shall keep the accounts relating to the undertaking separate and distinct from the accounts relating to the Company's railway except the accounts of working expenses. Such accounts as are required to be kept by this section shall be kept in such form, and under such heads or divisions, and for such sections of the undertaking, and for such periods, and with such details, and shall be submitted to the Secretary of State at such times as he shall from time to time prescribe. The said accounts, so far as the same are kept in India, shall be kept in rupees of the Government of India, and so far as they are kept in England shall be kept in sterling money. Such of the said accounts as are kept in England shall from time to time be transmitted by the Secretary of State to the Government in India and incorporated in the accounts of the Company in India, each account transmitted being for the purpose of such incorporation converted into rupees at the average rate of exchange obtained by the Secretary of State for bills payable on demand drawn by him on India during the half-year immediately preceding that in which the incorporation is to be effected, or if the Secretary of State shall not have drawn bills on India for so much as three months out of the half-year immediately preceding, then at the average rate obtained during the half-year immediately preceding that in which the incorporation is to be effected for the best commercial bills, payable on demand, drawn in London on India, such average rate to be decided by the Comptroller General at Calcutta.

32. Unless and until otherwise directed the Company shall keep for the purposes of this Contract the following accounts:—

A Capital Advance Account relating to the undertaking and, in respect of its maintenance, working, and equipment with rolling-stock and stores, to the Company's railway;

A Capital Account relating to the undertaking and, in respect of rolling-stock only, to the Company's railway;

A Revenue Account } relating to the undertaking and to the Company's rail-
A Joint Stores Account } way;

all which accounts shall be kept separate and distinct from the "accounts" which the Company shall be required under the original Contract to keep for the Company's railway.

33. All moneys advanced by the Secretary of State to the Company or received by the Company in respect of rolling-stock and stores shall be entered in the Capital Advance Account, and shall from time to time, as expended with the sanction of the Secretary of State, be transferred therefrom to the Capital Account, the Revenue Account, or the Joint Stores Account, as the case may require. The balance of the Capital Advance Account shall be made up and submitted to the Secretary of State from time to time as he shall require.

34. The Capital Account shall be in two parts.

In Part I shall be entered to Debit—

- (1) The value at cost price as shown in the Government accounts of the railways, plant, machinery, and land, or any part thereof, to be handed over to the Company pursuant to the 3rd and 4th sections of these presents, as and from the date or dates of such transfer.
- (2) The value, as certified by the Secretary of State, of all land provided by him under this Contract after the said 1st day of July 1890 for the purposes of the undertaking.
- (3) All moneys which shall be actually expended by the Company, with the sanction of the Secretary of State, out of the funds provided by him or by the Secretary of State upon works, plant, or machinery for the purposes of the undertaking, the cost of which is chargeable to capital.
- (4) The cost of providing and maintaining a police force in relation to any such part or parts of the undertaking as for the time being shall be under construction by the Company or shall not have been opened for public traffic.
- (5) The charges of the Government Telegraph Department for rent, maintenance, and inspection of such electric telegraphs and telegraphic appliances (if any) as the Secretary of State may allow the Company to use in relation to the construction of the undertaking or any part thereof, or in relation to any part of the undertaking which shall not for the time being have been opened for public traffic.
- (6) So much as ought, pursuant to this Contract, from time to time to be charged to account of capital in respect of the half-yearly amount to be charged by the Secretary of State under the provisions hereinafter contained for his supervision, audit, and control of the affairs of the Company.

- (7) Any amount which the Secretary of State may from time to time require to be charged to account of capital in respect of the cost to him of any of his legal expenses incurred in relation to this Contract or to any matters arising out of this Contract.
- (8) The cost to the Secretary of State, as certified by him, of works, acts, and things which shall be executed or done by him under any of the provisions of this Contract, provided that the cost thereof if executed or done by the Company would have been expenditure chargeable to account of capital.
- (9) All such other sums (if any) as ought, under the provisions of this Contract, to be entered to debit in the Capital Account.

And to Credit—

- (10) All such of the moneys to be received by or on behalf of the Company as are herein provided to be treated as received on account of capital.
- (11) The value (to be determined by the Secretary of State) of any land of which the Company shall have been allowed to take possession for the purposes of this Contract and which shall have been subsequently relinquished to the Secretary of State under the provisions of this Contract.

In Part II (which shall be a joint rolling-stock account) shall be entered—

The value at cost price, as shown in the books of the Company and of the Secretary of State, of the rolling-stock provided at the date of this Contract for working the Company's railway and the Tirhoot Railway, and also the amount of all sums expended in providing, after the date of this Contract coming into force, with the sanction of the Secretary of State, additional rolling-stock, and any credits or other debits properly arising in connection with such rolling-stock or additional rolling-stock as aforesaid.

35. The Capital Account shall from time to time, as the Secretary of State shall require, be made up as to both its parts, and the balances thereon ascertained and stated therein. The Secretary of State may from time to time audit the said Capital Account and correct errors therein, as he shall see fit.

36. The Revenue Account shall contain an account of all such of the moneys to be received by or on behalf of the undertaking and of the Company's railway as are herein provided to be treated as received on account of revenue, and of all expenditure connected with the open system as specified in section 45, which ought conformably with this Contract or with the original Contract to be treated as made on account of revenue. The Revenue Account shall be made up half-yearly to 30th of June and the 31st of December in each year, or to such other days as the Secretary of State shall from time to time prescribe, and shall be regularly submitted by the Company to the Secretary of State, who may audit the same either concurrently with or after expenditure, or in both ways, as he may think fit, and may in case of any error being discovered therein correct the same within three calendar months after the account containing such error shall have been submitted to him. Every revenue account shall be considered as settled at the expiration of three calendar months after the same shall have been submitted to the Secretary of State, but nevertheless any error which may subsequently be discovered therein shall be corrected in the then next revenue account, or in any subsequent revenue account or accounts, as the Secretary of State may determine.

37. The Company shall with due diligence make up and deliver to the Secretary of State an account of all stores held as on the date of this Contract coming into force by the Company for the purposes of the Company's railway, and of all stores belonging to the Tirhoot Railway which shall be delivered to the Company pursuant to the 5th section of this Contract as on that day, and of the value of such stores as entered in the inventories mentioned in that section. As soon as possible after the 30th of June and the 31st of December in each year, or such other half-yearly days as the Secretary of State may from time to time prescribe for the making up of the Revenue Account, the Company shall make up and deliver to the Secretary of State an account of all stores in hand on the half-yearly day immediately preceding the making up of the account, and of all stores purchased and of all stores used by the Company for the purposes of the undertaking and of the Company's railway respectively since the 1st day of July 1890, or since the date to which the Joint Stores Account was last made up, as the case may be, showing the purposes for which such stores have been purchased or used respectively. As often as any of the stores in hand shall be used by the Company for purposes properly chargeable to capital, the value of the stores so used shall be charged to the Company or to the Capital Account, as the case may require, in accordance with the provisions in that behalf herein

contained, and the Company shall forthwith pay for the stores so charged to it from its own proper funds. The value of all such stores used for purposes properly chargeable to revenue shall be charged in the Revenue Account. If any stores for the time being in use upon or in connection with the undertaking or the Company's railway shall during the continuance of this Contract be returned into store, the value thereof (to be agreed upon by the Secretary of State and the Company) shall be debited in the Joint Stores Account.

38. The stores in hand shall from time to time be revalued at such time or times as the Secretary of State shall direct, and in such manner as shall from time to time be agreed upon by the Secretary of State and the Company, and the value of the stores in hand as entered in the Joint Stores Account shall be corrected in accordance with such revaluation, and all necessary adjustments shall be thereupon made by making entries to debit or credit of working expenses as may be proper.

39. In the accounts aforesaid all general charges which the Secretary of State may expressly permit to be debited partly against working expenses and partly against capital shall be divided between them in proportion to the outlay on each of those accounts during the period for which such charges are debitable, and the same principle shall prevail in the further apportionment between the Company's Railway and the undertaking of the capital share of such general charges if works chargeable to Capital Account have been done for both the Company's railway and the undertaking.

40. The net amounts standing at the debit of (1) Part II of the Capital Account (the joint rolling-stock account), (2) the Joint Stores Account, and (3) the Capital Advance Account, as expended in the purchase of stores or in connection with the supply of rolling-stock and not transferred to the Joint Stores Account or to Part II of the Capital Account, shall at the end of each half-yearly period as aforesaid be severally apportioned to the undertaking and the Company's railway respectively in the ratio of the gross earnings of each for such period. The net amounts (4) expended on account of capital for the purposes of the undertaking solely as shown by the Capital Advance Account and not transferred to the Capital Account shall be apportioned to the undertaking. And for the purposes of sub-section 3 of section 46 of this Contract the Secretary of State's capital in the undertaking shall be taken to be the aggregate of the amounts at debit of Part I of the Capital Account, of his shares of the items (1), (2) and (3), and of the item (4) mentioned in this section, and the Company's capital shall be taken to be the aggregate of the amounts from time to time standing at the debit of the Company's Capital Account under the original Contract (omitting rolling-stock) and the amount of the shares of the Company's railway of items (1), (2), and (3) mentioned in this section. Provided that no part of the outlay on any extension or branch sanctioned by the Secretary of State of the undertaking or Company's railway shall be included in the capital as aforesaid of the Secretary of State and of the Company respectively until any such extension or branch or part thereof to which such outlay refers shall have been declared in a fit state for opening for public traffic and transferred to the open system.

41. In case any question shall arise whether any expenditure incurred for the purposes of the undertaking is to be treated in the whole or in part as a charge incurred on Capital Account, or how the same is to be dealt with, the question shall be determined on the general principle that capital is to bear the cost of new works, of additional rolling-stock, plant, and machinery, and of substantial improvements of and additions to old works, rolling-stock, plant, and machinery, including the cost of any temporary new work, the construction of which is requisite for the construction of a work properly chargeable to capital, and that the cost of repairs, restorations, renewals, replacements, and substitutions is to be borne by revenue. Provided, nevertheless, that any item of expenditure properly chargeable to capital, in accordance with this principle, on any part of the open system shall from time to time, if not exceeding R1,000, be classed as a "Minor work" and be charged to the working expenses within a maximum amount in each half-year of R15 per open mile of railway. Provided, also, that no portion of the salaries or allowances of any of the Company's permanent supervising staff, although for the time being employed, partly or wholly, in directing or superintending work chargeable to capital, shall, except with the express sanction of the Secretary of State, be charged to capital, and that no expenses connected with the engagement from England, or with the passage from or to England, of any person in the Company's service shall be charged to capital, unless such person shall have been specially engaged to carry out work chargeable to capital and actually employed upon such work.

42. If any difference shall arise between the Secretary of State and the Company as to whether any expenditure of the Company is properly chargeable to capital or revenue, the matters in difference shall be referred to the decision of the joint auditor if the

Secretary of State and the Company shall have appointed such an officer, but in case a joint auditor shall not have been appointed, then the matters in difference shall be referred for final decision to some person to be appointed by the Company and a Government examiner of railway accounts, or some other person to be named by the Secretary of State, or in case of their being unable to agree, to a referee to be named by them. The costs of any such reference shall, unless the Secretary of State shall otherwise direct, be included in working expenses.

43. The accounts of the Company in relation to its expenditure and receipts in India, England, and elsewhere, as well in respect of the Company's railway as of the undertaking, shall from time to time be audited on behalf of the Secretary of State by such person or persons as he shall from time to time appoint, as well as on behalf of the Company, and the Company shall produce to the auditors or auditor so appointed by the Secretary of State all vouchers, books, accounts, papers, and documents of the Company necessary for the purpose of audit, and afford to them or him all facilities requisite for the performance of their or his duties. Amongst the functions of the auditors or auditor shall be included the duty of seeing that all expenditure by the Company, whether on the Company's railway or on the undertaking, shall have been duly sanctioned by the Secretary of State, and that all expenditure is charged and revenue applied in accordance with the provisions of this Contract. Any correction made in the accounts by any person or persons who shall be acting as joint auditor or joint auditors on behalf both of the Secretary of State and of the Company shall be conclusive. If, consequent on the audit of any auditor or auditors acting exclusively on behalf of the Secretary of State, the Secretary of State shall require any alterations to be made in the accounts, and the Company shall object to the alterations, the matter in difference shall be referred for final decision to two persons, one to be named by the Secretary of State, and the other to be named by the Company, and in case such two persons shall be unable to agree, then to an umpire to be named by the referees. The costs of any such reference as last aforesaid shall be included in working expenses.

As to Working Expenses and the Appropriation of Receipts.

44. Working expenses shall include all costs and expenses incurred by the Company with the sanction of the Secretary of State in or about the maintenance, management, and working of the open system, and all other sums, if any, proper to be allowed out of revenue in connection with the maintenance, management, or working of the open system or in connection with the conduct of the affairs of the Company in relation thereto, and which shall have been sanctioned by the Secretary of State.

45. In the working expenses of any half-yearly period there shall be reckoned in so far as they are attributable to such period—

- (1) Such portion of the general charges mentioned in the 39th section of this Contract as are properly chargeable to revenue.
- (2) All expenditure incurred by the Company, with the sanction of the Secretary of State, or by the Secretary of State in keeping the open system in good repair and in good working condition, and fully supplied with rolling-stock, plant, and machinery, except such part, if any, of such expenditure as may, with the sanction of the Secretary of State, be charged to capital.
- (3) All expenditure incurred by the Company, with the sanction of the Secretary of State, in keeping the rolling-stock, plant, and machinery belonging to the open system in good repair and in good working condition.
- (4) All expenditure incurred by the Company, with the sanction of the Secretary of State, or by the Secretary of State in the execution of any works chargeable to revenue.
- (5) So much of the cost of providing and maintaining a police force for the purposes of the open system as is not agreed to be borne by the Secretary of State.
- (6) The costs of any reference that may arise on the audit of any of the accounts of the open system or any part of it, and such of the costs of any reference under the 17th and 42nd sections of this Contract as the Secretary of State shall not direct to be otherwise treated, and the costs of and incidental to the preparation of the returns and statistics mentioned in the 68th section of this Contract.
- (7) Such sums as under the provisions of the 16th section of this Contract are properly chargeable to revenue.
- (8) Such sums as, according to the rules for the time being in force of the State

Railway Provident Institution and of the Company's Provident Institution, shall from time to time be payable to or for the purposes of those institutions without being dependent or contingent on the amount of the net earnings of the undertaking and of the Company's railway respectively.

- (9) The charges of the Government Telegraph Department for rent, maintenance, and inspection of the telegraphs and telegraphic appliances provided for the use of the open system.
- (10) Such a sum, not exceeding in any half-year Rs 20 per mile of railway forming part of the open system, as may be required by the Secretary of State to cover the costs and charges of and incidental to the supervision, audit, and control of the Company in respect of the open system by the Secretary of State (being the sum hereinafter provided by section 61 of this Contract).
- (11) All reasonable legal expenses, whether incurred by the Secretary of State or with his sanction by the Company, in connection with the open system, and all such other expenses as the Secretary of State and the Company agree to treat as part of the working expenses of the open system.

And in so far as they are attributable to any period or periods—

- (12) All undischarged working expenses.

46. The sums remaining in each half-year, after deducting from the combined gross earnings of the undertaking and the Company's railway working expenses and all other charges (if any) to Revenue Account properly attributable to that half-year, shall be applied in the following manner and in the following order:—

- (1) In payment to the Company in rupees of the equivalent of the interest to be paid by the Company in respect of any capital raised by the Company in pursuance of section 30 with the sanction of the Secretary of State for the purposes of this Contract.
- (2) In payment to the Secretary of State of interest at such rate as may have been agreed upon between the Secretary of State and the Company on any moneys advanced by the Secretary of State for the purposes of the undertaking pursuant to section 30 of this Contract.
- (3) And the residue (if any) shall be divided between the Secretary of State and the Company in the ratio of their respective shares of capital as specified in section 40 of this Contract, and the proportion of such residue which shall be found to belong to the Company shall as soon as ascertained be paid over to the Company in India, together with a sum which shall be 5 per centum of the proportion found to belong to the Secretary of State. The balance remaining to the Secretary of State shall be the "net earnings" of the undertaking for the purpose of any further contribution to the State Railway Provident Institution payable under the rules for the time being in force.

47. The moneys payable to the Company under section 46 shall not be deemed to be receipts of the Company as between the Secretary of State and the Company within the meaning of section 26 of this Contract.

As to Running Powers and other Facilities and Accommodation for other Railways.

48. The Secretary of State may from time to time require the Company to allow the use of the undertaking or any part thereof opened for traffic for the passage of engines and trains from or to other railways of the same gauge upon the payment of reasonable tolls and under reasonable conditions and restrictions.

49. The Secretary of State may from time to time require the Company to supply other railways with any of the rolling-stock of the undertaking which shall not for the time being be required for the purposes thereof upon reasonable terms and conditions.

50. The Secretary of State may from time to time require the Company to execute work in the workshops of the undertaking in respect of rolling-stock and machinery belonging to State railways at such reasonable prices and upon such terms as shall be agreed upon between the Secretary of State and the Company, but so nevertheless as not to impede or unduly interfere with the ordinary operations of the Company in respect of the obligations imposed on the Company by this Contract.

51. The Secretary of State may from time to time require the Company to make reasonable arrangements for the interchange of traffic and rolling-stock between the undertaking and other railways, and for through booking.

52. The Company shall comply with all regulations from time to time prescribed by the Secretary of State for clearing through traffic with railways belonging to other companies or to the State.

53. The Secretary of State may from time to time require the Company to allow the use of any of the stations forming part of the undertaking for the accommodation of the traffic of any railway belonging to any other company or to the State, upon the payment of reasonable tolls, and under reasonable conditions, and restrictions, and may also require the Company to make such alterations and additions as may in the opinion of the Secretary of State be necessary or convenient for the purposes of such accommodation, upon such terms as may be agreed upon between the Secretary of State and the Company, and may also require the Company, to allow junctions to be formed between the undertaking and railways belonging to any other company or to the State.

As to Power to levy Tolls on Bridges.

54. If on any of the bridges of the undertaking there shall have been provided roadways for foot passengers, cattle, or vehicles, or if the Company shall, with the approval of the Secretary of State, provide any such roadways, the Company shall have the right to charge, during the continuance of this Contract, tolls on the traffic over such roadways, according to tariffs to be arranged between the Secretary of State and the Company.

As to Ferries.

55. The Company may, with the approval of the Secretary of State, from time to time, during the continuance of this Contract, establish any ferry for the accommodation of the traffic of the undertaking. Every such ferry shall be equipped with boats and fixed and moveable machinery, and plant of good quality and adequate in quantity to work the same ferry. The Company may, with the approval of the Secretary of State, work for purposes other than the accommodation of the traffic of the undertaking any ferry which shall have been established by it.

56. The previous provisions of this Contract relative to the undertaking, whether as regards construction, maintenance, working equipment, maintenance of equipment, or any other matter (inclusive of the provisions as to rates and fares to be charged by the Company to the Secretary of State and the public, and of the provision for the performance by the Company of certain services for the Secretary of State free of charge, and for the precedence of the Secretary of State in respect of his demands, whether for freight or passenger accommodation) shall apply, *mutatis mutandis*, and as far as circumstances will admit, in respect of every ferry which shall be established under the last preceding section.

As to the Construction and Working of Branch and other Railways.

57. The Secretary of State may require the Company to construct any branch or extension railway of the same gauge in connection with the undertaking upon such terms and conditions as may in each case be agreed upon between the Secretary of State and the Company.

58. If the Secretary of State shall at any time or times give to the Company six months' notice in writing requiring it to work any branch or extension of the undertaking, whether constructed by the Company on behalf of the Secretary of State or by the Secretary of State or otherwise, the Company shall accept and work such branch or extension from the expiration of the said notice and during the continuance of this Contract; provided as to each such branch or extension that if the Company shall not have concurred with the Secretary of State in the expediency of its construction, the Company shall accept any such branch or extension and shall work it upon terms to be specially agreed upon between the Secretary of State and the Company; and every branch or extension so accepted and worked shall thenceforth be and form part of the undertaking, and all the provisions herein contained shall be applicable thereto, with such variations only (if any) as may be necessary to make them consistent with the terms to be specially agreed upon as last aforesaid or to be settled by arbitration as hereinafter mentioned.

59. Any branch or extension of the Company's railway which shall in accordance with the original Contract and with the sanction of the Secretary of State be constructed by or on behalf of the Company may be worked by the Company as part of the Company's railway pursuant to these presents; provided as to each such branch or extension that the Secretary of State shall have concurred in the expediency of including it in the Company's railway for the purpose of being so worked. If the Secretary of State shall

not have so concurred, the Company shall work it upon terms to be specially agreed upon between the Secretary of State and the Company; and every branch or extension so worked shall thenceforth be and form part of the Company's railways, and all the provisions herein and in the original Contract contained shall be applicable thereto, with such variations only (if any) as may be necessary to make them consistent with the terms to be specially agreed upon as last aforesaid or to be settled by arbitration as hereinafter mentioned.

The Company to comply with the requirements of the Secretary of State.

60. The Company shall with all reasonable speed comply with all such requirements as the Secretary of State shall from time to time make in accordance with this Contract.

As to the Supervision and Control of the Secretary of State.

61. In all matters relating to or affecting the undertaking, and not herein specially provided for, the Company shall be subject to the supervision, audit, and control, as well in India as in England, of the Secretary of State. The Secretary of State shall be entitled to charge half-yearly for his supervision, audit, and control of the Company such a sum as he shall think fit, not exceeding the rate of Rs 20 per mile of railway forming part of the undertaking or of the Company's railway, so far as for the time being either constructed or under construction. The half-yearly charge to be made by the Secretary of State under this section shall cover a moiety of the salary in respect of audit of such joint auditor as aforesaid (if any), and shall from time to time be apportioned between revenue and capital in such manner as that so much of the half-yearly charge as bears the same proportion to the entirety thereof as the length of the railways opened for public traffic at the time when the half-yearly charge is made bears to the whole length of railways on which the same charge is to be calculated, shall be charged to account of revenue, and that the residue thereof shall be charged to account of capital. As from the time when the whole of the railways shall have been opened for public traffic the half-yearly charge to be made by the Secretary of State under this section shall be charged to account of revenue exclusively.

62. For the purposes of inspecting the undertaking and the Company's railway, and auditing the accounts of the Company, or otherwise exercising such supervision and control as are intended to be reserved to the Secretary of State by this Contract, the Secretary of State may from time to time appoint such person or persons as he may think proper with such powers as he may consider necessary or expedient, and the Company shall afford every person so appointed all reasonable facilities for the purpose of enabling him to perform the duties entrusted to him by the Secretary of State.

63. Whenever any duly authorised inspecting officer, acting on behalf of the Secretary of State, shall report to the Government of India that in his opinion the use of the undertaking, or of any particular part thereof, will be attended with danger to passengers, the undertaking or the part thereof referred to in the report, as the case may be, shall, upon the requisition of the Government of India, be forthwith closed so far as regards the conveyance of passengers, and shall not be re-opened for that purpose unless and until such an inspecting officer as last above mentioned shall have subsequently inspected the undertaking, or, as the case may be, the part thereof for the time being closed, and have certified the undertaking, or, as the case may be, the part thereof for the time being closed, to be fit and safe for the conveyance of passengers.

64. The Secretary of State may from time to time prohibit the Company from using any engine, carriage, wagon, vehicle, machine, or appliance of any description whatsoever of which the use shall be declared by a duly authorised inspecting officer, acting on behalf of the Secretary of State, to be attended with danger to passengers or to the public, and the Secretary of State may by taking into his custody such engine, carriage, wagon, vehicle, machine, or appliance, or by such other means as he shall think fit to employ, prevent the Company from using the same.

65. The Company shall, to the satisfaction of the Secretary of State, record and keep in proper books full and particular accounts of all their transactions and proceedings, including full and true minutes of all their meetings of directors, communications with India, and correspondence in any way relating to or affecting the undertaking and the Company's railway or the business thereof, or any of the matters or things included or referred to in this Contract, so as at all times to exhibit fully and truly the state of their affairs in relation thereto; and the Secretary of State or any person or persons appointed by him in that behalf shall at all reasonable times have free access, as well in India as in England, to all the books, accounts, papers, and documents of the Company relating to the undertaking and the Company's railway, with power to call for or make copies of or extracts from the same.

66. Any notice, direction, requisition, appointment, certificate of opinion, approval or sanction to be given or signified on the part of the Secretary of State for any of the purposes of this Contract shall be sufficient and binding if in writing signed by the Secretary of State or one of his Under Secretaries, or by a Secretary of the Government of India, or by any other officer or servant duly authorised to act on behalf of the Secretary of State in respect of the matters to which the same shall relate, and the Secretary of State shall not in any case be bound in respect of the matters aforesaid unless by some writing signed in the manner before mentioned.

67. The Company shall at all times during the continuance of this Contract keep an office established at some place in India to be determined from time to time by the Secretary of State, and shall keep at the said office an authorised agent or committee of agency with whom the Secretary of State and the Government of India or other officer or officers deputed in that behalf may communicate on affairs concerning the undertaking; and all drafts drawn and receipts given by the said agent or committee of agency, or under his or their authority, on behalf of the Company concerning the undertaking and the affairs thereof shall be binding on the Company; and every notice to be given to the Company shall be sufficiently given if left at the said office or personally served on the said agent or any member of the said committee of agency.

Miscellaneous Provisions.

68. The Company shall from time to time make such returns and furnish such statistics relating to the undertaking, in such form, and under such heads and divisions, and with such details as the Secretary of State may from time to time require. The costs of preparing such returns and statistics and incidental thereto shall be included in working expenses.

69. No claim shall be made upon the Secretary of State by the Company for compensation in respect of the prejudicial effect upon the undertaking or the profits thereof of any Act of the Indian Legislature of general applicability for the time being in force; and the Company and the undertaking shall be subject to the provisions of every such Act as last aforesaid.

70. The Company shall, if required by the Secretary of State, maintain and manage the State Railway Provident Institution for the benefit of the Government servants, members thereof, employed upon the undertaking, upon such terms and under such rules and regulations as shall from time to time be approved by the Secretary of State.

As to Determination of the Contract.

71. In the event of the original Contract terminating by or under notice of determination, or for any other cause, this Contract shall *ipso facto* terminate at the same time, save and except as regards the obligations imposed by section 75.

72. This Contract shall absolutely cease and determine by efflux of time on the 31st day of December 1904, save and except as regards the obligations imposed by section 75, but without prejudice to the rights of either party against the other in respect of any covenant herein contained which may have been previously broken.

73. If there shall be any breach on the part of the Company (whether by act, or omission, or default,) of any of the stipulations or provisions of this Contract on the part of the Company to be performed or observed, and the Company shall fail to remedy effectually any such breach as aforesaid within six calendar months after notice in writing to remedy the same shall have been given to the Company in England by the Secretary of State, he may, on or at any time after the expiration of the six calendar months last aforesaid, determine this Contract, save and except as regards the obligations imposed by section 75, by giving to the Company in England notice in writing of such determination.

74. Upon the determination of this Contract under any of the three sections lastly hereinbefore contained, the Company shall give to the Secretary of State possession of the undertaking, together with the stations, station-yards, offices, warehouses, houses for employes, plant, machinery, conveniences, works, bridges (inclusive of roadways referred to in the 54th section of this Contract), then erected or being on the undertaking, or in any wise belonging to the undertaking or any part thereof, or to any ferry or ferries then established or in course of being established under this Contract, and shall also deliver to the Secretary of State all moveable machinery, boats, plants, and articles belonging or appropriated, either as regards purposes of construction or maintenance, or establishment or working, or otherwise, to the undertaking or any part thereof, including any such road-

ways as previously mentioned in this section, or to any ferry or ferries then established or in course of being established, and all plans, books, surveys, sections, printings, writings, and documents whatsoever in any wise connected with the undertaking, and all other property (if any) belonging or appertaining thereto, and also all stores and rolling-stock in hand or in course of delivery on the day of the determination of this Contract, on account of both the undertaking and the Company's railway, and shall pay to him all moneys in their possession on account of the undertaking. And after such possession shall have been given, and after all moneys which under this Contract shall have become payable to the Secretary of State shall have been duly paid, the Secretary of State shall be bound to indemnify the Company, their property and effects, against all such debts and liabilities (if any) as they may have incurred with the sanction of the Secretary of State, and which shall be then subsisting.

PROVIDED ALWAYS, that all rolling-stock and all stores in the hands of or in course of delivery to the Company on the day of the determination of this Contract shall be divided between the Secretary of State and the Company in accordance with the working requirements of the undertaking and of the Company's railway respectively, and that all such rolling-stock and stores as may be apportioned to the Company shall be taken over by the Company at the value thereof as shown in Part II of the Capital Account and in the Joint Stores Account, and thereupon if such value shall exceed the value of the rolling-stock and stores contributed by the Company, to joint account pursuant to sections 4 and 5 of this Contract, the Company shall pay to the Secretary of State the amount of such excess. But if such value shall be less than the value of the rolling-stock and stores so contributed by the Company as aforesaid, the Secretary of State shall in that case pay to the Company the amount of such deficiency.

75. Upon the determination of this Contract under any of the provisions herein contained, any moneys advanced by the Secretary of State or raised on his sole responsibility for the purposes of the undertaking, which, with the sanction of the Secretary of State, shall have been expended on Capital Account on the Company's railway, shall become a debt of the Company to the Secretary of State and until discharged the Secretary of State shall be placed in the position of a bondholder of the Company, and in respect of the interest payable to him by the Company on such moneys shall rank against the earnings of the Company's railway next after the holders of any bonds for the time being issued by the Company pursuant to section 41 of the original Contract. Any moneys raised by the Company on its sole responsibility, and with the sanction of the Secretary of State expended on Capital Account on the undertaking, shall in like manner become a debt of the Secretary of State to the Company, and until discharged the Company shall be placed in the position of a preferential bondholder of the undertaking in respect of the interest payable to the Company by the Secretary of State on such moneys.

Arbitration.

76. If the Secretary of State and the Company shall fail to agree touching any matter with respect to which their agreement is required by this Contract, or if in any case not herein specially provided for any dispute, question, or controversy shall at any time arise between the Secretary of State and the Company touching these presents or any section or thing herein contained, or the construction hereof or any matter connected with these presents, or the operation hereof, or the rights, duties, or liabilities of either party in relation to the premises, then and in every such case the matter as to which the Secretary of State and the Company shall fail to agree, or the matter in difference, as the case may be, shall be submitted to two arbitrators or their umpire pursuant to and so as with regard to the mode and consequences of the reference, and in all other respects to conform to the provisions in that behalf contained in the Arbitration Act, 1889, or any subsisting statutory modification thereof, and upon every such submission the arbitrators and umpires shall respectively have the powers by that Act conferred upon arbitrators and umpires respectively, and in every such submission the provisions mentioned in the 1st Schedule to that Act shall be implied.

In witness whereof SIR ALFRED COMYNS LYALL, K.C.B., K.C.I.E., and SIR CHARLES ARTHUR TURNER, K.C.I.E., being two members of the Council of India, have hereunto set their hands and seals, and the Bengal and North-Western Railway Company, Limited, have hereunto caused their common seal to be affixed the day and year first above written.

APPENDIX M.

This Indenture, made the 8th day of September 1890, BETWEEN THE SECRETARY OF STATE IN COUNCIL OF INDIA of the one part, and THE ROHILKHAND and KUMAUN RAILWAY COMPANY, LIMITED, a Joint Stock Company with limited liability, having its registered office in London, of the other part, supplemental to a Contract dated the 12th day of October 1882, and made between the same parties.

WITNESSETH and it is hereby agreed and declared as follows:—

Interpretation of Terms.

1. In this Contract—

- (1) The expression "the Secretary of State" means the Secretary of State in Council of India.
- (2) The expression "the Company" means the Rohilkhand and Kumaun Railway Company, Limited.
- (3) The expression "the original Contract" means the said Contract dated the 12th day of October 1882, to which this Contract is expressed to be supplemental.
- (4) The expression "Railway No. 1" means the Company's line of railway constructed in pursuance of the original Contract.
- (5) The expression "Railway No. 2" means the Bareilly-Pilibhit State Railway now opened for public traffic, which extends from its terminal station in Bareilly to its terminal station in Pilibhit, as at present maintained and worked by the Company in pursuance of an agreement dated the 25th day of October 1884, and made between the Secretary of State of the one part and the Company of the other part.
- (6) The expression "Railway No. 3" means the section of the Lucknow, Sitapur, and Seheramau State Railway, extending from Lucknow to Gola Gokaran Náth, constructed by the Secretary of State, and now opened for public traffic.
- (7) The expression "Railway No. 4" means the line of State railway intended to be constructed by the Company in pursuance of these presents, for the purpose of effecting a connection between the termination of "Railway No. 3" at Gola Gokaran Náth and the Pilibhit terminus of "Railway No. 2," including the forest siding at Mailani.
- (8) The expression "the undertaking" means and includes "Railway No. 2," "Railway No. 3," and "Railway No. 4," and all the stations and other works, rolling-stock, fixed and moveable machinery and plant from time to time belonging thereto, together with any improvements, alterations, and additions of whatever description that may from time to time be made in or to any of the said railways, by or with the sanction of the Secretary of State, but with the exception of the telegraphs and telegraphic appliances used or to be used thereon.
- (9) The expression "the joint line" means that part of Railway No. 2 over which the Company has access for its trains to the terminal station in Bareilly of the said Railway (No. 2) with the joint use of the said station, pursuant to section 12 of the original Contract.
- (10) The expression "the open system" means and includes such part or parts of Railways 1, 2, 3, and 4 as may for the time being have been opened for public traffic.
- (11) The expression "the gross earnings of Railway No. 1" means and includes all receipts from coaching and merchandise traffic over the Company's Railway No. 1, and to and from any station thereof and any station of the joint line, and a moiety of such receipts from exclusively local traffic on the joint line as well as the sums received by the Company from the system of transport established under section 35 of the original Contract, and from the use of the telegraphs and the carriage of mails on the Com-

pany's Railway No. 1, and all sums received in respect thereof as rents, tolls on bridges, and from all other sources the receipts from which are treated as revenue on Indian railways generally. It does not include the subsidy paid to the Company in terms of section 51 of the original Contract, or any interest on the unexpended portion of the Company's capital raised under the original Contract.

- (12) The expression "the gross earnings of the undertaking" means and includes all receipts from coaching and merchandise traffic over such part or parts of Railways Nos. 2, 3, and 4 as is or are for the time being opened for public traffic (with the exception of such portion of the gross receipts due to the joint line as under sub-section (11) of this section is included in the gross earnings of Railway No. 1), and from the use of the telegraphs and the carriage of mails thereon, and all other sums received in respect thereof as rents, tolls on bridges, and from all other sources the receipts from which are treated as revenue on Indian railways generally.
- (13) The expression "working expenses" when not qualified or limited, means and includes the expenses of maintaining and working the open system, of which expenses one account only is to be kept. It includes the payments in lieu of forest dues under section 9, and for the expenses of working the system of transport established under section 35, but does not include the payment for improvement of the bridge over the Kitcha river under section 17 of the original Contract.
- (14) The "net earnings" of the undertaking and of Railway No. 1 respectively and the "profits" of the undertaking are severally defined for the purposes of sections 38, 54, and 56 respectively in section 55 and in sub-section 1 of section 56 of this Contract.

Duration of Contract.

2. This Contract shall continue in force for a term of 10 years, commencing upon the 1st day of January 1891, subject to the provisions hereinafter contained for determining the same.

As to existing Contract for working "Railway No. 2."

3. Upon the said 1st day of January 1891, the said agreement of the 25th day of October 1884 shall determine and be void, but without prejudice to the rights of either party thereto against the other in respect of any covenant therein contained which may have been previously broken, save and except the provision in section 2 thereof as to one year's notice of the determination of the said agreement, which it is hereby agreed shall be waived.

As to Railways Nos. 2 and 3.

4. On the said 1st day of January 1891, the Secretary of State, for the purposes of this Contract, shall allow the Company to remain in possession of or shall hand over to the Company, as the case may require, Railways Nos. 2 and 3, together with all works connected with either of such railways then made or in progress, and the rolling-stock, plant, and machinery then used thereon or appropriated or in course of construction therefor, together with copies of all plans, specifications, and working drawings of the works, rolling-stock, and other equipments; but with the exception of the telegraphs and all telegraphic appliances belonging to the said railways, which shall remain vested in the Secretary of State; and as from the aforesaid day the Company shall work and maintain Railways Nos. 2 and 3 as part of the open system.

5. As soon as may be after the said 1st day of January 1891, an inventory, No. I of the railways, plant, and machinery, and of the plans, specifications, and working drawings and an inventory, No. II, of the rolling-stock of Railway No. 3 to be so retained or handed over as aforesaid as on the said 1st day of January 1891, shall be made and signed by or on behalf of the Secretary of State and the Company, and the value of the same (including the land occupied, or used by, or for the purposes of the railways) at cost price, including exchange on all payments made in England in part of the said cost, as shown in the accounts of the said railways, shall be entered in Part I of the Capital Account of the undertaking as hereinafter provided. A third inventory, No. III, of the rolling-stock for working Railway No. 2 and of the machinery and buildings at Bareilly provided by and at the expense of the Company, shall be similarly made and signed, and the value of the same at cost price, as shown in the books of the Company, shall be entered in Part II of

the Capital Account of the undertaking as hereinafter provided. The Company shall be re-imbursed the amount of inventory No. III out of the moneys to be raised by the Company pursuant to this Contract.

6. On the said 1st day of January 1891, or as soon after as may be, the Secretary of State shall allow the Company to remain in possession of, or shall deliver to the Company, as the case may be, and the Company shall accept for the purposes of this Contract all serviceable stores belonging to Railways Nos. 2, 3, and 4, respectively, that may be in hand or in course of delivery on the said 1st day of January 1891, except such, if any, as belong to the telegraphs or telegraphic appliances. An inventory, No. IV, of the same shall be made with all reasonable expedition and signed by or on behalf of the Secretary of State and the Company, with the value at cost price, including exchange on all payments made in England in part of the said cost as shown in the accounts of the said railways. And on the said date, or as soon after as may be, the Company shall deliver to the Secretary of State an inventory, No. V, of all serviceable stores appertaining to Railway No. 1 at that date, with their value at cost price as shown in the books of the Company. The Secretary of State, and on behalf of Railway No. 1 the Company, shall be re-imbursed respectively the value of the stores herein referred to as pertaining to each of them respectively out of the moneys to be raised by the Company pursuant to this Contract. The stores included in inventories Nos. IV and V shall be entered in the Stores Account as hereinafter provided.

As to construction of Railway No. 4 and of additions to or alterations and improvements in the Undertaking.

7. All surveys, plans, and any works which the Secretary of State has caused to be made and executed with the view of facilitating and expediting the construction of Railway No. 4, or any part or parts thereof, and also all rolling-stock, plant, or machinery which he may have provided in relation to the construction of the said railway and forest siding, or any part or parts thereof, shall be made over to the Company, and the cost of the said surveys, plans, and works, rolling-stock, plant and machinery, as stated by the Secretary of State, shall be paid to him by the Company, and any now existing obligations or liabilities of the Secretary of State under contracts for the supply of stores and materials and the execution of works previously mentioned in this section shall be discharged by the Company from the moneys to be raised by the Company pursuant to this Contract.

8. The Company shall by the 31st day of December 1891, on the Secretary of State, at the request of the Company, duly providing all land shown to the satisfaction of the Secretary of State to be necessary for the purpose, construct, complete and make ready and fit for opening for public traffic throughout, on a route to be selected and determined by the Secretary of State, a line of railway to connect the termination of Railway No. 3 at Gola Gokaran Náth with the Pilibhit terminus of Railway No. 2, with all such stations, station-yards, sidings, crossing-places, bridges, viaducts, offices, warehouses, houses for employes, fixed machinery, conveniences, and works as shall be necessary or proper for the purposes of working the railway so to be constructed and Railways Nos. 2 and 3 as one undertaking and of protecting the same from destruction or injury by inundation, tempest, or otherwise.

9. Railway No. 4 (with the exception of the Mailani forest siding if made of a temporary character) shall be a single track line of railway of the metre gauge, and shall, as regards permanent way, station accommodation, and general structural character, be equal in all respects to the standard of Railways Nos. 2 and 3, so that it may be worked by the rolling-stock in use on those railways, and so that it shall not require special or undue maintenance. Surveys, designs, and estimates in relation to the construction or execution of the said railway and stations and other works shall, if required, be furnished by the Company to the Secretary of State, and shall be subject to his approval. The said railway and stations and other works shall be constructed in all respects to the satisfaction of the Secretary of State, who shall be at liberty, at any time during construction, or during 12 months thereafter, to object to any of the work done, or the materials employed or proposed to be employed in or about the same, and to require any work to be undone and to be done again, and any materials to be removed and to be replaced by others in a manner satisfactory to him.

10. The Secretary of State shall from time to time notify to the Company the route of Railway No. 4, so far as such route shall from time to time have been determined by him.

11. The Secretary of State shall have power to determine the situation and dimensions of, and the particulars of all additions to and alterations and improvements in, the

stations, station-yards, offices, warehouses, houses for employés, conveniences, and works to be constructed or carried out from time to time in connection with, or as part of, the undertaking.

As to Land.

12. The Secretary of State shall from time to time, at the reasonable request of the Company, provide the land which he shall consider requisite for the construction of Railway No. 4, and for the stations, station-yards, sidings, crossing-places, bridges, viaducts, offices, warehouses, houses for employés, conveniences, and works necessary or proper for the purposes of the said railway, also for additions to or alterations and improvements in the undertaking made with his sanction from time to time, and (at his discretion) for warehouses or elevators for the accommodation of goods in connection with the traffic of the undertaking, and for roads of approach thereto or to the stations of the undertaking, and shall allow the Company to have possession during the continuance of this Contract of the land so provided. The Company shall from time to time, with the sanction of the Secretary of State, as soon as practicable go out of possession of, and relinquish to the Secretary of State, such of the land of which the Company shall have been allowed possession under this Contract for the purposes of the undertaking as shall for the time being have become unnecessary to be retained possession of by the Company for any of the purposes of this Contract. And as often as, in the opinion of the Secretary of State, it shall appear to be unnecessary that the Company shall retain possession of any particular land of which the Company shall have been allowed possession under this section, the Secretary of State shall certify such his opinion to the Company. Upon receipt of such certificate, or so soon thereafter as may be, the Company shall state in writing whether it acquiesces in the opinion of the Secretary of State, or whether it objects thereto, and, if so, the grounds of its objection. If no objection is stated by the Company, or if the grounds of its objection (if any) are not, in the opinion of the Secretary of State, sufficient, the Company shall, upon the requisition of the Secretary of State, forthwith relinquish to him the land in question, and the Secretary of State shall be exclusively entitled to possession thereof.

As to Equipment of Undertaking with Rolling-stock, &c.

13. The Company shall with due diligence equip the undertaking with all such additional rolling-stock, plant, and machinery as shall from time to time in the opinion of the Secretary of State be necessary for the purpose of working the undertaking, and shall make such alterations or improvements in the equipment as may in his opinion be required from time to time; and if the Secretary of State shall be of opinion that the Company shall at any time have failed duly to perform its obligations under this section, he may himself from time to time complete or alter or improve the equipment of the undertaking, or any part thereof, in respect of all or any of the particulars specified in this section. Nothing herein contained shall operate to set aside the obligation of the Company under section 16 of the original Contract to keep Railway No. 1 sufficiently supplied with rolling-stock, plant, and machinery, and all rolling-stock belonging to the Company and to the undertaking shall be used in common throughout the open system, and be in no wise treated as foreign stock whilst on any part of the open system.

As to Opening of Railway No. 4 for Traffic.

14. The Company shall as soon as an inspecting officer acting on behalf of the Secretary of State shall have certified that Railway No. 4 or any part thereof is fit for the conveyance of passengers or goods or both, and that the undertaking is for the time being properly equipped with rolling-stock, plant, and machinery, forthwith open Railway No. 4 or such part thereof for traffic, and thereupon Railways No. 2, No. 3, and No. 4 or such part of No. 4, shall be worked and maintained as part of the open system by the Company.

As to Telegraphs.

15. The Secretary of State may from time to time construct and provide such new or additional telegraphs and telegraphic appliances as he shall think fit along or upon the railways for the time being comprised in the undertaking or any part or parts thereof, or any land or works belonging thereto, and may maintain and work the existing telegraphs and telegraphic appliances, and all or any of such new or additional telegraphs and telegraphic appliances, as he shall think fit; and it shall be lawful for him from time to time to erect, maintain, make, do, and execute on any part of the said railways, land, or works all such buildings, machinery, works, acts, and things as he shall consider necessary or proper

in relation to the maintenance, construction, use, and working of the said existing and new or additional telegraphs and telegraphic appliances, but so that due regard be had to the convenience of the working of the undertaking, in respect of the time and place of such erections, maintenance, making, and execution. The Company shall at all times furnish the Secretary of State with such free passes over all or any part of the railways comprised in the undertaking, and over all or any part of Railway No. 1, as he may require for persons employed by him in or about or in connection with the maintenance, construction, working, or inspection of the said telegraphs and telegraphic appliances, or any buildings or works appertaining thereto.

16. The Secretary of State shall from time to time allow the Company to have the exclusive use of such of the said telegraphs and telegraphic appliances as he shall from time to time consider proper to be used by the Company for the purpose of safely or efficiently working the railways comprised in the undertaking, and shall keep the same telegraphs and telegraphic appliances in good repair and in good working order and condition. And the Company shall, upon demand, pay into such Government Treasury in India as shall from time to time be appointed for the purpose by the Secretary of State the amount which the Secretary of State shall from time to time require the Company to pay in respect of the charges made by the Government Telegraph Department for rent, maintenance, and inspection of the telegraphs and telegraphic appliances, of which the Company shall for the time being be allowed to have the exclusive use. All amounts paid by the Company under this provision shall be included amongst working expenses.

17. The Company, if so directed by the Secretary of State, shall in working any telegraphs or telegraphic appliances of which they shall for the time being be allowed to have the exclusive use under the last preceding section observe the rules as to working telegraphs and telegraphic appliances for the time being in force in the case of State Railway Telegraphs, or such rules as the Secretary of State may from time to time prescribe for the Company's observance, and, if so directed by the Secretary of State, shall account in such manner as shall be prescribed by the rules for the time being in force in the case of State Railway Telegraphs, or as the Secretary of State shall require, for the receipts derived from the working of telegraphs and telegraphic appliances.

As to the Maintenance and Management of the Undertaking.

18. The Company shall keep the undertaking in good repair, in good working condition, and fully supplied with rolling-stock, plant, and machinery to the satisfaction of the Secretary of State. If the Company shall fail for the space of one calendar month to comply with any requirement in writing of the Secretary of State in regard to the matters aforesaid, or any of them, the Secretary of State may enter on the undertaking and execute all such works and provide all such rolling-stock, plant, and machinery as may in his opinion be required for the purposes of the undertaking.

19. The Company shall keep the rolling-stock, plant, and machinery belonging to the undertaking in good repair and in good working condition to the satisfaction of the Secretary of State.

20. The Company shall maintain a sufficient staff for the purposes of the undertaking to the satisfaction of the Secretary of State, and shall, if required so to do by the Secretary of State, continue all or any of the Government staff now engaged for the purposes of Railways Nos. 3 and 4 in their present employments, and fill up vacancies occurring from time to time in such staff, and for filling which there shall be no suitable persons or person available amongst those for the time being employed on the open system, from the Government service, and no such person so engaged, unless the incumbent of any such or similar office on any State Railway be then liable to be discharged by the Manager of any such railway on his own responsibility, shall be discharged from his employment by the Company, if after notice of the intention of the Company so to discharge him the Secretary of State shall object to such discharge. The debit of any contributions on account of pensions and furlough allowances which the Secretary of State may require to be paid to him on behalf of such persons shall follow the incidence of the debit of the salaries of such persons severally.

21. The Secretary of State may from time to time, by notice in writing, require the Company to carry out any alteration or improvement in the undertaking, or any addition thereto, that may in his opinion be necessary for the safety of passengers or for the safety of the public, or for the effectual working of the undertaking. Such notice shall specify the alteration, improvement or addition required, and shall also in general terms describe the works to be executed for the purpose of carrying out such alteration, improvement or addition. On receiving any such notice the Company shall with all reasonable speed

commence and proceed to execute the works described therein. The Secretary of State shall provide any land that may be required for the purposes aforesaid, and shall supply the funds necessary for the purchase of such land and for the execution of such works, and the cost of such of the said works as shall be properly chargeable to capital shall be charged against the moneys raised by the Company pursuant to this Contract, and the cost of all other such works shall be charged as working expenses. If in any case the Company shall neglect to proceed with the proposed works, or fail to complete the same to the satisfaction of the Secretary of State, the Secretary of State may enter on the undertaking and execute the said works, and charge the cost of the same as if done by the Company.

As to Police.

22. The Secretary of State shall provide and maintain for the purposes of so much of the undertaking as shall for the time being have been opened for public traffic such a force of police as the Company, with the approval of the Secretary of State, shall from time to time require; and if the Secretary of State shall consider that any addition to the force is required for the preservation of law and order for the purposes of the undertaking, his determination on that point shall be final, and such addition shall be made accordingly. The cost of providing and maintaining the force of police required for the purposes aforesaid shall be defrayed in the following manner; that is to say, three-tenths shall be borne by the Secretary of State, and the remaining seven-tenths shall be included in working expenses.

23. If the Company shall so desire, the Secretary of State will provide at the sole cost of the undertaking such a force of police as, with the approval of the Secretary of State, the Company shall from time to time require for the protection of so much of the undertaking as shall for the time being be under construction, or shall not have been opened for public traffic.

As to the Use and Working of the Undertaking and the Conveyance of Traffic.

24. The Company shall cause to be run on so much of the undertaking as shall for the time being have been opened for public traffic so many trains, at such times, at such rates of speed, between such places, and with such conveniences and accommodations as the Secretary of State shall from time to time require.

25. The Company shall from time to time, upon the requisition of the Secretary of State, carry out any alteration or improvement in the working of the undertaking that may, in his opinion, be necessary for the safety of passengers, or for the safety of the public, or for the safe and effectual working of the undertaking or any part thereof.

26. From the said 1st day of January 1891, and during the continuance of this Contract, the provision of section 12 of the original Contract as to payment by the Company for the use of the joint line and terminal station shall be read as if 20,000 were substituted for 11,250 therein mentioned.

27. The Secretary of State shall have power as regards Railways No. 2 and No. 3 as from the said 1st day of January 1891, and thereafter from time to time during the continuance of this Contract, and as regards Railway No. 4 as from the date when it shall be open partly or throughout for public traffic, and thereafter from time to time during the continuance of this Contract, to fix and vary both maximum and minimum fares and rates (which until otherwise fixed shall for goods be a maximum of one pie and a minimum of $\frac{1}{10}$ th pie per maund per mile) with a reasonable difference between them for the carriage of all passengers and goods, through and local, over the railways comprised in the undertaking, and the fares and rates to be charged by the Company for the carriage of such passengers and goods shall not exceed the maximum and shall not be less than the minimum fares and rates so fixed. Provided that the Company may for traffic to and from any station of the joint line and any station of Railway No. 1 levy the rates and fares in force for the time being on Railway No. 1 under the maximum tariff fixed for Railway No. 1 in section 28 of the original Contract. Provided, notwithstanding, that the Company shall carry on the open system, or any part or parts thereof, food-grains and salt at such rates not being less than the minimum rate for goods for the time being in force as the Secretary of State may fix, and shall carry fuel for distances exceeding 100 miles at a rate not exceeding $\frac{1}{4}$ th pie per maund per mile, loading and unloading of such fuel being done by consignors or consignees.

28. All stores required for use on Railway No. 1 or any part thereof, and on the undertaking or any part thereof, shall be carried at the same mileage rates over Railway No. 1 and over the undertaking, such rates being the same as those in force for the time being on other metre-gauge State railways.

29. All services which the Secretary of State shall require the Company to perform on so much of the undertaking as shall for the time being have been opened for public traffic, for any department of Her Majesty's Indian Government, whether Postal, Military, Police, or any other department of the State, or for high officials of such Government (including in such services the conveyance of mails as defined by the Post Office Act or Acts for the time being in force in British India, the conveyance of Post Office servants when on duty, the conveyance of troops and sailors, military and naval establishments, horses and other animals used for military purposes, guns, military stores, and equipments, the conveyance of police prisoners and paupers, the conveyance of telegraph stores, instruments, officers, and workmen, and of any public stores whatever including stores for State railways) shall be performed by the Company on the same general conditions as may for the time being be in force on other metre-gauge State railways, and at such rates as may be approved by the Secretary of State, subject to the provision as to free passes contained in the 15th section of this Contract.

30. The Company shall convey over the undertaking, or so much thereof as shall for the time being have been opened for public traffic, gold and silver bullion and coin and copper coin belonging to the Secretary of State, and the persons in charge thereof, at special rates to be from time to time approved by the Secretary of State.

31. The Company shall from time to time, upon the requisition of the Secretary of State, give precedence over all other traffic to his demands for either passenger or freight accommodation on the undertaking, or so much thereof as shall for the time being have been opened for public traffic.

32. No undue or unreasonable preference or advantage to or in favour of any particular person, company, or railway administration, or any particular description of traffic in any respect whatsoever, shall be made or given by the Company, nor shall any particular person, company, or railway administration be subjected by the Company to any undue or unreasonable prejudice or disadvantage in any respect whatsoever. The Secretary of State shall have absolute power for the purposes of this section to decide whether any preference, advantage, prejudice, or disadvantage is undue or unreasonable.

As to Receipts.

33. All moneys whatsoever which shall during the continuance of this Contract be received by or on behalf of the Company in respect of the undertaking, either in England or India, or elsewhere (including all moneys received from the use and working of the telegraphs and telegraphic appliances, of which the Company shall for the time being be allowed to have the exclusive use, but excepting any moneys which shall be paid to the Company by the Secretary of State pursuant to this Contract), and the gross earnings of Railway No. 1, shall at such times and in such manner as the Secretary of State may from time to time direct, and without deduction, be paid as to moneys received in England into the Bank of England to the credit of the Secretary of State, and as to moneys received in India or elsewhere into some Government Treasury to be from time to time approved for the purpose by the Secretary of State.

34. Of the moneys mentioned in the last preceding section, and not the subject of the exception therein contained, such as shall arise from the sale of any property forming part of the undertaking for any purpose other than the replacement of the property sold by other property of the same or a similar character, shall be treated as received on account of capital; the residue shall be treated as received on account of revenue. Provided always, that no sale of any property for any purpose, other than such replacement as aforesaid, shall be made without the sanction of the Secretary of State.

As to Capital.

35. The Company shall by way of capital raise a sum of 160,000*l.* by the issue of debentures, and shall, within such period and by such instalments as the Secretary of State and the Company shall agree, pay into the Bank of England to the credit of the Secretary of State the said sum of 160,000*l.* Provided that the Company may *pro tanto* discharge itself of its obligations under this section by payment of any amount in rupees into any Government Treasury in India, approved for the purpose by the Secretary of State; any amount so paid to be deemed the equivalent of sterling money at the average rate of exchange obtained for bills drawn by the Secretary of State, and payable on demand during the half-year immediately preceding the date of such payment.

36. The debentures to be issued by the Company for the purposes of the last section shall be issued, and if necessary renewed, at not below par, and shall be for such amounts,

and at such rate of interest, and fall due at such time or times as shall be agreed between the Secretary of State and the Company, and payment of all principal moneys and interest secured by the issue of such debentures shall be guaranteed by the Secretary of State.

37. The Company shall not, during the continuance of this Contract, without the sanction of the Secretary of State in writing first obtained, at any time increase its stock or share capital, or borrow any moneys over and above the said sum of 160,000*l.* to be raised by the issue of debentures in pursuance of section 35 of these presents; but any additional capital that may be required by the Company for the purposes of this Contract may be raised by the Company, or may be advanced to the Company by the Secretary of State at his option upon terms to be agreed upon between the Secretary of State and the Company.

38. Until the day that Railway No. 4 shall be opened throughout for public traffic, or until the 31st day of December 1891, whichever is the earlier, the interest on the debentures to be issued under section 35 of these presents, and the interest charged by the Secretary of State to the Company on moneys supplied by him to the Company for the purposes of this Contract, pending the issue of such debentures, shall be charged to Capital Account, and the amount by which the profits of the undertaking as set forth in section 56 of these presents may during the first year after the opening throughout of Railway No. 4 be insufficient to pay the aggregate interest in this section mentioned, shall be charged to Capital Account.

As to Supply of Funds and Expenditure thereof.

39. As often as any moneys shall (until the aggregate amount paid in by the Company under section 35 of these presents shall be exhausted, or have been refunded by the Secretary of State to the Company) be required by the Company to defray expenditure incurred by the Company in fulfilling its obligations under this Contract, the same may be drawn by the Company in London or in India, according to such arrangements as shall be made from time to time with the Secretary of State for that purpose, and 10 days' notice at least of every draft or proposed draft shall be given by the Company to the Secretary of State, and the Company shall not in any case be entitled under this section to draw to an extent greater than the balance in its favour for the time being, having regard to the respective amounts for the time being paid by the Company under section 35 of these presents, and drawn by the Company under this section.

40. All moneys proposed to be expended by the Company on account of the undertaking or in pursuance of this Contract shall from time to time be stated and submitted to the Secretary of State for his sanction, and as between the Company and the Secretary of State shall be allowed only so far as the same shall from time to time have been sanctioned by the Secretary of State.

As to Accounts and Audit.

41. The Company shall keep all such accounts relating to the undertaking, and all such accounts as between the Company and the Secretary of State, as the Secretary of State shall from time to time require; and shall keep the accounts relating to the undertaking separate and distinct from the accounts relating to Railway No. 1 except the accounts of working expenses. Such accounts as are required to be kept by this section shall be kept in such form and under such heads or divisions and for such sections of the undertaking and for such periods and with such details, and shall be submitted to the Secretary of State at such times as he shall from time to time prescribe. The said accounts, so far as the same are kept in India, shall be kept in rupees of the Government of India, and, so far as they are kept in England, shall be kept in sterling money. Such of the said accounts as are kept in England shall from time to time be transmitted by the Secretary of State to the Government in India and incorporated in the accounts of the Company in India, each account transmitted being, for the purpose of such incorporation, converted into rupees at the average rate of exchange obtained by the Secretary of State for bills payable on demand drawn by him on India during the half-year immediately preceding that in which the incorporation is to be effected; or if the Secretary of State shall not have drawn bills on India for so much as three months out of the half-year immediately preceding, then at the average rate obtained during the half-year immediately preceding that in which the incorporation is to be effected for the best commercial bills, payable on demand, drawn in London on India, such average rate to be decided by the Comptroller General at Calcutta.

42. Unless and until otherwise directed the Company shall keep for the purposes of this Contract the following accounts :—

A Capital Advance Account, relating to the undertaking and, in respect of working and maintenance only, to Railway No. 1,

A Capital Account
An Account of Revenue received } relating to the undertaking,

An Account of Working Expenses relating to the open system,

A Stores Account relating to the four Railways, Nos. 1, 2, 3, and 4,

all which accounts shall be kept separate and distinct from the "Accounts" which the Company shall be required by the Secretary of State under the provisions of the original Contract to keep for Railway No. 1.

43. All moneys advanced by the Secretary of State to the Company shall be entered in the Capital Advance Account, and shall from time to time, as expended with the sanction of the Secretary of State, including the payments to the Secretary of State and to the Company respectively for the stores referred to in section 6 of this Contract and to be transferred to the Stores Account as herein provided, be transferred from the Capital Advance Account to the Capital Account, the Account of Working Expenses, or the Stores Account, as the case may require. The balance of the Capital Advance Account shall be made up and submitted to the Secretary of State from time to time as he shall require.

44. The Capital Account shall be in two parts.

In Part I shall be entered the value at cost price, as shown in the Inventories Nos. I and II mentioned in section 5, of the railways, rolling-stock, plant, machinery, and land to be handed over to or retained by the Company pursuant to section 4 of this Contract.

In Part II shall be entered—

TO DEBIT:—

- (1) The value at cost price as shown in the Inventory No. III of the rolling-stock for working Railway No. 2, and the machinery and buildings at Bareilly already provided by the Company, referred to in section 5 of this Contract.
- (2) The payments made to the Secretary of State and the other charges which may arise under the provisions of section 7 of this Contract.
- (3) All interest properly charged to Capital Account under section 38 of this Contract.
- (4) The value as certified by the Secretary of State of all land provided by him for the purposes of Railway No. 4 and of all other land provided by him under these presents after the said 1st day of January 1891 for the purposes of the undertaking.
- (5) All moneys which shall have been actually expended by the Company with the sanction of the Secretary of State out of funds provided by him or expended by the Secretary of State upon works, rolling-stock, plant, or machinery for the purposes of the undertaking, the cost of which is chargeable to capital.
- (6) The cost of providing and maintaining a police force in relation to any such part or parts of the undertaking as for the time being shall be under construction or shall not have been opened for public traffic.
- (7) The charges of the Government Telegraph Department for rent, maintenance, and inspection of such electric telegraphs and telegraphic appliances (if any), as the Secretary of State may allow the Company to use in relation to the construction of the undertaking or any part thereof, or in relation to any part of the undertaking which shall not for the time being have been opened for public traffic.
- (8) So much as ought pursuant to this Contract from time to time to be charged to account of capital in respect of the half-yearly amount to be charged by the Secretary of State under the provisions hereinafter contained for his supervision, audit, and control of the affairs of the Company.
- (9) Any amount which the Secretary of State may from time to time require or permit to be charged to account of capital in respect of the cost to him or to the Company respectively of any legal expenses incurred in relation to this Contract or to matters arising out of this Contract.
- (10) The cost to the Secretary of State as certified by him of works, acts, and things which shall be executed or done by him under any of the provisions of this Contract, and of which the cost, if executed or done by the Company, would have been expenditure chargeable to account of capital.

- (11) All such other sums (if any) as ought under the provisions of this Contract to be entered to debit in the Capital Account, and all such expenses in relation to the issue by the Company, pursuant to section 35 of this Contract, of the debentures therein mentioned, as the Secretary of State may permit to be charged to account of capital.

AND TO CREDIT.

- (12) All such of the moneys to be received by or on behalf of the Company as are herein provided to be treated as received on account of capital.
- (13) The value (to be determined by the Secretary of State) of any land of which the Company shall have been allowed to take possession for the purposes of this Contract, and which shall have been subsequently relinquished to the Secretary of State under the provisions of this Contract.

45. Part II of the Capital Account shall from time to time, as the Secretary of State shall require, be made up, and the balance thereon ascertained and stated therein. The Secretary of State may from time to time audit the said Capital Account and correct errors therein as he shall see fit.

46. The Account of Revenue received shall contain an account of all such of the moneys to be received by or on behalf of the Company in respect of the undertaking as are herein provided to be treated as received on account of revenue. The Account of Working Expenses shall contain an account of all expenditure connected with the open system as specified in section 54 of this Contract and which ought conformably with this Contract or with the original Contract to be treated as made on account of revenue. These two accounts shall be made up half-yearly to the 30th of June and the 31st of December in each year, or to such other days as the Secretary of State shall from time to time prescribe, and shall be regularly submitted by the Company to the Secretary of State, who may audit the same either concurrently with or after expenditure, or in both ways, as he may think fit, and may in case of any error being discovered therein correct the same within three calendar months after the account containing such error shall have been submitted to him. Every such account shall be considered as settled at the expiration of three calendar months after the same shall have been submitted to the Secretary of State, but nevertheless any error which may subsequently be discovered therein shall be corrected in the then next account or in any subsequent account or accounts of revenue or of working expenses, as the case may be, as the Secretary of State may determine.

47. The Company shall with due diligence make up and deliver to the Secretary of State an account of all stores held as on the date of this Contract by the Company for the purposes of Railway No. 1, and of all stores belonging to the undertaking in possession of which the Company are allowed to remain, or which shall be delivered to the Company pursuant to the 6th section of this Contract as on that day, and of the value of such stores as entered in the inventories mentioned in that section. As soon as possible after the 30th of June and the 31st of December in each year, or such other half-yearly days as the Secretary of State may from time to time prescribe for the making up of the Revenue Account, the Company shall make up and deliver to the Secretary of State an account of all stores in hand on the half-yearly day immediately preceding the making up of the account, and of all stores purchased, and of all stores used by the Company for the purposes of the undertaking and of Railway No. 1 respectively since the 1st of January 1891, or since the date to which the Stores Account was last made up, as the case may be, showing the purposes for which such stores have been purchased or used. As often as any of the stores in hand shall be used by the Company for purposes properly chargeable to capital, the value of the stores so used shall be charged to the Company or to Part II of the Capital Account, as the case may require, in accordance with the provisions in that behalf herein contained, and the Company shall forthwith pay for the stores so charged to it from its own proper funds. The value of all such stores used for purposes properly chargeable to Revenue shall be charged in the Account of Working Expenses. If any stores for the time being in use upon or in connection with the four Railways Nos. 1, 2, 3, and 4 shall during the continuance of this Contract be returned into store the value thereof (to be agreed upon by the Secretary of State and the Company) shall be debited in the Stores Account.

48. The stores in hand shall from time to time be re-valued at such time or times as the Secretary of State shall direct, and in such manner as shall from time to time be agreed upon by the Secretary of State and the Company, and the value of the stores in hand as entered in the Stores Account shall be corrected in accordance with such re-valuation, and all necessary adjustments shall be thereupon made by making entries to debit or credit of working expenses as may be proper.

49. For the purposes of sub-section 4 of section 56 of this Contract, the Secretary of State's capital in the undertaking shall be taken to be the amount at debit of Part I of the Capital Account, and the Company's capital in the undertaking shall be taken to be the aggregate of the balances from time to time standing at the debit of Part II of the Capital Account, and of the Stores Accounts, and of the net amounts from time to time expended on account of capital as shown by the Capital Advance Account and not transferred to the Capital Account.

50. In case any question shall arise whether any expenditure incurred for the purposes of the undertaking is to be treated in the whole or in part as a charge incurred on Capital Account, or how the same is to be dealt with, the question shall be determined on the general principle that capital is to bear the cost of new works, of additional rolling-stock, plant, and machinery, and of substantial improvements of, and additions to, old works, rolling-stock, plant, and machinery, including the cost of any temporary new work, the construction of which is requisite for the construction of a work properly chargeable to capital, and that the cost of repairs, restorations, renewals, replacements, and substitutions is to be borne by revenue. Provided, nevertheless, that any item of expenditure properly chargeable to capital, in accordance with this principle, on any part of the open system, shall from time to time, if not exceeding Rs. 1,000, be classed as a "Minor work" and be charged to working expenses within a maximum amount, in each half-year of Rs. 15 per open mile of railway. Provided also, that no portion of the salaries or allowances of any of the Company's permanent supervising staff, although for the time being employed partly or wholly, in directing or superintending work chargeable to capital, shall, except with the express sanction of the Secretary of State, be charged to capital, and that no expenses connected with the engagement from England, or with the passage from or to England, of any person in the Company's service shall be charged to capital, unless such person shall have been specially engaged to carry out work chargeable to capital, and actually employed upon such work.

51. The accounts of the Company in relation to its expenditure and receipts in India, England, and elsewhere, as well in respect of Railway No. 1 as of the undertaking, shall from time to time be audited on behalf of the Secretary of State by such persons or person as he shall from time to time appoint as well as on behalf of the Company, and the Company shall produce to the auditors or auditor so appointed by the Secretary of State all vouchers, books, accounts, papers, and documents of the Company necessary for the purpose of audit, and afford to them or him all facilities requisite for the performance of their or his duties. Amongst the functions of the auditors or auditor shall be included the duty of seeing that expenditure is charged and revenue applied in accordance with the provisions of this Contract. Any correction made in the accounts by any person or persons who shall be acting as joint auditor or joint auditors on behalf both of the Secretary of State and of the Company shall be conclusive. If, consequent on the audit of any auditor acting exclusively on behalf of the Secretary of State, the Secretary of State shall require any alterations to be made in the accounts, and the Company shall object to the alterations, the matter in difference shall be referred for final decision to two persons, one to be named by the Secretary of State and the other to be named by the Company, and in case such two persons shall be unable to agree, then to an umpire to be named by the referees. The costs of any such reference as last aforesaid shall be included in working expenses.

52. If any difference shall arise between the Secretary of State and the Company as to whether any expenditure of the Company is properly chargeable to capital or revenue, the matter in difference shall be referred to the decision of the joint-auditor or joint-auditors if the Secretary of State and the Company shall have appointed such an officer or officers, but in case such joint-auditor or joint-auditors shall not have been appointed, then the matter in difference shall be referred for final decision to some person to be appointed by the Company, and a Government Examiner of Railway Accounts, or some other person to be named by the Secretary of State, or in case of their being unable to agree, to a referee to be named by them. The costs of any such reference shall, unless the Secretary of State shall otherwise direct, be included in working expenses.

As to Working Expenses, and the appropriation of Receipts.

53. Working Expenses shall include all costs and expenses incurred by the Company, with the sanction of the Secretary of State, in or about the maintenance, management, and working of the open system and all other sums, if any, proper to be allowed out of revenue in connection with the maintenance, management, or working of the open system or

in connection with the conduct of the affairs of the Company in relation thereto and which shall be sanctioned by the Secretary of State.

54. In the Working Expenses of any half-yearly period there shall be reckoned, in so far as they are attributable to such period—

- (1) Such portion (if any) of general charges as may with the sanction of the Secretary of State be charged to revenue.
- (2) All expenditure incurred by the Company, with the sanction of the Secretary of State, or by the Secretary of State, in keeping the open system in good repair and in good working condition, and fully supplied with rolling-stock, plant, and machinery, except such part, if any, of such expenditure as may, with the sanction of the Secretary of State, be charged to capital.
- (3) All expenditure incurred by the Company, with the sanction of the Secretary of State, or by the Secretary of State, in keeping the rolling-stock, plant, and machinery belonging to the open system in good repair and in good working condition.
- (4) All expenditure incurred by the Company, with the sanction of the Secretary of State, or by the Secretary of State, in the execution of any works chargeable to revenue.
- (5) So much of the cost of providing and maintaining a police force for the purposes of the open system as is not agreed to be borne by the Secretary of State.
- (6) The cost of any reference that may arise on the audit of any of the accounts of the open system or any part of it, and such of the costs of any reference under the 51st or 52nd sections as the Secretary of State shall not direct to be otherwise treated, and the costs of and incidental to the preparation of the returns and statistics mentioned in the 72nd section of this Contract.
- (7) Such sums as under the provisions of the 20th section of this Contract are properly chargeable to revenue.
- (8) Such sums as, according to the rules for the time being in force of the State Railway Provident Institution, and of the Company's Provident Institution, shall from time to time be payable to or for the purposes of those institutions, without being dependent or contingent on the amount of the net earnings of the undertaking and of Railway No. 1 respectively.
- (9) The charges of the Government Telegraph Department for rent, maintenance, and inspection of the telegraphs and telegraphic appliances provided for the use of the open system.
- (10) Such a sum, not exceeding in any half-year Rs 20 per mile of railway forming part of the open system, as may be required by the Secretary of State to cover the costs and charges of and incidental to the supervision, audit, and control of the Company in respect of the open system by the Secretary of State (being the sum hereinafter provided by section 65).
- (11) All reasonable legal expenses, whether incurred by the Secretary of State, or with his sanction by the Company, in connection with the open system, and all such other expenses as the Secretary of State and the Company agree to treat as part of the working expenses of the open system.

And in so far as they are attributable to any previous period or periods—

- (12) All undischarged working expenses.

55. Working expenses shall be divided between the undertaking and Railway No. 1 in proportion to their respective gross earnings during the period for which such expenses are debitable. The share of working expenses attributable to the undertaking shall be paid out of the gross earnings of the undertaking and shall so far as possible be borne by the gross earnings of the half-year to which such working expenses are properly debitable, and the balance of the said gross earnings shall be the "net earnings" of the undertaking. The share of working expenses attributable to Railway No. 1 shall be retained by the Secretary of State from the gross earnings of Railway No. 1, and the balance of the said gross earnings shall be the "net earnings" of Railway No. 1, and shall, as soon as ascertained, be paid over to the Company.

56. The net earnings in each half-year of the undertaking shall be applied in the following manner and in the following order:—

- (1) In payment of such sums (if any) as according to the rules for the time being in force of the State Railway Provident Institution hereinbefore mentioned shall from time to time be payable, with the sanction of the Secretary of

State, to or for the purposes of that Institution, and being contingent on the amount of the net earnings of the undertaking. The amount of earnings remaining after making this payment shall for the purposes of this section and of section 38 hereof be the "profits" of the undertaking for the same half-year.

- (2) In payment to the Company in rupees of the equivalent of the interest for the same half-year to be paid by the Company in respect of the capital raised by the issue of debentures in pursuance of section 35, but not during such period or periods as such interest or any part of such interest shall be chargeable to account of capital under section 38 hereof; and also of the equivalent in rupees of the interest for the same half-year at the rate of 4 per cent. per annum on any further moneys supplied by the Company with the sanction of the Secretary of State for the purposes of the undertaking in pursuance of section 37 hereof.
- (3) In payment to the Secretary of State of the interest for the same half-year at the rate of 4 per cent. per annum on the amount standing to the debit of Part I of the Capital Account.
- (4) And the residue (if any) shall be divided between the Secretary of State and the Company in the ratio of their respective shares of capital as specified in section 49 of this Contract, and the proportion thereof which shall be found to belong to the Company shall, as soon as ascertained, be paid over to the Company in India.

Provided always, and subject to the provision of section 38 of this Contract that if in any year the aggregate of the profits of the two half-years of any such year shall not be sufficient to provide for the payment in sterling money of the interest on the said debenture capital for the same year, the Secretary of State will supply to the Company such sum in rupees as shall be necessary with the said profits to provide for the payment in sterling money of such interest, but so far only as the amount of rupees required to provide for the payment in sterling money of such interest shall not together with the said profits exceed the sum of Rs6,000. And the Company will supply all moneys in excess of Rs6,000 in any year required to provide for the payment in sterling money of such interest, and will indemnify the Secretary of State against and repay to him any sum in excess of Rs6,000 which the Secretary of State may be required to pay in any one year by reason of his guaranteeing the payment of interest on the said debenture capital.

Provided also, and subject to the provisions of section 38 of this Contract, that all moneys which may be supplied to the Company by the Secretary of State in any year to make up the amount by which the said profits are insufficient to provide for the payment in sterling money of such interest, and also all moneys which the Secretary of State may have been called upon to pay by reason of his said guarantee, and the amount by which the said profits shall be not sufficient to pay interest to the Secretary of State pursuant to sub-section 2 of this section, shall be a charge upon the profits of subsequent years, and may be retained by the Secretary of State out of the profits of any year or years before division of the residue between the Secretary of State and the Company.

57. The moneys payable to the Company under section 56 shall not be deemed to be receipts of the Company as between the Secretary of State and the Company within the meaning of section 33 of this Contract, or of sub-section 7 of section 40 and sub-section 5 of section 42 of the original Contract.

As to Running Powers and other Facilities and Accommodation for other Railways.

58. The Secretary of State may from time to time require the Company to allow the use of the undertaking or any part thereof opened for traffic for the passage of engines and trains from or to other railways of the same gauge upon the payment of reasonable tolls and under reasonable conditions and restrictions.

59. The Secretary of State may from time to time require the Company to supply other railways with any of the rolling-stock of the undertaking which shall not for the time being be required for the purposes thereof upon reasonable terms and conditions.

60. The Secretary of State may from time to time require the Company to execute work in the workshops of the undertaking in respect of rolling-stock and machinery belonging to State railways at such reasonable prices and upon such terms as shall be agreed upon between the Secretary of State and the Company, but so nevertheless as not to impede or unduly interfere with the ordinary operations of the Company in respect of the undertaking.

61. The Secretary of State may from time to time require the Company to make

reasonable arrangements for the interchange of traffic and rolling-stock between the undertaking and other railways, and for through booking.

62. The Secretary of State may from time to time require the Company to allow the use of any of the stations forming part of the undertaking for the accommodation of the traffic of any railway belonging to any other Company, or to the State, or to any allied tributary or foreign State, upon the payment of reasonable tolls and under reasonable conditions and restrictions; and may also require the Company to make such alterations and additions as may, in the opinion of the Secretary of State, be necessary or convenient for the purposes of such accommodation, upon such terms as may be agreed upon between the Secretary of State and the Company; and may also require the Company to allow junctions to be formed between any of the railways forming part of the undertaking and railways belonging to any other Company, or to the State, or to any allied tributary or foreign State.

As to the Construction and Working of Branch or other Railways.

63. The Secretary of State may require the Company, upon such terms and conditions as may in each case be agreed upon between the Secretary of State and the Company, to construct any such branch or extension railway of the same gauge in connection with any of the Railways Nos. 1, 2, 3, and 4, as the Secretary of State may in his discretion think fit, and to work upon such terms and conditions as may in each case be agreed upon between the Secretary of State and the Company any and every railway so constructed, or any other railway of the same gauge convenient to be worked as auxiliary to or in connection with Railways Nos. 1, 2, 3, and 4, or any part thereof, or any branch or extension railway constructed pursuant to this section.

The Company to comply with the Requirements of the Secretary of State.

64. The Company shall with all reasonable speed comply with all such requirements as the Secretary of State shall from time to time make in accordance with this Contract.

As to the Supervision and Control of the Secretary of State.

65. In all matters relating to or affecting the undertaking, and not herein specially provided for, the Company shall be subject to the supervision, audit, and control, as well in India as in England, of the Secretary of State. The Secretary of State shall be entitled to charge half-yearly for his supervision, audit, and control of the Company such a sum as he shall think fit, not exceeding the rate of ₹20 per mile of railway forming part of the undertaking, or of Railway No. 1, so far as for the time being either constructed or under construction. The half-yearly charge to be made by the Secretary of State under this section shall cover a moiety of the salary in respect of audit of such joint-auditor or joint-auditors as aforesaid (if any), and shall, until the whole of Railway No. 4 shall have been opened for public traffic, from time to time be apportioned between revenue and capital in such manner as that so much of the half-yearly charge as bears the same proportion to the entirety thereof as the length of railways opened for public traffic at the time when the half-yearly charge is made bears to the whole length of railways on which the same charge is to be calculated, shall be charged to account of revenue, and that the residue thereof shall be charged to account of capital. As from the time when the whole of the undertaking for the time being shall have been opened for public traffic the half-yearly charge to be made by the Secretary of State under this section shall be charged to account of revenue exclusively.

66. For the purposes of inspecting the undertaking and Railway No. 1, and auditing the accounts of the Company, or otherwise exercising such supervision and control as are intended to be reserved to the Secretary of State by this Contract, the Secretary of State may from time to time appoint such person or persons as he may think proper, with such powers as he may consider necessary or expedient, and the Company shall afford every person so appointed all reasonable facilities for the purpose of enabling him to perform the duties entrusted to him by the Secretary of State.

67. Whenever any duly authorised inspecting officer, acting on behalf of the Secretary of State, shall report to the Government of India that in his opinion the use of the undertaking or of any particular part thereof will be attended with danger to passengers, the undertaking or the part thereof referred to in the report, as the case may be, shall, upon the requisition of the Government of India, be forthwith closed so far as regards the conveyance of passengers, and shall not be re-opened for that purpose unless and until such an inspecting officer as last above mentioned shall have subsequently inspected the undertaking or, as the case may be, the part thereof for the time being closed, and have certi-

fied the undertaking or, as the case may be, the part thereof for the time being closed to be fit and safe for the conveyance of passengers.

68. The Secretary of State may from time to time prohibit the Company from using any engine, carriage, wagon, vehicle, machine, or appliance of any description whatsoever of which the use shall be declared by a duly authorised inspecting officer, acting on behalf of the Secretary of State, to be attended with danger to passengers or to the public, and the Secretary of State may by taking into his custody such engine, carriage, wagon, vehicle, machine, or appliance, or by such other means as he shall think fit to employ, prevent the Company from using the same.

69. The Company shall, to the satisfaction of the Secretary of State, record and keep in proper books full and particular accounts of all its transactions and proceedings, including full and true minutes of all its meetings, meetings of Directors, communications with India, and correspondence in any way relating to or affecting the undertaking and Railway No. 1, or the business thereof, or any of the matters or things included or referred to in this Contract, so as at all times to exhibit fully and truly the state of its affairs in relation thereto; and the Secretary of State, or any person or persons appointed by him in that behalf, shall at all reasonable times have free access, as well in India as in England, to all the books, accounts, papers, and documents of the Company relating to the undertaking and Railway No. 1, with power to call for or make copies of or extracts from the same.

70. Any notice, direction, requisition, appointment, certificate of opinion, approval, or sanction to be given or signified on the part of the Secretary of State for any of the purposes of this Contract shall be sufficient and binding if in writing signed by the Secretary of State or one of his Under Secretaries, or by a Secretary of Government in India, or by any other officer or servant duly authorised to act on behalf of the Secretary of State in respect of the matters to which the same shall relate, and the Secretary of State shall not in any case be bound in respect of the matters aforesaid unless by some writing signed in the manner before mentioned.

71. The Company shall at all times during the continuance of this Contract keep an office established at some place in India to be determined from time to time by the Secretary of State, and shall keep at the said office an authorised agent or committee of agency, with whom the Secretary of State and the Government of India, or other officer or officers deputed in that behalf, may communicate on affairs concerning the undertaking; and all drafts drawn and receipts given by the said agent or committee of agency, or under his or their authority, on behalf of the Company, concerning the undertaking and the affairs thereof, shall be binding on the Company; and every notice to be given to the Company, other than any notice to be given under the 78th section of this Contract, shall be sufficiently given if left at the said office or personally served on the said agent or any member of the said committee of agency.

Miscellaneous Provisions.

72. The Company shall from time to time make such returns and furnish such statistics relating to the undertaking, in such form, and under such heads and divisions, and with such details, as the Secretary of State may from time to time require. The costs of preparing such returns and statistics and incidental thereto shall be included in working expenses.

73. No claim shall be made upon the Secretary of State by the Company for compensation in respect of the prejudicial effect upon the undertaking or the profits thereof of any Act of the Indian Legislature for the time being in force; and the Company and the undertaking shall be subject to the provisions of every such Act, and no claim shall be made upon the Secretary of State by the Company for compensation in respect of the prejudicial effect upon the undertaking or the profits thereof of any treaty, convention, or agreement for the time being in force between the Secretary of State and the Government of any allied tributary or foreign State; and the Company and the undertaking shall be subject to the provisions of every such treaty, convention, or agreement as mentioned in this section.

74. The Company shall not acquire either absolutely or for any limited estate any land situate in the dominions of any allied tributary or foreign State, or any rights or easements in, over, or in respect of any land so situate. The expression "land" includes as regards the operation of this section buildings, lands, and all other hereditaments of whatever description. This section does not apply to any land of which possession may be given to the Company by the Secretary of State.

75. No communication or negotiation of any kind in respect of any matter whatever shall be made or conducted by or on behalf of the Company to or with the Government

of any allied tributary or foreign State, or with any officials of any such Government as last aforesaid, except under the control of the Government of India, and in such manner and under such rules as the Government of India shall from time to time direct in that behalf.

76. The Company shall, if required by the Secretary of State, maintain and manage the State Railway Provident Institution for the benefit of the Government servants, members thereof, employed upon the undertaking, upon such terms and under such rules and regulations as shall from time to time be approved by the Secretary of State.

As to Determination of the Contract.

77. In the event of the original Contract terminating by effluxion of time, or by or under notice of purchase or notice of determination, this Contract shall *ipso facto* terminate at the same time.

78. The Secretary of State may determine this Contract on the 31st day of December 1900, or on the 31st day of December in any subsequent year, upon giving to the Company in London not less than twelve calendar months' previous notice in writing of such determination, and upon the expiration of such notice this Contract shall thereupon absolutely cease and determine, but without prejudice to the rights of either party against the other in respect of any covenant herein contained which may have been previously broken.

79. If there shall be any breach on the part of the Company (whether by act or omission or default) of any of the stipulations or provisions of this Contract on the part of the Company to be performed or observed, and the Company shall fail to remedy effectually any such breach as aforesaid within six calendar months after notice in writing to remedy the same shall have been given to the Company in England by the Secretary of State, he may, on or at any time after the expiration of the six calendar months last aforesaid, determine this Contract by giving to the Company in England notice in writing of such determination.

80. Upon the determination of this Contract under any of the three sections lastly herein-before contained, the Company shall give to the Secretary of State possession of the undertaking, together with the rolling-stock, plant, and machinery belonging thereto, and all stores in hand or in course of delivery on the day of the determination of the Contract, and all plans, books, surveys, sections, printings, writings, and documents whatsoever in any wise connected with the undertaking, and all other property (if any) belonging or appertaining thereto, and shall pay to him all moneys in their possession on account of the undertaking. And after such possession shall have been given, and after all moneys which under this Contract shall have become payable to the Secretary of State shall have been duly paid, the Secretary of State shall be bound to indemnify the Company, their property and effects, against all such debts and liabilities (if any) as they may have incurred with the sanction of the Secretary of State, and which shall be then subsisting.

Provided always, that all stores in hand or in course of delivery on the day of the determination of this Contract shall be divided between the Secretary of State and the Company upon such terms as may be agreed upon between them, and that all such stores as may be apportioned to the Company shall be taken over by the Company at the value thereof as shown in the Stores Account, and the said value shall be paid by the Company to the Secretary of State.

81. Upon the determination of this Contract under any of the provisions herein contained the Secretary of State shall at his option out of the revenues of India either pay to the Company in London an amount equal to the amount which shall have been paid by the Company conformably with this Contract in respect of the said sum of 160,000*l.* and also an amount equal to the aggregate of any such further sum or sums of money (other than in respect of the said sum of 160,000*l.* or any part or parts thereof) as shall have been paid by the Company into the Bank of England to the credit of the Secretary of State pursuant to this Contract, or out of the revenues of India pay to the Company in India the equivalent in rupees at the market rate of the day for bills drawn on London by the Secretary of State, payable on demand, of the aggregate of the amounts which, if the Secretary of State had exercised his option under this section of making payment in London, would under this section have been payable by him to the Company in London. Provided always, that the Secretary of State may, if he shall so think fit, relieve himself of the liability under this section to repay to the Company the amount paid by the Company in respect of the said aggregate of the amounts by taking upon himself the sole liability to pay any or all of the principal moneys and interest secured by the debentures

or other securities issued by the Company pursuant to this Contract for the purpose of raising the money so paid by the Company. Provided, nevertheless, that the Company shall not be entitled under this section to receive any money unless or until it shall in substance have performed and discharged its duties and obligations under the last preceding section of this Contract.

Arbitration.

82. If the Secretary of State and the Company shall fail to agree touching any matter with respect to which their agreement is required by this Contract, or if in any case not herein specially provided for any dispute, question, or controversy shall at any time arise between the Secretary of State and the Company touching these presents or any section or thing herein contained, or the construction hereof, or any matter connected with these presents, or the operation hereof, or the rights, duties, or liabilities of either party in relation to the premises, then and in every such case the matter as to which the Secretary of State and the Company shall fail to agree, or the matter in difference, as the case may be, shall be submitted to two arbitrators or their umpire pursuant to and so as with regard to the mode and consequences of the reference and in all other respects to conform to the provisions in that behalf contained in the Arbitration Act, 1889, or any subsisting statutory modification thereof, and upon every such submission the arbitrators and umpires shall respectively have the powers by that Act conferred upon arbitrators and umpires respectively, and in every such submission the provisions mentioned in the 1st Schedule to that Act shall be implied.

In witness whereof MAJOR-GENERAL SIR OWEN TUDOR BURNE, K.C.S.I., C.I.E., and SIR ALEXANDER JOHN ARBUTHNOT, K.C.S.I., C.I.E., being two Members of the Council of India, have hereunto set their hands and seals, and the Rohilkhand and Kumaun Railway Company, Limited, have hereunto caused their common seal to be affixed, the day and year first above written.

APPENDIX N.

Agreement between the Southern Mahratta Railway Company and the Madras Railway Company for working the Bangalore City Junction Station.

MEMORANDUM OF AGREEMENT made on the 20th day of November 1890 between the Southern Mahratta Railway Company and the Madras Railway Company for the interchange of traffic, and for

Preamble.
the use in common by both Railways of the Madras Railway Company's station at Bangalore City; also for additions and alterations which may be required thereat from time to time for the traffic of both Railways, as well as for the maintenance and renewal of the works and premises and the working of the traffic of the two Railways at that station.

1. This Agreement shall be considered as having effect from the 1st January 1891 and shall be subject to revision from time to time, but shall remain in force until the expiration of not less than six months' notice from either Company, such notice to expire only on the 30th June or 31st December in any year.

2. The Company giving notice of its desire to revise the Agreement, or any part of it, shall give six months' notice, and submit a statement of its reasons for desiring a change, and shall within three months of giving such notice submit revised proposals, failing which the Agreement shall run on until the expiry of three months after the date upon which revised proposals have been forwarded to the other Company, provided always that by mutual consent a change may be made in the Agreement at any time.

3. The limits of Bangalore City Junction Station for the purposes of this Agreement shall be the distant signal on each side of the station.

4. All descriptions of traffic are to be booked through between such stations of the two Railways, as may from time to time be arranged between the Traffic Managers of the two Companies.

5. The interchange of traffic under this Agreement shall include traffic to or from other Railways, with which either contracting Company has established, or may hereafter establish through booking. This interchange of traffic shall be carried on in accordance with the Conference Rules in force at the time, as far as these are applicable to the traffic and working between Railways of different gauges, and except where the Conference Rules are opposed to the clauses of this Agreement.

6. The Joint Staff for working Bangalore City Junction Station shall be appointed and controlled by the Madras Railway Company, the cost to be charged to Joint Station Expenses Account.

7. Each Railway working into Bangalore City Junction shall provide its own Telegraph staff and its own staff of Goods Clerks and Porters, &c., for the conduct of its local goods traffic.

The Southern Mahratta Railway may at any time provide a separate staff of number-takers at its own expense for its own purposes, but the returns and reports of such number-takers shall be submitted through the Joint Station Master.

8. The business of each Railway shall have equal attention at the hands of the Joint Staff who must carry out the instructions of properly authorised officers of each railway with reference to traffic for the respective lines.

9. Each Railway shall be furnished by the Joint Staff with any returns it requires regarding detentions to its own rolling-stock and regarding all other matters relating to its own working.

10. The Madras Railway Company's existing works and premises to be used in common for joint purposes by both Railways shall be fixed by Agreement.

The Madras Railway Company shall from time to time provide the amount chargeable to Capital which is required to be expended for joint use of the two Railways upon additions and alterations of the

existing premises, as fixed by Agreement, and upon new premises or works which may have to be provided for joint use within the limits of the Joint Station.

All such new works and additions and alterations shall be executed by the Madras Railway Company upon plans and estimates which shall be agreed to by both Railways before the work is commenced.

New Works.
11. Upon the total amount expended from time to time from Madras Railway capital on premises furniture and fittings used in common by both Railways, an annual rent of 7½ per cent. shall be charged to the Joint Station Expenses Account to cover interest and maintenance.

Rent.
12. Any expenditure which may be required from time to time for joint use of both Railways upon new minor works and upon minor additions and alterations of existing premises which is chargeable to Revenue under the Rules in force from time to time on the Madras Railway Company, shall be debited to the Joint Station Expense Account.

Expenditure on Joint Works.
 The Madras Railway Company shall execute all such additions and alterations and minor new works chargeable to Revenue upon plans and estimates which shall be agreed to by both Railways before the work is commenced, and shall also execute the work of maintenance and renewal of all premises and works which are used in common from time to time by both Railways within the limits of the Joint Station.

13. Upon the termination of this Agreement the amount of compensation to be paid by either Railway to the other for capital expenditure incurred shall be determined by mutual agreement or if necessary by arbitration as provided for in clause 41.

Termination of Agreement.
14. Each Company shall provide and maintain, at its own cost, all accommodation that may be required for its own exclusive use, and each Railway shall provide and maintain its own permanent way and signals.

Maintenance.
15. Each Company shall provide, at its own cost, all stores, and stationery required for its own exclusive use, and will make its own arrangements for cleaning and greasing its own vehicles.

Stores, cleaning and greasing.
16. All expenses, which under this Agreement are chargeable to Joint Station Expenses, shall be divided in proportion to the weight of traffic of each Railway using the station. The weight of Coaching Traffic shall be reckoned according to the following scale:—

1. For each passenger of whatever class, 1 cwt.
- „ child's ticket, 56lb.
2. For horse or each head of horned cattle, ½ ton.
3. „ sheep, calf, goat, pig, dog or other small animal, 56lb.
4. Parcels at actual weight.
5. Carriages each, ½ ton.

17. All sums realised by the sale of lost property, unclaimed goods, licenses, &c., collected at Bangalore City Junction Station, are to be credited to Joint Station Expenses Account.

Credit to Joint Station Expenses Account.
18. Any breach of Rules and Regulations by servants of the Southern Mahratta Railway Company within Bangalore City Station limits shall be dealt with by the Traffic Managers of the two Railways, and in case of dispute as to the interpretation of the Rules and Regulations, the matter shall be referred to the Agent and Manager of the Madras Railway, whose decision shall be final.

19. All damages or accidents which may be caused by Joint Station staff, to the public, to the stock of either Railway, or to trains and traffic within the limits of the station, and all damages or losses which either Railway may sustain or be put to in consequence of the acts of the joint station staff however arising, within the limits of the station, shall be charged to Joint Station Expenses.

Damages or Accidents.
20. Each Railway shall be responsible for damages or accidents caused by its own Running staff within station limits.

Damages or Accidents.
21. Notice of all accidents, damages and losses, which occur within station limits, shall be sent to the officers of both Railways immediately.

Letters and Telegrams.
22. Letters and telegrams relating to joint business and through traffic shall be interchanged free of charge between the two Railways.

Local Traffic.
23. Traffic booked to or invoiced from the Bangalore City Station by either Railway shall be considered local traffic.

24. The station books (with the exception of the local goods books) shall be kept by the joint staff, but they shall at all times be open to inspection by any authorised officer of either Railway.
- Station Books.
25. The instructions of each Railway as to charges on traffic for their respective lines shall be furnished by the Traffic Managers of the respective Railways to the Joint Station staff, and must be acted upon.
- Instructions.
26. No terminal on account of Bangalore City Junction shall be charged on through traffic by either Company. Each Company shall furnish the other from time to time with lists of the rates and fares between Bangalore City Junction and its respective stations.
- Terminals Rate lists.
27. The distance between Bangalore City and other stations shall be furnished by each Railway to the other, but the amounts to be charged upon through traffic shall be furnished by the Railway concerned in the form of Station-to-Station Rates in order to avoid any calculation of charges according to distance.
- Station-to-Station rates.
28. Minimum charges on goods, luggage and parcels shall be divided between the Companies concerned in proportion to mileage, subject to a minimum of 4 annas in the case of luggage.
- Division of minimum charges.
29. Each Railway shall be responsible for collecting all charges due to the other on all traffic received, with the exceptions noted below, for which the forwarding Railway shall be responsible, *vis.*—
- Responsibility of each Railway for collecting charges.
- (a) Charges on live stock of every description.
- (b) Charges on all perishable articles booked either as goods or parcels.
- (c) Charges on Commissariat Ordnance, and Government Medical Stores booked on Credit Note, or prepaid.
- (d) Passenger fares, freight on passengers' luggage, carriages, &c., and charges for insurance.
- (e) Charges on all articles booked and carried with owners.
30. All errors of calculation made by forwarding stations in booking luggage, parcels, horses, carriages and dogs as well as goods when such errors do not exceed annas two pies five shall not be subject to adjustment. This rule shall also apply to errors made in apportioning the mileage charges due to each Railway.
- Errors in calculation.
31. The receiving Railway shall not reduce below the charge mentioned on the invoice or through way-bill, without consent of the forwarding Railway except in case of over-charges, the evident result of errors in rates classification or calculation.
- Altering invoices.
32. Under-charges on consignment, whether "Paid" or "To Pay," unless booked under Credit Note, shall be debited to the receiving station with the exception of items included in clause 29.
- Under-charges.
33. All over-charges not claimed shall belong to the Railway Company by which the charges are collected.
- Over-charges.
34. Goods claims not arising from any act or negligence of the Joint Station staff shall be borne by the Railway in whose custody the loss or damage occurred, and when this cannot be ascertained with certainty, the claim shall be divided in proportion to mileage.
- Adjustment of claims.
- The junction record as to number of articles received and transhipped as well as to the exterior condition of goods when unloaded from either Company's wagons shall be held to determine liability unless error can be demonstrated. When goods are reweighed at the junction the record of reweighment shall be held to be correct. The absence of remark by the Junction staff shall be held to imply that the number and description of packages as described by the sending station are correct and that the packages were externally in good order at the time of transhipment.
35. The transhipment of all goods intercharged shall be performed by the Madras Railway, either by Contract or day labor, and the cost of the same shall be charged to Joint Station Expenses.
- Transhipment.
- The usual demurrage penalty shall be payable by either Company failing to supply wagons in time to permit of the release of the other Company's stock within 36 hours.
36. All stock shall be considered as handed over to the Joint Station staff when it is entered in the number-takers' books at the Junction Station and it shall be so entered directly it is placed in the tranship sidings. The joint staff shall be allowed 36 free hours for the transhipment of goods from broad to narrow gauge wagons or *vice versa*, and if such wagons under load are
- Delivery of Rolling-Stock at Bangalore City Junction.

not released of their loads within that time the usual demurrage penalty shall be enforced and this penalty shall be a charge against the Joint Station.

37. If at any time, either Railway shall be unable from any cause to receive and forward all the traffic tendered or likely to be tendered by the other, it shall be competent for the receiving Railway to give notice of not less than 7 days, naming the maximum quantity it will be prepared to receive and forward, and the period during which the restriction will be necessary, and during such period the said Railway shall not be bound to receive more than the quantity so specified.

Notice to limit traffic.

38. In booking luggage, fractions of 5 seers shall be charged as 5 seers, and in booking goods fractions of 10 seers shall be charged as 10 seers.

Fractions of weight.

39. In calculating charges, fractions of an anna above 5 pies are charged as one anna, and this rule applies not only to the gross charge made to the public, but also to each Railway's proportion as well as to Government and private baggage booked on a warrant.

Fractions of cash.

40. The Audit Offices of the two Railways shall exchange Weekly Division Sheets, each Railway to have in division its own rates and fares as quoted for through traffic in accordance with clause 27 (except in the case of insurance and traffic divisible by mileage between the Railways concerned), and shall account for all inward through goods, live stock, parcels and outward coaching (except parcels) traffic within six weeks from the date the traffic passes Bangalore City Junction. A monthly settlement of accounts, based on division sheets, bills and statements as rendered, and declared, shall be made by transfer adjustment, on the understanding that all errors which may be in them will be adjusted without delay in subsequent accounts by the responsible Railway.

Adjustment of accounts.

41. In case of any difference of opinion between the two Railways as to the construction of any part of this Agreement, or as to its application to any particular case, it shall be open to either Railway to call for arbitration, to be conducted in the ordinary way, each Railway nominating its own arbitrator, and should the arbitrators so appointed fail to agree, they, that is the arbitrators, shall nominate an umpire. The decision of the arbitrators or their umpire shall be final and binding on both Railways in regard to the matter or matters which may be referred to them or him. But if either Railway fail to nominate an arbitrator within eight weeks after notice to call for an arbitration has been given to it by the other Railway, such other Railway may nominate its own arbitrator, and in such case the decision of the one arbitrator so appointed shall be binding and conclusive upon both Railways.

Disputes.

APPENDIX

MADRAS RAILWAY AND SOUTHERN MAHRATTA RAILWAYS, BANGALORE CITY JOINT
STATION AGREEMENT OF 1ST JANUARY 1891.

Schedule of expenditure on Works and Fittings at the Bangalore City Station to be used in common by the Southern Mahratta and Madras Railway Companies, rent upon which is chargeable to the Joint Station Expenses Account, under the provisions of clause 11 of this Agreement.

No.	Description of Works.	Amount of Expenditure.		
		R	a.	p.
1	Alterations and Additions to Station House	5,580	10	1
2	Taking up slope terrace of front and back Verandahs of Station House and re- newing the same with Corrugated Iron	1,492	9	9
3	Amount expended on Station House by Mysore State Railway, and paid to them on 16th March 1881	6,601	0	6
4	Shed 200 feet long over Transfer Platform	21,434	13	1
5	Narrowing Good Shed do. do.	427	4	0
6	Amount expended on Goods Shed Transfer Platform Face wall by Mysore State Railway, and paid to them on 16th March 1881	2,031	7	0
7	Amount expended on Double Staff Quarters No. 2 by Mysore State Railway, and paid to them on 16th March 1881	3,769	1	11
8	Masonry in Drain in Station Yard	4,027	11	6
9	Making up Road Way	5,466	11	8
10	Well 6 feet diameter lined with Stone	194	13	0
11	Four-arm Signal	388	1	2
12	Passenger Platform	6,595	2	4
13	Sub-Way	8,190	9	4
14	Crane on Transfer Platform	4,736	13	9
15	Face wall of Tranship Goods Platform, Mysore Railway Side	4,800	11	7
16	Altering position of the Crane on the Tranship Platform, and building Face wall and Stone foundation to the same	466	9	11
	TOTAL	76,204	2	7

APPENDIX O.

This Indenture, made the 24th day of November, 1890, BETWEEN THE SECRETARY OF STATE IN COUNCIL OF INDIA of the one part, and THE SOUTH INDIAN RAILWAY COMPANY, LIMITED, of the other part.

WITNESSETH and it is hereby agreed and declared as follows :—

Interpretation of Terms.

1. In this Contract, unless there is something repugnant in the subject or context—
 - (a) "The Secretary of State" means the Secretary of State in Council of India.
 - (b) "The Company" means the South Indian Railway Company, Limited.
 - (c) "The old Company" means the South Indian Railway Company, incorporated by an Act of Parliament passed in the session of the 37th and 38th years of the reign of Her present Majesty, intituled "The South Indian Railway Act, 1874."
 - (d) "The purchased railway" means the railways and works of whatever description, together with the land, rolling-stock, plant, and machinery, forming the undertaking of the old Company on the 31st December 1890.
 - (e) "The unfinished railway" means the railways (together with the land, rolling-stock, plant, and machinery belonging thereto) connecting Villupuram, a station of the purchased railway, and Guntakal *via* Pakal, with a branch to Nellore from Pakal, part of which has been opened for public traffic, and is now being worked on behalf of the Secretary of State by the old Company, and part is in process of construction on behalf of the Secretary of State by the old Company.
 - (f) "The undertaking" means the purchased railway and the unfinished railway, or such part or parts of those railways as for the purposes of this Contract shall on the 1st January 1891 be handed over to, or may at any time after the aforesaid date, in accordance with the provisions of this Contract, be left in the possession of the Company, together with any improvements, alterations, and additions of whatever description that may from time to time be made therein or thereto, with the sanction of or by the Secretary of State, but with the exception of the telegraphs and telegraphic appliances used or to be used thereon.
 - (g) The undertaking or such part or parts thereof as may for the time being have been opened for the public carriage either of passengers or of goods or animals shall be deemed to be open for public traffic.
 - (h) "The open system" means and includes such part or parts of the undertaking as may for the time being be open for public traffic.
 - (j) "The gross earnings of the undertaking" means and includes all receipts from coaching and merchandise traffic over the open system and from the carriage of mails thereon, and the use of the telegraphs, and all other sums received in respect thereof as rents, tolls on bridges, and from all other sources the receipts from which are treated as revenue on Indian railways generally, and also any moneys payable by the Secretary of State, in respect of any branch or extension railway made part of the undertaking in accordance with the provisions of section 9 of this Contract, under the obligation thereby undertaken by him to make up the average weekly gross earnings of any such branch or extension railway to the amount and for the period specified in the last-mentioned section.
 - (k) "Working expenses," when not qualified or limited, means and includes the expenses incurred with the sanction of or by the Secretary of State in or about or in connection with the management, maintenance, and working of the open system.
 - (l) "Net earnings" and "net revenue receipts" respectively have the meanings attributed to those expressions respectively in section 59 of this Contract.

Duration of Contract.

2. This Contract shall continue in force for a term of 20 years, commencing on the first day of January 1891, subject to the provisions hereinafter contained for determining the same.

As to Railways to be taken over by the Company and matters connected therewith.

3. On the said first day of January 1891 the Secretary of State for the purposes of this Contract shall hand over to the Company, and the Company shall accept, the purchased railway and the unfinished railway, together with all works connected therewith then made or in progress, and the rolling-stock, machinery, and plant then used thereon or appropriated or in course of construction or under supply therefor, together with copies of all plans, specifications, and working drawings of the said works, rolling-stock, and other equipments, but with the exception of the telegraphs and all telegraphic appliances appropriated to the said railways, and as from the aforesaid day and during the continuance of this Contract the Company shall maintain and work the open system.

4. On taking over the said railways, or so soon thereafter as may be, the Secretary of State shall deliver to the Company, and the Company shall accept for the purposes of the undertaking, all serviceable stores belonging to the said railways respectively that may be in hand or in course of delivery, except such, if any, as belong to the telegraphs or telegraphic appliances. An inventory of such stores shall be made and signed by or on behalf of the Secretary of State and the Company, and their value shall be entered in the Stores Account as hereinafter provided. The value of the unserviceable stores belonging to the said railways shall be charged off as respects those of the purchased railway in the Working Expenses of the open system within the year 1891, and as respects those of the unfinished railway in the Capital Account as hereinafter provided. The values in each case herein mentioned shall be as shown in the accounts relating to the said respective railways of the old Company and of the Secretary of State including loss by exchange on all payments made in England in part of the prime cost of the stores, both serviceable and unserviceable.

5. On taking over the said railways, or so soon thereafter as may be, an inventory of the railways, rolling-stock, plant, and machinery to be so taken over as aforesaid shall be made and signed by or on behalf of the Secretary of State and the Company, and the value at cost price, as shown in the Indian accounts of the old Company and the Government of the said railways respectively, and of the said rolling-stock, plant, and machinery, and of the plans, specifications, and working drawings, of which copies shall be so taken over as aforesaid, shall be entered in the Capital Account of the undertaking as hereinafter provided. Provided always that if the said accounts of the Government of the unfinished railway do not include the loss by exchange on all payments made in England in part of the cost of the unfinished railway and the cost price of the land occupied or used by the unfinished railway or for the purposes thereof, or either of such items, then there shall be further entered in the Capital Account aforesaid as the case may require the said loss by exchange and the said cost price of the land.

As to existing surveys for extensions, &c., and liabilities in connection with the Railways transferred.

6. All surveys and plans which the Secretary of State has caused to be made with the view of facilitating and expediting the construction of branches or extensions of either the purchased railway or the unfinished railway shall be made over to the Company, and the cost of the said surveys and plans as stated by the Secretary of State shall be debited to the Capital Account of the undertaking as hereinafter provided. Any now existing obligations or liabilities of the Secretary of State, under contracts for the supply of stores or materials or the execution of works for or in connection with either the purchased railway or the unfinished railway, shall be discharged by the Company from the moneys to be supplied to the Company pursuant to this Contract.

As to the completion of the construction of the unfinished Railway.

7. Subject to the requisite funds being provided according to the stipulations in that behalf hereinafter contained, the Company shall with due diligence and expedition, and in accordance in all respects with the directions of the Secretary of State, complete the construction to the satisfaction of the Secretary of State, and make ready and fit for opening for the public carriage of passengers throughout on routes determined or to be determined by him, and on land provided or to be provided by him as hereinafter stipulated, the unfinished railway, together with all such stations, station-yards, offices, warehouses, houses for employes, conveniences, and works as in the opinion of the Secretary of State shall be necessary or proper for the purposes of the said railway, either as regards

the due working of the same or as regards the permanence of the same, and the protection of the same from destruction or injury by inundation, tempest, or otherwise. Subject to the like conditions as to funds, diligence, and directions, the Company shall equip the said railway with rolling-stock, plant, and machinery to the satisfaction of the Secretary of State. The unfinished railway shall be of the metre gauge, and shall in general structural character and equipment conform with the standard of the purchased railway. Surveys, designs, and estimates in relation to the construction or equipment of the unfinished railway shall if required be furnished by the Company to the Secretary of State, and be subjected to his approval, or the Secretary of State may furnish designs to the Company, and the Company shall in that case be bound to follow them.

As to the re-transfer to the Secretary of State of parts of the Undertaking.

8. The Secretary of State may at any time, by giving six months' previous notice in writing, require the Company to re-transfer to him any part or parts of the railways comprised in the undertaking, and particularly the line of railway between Nellore and the North-West line of the Madras Railway, and the line of railway between Guntakal and Dharmavaram and the Mysore frontier (if extended to the Mysore frontier from Dharmavaram), including any extensions or branches thereof or any part or parts of the said railways respectively, and the Company shall retransfer the same accordingly with (if so required) a reasonable proportion of the rolling-stock, machinery, plant, and stores of the undertaking, and shall not claim or be entitled to any compensation in respect of such re-transfer other than the sums to be credited in the Capital Account and the Stores Account of the undertaking in respect of the value of the things re-transferred as herein provided. And as from the date or dates of such re-transfer the rights of the Company with respect to any such part or parts of the undertaking, and the telegraphs and telegraphic appliances used therewith shall absolutely cease and determine. The things re-transferred shall be valued as respects the stores at the values shown in the Stores Account, as respects the rolling-stock, machinery, and plant at their fair value as agreed upon between the Secretary of State and the Company, and as respects the part or parts of the railways (including land) on the basis of the capital cost of such part or parts so far as ascertainable from the accounts of the undertaking and as may be agreed upon between the Secretary of State and the Company.

As to the acquisition, construction, and working of Branch and other Railways.

9. The Secretary of State may require the Company to construct as part of the undertaking, or acquire either absolutely or on lease for a term of years or otherwise on behalf of the undertaking, any such branch or extension railway of the same gauge in connection with the undertaking as the Secretary of State may in his discretion think fit, and to work as part of the undertaking any and every railway so constructed or acquired; and every railway so acquired and worked shall thenceforth be and form part of the undertaking, and all the provisions of this Contract shall be applicable thereto. Provided that if during the three years immediately after the opening for the public carriage of passengers of any such branch or extension railway the average gross receipts per week per mile of such branch or extension do not in any half-year amount to 50 rupees, the Secretary of State will make good the deficiency. Provided also that the moneys required for any such construction or absolute acquisition as aforesaid of any such branch or extension railway shall be supplied by the Secretary of State, and the expenditure incurred thereon, with the sanction of or as certified by the Secretary of State, shall be included in the Capital Account of the undertaking as hereinafter provided.

10. The Secretary of State may require the Company to construct, on behalf of any Local Authority or any allied tributary or foreign State, any such branch or extension railway of the same gauge in connection with the undertaking, or any other railway in connection with the undertaking, as such Authority or State may desire to have worked through the agency of the Company, and the Company shall, if and when required so to do by the Secretary of State, accept and work upon terms to be specially agreed upon in each case between the Company and the said Authority or State with the sanction of the Secretary of State any and every such railway whether existing or constructed through the agency of the Company or otherwise but no such railway shall form part of the undertaking. Provided that the moneys required for the construction through the agency of the Company of any such railway shall be supplied to the Company by the Authority or State concerned through the Secretary of State.

As to Land.

11. Subject and without prejudice to the stipulations contained in the next succeeding section of this Contract the Secretary of State shall from time to time provide the land which he shall consider requisite for the railways of the undertaking and for the stations, station-yards, sidings, crossing-places, bridges, viaducts, offices, warehouses, houses for employés, conveniences, and works necessary or proper for the purposes of the same railways, and shall allow the Company during the continuance of this Contract to have possession of the land so provided, as well as of the land occupied or used by or for the purposes of the railways to be taken over by the Company under the 3rd section of this Contract from the time of the same being so taken over. The Company shall from time to time, with the sanction of the Secretary of State, as soon as practicable relinquish to the Secretary of State, such of the land of which the Company shall have been allowed possession under this Contract as shall for the time being have become unnecessary to be retained possession of by the Company for any of the purposes of this Contract. And as often as in the opinion of the Secretary of State it shall appear to be unnecessary that the Company shall retain possession of any particular land of which the Company shall have been allowed possession under this Contract, the Secretary of State shall certify such his opinion to the Company. Upon receipt of such certificate, or so soon thereafter as may be, the Company shall state in writing whether it acquiesces in the opinion of the Secretary of State or whether it objects thereto, and if so, the grounds of its objection. If no objection is stated by the Company, or if the grounds of its objection (if any) are not in the opinion of the Secretary of State sufficient, the Company shall upon the requisition of the Secretary of State forthwith relinquish to him the land in question, and the Secretary of State shall be exclusively entitled to possession thereof.

12. The obligation of the Secretary of State under the last preceding section to provide land shall, as to any land therein mentioned which may be situate in territory not directly governed by Her Majesty or Her Majesty's Indian Government, not become absolute unless or until the Secretary of State shall himself acquire the land, which he shall not be under positive obligation to do, although he intends to acquire it if he can obtain it on reasonable terms by negotiation with any State or States concerned.

As to notification to Company of Route of Railways.

13. The Secretary of State shall from time to time notify to the Company the route of any railway forming or intended to form part of the undertaking so far as such route shall from time to time have been determined by him.

As to Situation of Stations, &c.

14. The Secretary of State shall have power to determine the situation and dimensions of and the particulars of all additions to and alterations and improvements in the stations, station-yards, offices, warehouses, houses for employés, conveniences, and works to be constructed or carried out from time to time in connection with or as part of the undertaking.

As to Equipment of Undertaking with Rolling-stock, &c.

15. The Company shall with due diligence equip the undertaking with all such additional rolling-stock, plant, and machinery as shall from time to time in the opinion of the Secretary of State be necessary for the purpose of working the undertaking, and shall make such alterations or improvements in the equipment as may in his opinion be required from time to time; and if the Secretary of State shall be of opinion that the Company shall at any time have failed duly to perform its obligations under this section, he may himself from time to time complete or alter or improve the equipment of the undertaking or any part thereof, in respect of all or any of the particulars specified in this section.

As to Telegraphs.

16. In addition to the electric telegraphs already established along or upon the purchased railway, and the unfinished railway the Secretary of State may from time to time establish such electric telegraphs as he shall think fit along or upon the undertaking, or any part or parts thereof, or any land or works belonging thereto, and may maintain and work the electric telegraphs already established or to be established as aforesaid as he shall think fit, and it shall be lawful for him for such purposes, or any of them (in addition to the general powers which it is hereby declared that he shall at all times have of enter-

ing by agent or otherwise upon all or any land of which he shall pursuant to this Contract have allowed the Company to have possession), to enter at all times, by his agents, workmen, or others, on any part or parts of the undertaking, or the lands or works belonging thereto, and to erect, place, maintain, make, do, and execute thereon all such buildings, machinery, works, appliances, acts, and things as the Secretary of State shall consider necessary or proper in relation to the construction, maintenance, use, and working of the said electric telegraphs. The Secretary of State shall be exclusively entitled to the possession of all buildings, machinery, works, and appliances erected or brought by him under the powers conferred on him by this section on the undertaking, or on any land or works belonging thereto. The Company shall at all times furnish the Secretary of State with such free passes over the undertaking, or any parts thereof, as he shall require for persons employed by him in or about or in connection with the construction, maintenance, working, or inspection of the electric telegraphs mentioned in this section, or any buildings, machinery, works, or appliances appertaining thereto.

17. The Secretary of State shall from time to time allow the Company to have the exclusive use of any such electric telegraphs and telegraphic appliances as he shall from time to time consider proper to be used by the Company for the purpose of safely or efficiently working the undertaking or any part or parts thereof. The Secretary of State shall maintain and keep in good repair and in good working condition the electric telegraphs and telegraphic appliances of which the Company shall for the time being be allowed to have the use.

18. The Company shall from time to time, upon demand by or on behalf of the Secretary of State, pay into such Government Treasury in India as shall from time to time be appointed for the purpose by the Secretary of State, the amount which the Secretary of State shall from time to time require the Company to pay in respect of the charges made from time to time by the Telegraph Department of Her Majesty's Indian Government for rent, maintenance, and inspection of the electric telegraphs and telegraphic appliances of which the Secretary of State shall from time to time under the last preceding section have allowed to the Company the exclusive use, such charges not to be in excess of similar charges for the time being in force in the case of State Railway telegraphs.

19. The Company, if so directed by the Secretary of State, shall in relation to any electric telegraphs or telegraphic appliances of which under the 17th section of this Contract it shall for the time being be allowed to have the use, observe the rules applicable to telegraphs and telegraphic appliances which shall for the time being be in force in the case of State Railway telegraphs, or such of the said rules as the Secretary of State may from time to time prescribe to be observed by the Company; and the Company, if so directed by the Secretary of State, shall account in such manner as shall be prescribed by the rules which shall for the time being be in force in relation to State Railway telegraphs, or as the Secretary of State shall require, for the receipts derived from the working of telegraphs and telegraphic appliances.

As to Police.

20. The Secretary of State shall provide and maintain for the purposes of the open system such a force of police as the Company, with the approval of the Secretary of State shall from time to time require; and if the Secretary of State shall consider that any addition to the force is required for the preservation of law and order for the purposes of the undertaking his determination on that point shall be final, and such addition shall be made accordingly. The cost of providing and maintaining the force of police required for the purposes aforesaid shall be defrayed in the following manner; that is to say, three-tenths shall be borne by the Secretary of State and the remaining seven-tenths shall be included in working expenses.

21. If the Company shall so desire, the Secretary of State will provide at the sole cost of the undertaking such a force of police as, with the approval of the Secretary of State, the Company shall from time to time require for the protection of so much of the undertaking as shall for the time being be under construction, or shall not have been opened for public traffic.

22. The cost of providing and maintaining any force of police from time to time provided and maintained by the Secretary of State under either of the two last preceding sections in relation to the undertaking or any part or parts thereof shall be taken to be as from time to time stated by the Secretary of State.

As to opening for Public Traffic.

23. The Company shall from time to time, when and as often as any part of the undertaking not previously opened for the public carriage of passengers is in a fit state and

properly equipped with rolling-stock, plant, and machinery for such carriage, give the notice prescribed by law of its intention to open such part, and on the opening thereof being sanctioned shall forthwith open the same part for the public carriage of passengers, and, if the Secretary of State shall so sanction, of animals and goods. Nothing in this section shall operate to prevent the public carriage of animals or goods on any part of the undertaking, the opening of which for the public carriage of passengers shall not have been sanctioned, provided that the Secretary of State shall have sanctioned the public carriage of animals or goods over such part.

As to the Maintenance and Management of the Undertaking.

24. The Company shall keep the undertaking and the stations and works belonging thereto in good repair, and shall also keep the open system and the stations and works belonging thereto in good working condition, and fully supplied with rolling-stock, plant, machinery, and stores to the satisfaction of the Secretary of State; and whenever the Secretary of State shall be of opinion that the Company is in any default as to any of the matters before mentioned in this section he may in writing notify the fact to the Company, specifying in such writing the general nature of the defect, and unless the defect be remedied by the Company within one calendar month after the notification thereof by him to the Company may himself remedy it, and charge the cost of the same as if done by the Company.

25. The Company shall keep the rolling-stock, plant, and machinery for the time being belonging to the undertaking and to every part thereof in good repair and in good working condition to the satisfaction of the Secretary of State; and whenever the Secretary of State shall be of opinion that the Company is in default as to any matter before provided for in this section he may himself remedy the defect, and charge the cost of the same as if done by the Company.

26. The Company shall maintain a sufficient staff for the purposes of the undertaking to the satisfaction of the Secretary of State, and shall, if required so to do by the Secretary of State, continue all or any of the Government staff now engaged for the purposes of the undertaking or any part thereof in their present employments, and fill up vacancies occurring from time to time in the staff, and for filling which there shall be no suitable persons or person available among those for the time being employed by the Company from the Government service; and no member of the Government service so engaged, unless the incumbent of any such or similar office on any State Railway be then liable to be discharged by the Manager thereof on his own responsibility, shall be discharged from his employment by the Company, if after notice of the intention of the Company so to discharge him the Secretary of State shall object to such discharge. The rates of remuneration to be paid by the Company to all members of the Government service employed on the undertaking shall not be in excess of the rates at which the Company can obtain similarly qualified servants. The debit of any contributions on account of pensions and furlough allowances which the Secretary of State may require to be paid to him on behalf of such persons shall follow the incidence of the debit of the salaries of such persons severally.

27. The Secretary of State may from time to time, by notice in writing, require the Company to carry out any alteration or improvement in or any addition to the undertaking that may in his opinion be necessary for the safety of passengers or for the safety of the public, or for the effectual working of the undertaking. Such notice shall specify the alteration, improvement, or addition required, and shall also in general terms describe the works to be executed for the purpose of carrying out such alteration, improvement, or addition. On receiving any such notice the Company shall with all reasonable speed commence and proceed to execute the works described therein. The Secretary of State shall provide any land that may be required for the purposes aforesaid, and shall supply the funds necessary for the purchase of such land and for the execution of such works, and the cost of such of the said works as shall be properly chargeable to capital shall be charged against the Capital Account as hereinafter provided, and the cost of all other such works shall be charged as working expenses. If in any case the Company shall neglect to proceed with the proposed works, or fail to complete the same to the satisfaction of the Secretary of State the Secretary of State may enter on the undertaking and execute the said works, and charge the cost of the same as if done by the Company.

As to working the Undertaking, Fares, &c.

28. The Company shall, until this Contract shall be terminated under any provision herein contained, keep the open system opened for public traffic, and work the same and carry on thereon, in accordance with the provisions of the law of India for the time being,

the business of carriers of passengers, animals, and goods, or passengers, animals, or goods, according as the carriage of the same respectively shall have been sanctioned by the Secretary of State.

29. The Company shall cause to be run on the open system so many trains, at such times, at such rates of speed, between such places, and with such conveniences and accommodations as the Secretary of State shall from time to time require.

30. The Company shall from time to time, upon the requisition of the Secretary of State, effect any alteration or improvement in the working of the open system or any part thereof that may in his opinion be necessary for the safety of passengers or of the public, or for the safe and effectual working of the open system or any part thereof.

31. The Company shall be entitled to charge the public for services rendered by way of conveyance on the open system or any part thereof of passengers and goods of different classes and descriptions at such rates only as shall for the time being be approved by the Secretary of State. The Company may from time to time and at the request of the Secretary of State shall submit for the approval of the Secretary of State maximum and minimum rates within which the Company is to be at liberty to charge for such services, and the Secretary of State may approve such rates with such modifications as he shall think fit, and may also from time to time require the Company to make such modifications in the maximum and minimum rates for the time being in force as he shall think fit. The Company shall not, in making charges to the public for services mentioned in this section, calculate any such charge at a rate which shall be either above the maximum or below the minimum rate for the time being applicable under this section to the particular service in respect of which the same charge is made, or make any reduction by way of rebate or otherwise which shall have the effect of bringing any rate actually paid below such minimum. The term "goods" shall as regards this section include everything conveyed on the undertaking, passengers only excepted.

32. No undue or unreasonable preference or advantage to or in favour of any particular person, company, or railway administration, or any particular description of traffic in any respect whatsoever, shall be made or given by the Company, nor shall any particular person, Company, or railway administration be subjected by the Company to any undue or unreasonable prejudice or disadvantage in any respect whatsoever. The Secretary of State shall have absolute power for the purposes of this section to decide whether any preference, advantage, prejudice, or disadvantage is undue or unreasonable.

As to Services rendered to Secretary of State on the Undertaking.

33. All services which the Secretary of State shall require the Company to perform on the open system for any department of Her Majesty's Indian Government, whether Postal, Military, Police, or any other department of the State, or for high officials of such Government (including in such services the conveyance of mails as defined by the Post Office Act or Acts for the time being in force in British India, the conveyance of Post Office servants when on duty, the conveyance of troops and sailors, military and naval establishments, horses and other animals used for military purposes, guns, military stores and equipments, the conveyance of police, prisoners, and paupers, the conveyance of telegraph stores instruments, officers, and workmen, and of any public stores whatever, including stores for State railways) shall be performed by the Company on the same general conditions as may for the time being be in force on other metre-gauge State railways, and at such rates as may be approved by the Secretary of State, subject to the provision as to free passes contained in the 16th section of this Contract.

34. The Company shall convey on the open system gold and silver bullion and coin, and copper coin, belonging to the Secretary of State, and the persons in charge thereof, at special rates to be from time to time approved by the Secretary of State.

35. The Company shall from time to time, upon the requisition of the Secretary of State, give precedence over all other traffic to his demands for either passenger or freight accommodation on the open system.

36. All stores intended to be used for any purposes of the undertaking or any part thereof (including stores intended to be used in or about the construction of any part of the undertaking or of any works or adjuncts of or pertaining to the same) shall be conveyed by the Company over the open system at rates to be approved by the Secretary of State.

As to Tolls for use of Bridges.

37. If the Company shall with the approval of the Secretary of State provide on any of the bridges on the undertaking ways or roads for public use by persons on foot or on horseback, or in carriages, or for any other purposes of traffic for which ordinary highways

are commonly used, the Company shall during the continuance of this contract have the right to charge, according to tariffs to be arranged between the Secretary of State and the Company, tolls for the user of such ways or roads by the public.

The Company to comply with requirements of the Secretary of State.

38 The Company shall with all reasonable speed comply with all such requirements as the Secretary of State shall from time to time make in accordance with this Contract.

As to Ownership of the Undertaking, &c.

39. Subject to the provisions of this Contract, all land of which the Secretary of State shall allow the Company to have possession for any of the purposes of this Contract, and everything constructed or to be constructed thereon, and all rails, plant, machinery, rolling-stock, stores, fixtures, and implements of every description acquired by the Company for the purpose of constructing, maintaining, equipping, keeping up the equipment of, or working the undertaking or any part thereof, or any stations, station-yards, offices, warehouses, houses for employés, or works upon any land of which the Secretary of State shall so allow the Company to have possession as aforesaid, and generally all property, whether real or personal, and things, and whether in England, India, or elsewhere, which shall be or have been transferred to the Company by the Secretary of State pursuant to these presents, or shall be or have been acquired, paid for or constructed by the Company with money supplied to the Company by the Secretary of State under the 47th section of this Contract, are hereby declared to be respectively the property of the Secretary of State, but subject to the user and enjoyment thereof by the Company during the continuance of this Contract.

As to Capital of Company and payment of Interest thereon.

40. The Company shall, within such period and by such instalments as the Secretary of State shall prescribe, pay into the Bank of England to the credit of the Secretary of State an aggregate sum of 1,000,000*l* to be raised in shares or stock.

41. The Secretary of State will during the continuance of this Contract out of the revenues of India pay to the Company in London in sterling money half-yearly on the 1st day of July and the 1st day of January in each year interest at the rate of 3 per cent. per annum, calculated to the last preceding 30th day of June and the 31st day of December respectively, on the amount which shall for the time being have been paid by the Company on account of share capital in respect of the sum of 1,000,000*l*, mentioned in the last preceding section of this Contract.

42. Any further moneys which may from time to time be required for completing and equipping the unfinished railway, and for any other purposes sanctioned by the Secretary of State under this Contract, shall at the option of the Secretary of State either be provided by him or be raised by the Company in such manner (by the issue at the option of the Secretary of State of shares or of debentures or otherwise) and on such terms as shall be agreed upon between the Secretary of State and the Company. All moneys so raised by the Company shall be forthwith paid into the Bank of England to the credit of the Secretary of State.

43. The Company shall not at any time during the continuance of this Contract, without the sanction of the Secretary of State in writing first obtained, at any time increase its stock or share capital or borrow any moneys. The restrictions imposed by the preceding portion of this section shall not preclude the Company from borrowing money for the *bond fide* purpose of discharging previously existing indebtedness of the Company in respect of borrowed capital to an amount equal to the extent of the money so borrowed, provided the money borrowed be *bond fide* applied to the purpose last aforesaid, as to which, however, no person lending or advancing money to the Company shall be concerned to see. No money shall without the previous sanction of the Secretary of State be borrowed by the Company at a discount, or at a premium, or on terms of the Company paying to the lender a larger capital sum than that actually borrowed from him by the Company. The Company shall not without the sanction of the Secretary of State pay interest at a rate higher than 3½ per cent per annum on any moneys borrowed by or owing from it, but this stipulation shall not necessitate the sanction of the Secretary of State to the payment of interest by the Company at any reasonable rate on any sums which the Company may borrow for *bond fide* temporary purposes.

44. Subject to the provision of this Contract, all moneys paid by the Company under the 40th and 42nd sections hereof shall, when and as paid, become the absolute property

of the Secretary of State, and he shall not be a debtor to the Company in respect of such moneys or any of them.

As to Receipts and expenditure of Company and supply of Funds by Secretary of State.

45. All moneys whatsoever, from whatever source arising or derived, and whether attributable to account of capital or revenue, which shall during the continuance of this Contract be received by the Company, and whether on its own behalf or as agent of the Secretary of State or otherwise, shall (with the exception only of moneys payable to the Secretary of State under the 40th and 42nd sections of this Contract, and of moneys paid by the Secretary of State to the Company or provided by him under the 41st, 42nd, and 47th sections of this Contract, or which it shall receive by virtue of the 4th subsection of the 60th section of this Contract) be paid without deduction at such times and in such manner as the Secretary of State may from time to time direct in manner following (that is to say) as to moneys received elsewhere than in India by or on behalf of the Company into the Bank of England to the credit of the Secretary of State, and as to moneys received in India by or on behalf of the Company into some Government Treasury in India to be from time to time approved for the purpose by the Secretary of State. All the moneys paid by the Company under this section shall, when paid, become the absolute property of the Secretary of State, subject to the provisions of this Contract and so in particular that such of the same moneys as are under this Contract to be treated as received on account of revenue shall be subject to the provisions hereinafter contained as to the application thereof.

46. All moneys proposed to be expended by the Company on account of the undertaking or in pursuance of this Contract shall from time to time be stated and submitted to the Secretary of State for his sanction, and as between the Company and the Secretary of State shall be allowed only so far as the same shall from time to time have been sanctioned by the Secretary of State.

47. All moneys which the Company shall require to defray expenditure by the Company under this Contract sanctioned by the Secretary of State shall be supplied to the Company by the Secretary of State in London or in India according to such arrangements as shall from time to time be made between the Secretary of State and the Company.

As to Accounts and Exchange.

48. The Company shall keep all such accounts in relation to the undertaking and to this Contract, and all such accounts as between the Company and the Secretary of State, as the Secretary of State shall from time to time require. Complete accounts shall be kept in India in rupee currency; nevertheless, account shall be kept in England in sterling money of the expenditure and receipts of the Company elsewhere than in India, in relation to the undertaking and to this Contract, but such accounts shall be incorporated in the Indian accounts of the Company, and for that purpose shall be furnished to the Secretary of State for transmission to the Government of India.

49. For the purposes of the incorporation provided for in the last preceding section of this Contract, sterling money entered in the accounts kept in England in such section mentioned shall (except in any cases where any particular amounts ought under special provisions of this Contract to be treated as convertible at special rates, in which excepted cases the special rates shall be adopted) be converted into rupees at the average rate of exchange obtained by the Secretary of State for bills payable on demand drawn on India during the half-year ending either on the 30th day of June or the 31st day of December next preceding the time at which the incorporation is to be effected, and so that if the incorporation is to be effected in the first six calendar months of the then current calendar year the half-year shall end on the 31st day of December, and if it is to be effected in the last six calendar months of the then current calendar year the half-year shall end on the 30th day of June. Provided that if and as often as the Secretary of State shall not have drawn bills on India payable on demand for so much as three calendar months out of any particular half-year ending on a 30th day of June or 31st day of December, then any conversion of sterling money into rupees which would or might under this section, but for this provision, be effected at the average rate obtained by the Secretary of State for bills payable on demand drawn on India during that half-year shall be effected at the average rate obtained during that half-year for the best commercial bills payable on demand drawn in London on India, such average rate to be decided by the Comptroller General at Calcutta.

50. Separate accounts shall, if required by the Secretary of State, be kept by the Company in respect to different sections of the undertaking; and all accounts to be kept

by the Company under this Contract shall be kept in such form and under such heads or divisions, and with such details, and shall be submitted to the Secretary of State at such times as he shall from time to time prescribe.

51. Unless and until otherwise directed by the Secretary of State, the Company shall keep in relation to the undertaking and this Contract the following accounts that is to say:—

- A Capital advance Account.
- A Stores Account.
- A Capital Account.
- A Revenue Account.

52. In the said Capital Advance Account shall be entered all moneys supplied by the Secretary of State to the Company to defray expenditure by the Company under this Contract or received from the sale of stores, and the moneys so entered shall as expended by the Company in conformity with this Contract, be transferred from the Capital Advance Account to the Stores Account, the Capital Account, or the Revenue Account, as shall be proper. The Capital Advance Account shall from time to time, as the Secretary of State shall require, be made up and submitted to him.

53. The Company shall as from the 1st day of January 1891 open an account of all stores which shall have been delivered to the Company pursuant to the 4th section of this Contract, and of the value of such stores as entered in the inventory mentioned in that section, and shall from time to time during the continuance of this Contract, with all reasonable expedition make up and deliver to the Secretary of State an account of all stores respectively in hand on every 30th day of June and 31st day of December, or on such other days as the Secretary of State may from time to time name for the purpose. In the account to be so made up from time to time shall be entered all stores which the Company shall for the purposes of fulfilling this Contract have used since, as regards the first occasion of making up the account, the day on which the same shall have been delivered to the Company as aforesaid, and since, as regards each other occasion of making up the account, the date to which the account shall have been last previously made up, showing in the account the purposes to which the stores which shall have been used shall have been applied. As often as any of the stores in hand shall be used by the Company for the purposes of fulfilling this Contract, the value as entered in the books of the Company of the stores so used shall be charged to account of capital or to account of revenue as shall be proper. The Stores Account shall, besides being made up periodically as above mentioned, be made up and balanced from time to time upon the requisition of the Secretary of State. If any stores for the time being in use upon or in connection with the undertaking shall during the continuance of this Contract be returned into store, the value thereof (to be agreed upon by the Secretary of State and the Company) shall be debited in the Stores Account. If any stores shall be re-transferred to the Secretary of State under section 8 of this Contract, the value thereof shall be credited to the Stores Account.

54. The valuations from time to time in the Stores Account of stores in hand shall, at such time or times as the Secretary of State shall direct, be revised in such manner as shall from time to time be agreed upon between the Secretary of State and the Company, and the Stores Account shall from time to time be corrected so as to accord with the revised valuations, and thereupon corresponding adjustments shall be effected in the Capital or Revenue Account by making entries therein either to debit or credit as requisite. Provided that such a revised valuation shall be made as soon as the whole of the unfinished railway shall have been opened for public traffic, and that in respect of any subsequent valuation all such adjustments shall be made in the Revenue Account alone.

55. In the Capital Account shall be entered all such of the moneys to be received by or on behalf of the Company as pursuant to this Contract are to be treated as received on account of capital, also the value (to be determined by the Secretary of State) of such land (if any) as shall for the time being have been relinquished by the Company to the Secretary of State under the previous provisions hereof, also the value of any part or parts of the railways, rolling-stock, machinery, and plant of the undertaking re-transferred to the Secretary of State, under the provisions of section 8 of this Contract, and also all such expenditure of the Company under this Contract as pursuant to this Contract shall be chargeable to account of capital, including:—

- (a) The value to be fixed as provided by the 5th section of this Contract of the railways, rolling-stock, plant, and machinery, plans, specifications, and working drawings mentioned in that section.
- (b) Such sum as the Secretary of State may allow to be charged in respect of the expenses of and incident to the formation and incorporation of the

Company and in connection therewith and such amount (if any) as the Secretary of State may allow, or require to be charged to account of Capital, in respect of the cost of the management of the Company and the conduct of its affairs prior to the time when the whole of the unfinished railway shall have been opened for the public carriage of passengers.

- (c) The cost to the Secretary of State as certified by him of the said several surveys, designs, estimates, and plans mentioned in the 6th and 7th sections, and the value of the unserviceable stores of the unfinished railway mentioned in the 4th section of this Contract.
- (d) The value as certified by the Secretary of State of all land of which he shall allow the Company to have possession for any purposes of this Contract, except the land handed over to the Company with the purchased railway pursuant to section 3 of this Contract.
- (e) All moneys which shall be actually expended by the Company, with the sanction of the Secretary of State, out of funds provided by him upon works, rolling-stock, plant, and machinery of the unfinished railway pursuant to the 7th section of this Contract, or upon any branch or extension railway under the 9th section of this Contract, or for any other purposes of the undertaking, the cost of which is chargeable to account of capital.
- (f) The cost of providing and maintaining a police force in relation to any such part or parts of the undertaking as for the time being shall be under construction or shall not have been opened for public traffic.
- (g) The charges of the telegraph department of Her Majesty's Indian Government for rent, maintenance, and inspection of such electric telegraphs and telegraphic appliances (if any) as the Secretary of State may allow the Company to use in relation to the construction of the undertaking or any part thereof, or in relation to any part of the undertaking which shall not for the time being have been opened for public traffic.
- (h) So much as ought pursuant to the 26th, 27th, and 65th sections of this Contract from time to time to be charged to account of capital.
- (i) Any amount which the Secretary of State may from time to time require to be charged to account of capital in respect of the cost to him of any of his legal expenses incurred in relation to this Contract, or to any matters arising out of this Contract.
- (k) The cost of the Secretary of State as certified by him of works, acts, and things which shall be executed or done by him under any of the provisions of this Contract, provided that the cost thereof if executed or done by the Company would have been expenditure chargeable to account of capital.

56. The Capital Account shall from time to time, as the Secretary of State shall require, be made up and submitted to him.

57. In the Revenue Account shall be entered working expenses and all such expenditure of the Company under this Contract and other items as pursuant to this Contract shall be chargeable to account of revenue, and also all such of the moneys to be received by or on behalf of the Company as under the provisions of this Contract are to be treated as received on account of revenue. The Revenue Account shall be made up half-yearly to the 30th day of June and the 31st day of December in each year, or to such other days as the Secretary of State may from time to time prescribe, and shall be regularly submitted by the Company to the Secretary of State, who may in case of error being discovered therein correct the same within three calendar months after the account containing such error shall have been submitted to him. Every Revenue Account shall be considered as settled at the expiration of three calendar months after the time when the same shall have been submitted to the Secretary of State; but nevertheless any error which may subsequently be discovered therein shall be corrected in the then next Revenue Account or in any subsequent Revenue Account or Accounts, as the Secretary of State may determine.

58. In the working expenses of any half-yearly period there shall be admitted and included in so far as they are attributable to such period—

- (1) All expenditure incurred by the Company with the sanction of the Secretary of State after the opening for the public carriage of passengers of the whole of the unfinished railway in the management of the Company and the conduct of the affairs.
- (2) Such proportion of the expenditure last aforesaid incurred prior to the time when the whole of the unfinished railway shall have been so opened as the mileage of the undertaking for the time being opened for the public

- carriage of passengers shall bear to the aggregate mileage thereof under construction and opened for traffic.
- (3) All expenditure incurred by the Company with the sanction of the Secretary of State in keeping the open system in good repair and in good working condition and fully supplied with rolling stock, plant, and machinery, except such part (if any) of such expenditure as may with the sanction of the Secretary of State be charged to account of capital.
 - (4) All expenditure incurred by the Company with the sanction of the Secretary of State in keeping the rolling-stock, plant, and machinery belonging to the open system in good repair and in good working condition.
 - (5) All expenditure incurred by the Company with the sanction of the Secretary of State in the execution of any works of which the cost shall be chargeable to account of revenue.
 - (6) The cost to the Secretary of State as certified by him of works, acts, and things which shall be executed or done by him under any of the provisions of this Contract, provided that the cost thereof if executed or done by the Company would have been expenditure chargeable to account of revenue.
 - (7) The costs, so far as not under the terms of this Contract to be borne by the Secretary of State, of providing and maintaining a police force for the purposes of the open system.
 - (8) All moneys from time to time payable under the rules for the time being in force of the State Railway Provident Institution and the Company's Provident Institution respectively to or for the purposes of those Institutions as hereinafter mentioned, without being dependent on the amount of the net earnings of the undertaking.
 - (9) The charges of the Government Telegraph Department for rent, maintenance, and inspection of the telegraphs and telegraphic appliances of which the Secretary of State shall from time to time allow the Company to have the exclusive use in relation to the open system.
 - (10) The costs of and incidental to the preparation of the returns and statistics from time to time furnished to the Secretary of State under the provisions hereinafter contained.
 - (11) So much as ought pursuant to the 26th and 65th sections of this Contract from time to time to be charged to account of revenue.
 - (12) All reasonable legal expenses, whether incurred by the Secretary of State or with his sanction by the Company, in relation to the open system, and all such other expenses as the Secretary of State and the Company shall agree to treat as working expenses.
 - (13) All undischarged working expenses, so far as they are attributable to any previous period or periods or are exceptional.
 - (14) The value of the unserviceable stores of the purchased railway mentioned in section 4, and the sums debitable to account of revenue in adjustment of the revised valuations of stores provided for in section 54 of this Contract.

59. The sum remaining in each half-year, after deducting from the gross earnings of the undertaking working expenses and all other charges (if any) to revenue account properly chargeable to that half-year, shall be "net earnings," and from such sum shall be deducted such sums (if any) as according to the rules for the time being in force of either the State Railway Provident Institution or the Company's Provident Institution respectively shall from time to time be payable, with the sanction of the Secretary of State, to or for the purposes of either or both of those Institutions, and being contingent on the amount of net earnings of the undertaking. The amount of earnings remaining after making this payment shall for the purposes of this Contract be "net revenue receipts."

60. The "net revenue receipts" of each half-year shall be applied in the following manner and in the following order:—

- (1) In payment to the Secretary of State in rupees of the equivalent at the rate of 14 rupees to the pound sterling of the interest at the rate of 3 per cent. per annum for the half-year paid by him to the Company in respect of the capital (not exceeding 1,000,000*l.*) raised and paid into the Bank of England in pursuance of section 40 of this Contract.
- (2) In payment to the Secretary of State of the equivalent in rupees at the rate of exchange mentioned in section 49 of this Contract of interest for the half-year at the rate of 4½ per cent. per annum on the amount of 425,000*l.* Irredeemable Debenture Stock of the old Company.

- (3) In payment to the Secretary of State in rupees of interest for the half-year at the rate of 3 per cent. per annum on the total net expenditure standing at the debit of the Capital Advance Account, the Stores Account, and the Capital Account of the undertaking at the close of the half-year, less the sums of ₹1,40,00,000 and ₹59,50,000 the respective equivalents (at the rate of 14 rupees to the pound sterling) of the capital undertaking to be raised by the Company and of the Irredeemable Debenture Stock of the old Company.
- (4) And the residue (if any) shall be divided between the Company and the Secretary of State in the ratio of ₹1,40,00,000 (the prescribed equivalent of the Company's capital), and the net expenditure as stated in the last preceding sub-section, less the said sum of ₹1,40,00,000, and the proportion thereof which shall be found to belong to the Company shall, as soon as ascertained, be paid over to the Company in India.

Provided that if in any one or more of the first three years of this Contract—that is to say, the three years ending the 31st December 1893—the Company's share of the net revenue receipts under the 4th sub-section of this section shall be less than 5,000*l.*, the Secretary of State shall in each such year out of his share of the net revenue receipts under the same sub-section, or out of the interest payable to him under any or all of the first three sub-sections, of this section, pay to the Company in India so many rupees as may be necessary to make up the Company's share for such year to the equivalent of 5,000*l.*, and this sum shall be paid in such manner and at such times that the Company shall have funds in London to the amount of at least 2,500*l.* on the 30th June and the 31st December in each of the said three years.

As to audit and settlement of certain possible questions.

61. The accounts of the Company in relation to its expenditure and receipts in India, England, and elsewhere shall from time to time be audited on behalf of the Secretary of State by such person or persons as he shall from time to time appoint as well as on behalf of the Company, and the Company shall produce to the auditor or auditors so appointed by the Secretary of State all vouchers, books, accounts, papers, and documents of the Company necessary for the purpose of audit, and afford to him or them all facilities requisite for the performance of his or their duties. Amongst the functions of the auditor or auditors shall be included the duty of seeing that expenditure is charged and revenue applied in accordance with the provisions of this Contract. Any correction made in the accounts by any person or persons who shall be acting as joint auditor or joint auditors on behalf of both the Secretary of State and the Company shall be conclusive. If consequent on the audit of any auditor or auditors acting exclusively on behalf of the Secretary of State the Secretary of State shall require any alterations to be made in the accounts, and the Company shall object to the alterations, the matter in difference shall be referred for final decision to two persons, one to be named by the Secretary of State and the other to be named by the Company, and in case such two persons shall be unable to agree, then to an umpire to be named by the referees. The costs of any such reference as last aforesaid shall be included in working expenses.

62. If any difference shall arise between the Secretary of State and the Company as to the head of account to which any expenditure of the Company is properly chargeable the matter in difference, unless under the terms of this Contract to be solely decided or determined by the Secretary of State, shall be referred to the decision of the joint auditor or the joint auditors if the Secretary of State and the Company shall have appointed such an officer or officers, but in case such joint auditor or joint auditors shall not have been appointed, then the matter in difference shall be referred to some person to be jointly appointed for the reference by the Secretary of State and the Company, and if the Secretary of State and the Company shall not appoint such a person, then to the decision of two persons, one to be named by the Company and one by the Secretary of State, or failing the agreement of such two persons, then to the decision of an umpire to be named by such two persons. The costs of any reference under this section shall, unless the Secretary of State shall otherwise direct, be included in working expenses.

63. Of the moneys to be so paid as provided by the 45th section of this Contract, such as shall have accrued from the sale of any property not paid for out of revenue on any occasion other than one on which the property sold is replaced by other property of the same or a similar character, shall be treated as received on account of capital; and of all other moneys to be so paid as provided by the 45th section of this Contract, such portions shall respectively be attributed to account of capital and such portions to account

of revenue as the Secretary of State shall from time to time determine, having regard in so doing to the principle that receipts from the working of the portion or portions of the undertaking for the time being open for public traffic are, subject to the provisions of this Contract, to be deemed attributable to account of revenue.

64. In case any question shall arise whether any expenditure incurred for the purposes of the undertaking is to be treated in the whole or in part as a charge incurred on Capital Account, or how the same is to be dealt with, the question shall be determined on the general principle that capital is to bear the cost of new works, of additional rolling-stock, plant, and machinery, and of substantial improvements of, and additions to, old works, rolling-stock, plant, and machinery, including the cost of any temporary new work, the construction of which is requisite for the construction of a work properly chargeable to capital, and that the cost of repairs, restorations, renewals, replacements, and substitutions is to be borne by revenue. Provided, nevertheless, that any item of expenditure properly chargeable to capital, in accordance with this principle, on any part of the open system, shall from time to time if not exceeding ₹1,000, be classed as a "Minor work" and be charged to working expenses within a maximum amount in each half-year of ₹15 per open mile of railway. Provided also that no portion of the salaries or allowances of any of the Company's permanent supervising staff, although for the time being employed, partly or wholly, in directing or superintending work chargeable to capital, shall, except with the express sanction of the Secretary of State, be charged to capital, and that no expenses connected with the engagement from England, or with the passage from or to England, of any person in the Company's service shall be charged to capital, unless such person shall have been specially engaged to carry out work chargeable to capital, and actually employed upon such work.

As to the supervision, audit, and control of the Secretary of State, and the appointment of a Government Director, &c.

65. In all matters not herein specially provided for relating to the fulfilment and performance by the Company of this Contract, so far as the same is to be fulfilled or performed by the Company, the Company and its affairs shall be subject to the supervision, audit, and control (as well in India as in England) of the Secretary of State. The Secretary of State shall be entitled to make a charge half-yearly for his supervision, audit, and control of the affairs of the Company. The said half-yearly charge shall be a mileage rate not exceeding in any case 40 rupees for every mile of the undertaking so far as for the time being either constructed or under construction. The half-yearly charge to be made by the Secretary of State under this section shall cover a moiety of the salary in respect of audit of such joint auditor or joint auditors (if any) as aforesaid, and shall, until the whole of the undertaking for the time being shall have been opened for public traffic, from time to time be apportioned between revenue and capital in such manner as that so much of the half-yearly charge as bears the same proportion to the entirety thereof as the length of railways opened for public traffic at the time when the half-yearly charge is made bears to the whole length of railways on which the same charge is to be calculated, shall be charged to account of revenue, and that the residue thereof shall be charged to account of capital. As from the time when the whole of the projected railways shall have been opened for public traffic the half-yearly charge to be made by the Secretary of State under this section shall be charged to account of revenue exclusively.

66. For the purpose of inspecting the undertaking and the works thereof, either whilst under construction or subsequently, and the stations, rolling-stock, plant, machinery, and stores belonging thereto, and the electric telegraphs and telegraphic appliances for the time being provided under this Contract for the use of the Company, and for the purpose of auditing the accounts of the Company, or otherwise exercising such supervision and control as are intended to be reserved to the Secretary of State by this Contract, the Secretary of State may from time to time appoint such person or persons as he may think proper with such powers as he may consider necessary or expedient, and the Company shall afford every person so appointed all reasonable facilities for the purpose of enabling him to perform the duties entrusted to him by the Secretary of State.

67. The Company shall to the satisfaction of the Secretary of State record and keep in proper books full and particular accounts of all its transactions and proceedings, including full and true minutes of all its meetings, meetings of Directors, communications with India and correspondence, so as at all times to exhibit fully and truly the state of its affairs. The Secretary of State or any person or persons appointed by him in that behalf shall at all reasonable times have free access to all the books, accounts, papers, and documents of the Company relating to the undertaking, with power to call for and make

copies of or extracts from the same. The cost of making all such copies and extracts shall be defrayed by the Company, and either charged to revenue or capital exclusively, or apportioned between revenue and capital, as the Secretary of State shall direct.

68. The Secretary of State may from time to time appoint any one person to be Director of the Company. Such Government Director shall be *ex officio* a member of committees appointed by the Board of Directors of the Company or by the Company in relation to the undertaking or any matter connected therewith, and shall have power to exercise at his discretion an absolute veto in all proceedings whatever at the Board of Directors. The said Government Director shall not be removable except by the Secretary of State, and may act by a deputy appointed by the Secretary of State.

As to assisting the Company to make Junctions with and to obtain running Powers over other Railways.

69. The Secretary of State will, so far as he may from time to time consider it desirable with a view to public convenience that any junction should be formed between an railway forming part of the undertaking and any other railway, and that such junction should be effected by the Company, endeavour from time to time to obtain for the Company on reasonable terms powers to form such junction, and will, so far as he may from time to time consider it desirable, with a view to the public convenience, that the Company should in continuation of the service of trains on any railway forming part of the undertaking run trains on any other railway, endeavour to obtain for the Company on reasonable terms and conditions power to do so. If and as often as the Company intend to form between any railway forming part of the undertaking and any other railway any junction which the Secretary of State shall have sanctioned to be made by the Company the Company shall signify to the Secretary of State its intention to form the junction, and this Contract shall thenceforth be read and take effect as if such junction were a part of the undertaking.

As to running Powers and other facilities and Accommodation for other Railways.

70. The Company shall from time to time, upon the requisition of the Secretary of State, allow the use of the undertaking or any part or parts thereof for the passage of engines and trains from or to other railways of the same gauge upon the payment of reasonable tolls and under reasonable conditions and restrictions.

71. The Company shall from time to time, upon the requisition of the Secretary of State, allow upon reasonable terms and conditions the use for other railways of any such rolling-stock appropriated or belonging to the undertaking as shall not for the time being be required for the purposes of any part of the undertaking, or for any other operations of the Company under this Contract.

72. The Company shall from time to time, upon the requisition of the Secretary of State, execute work in its workshops at reasonable prices and on reasonable terms in respect of rolling-stock and machinery belonging to State Railways, but so nevertheless as not to impede or unduly interfere with the ordinary operations of the Company in respect of the undertaking.

73. The Company shall from time to time, upon the requisition of the Secretary of State, make reasonable arrangements for the interchange of traffic and rolling-stock and for through booking between the undertaking or any part thereof and other railways, and the Secretary of State shall to the extent of his powers require the managers of such other railways to co-operate in making similar arrangements on the requisition of the Company.

74. The Company shall from time to time, upon the requisition of the Secretary of State, allow the use of any of the stations belonging to the undertaking for the accommodation of the traffic of any other railway upon the payment of reasonable tolls and under reasonable conditions and restrictions, and also upon reasonable terms make such alterations and additions as may in the opinion of the Secretary of State be necessary or convenient for the purposes of such accommodation.

75. The Company shall from time to time, upon the requisition of the Secretary of State, allow any junction to be formed between any railway forming part of the undertaking and any other railway on reasonable terms and conditions.

76. The Company shall comply with all regulations from time to time prescribed by the Secretary of State for clearing through traffic with other railways.

Miscellaneous Provisions.

77. The Company shall not alter, vary, or add to its Memorandum or Articles of Association during the continuance of this Contract in such a way as to affect or prejudice the operation thereof without the sanction of the Secretary of State.

78. The Company shall not during the continuance of this Contract, without the sanction of the Secretary of State in writing first obtained, engage in or carry on any business other than the business provided by this Contract to be carried on by the Company.

79. The Secretary of State shall promote the passing by Her Majesty's Legislature in India of any Act or Acts which may be required to enable the Company to carry into effect this Contract.

80. No claim shall be made upon the Secretary of State by the Company for compensation in respect of the prejudicial effect upon the undertaking or the profits thereof of any Act of Her Majesty's Indian Legislature for the time being in force, and the Company and the undertaking and its equipment shall be subject to the provisions of every such Act, and no claim shall be made upon the Secretary of State by the Company for compensation in respect of the prejudicial effect upon the undertaking or the profits thereof of any treaty, convention, or agreement for the time being in force between the Secretary of State and the Government of any allied tributary or foreign State and the Company, and the undertaking and its equipment shall be subject to the provisions of every such treaty, convention, or agreement as mentioned in this section.

81. The Company shall not, without the consent of the Secretary of State, acquire, either absolutely or for any limited estate, any land situated in the dominions of any allied tributary or foreign State, or any rights or easements in, over, or in respect of any land so situate. The expression "land" as regards the operation of this section includes mines, minerals, buildings, easements in or over lands, and generally all hereditaments of every description and of whatever nature or tenure, whether corporeal or incorporeal. This section shall not apply to any land of which possession may be given to the Company by the Secretary of State.

82. No communication or negotiation of any description or in respect to any matter shall, unless with the sanction and under the supervision of the Secretary of State, be made or conducted by or on behalf of the Company to or with the Government of any allied tributary or foreign State, or with any officials of any such Government.

83. The Company shall from time to time prepare and furnish to the Secretary of State such returns and statistics as to traffic and otherwise as the Secretary of State may from time to time require and such returns and statistics shall be prepared in such form and under such heads and divisions and with such details as the Secretary of State shall from time to time prescribe. The cost of preparing such returns and statistics and incidental thereto shall be included in working expenses.

84. The Company shall at any time, upon the requisition of the Secretary of State, establish and thenceforth maintain out of contributions from revenue and on terms to be agreed upon between the Secretary of State and the Company, reserve funds for the purposes of insuring property, whether appropriated to the undertaking or in the custody of the Company as carriers of passengers and goods, or in any other capacity, against damage by fire, and of making good deterioration of permanent-way and rolling-stock. No part of any such reserve funds for the time being subsisting shall be applied to any purpose without the sanction of the Secretary of State.

85. The Company may and, if required by the Secretary of State so to do, shall establish on terms to be approved by the Secretary of State a Provident Institution for the benefit of servants of the Company, and thenceforth maintain and manage the institution so established under rules and regulations to be approved by the Secretary of State, and which rules and regulations shall be subject to be varied from time to time as he shall approve.

86. The Company shall, if required by the Secretary of State, maintain and manage the State Railway Provident Institution for the benefit of the Government servants, members thereof, employed upon the undertaking, upon such terms and under such rules and regulations as shall from time to time be approved by the Secretary of State.

87. Any notice, determination, decision, direction, requirement, requisition, appointment, certificate, or expression of opinion, approval, or sanction to be given or signified on the part of the Secretary of State for any of the purposes of or in relation to this Contract or any of the powers or provisions herein contained shall be sufficient and binding if in writing signed by the Secretary of State or one of his Under Secretaries or his Assistant Under Secretary, or by a Secretary of Her Majesty's Indian Government, or by any other

officer or servant authorised to act on behalf of the Secretary of State in respect of the matters to which the same shall relate, and the Secretary of State shall not in any case be bound in respect of any of the matters aforesaid unless by some writing signed in the manner before mentioned in this section.

88. The Company shall at all times during the continuance of this Contract keep an office established at some place in India to be determined from time to time by the Secretary of State, and shall keep at the said office an authorised agent or committee of agency with whom the Secretary of State and Her Majesty's Indian Government or any officer or officers deputed on behalf of the Secretary of State or Her Majesty's Indian Government may communicate on affairs concerning this Contract, and the duties and liabilities of the parties hereto under this Contract, and to whom the Secretary of State and Her Majesty's Indian Government and such officer or officers as last aforesaid may respectively pay moneys for the use or on behalf of the Company, and all drafts drawn and receipts given by the said agent or committee of agency or under his or their authority on behalf of the Company in relation to this Contract, or to any payment made or matter arising under or out of or by virtue of this Contract, shall be binding on the Company, and every notice to be given to the Company (save any notice with respect to the termination of this Contract under the subsequent provisions hereof) shall be sufficiently given if left at the said office or personally served on the said agent or any member of the said committee of agency.

89. The Company shall not in respect of the performance or fulfilment by it of its duties and obligations under this Contract be entitled by any implication of law to remuneration as for services rendered by it to the Secretary of State.

As to termination of the Contract and Provisions to come into effect thereon.

90. The Secretary of State may, if this Contract shall not have been previously terminated, terminate the same either on the 31st day of December 1910, or on the 31st day of December of any succeeding fifth year by giving to the Company in England not less than 12 calendar months' previous notice in writing of the termination of this Contract. The Secretary of State may also if default be made by the Company in duly paying any sum or sums payable by the Company under the 40th or the 42nd section of this Contract, or in the construction and completion in conformity with this Contract of any part of the undertaking or any of the stations or other works thereof, or in the due equipment pursuant to this Contract of the undertaking or any part thereof with rolling-stock, plant, and machinery, or in case there shall be any breach on the part of the Company (whether by act, omission, or default) of any of the stipulations or provisions of this Contract, or in case the undertaking or any part thereof shall at any time in the opinion of the Secretary of State be in course of gross mismanagement by the Company, or be worked at a loss as shown by the revenue account, and have been so worked for not less than three half-years continuously down to the time at which the Secretary of State shall give to the Company the stipulated notice of termination under this present power, terminate this Contract by giving to the Company in England six calendar months' previous notice in writing of the termination of this Contract.

91. Upon the day on which this Contract shall expire under the 2nd or be terminated under the 90th section hereof the Company shall relinquish to the Secretary of State all land of which he shall have allowed the Company possession under or for the purposes of this Contract (except such land as may previously have been relinquished to him or sold with his sanction), together (by way of inclusion, not of exception) with the station, station-yards, offices, warehouses, houses for employes, conveniences, rails, machinery, fixtures, and plant, then erected, or being on the land to be relinquished under this section or in any wise belonging to the undertaking or any part thereof, and also deliver to the Secretary of State possession of any office in England of the Company, and also relinquish or deliver to the Secretary of State all rolling-stock, moveable machinery, plant, and articles belonging or appropriated either as regards purposes of construction or working or otherwise to the undertaking or any part thereof, or any of the works or adjuncts thereof, and the then existing stock of stores appropriated, whether for purposes of construction, working, or otherwise to the undertaking, or to any of the works or adjuncts thereof, or to the equipment thereof, and all plans, books, surveys, sections, printings, writings, and documents whatsoever in any wise connected with or with the construction or maintenance of the undertaking or any part thereof, or any of the works or adjuncts thereof, and any electric telegraphs, telegraphic appliances, and other property belonging to the Secretary of State and then in the possession of the Company in reference to this Contract, including all furniture and tenant's fixtures, appropriated to the office in England of the Company, and generally all property, whether real or personal and whether in

England or India or elsewhere, then in the possession or power of the Company which shall be or have been acquired or paid for by or with money supplied to the Company by the Secretary of State. The Company shall also on the day on which this Contract shall expire or be terminated refund to the Secretary of State all such of the moneys previously supplied by him to the Company under the 47th section of this Contract as shall then remain unexpended with the sanction of the Secretary of State, and shall make over to the Secretary of State any such reserve funds as aforesaid then existing under this Contract, subject to any terms which may have been agreed upon under the 84th section hereof. The Company shall at the cost of the Secretary of State execute or procure to be executed any such assurances as he shall reasonably require to be executed for the purpose of giving full effect to the previous provisions of this section.

92. The Secretary of State shall be entitled to the benefit of and shall indemnify the Company against all such Contracts entered into with his sanction by the Company as shall be subsisting at the time of the expiration or termination of this Contract.

93. The termination of this Contract shall not prejudice the rights of either of the parties hereto as against the other of the parties hereto in respect of any covenant herein contained which may be broken prior to the termination hereof or which may continue or be in force after such termination.

94. Upon the relinquishment, delivery of possession, delivery payment, or making over to the Secretary of State by the Company in conformity with the 91st section of this Contract of all the particulars and property therein, respectively provided to be relinquished, delivered possession of, delivered, refunded, or made over by the Company, the Secretary of State shall become bound to indemnify the Company, its property and effects, against all such debts and liabilities (if any), including liabilities on debentures as it may have incurred with the sanction of the Secretary of State and as shall be then subsisting.

95. Upon the expiration or determination of this Contract under any of the provisions herein contained the Secretary of State shall, out of the revenues of India, pay to the Company in London an amount in sterling equal to the amount which shall have been paid by the Company conformably with this Contract in respect of the said sum of 1,000,000*l.*, and also an amount also in sterling equal to the aggregate of such further sum or sums of money (if any other than and beyond any sums paid in respect of the said sum of 1,000,000*l.*) as shall have been paid by the Company into the Bank of England to the credit of the Secretary of State pursuant to this Contract and shall be represented by share capital or stock. Provided nevertheless that the Company shall not be entitled under this section to receive any money unless or until it shall in substance have performed and discharged its duties and obligations under the 91st section of this Contract.

Arbitration.

96. If the Secretary of State and the Company shall fail to agree touching any matter with respect to which their agreement is required by this Contract, or if in any case not herein specially provided for any dispute, question, or controversy shall at any time arise between the Secretary of State and the Company touching these presents or any section or thing herein contained, or the construction hereof, or any matter connected with these presents or the operation hereof, or the rights, duties, or liabilities of either party in relation to the premises, then and in every such case the matter as to which the Secretary of State and the Company shall fail to agree, or the matter in difference, as the case may be, shall be referred to two arbitrators, one to be appointed by each party, pursuant to and so as with regard to the mode and consequences of the reference, and in all other respects to conform to the provisions in that behalf contained in the Arbitration Act, 1889, or any subsisting statutory modification thereof.

In witness whereof ROBERT HARDIE, Esquire, and SIR CHARLES ARTHUR TURNER, K.C.I.E., being two Members of the Council of India, have hereunto set their hands and seals, and the South Indian Railway Company, Limited, have hereunto caused their common seal to be affixed, the day and year first above written.

APPENDIX P.

Agreement between the Southern Mahratta Railway Company and the Madras Railway Company for working the Guntakal Junction Station.

MEMORANDUM OF AGREEMENT made on the twenty second day of December 1890,
between the Southern Mahratta Railway Company and
the Madras Railway Company for the interchange of

Preamble. traffic, and for the use in common by both Railways of the Southern Mahratta Railway Company's station at Guntakal; also for additions and alterations which may be required thereat from time to time for the traffic of both Railways as well as for the maintenance and renewal of the works and premises and the working of the traffic of the two Railways at that station.

1. This Agreement shall be considered as having effect from the 1st day of January 1891 and shall be subject to revision from time to time, but shall remain in force until the expiration of not less than six months' notice from either Company, such notice to expire only on the 30th June or 31st December in any year.

Duration of Agreement. shall give six months' notice, and submit a statement of its reasons for desiring a change, and shall within three months of giving such notice submit revised proposals, failing which the Agreement shall run on until the expiry of three months after the date upon which revised proposals have been forwarded to the other Company, provided always that by mutual consent a change may be made in the Agreement at any time.

3. The limits of Guntakal Junction Station for the purposes of this Agreement shall be the distant signal on each side of the station.

Station limits. 4. All descriptions of traffic are to be booked through between such stations of the two Railways as may from time to time be arranged between the Traffic Managers of the two Companies.

Through booking. 5. The interchange of traffic under this Agreement shall include traffic to or from other Railways, with which either contracting Company has established, or may hereafter establish through booking.

Interchange of traffic. This interchange of traffic shall be carried on in accordance with the Conference Rules in force at the time, as far as these are applicable to the traffic and working between Railways of different gauges and except where the Conference Rules are opposed to the clauses of this Agreement.

6. The joint staff for working Guntakal Junction Station shall be appointed and controlled by the Southern Mahratta Railway Company, the cost to be charged to Joint Station Expenses Account.

Appointment of Joint Staff. 7. Each Railway working into Guntakal Junction shall provide its own telegraph staff and its own staff of goods clerks and porters, &c., for the conduct of its local goods traffic, and the Madras Railway may at any time provide a separate staff of number-takers at its own expense, for its own purposes, but the returns and reports of such number-takers shall be submitted through the joint Station Master. It is understood that the Madras Railway has the right of building its own local Goods Shed at Guntakal Junction and of appointing its own staff for the conduct of its local goods traffic.

Telegraph Staff. 8. The business of each Railway shall have equal attention at the hands of the Joint Staff who must carry out the instructions of properly authorised officers of each Railway with reference to traffic for the respective lines.

Duties of Joint Staff. 9. Each Railway shall be furnished by the Joint Staff with any returns it requires regarding detentions to its own rolling-stock, and regarding all other matters relating to its own working.

Returns and Accounts. 10. The Southern Mahratta Railway Company's existing works and premises to be used in common for joint purposes by both Railways shall be fixed by Agreement.

Joint premises. The Southern Mahratta Railway Company shall from time to time provide the amount chargeable to Capital which is required to be expended for joint use of the two Railways upon additions and

Capital expenditure.

alterations of the existing premises, as fixed by agreement, and upon new premises, or works which may have to be provided for joint use within the limits of the joint station.

All such new works and additions and alterations shall be executed by the S. M. R. Company upon plans and estimates which shall be agreed to by both Railways before the work is commenced.

New works.

11. From the total amount expended from time to time from Southern Mahratta Railway Capital on premises, furniture and fittings used in common by both Railways, the value of the buildings at old Guntakal Station (now Timmencherla) rendered useless, shall be deducted, and an annual rent of $7\frac{1}{2}$ per cent. shall be charged on the difference to a Joint Station expenses account, to cover interest and maintenance.

Rent.

The value of the buildings at the old station to be determined by mutual agreement.

12. Any expenditure which may be required from time to time for joint use of both Railways upon new minor works and upon minor additions and alterations of existing premises which is chargeable to

Expenditure on joint works.

Revenue under the rules in force from time to time on the Southern Mahratta Railway Company shall be debited to Joint Station Expense Account.

The Southern Mahratta Railway Company shall execute all such additions and alterations and minor new works chargeable to Revenue upon plans and estimates which shall be agreed to by both Railways before the work is commenced, and shall also execute the work of maintenance and renewal of all premises and works which are used in common from time to time by both Railways within the limits of the joint station.

13. Upon the termination of this Agreement the amount of compensation to be paid by either Railway for capital expenditure incurred shall be determined by mutual agreement or if necessary

Termination of Agreement.

by arbitration as provided for in clause 42.

14. Each Company shall provide and maintain at its own cost all accommodation that may be required for its own exclusive use and each Railway shall provide and maintain its own permanent way and signals.

Maintenance.

15. Each Company shall provide, at its own cost, all stores and stationery required for its own exclusive use, and will make its own arrangements for cleaning and greasing its own vehicles.

Stores, cleaning and greasing.

16. All expenses, which under this Agreement are chargeable to Joint Station Expenses, shall be divided in proportion to the weight of traffic of each Railway using the station. Main line traffic

Division of expenses.

of both Railways shall be excluded from the account. The weight of Coaching Traffic shall be reckoned according to the following scale:—

1. For each passenger of whatever class, 1 cwt.
- " child's ticket, 56lb.
2. " horse or each head of horned cattle, $\frac{1}{2}$ a ton.
3. " sheep, calf, goat, pig, dog, or other small animal, 56lb.
4. Parcels at actual weight.
5. Carriages each, $\frac{1}{2}$ a ton.

17. All sums realized by the sale of lost property, unclaimed goods, licenses, &c. collected at Guntakal Junction Station, are to be credited to Joint Station Expenses Account.

Credit to Joint Station Expenses Account.

18. Any breach of Rules and Regulations by servants of the Madras Railway Company within Guntakal Station limits shall be dealt with by the Traffic Managers of the two Railways, and in case

Rules and Regulations.

of dispute as to the interpretation of the Rules and Regulations, the matter shall be referred to the Agent of the Southern Mahratta Railway, whose decision shall be final.

19. All damages or accidents which may be caused by Joint Station staff to the public, to the stock of either Railway or to trains and traffic within the limits of the station, and all damages or losses which

Damages or accidents.

either Railway may sustain or be put to in consequence of the acts of the Joint Station staff, however arising, within the limits of the Station, shall be charged to Joint Station Expenses.

20. Each Railway shall be responsible for damages or accidents caused by its own Running Staff within station limits.

Damages or accidents.

21. Notice of all accidents, damages and losses which occur within station limits shall be sent to the officers of both Railways immediately.

Damages or accidents.

22. Letters and telegrams relating to joint business and through traffic shall be interchanged free of charge between the two Railways.
Letters and telegrams,
23. Traffic booked to, or invoiced from, Guntakal Junction Station by either Railway shall be considered local traffic.
Local traffic.
24. The station books (with the exception of local goods books) shall be kept by the Joint staff, but they shall at all times be open to inspection by any authorized Officer of either Railway.
Station books.
25. The instructions of each Railway as to charges on traffic for their respective lines shall be furnished by the Traffic Managers of the respective Railways to the Joint Station staff, and must be acted upon.
Instructions.
26. No terminal on account of Guntakal Junction shall be charged on through traffic by either Company. Each Company shall furnish the other from time to time with lists of the rates and fares between Guntakal Junction and its respective stations.
Terminals rate lists.
27. The distance between Guntakal and other stations shall be furnished by each Railway to the other, but the amounts to be charged upon through traffic shall be furnished by the Railway concerned in the form of Station to Station Rates in order to avoid any calculation of charges according to distance.
Station to station rates.
28. Minimum charges on goods, luggage and parcels shall be divided between the Companies concerned in proportion to mileage, subject to a minimum of 4 annas in the case of luggage.
Divisions of minimum charges.
29. Each Railway shall be responsible for collecting all charges due to the other on all traffic received, with the exceptions noted below, for which the forwarding Railway shall be responsible, *via.*—
Responsibility of each Railway for collecting charges.
- (a) Charges on live stock of every description.
 - (b) Charges on all perishable articles booked either as goods or parcels.
 - (c) Charges on Commissariat, Ordnance and Government medical stores booked on credit note or prepaid.
 - (d) Passenger fares, freight on passengers' luggage, carriages, &c., and charges for insurance.
 - (e) Charges on all articles booked and carried with owners.
30. All errors of calculation made by forwarding stations in booking luggage, parcels, horses, carriages and dogs, as well as goods when such errors do not exceed annas two pies five shall not be subject to adjustment. This rule shall also apply to errors made in apportioning the mileage charges due to each Railway.
Errors in calculation.
31. The receiving Railway shall not reduce below the charge mentioned on the invoice or through way bill, without consent of the forwarding Railway, except in case of overcharges, the evident result of errors in rates classification or calculation.
Altering Invoices.
32. Under-charges on consignments, whether "Paid" or "To Pay," unless booked under credit note, shall be debited to the receiving station with the exception of items included in Clause 29.
Under-charges.
33. All over-charges not claimed shall belong to the Railway Company by which the charges are collected.
Over-charges.
34. Goods claims not arising from any act or negligence of the Joint Station staff shall be borne by the Railway in whose custody the loss or damage occurred, and when this cannot be ascertained with certainty, the claim shall be divided in proportion to mileage.
Adjustment of claims.
35. The Junction record as to number of articles received and transhipped as well as to the exterior condition of goods when unloaded from either Company's wagons shall be held to determine liability unless error can be demonstrated. When goods are reweighed at the Junction, record of reweighment shall be held to be correct. The absence of remark by the Junction staff shall be held to imply that the number and description of packages as described by the sending station are correct, and that the packages were externally in good order at time of transhipment.
Determination of liability.
36. The transhipment of all goods interchanged shall be performed by the Southern Mahratta Railway, either by contract or day labour, and the cost of the same shall be charged to Joint Station Expenses. The usual demurrage penalty shall be payable by either Company failing to

supply wagons in time to permit of the release of the other Company's stock within 36 hours.

37. All Stock shall be considered as handed over to the Joint Station staff when it is entered in the number-takers' books at the junction station and it shall be so entered directly it is placed in the tranship sidings. The Joint staff shall be allowed 36 free hours for the transshipment of goods from broad to narrow gauge wagons or *vice versa*, and if such wagons under load are not released of their loads within that time the usual demurrage penalty shall be enforced and this penalty shall be a charge against the joint station.

38. If at any time, either Railway shall be unable from any cause to receive and forward all the traffic tendered or likely to be tendered by the other, it shall be competent for the receiving Railway to give notice of not less than 7 days, naming the maximum quantity it will be prepared to receive and forward, and the period during which the restriction will be necessary, and during such period the said Railway shall not be bound to receive more than the quantity so specified.

39. In booking luggage, fractions of 5 seers shall be charged as 5 seers, and in booking goods, fractions of 10 seers shall be charged as 10 seers.

40. In calculating charges, fractions of an anna above five pies are charged as one anna, and this rule applies not only to the gross charge made to the public, but also to each Railway's proportion as well as to Government and private baggage booked on a warrant.

41. The Audit Offices of the two Railways shall exchange weekly Division Sheets, each Railway to have in division its own rates and fares as quoted for through traffic in accordance with Clause 27 (except in the case of insurance and traffic divisible by mileage between the Railways concerned), and shall account for all inward through goods, live stock, parcels and outward coaching (except parcels) traffic within six weeks from the date the traffic passes Guntakal Junction. A monthly settlement of accounts, based on division sheets, bills and statements as rendered and declared, shall be made by transfer adjustment, on the understanding that all errors which may be in them will be adjusted without delay in subsequent accounts by the responsible Railway.

42. In case of any difference of opinion between the two Railways as to the construction of any part of this Agreement, or as to its application to any particular case, it shall be open to either Railway to call for arbitration, to be conducted in the ordinary way, each Railway nominating its own arbitrator, and should the arbitrators so appointed fail to agree, they, that is the arbitrators, shall nominate an umpire. The decision of the arbitrators or their umpire shall be final and binding on both Railways in regard to the matter or matters which may be referred to them or him. But if either Railway fail to nominate an arbitrator within eight weeks after notice to call for an arbitration has been given to it by the other Railway, such other Railway may nominate its own arbitrator, and in such case the decision of the one arbitrator so appointed shall be binding and conclusive upon both Railways.

APPENDIX Q.

AGREEMENT.

ARTICLES OF AGREEMENT made the thirtieth day of December, one thousand eight hundred and ninety, BETWEEN the SOUTH INDIAN RAILWAY COMPANY, LIMITED, (hereinafter called the SOUTH INDIAN COMPANY) of the one part, and the PONDICHERRY RAILWAY COMPANY, LIMITED, (hereinafter called the PONDICHERRY COMPANY) of the other part: WHEREAS a Contract was made by Indenture, dated 24th November 1890, between the Secretary of State in Council of India of the one part and the South Indian Company of the other part, which shall be deemed to be herein recited so far as needful for the purposes of these presents, and of which a copy has been delivered by the South Indian Company to the Pondicherry Company on the execution hereof. AND WHEREAS the Pondicherry Company was incorporated in the year 1869, under the Joint Stock Companies Acts of 1862 and 1867, for the purpose (amongst other things) of constructing a Railway and Telegraphs in the French Colony of Pondicherry. AND WHEREAS the Pondicherry Company have in accordance with the terms and conditions of a Contract made in the year 1879, between that Company and the French Minister of Marine and Colonies, acting in the name of the said Colony of Pondicherry, constructed a line of railway from the town of Pondicherry to the River Gingi (hereinafter called the Pondicherry Line), where such line connects with the South Indian Railway, and such line of railway, after approval thereof by the French Colonial Government and the South Indian Railway Company, was opened for public traffic and has been and now is being worked, managed and maintained by the South Indian Railway Company, under the terms of an Agreement dated the 25th day of March 1879, and made between the said South Indian Railway Company of the one part and the Pondicherry Company of the other part.

Now these presents WITNESS, and it is hereby agreed and declared by and between the said Companies parties hereto for themselves and their successors in manner following, that is to say:

1. These presents shall not come into force unless and until the sanction of the said Secretary of State thereto in writing shall have been first obtained, and shall at all times be subject to the continuance of such sanction, and shall determine upon the determination of the said contract between the said Secretary of State and the South Indian Company under any condition in such Contract contained; or upon the said Secretary of State under the provisions of the 8th section of the said Contract between him and the South Indian Company, requiring the South Indian Company to retransfer to him such portion of the undertaking as connects with the Pondicherry Line at the River Gingi as aforesaid, so that the undertaking of the South Indian Company and the Pondicherry Line shall be no longer in connection.

2. All works from time to time required for the accommodation and extension of the traffic on the Pondicherry Line which may at any time be found necessary, and which it would have been the province of the Pondicherry Company to construct had they been themselves working the Pondicherry Line, shall be constructed by and at the cost of the Pondicherry Company to the satisfaction of the Engineer-in-Chief for the time being of the South Indian Company. Provided, nevertheless, that the failure of the Pondicherry Company to construct such works when called upon so to do, the South Indian Company shall be at liberty to commence and complete such works at the cost of the Pondicherry Company. The amount of the cost of any such works so carried out by the South Indian Company, as certified by their said Engineer-in-Chief, to be repaid to the South Indian Company by the Pondicherry Company within three months after the delivery to them of the Certificate of such Engineer of such amount, and in case of any default of the Pondicherry Company in making such repayment within such period, to be retained by the

South Indian Company out of any moneys for the time being and from time to time in their hands and payable by them to Pondicherry Company, under any provision of this Agreement.

3. The South Indian Company shall provide Rolling Stock, and shall, with their own staff and plant, work and maintain the Pondicherry Line, and all the Works, Buildings and Conveniences connected therewith.

4. The Pondicherry Line shall be worked by the South Indian Company as if it were an integral part of their undertaking and with a view to develop the traffic to the utmost. The gross receipts of the said line shall from time to time be paid into such Government Treasury in India as the Secretary of State may prescribe, and the rates for Passengers and Goods shall correspond with those for the time being in force on the undertaking.

5. Out of the gross receipts of the Pondicherry line there shall be deducted and retained by the South Indian Company for working expenses the same percentage of gross receipts as the traffic on the undertaking of the South Indian Company, including therein the Pondicherry line, is from time to time worked at such deduction to cover all expenses for working the line, maintenance of way and stations, and all charges except duty (if any) payable to the French Colonial Government, Direction and Office Expenses in England.

6. After the deduction of the above charge for working expenses from the said gross receipts the balance shall be ascertained, and subject to the sanction of the said Secretary of State, and to the provision by him of such moneys as may be necessary for the purpose, shall be paid over every six months by the South Indian Company to the Pondicherry Company in India in rupees.

7. The Pondicherry Company shall, at their own expense, from time to time, pay and discharge all sums (if any) that may become payable to the French Colonial Government by way of duty at the times and places, and in the manner required by such Government.

8. The gross receipts from traffic, to, from, and over the Pondicherry line, from or to the undertaking of the South Indian Company or other Railways in connection therewith shall be computed at a mileage rate, and divided between the two Companies in proportion to the distance Goods and Passengers are carried over each line respectively, the Pondicherry line for this purpose being considered as ten miles in length, and any part thereof in the same proportion.

9. Subject to the provisions of clause 1 hereof, this Agreement shall be for a period of three years from the first day of January 1891, terminable, however, during such period by either party on their giving twelve months' previous notice to that effect, expiring on the 31st day of December in any year.

10. In case of any dispute or difference between the two Companies in respect of any of the provisions or conditions herein contained, or the construction thereof, such dispute or difference shall be referred to and determined by arbitration between the two Companies according to the provisions with respect to the settlement of disputes by arbitration of the "Railways' Arbitration Act, 1889."

11. The expression "the undertaking" in these presents shall have the same meaning as is attached thereto in the said Indenture hereinbefore referred to.

In WITNESS whereof the respective Common Seals of the said Companies have been hereunto affixed the day and year first above written.

APPENDIX R.

Memorandum of Agreement, dated 13th February 1891, for working the BENGAL CENTRAL RAILWAY through the Agency of the State.

In this Agreement, unless there be something repugnant in the subject or context :—

- (a).—“ Government ” means “ Government of India or the Local Government or Administration to whom the Eastern Bengal State Railway may belong.”
- (b).—“ Company ” means “ the Bengal Central Railway Company, Limited.”
- (c).—“ Central Railway ” means “ the Company’s Railways now existing and worked, and any others which by Agreement may be added.”
- (d).—“ Manager ” means “ the Government Manager of the Eastern Bengal State Railway.”
- (e).—“ Agent ” means “ the Company’s Agent in India.”
- (f).—The term “ Indian Agency ” means all charges under control of the Company’s Agent and directly disbursed by him.
- (g).—“ Principal Contract ” means the main Contract between the Secretary of State and the Company for the construction and working of the Bengal Central Railway in force at the time being.

1. This Agreement is to be held to have come into force on and from the 1st July 1888, from which date the Government will work the Central Railway on the terms herein set forth for a period of three years certain, after which this Agreement shall remain in force until the termination of six months’ notice from either side desiring to revise or cancel it. Such notice to be given, so as to expire on the 30th June 1891, or on any succeeding 31st December or 30th June. The Manager will do all in his power to develop the traffic on the Central Railway in co-operation with the Agent.

2. The Company shall, during the continuance of this Agreement, maintain the way and works of the Central Railway in good order, to the satisfaction of the Government, and will be responsible for the results of accidents due to inefficient maintenance thereof. The Government shall be responsible for the results of accidents other than those due to defects in the way and works or to inefficient maintenance thereof; but the Company shall repair, replace, or make good at the cost of maintenance any damages or injuries to the way and works, the result of accidents from whatever cause arising when the actual cost of repairing, replacing, or making good such damages or injuries does not exceed ₹100 in each case. The rules for the time being in force as to the incidence on Capital and Revenue respectively of expenditure on State Railways open for traffic, shall be followed in making up the accounts of maintaining the Central Railway. The accounts shall be kept by the Joint Auditor on behalf of the Company. The Company shall pay to the Government a sum of ₹550 per mensem for keeping accounts in forms approved by Government of the expenditure under Capital and Revenue in maintaining the Central Railway. The accounts shall be rendered punctually to the Government at such times as they may require.

3. The Company shall at the expense of Capital complete the ballasting of the Central Railway as the requirements of the traffic, that may arise, demand, and shall complete the same between Dum-Dum Junction and Bongong Junction, as early as possible, after sanction is received from the Secretary of State.

4. The Eastern Bengal State Railway shall, during the continuance of this Agreement, work the Central Railway, and shall provide all train and station staff, materials and appliances usually supplied by Revenue for such working; first equipment being, however, always at the debit of the Company. Such first equipment shall be maintained by Government in good working order and condition.

5. The general rules and regulations in force for the time being on the Eastern Bengal State Railway for traffic working, shall also apply to the Staff of the Central Railway.

6. In consideration of the payment hereafter specified under Clause 10, the Eastern Bengal State Railway shall bear all charges of working the Central Railway, excepting the expenditure incurred in maintenance of way and works, and the cost or any share of the general charges on account of Home Establishment or Indian Agency, including in the latter the amount payable by the Company to the Government for Audit and Account, as specified in Clause 2.

7. The Government has paid to the Company the sum of ₹3,60,000, being part cost of the Company’s rolling-stock. On the Government ceasing to work the Central Railway, under this or any subsequent agreement, the Company shall, at its option, either repay to the Government the said sum of ₹3,60,000 in cash, and take back the whole of its rolling-stock, or shall make over to Government stock of such descriptions as may be

mutually agreed on at market value at time of transfer to be determined by experts, if necessary on such date as Government may cease to work the Central Railway. On Government ceasing to work the Central Railway under this or any subsequent Agreement the Government shall pay to the Company, on account of depreciation which has accrued under the previous working agreements on the Company's rolling-stock, from the 1st July 1884 to 30th June 1888, the sum of Rs. 2,71,841, being depreciation calculated at 5 per cent. per annum, on the entire value of the Company's rolling-stock on 1st July 1884, as per annexed statement. The account as between the Government and the Company shall, on 1st July 1888, stand as shown in that statement, and shall be the basis upon which the account shall be settled as between the Government and the Company on Government ceasing to work the Central Railway. From and after the 1st July 1888, no further depreciation shall be chargeable to Government on the said rolling-stock which shall remain at the disposal of Government who shall be responsible for its maintenance in good working order and condition. During the continuance of this Agreement the Government shall, out of its own or hired rolling-stock and out of the rolling-stock of the Company at the disposal of Government as above provided, supply at all times such rolling-stock of all descriptions as may be required to work the traffic of the Central Railway, and it is agreed that, on and after the 1st July 1888, no charge shall be made either by Government to the Company or by the Company to Government on account of rolling-stock, it being admitted that the charge for the use of the Company's rolling-stock not required for the traffic of the Central Railway is equal to the charge for additional rolling-stock of the Government required to be supplied for the traffic of the Central Railway.

8. The Government shall provide Locomotives and Rolling Stock of good quality in relative proportion to the requirements of the traffic of the two lines as now open.

9. The rates charged to the Engineering Department of the Central Railway for carriage of all stores and materials for Capital and Revenue Works respectively, and for ballast trains and engines, shall be the same as charged to the Eastern Bengal State Railway for similar services.

10. At the close of each half-year, the Eastern Bengal State Railway shall, for working the Central Railway, be credited with 40 per cent. of the gross earnings of the Central Railway for such half-year as full payment and remuneration for supplying rolling-stock, and working the line, including telegraphs, police, taxes, and gatemen.

11. The gross earnings of the Central Railway shall be paid into the Government Treasury in the same manner as is done with the Eastern Bengal State Railway earnings, and shall be dealt with under the Principal Contract.

12. The payments to be made under Clauses 2, 10, and 16 shall, in the order named, be preference charges under the head Working Expenses against the gross earnings of the Central Railway, and the balance shall be dealt with under the Principal Contract as regards the payment for Indian Agency, Provident Fund Contribution, Home charges, and the disposal of net earnings.

13. The Company shall, subject to the restrictions laid down in the Principal Contract, retain control over the rates and fares of the Central Railway, with the following exceptions:—

(i)—That no reduction in the mileage rates and fares of the Central Railway be made below those from time to time in force on the Eastern Bengal State Railway, without the concurrence of the Manager of that line.

(ii)—That no special concession be made to the Bengal Central Flotilla except under the terms of the Principal Contract or to any outside Company, without the concurrence of the Manager of the Eastern Bengal State Railway, and subject to the approval of Government.

14. The Agent shall have the power of issuing free passes to and from Calcutta and over any part of the Central Railway to the servants of the Company employed on the Central Railway, when proceeding on Company's business or on leave.

15. The Government shall, at the expense of the Eastern Bengal State Railway, duly ascertain and keep full, true and perfect accounts of all traffic upon the Central Railway; and such accounts shall comprise all such particulars of names, places, dates, commodities, numbers, rates, tolls, weights, quantities, mileage, and such other items as shall be sufficient for the full elucidation thereof, and for determining the amount payable to the Company, and shall also render periodical accounts and returns to the Company of the gross earnings of the Central Railway, and such other accounts as may be agreed upon. The Manager shall compile the Revenue Accounts of the Central Railway from time to time, and present the same to the Company as soon as possible after the close of each period of account.

cclxviii APPENDICES TO THE ADMINISTRATION REPORT FOR 1890-91.

16. The Agent with his office shall, if possible, during the continuance of this Agreement, continue to be accommodated in the same building as the offices of the Manager and shall pay for the use of the present office and godown occupied by the Company's offices a sum of Rs100 per month as rent. And the Agent shall both at the head-quarters' office and on the Central Railway and at its stations and junctions have all reasonable access to sources of information regarding the traffic and working, and to the incidence of charges made in the Eastern Bengal State Railway Accounts, which might in any way affect the incidence of similar charges as regards the Company's accounts.

17. All accounts between the Government and the Company arising out of this Agreement shall be adjusted on a half-yearly basis.

18. For the use of the Eastern Bengal State Railway line between Dum-Dum Junction and Calcutta, and for the use of the terminal stations and yards in Calcutta, the Eastern Bengal State Railway shall be entitled to receive in division of the earnings from through traffic a charge as for eight miles on all coaching and ten miles on all goods traffic booked between Central Railway stations and Calcutta and *vice versa*.

19. Other details to be adjusted between the Manager and the Agent subject to the terms of the Principal Contract. In the event of disagreement, the Director General of Railways to be the referee.

20. Nothing in this Agreement that shall be in contravention of the terms or conditions of the Principal Contract shall be binding on either party.

APPENDIX S.

Agreement between the Government of India and HIS HIGHNESS MAHARAJA PERTAB SINGH, INDAR MAHINDAR BAHADUR SIPAR-I-SALTANAT, MAHARAJA of JAMMU and KASHMIR, relative to the construction* of a railway to JAMMU.

The line shall be called the "Jammu and Kashmir State Railway."

2. An estimate of the entire cost of constructing the line on the 5 feet 6 inches gauge from Sialkot to the left bank of the Tawi river at Jammu shall be submitted to the Kashmir Darbar for sanction.

3. The whole line shall be constructed by the Darbar through its Chief Engineer Major General de Bourbel, according to the standard dimensions prescribed by the Government of India, and shall be completed with the utmost possible despatch.

4. All the capital required for the construction of the whole line shall be provided by the Darbar. The Darbar shall receive from the Government of India interest at the rate of 4 per cent. per annum on the capital expenditure on the section of the line which lies within British territory, from the date of payment.

5. All moneys needed for additional works found necessary on the British section of the railway after first construction is completed, will be found by the Government of India, and on similar works on the Kashmir section by the Darbar.

6. The section of the line in Jammu territory shall be leased to, and worked by, the North Western Railway for a period of five years from the date of opening to traffic. During this period the North Western Railway shall maintain the line in an efficient state, and shall pay to the Darbar one per cent. per annum on the capital expenditure on the Jammu section. The surplus net earnings on this section, in excess of the said payment of one per cent., during the period of five years, shall be divided equally between the North Western Railway and the Kashmir Darbar. In calculating net earnings, the rate of working expenses shall be taken at the average percentage of working expenses to gross earnings on the Punjab section of the North Western Railway, including the Jammu and Kashmir State Railway, for the same period, *plus* five per cent. per annum on gross earnings for the use of rolling-stock.

7. Subject to the payment of four per cent. interest provided in clause 4, the portion of the line in British territory shall remain the absolute property of the Government of India, and the earnings of it shall belong solely to that Government. The Government of India shall have the right at any time, after giving six months' notice, to repay to the Darbar the capital expenditure advanced by it in respect of this section of the line, and the payment of interest shall thereupon cease.

8. The Government of India and the Darbar shall provide, at their respective charges, and free of cost to the North Western Railway, the land required for railway purposes in their respective territories.

9. After the expiry of the said period of five years, a fresh arrangement shall be made for working the line upon terms to be agreed upon between the Government of India and the Darbar.

10. The fares charged to passengers, the rates for goods, and the rates for railway materials, whether used in construction, maintenance, or working of the line, shall be such as are in general use on the Punjab section of the North Western Railway. The line shall be worked in accordance with the general rules and regulations in force on Indian State Railways.

11. The permanent-way, station machinery, and other fittings shall be of the types used on Indian State Railways, and shall be obtained at the cost of the Darbar through the Government of India.

12. Half-yearly *pro forma* accounts showing the entire earnings of traffic and the working expenses, calculated as explained in clause 6 of this Agreement, incurred upon the Jammu and Kashmir State Railway, shall be supplied regularly by the North Western Railway to the Darbar.

13. His Highness the Maharaja of Jammu and Kashmir, accompanied by his suite and servants with their luggage, shall, when travelling by ordinary train upon this railway,

* Since made applicable to the working of the line by the North Western Railway. "Main line section" being substituted for "Punjab section" in paragraphs 6 and 10.

have the privilege of travelling free of any charge between Jammu and Sialkot; suitable vehicles being reserved on each occasion for the exclusive use of the Maharaja and his party.

14. His Highness the Maharaja shall also have the privilege of running free of any charge between Jammu and Sialkot two special return trains every year, consisting each of not more than 18 railway vehicles of each description as may be required.

15. Each of the ordinary daily trains shall have one carriage attached to it for the exclusive use of the State officials, each of the number of occupants paying a single fare. This carriage shall ordinarily be of the intermediate class, but shall be changed to one of another class upon the requisition of the Darbar.

16. The site of the terminal station at the Jammu end of the line shall be fixed by the Darbar.

17. His Highness the Maharaja of Jammu and Kashmir shall grant to the British Government full jurisdiction within those portions of land situated in His Highness' territories which may be occupied from time to time by the Jammu and Kashmir State Railway or its premises. This cession of jurisdiction is restricted absolutely to railway limits, and to cases occurring within those limits, and does not confer any right of interference in the internal administration of His Highness' territory. Accordingly the railway police shall forthwith surrender to the Darbar any accused person who, having escaped from the custody of His Highness' police, is in their custody within railway limits.

18. All the plants and trees along and within the whole line lying in the territory of His Highness the Maharaja shall also be considered the property of the Darbar.

Dated at Srinagar this fourth day of July 1888, corresponding with twenty-third day of Har Samvat 1945.

[This Agreement was approved and confirmed by His Excellency the Viceroy and Governor-General in Council on the 14th July 1888.]

Supplementary Agreement between the Government of India and the State Council of Jammu and Kashmir, relative to the funds required for the construction of the British section of the Jammu and Kashmir State Railway.

Whereas on the 14th July 1888, an agreement was concluded between the Government of India and His Highness the Maharaja of Jammu and Kashmir, according to which it was settled among other points that all the capital required for the construction of the whole line of Railway between Sialkot and Jammu should be provided by the Darbar, and that the Darbar should receive from the Government of India interest at the rate of 4 per cent. per annum on the capital expenditure, on the section of the line which lies within British territory; and whereas the Government of India has since undertaken to pay from Imperial Funds the amount required for the construction of the British section, the Government of India and the Kashmir State Council do hereby make and enter into a supplementary agreement as follows:—

The capital required for the construction of the British section of the Jammu and Kashmir State Railway shall be provided by the Government of India instead of being advanced as a loan by the Kashmir Darbar.

2. So much of clauses 4 and 7 of the agreement of the 14th July 1888, as relates to the following matters, namely—

- (a) the provision by the Darbar of the capital required for the construction of the section of the Jammu and Kashmir State Railway lying within British territory,
 - (b) the payment to the Darbar of interest on the capital which was to have been so provided, and
 - (c) the repayment to the Darbar of such capital,
- is accordingly hereby cancelled.

[This Agreement was approved and confirmed by His Excellency the Viceroy and Governor-General in Council on the 18th November 1890.]