# ADMINISTRATION REPORT

ON

# THE RAILWAYS IN INDIA

**FOR** 

1892-93.

LIEUTENANT-COLONEL R. A. SARGEAUNT, R.E.,

Assoc. Inst. C. E., V. I. Inst.,

Director general of railways.

PART II.



OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.
1893.

## ADMINISTRATION REPORT

ON

# THE RAILWAYS IN INDIA

FOR

1892-93.

BY

LIEUTENANT-COLONEL R. A. SARGEAUNT, R.E.,

Assoc. Inst. C. E., F. I. Inst.,

DIRECTUR GENERAL OF RAILWAYS.

PART II.



CALCUTTA:

OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA. 1893.

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

• The following lengths of railway have been opened to public traffic from the 1st April 1893 to 15th December 1893:

Date.	Railway.	From	То	Miles.	REMARKS.
12th April 1893 .	Jetalsar-Rájkot	Jetalsar .	Rájkot .	46 <del>}</del>	
23rd April 1893 .	Guntakal-Mysore frontier	Dharmavaram	Hindupur .	49‡	
10th May. 1893 .	Burma	Meiktila road	Meiktila Can- tonment .	123	
11th June 1893 .	Bengal Dooars	Latiguri .	Ramshai-Hât	7 <del>3</del>	For goods traffic.
15th July 1893 .	East Coast ,	Rajahmundry.	Vizianagram.	163	For goods traffic, and on the 21st August 1893 for passenger traffic.
15th July 1893 .	East Coast	Sámalkôt .	Cocanada .	94	For goods traffic, and on the 21st August 1893 for passenger traffic:
	East Coast	Waltair .	Vizagapatam.	13	For goods traffic, and on the 21st August 1893 for passenger traffic.
17th September 1893	Guntakal-Mysore fron-	Hindupur .	Mysore frontier	7	•
17th September 1893	Southern Mahratta (Mysore section)	Dodballapur .	Mysore frontier	311	
26th October 1893.	Oudh and Rohilkhand, Lucknow-Rae Bareli- Benares section	Lucknow .	Rae Bareli .	48⅓	
8th November 1893	Pálanpur-Deesa	Pálanpur	Deesa	171	For goods traffic, and on the 21st November 1893 for passenger traffic.

# CONTENTS.

CHAPTER I.		İ	Page.	  Paragra
•			Page.	[Paragra]
Stores and Rolling stock.				l
Section i.—Stores.				1
Working of the stores department during 1892-93—			} .	
East Indian				1
Bengal-Nágpur	•		] }	1
* 1, 18:11	• •	•		[
Indian Midland	•	•. •		1
North Western (state)	• •	•	} 2	}
Oudh and Rohilkhand (state)	•		1	1
Eastern Bengal (state)	• •	•	) /	
East Coast	•	: .	1	
Great Indian Peninsula	•		1	
Rajputana-Malwa		•	3	1
Southern Mahratta	•		)	
Bhávnagar-Gondal-Junagarh Porbander			4	]
			Ì	1
ores balances—	*		ŀ	
Stores transactions on the standard and metre gauge railwa and review thereof	ys during	g 1892,	} .   4	
iscellaneous—			,	]
East Indian			)	
Bengal-Nágpur	_		} 14	
Indian Midland	·		)	1
North Western (state)	• •	•		1
	•		} 15	]
	• •	•	,	1
Eastern Bengal (state)	•		} 16	1
Great Indian Peninsula	•	•	,	}
Bombay, Baroda and Central India	• •	•	1	1
The Nizam's Guaranteed State	•		17	İ
Bengal and North-Western railway system		•	)	1
Rajputana-Malwa			18	
Southern Mahratta			)	
South Indian	• •	•	19	
Burma (state)			1	
Rohilkund and Kumaon railway system			20	
•				į
Section ii.—Rolling-stock.				
Locomotive and vehicle stock on the standard and metre gauge 31st December 1892	railways	on the	1	
Vehicles adapted for military purposes on the 31st December 18		• :	1)	13
	.92	•	20	'
Bengal-Nágpur	•		16	1
Indian Midland		• •	1)	
North Western (state)	•	•	/-	1
Oudh and Rohilkhand (state)	• •	•	1	
Eastern Bengal (state)	•			•
East Coast			21	1
Great Indian Peninsula		•		
Bombay, Baroda and Central India ,			1	1.
Madras	• •	•	1	
The Nizam's Guaranteed State	•		$\mathbb{R}^{-1}$	•
Bengal and North-Western railway system			22	1
Rajputana-Malwa			] }	]
Southern Mahratta		•	1;	1
South Indian	•	٠.		ļ.
Burma (state)	•	•	23	
Dibru-Sadiya		•	1	

11	00111211101	•		
· 			Page,	Paragraph.
	CHAPTER II.		·	<u> </u>
•	CAPITAL.		ļ	
East Indian			34	2
Bengal-Nágpur			36	3
Indian Midland	,		37	4
Wardha Coal • • •	• • • •		()	5
Dhond-Manmad	• • • • •	• • •	38	6
Bezwada extension • • • •			1)	8
North Western (state) Hyderabad-Umarkot			39	1
Oudh and Rohilkhand (state)			40	10
Eastern Bengal (state) •			41	111
Bengal Central			43	12
Calcutta Port Commissioners'			,	13
Great Indian Peninsula .			} 44	14
Bombay, Baroda and Central Ind	ia		45	15
Madras			46	16
Delhi-Umballa-Kalka			14	17
Tarkessur	• • • • •	• • •	47	18
Khámgaon and Amráoti .			1	19
•		• • •	,	20
The Nizam's Guaranteed State			48	31
		• • •	1)	23
Rájpura-Bhátinda Jammu and Kashmir (Native stat			49	23
Bengal and North-Western railwa	· · · · · · · · · · · · · · · · · · ·	•	}}	24
Rajputana-Malwa railway	• •		50	<sup>25</sup>
Southern Mahratta			51	20
Southern Mahratta (Mysore section	on)		, ,	28
Southern Mahratta (Mysore-Nanj	angud and Yesvantpur-Dodballapur	sections) .	52	. 20
South Indian			53	30
Burma (state)			54	-
Rohilkund and Kumaon railway s	system	• • • •	35	32
Dibru-Sadiya	• • • • • • •	• • •	5 33	*33
The Gaekwar's Mehsána Kolhápur			) •	34
Kolhápur Jodhpore-Bickaneer railway syste	• • • • • •	• • •	56	35
Bhávnagar-Gondal-Junágarh-Por			J	36
	the standard and metre gauge railwa	 ava on the arct	)	37
December 1092		ays on the 31st	<b>}</b> 57	38
Cost and particulars of some of the		•	\ "	)
Cost and particulars of the import	ant railway tunnels		1	39
				1
			ŀ	<b>}</b> .
	CHAPTER III.			
STATISTICS OF	Indian Railways, 1891 and 1892.			İ
Review	of expenditure on working.			
	e principal railways by half-years			
Total maintenance expenses per n	nean mile : standard gauge	• • •	1)	1
Total maintenance expenses per n	nean mile : metre gauge		} <b>7</b> 4	2
Maintenance expenses per mile of	track, including sidings : standard g	auge .	)	3
Maintenance expenses per mile of	track, including sidings : metre gauge		76	5
Maintenance expenses per 1,000	gross ton-miles: standard gauge .		77	6
Maintenance expenses per 1,000	gross ton-miles: metre gauge		)	1 2
Total locomotive expenses per tra	in-mile: standard gauge		78	8
Total locomotive expenses per tra Locomotive expenses per train-mi	ain-mile: metre gauge	• • •	) .	و
Locomotive expenses per train-m	ile : metre gauge		1	10
Locomotive expenses per 1,000 g	ross ton-miles, standard manne		3 79	11
Locomotive expenses per 1,000 gr	oss ton-miles : metre gauge	• •	} 80	12
I assess the automos and of fig. 1		•	,	13
Locomotive expenses, cost of fuel	• • • • • • •			
Locomotive expenses per 1,000 gr	oss ton-miles, excluding cost of fuel	standard wave	81	14
Locomotive expenses per 1,000 gr	oss ton-miles, excluding cost of fuel: oss ton-miles, excluding cost of fuel: n	standard gauge	81 82	15

# CONTENTS.

	Pa	ige.	Paragrap
CHAPTER III—concld.			
STATISTICS OF INDIAN RAILWAYS, 1891 AND 1892—concid.			
Review of expenditure on working-concld.	1		
Carriage and wagon expenses per 1,000 home vehicle miles : standard gauge		82	17
Carriage and wagon expenses per 1,000 home vehicle miles: metre gauge	<u> </u>		• 1
Fraffic expenses per train-mile: standard gauge	}	83	19
Fraffic expenses per train-mile: metre gauge	1,	٥.	20
General charges, percentage on gross earnings: standard and metre gauges	}	84	2
Compensation: standard and metre gauges		85	2
Summary of working expenses compared with gross earnings: total of all railways.		86	2
CHAPTER IV.			
REVENUE TRANSACTIONS-TRAFFIC AND WORKING.			
Map showing the several systems of railways and steam tramways corrected to the 30th	<b>b</b>		
September 1893		88	1
Details of the earnings and expenditure of the several railways		•	2
East Indian railway system • • • • • • • • • • • • • • • • • • •	)		3
Bengal-Nágpur	ı	93	4
ndian Midland railway system	1	96	5
North Western railway system		98	6
Oudh and Rohilkhand (state)	1	103	. 1
astern Bengal railway system	ĺ	105	8
Calcutta Port Commissioners'		108	9
reat Indian Peninsula railway system	l	109	10
Bombay, Baroda and Central India	4	112	11
Madras	1	116	12
The Nizam's Guaranteed railway system		119	13
The Gackwar's Petlad		121	14
Bengal and North-Western railway system		123	15
Rajputana-Malwa		125	16
Southern Mahratta railway system		128	17
South Indian		131	18
Burma (state) railway system		134	19
Rohilkund and Kumaon railway system	1	137	20
Dibru-Sadiya		139	21
The Gaekwar's Mehsána Jodhpore-Bickaneer railway system	1	141	
Bhávnagar-Gondal-Junágarh-Porbandan	\	143	23
Difavilagai-Gondar-Junagain-Lordandar ,		145	
	ĺ		
* CUADADA M			ŀ
CHAPTER V.		-	
Schools and Fine Funds	1.		
Section i.—Schools.	ļ,		
Railway, and local and district schools	.	148	1
Section ii.—Fine Funds.	ļ.		
Summary of transactions on state railways worked by the State	1	149	
Details of expenditure		150	2
	1	•30	3

#### APPENDICES.

A Statistics of the working of Indian railways, Parts I and II, for the half-	PAGE.
years ended 30th June and 31st December 1892	i
B.—Statement showing the general results of the working of the principal railways	
during the years 1888 to 1892	lxxx
C Statement showing the mileage, age, cost, and general results of the working	
of Indian railways for the year 1892	voii

### CONTENTS.

### APPENDICES-concld.

	PAGR.
D.—Statement of Indian railways and steam tramways, outside municipal limits, constructed and in progress on the 31st March 1893	XCV
E.—Statement showing the distribution of the mileage of railways and steam tramways, outside municipal limits, by provinces on the 31st March 1893	cxcviii
F.—Table of railways constructed in or traversing native states	cciv
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.	ccxii
H.—Statement showing the actual capital expenditure on open lines of railway which are the property of the State, and the mileages during the nine years 1884-85 to 1892-93	ccxxii
I.—Agreement between the Secretary of State for India in Council and the East Indian Railway Company for the provision of a Sinking Fund in connection with the Kurhurbaree and Serampore collieries for the gradual extinction of the whole capital expended on the works, dated the 8th March 1892	ccxxiv
J.—Indenture between the Secretary of State for India in Council and the Assam-Bengal Railway Company, Limited, for the construction and working of the Assam-Bengal railway, dated the 26th April 1892.	ccxxy
K.—Agreement between the Oudh and Rohilkhand railway and the Rohilkund and Kumaon railway for the interchange of traffic via Lucknow and Bareilly junctions, and for the joint working of those stations, dated the	
L.—Agreement between the Bengal and North-Western railway and the Government, North-Western Provinces and Oudh, for the working of the ferries known as the Ajodhya and Byramghat ferries, dated the 21st December	ccxlvii
MAgreement between the Oudh and Rohilkhand railway and the Bengal and North-Western railway for the interchange of traffic at Byramghat, dated	ccixvi
the 1st February 1892	cclxxi
sioners for the Port of Calcutta for the performance by the latter of terminal services on traffic despatched from and to stations on the East Indian railway and connected lines, to and from the Kidderpore docks, dated the 10th February 1802	cclxxiv
O.—Agreement between the Eastern Bengal (state) railway and the Commissioners for the Port of Calcutta for the performance by the latter of terminal services on traffic despatched from and to stations on the Eastern Bengal (state) railway and connected lines, to and from the Kidderpore Docks	cclxxviji
P.—Agreement between the Madras Railway Company and the South Indian Railway Company for the interchange of traffic and for the use in common by both railways of the Madras Railway Company's station at Katpadi, dated the 22nd March 1892	cclxxxii
Q.—Agreement between the East Indian Railway Company, the Oudh and Rohil- khand and the Indian Midland railways for the interchange of traffic at Cawnpore, and for the use in common by the three railways of the East Indian Railway Company's existing station at Cawnpore, dated the	
29th April 1892.  R.—Agreement between the Commissioner in Sind and the North Western (state) railway for the working of a ferry at Kotri in connection with the Hydera-	cclxxxvi
bad-Umarkot railway, dated the 10th May 1892  S.—Agreement between the Madras railway and the Nilgiri railway for the	ccci .
joint use of the Mettupalaiyam station, dated the 15th June 1892  T.—Agreement between the Madras Railway Company and the South Indian Railway Company (Limited) with respect to the Madras, Arkonam and	ecchi
Erode stations, dated the 1st July 1892.  U.—Agreement between the Secretary of State for India in Council and the	ccciv
Bengal and North Western railway for the lease of the ferry across the River Gogra on the road from Revelganj to the Ballia district, dated the 16th September 1892	cccviii
VAgreement between the Secretary of State for India in Council and the Patiála Darbar for the working and maintenance of the Rájpura-Bhátinda railway by the North Western (state) railway on behalf of the Patiála Darbar, dated the 30th January 1893	<b>400</b> P
W.—Modification of clause 17—II of the agreement between the East Indian and the Bengal-Nagpur railways for the interchange of traffic at, and joint use	cccx
of, the Katni junction station, executed on the 31st July 1891.	CCCXV

List of tabular statements contained in the Director General of Railways' report, Part II, for 1892-93.

Page.	State- ment No	Particulars.
6—13	1	Stores transactions on the standard and metre gauge railways during 1892.
24 -29	2	Locomotive and vehicle stock on the standard and metre gauge railways on the 31st December 1892.
30-33	3	Rolling-stock on the standard and metre gauge railways adapted for military purposes, as existing on the 31st December 1892.
. <b>58—</b> 65	4	Average mileage capital cost of the standard and metre gauge railways on the 31st December 1892, distributed over main heads of expenditure, exclusive of steam ferries and suspense items.
66-69	5	Cost and particulars of large railway bridges.
70—73	6	Cost and particulars of important railway tunnels.
148	7	Railway schools.
149	8	Local and district schools.
149	9	Transactions of the Fine Funds during 1892-93 on state railways worked by the State.
	ļ.,	•
		APPENDICES.
	   	See pages iii and iv of the table of contents.

### ADMINISTRATION REPORT

ON

## THE RAILWAYS IN INDIA

FOR

1892-93.

PART II.

### CHAPTER I.

#### STORES AND ROLLING-STOCK.

SECTION I.—STORES.

#### General.

Working of the stores department during 1892-93.

The arrangements in force during the previous year for landing and forwarding English stores and making local purchases for state railways at the principal Indian ports were continued during the year 1892-93.

### East Indian Railway (standard gauge).

2. The cost of working the stores department was the same as in the pre-

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

### Bengal-Nágpur Railway (standard gauge).

3. During the year 1892 the Damoodur and Umaria depôts were closed. At present there is, in addition to the head-quarters store at Nágpur, only one other depôt, viz., at Jharsuguda, mile 382, and this supplies the Sambalpur extension and parts of the branch and main lines towards Katni and the Bengal end. It is intended, however, to close the depôt at Jharsuguda very shortly, and all the miscellaneous stores lying there are being sent into the main depôt at Nágpur.

In the Administration report for 1891-92 it was stated that only 35 miles of permanent-way materials out of the balance of the stores taken over by Government on account of the late Nágpur-Chhattisgarh State railway then remained on the books. This balance of 35 miles has now been disposed of by the sale of 13½ miles to the Rohilkund and Kumaon Railway Company, 9½ miles to the Bengal

and North-Western Railway Company, and by the transfer of 12 miles to the

Eastern Bengal (state) railway.

The material sold to the Rohilkund and Kumaon and Bengal and North-Western Railway Companies was delivered free of carriage charges in trucks at Katni at R55 per ton for rails, R85 per ton for fishplates, and R120 per ton for fishbolts and spikes.

This disposes of the entire stock of material belonging to the late Nágpur-Chhattisgarh State railway taken over by Government under agreement with

the Bengal-Nágpur Railway Company.

### Indian Midland Railway (standard gauge).

4. The first stock-taking following on completion of original construction works was carried out during the year, and the various discrepancies between the actual stock and the figures on the books are under investigation with a view to adjustment.

### North Western (state) Railway (standard gauge).

5. The cost of working the stores department in 1892 was R83,566 against R80,931 in 1891; the increase of R2,635 being due to the promotion of the Chief Storekeeper and the appointment of an Assistant Storekeeper to the charge of the Quetta depôt.

Stores amounting to R19,51,083 were sold during the year. The sales included the transfer to the Mushkaf-Bolán railway of 15 bogie low-sided trucks with vacuum brakes, valued at R58,663.

The stores transactions of the Amritsar-Pathánkot railway were absorbed into those of the North Western (state) railway from the 1st April 1892.

The collection of the 16 miles of permanent-way material ordered to be kept in reserve at Pesháwar was completed in June 1892. The actual cost of the material stacked amounted to R3,67,759.

### Cudh and Rohilkhand (state) Railway (standard gauge).

6. Verification of the stores in stock was completed in March 1892, but owing to their scattered state, the result arrived at was not entirely satisfactory. More storage and office accommodation is now being provided, and as soon as the buildings are completed, the stores will be re-arranged and again verified.

The selling rate of unserviceable rails was increased from six to nine annas per foot during November 1892, and the sales have not fallen off at the enhanced rate. Old rails valued at R1,23,285 were sold during the official year ending 31st March 1893, and R66,500 worth of unserviceable material and surplus stores were also disposed of by auction or transferred during the year.

Pot sleepers required for the renewals on this railway are manufactured in the locomotive workshops at Lucknow out of Barákar-pig iron and old broken pot sleepers from the home line. 94,278 were issued during the 12 months ending 31st March 1893, and the outturn is increasing.

### Eastern Bengal (state) Railway (standard and metre gauges).

7. There was only a small reduction in the value of the surplus stores during the year, the figure being R39,586 at the end of 1892-93, against R40,000 in 1891-92.

The stock verification at the different depôts on the line was carried on with regularity, and although discrepancies were in some cases discovered, the result on the whole was satisfactory.

### East Coast Railway (standard gauge).

8. The arrangement for landing stores at Cocanada and Vizagapatam by Messrs. Hall, Wilson & Co. has worked well. During the year under review, 35,188 tons of English stores, sent out from England, were landed at different ports, vis., 22,506 tons at Cocanada, 11,084 tons at Vizagapatam, and 1,598 tons at Masulipatam; the first two items representing the stores for the East Coast railway proper, and the last for the Kistna bridge. At the recommendation of this railway, a new port was opened at Ganjam, under the Indian Ports Act, on the 7th January 1893, but the amount of stores landed at that port during the year has been comparatively small, viz., 1,800 tons.

The bulk of "locally" purchased stores for this railway have been obtained

through the agency of the Port Storekeeper, Calcutta.

During the greater portion of the year, an executive engineer held charge as Chief Storekeeper. There were three main depôts, at Cocanada, Vizagapatam, and Gopalpur, in charge of depôt storekeepers, and also several depôts attached to divisions. The total expenditure for working the stores department during the year was R1,70,000, which includes salaries, allowances, office expenses, and also rent and office furniture.

During the year, the Kistna bridge stores were, after verification, amalga-

mated with the general stores of the East Coast railway.

### Great Indian Peninsula Railway (standard gauge).

9. During the official year under report the purchases of stores in India amounted to R29,89,296; and English material to the value of R33,02,744 was received in India and debited to general stores account. The total issues, including sales, during the same period amounted to R68,45,499.

In addition to the stores purchased from outsiders, manufactured articles, valued at R7,43,166, were supplied from the company's workshops upon orders from the Storekeeper; raw materials to the amount of R5,08,111 having been worked up at a cost of R1,68,335 for labour and R65,720 for fuel and contingent expenses. The following items may be mentioned as forming part of the raw materials operated on, viz., 1,902 tons of teak logs purchased at an average cost of R96-8-11 per ton for conversion in the log mill, and 210 tons of scrap iron wrought up in the steam-hammer factory.

The total receipts, from all sources, were R70,35,206; and the total issues,

including sales, during the same period amounted to R74,20,330.

### Rajputana-Malwa Railway (metre gauge).

10. The work of verifying stores in the central depôt was in progress

throughout the year.

The watch and ward of the stores was transferred to the police department in February. 1893, having previously been entrusted to chowkidars paid by the stores department.

On the recommendation of the Stores Committee, a sum of R47,844 was

written off on account of depreciation on stock.

### Southern Mahratta Railway (metre gauge). .

11. Stores amounting to R87,870 were sold during the year. The sales included transfers to the East Coast and Bangalore-Hindupur railways of stock valued at R44,031 and R14,643 respectively. The transfer to the former railway consisted almost exclusively of stores and material obtained in excess of requirements and remaining over on completion of the Bellary-Kistna line. The value of this material in hand at the close of the year was shown on the book as R49,530.

Under the orders of Government, the Southern Mahratta and Mysore railway stores accounts were amalgamated during the year, and, except for large construction works, materials or stores for special renewals are now maintained as for one, and not, as heretofore, for two distinct railways.

### Bhávnagar-Gondal-Junágarh-Porbandar Railway (metre gauge).

12. During the year the Committee of Management decided to alter their procedure of obtaining supplies of stores, materials, etc., from England. Formerly all English stores were obtained through the Secretary of State, but as this procedure sometimes involved waiting for a lengthy period, the Committee thought it more advantageous to appoint an agent of their own in England. This new departure in the manner of purchasing stores has so far proved a success. At the beginning of the year one lakh of creosoted pine sleepers were ordered from England. These were supplied in time and appeared to be of good quality and up to specification.

In June, two lakhs of creosoted pine sleepers were ordered (one lakh being for the Jetalsar-Rájkot railway). The sleepers have all been received and are approved.

Forty-three miles of rails (41\frac{1}{4} lbs. per yard), Vignole's pattern, were ordered. They are all out and most of them laid on the Jetalsar-Rajkot railway.

The verification of the stores magazine has nearly been completed, and the result of the verification will, in the Storekeeper's opinion, be in favour of stores.

The work of receiving stores from England in Bombay and superintending the despatch of the same has been done by the Bombay Port Trust.

#### Stores balances.

13. The statement on pages 6 to 13 contains an abstract of the stores transactions of the several standard and metre gauge railways for the calendar year 1892.

At the close of the year, the capital locked up in stores on standard and metre gauge railways was represented by a sum of R5,42,56,112, showing a net decrease of R30,47,476 as compared with the previous year. There was also a sum of R39,85,620 under adjustment on the 31st December 1892, making a total of R5,82,41,732 at the debit of stores on that date.

State lines worked by companies (standard and metre gauges).—Of the standard gauge state lines worked by companies, it is noticed that accumulations of stores occurred during the year under review only on the Godhra-Rutlam railway to the extent of R13,28,908. The transactions of the other lines show large decreases of stock. The accumulations on the Godhra-Rutlam railway were mainly due to the receipts during the year of bridge-work, permanent-way, and station materials, aggregating R16,90,381, while the issues of stores of these classes amounted to only R4,13,235 during that period.

The stores balances of the East Indian railway were reduced during the year 1892 by R9,95,649, and the reduction in interest amounted, during the first half of the year, to R20,392 and during the second-half to R10,773. The surplus stores, other than scrap and condemned stores, in hand on 31st December 1892, amounted to R1,14,006 against R2,16,072 at the beginning of the year, showing a decrease during the year to the extent of R1,02,066. The book value of scrap and condemned stores on 31st December 1892 was R6,16,233 as compared with R4,69,311 on 31st December 1892; of this increase the sum of R1,39,132 represents the value of old rails reserved for company's purposes.

On the metre gauge state lines worked by companies there were decreases

in stores balances during the year under review on all with the exception of the Assam-Bengal and Máyavaram-Mutupet railways. Although the South Indian railway shows a decrease on the entire transactions, it is noticed that there were additions to stock under several classes. This has received the attention of Government, and the authorities of the line have been requested to take steps to reduce the stores balances generally to the lowest limit compatible with efficient working. The increase of stock on the Assam-Bengal and Máyavaram-Mutupet railways does not call for any remarks, these lines having been in progress during the year under report.

State lines worked by the State (standard and metre gauges).—With the exception of the Eastern Bengal (state), Mári-Attock, Burma (state) and Mu Valley (state) railways, all the State lines worked by the State show reductions in their stores balances. The increase of stock on the Eastern Bengal (state) railway, which amounted to R3,00,612, was mainly due to the receipt of permanent-way materials, rolling-stock and other small stores during the latter part of the year, which were not all charged off to works within the year.

The increase on the Burma (state) railway was due to the receipt of rails and sleepers for renewals on the Irrawaddy section. These were issued to revenue early in the next year (1893). Besides these, the stock of fuel was also increased during the year: this increase being necessary owing to the extensive use of wood fuel and to the stock needed in consequence.

The Mári-Attock and the Mu Valley railways were under construction during the year under review.

The stores balances of the North Western (state) railway on 31st December 1892 included R71,076 (exclusive of a sum of R11,156 under adjustment) on account of the stock of the gradient improvement works, North Western (state) railway.

The balances of the North Western (state) railway at the close of the year under report show a decrease of R49,710 as compared with the opening balance of the year. But if the amount under adjustment be taken into account the net result shows an increase during the year to the extent of R3,93,208. The amount under adjustment on 31st December 1892 was, however, for the most part finally adjusted during the early part of 1893.

The stores balances of the Oudh and Rohilkhand (state) railway were reduced during the year to the extent of R4,52,952. Surplus stores amounting to R3,62,965 were sold to the public and to other railways. The sales of the Dufferin bridge plant during the year amounted to R21,653.

Lines worked by guaranteed and assisted companies (standard and metre gauges).—With the exception of the Madras and the Deoghur railways, the stores balances of all the guaranteed and assisted railways were reduced during the year. The transactions of the Madras railway, however, though they show a decrease of R60,782 on 31st December 1892 as compared with the balances at the close of the previous year, nevertheless present several instances of accumulations under various classes, and the attention of the authorities of the line has been invited to these increases.

Lines owned by native states (standard and metre gauges).—There have been general reductions of stock during the year on all the lines owned by native states, except on the Jodhpore-Bickaneer railway, which shows an increase of stock, including the amount under adjustment on 31st December 1892, to the extent of R2,11,239.

STATEMENT

Stores transactions on the standard

	<del></del>				_ <u></u>	<del></del>	BALANCE IN
		T-4-1 1 1			A ·	В	C
Serial No.	RAILWAY	Total balance on the 1st January 1892.	Receipts during the year.	Issues during the year.	Bridge-work.	Engineer's	Workshop machinery.
	STANDARD GAUGE.						
	State lines worked by com-	•	<b>"</b>		•	^	R
I	panies.	56 80 <b>-</b> 50	6, 06, 200			,	
•		56,89,559	61,96,390	71,92,039	East Indian		***
II	Patna-Gya		49,93,879		ŀ	i -	•••
111	Bengal-Nágpur	43,20,271	19,23,833	57,40,310	26,237	2,75,930	1,71,929
1V		34,72,854		32,92,670	33,457 native state s	24,225	98,320
V	Bhopal-Itársi (British section). Godhra-Rutlam		<b>i</b> 1	1	i	I	•••
V	Wardha Coal	1,97,904		5,20,455	1,16,892	2,670	8,131
• .			separate stor	1	tor this line,	***	*** *
VII VIII	Dhond-Manmad	11,853	55,656	65,765	***	•••	•••
VIII	Bezwada Extension (including the Bezwada-Godávari section of the East Coast railway).	I here are no	stores on this	s line.		•••	•••
	TOTAL .	1,36,82,441	1,50,19,121	1,68,11,239		•••	•••
٠.	State lines worked by the State.						
IX	North Western (state) (including the gradient division).	1,03,15,354	1,26,49,438	1,26,99,148	8,05,305	1,11,777	1,17,454
	Amritsar-Pathánkot	Included in	l the stores trans	 sactions of the	   North Wester	l rn (state) ra	ilwav.
x	Hyderabad-Umarkot	1	count for this 1			, <u>.</u>	•••
ΧI	Oudh and Rohilkhand (state) .	22,84,903	25,58,479	30,11,431	26,995	88,001	12,403
XII	Eastern Bengal (state) *	18,50,791	39,96,573	36,93,961	26,667	32,743	14,526
XIII	Bengal Central †	1,45,556	25,136	69,100	2,772	12,815	484
XIV	Calcutta Port Commissioners'.	Statement of	stores transac	tions not recei			
	(Under construction.)		[	1		•••	•••
. <b>xv</b>	Mushkaf-Bolán		14,24,056	8,89,332	1,03,911	1,73,831	-286
XVI	Mári-Attock	60,752	3,46,902	2,27,632	9,417	27,144	
XVII	East Coast	32,35,382	51,76,811	61,93,380	5,63,269	1,68,750	3,955 58,693
•	Lucknow-Rae Bareli-Benares		8,55,479	3,99,528	<b>—4.699</b>	3,794	_
	Bareilly-Rampur-Moradabad .		4,34,209	2,82,778	13,305	41,577	2,529
	Total .	1,78,92,738	2,74,67,083	2,74,68,290			-1329
•	Lines worked by guaranteed companies.						<u>-</u> -
XVIII .	Great Indian Peninsula	60,49,422	69,06,038	80,17,512	•		
XIX	Bombay, Baroda and Central India.	28,44,722	30,60,173	33,40,344	5,88,724	30,119	32,918
<b>XX</b>	Madras	25,01,274	25,76,516	22,58,677	1,09,370	3,798	<b>7</b> ,744
	TOTAL	1,13,95,422	1,25,42,727	1,36,16,533	,		•••
	Carried over ,	4,29,70,601	5,50,28,931	5,78,96,062			***

No. 1.
and metre gauge railways during 1892.

H NO DNAF			Ι -	TOTAL	AMOUNT			
Permanent-	Rolling- stock.	Station materials and fencing	Tools and stores.	BALANCE ON THE 31ST DECEMBER 1892.	UNDER AD- JUSTMENT ON THE JIST DECEMBER 1892.		Serial No.	REMARKS.
R	R	R.	R	R	R	R		
		]					_	
•••	•••	•••	··· •	46,93,910	5,5 <b>7</b> ,97 <b>9</b>	52,51,889	1 .	
		•••			***	•••		
10,94,848	8,85,783	2,09,877	9,09,236	35,73,840	2,39,570	38,13,410	ц.	
8,18,486	4,99,555	3,39,250	2,90,724	21,04,017	3,85,547	24,89,564	III	
			···		***		IV	
12,35,358	22,667	79,908	51,186	15,16,812	32,868	15,47,680	V	
•••	•••	***	***	"	***	•••	VI	
•••	***	1,744	•••	1,744	•••	1,744	VII	
***	•••	•••	•••	***	•••	•••	VIII	
					•		•	,
•••	•••		***	1,18,90,323	12,13,964	1,31,04,287		
			<u></u>				_	·
27,37,417	• 29,54,990	4,65,576	30,73,125	1,02,65,644	10,58,130	1,13,23,774	IX	•
•••	•••	141	•••		***			
	•••				•••		x	
5,43,025	6,23,467	24,430	5.13,630	18,31,951		18,31,951	ХÌ	•
6,96,768	- 5,99,298	66,804	7,14,597	21,51,403	<b>—</b> 62,907	20;88,496	XII	* Includes metre and 2' 6" gas sections also.
52,982	70	21,689	10,780	1,01,592	725	1,02,317	XIII	† Although for convenience class among state railways, this line
		100					xtv .	the property of the Bengal Cent Railway Company.
1,45,645	69	21,677	89,877	5,31,724	1,92,641	7,27,365	xv.	
28,741	697	58,145	51,923	1,80,022	9,509	1,89,531	XVI	•
9,81,115	35,296	68,758	3,12,932	22,18,813	3,92,851	26,11,664	xvII	
3,19,829	***	1,27,393	9,634	4,55,951	***	4,55,951		ĺ .
40,010	87	16,580	37,343	1,51,431	•••	1,51,431		
	····		. <b></b>	1,78,91,531	15,90,949	1,94,82,480		
				•		•		
		1		49,37,948	3,16,261	52,54,209	XVIII	
)*** 2.72.02.1	 E OF TO	1,20,471	8,24,175	25,64,555	1,57,074	27,21,629	XIX	
3,72,954 6,49,543	5,95,194 39,946	29,113	19,79,598	28,19,113	1,06,280	29,25,393	xx	
		•	•••	1,03,21,616	5.79,615	1,09,01,231		•
		-					•	
***	•••			4,01,03,470	33,84,528	4,34,87,998		,

STATEMENT

### Stores transactions on the standard

	1						BALANCE
		Total balance	Receipts during	Issues during	<b>A</b> ,	В	C
Serial No.	, Railway.	on the 1st January 1892.	the year.	the year.	Bridge-work.	Engineer's	Workshop machiner y
3		R	R	R	. · R	R	R
	Brought forward .	4,29,70,601	5,50,28,931	5,78,96,062	• • •		<b>)</b>
	STANDARD GAUGE-concld.		1	•	1		
	• Assisted companies.						
XXI	Delhi-Umballa-Kalka .	17,713	1,548	16,433			
XXII	Tarkessur		no stores on thi	s railway.		<b></b>	 
	TOTAL .						
	I TOTAL.	17,713	1,548	16,433		···	
•							<u> </u>
	Lines owned by native states and worked by companies.						
XXIII	Khámgaon	4,887	·	1,276	•••	<b></b>	•••
XXIV	Amraoti	8,689		85	•••		
XXV	Bhopal-Itársi (native state section).*	48,799		30,46 <b>0</b>	· •••		•••
XXVI	The Nizam's Guaranteed State	9,61,745	16,68,145	20,06,810	1,330	17,257	29,27
XXVII	The Gaekwar's Petlad	Exempted fr	om submitting	the statement			•
							-
	(Under construction)						
XXVIII	Mysore Gold-fields	Exempted fr	om submitting	the statement	of stores tran	 sactions.	•••
			<b> </b>		<u> </u>	<del></del>	<del></del>
	TOTAL .	10,24,120	16,68,145	20,38,631	•••		•••
•	•					<del>- ,</del>	
	Lines owned by native states and worked by state railway agency.	•	<u> </u>			•	
XXIX	Rajpura-Bhatinda	71,314	12,680	36,696		731	39
XXX	Jammu and Kashmir (native	There are no	stores on this		railway.	]	
	state section).†	· 				***	•••
	TOTAL .	71,314	12,680	36,696			***
		<u> </u>	<del></del>		<del></del>	<u></u>	
	Lines owned and worked by					•	
	native states. (Under construction.)	•					
xxxı	Bina-Guna		ļ	j			
XXXII	Bhopal-Ujjain	There were	no stores on t	hese railways i	in 1892.		
		,	1	•	ĺ	1	
	TOTAL		<del> </del>	<del></del>		<u> </u>	<u> </u>
	TOTAL .		•••	·· <b>·</b>		•••	•••
	TOTAL STANDARD GAUGE CAT-		1		·	·	i

No. 1-contd.

and metre gauge railways during 1892.

1		ECEMBER 189		Torre	AMOUNT	[	•	1
D .	<u>E</u>	F F	, <b>G</b>	TOTAL BALANCE ON THE 31ST DECEMBER 1892.	AMOUNT UNDER AD- JUSTMENT ON THE 31ST DECEMBER	GRAND TOTAL AT DEBIT OF	Serial No.	- Remarks
ermanent- way.	Rolling- stock.	Station materials and tencing.	Tools and stores.	1892.	10ECRMBER 1892.	STORES.		
R	R	R	· #	R	R.	·R		
]			***	4,01,03,470	33,84,528	4,34,87,998		
į			•				•	
160	•••	1,995	673	2,828	net .	2,828	xxı	
		*:•	***	649		***	XXII .	·
			***	2,828	•••	2,828		
				]		' <u>—</u> —		
•				}	·		•	
	•				•		,	
3,611 8,604	***		<del>!**</del> ,	3,611 8,604		3,611 8,604		
16,400	•••	1,939	***	18,339	Ι.	18,339	1	Includes the stores transactions the British section also,
j		<b>.</b> .	2,07,069	6.00.090		6,23,080		the British section also,
94,679	2,39,591	33,884	2,07,009	. 0,23,000	***		XXVII	
•	•		•	. 1				
							xxviii	 
			····					
···. [	•••			6,53,634	144	6,53,634		<u></u>
	· <del></del>		•					
	•		, ,				-	•
7,619		38,436	122	47,298	3,595	50,893	XXIX	_
	••• •	, 30,432	**	,,,	***		xxx.	† The British section of this raily forms an integral part of North Western (state) railwa
	<del></del>					<u></u>		North Western (state) railwa
, <u>.</u>	····			47,298	3,595	50,893		
		i 		, •	!	,		
				.				
·		•••				· {	XXXII	
•	•		· .	<u> </u>				
	***		•••			•		
				4,08,07,230	33,88,123	4,41,95,353		
	. <b>"".</b>	'''	•			.		

### ADMINISTRATION REPORT FOR 1892-93.

### STATEMENT

### Stores transactions on the standard

							BALANCE IN
•		Total balance	Receipts during	Issues during	Α .	В	С
Serial No.	RAILWAY.	on the 1st January 1892.	the year.	the year.	Bridge- work.	Engineer's plant.	Workshop machinery.
	•	·R	R			· R	
•	Brought forward (standard gauge)	4,40,83,748	5,67,11,304	5,99,87,822	•••	•••	•••
	METRE GAUGE.						
	State lines worked by com- panies.				•		
XXXIII	Bengal and North-Western-			ļ			
	Tirhoot section	,			•		
	Company's section*	6,65,207	9,65,290	9,81,663	21,271	18,873	10,030
XXXIV	Rohilkund and Kumaon (Luck-now-Bareilly section).	4,25,024	4,52,722	7,27,956	517	2,428	3,353
xxxv	Rajputana: Malwa	42,91,983	50,87,012	52,5 <sup>9</sup> ,494	63,140	32,958	1,04,931
XXXVI	Southern Mahratta	19,85,019	13/75-574	15,96.631	5,745	41.748	55,710
XXXVII	Guntakal-Mysore Frontier† .	1,60,671	6,54,016	7,45,521	48,425	743	<u></u>
XXXVIII	Southern Mahratta (Mysore section).	Included in	the stores trans	sactions of the	Southern Ma	i hratt <b>a r</b> ailw [	ay.
XXXIX	South Indian	30,71,343	43,70,277	44,98,236	11,863	1,37,129	49,519
•	(Under construction.)						
. XL	Assam-Bengal	‡25 <b>8</b>	5,41,673	92,806	2,52,193	15,226	5,380
XLI	Máyaveram-Mutupet	2,61,738	5,60,374	<b>2,71,</b> 611	38,063	11,323	3,849
XLII	Palanpur-Deesa	Included in t	he stores transa	ctions of the R	ajputana-Malv	] ca railway	***
•	Total .	1,08,61,243	1,40,06,938	1,41,72,923	***	*	•••
			•			' <u></u> -	
			-				
	State lines worked by the State.	•					_
XLIII	Eastern Bengal (state)—					<u> </u>	
•	Northern and Behar sec- tions (including the Kaunia- Dharlla, 2' 0" gauge branch).	i .	ed in the stores	transactions	of the standar	d gauge see	tion.
•	Dacca section		the stores trans	sactions of the	ctandard ac-	ora castina	
XLIV	Burma (state)	12,53,623		23,26,318	26,677		20 -0 -
42217		,,,,,,,,,	-3731793	-3,20,310	. 20,077	45,503	28,784
•	(Under construction.)	] .	1	<i>:</i> .	•	,	,
XLV	Mu Valley	6,32,879	14,96,974	12,08,157	. • 60,711	79,792	88,917
	'			. 7-31		19,192	00,917
•			<del> </del>	<u> </u>			
	TOTAL .	18,86,502	38,70,767	35,34,475	•••		***
-	1			- <del></del>			ļ <del></del>

No. 1-confd.

and metre gauge railways during 1892.

AND ON THE	s 31ST OF D	CEMBER 189	·		Amount			
υ	E	F	G	TOTAL BALANCE ON THE 31ST	UNDER AD- JUSTMENT	GRAND TOTAL AT DEBIT OF	· Serial No.	Remarks.
Permanent- way.	Rollings stock.	Station materials and fencing.	Tools and stores.	DECEMBER 1892.	ON THE 3IST DECEMBER 1892.	STURES.	· · ·	• •
R	· R	. R.	₽.	R	æ	. <i>R</i>		
•••	•••			4,08,07,230	33,88,123	4,41,95,353		•
	•	:	· •	.	•			
			•	•	•			• .
1,36,403	1,79,242	38,920	2,44,090	6,48,829	-6,331	6,42,498	xxxIII	* Although for convenience class among state railways, the co pany's section of this line is
29,266	42,091	10,430	61,705	1,49,790		1,49,790	XXXIV	property of the Bengal and Nor Western Railway Company.
7,22,169	12,02,271	2,67,269	17,27,763	41,20,501	19,105	)	XXXV	
2,50,322	5,24,569	88,474	8,07,394	17,63,962	2,34,473	19,98,435	XXXVI	ATPLICATION OF THE STATE OF THE
<b>5</b> ,485	***,	10,363	4,150	69,166	92,618	1,61,784	XXXVII	†The amounts shown against   Guntakal-Mysore Frontier railw represent the stores transaction
	***	•••	***		•••		xxxviti	of the Contakation of the Guntakation of the Guntakal-Dharmavari
9,29,780	3,88,821	1,72,800	.12,53,472	29,43,384	<b>—24,7</b> 07.	29,18,677	XXXIX	section have been recluded those of the South Indian railwa
78,744	46, <i>777</i>	10,681	40,124	4,49,125	-2,383	4,46,742	XL _	As this amount was small,
4,25,543	•••	32 <sub>2</sub> 775	38,948	5,50,501	26,184	5,76,685	XLI	return of stores balances v submitted for the year end 31st December 1891.
						•.	•	;
•••	***	·;·	•	•	***		XLII	
	•••	···•		1,06,95,258	3,00,749	1,09,96,007		
			· <del></del>	•			•	
				·				
							•	
j				,		.•	•	•
	***		•••	•••	•••		XLIII	•
				•	•			
,	•••		***		•••			
4,27,413	2,06,407	71.375	4,94,939	13,01,098	-13,604	12,87,494	XLIV	
•				:	•			
3,84,108	336	1,36,349	1,71,48,3	9,21,696	52,861	9,74,557	XLV	
	!					,		
		•••	•••	22,22,794	39,257	22,62,051		·
		1						

### STATEMENT

### ·Stores transactions on the standard

<del></del>							<del></del> .
	•	•			<del></del>		BALANCE 1
Serial No.	RAILWAY.	Total balance on the 1st January 1892.	Receipts during the year.	. Issues during the year.	A	B Engineer's	Workshop
	•				Bridge-work.	plant.	machinery.
,	•	R	R	. R	R	R ·	R
	Brought forward (standard gauge)	4,40,83,748	5,67,11,304	5,99,87,822		•••	
	Brought forward (metre gauge)	1,27,47,745	1,78,77,705	1,77,07,398	<b>:</b>	•	•••
	METRE GAUGE—concld.		:		•		
•	· Assisted companies.	•	}	<u> </u>			
XLVI	Deoghur	. 1,572	4,931	4,353		•••	
XLVII	Rohilkund and Kumaon (Company's section).	There are no	l separate store !	es transactions 	for this section	* n. [	•••
XLVIII	Bengal Dooars	<b></b>	7,93,022	4,85,569	66,870	2,994	82
ХĽІХ	Dibru-Sadiya	Exempted fr	ı om submitting	the statement	of stores tran	sactions.	•••
•			•				
•	(Under construction.)					·	
<b>•</b> L	Nflgiri	There were i	! no stores on thi	is line on 31st	  December 18 <sub>9</sub> 	 9 <b>2.</b> 	<b>6</b>
	TOTAL	1,572	7,97,953	4,89,922		•••	***
	Lines owned by native states and worked by companies.			_			
, LI	The Gaekwar's Mehsána.	)_ •					-
LII	Kolhápur	Exempted	from submittin	g the stateme	nt of stores tr	ansactions.	•••
~	TOTAL :	474	<u>-</u>	***	•		•
		· · · · · · · · · · · · · · · · · · ·			•"-		<u></u>
•	Lines owned and worked by native states,						
LIII	Jodhpore-Bickaneer-						
•	Jodhpore section	5.					
•	Bickaneer section	1,13,204	6,70,548	6,78,632	•••		<b></b>
LIV	Bhávnagar-Gondal-Juná- garh-Porbandar.	3,57,319	5,44,714	7,85,926	4,514	20,476	2,503
•	•						
	Total	4,70,523	12,15,262	14,64,558		***	•••
	TOTAL METRE GAUGE	1,32,19,840	1,98,90,920	1,96,61,878	•	<b></b> .	
				•	· .	<del></del> -	<u> </u>
	GRAND TOTAL .	5,73,03,588 <b>4</b>	7,66,02,224	7,96,49,700			
		• -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7,99,49,700	•••	•••	. "
			}	. ·		]	,

No. 1-concld.

and metre gauge railways during 1892.

_		3151 07 060	CEMBER 1892.		1 _	A		
Ì	<b>a</b>	E	F	G	TOTAL BALANCE ON	AMOUNT UNDER AD-	GRAND	
-				<del></del>	THE 31ST DECEMBER	I IUSIMENT	Town to a m	Serial No,
1	Permanent-	Rolling-	Station	Tools and	DECEMBER 1892.	ON THE JIST DECEMBER	DEBIT OF STORES.	
	way.	stock.	materials and iencing.	1	1092.	1892.	SIORES	
	•			<u> </u>	l		[]	
			j ,					· · · · · · · · · · · · · · · · · · ·
	R	R	R	R	R	R	R	
	_ 1		Î	-	}	•	• )	•
	• 1		•		1,08,07,230	33.88 122	4,41,95,353	
	•••	.***	"		14,00,00	33,00,123	33333	
				·		<del></del> -		
		,		·			1 1	•
		***	•••	**-	1,29,18,052	3,40,006	1,32,58,058	
	Į.		•				1	
	ſ				1			•
	ĺ		[		<b>(</b> '	' •	<b>i</b> • i	
					<b>j</b>	•		
			j l					
	224	1,336		590	2,150	• •••	2,150	XLVI
	•		[		<b>\</b>	_	1	127 1777
	,	•••	•••'	•••	•••	•••		XLVII
			i		]	-	[ · _ [	-
	1,48,711	58,415	10,465	19,916	3,07,453	38,168	3,45,621	XLVIII
	1,40,/11	30,413	- 10,403	19,910	3,07,433	30,100	3,43,022	
	4	•••		•••	•••		]	XLIX
	•••	•	i '	İ		•		_
	Ì			l	1 .		] ]	•
		_						
				·		•		
l	•	•	. 1					
		•••		<b></b>	<b></b> . 1	•••	} }	L
	•••		ì	•	1	•	,	•
•								•
r		•				-0 -60	0 45 551	•
		•••	<b>! •••</b>	***	3,09,603	38,168	3,47,771	•
_	·—·			<u> </u>	}		i	
ŀ							! i	
ĺ			)	{		•	þ. 1	
				•			(	• . •
١					į .	•		
		••			]		. (	LI
	•••		•••	٠	}	•••	··· 7	Lii
l			1		1	•	1 `	LII
l	•		]			•.		
Ļ					ļ ———			
l		***			} <sub> </sub>	•••	}	•
	***	•••			İ		L	
ļ-				[		•	[ [	
l			•		1			
ĺ	-		<b>!</b> !		Ì		{	•
l	•		]		i ,		( ·	•
ĺ					•		1	
			, i	l	]			•
ŀ				ĺ ·	<b>i</b>		ا : ا	
	62,196	***		42,924	1,05,120	2,19,323	3,24,443	LIII
	• • •		ı	Ì			! !	
ŀ		40,630	16,638	81,423	1,16,107	***	1,16,107	LIV
ĺ	<b>50,</b> 077	40,030	10,030	0.,423	3,13,127			
l					]			•
ŀ			1		<u> </u>		] ———'	
ŀ						0.10.000	4,40,550	•
ï		***	• • • •	• 1,,,	2,21,227	2,19,323	4,40,550	
l					{i			
ľ				,	1,34,48,982	<b>5</b> ,97,49 <b>7</b>	1,40,46,379	
ĺ	•••		•••	111	11,54,40, 102	3,717,71		
Ĺ		<del></del>	<del></del>	<del></del>	<del></del> ;			
ĺ			[·		<b>i</b>	•	· " ]	
١			. '					
ĺ	- 1		[		1 • 1		, , ,	
l			•		5,42,56,112	20 8= 620	5.82.41.722	
					15,42,50,112	39,03,020	~,~~, <del>4</del> • >/ 3*	
ļ	•••	•••	•••	•••			j .	
	<b>***</b>	•••	•••	'''				

The difference between the closing balance of 1891 (R5,79,44,271) and the opening balance of 1892 (R5,73,03,588) is due to the stores of the Sind-Pishin railway (Chaman Extension) and the Kistna bridge, in hand on 31-12-91, having been disposed of by transfer at the close of the works during the year 1892.

### Miscellaneous.

### East Indian Railway (standard gauge).

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

_				1	1891.	1892	2.	
Descri	ptio <b>n.</b>		•	Gallons.	Cost.	Gallons	( ost.	
				<del></del>	R		R	
Castor oil, 1st quality Linseed oil, raw Linseed oil, boiled.	: :	:	:	330,921 6,801 1,240	4· 19,268 9,878 1,898	326.870 7,759 2,829	3,80,739 · 10,883 4,283	

This makes the average rate of out-turn for castor oil, 1st quality, for 1892. R1-2-7 as against R1-4-3 in 1891. The decrease in cost is due to the price paid for castor seed being less and to castor oil cake being sold at a higher rate.

Fuel.—The following statement shows the quantity and average cost per ton of the fuel used on the East Indian railway during the financial year 1892-93:

De	script	ion.			Source of supply.	Quantity consumed.	Average cost per ton at place of delivery.	REMARKS.		
		-	•			Tons.	R a p.			
Kurharbaree	٠	٠	:	•	Collieries .	244,916	2 0 2.8	•		

### · Bengal-Nágpur Railway (standard gauge).

15. Fuel.—The fuel used in locomotives was entirely Bengal and Umaria coal. The quantity consumed from April 1892 to March 1893 was:

									T	ons,
Bengal coal	• •	•	•	٠	•	•	•	•	• 3	3,744
Umaria coal	•	•	•	•	• ,	•	•	• •	•	3,128

The consumption of the various descriptions of fuel by running engines and in the workshops was as follows for the same period:

Descri	ption.	•		Source of supply.	Quantity consumed.	Average price per ton.	REMARKS.		
•					Tons.	R a. p.			
Bengal coal	•	•		Bengal Coal Co., Sanctoria, BN. Ry.	36,024	3 1 0			
Umaria coal	•	•	•.	Umaria Collieries, BN. Ry.	3,263	5 9 3			
English coke Gas coke	:	- •.	· {	Through Messrs. Richi Stewart & Co., Bombay.		62 0 0 40 0 0			
Hard coke	•	•		Sanctoria branch, BN. Ry.	1/	6 8 0			

### Indian Midland Railway (standard gauge).

16. Fuel.—The following statement shows the various descriptions of fuel

consumed by running engines, steam pumps, stationary engines, and in the workshops:

Description .	Source of supply.	• Quantity consumed.	Average price per ton at place of delivery.	• REMARKS.
Bengal coal Bengal coal Bengal coal Bengal coal Bengal coal (smithy) Umaria coal Umaria (washed nuts) Coke Firewood	Umaria Umaria Giridih	Tons.  11,035  594 32,802 86 69 874	• R a. p.  13 6 6  11 10 11  8 14 8  7 4 1  17 8 0  1 8 0	The average prices of coal represent the cost of delivery at Indian Midland railway junctions.

North Western (state) Railway (standard gauge).

17. Oil.—The following statement shows the total quantity of vegetable oils manufactured in the railway oil mill at Lahore during the last two years:

		•		1891	-92.	1892-	93.
Descri	iption.			Total quantity manufactured.	Average cost per cwt.	Total quantity manufactured.	Average cost per cwt.
Castor oil l.inseed oil, raw . Linseed oil, boiled	.:	:	:	 Cwt 24,684• 484 549	R a. p. 14 5 5 20 3 5 17 9 3	Cwt. 22,426 1,198 310	R a p. 13 8 6 18 5 0 LI 10 I

The manufacturing rate of castor oil during 1892-93 was less than in the previous year. The rate of linseed oil, raw, was also less by R1-14-5, but that of boiled oil was R1-0-10 more.

Castor plant.—No further experiments were made on the North Western (state) railway with the cultivation of castor plant during 1892-93. It being found that plants on the railway embankment obstructed the view along the line and caused interruptions in the telegraph by frequently coming in contact with the wires, they were cut down in January 1892.

Fuel.—The following statement shows the quantity and cost of fuel of every description taken into stock during 1892-93:

Descri	iptio	n. •			Quantity.	Cost,	Average cost per ton, 1892-93.	Average cost per ton, 1891-92.			
English coal. Bengal coal. Hanna coal. Dandot coal. Khost coal. Wood coal. English coke. Bengal coke.			:	•	Tons. 30,805 59,930 96 58,047 7,824 145,409 2,280 2,476	6.51.813 9,46,492 1,638 5,20,818 1,16,761 6,31,056 82,877 61,469	# a. p. 21 2 6 15 12 8 17 0 0 8 15 7 14 14 9 4 5 5 36 5 7 26 0 7	R a, p. 21 9 3 15 5 5 8 15 7 14 14 0 4 5 1 36 13 6 27 4 8			
Khost coke English patent fuel Quetta patent fuel	•	•	•		303 97 37	8,313 2,003 1,005	27 6 11 20 9 0 27 0 0	•			
		Ton	TAL		307,301	30,27,245	9 13 6	***			

The average cost per ton of suel is a little more than in the previous year, being R9-13-6 against R9-8-0 per ton. The cost of Bengal coal was higher on account of a rise in price owing to the enhancement of the rate of carriage over the East Indian railway.

### Oudh and Rohilkhand (state) Railway (standard gauge).

18. Oil. - Canadian lubricating oil continues to be used on this railway, and 81 tons were consumed during 1892-93.

. Fuel.—During the year under report the fuel used on this railway was as noted below:

Description.	Soutce of supply	Quantity consumed.	Average price per ton at place of delivery.	Remarks.
Bengal coal	Giridih	Tons. 44,850-	# a. p. 14 8 0	Delivered at Moghal Sarai.

### Eastern Bengal (state) Railway (standard and metre gauges).

19. Oil.—The following statement shows the quantities of oil used during 1892, as compared with 1891, and the average cost:

	•			•	- 1	- 1891.					189	33.		
	Description.				Quantity us		Averag per g	age cost gallon.		Quantity used		Average cos per gallon.		
Castor oil Cocoanut oil Canadian oil Kerosine oil	{ From		mark •			Gals. 98,715 11,400 917 19,170 47,581	R I I I	a. 7 4 4 0 7	9 1 0 0	•	Gals. 53.935 55.495 795 21,077 18,185	R 1 1 0	a. 4 4 5 15	io 0 7 4

Fuel.—The following statement shows the various descriptions of fuel consumed by running engines, steam pumps, stationary engines, and in the workshops on the Eastern Bengal (state) railway during 1892-93:

Des	cripti	on.	•	_	Source of suppl	у.	Quant	tity cor	sume	d.	ton a		ice per ace of	REMARKS
Bengal coal Bengal coal Bengal coal Bengal coal Dooars coal Assam coal English coke			•	•	 Shibpore Barakar Gourandhi Borrea Port store keeper Giridih	•	Tons. 7,670 37,964 17,918 8,185 110 3,528 76	Cwt. 0 6 0 5 19 15 9	Ors. 0 2 0 3 1 0 0	lbs. 0 0 20 12 0 13	5 5 5 5 9 14 27	13 0 0 13 0	11.73 10 10 8 0	•

### Great Indian Peninsula Railway (standard gauge).

20. Fuel.—The consumption of the various descriptions of fuel by running engines, steam pumps, stationary engines, and in the workshops was as follows:

	Description,		<u>.                                    </u>	Source of supply.	Quantity consumed.	Average price per ton.	REMARKS.
	•.		j		Tons.	R a, p.	
English co			1	•,	81,560	13 6 6	At Bombay.
Wагога со		•	-	***	71,551	4 8 9	At Warora, including carriage from
Narbudda		•	٠,	•••	15,668	8 6 o	At pit.
Singareni	<del>-</del>	٠.	•	•••	54,100	12 8 4	At Wadi, including carriage from Ye.
	oal (large) .	•	•	***	21,293	8 9 11	At Jubbulpore, including carriag
Umaria co	oal (washed nut	.s)	•]	1	5,303	5 13 11	At Jubbulpore, including carriage from
	/ Sanctoria	.•	•	•••	i 573	11 14 11	At Nagpur, including carriage from
Bengal coal.	Damoodur	•	•	,	2,872	11 12 .8	At Nagour, including carriage from
coal.	Dushergur.	•	•	•••	2,725	11 14 11	At Nagpur, including carriage from Dushergur.
•	\ Raneegunge			***	5,357	13 5 o	At Bombay, imported by sea.
₩ood.	• •	•		191	3.249	5 4 10	,, , , , , , , , , , , , , , , , , , , ,
English c		•	•		1,073	17 8 5	At Bombay.
Bombay (	coke	•			1,931	16 8 0	At Bombay.
					268,258		• • •

The fuel consumed in locomotives was as follows:

English coal		•	•			•	•		•	•	Tens. 76,675
Indian coal			•	•	•	-	•	•		•	151,397
	•						T	OTAL	COAL		228,072

In addition to this 2,159 tons of firewood were used for lighting up.

### Bombay, Baroda and Central India Railway (standard gauge).

21. Oil.—The following statement shows the total quantity of oils manufactured in the railway company's oil mills at Sabarmati during the year 1892:

	, 1	Descrip	ion.	-	·		Tetal quan- tity manu- factured.	Aver pe	age r cw		Remarks.
		-	_	·			Cwt.	R	a,	p.	· · · · · · · · · · · · · · · · · · ·
Castor oil	•	• •	•	•	•	, <b>•</b>	11,572	15	7	I	This is the first complete year of the working of the mills.
Linseed oil Mixed lubricat	ing	oil (ca	istor	and	petrole	eum	516	20	9	5	
in equal par	ls)	.•	•	•	•	•	7,283	13	11	2	

The details of the oils consumed on the Bombay, Baroda and Central India railway during the official year 1892-93 are given below:

		Descr	iption.			•		•	Rate.	. Consumption in 1892-93.
		•	_		• .	-		 R a.	· p.	• •
Castor oil '				•		•	•	15 8	o per cwt.	155 tons.
Cocoanut oil	•	•	•	· .	•	•	•	14 10		. 100 tons.
Linseed oil, raw		•	•	•	-		•	1 11	6 per gallon ·	1,339 gallons.
Linseed oil, builed				•	. •	•		1 13	ο ,,	4,451 gallons.
Cerosine oil					٠.			0 7	9 "	28,526 gallons.
Aixed oil		٠.	٠.		•	•		13 8	g per cwt.	48 tons.

Fuel.—The following statement shows the various descriptions of fuel consumed by running engines, steam pumps, stationary engines, and in the workshops during the official year 1892-93:

Descript	io <b>n</b> ,		·		Source of supply.	Quantity consumed.	Average price per ton at place of delivery.	
•	٠					Tons.	Rasp.	•
Steam coal, English Steam coal, Bengal Furnace coal, English Smithy coal, English Foundry coke, English Gas coke, Indian		•			•••	46,708 24 306 864 356 199	13 4 3 14 13 6 13 5 6 11 12 7 17 7 0 16 11 2	From the Bombay Gas Works.
Firewood	•	To	TAL	•		49,664	5 10 5	· · · · · · · · · · · · · · · · · · ·

### The Nizam's Guaranteed State Railway (standard gauge).

22. Recently a trial consignment of Canadian lubricating oil was obtained from England, and is now being used in axles of goods wagons.

Bengal and North-Western Railway system (metre gauge).

23. Oil.—During the year 1892-93 the rate for castor oil was R14-2-0 per cwt. and for Canadian oil R11-9-0 per cwt.

The following table shows the rates for the past two years:

••										. [	 1891-	92.		1892	<b>-93</b> .	
•				•							R	a,	p.	R	a,	p.
Castor oil .	•			•	•	•	•	•		per cwt.	17		0	14	2	0
Canadian oil .	•	•	•	•.	•	•	•	٠	•	,, ·	12	3	0	11	9	Ð
								_					ļ			

Canadian oil continues to be used for lubricating both locomotives, and carriages and wagons. Castor oil is chiefly used for lighting purposes.

Fuel.—The quantities and the rates of the different descriptions of coal used during the financial year 1892-93 were as follows:

De	esc:	ri <b>p</b> tio	ο.		Source of supply	Quantity consumed		Remarks.
Kurhurbaree coal Barákar coal Gourandhi coal Palamow coal Smithy coal Bengal coke		•	•	•	Giridíh Sitarampur Sitarampur Palamow Giridih Giridih	Tons. 24,938 2,10. 10 55 52; 86	6 4 0 6 4 0 3 5 0 6	
					TOTAL	27,80	<u>-</u>	

In addition to this, 5,764 tons of wood fuel was also used during the financial year.

### Rajputana-Malwa Railway (metre gauge).

24. Oil.—The following quantities of castor and linseed oils were obtained. from the oil mills of the Bombay, Baroda and Central India railway at Sábarmati:

Petroleum mixed with castor oil has been introduced as a lubricant in place of castor oil.

The statement below shows details of the oils consumed on the Rajputana- Malwa railway during the official year 1892-93:

•			Descr	iption.			•				Rate.	Quantity consumed during 1892-93,
•		•				•				R a.	p.	,
Castor oil . •				•	•	•	•	•		15 12	o per cwt.	406 tons.
Mixed oil .		•			•	•		•		13 8	g per cwt.	400 tons.
Kerosine oil		٠.	•		•			÷ .		õģ	o per gallon.	58,466 gallons.
Cocoanut oil			•			-				16 1o		6 tons.
Linseed oil, raw		•								1 13	•	2,639 gallons.
Linseed oil, boile	d	•	•	•		•	-		•	I 14	o per gallon.	2,401 gallons.
								<u>.                                    </u>			••	

Fuel.—The following statement shows the various descriptions of fuel consumed by running engines, steam pumps, stationary engines, and in the workshops during the official year 1892-93:

Description.	Source of supply. Quantity consumed.	Average price per ton at place of delivery.	Remarks.
Steam coal, Welsh Steam coal, Indian Gas coke, Indian Hard coke, Indian Gas coke, English Coke, English Firewood (unserviceable sleepers), Indian Charceal, Indian	Bombay	15 8 0 22 0 0 21 8 0 34 6 6 35 8 0 5 14 0 24 11 0	•

### Southern Mahratta Railway (metre gauge.)

25. Fuel.—The consumption of the various descriptions of fuel used by running engines, steam pumps, stationary engines, and in the workshops during the official year 1892-93 was as follows:

. •	Des	criptio	on.			Quantity consumed.	Cost.	Averag per t		REMARK	s.
•			-			 Tons.	Ŗ	R a	. p:	•	•
English coal	٠,		•	. •		210	3,430	16	5 4(a)		
Singareni coal	•			·		14,437	1,45,745	10	t 6(å)		
Kanara firewood		•		•		55,292	2,34,260	4 :	39		
Mysore firewood		•	٠.		**	17,292	1,19,626	6 1	<b>.</b> 8	• .	

### South Indian Railway (metre gauge).

26. Oil.—Experiments have been made in American mineral and non-corrosive cylinder oils with satisfactory results, they having proved to be both economical and of excellent lubricating protection. Indents have been sent home as it is proposed to substitute them for castor oil.

### Burma (state) Railway (metre gauge).

27. Fuel.—The Shwebo Mining Syndicate having been unable to supply the full quantity of coal ordered for trial, no final results have been arrived at as to the efficiency of their coal. The Government of India have ordered further trials to be made in engines of the Burma (state) railway fitted with fire brick arches.

No satisfactory trials could be made with the Thingadaw coal ordered from the Burma Coal Company, owing to its tardy supply by the company, but larger supplies are now coming in, and it is hoped that further and satisfactory trials will be made during the current year.

The following statement shows the different descriptions of fuel used on the Burma (state) railway during 1892-93:

Description.		Port shipped from	n,	Quantity consumed.	Average ton at p deliv	lace	of	Remarks.
			1	Tons.	R	an	p.	
English coal, chiefly patent fuel .		Cardiff .	.	8,525	17	2	0	· •
Bengal coal		Calcutta .	٠.	14,843	15	1	o	
Burmese coal		Kabwet .		1,303	17	I	0	1
Japanese coal		Not known		1,077	17	0	0	
English coke—		Cardiff .		40	56	0	ا م	
(i) Foundry (ii) Gas (smithy)	•	Cardiff .		. 308	25	8	0	
Bengal coke, gas (smithy)	•	Calcutta Depôts in Upp	er	198	24	ā	O	
Wood · · · · · ·	•	Burma	•	11,793	4	13	0	Includes cost of carriage to depots.

		•					`			<u>1</u>						
(a) The rate R16-5-4 per tor t was R23-12-3 per ton, vide d	represents	s the	actua	boo	ok va	lue	at th	e tin	ie of	issu	e, b	ut	the	ori	zinal	•
. 425 1153 12 9 Pro		•								-		- Λ	5.	d		
(1) Cost price at Mormugao	harbour	•	•	•	•	٠	•	٠	•	•	٠	ĩ	9	6		
												R	a. ,	ø.		
(2) Indian value at 17'878d. (3) Inspection charges in L	per rupee		st Mo	·	inc	lodic	o fre	ight i	o Por	i. Inom			12	9		
frontier and charges for	handling	iges i			•	•			•	.ugu	•	3	15	6		
•			. '	•				٠.	Tot	AL.		23	12	3		
(b) Details working up to R	10-1-6 are	as fol	llows :						•			_		=		
(1) Cost per top loaded in wai	vons at collic	· 7					•	•	• .	٠.		б	0	0		
/a) Charges for freight Over 10	oreign line .	· .	•					•	•			3	15	3		
(3) Charges for handling		•	•	•	•	•	• •	•	•	•	•	1	2	ž		
	•							٠.	To1	ML	٠.	10	1	6		
•					•							_		<u>-</u>	`	

cost

### Rohilkund and Kumaon Railway system (metre gauge).

28. Cil.—Castor oil continues to be used for both lubricating and lighting. The rate for the year. 1892-93 was R12 per cwt. against R12-8-0 for the previous year.

Fuel.—The fuel used in locomotives was entirely Bengal coal. The quan-

tity consumed during the financial year 1892-93 was as follows:

•	Desci	ription.	•		Source o	f supply.	Quantity consumed.	Average price per ton at place of delivery.	Remarks.
Bengal . Wood fuel	:		•	•	Giridih Forest ment	depart-	Tons. 3,570'97 4,488'66	# a. p. 14 6 5	

### SECTION II.—ROLLING-STOCK.

29. The statement on pages 24 to 29 shows the stock of locomotive engines and vehicles on the several standard and metre gauge railways on the 31st of December 1892, and that on pages 30 to 33 the number of vehicles adapted for military purposes.

### Bengal-Nágpur Railway (standard gauge).

30. Brakes.—There is at present no system of continuous brakes in use on the line.

Springs.—Springs of a stronger type are being fitted to all the goods stock to enable wagons to carry the increased load allowed by Government, the axles being already sufficiently strong to take the additional weight.

Couplings.—The whole of the coaching and goods stock is fitted with

couplings at both ends.

#### Indian Midland Railway (standard gauge).

- 31. Automatic vacuum brakes.—None of the stock of this railway has yet been fitted with the automatic vacuum brakes, but sanction has been obtained for fitting the following stock with this appliance at an estimated cost of R1,13,606:
  - 30 Passenger engines (four wheels coupled).
  - 4 Inspection carriages.
  - 10 First class carriages.
  - 10 Second class carriages.
  - 20 Composite carriages,
  - 35 Third class carriages.
  - 7 Post office vans.
  - 7 Luggage vans.
  - 15 Brake vans.

### North Western (state) Railway (standard gauge).

· 32. Vacuum brakes.—The fitting of vacuum automatic brakes to rollingstock was in steady progress during the year. The total stock fitted to end of March 1893 was:

Engines .	•	•	• •	•		•	•		228
Coaching stock	• •		•	•	•				1,147
Goods stock				• .			_		215

Of the goods stock, 77 vehicles have been fitted with pipes only.

Couplings.—Up to 31st March 1893, 8,054 vehicles were fitted with screw couplings at both ends, leaving 3,818 vehicles still to be fitted.

### Oudh and Rohilkhand (state) Railway (standard gauge).

33. Brakes and springs.—Thirteen locomotive engines and 118 coaching vehicles were fitted with automatic vacuum brakes during the year, including ten carriages fitted with train pipes only. Side brakes and springs continued to be fitted on to the goods stock.

Retiring accommodation.—Latrine accommodation was provided in the third class carriages for native females.

### Eastern Bengal (state) Railway system (standard and metre gauges).

34. Automatic vacuum brakes.—Up to 31st March 1893, the following standard gauge locomotive and vehicle stock were fitted with the automatic brake gear:

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

### East Coast Railway (standard gauge).

### 35. The rolling-stock on the line on the 31st March 1893 was as follows:

Particulars.					au	Stock thorized	Stock 1. erected.
Four wheels coupled engines		•	•	•	٠.	5	
Six wheels coupled engines		•		•	•	30	. 15
First class carriages .	•	:	•	•	•	8	I
Second class carriages .	••			•	•	4 .	I
Composite carriages .	•		•	•	•	<i>:</i>	2
Brake vans for passenger and	goo	ds		. ,	•(	20	18
Ballast wagons		-	• *	:	•	300	300
Accident 10-ton cranes .	•••	•	•	•	•	2	• 2

All the vehicles are coming out from England with two screw couplings to each vehicle. None of the stock have been fitted with automatic vacuum brake gear, nor have any been so ordered.

### Great Indian Peninsula Railway (standard gauge).

36. Brakes.—One coaching vehicle was fitted with automatic brake during the official year 1892-93. The total rolling stock so fitted is as follows:

,												
Locomotives	•	•		•			•	•	•	•	•	• • 66
Vehicles				•	•	•	• 1	•	·	•	•	. 160
Vehicles fitted	l'with	Dit	oes	only			•	•	•	•	•	•. 50

Couplings.—The whole of the coaching stock is fitted with screw couplings at both ends.

The work of fitting 30 per cent. of the wagon stock with screw couplings continued, and during the year under review 986 vehicles were fitted.

### Bombay, Baroda and Central India Railway (standard gauge).

37. Brakes.—The whole of the company's coaching stock and the passenger and mixed train locomotives are to be fitted up with automatic vacuum brake, the fittings for which are being received from England; the work is in hand, but up to 31st March 1893 none of the stock was completely fitted.

Couplings.—The whole of the company's coaching stock has screw couplings at both ends. The goods stock is being fitted with one screw coupling to each vehicle, and more than half the stock is so fitted. The work is going on.

Gas lighting.—The lighting of trains with gas on Pintsch's system has been tried in a suburban train for over six months and is still in use; it has recently been decided to introduce the system over this railway. Estimates for the complete installation are being prepared.

### Madras Railway (standard gauge).

38. Brakes.—An indent has been sent home for vacuum brake gear complete for six carriages and also for seven sets of piping for fitting the automatic brake to the Bombay-Madras mail train.

Couplings.—The total number of vehicles fitted with double couplings on the 31st March 1893 was 1,254 against 466 at the close of the year 1891-92.

Gas lighting.—One of the company's saloons having been experimentally lighted with Pintsch's gas for a period of six months with highly satisfactory results, an indent has gone forward for sanction for a complete set of gasmaking apparatus and carriage lamps and reservoir fittings sufficient for introducing this system of gas lighting into the majority of this company's passenger stock.

Painting of carriages.—In accordance with the recommendation of the Committee of Locomotive and Carriage Superintendents that all first class carriages on the several Indian railways should be painted white, a large number of this class of vehicles belonging to this company have been so coloured and the remainder will be similarly dealt with as they come into the shops for repainting.

### The Nisam's Guaranteed State Railway (standard gauge).

39. Brakes.—The rolling-stock of this line is not fitted with automatic vacuum brakes, but as the Great Indian Peninsula Railway Company intend fitting these brakes to their South-Eastern mail and passenger trains, it is under consideration to provide some of the vehicles of this railway with piping only to enable them to run through with trains fitted with automatic vacuum brakes.

Couplings.—The whole of the stock on this railway has screw couplings rivetted on at both ends.

### Bengal and North-Western Railway system (metre gauge).

40. New stock.—Two composites (\frac{1}{2} postal van and \frac{1}{2} third class) carriages, 2 composites (\frac{1}{2} first class and \frac{1}{2} second class) carriages and 600 iron covered goods wagons were built as new and additional stock during the year 1892-93.

Axles.—Good progress was made in renewing the small steel axles of the goods wagons with Lowmoor ones of a larger size capable of carrying 6 tons per axle, and up to the end of the year 1,000 wagons had been so altered. The springs of these wagons had also been strengthened to enable them to carry the heavier loads.

### Rajputana-Malwa Railway (metre gauge).

41. Axles.—Owing to the small number of axles available, only 106 were changed during the year.

Flexible buffers.—Four hundred and ninety vehicles were fitted with flexible buffers as under:

Goods 120	Canahine										
Goods	Coaching	ś	•	•	•	•	•	•	•	•	120
	Goods	•.	•	•	•	•	•		•	. •	370

On 31st March 1893 the total number of vehicles fitted with this description of buffers was:

Coaching	•	• '	•	•	•	•		•		•	1,283
Goods	•	•			•	•	•		•	• -	<b>2,</b> 535
								•	<b>FOTAL</b>		3,818

Wheels.—Seven hundred and ninety-five pairs of wheels with axles having journals  $\eta'' \times 3''$  were placed under vehicles during the year.

Third class carriages for women.—Fifty-five third class carriages were

fitted with retiring accommodation for females. This number was actually running on 31st March 1893.

Vehicles of miscellaneous types.—Twenty-five third class end doors were converted into side doors during the year.

Thirty-eight Clemenson wagons were converted into covered bogies. All the 249 bogie wagons are now running.

Two brake vans were converted into postal brake vans. One full postal van was converted into a 2th postal and 2th intermediate compartment.

Sixty-nine low-sided bogie wagons were provided with end platforms and rope cleats.

### Southern Mahratta Railway (metre gauge).

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

Locomotives	· .•			•	•	٠.		•	·	3
Coaching vehicle	es .	••	•		• •	•	•	•	•	19

### South Indian Railway (metre gauge).

43. Brakes.— Five O class bogie engines were fitted with the automatic vacuum brake. Indents have been sent home for 73 sets for existing coaching stock. 20 engines and 100 bogie carriages, now under erection, will also be fitted with this brake.

Couplings.—In addition to the whole of the Villupuram-Guntakal stock, the following vehicles of the South Indian railway were fitted with Jones' patent couplings:

Coaching v	ehicles	•	•		•		•	•	•	•	250
Goods .	•	•	•	•	•	•	•				222

Safety chains.—The work of fitting safety chains to the stock taken over with the Cuddapah-Nellore State railway was proceeded with very slowly. At present the following number of vehicles have been so fitted:

Coaching	•		•	•	•	•		•	•	•	8
Goods			••		•	•	•				5

### Burma (state) Railway (metre gauge).

44. The principal works during the year in connection with locomotive and rolling-stock were:

Repairs and additions to two new B class engines transferred from the late Nágpur-Chhattisgarh State railway in 1891.

Fitting 12 engines with duplex screw couplings and flexible buffers.

Fitting 54 old 3rd class carriages with luggage racks.

Fitting 80 old wagons with brakes.

Fitting 64 old seatless 3rd class carriages with seats and rifle racks.

Fitting 182 old 3rd class carriages with an extra seat down the middle.

Altering the rifle racks of 122 3rd class carriages to take rifles used by troops in Burma.

Constructing 4 water tank wagons for carrying drinking water to bad water stations.

Couplings.—With the exception of a few engines, the whole of the rollingstock is now fitted with Jones' patent screw couplings and flexible buffers. The engines are fitted, or are being fitted, with a special duplex coupling (male and female) for coupling up after turning without any change of hook being necessary.

Dibru-Sadiya Railway (metre gauge).

45. Brakes — Screw brakes are in use on this railway, no other brakes having been introduced.

Couplings.—The rolling-stock is fitted with the combined centre buffer and hook couplings, and some tight couplings were fitted to the coaching vehicles.

STATEMENT

List of locomotive engine stock on the standard

	•	· STANDARD GAUGE.											
		٠,	TATE LIN	BY	STATE	LINES W	ORKED E	у тнв	BY GU	WORI ARANT IPANIE	KED	LINE OWNED BY NATIVE STATE AND WORKED BY COMPANY.	
Progressive number.	CLASS OR DESCRIPTION OF ENGINE.	I.—East Indian,	IIBengal-Nagpur.	111,—Indian Midland.	IXNorth Western (state).	XtOudh and Rohilkhand (state).	XII.—Factern Bengal (state) (including the Bengal Central railway).	XIV.—Calcutta Port Com-	XVIII,—Great Indian Peninsula.	XIX.—Bombay, Baroda and Central India.	XXMadras.	XXVI.—The Nizam's Guaranteed State.	Total.
1	Tank, mail	5							•			•••	.5
2	Passenger	168	fi (6)	(b) 42		-25	•••	***	(k) 113	15	2	• •••	376
3	Heavy incline			•••				***	. 74			٠	74
•				,		·				٠			.
	Passenger and goods (mixed)		·			. 30	•		•••	29	79		
4	Tank, goods	,	(6 & c)	(b) 15	""			13	22	3	(l)13		138
5 6	Goods	387	16	45	]	(g)100	·		376	68	59		72
0	doods			, 3	· ""	,,,,,,	""	•••	3,0		39	<b>**</b> ·	1,051
. 7	Local traffic, and shunting and ballast .			3	(d) 25	•••			20	12		<b>.</b>	60
			ļ ·					l !		1		ŀ	
	State railway type—	1											
8	Class A						(i)13				·	20	ļ <u>.</u> .
9	Class B						. 3t	***	***			ļ <u></u> .	33 31
10	Class C		·				(j) 6	•••	•••	•••	·:		6
11	Class D						.,.	<b>.</b>	•	٠	:	٠	
12	Class E			ļ	(e) 4		·	141	***				4
. 13	Class F							***	•••			<b></b>	
										[			
14	Class H		ð (6)		(6) 160		*(b) 47 .		•••			13	226
15	Class J				17	•••		•••	•••			···	17
16	Class L		(6) 60		(b)220 ·		•	 ,	•••	••••	•	17	- 297
17	Class M			<b></b>				•••	***	***			
18	Class N					***	•	***	***	<u></u> .			
19	Class O	***							•••		•••	, 	
20	Class P ,			177	25			***	49-	•••	4+2	•••	. 25
21	Class Q				17	,			•	•••	•••	*	17
22	Class KS	"			101	···	a.	<b></b>	•••	••• ·•• ·		***	101
23	Class S		<b> </b>		9								
24	Class SS				6			***	***			***	9
,					· ·			***	•	••••	•••	•••	6
25	Fairlies			<b>,</b>	(e) 15	•		•••		•••			l
• 26	Twin				10		4,.	***	• • • • • • • • • • • • • • • • • • • •	***		***	15
27	Tramway				4	•	•••		•		···	*** *	10
							-						
•							-			-		,	
	TOTAL	(a) 562	97	105	( <i>f</i> )613	(h) 156	97	13	605	127	153	50	(h) 2,578

No. 2. and metre gauge railways on the 31st December 1892.

					METRI	E GAU	GE.				-		1	
Sta		IES WO	RKED 1	вү	STATE L WORKEL THE ST	BY	Assis	TED COMPA	NIES.	LINES C AND WOR NATIVE S	KED BY			·
XXXIII.—Bengal and North-Western—Tirhoot and Company's sections.	XXXV.—Rajputana-Malwa.	XXXVI.—Southern Mahratta.	XXXVIII.—Southern Mahratta (Mysore section).	XXXIXSouth Indian.	XLIII.—Eastern Bengal (state) Northern, Behar and Dacca sections.	XLIV.—Burma (state).	XLVIDeoghur.	XLVII,—Robilkund and Kumaon(including the Lucknow-Bareilly section).	XLIX,—Dibru-Sadiya.	LIII.— Jodhpore-Bickaneer— Jodhpore and Bickaneer sections.	LIV.—Bhávnagar-Gondal- Junágach-Porbandar.	Total.	Progressive number.	Remarks.
	•••	 ( <i>b</i> & <i>c</i> ) 3		 45 	 	 		 	: :	••• •••	 	 45 3	1 2 3	(b) On bogie frames. (k) 69 on bogie frames. (c) These are for banking and shunting purposes only.
***	•••			 8 86	 			 3	 5 	 	  	 16 87	. 4 5 6	(I) One of these is fitted with a trailing bornie. (g) Ten on bogie frames.
•••	•••	4	·	<b></b>	<b></b>	•••	<b></b>	·	<b></b>			•••	7	(d) Of these, 5 are heavy tank engines.
	. 3 29 20	3 		 	(j) 2   	3 2	3 			 •••		21 31 20	8 9 10	(i) One is a tank engine. (j) Two are tank engines.
9 9 • 45	1 69 130		  #1	  45	 26 39	 24 73		 15	10	 13	  33	10 151 546	11 12 13	(e) Metre gauge engines.
 	***				***		••• •••				 		14 15 16	
	34 29 109	  (b)26	 (b)16		 (b) 17	 	::	8				34 45 214	17 18	
414		,		 	••• •••		: : :				 	•••• ••• •••	20 21 22	-
•••	***	111	,,,,			991		***					23 24 25	
***				***	•••	•••	4	***		••• •••	::	 	26 27	(a) 64 on bogie frames.  (f) Includes 19 metre gauge engines (4 class E, and 15 Fairlies') and 4 Ferozepore steam tramway engines.  (h) Includes one unclassed engine laid by as spare.
too	(m) 424	(n) 178	42	184	84	120		. 27	15	13	. 33	1,223		(m) 201 engines on bogie frames. (n) Excludes one tender of a condemned engine.

### STATEMENT

List of coaching stock on the standard and

		STANDARD GAUGE.											
		W	CATE LIN	ВУ		STATE WORK: THE S		LINES WORKED BY GUARANTEED COMPANIES.			LINE OWNED BY NATIVE STATE AND WORKED BY COMPANY.		
Progressive number.	Description.	1.—East Indian.*	11.—Bengal Nagpur.	III,—Indian Midland,	IX North Western (state).	XI.—Oudh and Rohilkhand (state).	XII.—Eastern Bengal (state) (including the Bengal Central railway).	XIV.—Calcutta Port Commissioners', 4	XVIII.—Great Indian Peninsula.	XIX.—Bombay, Baroda and Central India.	XXMadras.	XXVI.—The Nizam's Guaranteed State.	Total
ι	Saloons, royal	.									:		
2	Saloons, state	<b>]</b>	***	3		•••	τ				2		6
3	Salouns, ordinary		2	•••	12	***	11			14			43
4	Carriages, reserved		4	•••		(f) 13			<b></b>	5	3	]	. 25
5	Carriages, family	23		3							3	•••	29
6	Carriages, 1st class	90	8	17	72	43	15	,	88	11	26	10	380
7	Carriages, composite, 1st and 2nd class .	32	22	34	(c) 88	33	. 41		72	(j)22	(1)43	و	396
8	Carriages, 2nd class	104	8	17	82	25	. 12	•••	150	41	70	8	517
9	Carriages, composite, 2nd and intermediate class.						•••	•••		}			***
10	Carriages, composite, 2nd and 3rd class				(d) 10			Ì	١.	ĺ			
11		,						•••	20				13
	commodation.			]	]		""	•••		"	•••		20
12	" " " " " " " " " " " " " " " " " " "		•••		•••	•••		••			<b></b>		
13		47	-		78	20	28			22	}	,	195
••	accommodation	} ""	6	•••	•••	12	.8	••• •		2			28
15	Carriages, composite, intermediate and 3rd class.	14	7		66	5	16	•••			<b> </b> 		108
16	Carriages, lower class								ĺ	•		<u> </u>	•
17	Carriages, 3rd class	(7)651	126	(6) 198	(e) 386	 259	196	***		(L)228			***
18	Carriages, 3rd class, with brakes	}	و		42			***	532	(k)228 26		52	2,966
19	Carriages, 3rd class, with postal accom-	45	3	9	51	10	5	•••		5	4 7	"	81
20				.	•			'''	<b>"</b>		)	7	142
21	<b>1</b>	""		<b></b>		***	***	***				***	•••
22	.			I	45	***	***			•••	3		49
23		*** 				***	1			•••		!	
24			)	<b></b>		•••	•••		2				2
25					·" .	, <i></i> -	•••					<b> </b>	•••
26		21	<b></b>	•	3	"	]	***	44.			<b></b>	3
27	Vans, prison			<b></b>	1		•••	•••	6	3	9		50
28	Carriages, hospital			<b></b>		***			•••		<b></b>	· ·	
29	Carriages, ambulance or invalid	52	23	22	348		 16				\ \/\a-		***
30	Horse-boxes	75	10	10	124	27	10	•••	29	1	(m)30		535
31	Brake vans	132	19	50	(f) 514	120	. 35	***	93 588	15	46	10	420
32		21	<b></b>	30	53	8	12	***		14	143	39	1,664
33	1 .			<b></b> .			40					7	169
34		39	4	5	42		4		50	) "   4	21		40
3.	, , , , ,	· ]				<b> </b>				ļ <b>~</b> ,		2	171
30	Miscellaneous	· ]	(a) I		14	(h) 4	(i) 23	***				,,,	
		-			1	1			Ì		ĺ	"	42
		1	<del> </del>	<b> </b>	<b> </b>	<b> </b> -	<b></b>		<b> </b>				
_	TOTAL .	1,350	252		(g')2,041	579	474	***	1,633	451	772	148	8,099

In addition to the coaching stock shown in this list, there are for the through mail service to Bombay 8 first, 8 second class carriages, 8 through Peninsula railway possesses a 7ths share in this stock

There is no passenger stock on the railway

No. 2—conid.

metre gauge railways on the 31st December 1892.

METRE GAUGE.													<del>-</del>	<u> </u>		
STATE LINES WORKED BY STATE						STATE LINES WORKED BY THE STATE,  ASSISTED COMPANIES,					NED AND BY NA-					
XXXIII.—Bengal and North-Western—Tirhoot and Company's sections.	XXXV.—Rajputana-Malwa.	XXXVI.—Southern Mah-	XXXVIII.—Southern Mahratta (Mysore section).	XXXIX.—South Indian.	XLIII.—Fastern Bengal, (state) Northern, Behar and Dacca sections.	XLIV.—Burma (state).	XLVI.—Deoghur.	XLVIIRobilkund and Kumaon, (including the Lucknow-Bareilly section).	XLIXDibru-Sadiya.	LIII.—Jodhpore-Bickaneer— Jodhpore and Bickaneer sections.	LIV.—Bhávnagar-Gondal- Junágarh-Porbandar,	Тотас.	Progressive number.	Remarks.		
							***	• ,				•••	1			
3	5		3	1	(d) 2	;;; (r) 21				1	2	15 37	2	(d) On bagie frames. (r) Two on bogie frames.		
2	•			<b></b>	***			<b>,</b> ·				2	4	(f) One on bogie frame.		
16 28	124 46 96	(o) 43 34	(s) 9 8	19 34 44	(r) 21 31 12	34 (12)41 60	 2	• 15 9	7	5 1	(n & r) (l & o) 7	268 262 278	5 6 7 8	(x) Includes two composite (1st and 3rd class) carriages. (c) Twenty-seven on bogie frames, including two metre gauge composite carriages. (j) Three on bogie frames.		
			<b></b>		. ***	 (d) 3			 		 (d) 2		9	(1) Two of these are composite (1st, 2nd, and 3rd class) carriages. (o) Five on bogie frames. (s) Seven on bogie frames. (u) Six on bogie frames.		
		<b>  .</b>			**4	<b></b>				***	4	4	11			
							<b></b>						12			
	50 8				36 2					···· ·		89 10	13			
. 22	25				1			9		<b></b> .		57	15	(b) Includes 20 carriages, with retiring accommodation for females.  (e) One hundred and sixty on bogie frames, including 5 metre gauge		
221	 680	(p) 160	(k) 75	499	 (r) 172	(v) 333	8	 94		32	 (x) 130	2,407	.16	carriages.  (p) Eight on bogie frames.  (k) Fitteen on bogie frames.		
	8t	(q) 216	28		•••	7	•	•••		10		342	18	(v) Twenty-two on bogie frames. (x) Twelve on bogie frames. (q) Nineteen on bogie frames.		
10	8	29		2	7	6	***	•••	2	6	3	73	19	•		
		(r) 4	3	   I	***	••• 				ι	 (f) 7	 37	2 <sub>0</sub>			
	1				,						***	1	22			
					***	`			***				23			
	1					•••		<b></b> .	***			1	24			
	<b></b>			 18	3		•••	•••	•••	•••	***	2 25	25 26			
			<b></b>			8					•••	9	27			
<b></b>	•••												28			
	5		3	15	443	••• .					•••	23	29	(m) Of these, 28 are fitted for ambulance purposes.		
15	82	28	8	30	10	30		5	1	1 8	4	214	30	(a) This is a composite carriage (inter-		
67	282 31	158	12	 89	54 4	-31	2   	18 6		8		780 184	31 32	mediate and 3rd class, with postal compartment).		
5	38		5	5	5			•••		•	2	 69	33 34	(h) These are composite carriages (1st, 2nd, intermediate and 3rd class). (i) Of these, 20 are fish vans, two are Traffic Inspectors' vans and one		
	•	 			 (t) 5			***	***	1		1	35 36	is a Water Inspector's van.  (t) Of these, 4 are fish vans and 1 is		
) <sup></sup>	•••			"	""		"	•••		]			] "	a Water Inspector's van.		
41	(n) 1,583	710	192	758	377	695	12	166	27	72	225	5,228	 	(g) Includes 12 3rd class carringes with brakes belonging to the late Ferozepore steam tramway. (n) Twenty-six on bogic frames.		

STATEMENT

List of goods stock on the standard

						STAN	IDARD (	GAUGE.					<del></del> -
	•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	TATE LIN ORKED I	3 <b>Y</b>	Sta		WORKEI STATE.	) BY	BY GU	WOR ARANT APANTE	ERD	LINE OWNED BY NATIVE STATE AND WORKED BY COMPANY.	•
Progressive number.	DESCRIPTION.	I,Bast Indian.	IIBengal-Nágpur.	III,—Indian Midland.	1XNorth Western (state).	XIOudh and Rohilkhand (state).	XII,—Eastern Bengal (state) including the Bengal Central railway.	XIV.—Calcutta Port Commissioners!.	XVIII,—Great Indian Penin- tula.	NIX,—Bombay, Baroda and Central India.	XX.—Madras.	XXVI.—The Nizam's Guaranteed State.	Total.
1	Wagons, covered, goods (wooden) .	3,002		***	351	1,840	• 103 1,143	 146	2,609	1,651	58 <b>3</b>	60	10,199
2	Wagons, covered, goods, iron or iron rectangular.			420	2,384	1,972	272	,	<b>4</b> 27	,t5a		110	11,167
3	Wagons, iron, cylindrical	""	•••	•••	***	•••		•••	***		-11-	•	272
4		1,458	 456	600	277	6υ	76	2	858 • • • • • • • • • • • • • • • • • • •	891	1,336	390	5,948
5	Wagons, medium-sided		430		215	*11	• •••	•••	h)2,240	306	•••	( <i>f</i> ) 10	3,011
6	Wagons, low-sided and ballast .	247	88	298	(a)2,413	272	135	5	2 <sup>80</sup> .	200	213	158	4,309
7	Wagons, cotton (covered, iron)			•••	, ••••	•••				<b></b>		***	<b></b> ·
8	Wagons, cotton (covered, wooden)	.:.				•••	•	*	***	19		***	19
9	Wagons, open, for jute	. <b></b>				•••	•••				•••	•••	•••
to	Wagons, pilot					•••				71	•••	•	11
11	Wagons, dummy		4	•••		***	3		,		***	***	7
12	Wagons, coal or coke	4	300	·	(b) 2			•••			54	***	360
. 13	Wagons, horse or cattle	21	520	750	(c) <b>4,0</b> 85	6	5		1,509	<b></b> .	- 50		6,941
14	Trucks, timber	99	16		16	207	20		191	60	150	***	759
15	Trucks, platform			**1	42	***		4			3	•••	49
16	Trucks, fuel	<b>.</b>		**-	··•	***	82	•••			76	- <b></b>	158
17	Trucks, bolster		4	50	49	•••	12			<b></b> .			115
18	Trucks, six-wheeled				•••	***		•••		102	50	,	.152
19	Brake vans	209	65	52		•••	28	•		бo			
20	Powder vans	31	4	3 <sup>2</sup>	 47	8	,		18	6	20	2	436
21	Salt wagons		·`							150	4	•••	123 150
22	Accident vans					٠				.,"		· •••	130
23	Treasure vans			10		. 4	5	***	25		6	3	53
21	Tool or stores vans			•••	8			•••		•••	•	•••	8
·				•••	***	***		•••	***	•••	•••	•	, 2
25 26	Coal hoppers Oil tanks or oil tank wagons	1,136	194	•••		•••	•••	•••		<b></b>			1,330
20			24		29	2	2	•••	••• •	3	••	***	бо
-,	The state of the s	"	•••	8	(d) 43	***	,	•••	12	15	4	2	8 <sub>5</sub>
28	Rail carriages or trucks				(e) 155					<b></b> .	50	•	205
29	Miscellaneous vehicles	<i></i> .	44		(f) i	•••	t	<b></b>		***	20	••• •••	46
30	Travelling cranes	20	8	8	41	Ii	4	***	46		6	2	146
31	Accident cranes			•••		2		•••	<b></b>	3		<i></i> .	5
	• .		  - <del>-</del>		 								
	TOTAL .	9,165	2,804	2,200	(g) 16,153	4.384	1,894	157	7,999	3,627	(i) 3,006	<b>7</b> 37	46,126

No. 2—concld.

and metre gauge railways on the 31st December 1892.

<u></u>				=	METRI	E. GAU	GE.	<u> </u>			<u> </u>		<u> </u>	
STA	TE LIN	ES WO	RKED I	Вұ	STATE L WORKE THE ST	) BY	Assis	TED COMPA	NIES,	LINES OW WOPKE NATIVE S	D BY		• •	
XXXIII.—Bengal and North-Western—Tirhoot and Company's sections.	XXXVRajputana-Malwa.	XXXVI.—Southern Mahratta.	XXXVIII.—Southern Mah- ratta (Mysore section).	XXXIX.—South Indian.	NLIII.—Fastern Bengal. (state) Nothern, Behar and Dacca sections.	XLIVBurma (state).	XLVIDeoghur.	XLVIIRobilkund and Kamaon (including the Lucknow-Bareilly section).	XLIN,-Dibre-Sadiya.	LIII.—Jodhpore-Bickaneer- Jodhpore and Eickaneer sections,	LIV.—Bhávnagar-Gondal- Junágarh-Porbandar,	Total.	Progressive number.	Remarks.
418	2,039	206 (k) 2,434	j. <b>R</b> 40::	856 877	697 1,024	(m) 1.956	4	470	79		 263	6,276 9,072	1 2	(m) Five hundred on bogie frames. (k) Seventy-five on bogie frames.
										180	ļ	180	3	
	143	(f) .75	170	813	***	60 (h) 359			379		•••	1,640 *653	4 5	(f) On bogie frames,  (h) Fifty medium-sided wagons are on bogie frames.
291	2,401	849	75	504	253	371		105	70	85	(v) 604	5,608	6	bogie frames.  (a) Two hundred and forty-nine on bogie frames, including thirty-
4.				•	· 		٠		•••	···			7	seven metre gauge wagons.  (o) Twenty on bogie frames.
<b></b>			 	77 	 24	, ,		••• ·		•••		77 24	9	
				***						•••	٠٠٠.		10	
			•••	•••		23 							12	(b) Metre gauge wagons on bogie frames.
4 82	79	125 38	3	6 (l) 51	42	120		57	;···		6	26 <sub>4</sub> 405	13	(c) Four hundred and twenty-eight on boyie frames.  (l) Eighteen on boyie frames.
	55	36	***	4	<b>7</b> 25	<del>""</del>	•••		<u></u> .			120	15	
				•	***		•••		•••		<b></b> .		16	
		53	37			(n) 205	•••		•••	, ,,,		355 4	1 <b>7</b> 18	(n) Twenty-five on bogic frames.
	•		 	 52		.,,		9	, 7			74	19.	·
1	35	11	2	5	2	6	***	2	1		2	6 <sub>7</sub>	20 21	
,	15	10	     3	***		     5	· ···		***	• •••	1	51	22	
					• •••			•••			 (p)2	<b>.</b> 9	23 24	(p) One on bogie frame.
		3			1	   !			***			•	25	
	6	4	-••					•••	2		. ,	12 14	26 27	(d) Includes one metre gauge wagon on bogie frame.
		7			***	7	"		• •••				28	(e) Includes eleven metre gauge trucks
					 2		]	••• •••	2			5	29	on bogie frames.
13 	26 	15	5	3	10		••• ·					99 	30 31	(g) Includes to low-sided trucks belong- ing to the late Ferozepore steam
								•						ing to the late Ferozepore steam tramway.  (i) Difference due to 531—8-ton wagons having been shown in terms of toton wagons in the Revenue Ac-
2,052	(j)	4,010	605	3,249	2,0)6	3,240	8	674	581	265	896	25,036		counts.  (j) One thousand four hundred seventy-five on bogie frames.

STATEMENT

Rolling-stock on the standard and metre gauge railways in

		Nu	MBER OF	COACHIN	G VEHIC	LES FIT1	NUMBER OF COACHING VEHICLES FITTED WITH HOOKS OR RACKS FOR SUSPENDING RIPLES.						
SERIAL NUMBER.	RAILWAY.	First class.	Second class.	Inter- mediate class.	Third class.	Total.	Percentage on entire stock of first, second, intermediate and third class on the line.	First class.	Second class.	Inter- mediate class.	Third class.	Total.	Percentage on entire stock of first, serond, intermediate and third class carriages on the line.
!	STANDARD GAUGE. State lines worked by companies.	•		  - 							•		•
- 1	East Indian	 			52	52	5*18	•••	•••	<b></b>	***	إ	•••
11	Bengal-Nágpur	•			23	23	10*80	(b)29	8	(1) 7	137	181	84°S9
. 111	Indian Midland	   			22	22	8 66	 	9		178	187	73.62
12	State lines worked by the State.	{   								-			·
. IX	North Western (state)				413	413	35'82	<b></b>	23	27	469	519	45'01
ХI	Oudh and Rohilkhand (state) .			.3.	15	(f) 15	5'79	<b></b>	<b></b>	20	229	249	89*24
XII	Eastern Bengal (state) (h)			16	***	16	4*75	•••	•••	8	102	110	32.64
											1		•
ŻIV	Calcutta Port Commissioners' .	   			•				• •		•••	•••   •••	
	Lines worked by guaranteed companies.	,	-			,		,					
XVIII	Great Indian Peninsula				. 29	29	3.63		54		66	120	15'02
XIX	Bombay, Baroda and Central India.				15	15	3.83			22	92	1;4	29'15
• XX	Madras				28	28	5*39		70	<b></b>	• 293	363	72.64
	Line owned by native state and worked by company,					•		İ					
XXVI	The Nizam's Guaranteed State .							<b>,,,</b>			***		

No. 3.

India adapted for military purposes as existing on the 31st December 1892.

Nυ	MBER	<b>0</b>	tse-box	ŒS.	WAGO	NS ADA	OVERS PTED OF HO	D GOODS FOR THE PRSES.	SULT/	R OF OP ABLE FOR	THE CA	S WAGONS RRIAGE NS.		•
Cap- able of carry- ing 6 horses	Cap- able of carry ing 4 horses	Cap- able of carry- ing 3	ing 2	ļ	Wooden	Iron.	Total.	Percentage of entire stock of covered, wooden and iron goods wagens on the line.	Medium or high- sided.	Ballast or low- sided.	Total.	Percentage on entire stork of medium or high sided and ballast or low-sided wag ons on the line.	Serial Number,	REMARKS.
									j				:	,
<b>7</b> 5		 	·	75	841	52	(a) 893	15.03	1,312		1,312	76 <sup>-</sup> 94	1	(a) To carry 8 horses each.
IO	 	<b></b>	***	10		520	(d) 520	32*58	514	55	569	54 <sup>-</sup> 82	įī	(b) Eight first class and 21 composite (first and second class) carriages, the second class compartments only
			•			; ;	!							are fitted with rifle racks.  (c) Composite (intermediate and third class) carriages. (d) To carry 8 horses or 10 ponios each.
•••	<u>.</u>	10		10		750	(d) 750	64'10		208	208	24 <sup>.</sup> 24	111	
				"		!		;						
98		26	•••	124	(a) 75	(#) 4,005	4,080	60*09	148	1,538	1,686	58*48	ıx	(e) 428 on bogie frames to carry 12 horses each and 3,577 to carry 8 horses each.
25	3	   	***	27	150	300	(d) 450	11*80		213	(g) 213	44*47	_ <b>X</b> I	(f) One is fitted with fittings for Lushai and Collis' dandies.  (g) 133 low-sided and 80 timber trucks
5	ļ	5	4**	10	(i) 9	( f) 560	569	   45'48		112	112	46'0g	11:X	are only provided with end-openings suitable for carriage of artillery.  (h) Includes the Bengal Central rail-
•		<u> </u>   					•		<del>""</del>	,		<b>40</b> 39		way.  (i) Four are ambulance wagons and 5 are cattle wagons.
! -		į.	:						-				_	(i) One is a powder van, 8 horses or 10 ponies are capable of being carried in each wagon, but only 30 wagons having breast bars fitted in them are at present adapted for the carriage of horses.
•••	<b>"</b>			***		•••	·	***			•••	***	XIV	
							(d)				,			· .
***		93		93	1,502	•••	1,502 (k)	33,10	2,882	280	3,162	100.00	XVIII	
15				15	1,634		1,634 (a)	<b>59</b> °78	942	557	1,499	100,00	XIX	(&) To carry 6 horses each.
1	,	45		46	564	401	965	98'07	1,436	213	1,649	100'00	××	•
							/						:	
7		3		to	45	6о	(d) 105	61.77	350	8o	430	• <b>9</b> 1•49	XXVI	

# STATEMENT

# Rolling-stock on the standard and metre gauge railways in

<del></del>					3	=		<del>-</del>				····	<del></del>	
		Num	BRR OF (	COACHING ULANCE	VECHIC PURPOSE	LES F117 S.	ED FOR	Number of coaching vehicles fitted with hooks or racks for suspending riples.						
SERIAL NUMBER.	RAILWAY.	First class.	Second class.	Inter- mediate class.	Third class.	Total.	Percent- age on entire stock of first, second, inter- mediate and third class carri- ages on the line.	First class.	Second class.	Inter- mediate class.	Third class.	Total.	Percentage on entire stock of first, second, intermediate and third class carriages on the line.	
	METRE GAUGE.				'									
XXXIII	State lines  worked by companies.  Bengal and North-Western—(a)  Tirhoot section	)	•				-			·	•		22'62	
xxxv	Company's section	} (	••••			5	•··· •·'45	•••	2	15	100	50 117	10,20	
·												i		
xxxvi	Southern Mahratta $(J)$			,	3	3	0-18	(e) 27	<b>3</b> 6	•••	175	<b>23</b> 8	38'44	
XXXIX					15	15	0.03	(g) 3	•••	•••	*229	232	o.28	
	State lines worked by the State,		-										1	
XLIII	Eastern Bengal (state)—  Northern and Behar sections.				•••			•	(i) 30	26	143	199	88·o5	
		,												
	Dacca section		4**	<b>,.</b> .		•••	•••	***	(k) 9	( <i>l</i> ) 1	36	46	82'14	
						!								
. XLIV	Burma (state)	•••			68	68	21"38	***	(n) 21	 	(o) 241	262	60'32	
			]     		   									
•	Assisted companies.													
XLVI		· 					***	· •••	<b></b> •	•••	•,	•		
XLVII	Rohilkund and Kumaon (Com- pany's section) (r)				<u></u>		• •••		<b></b>	(s) 12	<sup>-</sup> 73	85	62.77	
XLIX	Dibru-Sadiya Lines owned and worked by native states.	•					***				7	7	33*00	
LIII	Jodhpore-Bickaneer—  Jodhpore section	}	•						49-					
LIV	Bickaneer section.  Bhavnagar-Gondal-Junágarh- Porbandar.			•			***		***			8	4-88	

No. 3-concld.

India adapted for military purposes as existing on the 31st December 1892.

Nu	NUMBER OF HORSE-BOXES.		XES.	Number of covered goods wagons adapted for the carriage of horses.				LE FOR		WAGONS RIAGE OF				
Cap- able of carry- ing 6 horses	Cap- able of carry- ing 4 horses.	able of carry- ing 3	ing 2		Wooden,	Iron.	Total.	Percentage of entire stock of covered, wooden and iron goods wagons on the line.	Medium or high- sided.	Ballast or low- sided.	Total.	Percentage on entire stock of medium or high-sided, and ballast or low-sided wagons on the line.	SERIAL NUMBER.	Remarks.
										_				
<b>4</b>	15	***	534	(b) 15	74	344	(b) 74 (c)	4*50	•••	175	175	бо*14	xxxııı	(a) Although for convenience classed amongst State railways, the Company's section of this line is the property of the Bengal and North-Western Railway Company.  (b) To carry 4 horses or 8 mules each.
•	<b>8</b> 2	•••		82	303	40	343	7.60		1,988	1,988	72`32	XXXV	(c) 100 covered goods wagons to carry 6 country-bred horses or 10 ponies each.  100 covered goods wagons to carry 4 walets, 6 country-bred horses or 10 ponies each.  143 high-sided wagons to carry 9 small-animals each.
•11	36		•••	36	<b></b>	100	( <i>f</i> ) 100	- 3*18	102	- 849	951	.63'91	•xxxvi	(d) Includes the Southern Mahrattar railway (Mysore section). (e) Composite (first and second class) carriages. (f) To carry 4 horses or 6 ponies.
***		•••	20	30	933	877	(h) 1,810	100*00	813	504	1,317	100'00	XXXIX	(g) These are (first and second class) composite carriages. (h) Covered goods wagons to carry 6 horses or 8 ponies, and covered cotton wagons, ordinary, to carry 6 horses or 12 ponies.
•••	8	444	•••	8	573	•••	( <i>j</i> ) 573	37*04	•••	25	25	8-99	XLIII	(i) Of these, 30 carriages, 8 are second class carriages and 22 are second class compartments of composite carriages  (j) 252 wagons capable of carrying 4 horses and 319 of carrying 4 ponies each, but none have yet been adapted for the purpose.  Two wagons are adapted for carrying artillery.
•••	2		•		126 ·		(m) 126	<b>7</b> 1`59	•••			·		<ul> <li>(k) Four are second class carriages and 5 are second class compartments of composite carriages.</li> <li>(I) This is a composite (intermediate and third class) carriage.</li> <li>(m) Capable of carrying 4 horses each, but none have yet been adapted for the purpose.</li> </ul>
	30	***	1	30	(p) 248	50	(q) 293	14'85		290	290	78*17	XLIV	(n) Of these, 12 are entire carriages, 9 are compartments of second class carriages on bogie frames. (n) Includes 3 compartments of composite bogie carriages and 22 carriages on bogie frames. (p) Of these, 73 wagons are completely fitted, but 175 wagons, though of proper dimensions for the carriage of horses, have not yet been 'supplied with fittings. (q) To carry 4 horses, mules, or artillery bullocks or 6 small bullocks or ponies.
				<b>.</b>			***		,.,			***	XLVI	•
	5		•••	(6) 5	3	***	(b) 3	0.91		***			XLVII	(r) Includes the Robilkund and Kumaon railway (Lucknow-Bareilly section). (s) Includes 9 composite (intermediate
		***	1	,	79	151	(t)1 79	100,00	(н) 379	70	, 449 -	100,00	XLIX	and third class) carriages.  (/) To carry 1 horse each. (n) Of these, one is a powder van.
 										ļ				•
			1	1			<b> </b>			40	40	47*06	LUI	
,	4		(v) 6	10				•••		•••	•••	***	LIV	(v) Cattle trucks to carry 2 horses each

#### CHAPTER II.

#### CAPITAL.

The following paragraphs detail the capital transactions of the more important standard and metre gauge railways during the year 1892:

### East Indian Railway (standard gauge).

2. The following is a brief statement of the capital transactions of the East Indian railway as recorded in the Finance and Revenue Accounts of the Empire; further details will be found in Chapter II, pages 30 and 31, of the Administration report, Part II, for 1890-91.

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 Government took over the railway at a valuation of £37,200,000 made up thus:

Up to the end of 1892 the commuted value of capital stock and the debentures and debenture stock to the extent of £11,749,157 has been paid for by the State by the creation of a "Debt" of £12,032,765 + Rx. 10,675, the amount of which 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.

The balance of the commuted capital remains to be discharged by the payment of an annuity of £850,538, which is exclusive of the deferred annuity.

The annuity of £850,538, which is discharging commuted capital to the extent of £18,900,850, is exclusive of the deferred annuity on the commuted capital amounting to £6,550,000.

Since purchase of the line—1st January 1880 to 31st December 1892—the capital transactions of the East Indian railway stand as follows:

Debt incurred in, or creat- ed for the purchase of,	R	R	£	Rx.
the line Capital outlay incurred since purchase of line Overdrawn capital to the 31st December	•••	•••	12,032,765	+10,675
1879 Capital outlay on final	26,45,269		•	
<u> </u>	<b>3</b> ,0 <b>2</b> ,68,386			
Carried over		3,29,13,655	12,032,765	+ 10,675

Brought forward Capital stores suspense	R £ · 3,29,13,655 12,032,76 53,64,566	* R*. 5 + 10,67 <b>5</b>
Deduct—Value of stores, cash, deposits, etc., received from the com-	3,82,78,221	
pany on pur- chase of the line	1,00,04,859 	. <b>2</b> ,827,336
	TOTALS . 12,032,76	5 2,838,011

The expenditure of the year on final heads, including outlay on lines under construction, was as follows:

e at which it	Azimganj branch, including the capital va
9,72,926	was taken over to 31st March 1892. Patna-Gya State railway (past outlay tr
43,69,426	T2 - 4
10,78,438	Net outlay, East Indian railway proper.
TOTAL . 64,20,790	

The expenditure was chiefly incurred on the following works:

		R
Jherriah extension		9,47,462
Additional-steamer for the Sahebgunge ferry service		1,56,990
Four additional flats for the Sahebgunge ferry service		1,39,227
Ballasting and relaying the Patna-Gya, branch		62,652
Fitting coaching vehicles with vacuum automatic brakes	•	47,452

The capital outlay on the East Indian railway during the year 1892 has en reduced pro tem. by R5,24,100, the value of 14 engines and 10 boilers ndemned, but not replaced before the calendar year for want of stock in nd.

The following figures show the comparison of interest charges with net nings:

Patna-Gya State

East Indian railway

				y for the half- nded June 1892.	(including Patna-Gya branch from 1st July 1892).
		_		<b>R</b>	R
Interest at 4 per	cent. o	n capi	tal		
outlay .				87,147	2,43,72,918*
Net earnings of the	е уеаг.	less c	on-		
tribution to th				1,63,462	3,48,16,720
Excess of net earning	ngs over	inter	est		
	-			76,315	1,04,43,802
				~	,

The total capital outlay on the East Indian railway to the 31st December 1892 which has been adopted for statistical purposes in this report, as represent-

<sup>•</sup> Includes R2.16,14,328 on account of annuity, interest on depenture stock and deferred annuity R14,18,673 on account of interest on depentures paid off, and R1,05,811 on account of interest on overdrawn capital to 31st December 1879.

ing the money expended in constructing the line, has been arrived at as follows:

	Capital outlay by the East Indian Railway Company prior to the purchase of the line by the	R
	state	32,94,21,094
	Outlay on final heads since purchase	3,02,68,386
	Amount at debit of suspense	53 64,566
	Balance of surplus stores on purchase of line .	9,75,428
		36,60,29,474
	Deduct-Sale-proceeds of dismantled build	0.05.6
	ings	8,86,699
	•	36,51,42,775
Deduct-	Outlay on the Jherriah extension . 9,47,462	
•	Outlay on the Toposi branch 9,736	
•	Outlay on the grand chord line survey 1,44,460	11,01,658
	OUTLAY ON OPEN LINE	36,40,41,117

### Bengal-Nagpur Railway (standard gauge).

3. During the year £200,000 were advanced by the Secretary of State to meet the capital outlay on the Bengal-Nágpur railway. The capital account at the close of 1892 was as follows:

~	£	• £	$R_{\cdot}$
Capital authorised—		<del>, -</del>	
Share capital	3,000,000	•	•
• Debentures	1,500,000		
Provided by the Secretary of State for			
India under Act 51 Vic., Chapter 5.	2,700,000		
Advance by the Secretary of State for			
India	373,372		
•		7,573,372	= 9,84,53,830
Capital subscribed—			
Share capital • • • • •	3,000,000		
Debentures	1,500,000		
Provided by the Secretary of State for		•	
India under Act 51 Vic., Chapter 5 .	2,600,000		
Advance by the Secretary of State for			
India	373,372		
Capital not bearing interest	5, <b>7</b> 80		
C10.1	<del></del>	7,479,152	= 9,72,28,980
Capital expenditure—			
On construction account	• •	7,051,241	= 9,16,66,132
On stores in suspense	• •	293,339	= 38,13,410
On advances in suspense	• •	11,327	
*		<del></del>	
10	OTAL .	7,355,90 <b>7</b>	= 9,56,26,799
Delegas and Theref			
Balance available of—		_	_
Capital authorised • • • • •	• •	217,465	
Capital subscribed	• •	123,245	= 16,02,181
•			

The total capital outlay on final heads to the 31st December 1892 was as follows:

Main line-Nagpur	to Asar	sol (i	ncludi	ing	¥
branch line fro and London est	m Katni tablishme	to intan	Bilásp d otl	our he <b>r</b>	•
charges) . Sambalpur branch-	-Jharsuga	da to	Saml	al-	9,02,84,425
pur		•	•	•	13, <b>7</b> 9,17 <b>8</b> 1,94 <b>6</b>
Raipur-Dhamtari s		•	•	•	583
•	•	Tot	1L	•	9,16,66,132

The expenditure of the year on final heads was R63,99,406.

	rred:
Earth-work (main line)	
Saranda tunnel	
Ballasting (main line)	•
Earth-work Bilaspur district (main and branch lines) 1,00,068	
Ballast, Bilaspur district (main and branch lines) . 1,57,108	
Huts for permanent-way gangs, Nagpur to Bilaspur 1,13,301	
30 Compound goods engines, B. class 8,25,217	
720 Covered goods wagons for carrying horses 13,19,778	
494 Medium-sided wagons for carrying coal 7,62,517	•
55 Ballast wagons	
Earth-work	
Minor bridges 1,99,972	
Large bridge No. 8	
Permanent-way	
	- O
The following figures show the comparison of interest charges for	1892
with net earnings:	
Interest— R	•
On subscribed capital at 4 per cent 17,62,785	
On debentures at 3½ per cent	
	•
On capital under Act 51 Vic., Chapter 5, at 34 per cent 11,95,552  On advances by the Secretary of State for India for capital	
the first that the state of the	•
	•
Total . 39,05,345	
Net earnings of the year less contribution to the Provident	•
Fund	
Deficit of net earnings below interest charges . 8,97,179	
Indian Midland Railway (standard gauge).	
4. The capital account on the 31st December 1892 stood as under:	
Capital authorised and received— £	_
Share capital	•
Debenture bonds—	
At 3½ per cent	
At 31 per cent	
Advance by the Secretary of State for India under Act	
51 Vic., Chapter 5, at 34 per cent 1,345,000	•
Capital not bearing interest	
7,101,116	÷
Capital expenditure— On construction account On construction account	
1 0 A	
On suspense accounts $\cdot \cdot \cdot \cdot \cdot \cdot \frac{198,897^{\circ}}{6,918,796}$	
· · · · · · · · · · · · · · · · · · ·	
Balance available	
Balance available	cember
Balance available	cember
Balance available  The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885.	cember
Balance available  The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.	
Balance available  The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.	
Balance available  The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was	
Balance available The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885. The amount held in suspense was R25,27,121. The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:	
Balance available The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885. The amount held in suspense was R25,27,121. The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:	
Balance available The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885. The amount held in suspense was R25,27,121. The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  R  Stations and buildings  182,320  R 6,16,713	
Balance available The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885. The amount held in suspense was R25,27,121. The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings Plant  182,320  6,162,320  R  6,16,713  1,05,127	
Balance available The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885. The amount held in suspense was R25,27,121. The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings Plant Rolling-stock	chiefly
Balance available The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885. The amount held in suspense was R25,27,121. The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings Plant Rolling-stock	chiefly
Balance available  The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings  Plant  Rolling-stock  The following figures show the comparison of interest charges were considered.	chiefly
Balance available  The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings  Plant  Rolling-stock  The following figures show the comparison of interest charges we carnings:	chiefly
Balance available  The total capital outlay on final heads of account to the 31st December 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings  Plant  Rolling-stock  The following figures show the comparison of interest charges we earnings:  Interest to 31st December 1892 on original capital at 4 per  R	chiefly
Balance available  The total capital outlay on final heads of account to the 31st December 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings Plant Rolling-stock The following figures show the comparison of interest charges we earnings:  Interest to 31st December 1892 on original capital at 4 per R17,62,785	chiefly
Balance available  The total capital outlay on final heads of account to the 31st December 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings  Plant  Rolling-stock  The following figures show the comparison of interest charges we earnings:  Interest to 31st December 1892 on original capital at 4 per cent.  Interest to 31st December 1892 on 31 per cent debentures  17,62,785  1,14,145	chiefly
Balance available  The total capital outlay on final heads of account to the 31st December 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings  Stations and buildings  Plant  Rolling-stock  The following figures show the comparison of interest charges we earnings:  Interest to 31st December 1892 on original capital at 4 per cent.  Interest to 31st December 1892 on 3½ per cent. debentures  Interest to 31st December 1892 on 3½ per cent. debentures  Interest to 31st December 1892 on 3½ per cent. debentures  Stations and buildings  Figure 1992 on 3½ per cent. debentures  R17,62,785  5,14,145  8,37,444	chiefly
The total capital outlay on final heads of account to the 31st December 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings Plant Rolling-stock The following figures show the comparison of interest charges we rearnings:  Interest to 31st December 1892 on original capital at 4 per cent. Interest to 31st December 1892 on 3½ per cent. debentures Interest to 31st December 1892 on 3½ per cent. debentures Interest on advance by the Secretary of State for India at 6 and 6 a	chiefly
The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings Plant Rolling-stock The following figures show the comparison of interest charges we earnings:  Interest to 31st December 1892 on original capital at 4 per cent.  Interest to 31st December 1892 on 3½ per cent debentures Interest to 31st December 1892 on 3½ per cent. debentures Interest on advance by the Secretary of State for India at 6,09,611	chiefly
Balance available The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings Plant Rolling-stock The following figures show the comparison of interest charges we earnings:  Interest to 31st December 1892 on original capital at 4 per cent. Interest to 31st December 1892 on 3½ per cent debentures Interest to 31st December 1892 on 3½ per cent. debentures Interest to 31st December 1892 on 3½ per cent. debentures Interest on advance by the Secretary of State for India at 3½ per cent.  TOTAL  182,320  182,320  182,320  182,320  6,16,713  1,05,127  16,39,155  5,14,145  8,37,444  6,09,611  37,23,985	chiefly
Balance available  The total capital outlay on final heads of account to the 31st December 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings Plant Rolling-stock The following figures show the comparison of interest charges we earnings:  Interest to 31st December 1892 on original capital at 4 per cent.  Interest to 31st December 1892 on 3½ per cent. debentures Interest to 31st December 1892 on 3½ per cent. debentures Interest to 31st December 1892 on 3½ per cent. debentures Interest to 31st December 1892 on 3½ per cent. debentures Interest on advance by the Secretary of State for India at 3½ per cent.  Total  Net earnings of the year less contribution to the Provi-	chiefly
Balance available  The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings Plant Rolling-stock The following figures show the comparison of interest charges we earnings:  Interest to 31st December 1892 on 3½ per cent debentures Interest to 31st De	chiefly
Balance available  The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings Plant Rolling-stock The following figures show the comparison of interest charges we earnings:  Interest to 31st December 1892 on 3½ per cent debentures Interest to 31st De	chiefly
Balance available The total capital outlay on final heads of account to the 31st De 1892 was R8,40,51,885.  The amount held in suspense was R25,27,121.  The expenditure of the year on final heads was R24,80,548, and was incurred on the following works:  Stations and buildings Plant Rolling-stock The following figures show the comparison of interest charges we earnings:  Interest to 31st December 1892 on original capital at 4 per cent. Interest to 31st December 1892 on 3½ per cent. debentures Interest to 31st December 1892 on 3½ per cent. debentures Interest on advance by the Secretary of State for India at 3½ per cent.  Net earnings of the year, less contribution to the Provident Fund  182,320  182,320  182,320  182,320  6,16,713  1,05,127  16,39,155  5,14,145  8,37,444  6,09,611  37,23,985	chiefly

#### Wardha Coal State Railway (standard gauge).

5. The total capital outlay on final heads of account to the 31st December 1892 was R49,87,689. There was no sum at debit of suspense.

The expenditure of the year on final heads was R6,493, and was incurred

chiefly on "Bridge-work," "Stations and Buildings" and "Plant."

The following figures show the comparison of interest charges with net earnings:

Interest on capital outlay at the rate of 4 per cent.		•	1,99,337
Net earnings	•	•	34,096
Deficit of net earnings below interest charges .	•	•	1,65,241

# Dhond-Manmad (state) Railway (standard gauge).

6. The total capital outlay on final heads of account to the 31st December 1802 was R1,10,71,284. The amount held in suspense was R1,744.

The expenditure of the year on final heads was R86,594, and was chiefly

incurred on "Fencing" and "Stations and Buildings."

The following figures show the comparison of interest charges with net earnings:

				A
Interest on capital outlay at the rate of 4 per of	cent.			4,42,535
Net earnings	•	•	•	3,28,335
Deficit of net earnings below interest charges				1,14,200

# Bezwada Extension Railway (standard gauge).

7. The total capital outlay on final heads of account to the 31st December 1892 was R14,17,674. There was no sum at the debit of suspense.

The expenditure of the year on final heads was R6,597.

The net earnings of the year, R28,347, were short of the interest charges by R28,237.

#### North Western (state) Railway (standard gauge).

8. In the capital account of the North Western (state) railway system is included that portion of the purchase money of the Sind, Punjab and Delhi railway which was raised by the issue of India stock amounting to £4,911,621: the balance of the cost of this line is being redeemed by means of an annuity.

The Sind, Punjab and Delhi undertaking was taken over from the company on the 1st January 1886, at a valuation of £14,009,124-8-3. On date of purchase the share capital of the company stood at £11,075,320; there were no debentures or debenture stock. At the market-rate of the day the share capital represented £14,009,124-8-3, and was acquired by Government by means of an annuity of £4-1-7.6393 per cent. on this commuted value. Government were, however, empowered to convert these annuities into India stock, and since the date of purchase £200,467-10-5 of annuities were redeemed by the issue of £4,911,621-6-1 India  $3\frac{1}{2}$  per cent. stock. The balance of the commuted capital stock, £9,097,908-1-11, remains dischargeable by an annual payment of £371,361-3-7, which is charged to the revenue account of the line at the average rate of exchange of the year of payment.

The capital accounts of the Amritsar-Pathánkot railway, the Mianwali-Mári and Chaman extensions were amalgamated with that of the North Western (state) railway from the 1st April 1892.

The total capital outlay charged off to final heads on the entire system of the North Western (state) railway (excepting the Rájpura-Bhátinda and Hyderabad-Umarkot railways, and the native state section of the Jammu and Kashmir railway) to the 31st December 1892 amounted to R41,37,42,272

The distribution of this amount over the three sections of the North Western (state) railway was as follows:

•				R
Main line and branches		•	•	29,23,60,119
Pishin section	•	•	•	8,71,41,670
Sind-Sagar and Khusalgarh branches	•	•	•	3,42,40,483
•	To	TAL	•	41,37,42,272

The amount held at debit of suspense on that date was R1,12,93,215.

The expenditure of the year on final heads was R37,77,213, and was chiefly incurred on the following works:

■	K
New engine-changing station, Dádú	71,469
Extra sidings and platforms at certain stations for	
troop traffic	1,94,089
Troop sidings and platforms at Peshawar City	1,30,622
Improvement to grades and permanent-way, Bakrala,	
Mandra and Siala projects, also between mileage	
954 and 970	£5,83,998
Renewing the Ravi bridge girders	1,18,215
Brewery siding at Rawalpindi	28,439
Extension from Hussainiwalla to Ferozepore	1,34,314
Re-building the Jhelum bridge piers	40,746
Constructing a ferry line at Darya Khan	44,712
Improved permanent scheme for supplying water to	
engine shed and workshop, Sukkur	25,905
New engine shed at Kurrachee Cantonment	42,523
Alteration to the Alexandra bridge at Wazirabad .	1,03,090
Regrading line, Sibi to Násák	35,870
Flood works, Sharigh district	47,276
Additions and alterations to Staff-quarters, Quetta	34,330
Additions and alterations to Bostán-Gulistán section,	
permanent-way	53,523
Flood works, Quetta district	47,412
Military sidings at Chaman	1,05,638
Fitting main line engines with automatic vacuum brake	-)-0)-0-
gear	1,00,513
Low-sided wagons for the Rajpura-Bhatinda railway .	3,92,720
Vacuum brake gear for engines and vehicles	2,77,723
Draw-bars and cradles for vehicles	47,045
Providing second screw couplings to rolling-stock. • •	53,834
	JJ, JT

The following figures show the comparison of interest charges with net earnings:

	Main line and branches.	Pishin section.	Sind-Sagar and Khusálgarh branches,
•	R	· R	R
Interest at the rate of 4 per cen on capital outlay	. 1,64,55,13	34,83,899	13,68,240
Net earnings of the year less cont bution to the Provident Fund	. 1,03,94,29	8 —11,37,527	1,94,189
Deficit of net earnings below interes	st 60,6 <b>0,</b> 84	1 46,21,426	11,74,051

# Hyderabad-Umarkot Railway (standard gauge).

9. The total capital outlay on final heads of account to the 31st December 1892 was R16,17,397. The amount held in suspense was R14,421.

<sup>•</sup> Includes R89,84,076 on account of annuity for the two half-years, payable on account of purchase money of the late Sind, Punjab and Delhi railway.

The expenditure from the 22nd August to the 31st December 1892 on final heads was R294,239, incurred chiefly on ballast and permanent-way.

The following figures show the comparison of interest charges with net earnings:

•				K
Interest on capital outlay at the rate of 4 per co	en <b>t</b> :	•	•	29,587
Net earnings	٥	•	•	-1,949
Deficit of net earnings below interest charges	•	•	•	31,536

# Oudh and Rohilkhand (state) Railway (standard gauge).

10. The line was purchased by Government on 1st January 1889, and taken over at a valuation of £10,336,049.

On date of purchase the capital of the Oudh and Rohilkhand Guaranteed Railway Company consisted of:

					£
Share capital	•	•	•	•	4,000,000
Debentures and debenture stock	•	•	•	•	5,300,000
•		To	ral .		9,300,000
•					

The share capital was acquired by the issue of £5,036,049, 3 per cent. India stock, and the debentures and debenture stock were taken over as State debt.

The total capital outlay on final heads of account to 31st December 1892 was as follows:

Oudh and Rohilkhand Guaranteed Railway C	ompany's	R
expenditure to 31st December 1888 State railway expenditure from 1st January 188	8,91,	57,048
December 1892	• . • 14,	63,419
To	TAL . 9,06,	• 20,467

The amount held in suspense at the close of the year was R18,33,767.

The capital expenditure of the year charged to final heads was R1,27,510.

It represents the net outlay after allowing for the following credits:

Receipts on capital account  Value of land relinquished  Value of stores obtained from the old East Indian railway  station at Paichet Barrens	•
Value of land relinquished . 20,66  Value of stores obtained from the old East Indian railway	
Value of stores obtained from the old East Indian railway	_
atation at D.C. Lat. D	_
station at Raighat—Benares	o.
value of stores obtained from old siding at Lucknow	_
station 2,01	2
Value of plant obtained from Ganges bridge, Benares 19,34	0
Sale-proceeds of a bungalow at Cawnpore	0
Petty items	5
Тотац . 79,16	9

The actual outlay on new capital works during the year under review amounted to R2,06,679, which was incurred chiefly on stations and buildings and rolling-stock.

The principal works were:

	K
Island platform at Lucknow station	50,548
Fitting automatic vacuum brakes to 13 engines, 106 car-	
riages and 12 brake-vans	94,302

The following figures show the comparison of interest charges with net earnings

Interest for 1892 on monies 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	K
1889 at 4 per cent  Net earnings of the year less contributions to the Provi-	52,30,297
dent Fund  Excess of interest charges over net earnings	50,16,329 2,13,968

Eastern Bengal (state) Railway system (standard, metre and special gauges).

11. In the capital account of the Eastern Bengal (state) railway system is included £1,569,784, which represents that portion of the cost of the Eastern Bengal railway purchased from the company which was raised by the creation of a specific debt. The remainder of the liability is being redeemed by annuities.

The Eastern Bengal railway was purchased by Government on the 1st July 1884, at a valuation of £4,415,574-17.5.

On date of purchase the capital of the company consisted of:

						•			£
Share capital.	•	•	•	•	•	•	•	•	2,255,480
Debentures .	•	•	•	•		•	•	•	612,350
Debenture stock	•	•	•	•	•	•	•	•	411,308
					•				
•						То	TÀL	٠	3,279,138

This is exclusive of capital not bearing interest amounting to £2,290.

Under the Purchase Act the share capital of the company, amounting to £2,255,480, was taken over by Government at a commuted value of £150-7-8 54 for every £100 of original capital, which thus became £3,391,916-17-5; the debentures and debenture stock of the company were taken over as State debt.

Under the same Act Government were allowed the option of redeeming the commuted value of the share capital by means of an annuity instead of by direct purchase, and it was acquired by the issue of an annuity terminable on the 30th July 1957, calculated at the rate of £4-2-0.66 per cent.

It was furthermore enacted that Government could exchange India stock for any portion of the debenture stock, and purchase the said annuities by the creation and issue of India stock, at a rate not above 4 per cent., provided that the interest thereby saved should be annually set aside and invested, so as to create a Sinking Fund sufficient to redeem the principal of the stock within the original period of the liability.

Of the £4.415.574-17-5, representing the cost of the Eastern Bengal railway, debentures and debenture stock, amounting to £1,023,658, have been converted into State debt amounting to £1,028,729-7-1, and commuted capital to the extent of £543,818-15-7 has been purchased for £541,054-7-4 India  $3\frac{1}{2}$  per cent. stock.

The balance of the commuted capital stock, £2,848,098, remains to be discharged by the payment of an annuity of £116,850-14-8\frac{3}{4}.

The total capital outlay on final heads of account to the 31st December 1892 was as follows:

Eastern section, including the Calcutta	and S	South	-Easte	rn	
section, standard gauge  Northern and Behar sections (included)	•	•	•	•	5,71,09,557
Dharila 2' 6" gauge, branch)	and	tne	pars	01-	
Kissengunge branch, metre gauge		•	•	•	3,90,40,471
Dacca section, metre gauge	٠	•	•	•	<b>6</b> 6,99,36 <b>3</b>
				•	

. Total 10,28,49,391

The total amount held in suspense was R20,16,752.

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

•							·R
Eastern section, including t	he C	alcutt	a and	South	-East	ern	
section, standard gauge							11,22,589
Northern and Behar sections							
• 2' 6" gauge, branch) and	the B	arsoi-	Kisse	ngung	e bran	ıch,	•
metre gauge	•	•	•	•		•	15,99,169
· Dacca section, metre gauge							
						-	

The expenditure was chiefly incurred on the following works:

#### Eastern section, including the Calcutta and South-Eastern section, standard gauge.

	R
Doubling the line from Naihati to Kanchrapara	49,284
Doubling the line from Kánchrapára to Ránaghat	5,96,911
Fitting 80 carriages, 12 brake-vans, and 11 engines, with	
vacuum brakes	91,537
. Twenty third class carriages	53,975
Cost of laying an extra sleeper under each rail on portion of	
line laid with Denham-Olphert's sleepers	52,898
Doubling the line from Kidderpore dock junction No. 2 to	- · •
Tolley's nullah	33,479
Cost of a third steamer of the "Aligator" type	30,395

# Northern and Behar sections (including the Kaunia-Dharlla, 2 6 gauge, branch) and the Barsoi-Kissengunge branch, metre gauge.

										Æ
Two hund	red and	d fifty	iron-	cover <del>c</del>	d go	ods	wagon	18		3,72,086
Five F. cl						•		•	•	1,09,345
Manihári						•	•	•		56,692
Six double							Saidpu	Γ	•	35,254
Compensa							•	•	•	34,207
Construct										-
conside										
of 1892	, rende	ring p	provis	ion of	extra	wate	er-way	s ne	ces	
sary	•	• .		•	•	•	•	•		8,12,067
						1				•

The following figures show the comparison of interest charges with net earnings:

•	Eastern section, including the Calcutta and South-Eastern section, standard gauge.	Northern and Behar sections (including the Kaunia-Dharlia, 2' 6" gauge, branch), and the Barsoi-Kissen- gunge branch, metre gauge.	Dacca section, metre gauge.
Interest at the rate of 4 per cent, on capital outlay  Net earnings of the year less contribution to	R	<i>R</i>	<i>R</i>
	*37,28,350	15,44,116	2,67,63 <b>7</b>
the Provident Fund	39,11,578	21,86,559	1,35,590
	1,83,228	6,42,443.	1,32,047

#### Bengal Central Railway (standard gauge).

12. The total capital of the company at the	e close of 1892 was as follows:
Capital authorised—	£
Share capital	. 1,000,000
Capital subscribed—	
Share capital paid up	. 500,000
Advance by the Secretary of State for I	ndia 500,000
	1,000,000
Capital expenditure—	£
On construction	. 814,138 ± 99,69,368
On stores in suspense	. 6,647 = $†95,137$
•	
•	820,785 = 1,00,64,505
Balance available—	·
Capital subscribed and advance by the	£
Secretary of State for India .	. 179,215
	•
The expenditure of the year on final heads	was R1,70,880, and was chiefly
incurred on the following works:	:
MC b. 13ma	£
Minor bridges	45,934
Three spans of 40' girder bridge at	• <b>29,943</b>
chain 1,112, mile 49	* -217TJ
Amrakhally	47,363

Amrakhally . . Ballasting 51 miles of line 25,661 The following figures show the comparison of interest charges with net earnings:

t	Interest—				R
•	On subscribed capital at 31 per cent.	•	•	•	2,74,945
	On advance by the Secretary of State for Ind	ia at	3 <sup>1</sup> P	er cen	t. 2,55,306
		Тота	\L	•	5,30,251
	Net earnings	•	•	•	3,12,903
	Deficit of net earnings below interest charges	,	•	•	2,17,348

<sup>\*</sup> Includes interest on debentures, loans, and annuities, for the two half-years, on account of purchase of the Eastern Bengal line.

† Does not include withdrawals on account of English stores, amounting to R1,279.

† Converted at the average rates of the Secretary of State's bills drawn on India for the half-years ending 30th June and 31st December 1892.

#### Calcutta Port Commissioners' Railway (standard gauge).

13. The total capital outlay on final heads of account to the 31st December 1892 was R57,83,467. There was no debit under the head suspense.

The total capital outlay is distributed as follows:

								K
Capital outlay on P	ort Con	nmissi	oners'	rail	way f	rom Co	ssi-	•
pore to Chandpal	Ghåt		•	•		•		50,55,153
Capital on account	of line	from	Chan	dpal	Ghåt	to Kid	der-	
pore dock works	•	•	•	•	•	• •		7,28,314
					Т	DTAL	•	57,83,467

The following figures show the comparison of interest charges with net earnings:

	Interest at R6'14 and R7'14	per	cent.	on Go	verni	nent a	and	
	debenture loans .	•	•1	•	•	•	•	74,509
٠	Net earnings of the year	. •	•	•	•	•	•	1,30,915
	Excess of net earnings over	intere	st cha	rges	•	•	•	56,406

# Great Indian Peninsula Railway (standard gauge).

14. During the year there were no changes in the capital stock of the company, which at the close of 1892 was as follows:

```
£
                                                           R
Capital authorised-
    Share capital
                          . 20,000,000
    Debenture bonds
                              6,666,666
                                       -26,666,666 = 29,09,09,084
Capital subscribed-
    Share capital
                            20,000,000 .
    Debenture bonds
     converted into
     stock .
              . 2,701,450
    Less-Discount 225,891
                              2,475,559
    Debenture bonds at
      per cent. . .
                                845,200
    Debenture bonds at 31
      per cent. .
                               1,866,100
    Capital not bearing in-
      terest
                                290,074
                                       25,476,933 = 27,79,30,174
Capital expenditure-
    On construction account .
                                       \cdot 24,949,611 = 27,21,77,576
    On stores in suspense
                                           481,636 =
                                                        52,54,209
    On advances in suspense .
                                            -19,665 =
                                                         -2,14,530
                                        25,411,582 = 27,72,17,255
Balance available of-
    Capital authorised
                                          1,255,084 = 1,36,91,829
    Capital subscribed .
                                             65,351 =
```

The total capital outlay on final heads of account to the 31st December 1892 amounted to R27,21,77,576.

The expenditure of the year on final heads was R8,85,127.

The following are the principal works on which the expenditure was incurred:

incurre	d:	
		R
	Byculla new running shed for goods engines and alterations	
	to the existing shed for passenger engines	1,14,757
•	Byculla—quadrupling the line	29,786
	Bhusawal new goods station	94,940
	Itarsi-junction station arrangements	84,632
	Poona—junction station arrangements	75,63 <u>5</u>
	Putting an 8th sleeper under every 24' rail, south-east line	1,71,858
TL.	Introduction of new system of signalling along the line	31,086
	e following figures show the comparison of interest	charges for 1892
with ne	t earnings:	
	Interest—	R
		•
	On debentures at 3½ per cent.	1,09,09,091 3,22,713
	On debentures at 34 per cent.	6,61,617
	On debenture stock at 4 per cent.	11,78,814
	on describing stook at 4 per cents, 4 4 4 4	
		1,30,72,235
	Payment to Government in respect of state lines worked by	•
	the company	5,29,160
	Total .	1,36,01,395
	Net earnings of the year, less contribution to the Provi-	-10-11055
	dent Fund	2,07,47,471
	Excess of net earnings over interest charges	71,46, <b>076</b>
	Bombay, Baroda and Central India Railway (standa	ird gauge).
		• • •
15	. The total capital of the company at the close of 189	2 was as tonows:
Cat	oital authorised→	
001	Share capital 6,250,000	
	Debenture bonds 3,663,500	
_	9,913,500 =	10,81,47,273
Cap	pital subscribed— Share capital 6,250,000	
	Debenture bonds converted into	
	stock 1,300,300	
	Debenture bonds at 31 per cent. 1,238,500	
	Capital not bearing interest . 18,419	0.60 = 0 = 10
Car	pital expenditure—	9,60,78,748
Caj	On construction account 8,522,211 =	9,29,69,575
	On stores in suspense	27,86,786
	On advances in suspense $\cdot \cdot -20,865 =$	-2,27,626
	9 ar 6 901	0.55.08.505
	8,756,801 =	9,55,20,735
₽a¹	lance available of—	
	Capital authorised $\cdot$ $\cdot$ $\cdot$ $\cdot$ $\cdot$ $\cdot$ $\cdot$ $\cdot$ $\cdot$ $\cdot$	1,26,18,538
	Capital subscribed 50,418 =	5,50,013
<b>T</b> '	he total capital outlay on final heads of account, inclu-	ding R8.08.405, the
دا. مدين	expenditure on the Pátri branch to 31st December 189	a. was as follows.
State	expenditure on the rath planen to 3.22 2000mper 103	R
	Main line-Bombay to Sabarmati (including London es-	
	tablishment and other charges)	8,59,98,491
		44 51 004

Main line-Bombay to Sabarmati (including London es-	00
tablishment and other charges)	8,59,98,491
Wadhwan extension—Sabarmati to Wadhwan • •	42,51,063
Anand Godhra branch - Anand to Godhra	25,82,847
Pátri branch—Viramgám to Khárágodha Share State share	<u> </u>
Pátri branch—Viramgám to Khárágodha . share	1,34,171
State share	8,08,405
Dhejbara survey	3,003
TOTAL .	9,37,77,980

The expenditure of the year on final heads was R3,34,826.

The following are the principal works on which the expenditure was incurred:

The following figures show the comparison of interest charges for 1892 with net earnings:

Interest-					R
On subscribed capital at 5 per cent.	•	•	• •	٠.	41,18,345
On debentures at 31 per cent.	•	•	•	•	4,39,105
		To	TAL	•	45,57,450
Net earnings of the year, less contribut	ion t	o the	Provid	lent	
Fund				•	81,30,959
Excess of net earnings over interest cha	rges	•		•	35,73,509

#### Madras Railway (standard gauge).

16. During the year  $3\frac{1}{3}$  per cent. debentures, to the extent of £97,800 which became due on 30th June 1892, were renewed for three years at the reduced rate of 3 per cent.

The following new loans were raised during the year and paid into the London treasury:

froo,000 at 3 pe

£100,000 at 3 per cent. £100,000 at 34 per cent.

The total capital of the company at the close of 1892 was as follows:

Capital authorised—	
Stock and shares 10,257,630 Loans and debentures 3,419,210	•
	=14,92,01,891
Capital subscribed—	1,5-,,
Stock and shares 10,257,630	
Loans and dehentures . 800,000	
Capital not bearing interest . 12,014	
Capital expenditure—	= 12,07,59,753
On construction account 10,716,178=	= 11,69,03,761
Un stores in suspense	= 29,25,393
On advances in suspense	= -57,318
10,979,085=	=11,97,71,836
Balance available of—	
Capital authorised 2,607,755=	= 2,94,30,055
Capital subscribed	= 9,87,917

The total capital outlay on final heads of account to the 31st December 1892 was R11,69,03,761.

The amount held in suspense was\*:

C4										R
Stores	•	•	•	•	•	•	•	•	•	29,25,393
Other items, stores outstanding						•	•	•	•	71,748

The expenditure of the year on final heads was R6,58,407.

The following are the principal works on which the expenditure was incurred:

New bridge over the Papaghni river		# 1,28,863
Distant signals for the south-west and north-west lines Carriage and wagon stock	•	38,182
Substituting stronger girders for the Thootha bridge	•	31,748
Bridge	•	33,35 <b>7</b>

<sup>\*</sup> As per published capital account for the half-year ended the 31st December 1892. The actual withdrawal from treasury on suspense account was R28,68,075.

The following figures show the comparison of interest charges for 1892 with net earnings:

Interest—		•	i		R
On subscribed capital at 5 per cent.					47,76,911
On subscribed capital at 44 per cent.		•			5,18,161
On subscribed capital at 41 per cent.	•	•	•	•	2,45,455
On debentures at 3½ per cent.	•	•	•	•	72,125
On debentures at 3t per cent.	•	•	•	•	1,63,871
On debentures at 3 per cent.	•.	•	•		32,367
On overdrawn capital at 41 per cent.	• `	•	•	•	<b>2,066</b>
•		To	<b>TAL</b>		<b>5</b> 8,10,956
Net earnings of the year, less contribution	n to	the I	Provid	ent	
Fund	•	•	•		42,92,133
Deficit of net earnings below interest cha	rges		•		15,18,823

#### Delhi-Umballa-Kalka Railway (standard gauge).

17. The total capital outlay on final heads of account to the 31st December 1892, excluding R5,76,918 on account of interest on capital during construction, amounted to R1,49,07,798. The amount held in suspense was R3,37,420.

The expenditure of the year on final heads was R2,44,782, and was incurred chiefly on "Maintenance," "Stations and Buildings" and "Establishment."

#### Tarkessur Railway (standard gauge).

18. The total capital outlay on final heads of account to the 31st December 1892 was R17,32,567. There was no debit under the head suspense.

The expenditure of the year was R3,546, incurred on stations and buildings.

#### Khámgaon and Amráoti Railways (standard gauge).

19. The total capital outlay on final heads of account to the 31st December 1892 was R4,85,521 on the Khámgaon, and R4,41,556 on the Amráoti railway. The amounts held in suspense on these lines were R3,611 and R8,604 respectively.

No expenditure was incurred during the year on capital account on the Khamgaon railway, but R851 were spent on stations and buildings on the Amraoti line.

The following figures show the comparison of interest charges with net earnings:

		Khámgaon railway.	Afnráoti railway.
		R	R
Interest on capital outlay at the rate of 4 p	er cent	t 19,578	17,996
Net earnings	•	30,909	48,638
Excess of net earnings over interest charge	s.	. 11,331	30,642

#### Bhopal-Itársi Railway (standard gauge).

20. The total capital outlay on final heads of account to the 31st December 1892 was R67,27,868, divided between the Government of India and the Bhopal Darbar as under:

							K
Government of India	•	•	•	•	•		17,27,868
Bhopal Darbar .	•	•	•		•	•	<b>50,0</b> 0,00 <b>0</b>

The amount held in suspense was R18,340.

The expenditure of the year on final heads was R2,99,875, and was chiefly incurred under the following heads:

										R
<b>Formation</b>	•	•	•	•	•	•	•	•	•	39,817
Ballast and	perma	anent-	way	•	•	•	•	•	•	35,156
. Stations and	d build	lings		•	•	•		•	•	1,03,150

The following figures show the comparison of interest charges with net earnings:

•		Government of India	Bhopal Darbar.
		R.	R
Interest for the year on capital outlay at 4 pe	r cent.	69,131	2,00,000
Net earnings	•	56,397	1,65,883
Deficit of net earnings below interest charges	•	12,734	34,117

# The Nisam's Guaranteed State Railway (standard gauge).

21. During the year no capital was raised, nor have any debentures been redeemed. The total capital of the company on the 31st December stood as under:

Capital authorised-							£	£
Share capital	•	•		•	•	•	2,000,000	•
Debentures .	•	•	••	•	•		2,000,000	
	_						<del></del>	4,000,000
Capital subscribed—			•					٠.
Share capital	• .		•	•	•		2,000,000	
Debenture bonds	conve	erted	into s	tock	•	•	1,200,000	
•					•			3,200,000
Capital expenditure—								<b>0</b> ,,
On construction a	ccour	nt		•	•	. •	3,067,812	
On stores in suspe	ens <b>e</b>	•	•	•	. •	•	51,579	
•	•							3,119,391
Balance available of-						•		
Capital authorised	ŧ	•			•	•		800,000
Capital subscribed	1 .	٠	•	•	•	•		80,609

The total capital outlay on final heads of account to the 31st December 1892 was R3,88,25,112.

The amount held in suspense was R7,10,750.

The expenditure of the year on final heads was R7,05,901.

The following are the principal works on which the expenditure was incurred:

•			R
Expenditure on 2nd set of 10 new engines		÷ ,	4.58.030
Renewals of sleepers on mineral branch	• •	•	52.861
Earthwork in levelling the site of the new	locomotive	work-	. 33,001
shops at Lalagooda			32,830
Staff quarters		•	

. The net earnings of the year, R13,24,959, were short of the interest charges by R13,12,268.

<sup>\*</sup> Includes a credit of R12,533 on account of deposits (security).

# The Gaekwar's Petlad Railway (standard gauge).

22. The total capital outlay on final heads of account to the 31st December 1892 was R7,02,375, and the amount held in suspense at that date was R8,706.

The expenditure of the year on final heads was R9,868. -

The following figures show the comparison of interest charges with net earnings:

•		· R
Interest at the rate of 4 per cent. on capital outlay	•	. 28,144
Net earnings of the year	•	• 34,75 <b>7</b>
Excess of net earnings over interest charges .	•	. 6,613

#### Rajpura-Bhatinda Railway (standard gauge).

23. The total capital outlay on final heads of account to the 31st December 1892 was R65,90,424. The amount held in suspense was R50,958.

The expenditure of the year on final heads was R79,794, incurred chiefly on "Stations and buildings," R76,349; "Ballast and permanent-way," R8,280; and "Fencing," R4,346.

The following figures show the comparison of interest charges with net earnings:

				A
Interest on capital outlay at the rate of 4 per	cent.	•		2,64,279
Net earnings	•	•	•	<b>2,</b> 53,824
Deficit of net earnings below interest charges	•	•	•	10,455

#### Jammu and Kashmir Railway, native state section (standard gauge).

24. The total capital outlay on final heads of account to the 31st December 1892 was R9,45,302. There was no suspense account.

The expenditure of the year on final heads was R13,939, incurred chiefly on ballast and permanent-way.

The following figures show the comparison of interest charges with net earnings:

	•								
Interest on capit	al out	lay at	the ra	ate of	4 per o	ent.	•	•	40,914
Net earnings	•		•		•	•	•	•	15,444
Deficit of net ea	rnings	belov	v inte	rest c	harges		•		25,470

#### Bengal and North-Western Railway system (metre gauge).

25. The total capital outlay on final heads of account to the 31st December 1892 was as follows:

								R
Company's section	•	•	•	•,	•	•	•	2,68,34,301*
Tirhoot section	•	•	•	•	•	•	•	2,36,38,810
					To	r <b>al</b>	•	5,04,73,111

<sup>\*</sup> Excludes interest on capital during construction, \$10,90,014.

The amount held in suspense was:

The amount here in		•						R
Company's section	•	•	•		•	•	•	4,64,506
Tirhoot section	•	•	•	•	•	•	•	6,86,994
					То	TAL	•	11,51,500
The expenditure of t	he	уеаг с	n fin	al hea	ads w	as as	follor	
								R
Company's section	•	•	•	•	•	•	•	9,09,696
Tirhoot section	•	•	•	•	•	•	•	2,71,218
	•				Tot	ΓAL	•	-11,80,914
				•				
The expenditure was	chi	efly in	ncurre	ed on	the f	ollow	ing w	orks:
• •		•						R
Company's section-	<del>-</del>							
Dilai Las Lasa								

						R
Company's section-						
Bahramghat branch .	•	•	•	•	٠.	7,11,539
Bahramghat ferry and plant	•	•	•	•	•	1,67,187
Tirhoot section-			•			
Sitamarhi branch	•	•	•	•	•	82,501
500 covered goods wagons	•	•	•	•	•	4 <sup>8</sup> ,95 <b>7</b>

The following figures show the comparison of interest charges with net earnings:

•	Company's section.	Tirhoot section.	
	R	R	
Interest at the rate of 4 per cent. on capital outlay  Net earnings of the year, less contribution	11,25,585	9,50,025	
to the Provident Fund Excess of net earnings over interest charges	.17,01,254 5,75,669	13,15,815 3,65,790	

# Rajputana-Malwa Railway (metre gauge).

26. The total capital outlay on final heads of account to the 31st December 1892 was as follows:

								R
Rajputana-Malwa section	•	•		•	•	٠.	. •	8,8 <sub>7</sub> , <sub>97</sub> , <sub>79</sub> 9
	•	•		•	•	•	•	1,30,55,737
Rewari-Ferozepore section		•	•	•	•	•	•	1,28,10,626
Cawnpore-Achnera section	•	•		•	•	•	•	1,15,22,741
					To	TA <b>L</b>	•	12,61,86,903

The amount held in suspense was R42,47,574.

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

•							R
Rajputana-Malwa section	•	•	•			•	3,72,458
Holkar section	. •						
Rewari-Ferozepore section	•	•	•	•	é	•	30,401
Cawnpore-Achnera section	•	•	•	•	•	•	60,47 <b>2</b>
				To	TAL	•	4,82,211

#### CHAP. II.-CAPITAL.

The expenditure was chiefly incurred on the following works:

55,982 Grain siding and shed at Delhi station yard Fencing main line, Rajputana-Malwa section Certain crossing stations on the line Converting 247 Clemenson's wagons into American type bogie covered goods wagons

97,620 38,430 49,056

The following figures show the comparison of interest charges earnings:

RInterest at the rate of 4 per cent. \* on capital outlay † 54,39,268 Net earnings of the year, less contribution to the Provident Fund 1,32,14,774 Excess of net earnings over interest charges. 77,75,506

#### Southern Mahratta Railway (metre gauge).

27. Of the total sum of £855,000 of the company's 3½ per cent. debentures which existed at the close of December 1891, £600,000 fell due on the 1st April of the year under review and were disposed of as follows:

£580,000. Recissued at par bearing interest at 31 per cent. per annum for 7 years.

Re-issued at 2s. 6d. per cent. premium, bearing interest at 31 £,20,000. per cent. per annum for 7 years.

On the same date, viz., 1st April 1892, the Secretary of State for India made a further advance of £75,000 to meet anticipated capital expenditure on the company's system.

The total capital of the company at the close of 1892 was as follows:

Capital authorised-3,500,000 Share capital 943, 100 Debenture bonds  $\cdot 4,443,100 = 5,43,17,200$ Capital subscribed-3,500,000 Share capital Debenture bonds at 31 per cent. 255,000 688,100 Debenture bonds at 31 per cent. Capital not bearing interest 30,957 4,474,057 = 5,47,50,592Capital expenditure --.6,238,234 = 7,59,20,721On construction account . 135,106 = On stores in suspense 16,21,275 6,373,340 = 7,75,41,99,6Excess of expenditure over-1,930,240 = 2,32,24,796Capital authorised 1,899,283 = 2,27,91,404Capital subscribed .

The excess was met from the total advances made by the Secretary of State for India amounting to £2,054,900=R2,46,58,800, from which £155,617 =R18,67,396 were available for expenditure from 1st January 1893.

The capital outlay on final heads, including R1,65,77,535, the State expenditure on the Bellary-Kistna section to 31st December 1892, was R9,24,98,256.

The expenditure of the year on final heads was R5,84,634.

The following are the principal works on which the expenditure was incurred:

								A
Land	•.			-	•	•	•	32,211
Fencing the dangerous	parts	of the	e line	•	٠	•	•	1,06,053
Covered way, Alandi gl	hat	•	•	•	•	•	•	38,412
Staff quarters, Miraj			•	•	•	•	•	37,326
Water-supply, Hubli	•	•	• •	•	•	•	•	87,500

Interest on one crore of rupees, advanced by the Indore Darbar, is calculated at 41 per cent. Includes interest on R64,94,798, the outlay on the Godhra-Rutlam railway.

\*The following figures show the comparison of interest charges for 1892 with net earnings:

Interest—				R
On subscribed capital at 31 per cent.	•		•	19,24,614
On debentures at 31 per cent	•	•	•	2,10,131
On debentures at 31 per cent:	.•	•	•	<b>2,7</b> 1,374
. On advances by the Secretary of State for	India	٠.	•	7,30,830
	Тот			31,36,949
Net earnings of the year, less contribution	to th	ie Pr	ovi-	•
dent Fund			•	13,74,119
Deficit of net earnings below interest charge	es	•	٠	17,62,830

Southern Mahratta Railway-Mysore section (metre gauge).

28. The total capital of the company underwent no change, and at the close of 1892 was as follows:

Capital authorised—	£	£	R
Debenture bonds	1,200,0	000 1,200,000 =	1,60,61,569
Capital subscribed—	•		
Debenture stock at 4 per cent.	. 1,200,0	00 <b>0</b>	•
Capital not bearing interest .	• 24,0		
- · · · • · ·		— I,224,000 =	1,63,82,801
Capital expenditure—			
On construction account .	•	1,017,947 =	* 1,41,86,520
On stores in suspense.	• . •	. 29,381 =	4,49,685
		1,047,328 =	1,46,36,205
Balance available of—		1,04/,320 —	1,40,30,203
· Capital authorised		152,672 =	† 14,25,364
Capital subscribed		176,672 =	† 17,46,59 <b>6</b>
The expenditure of the year on	final heads		

The expenditure of the year on final heads was R79,814, of which R27,096 were incurred on land.

The following figures show the comparison of interest charges for 1892 with net earnings:

Interest— .		R
On debentures at 4 per cent	٠.	7,29,624
On debentures at 4 per cent	rovident	
Fund		
Deficit of net earnings below interest charges		2,86,107

#### Southern Mahratta Railway-Mysore-Nanjangud and Yesvantpur-Dodballapur sections (metre gauge).

29. For the first time the capital expenditure of the Mysore-Nanjangúd extension is shown separately. The cost of the extension, which was first met from the capital subscribed by the Southern Mahratta Railway Company for the Mysore railway, was recovered from the Mysore Darbar in January 1893, but with the consent of the British and Mysore Governments the 1st July 1892 was fixed as the date on which the extension should be considered to have been purchased by the Mysore Government and made over to the company for working and maintenance.

The total capital outlay on the section on final heads of account to the 31st December 1892 amounted to \$25,92,414. There was no sum at debit of suspense.

The expenditure of the year on final heads was R68,164.

The approximate outlay on the Yesvantpur-Dodballapur section on final heads of account to the 31st December, 1892 was R5,20,782. The suspense account amounted approximately to R80,000.

Excludes R5,92,414 being cost of the Mysore-Nanjangúd extension recovered from the Mysore
 Darbar.
 † Includes R5,92,414 on account of the cost of the Mysore-Nanjangúd extension recovered from the Mysore Darbar.

#### South Indian Railway (metre gauge).

30. This undertaking was acquired by Government on 1st January 1891 and was taken over at a valuation of £5,692,557.

In the Finance and Revenue accounts of the Government of India, the cost of the line is stated at £4,692,557, the difference, one million pounds, representing the capital subscribed by the new company for working the purchased and other connected lines which under contract it undertook to construct for Government.

At the time of purchase the capital of the company consisted of-

•			•			£
Share capital		•		•	•	3,208,280
Debentures and debenture stock	•	•	•	•	•	1,495,000
•						·
			T	DTAL	•	4,703,280
_						

The share capital, comprising £3,070,668 of 5 per cent. stock, and £137,612 of  $4\frac{3}{4}$  per cent. stock, was acquired by the issue of £4,197,557, 3 per cent. India stock, the 5 per cent. being taken over at a premium of £31-2-4 and the  $4\frac{3}{4}$  per cent. at £24-11-2; the debentures and debenture stock were taken over as State debt.

The total capital of the new company remains unchanged, and at the close of 1892 was as follows:

•			£		R
Capital authorised— Share capital		•	1,000,000	=	1,40,00,000*
Capital subscribed — Share capital			1,000,000	<u>,</u> =	1,40,00,000
Capital expenditure (including	out	lay fro	m State capi	tal)	ı
On construction account		٠.		•	7,45,74,660
On stores in suspense				•	36,60,04 <b>7</b>
On advances in suspense		•		•	49,054
•			TOTAL	•	7,82,83,761

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

			-						A
Engineering	works. \	Villu	nurat	n-Gunt	akal se	ction		٠.	14,31,636
Rolling-stock Engineering	•.	•		. 14	, T La laimer	and	Nell	ore	2,12,577
Engineering Branch	works	on	old	under	taking	•	•	•	1,96,183
branch .	•	•	•	•	-	Тот			18,40,396

The outlay on rolling-stock was chiefly on the stock provided for the Villupuram-Guntakal section.

Of the outlay of R1,96,183, R35,877 were expended on further workshop accommodation at Negapatam, R24,594 on enlarging the station at Tiruválur to provide accommodation for the Máyavaram-Mutupet railway traffic, and R19,440 on blocks of quarters at Villupuram.

<sup>•</sup> Calculated at R14 per &.

54	•	ADMIN	ISTRATION	KEPU	XI FUK	1092-93.		
	The fo	llowing figures she	ow the comp	arison	of inter	est cha	rges for 18d	2 with
net	earning						3	•
		erest (in terms of co	ompany's cont	ract)—	•	•	R	
		On company's cap	ital at 3 per co	ent, ,	•	•	4,20,000	
		On State capital (#	{,425,000) at 4	. per o	ent.	•	2,80,914	
		Expenditure and co	ash balance at	g per	cent.	•	17,41,609	
		Share of surplus pr	ronts paid to c	ompan	у •	•	76,586 	
			•		COTAL	•	25,19,139	•
	Net	earnings of the year	ar, <i>less</i> contrib	ution t	o Provid	ent		
	F	Fund		• •b•=====	• •	•	27,22,450*	
		ess of net earnings		_		•	2,03,311	
	I here v	vas, however, a ne	t loss to the	State o	DI #E13,0	5,229 a	rriveu at as t R	inde <b>t</b> :
	Inte	rest on company's	eapital	••			4,71,334	
	Inte	rest on Governmen	t capital—		· R		1/1 /051	
		Debenture stock at		•	3,00,4			
		Debenture bonds a Debenture bonds a	it 3 g per cent.	•	3,26,2 1,60,1			
		Indian stock at 3 p		. •	15,99,2			•
		Indian outlay at 4		•	. 10,93,6			
	_				<u> </u>		34,79,759	•
	Sur	plus profits paid to o	company.	•	• •	•	76,586	
		•					40,27,679	
	Am	ount charged in ter	ms of contract			•	25,19,139	
	т.							
-		cess of actual charge cess of net earnings				•	15,08,540	
	LA	cos or net carnings	Over interest	charge.	•	•	2,03,311	
	Net	loss to the State		•		•	13,05,229	
		_		•			<del></del>	
		Burma	(state) Rai	lway (	metr <b>e</b> ge	iuge).		
	31. Ti	ne total capital ou	itlay on final	heads	of acco	unt to	the gist Dec	ember-
189	-	s follows:	•				Ü	
_							R	
		rma (state) railway	• • •	٠.	•	• •	5,13,46,745	
		iktila branch . Vailey (state) railw	av (open sect	ion)	•.	•	1,84,196. 97,62,42 <b>1</b>	
		turies (source) runni.	a) (open deet	.0,	Тота		6,12,93,362	
-			•			- •	=======================================	
	Thean	nount held in susp	pense was ::					
	D	······································					R	
	Mei	ma (state) railway iktila branch .	• •	•	•, (	•	14,47,338	
		Valley (state) railw	ay (open secti	ion)	• •	•	9 <b>6</b> 3,10,000	
		•		-			3, 1,100	
					TOTAL	•	17,57,434	
but	the bala	ance against the	Burma (state	e) rails	vav inclu	des Ra	of oot of th	- M
Val	lev (stat	e) railway stores,	etc held in	stoci	r for the	CODE	55,225 of th	- 11'-
sto	ck for th	at line	occ., nera m	Stoci	· ioi tiid	Const	ruction of R	ouing-
200		spenditure of the y	vear on final	haada		. 11	•	
	XIIC CA	ipenditure of the	year on man	neaus	was as i	onows:	R	
		ma (state) railway	٠				<b>4</b> 3,72,296	
	Mei	iktila branch		. •	•-	•	1,82,652	
	Mu	Valley (state) railw	ay (open sect	ion).	•		26,69,693	
				•	Тотаі	•	32,24,641	
			·····	_			<del></del>	
	• Excludes	R1,31,141 made up as fo	llows:					
	O:	· ver-credit to earnings !	reconnect of the time				R	
	Le	ver-credit to earnings in r vss overcharge to working	espect Of the old	company	's Fire Insu	rance Fun	d 1,48,441;	
			<del>-</del>			R		
		Traffic expenses . Police charges .		• •	• •	6,000 11,300		
	•		_	. •	· •	,500	17,300	

1,31,141

The expenditure on the Burma (state) railway was chiefly incurred on the following works:

Renewal of 25 miles of line on Irrawaddy district with
50lb steel rails

Cost of two B class engines transferred from the late
Nagpur-Chhatisgarh (state) railway

New bridge over Kambe Choung

30,038
28,792

The following figures show the comparison of interest charges with net earnings:

Interpret at the acts of a new root and the	Burma (state) railway. <i>R</i>	Mu Valley(state) railway (open section).  R
Interest at the rate of 4 per cent. on capital outlay  Net earnings of the year, less contribution to	21,02,577	3,90,366
the Provident Fund  Excess of net earnings over interest charges	36,07,334 . 15,04,757	-2,21,246 -6,11,612

Rohilkund and Kumaon Railway system (metre gauge).

32. The total capital outlay on final heads of account to the 31st December 1892 was as follows:

C							R
Company's section .	•	•	•	•	•	•	20,52,435
Lucknow-Bareilly section	•	•	•	•	•	•	79,97,955
				Tot	ra <b>L</b>	•	1,00,50,390
The amount held in suspen	se wa	as:					
		•					R
Company's section .	•	•	•	•	•	•	6,140
Lucknow-Bareilly section	•	•	•	•	•	•	1,68,849
			•	Ton	TAL	•	1,74,989
The expenditure of the year	r on f	inal-l	heads	was	as fo	llows	: _

							R
Company's section	•	•	•	•	•		4,884
Lucknow-Bareilly section	•	•	•	•	•	•	5,25,806
				To	TAL	•	5,30,690

The following figures show the comparison of interest charges with net earnings:

• .	Company's section.	Bareilly section.
Interest at the rate of 4 per cent. on capital outlay  Net earnings of the year, less contribution to the	82,161	3,07,651
Provident Fund  Excess of net earnings over interest charges	1,97,780 1,15,619	2,74,601 —33,050

#### Dibru-Sadiya Railway (metre gauge).

33. The total capital outlay on final heads of account to the 31st December 1892 was £485,012 or R68,47,234. The amount held in suspense was R1,09,070.

The expenditure of the year on final heads was R1,41,760, and was chiefly incurred on:

•						•	-	K
Two locomotive engines		•	•	•		•	÷	40,194
Stations and buildings	•	•	•	•	•	•	•	28,756
Ballast		•	•			•		23,984

The following figures show the comparison of interest charges with net earnings:

•			**
Interest at the rate of 5 per cent. on capital outlay	•	. •	3,38,818
Net earnings of the year	•	•	1,63,719
Deficit of net earnings below interest charges .	•	•	1,75,099

### The Gaekwar's Mehsana Railway (metre gauge).

34. The total capital outlay on final heads of account to the 31st December 1892 was as follows:

							R
Mehsána-Kherálu section	•	•	•	•	•	•	9,45,552
Mehsana-Viramgam section	•	•	•	•	•		12,49,670
Mehsána-Pátan section .	•	•	•	•	•	•	7,76,388
•				To	TAL	•	29,71,610

There was no debit under the head suspense.

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

							R
Mehsána-Kherálu section .	•	•	•	•	•	•	19,373
Mehsána-Viramgám section	•	•	•	•	•	•	19,103
Mehsána-Pátan section .	•	•	•	•	•	•	29,084
				To	TAL	•	67,560

The following figures show the comparison of interest charges with net earnings:

Mehsána- Mehsána- Mehsána- Mehsána-

Kherálu.	Viramgam.	Pátan.
$\boldsymbol{R}$	R	R
37,435	49,605	30,474
	-	37,183 6,700
	R 37,435 33,822	Kherálu. Viramgárn.  R  37,435 49,605 33,822 82,000 3,613 32,395

#### Kolhápur Railway (metre gauge).

35. The total capital outlay on final heads of account to the 31st December 1892 was R23,18,476. The amount held in suspense was R63,470.

The expenditure of the year on final heads was R1,06,832.

# Jodhpore-Bickaneer Railway system (metre gauge).

36. The total capital outlay on final heads of account to the 31st December 1892 was as follows:

								-75
Jodhpore section Bickaneer section	•	. •	•	•	•	•	•	57,97,853
Bickaneer section	•	•	•	•	•	•	• .	9,48,622
•					Тот	AL	•	67,46,475
The amount held in s	uspei	nse w	as:					
	•							R
Jodhpore section Bickaneer section	•	•	•	•	•	•	•	2,61,699
Dickaneer section	•	•	•	•	•	•	• •	***
_					Tor	AL	•	2,61,699

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

								K
Jodh pore section .	•	•	• •	•	•	•	•	16,10,743
Bickaneer section	•	•	•		•		٠	<del></del> 4,84,084
•					To	TAL	•	11,26,659

The credit on the Bickaneer section was due to transfers to the Jodhpere section.

· Bhávnagar-Gondal-Junágarh-Porbandar Railway (metre gauge).

37. The total capital outlay on final heads of account to the 31st December 1892 was as follows:

										R
Bhávnagar	•	•	•	•	•	•	•			68,88,397
Gondal	•	•	•	•	•	•		•	•	46,21,134
Junágarh	•	•	•	•	•	•	•	•	•	35,39,356
Porbandar	•	•	•	•	•	•	•	•	•	17,93,856
							Tot	AL	•	1,68,42,743
The amount	held	l in	suspe	ense	was:					
			•							R
Bhávnagar		•	•	•		•			•	1,47,875
Gondal	•	•		•	•	•	•	•		1,33,196
Junágarh	•	•	•		•		•	•	•	85,663
Porbanda <b>r</b>	•	•	•	•	•		•	•	•	42,553
							То	TAŁ	•	4,09,287
The expendi	ture	of	the ye	ear o	n fin	al he	ads v	was a	as fo	llows:
Bhávnagar			•							38,348
Gondal		•		•					٠.	10,621
Junágarh							•			71,648
Porbandar	•	•	•	•	•	•	•	•		10,620
					•		To	ΓAL	•	1,31,237

The following figures show the comparison of interest charges with net earnings:

nings:	Bhávnagar.	Gondal.	junágarh.	Porbandar.	Total.
	R	R	· R	R	₽
Interest on capital at	,			•	•
the rate of 4 per					
cent. on capital out-					
lay to end of 1891,					
and at 2 per cent. on					
the outlay during the	_				
year	2,80,617	1,89,894	1,43,802	73,223	6,87,536
Net earnings of the					
year, less contribu-					
tion to the Provident					
Fund	3,20,599	42,580	58,705	16,438	* 4,38,322
Deficit of net earnings			- 7, -		
below interest charges	+30,082	1,47,314	85,09 <b>7</b>	56,785	2,49,214
		, . , , , ,	J, 7,	J., J	

Average mileage capital cost of standard and metre gauge railways.

38. On pages 58 to 65 will be found a statement showing the average mileage capital cost of the standard and metre gauge railways in India on the 31st Décember 1892, distributed as far as possible over main heads of expenditure, exclusive of steam ferries and suspense items.

#### Railway bridges and tunnels.

39. The statements on pages 66 to 73 give details of the cost of some of the large railway bridges and tunnels in India.

<sup>•</sup> Exclusive of the loss on the working of the Porbandar dock estate.

STATEMENT

Average mileage capital cost of Indian railways (standard gauge) on the 31st December 1892,

		1,136·02 831·58 677·35 44·88 145·44 21·47 1,610·27 831·58 677·35 44·88 145·44 21·47 1.610·27 831·58 677·35 44·88 145·44 21·47													
LENGTH OF RAILWAY AND MAIN HEADS OF EXPENDITURE.		IAN.		'					DHO	≀D-	Bezv	VADA			
•	Total.		Total.		Total.		Total.		Total.		Total.	Per mile.			
Length of Line—															
Double Miles.	474:25	•••,	***	•••	.,,	***		***	,		***				
Single	1,136.02	•••	831-58	***	677'35		44.88	•••	145'44		21.47	•••			
Total . 19	• 1,610·27	•••	831.28		677.35		44.88	***	145'44		21:47	1,,			
	-			ı.					,						
I. Preliminary expenses R	12,55,700	780	14,86,796	1,788	9,03,173	1,333	91,642	2,042	1,28,528	884	15,319	71			
II. Land "	11,06,359	687	5,89,531	709	6,09,311	900	4,745	106	98,372	676	47,109	2,19			
III. Formation . ,,	<b>2</b> ,09,96,513	13,039	1,35,63,412	16,310	• 78,63,744	11,610	3,02,318	<b>6,7</b> 36	9,14,803	6,290	1,75,513	8,17			
IV. Bridgework . "	6,78,15,273	42,114	1,76,32,893	21,204	2,05,12,081	30,284	10,49,576	<b>2</b> 3, <b>3</b> 86	21,77,107	14,969	97.717	4,55			
V. Fencing, etc "	28,03,470	1,741	3,14,431	378	25,18,894	3,719	2,22,989	4,968	2,86,834	1,972	19,788	92			
VI. Electric telegraph	<b>2</b> 9,82,766	1,852	<u>:</u>		13,477	20		***		•••	444	144			
VII. Ballast and per- manent-way . "	9,93,35,342	<b>6</b> 1,689	2,92,81,447	35,212	2,80,44,873	<b>41,4</b> 04	17,51,227	39,020	50,20,008	34,516	6,12,467	28,52			
VIII. Stations and buildings . ,,	3,22,76,448	20,044	58,91,295	7,084	75,46,771	11,142	3,58,320	7,984	8,15,562	5,608	3,02,566	14,09			
IX. Plant "	28,06,082	1,743	16,40,344	1,973	6,42,364	948	2,17,579	4,848	1,81,771	1,250	9,536	44			
		•				,				•		•			
XI. Rolling stock . "	7,02,96,88 <sub>5</sub>	43,655	1,35,88,914	16,341	1,13,61,131	16,773	3,79,332	8,452	17,298	119	20,384	94			
XII. General charges "	5,41,11,060	33,604	56,42,177	6,785	34,92,465	5,156	4,52,519	10,083	7,74,011	5,322	1,1 <b>7</b> ,275	5,46			
Loss by exchange . "	<b></b>	***	6,53,185	<b>7</b> 85	<b>2</b> ,91, <b>5</b> 51	430	1,57,442	3,509	6,56,990	4,517	•••	•••			
Total . "	(a) 35,81,27,912	2,22,401	(6) 9,02,86,954	1,08,573	(c) 8,40,51,885	1,24,089	49,87,689	1,11,134	1,10,71,284	76,123	14,17,674	66,03			

<sup>(</sup>a) Includes \$2,529 on account of collieries and \$6,75,428 on account of surplus stores not included in any of the above heads.

(b) Includes \$2,529 on account of expenditure on Jherriah coal and Raipur-Dhamtari surveys not included in any of the above heads.

(c) Includes \$2,52,050 on account of commission, etc., on loans not included in any of the above heads.

No. 4. distributed over main heads of expenditure, exclusive of steam ferries and suspense items.

			s	TATE LINE	S WORKÉ	D BY THE	STATE.				
IX North V (sta	VESTERN	X Hydbrabad		XI Oudh Rohilkhani	AND	· XI Eastern (stat	BENGAL	-	II. Central.	X CALCUT COMMISS	IV. TA PORT SIONERS.'
Total.	Per mile.	Total.	Per mile.	Total.	Per mile,	Total.	Per mile.	Total.	Per mile.	Total.	Per mile
41°26	<b>.</b>	***	•••			51.48	***	***	•	5.18	•
· 2,386-12	•••	58.91		<b>6</b> 92 <sup>.</sup> 55	···	197'01		125'01	*** ,	1'04	•••
(d) 2,427·38	···	58:91	•••	692.22	***	248.49		125'01		6.55	•••
			_							-	
36,34,273	1,497	36,345	617	10,66,016	1,539			1,45,483	<b>1,</b> 164		*** 
24,45,838	1,008	18,499	314	1,05,118	152			23,969	192		
4,92,50,090	20,289	1,35,845	2,306	31,05,052	4,483		•••	7,23,193	5,7 <sup>8</sup> 5		***
8,70,11,653	35,846	2,74,256	4,656	<b>2</b> ,45,15,633	35,399	e given.	. ***	14,38,848	11,510	oe given.	•••
67,12,881	2,765	18,815	319	15,73,470	2,272	neads cannot be given.		4,04,477	3,236	heads cannot be given.	•••
8,71,594	359	`	•••	46,129	67	ain heads	•11	12,032	108		
11,70,16,774	48,207	8,41,011	14,276	2,51,70,832	36,345	Distribution over main l	., •••	40,03,226	32,023	Distribution over main	,
3,76,91,593	15,528	1,38,523	2,351	98,28,572	14,192	Distribu	1***	10,46,874	8,374	Distrib	•••
92,60,682	3,815	16,665	283	21,16 475	3,056			3,20,076	<b>2,</b> 560		***
5,65,50,440	23,297	7,056	120	1,45,39,128	20,993			10,27,198	8,217		
2,78,38,044	11,468	1,05,048	1,783	. 85,54,042	12,352			7,21,420	5,751		
87,18,561	3,592		***						<b></b>	• •	
(e) 40,93,23,694	(f) 1,62,040	15,92,063	27,025	9,06,20,467	1,30,850	5,51,34,197	2,21,877	(g) 99,69,367	79,749	57,83,466	(h) 16,52,419

<sup>(</sup>d) Excludes portion of the Quetta loop (98.68 miles) which is under re-construction on a new alignment, but includes 6.13 miles (Mcan-Meer chord and Ferozepore Cantonment to Hussainiwala) used for Military traffic only.

(e) Includes R23,21,271 on account of maintenance and sundries not included in any of the above heads.

f) C Iculated on 2,526.06 miles, including 98.68 miles of the Quetta loop now under reconstruction on a new alignment,

(g) Includes R1,01,671 on account of loss on working, not included in any of the above heads.

(h) Calculated on 3.50 miles belonging to the Calculate Port Commissioners' railway.

STATEMENT

# Average mileage capital cost of Indian railways (standard gauge) on the 31st December 1892,

	LINES	WORKE	D BY GUAR	RANTEEI	O COMPANI	IES.	Ass	ISTED (	COMPANIE	<del></del> S.
LENGTH OF RAILWAY AND MAIN HEADS OF EXPENDITURE.	XVII GREAT INDI	II. AN PEN-	XIX Bombay, Ba Central	C. RODA AND INDIA.	XX		XX Dethi-Um Katk	BALLA-	X X I	
	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.
Length of line-  Double Miles	461'92		60-11		42.41				***	
Single • • • »	824.85		400.79		796-82		161'40	· · · · ·	22.23	
TOTAL . »	1,286.77		460.90		839:23		161:40		22.23	
I. Preliminary expenses R						•••	<b>7</b> ,98,376	4,947		
II. Land,						 			•	
III. Formation . "	-	   					39,33,346	24,370		***
IV. Bridgework . »			e j	 	e e				ė.	***
V. Fencing, etc "	annot be given.	 	annot be given.	 	annot be giv	<b></b>	}	}	innot be given.	***
VI. Electric telegraph . "	nain heads c	     •••	nain heads c		nain heads c		***	***	aain heads c	•••
VII. Ballast and permanent way.	Distribution over main heads ea		Distribution over main heads ca		Distribution over main heads cannot be given.		70,93,23 <b>1</b>	43,948	Distribution over main heads ca	***
VIII. Stations and buildings . »					, <del>,</del>		13,80,186	8,551	р	, •4•
1X. Plant "							2,42 <u>,305</u>	1,502		***
XI. Rolling stock. "				fas		•••	•••	•••		•••
XII. General charges "		***				ļ	9,12,322	5,653	•	oĥo
Loss by exchange . "		 		 		 		***		
TOTAL . ,	27,21,77,576	2,11,520	(a) 9,37,77,980	2,03,467	11,69,03,761	1,39,300	(8) 1,49,07.798	<sup>-</sup> 92,366	17,32,567	77,938

<sup>(</sup>a) Includes the Pátri branch, the state outlay (R8,08,405) on which was met from the Civil Works Grant. The capital outlay shown in this table is inclusive of this amount.

(b) Includes R5,47,942 on account of maintenance and contingencies not included in any of the above heads, but excludes R5,76,918 on account of interest on capital during construction.

No. 4-continued.

# distributed over main heads of expenditure, exclusive of steam ferries and suspense items.

1	LINES O	WNED BY	Y NATIV	E STATE	SAND	WORKED	ву сом	PANIES.		LINES OV AND R.	WORKE	NATIVE D BY STA AGENCY	<b>ATE</b>
ХХ Кнам		XX Amrá		XX Bhopal (Native Sectio	-ITÁRSI STATE	XX The N Guarantei	IZAM'S	XXV THE GAE PETI	KWAR'S	XX Rájpura-B		XX Jammu an mir (N/ state se	D KASH.
Total.	Per wile.	Total.	Per mile.	Total.	Per mile,	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	·Total.	Per mile.
•			•••										
7'55		5'44		\$7.11		329 <sup>.</sup> 20	<b></b>	13.35	•••	107'94		15.92	<b></b>
7'55		5'44		57 11		329.20		13.35		107:94		15'92	
369	. 49	- 11,799	2,169				•	7,991	598	59,422	551	23,934 •	1,503
1,116	148	2,450	450	15,443	270		<b>-</b>	***		48,350	448	•••	
44,036	5,832	20,37 <i>7</i>	3,746	15,78,680	27,643					2,75,619	2.553	34,838	2,188
57, <sup>6</sup> 34	7,633	62,106	11,417	18,63,57&	32,631	cannot be given.		83,687	6,269	5,36,994	4.975	1,25,753	7,899
7,366	975	11,699	2,150	74,308	1,301	ę		]		1,89,146	1,752	1,652	104
•••	144	• •		<b>404</b>	,7	Distribution over main hea		•••		***		. 13,761	86 <sub>5</sub>
<b>2,78,78</b> 9	36,926	2,41,571	44,407	21,34,890	37,382	• Distributio		4,22,465	31,645	41,50,011	38,448	5,69,461	35,770
49,141	6,509	50,188	9,226	6,45,309	11,299	·	141	1,50,426	11,268	9,80,459	9,083	1,10,199	6,922
3,434	455	<b>3,</b> 016	554	<b>3</b> 8,013	666			***		81,834	758	5,260	330
11,669	1,546	8,641	1,588	15,131	265	·		<b>117</b> ,				•	
31,967	4,234	. <b>2</b> 9,709	5,461	3,62,112	• 6,341			37,806	2,832	<b>2,</b> 68,589	2,488	бо,444	3,797
**		• ;	,								 	·	ļ <u>.</u>
4,85,521	64,307	4,41,556	81,168	67,27,868	1,17,805	3,88,25,112	1,17,938	7,02,375	52,612	65,90,424	61,056	9,45,302	59,378

STATEMENT

Average mileage capital cost of Indian railways (metre gauge) on the 31st December 1892,

	<del></del>	XXX	7111		1	•		<del></del> -	1		
LENGTH OF RAILWAY AND MAIN HEADS OF EXPENDITURE.	Bang Tirhoot se	AL AND N	Company's		XXX Rohiekus Kumaon (L Barbilly s	ND AND	XXX Rajputana	V. Malwa.	XXXVI. Southern Mahratta		
•	Total,	Per mile.	<u>                                     </u>	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile	
Length of line—  Double Miles			.,,,				1.14				
Single »	. 341'80		414'50		198:38		1,672 <sup>.</sup> 88		1,043.70		
Total . "	341.80		415.20		198:38		1,674.02	. ""	1,043'70		
I. Preliminary expenses R	1,83,608	537	3,16,302	763	<b>2</b> ,55,830	- 785	· 22,71,381	1,357	10,90,895	1,045	
II. Land • • »	8,74,081	2,558	•		1.73,673	876	12,79,603	764	11,03,363	-1,057	
III. Formation	10,72,175	3,137	19,48,340	4,700	4,31,890	2,177	72,34,585	4,322	1,89.93,052	18,198	
IV. Bridge-work • "	40,56,173	11,867	<b>5</b> 0,59,463	12,205	6,74,895	. 3,402	2,15,71,245	12,886	1,84,35,383	17,663	
V. Fencing, etc "	9,01,019	2,636	<b>2,2</b> 9, <b>4</b> 72	. 554	1,09,743	553	25,49,622	1,523	14,65,288	1,404	
VI. Electric telegraph,	•••				•••		***	•••	•••		
VII. Ballast and per- manent-way . ,,	79,53,175	23,268	84,55,595	20,400	31,84,857	16,054	3,70,32,380	22,122	2,15,21,426	20,620	
VIII. Stations and buildings . ,	30,77,834	9,005	30,48,291	7,354	<b>7</b> 60,366	3,833	1,75,60,831	10,490	1,00,74,967	9,654	
IX. Plant	5,77,724	1,690	10,29,909	2,485	· 2,11,183	1,065	28,63,377	1,711	26,05,820	2,497	
XI. Rolling-stock . "	23,28,543	6,813	32,65,921	7,879	14,78,621	7, <b>4</b> 54	2,05,81,691 •	12,295	1,02,56,316	9,865	
XII. General charges . "	13,64,613	3,992	17,06,213	4,116	4.46,360	2,250	83,33,216	4,978	64,20,656	6,152	
Loss by exchange . ,,	7,04,770	2,062	•••		42,150	212	49,08,971	2.932	4,91,090	470	
TOTAL . "	2,30,93,715	67,565	(a) 2,52,35,845	60,883	( <i>l</i> ) 76,69,563	38,661	12,61,86,902	75,380	9,24,98,256	88,625	

<sup>(</sup>a) Excludes R10,90,014 on account of "Interest on capital during construction," but includes R1,76,339 on account of "Maintenance allowed to be charged to Capital," not included in any of the above heads.

(b) Excludes R41,029 on account of interest on capital outlay.

No. 4-continued.

### distributed over main heads of expenditure, exclusive of steam ferries and suspense items.

		XXXVIII. XXXIX.			XLIII.  EASTERN BENGAL (STATE).  Northern and Behar				v.
SOUTHERN MAHRATTA (Mysorb section).		South Indian.		sections, including the Kaunja-Dharlla (2' 6" gauge) branch.		Dacca section.		Burma (state).	
Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.
•••		***				•••	•••	9.00	
(c) 311°25		1,105 <sup>-</sup> 19		477`94	***	85.92		<b>7</b> 08:50	
311'25		1,105'19		477'94	•	85'92		717:50	444
3,10,444	997	10,53,350	954	1,93,817	406	1,27,561	1,485	<b>4</b> ,63,424	6.
• 95,875 \	308	3,73,214	338	12,15,095	2,542	5,39,997	6,284	9,08,383	1,26
24,84,726	7,983	58,42,055	5,286	29,95,689	<b>6,</b> 268	6,94,568	8,084	58,39,006	8,13
19,82,885	6,371	1,63,13,713	14,761	73,53,341	15,386	5,88,703 •	6,852	84,57,863	11,78
1,50,501	484	15,72,865	1,423	•10,38,950	2,174	1,05,445	1,227	24,59,563	3,42
•	· · ···	89,141	81			74.8		***	
52,39,694	16,834	1,98,53,246	17,964	99,02,938 ·	20,721	17,67,860	20,576	1,38,94,471	19,3
10,79,460	3,468	70,80,492	6,407	40,42,610	8,458	12,33,934	14,361	55,17,120	7,6
<b>2,9</b> 7, <b>7</b> 98	957	17,06,414	1,544	11,97,623	2,506	2,18,844	2,547	11,14.136	1,5
22,02,516	7,076	1,07,07,426	9,688	<b>5</b> 0,68,334 (	10,605	7,54,059	8,776	77,65,568	10,8
9,35,034	3,004	86,22,104	7,801	30,15,669	6,310	3,62,982	4,225	36,76,599	5,1
***	•••	2,42 <b>,3</b> 60	. 219	9,3 <b>1,</b> 358	1,948	3,05,500	3,555	12,50,610	1,7
(d) 1.52,99,715	46,198	(e) 7,45,74,660	67,477	3,69.55,424	77,324	66,99,363	77,972	(f) 5,13,46,743	71,5

STATEMENT

Average mileage capital cost of Indian railways (metre gauge) on the 31st December 1892,

	•.			ASSISTED C	OMPANIES.			
LENGTH OF RAILWAY AND MAIN HEADS OF EX	PENDITURE,	XL.		XLV Rohilkund a (company's	ND KUMAON	XLI Dibru-S		
		Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	
ength of line—			,				•	
Double	• • Miles	•••	***			•••	***	
Single	• • 33	<b>4</b> '79	••• . ·	53.92	•••	77 SO	***	
Тот	'AL . ,,	4:79		53 92		77`50		
		, , , , , , , , , , , , , , , , , , ,		•		· .	•	
I. Preliminary expenses	R		195	90,660	1,681	1,63,265	2,10	
II. Land	* * 95		•••	624	12	37,829	. 48	
III. Formation	.* • 33	•		1,27,926	2,373	·		
IV. Bridge-work				1,52,326	2,835	11,17,936	14,42	
V. Fencing, etc.	• • »	ot be given.	•	4,986	92		•	
VI. Electric telegraph	* * 13	heads can	•••				•	
VII. Ballast and permanent-way	• • • • • • • • • • • • • • • • • • • •	Distribution over main heads cannot	<b></b>	8,97,067	16,637	17,17,203	22,19	
VIII. Stations and buildings	• • 99	Distribution	<b></b>	1,44 970	2,689	1,94,380	2,50	
IX. Plant	• • •		ði.	57,117	1,059	4,91,895	6,32	
XI. Rolling-stock	• • р:		***	3,94,875	7.323	11,81,891	- 15,2	
XII. General charges	·			1,81,283	3,362	16,70,470	21,55	
Loss by exchange	. '. ,,		***	<u></u>		<b></b>	•••	
To	Fal . "	2,86,179	59.745	20,52,434	38,064	· (a) 68.26,045	88,07	

No. 4-concluded.

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

LINES O	WNED BY NORKED BY	COMPANIES.	es and	LI	NES OWNE	D AND WORK	ED BY NA	TIVE STATES	
LI	1	· Lii			Jodneore.	III. Bickaneer,		LIV BHÁVNAGAR-G	/.
THE GARKWAR	's Mehsána.	Коли/	PUR.	Jodhpore	section.	Bickanee	r section.	BHÁVNAGAR-G GARH-POR	BANDAR.
Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile.	Total.	Per mile
		•	•		,				
	•••	***	***		•		<b></b>	, , ,	•••
92.63		· 29·07	494	247.50		43.20	· •••	329.22	
92.63		29.07		247'50	,,	43'50		(b) 329.22	
		•	<del></del> -				<del></del>		
13,490	146	13,858	477		<b></b>	- 7,826	180	1,19,442	36
<b>,</b>	···	27,015	929		·			58,377	.17
2,66,130	2,873	2,69,028	9,255		•	76,362	1,755	16,82,820	5,1
4,62,471	4,993	11,22,135	38,601	น้ำ เรื่		4,658	107	41,79,294	12,6
52,038	562	41,668	1,433	nnot be given.		238	6	72,706	2
•••	<b></b>		•••	n heads ca			· •••	11,774	
16,91,007	18,256	4.94.462	17,009	Distribution over main heads can		6,78,563	15.599	49 07 876	14.9
3,61,650	3,904	2,31,190	7,953	Distributio		53:343	1,226	23,18.997	7,0
31,392	338	7,03₽	242			5.746	133	3,29,440	1,0
16,026	173					1,11,597	2,565	22,85,033	6.9.
<b>7</b> 7,406	835	1,12,089	<b>3,</b> 856	,		10 <b>,289</b>	. 237	8,76,984	2,66
<b></b> .						; •	•••		
29,71,610	32,080	23,18,476	<b>7</b> 9,75 <b>5</b>	47,61,590	19,239	9,48,622	21,807	1,68,42,743	\$1,1C

<sup>(</sup>b) Excludes 4.50 miles of state mileage in dock estates and quarry lines constructed and maintained by the states themselves.

(417)

STATEMENT

Cost and particulars of some of the large

	-	<u> </u>		340	3 (	ost ana	particul	ars of so	me of	he large
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.)	1	Soane	22nd Dec. 1862	28	Feet.  150.00	Feet, 4,726'00	Feet.	Feet. 35°60	Tons.	
East Indian.	2	Jumna (Allahabad)	15th Aug. 1865	17{	14 of 200'00 3 of 30'00	} 3,235 <sup>-∞</sup>	42	60.00	4,300'00	29,86,000
EAST [	3	Jumna (Delhi)	1 <b>st Jan.</b> 1867	13	211,20	2,640*00	7 to 39 •	23,20	3,491 '00	5,28,475
		Jubilee (over the Hooghly, between Hooghly station on the E. I. R. and Naihati on the E. B. S. R.)		{	523.67	} 1,213*25	98.20	55.00	3,460'15	(f)10,71,653
. \	4	[]	15th Mar. 1887	29 35 74 I	10°83 *10°83 29°17 25°83 43°00	3,278'00	•••	***	••• • •••	***
		( Hooghly		i ( 6	48°00	)				
- 1	5	Kanhan	1st Sept. 1887	2	<b>6</b> 0,00	1,237'00	9 to 26	20.00	1,061,10	3,81,109
Bengal-Nágfur,	6	Weinganga	29th April 1889	. 9	120,00	1,450.00	21	54*00	1,234'47	(i) 7,38,652
ENCAL	7	Sheonath No. II	31st May 1889	14	120,00	2,250*00	6 to 12	57'00	1,912'40	4,92,353
ā	8	Eeb	1st Aug. 1890	9	120,00	1,461.00	42 to 55	38;00	1,229'40	3,62,294
1	9	Damuda	12th June 1890	10	200'00	2,364.00	4 to 75	40'75	2,330'00	3,62,448
- 1	ەد	Chumbal	15th May 1891	§ 13	136.00	2,714 00	75	112*50	3,026.00	17,39,057
DLAND.	11	Jumna (Kalpi)	1st Feb. 1888	10	250'00	2,640'00	90	76 <sup>.</sup> 63	3,200'00	12,66,779
INDIAN MIDI	12	Betwa (Mánikpur)	5th June 1889	{ 13 1	<b>6</b> 0,00	2,166.00	13	, 77.75	1,772*30	8,19,669
I an I	13	Ken (Bánda)	1st Aug. 1889	{ 12 1	250°00	} 1,558'00	. 4	65.66	1,125'30	3,94,363
\	14	Betwa (Lalitpur)	18t Jan. 1889	9	120,00	1,446.00	12	56*14	1,200°86	4,02,749
BHOPAL- Itábsi.	15	Nerbudda	18th Nov. 1884	14	150'00	2,240'00	4	65.00	1,980'00	3,45,696
	16	Sutlej (Ludbiána)	Jan. 1870	(n) 46	99*00	5,193'00	40 to 50	16.60	(0)2,314'00	20,97,296
	17	Beas	April 1869	33	99*00	3,820*00	43 to 70	20'00	1,660.00	15,66,476
TATE).	19	Jumna (Saháranpur)  Kaisir-i-Hind (over the Sutlej at	Jan. 1869	26	99'00	2,663°50	• 42	19,00	1,308'00	7,64,420
ERN (S	20	Ferozepore)	8th May 1887 12th April 1875	· 27	144'50 90'00	4,293°00 3,217°00	• 78 • 75	26.00 30.00	6,000°00 1,419°00	9,50,202
NORTH-WESTERN (STATE),	.(	Ravi as reconstructed  Alexandra (over the Chenab between Wazirabad and Kathála)	15th July 1893	15	90'00	1,463.00	75	<b>⊮3°0</b> 0 .	747.00	• 36,747
Norti	21	as originally constructed	22nd Jan. 1876	64	133,20	9,088.00	75	20100	5,248 00	24,03,756
		Alexandra as reconstructed .	1st Nov. 1891	28	133.20	3,976*00	· 75	20*00	5,073*40	22,920
	22	]helum	Towards end of	50	90'00	4,875*00	30	20.75	2,150 00	<b>5,90,137</b>
	23	Attock	24th May 1883	. 2	2 of 308'40 3 of 257'00	1,655'00	(s)	111.00	2,202.00	14,77,5%
•			• .			!	• -			
			-			İ	•			
	<u>!</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	! = = <del>= = = = = = = = = = = = = = = = = </del>	   <del></del>		<u> </u>	<u> </u>

No. 5.
railway bridges in India.

	•	Total	Cost per linear	Cart -	[	
Total cost of girders.	Cost of protective works.	Total cost, including cost of protective works.	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	ı	Has the rails above and the roadway below. The roadway was subse quently 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
(c) 14,60,300		(d) 44,46,300	1,374	110	2	as the cost of iron work for the first line.  The substructure of this bridge is for a double line, but the girders ar erected for a single line only. It has the rails above and the roadwa below.  (c) Of this amount, R13,13,000 represents the cost of girders, and
10,49,779	343	( 0) 16,60,355	629	. 74	3	R1,47,300 the cost of upper and lower roadways.  (d) Represents the total expenditure on the bridge debited to capita and includes some special items not separately detailed.  Has the rails above and the roadway below.
21,78,852	1,009	32,51,514	2,679	(g) 350	)	(e) Represents the total expenditure on the bridge debited to capita and includes some special items not separately detailed.  (f) Includes Plant, R3,81,544.  Supervision, R3,19,456.
•••		64,611	147	•••	4	(g) Estimated expenditure.
•••	•••	4,80,263	147		)	The approach viaducts are brick arches.
2,78,632	13,174	6,72,915	. 533		5	
(j) 2,42,833	(k) 22,248	10,03,733	677	43	6	Has been converted from metre to standard gauge, and the expenditus shown represents the cost of the bridge as a standard gauge one. Met gauge opened on 7th June 1882. Standard gauge opened on 20th April 188 (i) Includes the cost (R6,74,612) of the old metre gauge bridge.
3,91,240	***	8,83,593	393	87	7	<ul> <li>(j) Actual cost of girders only.</li> <li>(k) Cost of protective works as it was on the metre gauge bridge.</li> <li>The cost of the metre gauge girders removed, which is not include.</li> </ul>
2,45,842	18,230	(l) 6,26,366	416	1 111	8	in these figures, was R2,40,803. (I) Completion report not yet received.
6,32,174	_ 40,328	10,34,950	421	65	9	
9,02,295	6,29,683	32,71,035	973	78 107	10	The abutments and piers are built for a double line, but the girders a
10,96,401 5,74,181	1,59,564	25,22,744 13,93,850	895 644	85	12	erected for a single line only with roadway on the same level, which h not, however, been taken into use.
3,39,954	•.	7,34,31 <i>7</i>	471	84	13	•
3,59,308	2,615	7,64,672	527	64	14	•
5,77,925	***	(m) .9,44,171	, . 412	85	15	(m) Includes some special items not separately detailed.
(a) 10,08,780	(p) 2,54,000	33,60,076	(q) 598	Contract	16	(n) Twelve spans have been removed.  (o) Does not include girders removed.  (p) Includes cost to 1874, since which date a large amount of addition expenditure has been incurred.
7,23,690 5,70,180	3,00,000	25,90,166 15,34,600	600	included erection.	17	<ul> <li>(q) Calculated as for the present length.</li> <li>(r) The contract rate for the construction of these three bridges, incluing protective works, was R428 per foot run of the bridges, at the figures as to cost are approximate only.</li> </ul>
15,52,329	11,07,900	41,08,266	699	50	19	Carries the rails below and the roadway above.
5,01,031 2,37,866	1,50,472 50,281	16,02,315 3,24,894	451 188	125 50	} 20	Carries the rails on the top boom. Roadway will be on separate girders. The figures as to cost are approximate only.
19,94,271	9,40,336	53,38,363	484	121	} 21	The bridge has been reduced from 64 to 28 spans. The girders double and new cross and rails girders put in. The track is carried between the girders, and there are foot-paths on cantilevers outside.
2,45,769	49,381	3,18,070	<b>8</b> o	27	)	The cost of reconstruction only is shown against this entry. The bring was not closed for traffic during reconstruction; 1st November 1891 when the date on which all restrictions were removed and the bridge was throw
9,40,487	81,248	17,11,872	334	124	22	Carries the rails above and a root-path below. This bridge is under after ation.
15,96,980	1,45,956	32,20,516	1,858	{ 437 252	} 23	(s) Pier No. 1.—All standards and struts founded at same level, viz 343'68 or 21'68 feet above low-water level.  Pier No. 2.—All standards and struts founded at same level, viz 319'12 or 2'88 feet below low-water level.  Pier No. 3.—Up-stream strut on east side of pier was founded by the standards and strute level; all other standards
	-			•		and struts sounded at same level, vis., 313'30 or 8'70 seet beld low-water level.  Pier No 4.— Two main standards and one down-stream strut, on west side of pier, were sounded at 337'29 or 15'29 seet abolow-water level; all other standards and struts sounded at sailevel, vis., 343'29 or 21'29 seet above low-water level.

STATEMENT

Cost and particulars of some of the large

				<del> </del>			au partic			the turg
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- concid.)	24	Empress (over the Sutlej at Ad-			Feet,	Feet.	Feet.	Feet.	Tons.	R
ATE)		amwáhan)	8th June 1878	16	250:00	4,210'00	. 103	28.75	6,704'00	26,98,885
North-Wrstern (state) —concid.	25	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
/RSTB		Sukkur)— (Rohri Channel)		( I	790:00	900,00	None in river	51,00	3,292'00	2,88,320
<u> </u>		Sukkur Channel	27th Mar. 1889	\{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	270'00 230'00 90'00	620'00	6	46.00	1,014'00	1,79,468
S. /	27	Sher Shah (over the Chenab at Sher Shah)	1st Feb. 1890	17	200'00	3,650'00	75	29.00	3,740'00	10,84,453
. (	28	Gumti (Juanpur)	24th Dec. 1874	16	* 82*00	1,472'00	45 to 50	44'17	811.00	4,21,530
Q.	29	Rámganga (Bareilly)	24th June 1874	.34	56.00	2,260.00	85	25'77	490'00	4,50,625
LK H	30	Ganges (Rájghat), Aligarh branch	5th June 1874	33	80.00	3,040'00	55	24*39	1,050.00	3,78,991
AND ROHILRHAND (STATE).	31	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
NY 1	32	Ganges (Bálawali)	9th May 1887	11	248'17	2,904'00	100 .	39'94	3,944.00	10,13,040
нало.	*33	Soláni	1st Jan. 1886	( 7	148'75 331'00	1,760.00	60	16.00	1,563.00	4,03,182
	34	Dufferin (over the Ganges at Benares).	1st Oct. 1887	ر و }	104'00	3,523.00	25 to 141	75'32	6,780.00	14,74,567
EASTERN ) BENGAL	35	Gorai	ıst Jan. 1871	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	185.00	} 1,744°∞{	78 to 96	21,00	1,645.00	}
(STATE). )				9	46*25	( 3,736 )	25	. 46*50	154.00	,
EAST COAST	36	Kistna	17th Mar. 1893	12	293	abut- ments, 3,684	80.20	46.20	6,426 <sup>.</sup> 00	13,21,000
DIAN LA.	37	Kistna	9th Oct. 1873	36 ( 28	100'00	inside. / 3,855-00	(e) 9 <sup>°</sup>	48.67	2,556.00	(f) 6,11,163
GREAT INDIAN	38	Tapti	12th Aug. 1872	{ 25 5	138.00	2,556.00	15.96	60:33	2,392'00	(g) 7,72,163
2 a (	39	Nerbudda . •	8th Mar. 1870	<b>5</b> 6	137'00	} 1,052'00	4*60	81.33	525.00	4,06,032
Bombay, BARODA AND CEN- TRAL INDIA.	40	Nerbudda	23rd June 1861 16th May 1881	} 25	183.20	4,687.50	76	48.20	<b>4,</b> 650'00	23,21,000
BABA (	41	Tapti	19th Nov. 1860	30	60.00	1,875.00	20	20.20	•••	•••
1	42	Cheyer	1st Sept. 1865 1st May 1880	} 50	64'90	3,500,00	100	14.00	988.00	9,10,934
ł	43	Tungabhadra	16th Jan. 1871	58	64'00	4,060'00	14	34'00	1,065,00	4,23,031
Madras.	44	Penner	May 1869 1st Oct. 1889	} 13	· 131°00	1,830'00	33 to 54'33	22*00	1,999'00	***
×	45	Chitravati Old . New.	1st Sept. 1868 6th Mar. 1890	IS to	131,00	2,670*00*	18 to 78	18 <b>.6</b> 0	2,938.00	
-	46	Cold .	Aug. 1866	20	64*00	1,410'00	ļ <u></u>		•	4.00
(Metre gauge.) Bengal and North		Papaghoi. {New.	18t July 1892	. 15	131.00	2,110'00	52°50 to 62°00	15.00	2,391'00.	5,93,030 •
WESTERN— Tirhoot sec- tion		Condata				.				
Company's section.	47 48	Gandak , , , Rapti	25th Apl. 1887	8	250'00	2,176*00	40 to 90	37'50	2,495'00	6,07,133
	49	Jumna (Agra)	15th June 1886 1st Jan. 1876	· 9	150.00	1,445'00	86	41'00	1,145'70	4,93,956
,					133.00	2,272*00	70	31,99	2,551.40	3,92,886
RAJPUTANA- MALWA.	50	Nerbudda	14th June 1877	34	183.00	(q)2,836°00	14	80-00	2,362°0b	9,39,40
`	51 52	Jumna (Muttra)	15th Dec. 1884	7	150 00	1,146'00	71	27'00	1,309.00	3,06,34
SOUTHERN MAHRAITA.	53 54	Kistna (Rijápur branch) Kistna (Poona branch)	18t Ang. 1884 1st Aug. 1884 2nd Feb. 1888	14 21	150'00 150'00	2,342'00 ' 3,392'00	13,00 18,20	58 <sup>.</sup> 77 43 <sup>.</sup> 17	1,680°00 2,498°00	3,33,25 3,43,34
iout IAHR	55	Hagari .	4th Oct. 1877	34	150'00 ∳4'00 250'00	2,339 50 2,396 00	4'17 68'25	75'79 1 <b>6</b> '30	1,897.12 660.90	2,65,22 6,42,73
GUNTAKAL-	56	Dorabavi Viaduct	15th June 1890	2	150 00 66 50	670'00		(#)29°00 to	560.00	3,33,93
MYSOER RONTIER.	57	Penner	1st June 1892	11	150.00	1,740'00	21 '00 to 55'00	18.71	1,007*00	2,89,77
		•			N.,	BBridges c	esting less tha	п R6,00,000 еа	ch or having	spans of

### railway bridges in India.

24,65,074 4,946 27,89,340 3,094 3,77,912 5,57,350 5,57,350 5,58,315 5,54,001 3,14,522 5,536 5,54,001 3,14,522 5,536 5,75,459 3,75,459					·		<u> </u>
## ## ## ## ## ## ## ## ## ## ## ## ##			including cost of protective	foot, excluding protective works, where separately	tion of girders		Remarks.
24,05,558 (a)20,06,246 71,01,659 1,1210 105		  - <del></del>		stated.	ļ		
8,03,144 3,73,225 15,48,811 (b)579 (6)56 24,65,074 4.046 27,59,140 3.094 3.094 3.77,912 5,73,250 5.004 3,77,912 5,73,250 5.004 3,74,692 7,54,678 5.007 109 25 3,34,692 8,535 7,54,678 5.007 109 25 3,34,692 7,54,678 5.007 109 25 3,53,33,34,692 7,68,593 17,46,955 7,68,199 277 28 8 8,75,75,250 17,46,955 7,68,199 277 28 8 8,75,75,250 17,46,955 7,68,199 277 28 8 8,75,75,250 1,75,25,250	R	~ R	R	. 2	R		
24,65,074 24,69,074 3,77,974 4,946 5,57,380 899 110 3,77,975 10,85,588 6,66,120 28,34,101 594 39 31,24,632 8,535 7,54,678 397 193 3,24,632 8,535 1,69,236 1,69,230 1,53,539 1,69,230 1,69,230 1,69,25,600 4,75,600 4,75,600 3,77,4,600	23,96,558	(a)20,06,246	71,01,689	1,210	105	24	
24,65,674	8,02,104	3,73,226	19,48,811	(6)579	(6)66	25	Has a combined road and railway on the same level and a footway on each side, supported on wrought-iron brackets, and provided with hand-rails.  (b) Calculated on cost which includes R18,000 on account of cost of
5,77,972	24,96,074	4,946	27,89,340	3,094	J85	)	· •
3,34,652	3,77,912	,, .	5,57,380	899	110	1 k	the roadway being formed of steel corrugated troughs fitted with teak
1,53,539	•	_		594	. 56		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
3,10,388 1,08,320 7,08,199 227 28 30  8,75,745 1,60,130 17,46,0357 561 (c) 31  10,86,000 6,73,430 27,77,470 73 62 33  3,09,277 2,10,014 10,12,473 455 10 33  32,25,035 1,45,379 48,74,031 1,342 47 34 Has a roadway on the same level as the rails and a footway on each supported on cantilevens outside the girders.  (d)14,83,750 837 35 (d) Includes Raz,676 charged to revenue, and Röyr charged to capital reproduction of the piers.  20,28,000 4,25,000 37,74,000 896 33 36 The cost of approaches, R4,73,844, has not been entered. The figures the cost are approximate only.  20,28,000 4,25,000 12,73,066 330 30 37 The cost of approaches, R4,73,844, has not been entered. The figures the cost are approximate only.  20,28,000 4,25,000 16,27,248 611 71 38 (2) Includes Raz,676 charged to revenue, and Röyr charged to capital revenue of the piers.  20,28,000 (1) 12,73,066 330 30 37 The cost of approaches, R4,73,844, has not been entered. The figures are controlled above lowerstare level as the cost are approximate only.  30 (1) Includes Raz,676 charged to revenue, and Röyr charged to capital revenue of the piers.  31 (2) Includes Raz,676 charged to revenue, and Röyr charged to capital revenue, and Röyr charged to capital revenue of the piers.  32 (2) Includes Raz,676 charged to revenue, and Röyr charged to capital revenue of the cost of c						1	
8,75,745			· '	1	·	1	
10,86,000 6,73,430 27,77,470 723 3,909,777 2,10,014 10,124,73 455 10 33 34 Has a roadway on the same level as the rails, and a footway on each supported on cantileven soutside the girders.  (d) 14,83,750 837 32,252,850 4,25,000 37,74,000 896 33 36 The cost of approches, R4,73,844, has not been entered. The figures the cost are approximate only.  7,90,175 64,910 16,27,248 611 73 64,910 16,27,248 611 73 64,930 (h) 1,95,830 (i) 3,75,7559 763 (i) 1,95,830 (i) 1,75,7559 764 (ii) 1,95,830 (ii) 1,24,54,64 336 (iii) 1,95,830 (iii) 1,24,54,64 336 (iii) 1,95,830 (iii) 1,24,54,64 336 (iii) 1,95,830 (iii) 1,24,54,64 336 (iii) 1,95,830 (iii) 1,24,54,64 336 (iii) 1,95,830 (iii) 1,35,834 (iii) 1,35,834 (iii) 1,35,834 (iiii)	3,10,388	1,08,820	7,98,199	227	. 28	30	
3.09,277 3.10,04 1.01,124/13 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.	8,75,745	. 1,60,139	17,46,957	561	(c)	.31	
34,35,035  1,45,329  4,74,931  1,342  47  38  48,74,931  1,342  47  38  48,74,931  38  39,28,060  4,25,000  37,74,000  896  33  36  The cost of approches, R4,73,844, has not been entered. The figures the cost of abstraction of the piers.  7,90,173  64,910  12,73,065  330  30  37  The griders are for a single line and the piers for a double line.  (2) Includes R23,058, being the cost of other items not separately detailed.  (3) Includes some special items not separately detailed.  (4) 1,95,830  (4) 1,95,830  (6) 1,75,735  (7) 1,90,921  (8) 1,90,921  (9) 1,90,921  (10) 1,90,921  (11,33,077  (11,33,077  (12) 1,90,921  (13) 1,90,930  (14) 1,90,930  (15) 1,90,930  (16) 1,95,833  (17) 1,90,930  (18) 1,90,930  (19) 1,93,879  (19) 1,93,879  (19) 1,93,879  (19) 1,93,879  (19) 1,93,387  (19) 1,93,387  (19) 1,93,387  (10) 1,90,930  (10) 1,92,534  (10) 1,92,534  (10) 1,93,532  (10) 1,93,535	10,86,000		27,72,470	723	. 62	32	
(d)14,83,750 837 35 (d) Includes Rog.676 charged to revenue, and R879 charged to capita protection of the piers.  20,28,000 37,74,000 896 33 36 The cost of approches, R4,73,844, has not been entered. The figures the cost are approximate only.  The griders are for a single line and the piers for a double line.  (a) Nine piers and two abutments are iounded above how-water level.  (b) Nine piers and two abutments are iounded above how-water level.  (c) Includes R89,618, being the cost of other items not separately detailed.  (d) Includes S89,618, being the cost of other items not separately detailed.  (d) 10,34,5464 336 47 (e) 10,14,54,64 336 48 (f) 10,14,54,64 336 49 (f) 10,14,54,64 34 49 (f) 10,14,54,64 34 49 (f) 10,14,54,64 34 49 (f) 10,14,54,64 34 49 (f) 10,14,54,64 34 49 (f) 10,14,54,64 34 49 (f) 10,1	3,99,277	· · ·	10,12,473		10	33	
protection of the piers.  20,28,000  4,25,000  3,7,74,000  896  33  36  The cost of approches, R4,73,844, has not been entered. The figures the cost or expression line and the piers for a double line. (c) Nine piers and two abstracts the sounded above low-water level. (c) Nine piers and two abstracts the cost or expression line and the piers for a double line. (c) Nine piers and two abstracts to londed above low-water level. (c) Nine piers and two abstracts to londed above low-water level. (c) Nine piers and two abstracts to londed above the lines not separately detailed.  36  37  38  39  The girders are for a single line and the piers for a double line. (c) Includes R95,0518, being the cost of other items not separately detailed.  30  31  32  33  34  35  36  37  The girders are for a single line and the piers for a double line. (c) Includes Some special lines not separately detailed.  36  37  38  39  The girders are for a single line and the piers for a double line. (c) Includes Some special line and the piers for a double line. (d) Includes Some special line and the piers for a double line. (e) Nine piers and two abstracts are founded above cost of the discovery of the cost of other items not separately detailed.  30  31  32  33  34  35  36  37  38  38  39  39  39  30  30  30  30  30  30  30	32,55,°35	1,45,329			47		
the cost are approximate only.  12,73,066 330 30. 12,73,066 330 30. 16,27,248 611 71 36 4,910 16,27,248 611 71 37 64,910 16,27,248 611 71 38 612 71 38 613 71 71 71 71 71 71 71 71 71 71 71 71 71	, •••		(4)14,03,750			33	
(2) Nine piers and two abutments are lounded above low-water level.  (3) (1) Includes R3-5,65, being the cost of other items not separately detalled.  (4) Includes R3-5,65, being the cost of other items not separately detalled.  (4) Includes R3-5,65, being the cost of other items not separately detalled.  (5) Includes some special items not separately detalled.  (6) Includes some special items not separately detailed.  (7) Includes R3-5,645, being the cost of her items not separately detailed.  (8) Includes some special items not separately detailed.  (8) Includes R3-5,645, being the cost of raising rail-level on up and down upon the cost of raising rail-level on up and down upon the late of t	20,28,000	4,25,000	37,74,000	896	33	36	The cost of approches, R4,73,844, has not been entered. The figures as to the cost are approximate only.
7,90,175   64,910   16,27,248   611   71   38   Carries a double line. (g) Includes K95,918, being the cost of other items not separately deta   2,63,064     6,69,096   636   235   39   The girders are for a single line and the piers for a double line.   12,58,929   (h)1,95,830   (i)37,75,759   764   49   40   The figures as to cost refer to the new bridge only; the cost of the bridge is not known.   (k) Includes Sost of the approaches, R6,306.   (i) Excludes cost of the approaches, R6,306.   (ii) Excludes cost of the approaches, R6,306.   (iii) Excludes cost of the approaches, R6,306.   (iv) Includes Some special items not separately detailed.   (iv) Excludes cost of the approaches, R6,306.   (iv) Includes Some special items not separately detailed, but excludes cost of the old bridge, R4,06,293.   (iv) Includes Some special items not separately detailed, but excludes cost of the old bridge, R4,06,293.   (iv) Includes Some special items not separately detailed, but excludes cost of the special items not separately detailed, but excludes cost of the old bridge, R4,06,293.   (iv) Includes Some special items not separately detailed.   (iv) Excludes cost of separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) Includes Some special items not separately detailed.   (iv) I	6,61,903	***	12,73,066	. 330	30.	37	(e) Nine piers and two abutments are founded above low-water level.
12,58,929 (h)1,95,830 (i)37,75,759 764 49  12,58,929 (h)1,95,830 (i)37,75,759 764 49  (i)9,08,030 484 41  1,95,689 (i) 12,45,464 336 42  1,99,921 (m)7,55,756 186 54 43 (m) Includes some special items not separately detailed, but excludes cost of the old bridge, R4,06,293.  1,99,921 (m)7,55,756 186 54 43 (m) Includes some special items not separately detailed, but excludes cost of the old bridge, R4,06,293.  1,85,833 13,58,194 509 45 The cost does not include the expenditure incurred on the old br R1,72,576.  3,85,833 13,58,194 509 45 The cost does not include the expenditure incurred on the old br R3,34,705.  (m²) 1,62,354	7,90,175	64,910	16,27,248	, 611	71	38	
(A) 9,08,030	2,63,064	•	6,69,096	636	235	39	The girders are for a single line and the piers for a double line.
(k)9,08,030 484 (1) Excludes cost of the approaches, NS, 360.  1,95,689 (l) 12,45,464 336 42 (l) Includes NS,938, being the cost of raising rail-level on up and down up to 31st March 1893.  (l) Includes NS,938, being the cost of raising rail-level on up and down up to 31st March 1893.  (l) Includes NS, 838, being the cost of raising rail-level on up and down up to 31st March 1893.  (l) Includes NS,948, being the cost of raising rail-level on up and down up to 31st March 1893.  (l) Includes some special items not separately detailed.  The cost does not include the expenditure incurred on the old br R1,72,576.  The cost does not include the expenditure incurred on the old br R3,54,705.  (m¹) Approximate.  (m²) Includes superintendence and all charges after girders were unlo from wagons.  The cost does not include the expenditure incurred on the old br R3,54,705.  (m²) Includes superintendence and all charges after girders were unlo from wagons.  The cost does not include the expenditure incurred on the old br R3,54,705.  (m²) Approximate.  (m²) Includes superintendence and all charges after girders were unlo from wagons.  The cost does not include the expenditure incurred on the old br R3,54,705.  (m²) Approximate.  (m²) Includes superintendence and all charges after girders were unlo from wagons.  The cost does not include the expenditure incurred on the old br R3,54,705.  (m²) Approximate.  (m²) Includes superintendence and all charges after girders were unlo from wagons.  The cost does not include the expenditure incurred on the old br R3,74,72,576.  (m²) Includes superintendence and all charges after girders were unlo from wagons.	12,58,929	(h)1,95,830	(1)37,75,759	764	49	40	hridge is not known.
1,99,921 (m)7,55,756 186 54 43 (m) Includes some special items not separately detailed.  2,84,610 11,32,077 619 44 The cost does not include the expenditure incurred on the old br R1,72,576.  3,85,833 13,58,194 509 45 The cost does not include the expenditure incurred on the old br R3,54,705.  (m²) Approximate.  (m²) Approximate.  (m²) Approximate.  (m²) Approximate.  (m²) Includes superintendence and all charges after girders were unlo from wagons.  48,244 (n)13,84,883 614 61 61 65 65 65 65 65 65 65 65 65 65 65 65 65		***	( <i>k</i> )9,08,030	. 484		41	(i) Excludes cost of the approaches, K56.366. (k) Includes R5,948, being the cost of raising rail-level on up and down lines
2,84,610 II,32,077 619 44 The cost does not include the expenditure incurred on the old br R1,72,576.  The cost does not include the expenditure incurred on the old br R3,54,705.  (m²)1,62,354 (m²)1,62,354	1,95,689	•••	( <i>l</i> ) 12,45,464	356	***	42	l •
3,85,833 13,58,194 509 45 The cost does not include the expenditure incurred on the old br R3,54,705.  (m²)1,62,354	1,99,921	·	(m)7,55,756	. 186	. 54	43	(m) Includes some special items not separately detailed.
(m²) 1,62,354  3,63,332 38,568 9,94,930 453 (m²) 12   (m²) 12   (m²) 12   (m²) 12   (m²) Includes superintendence and all charges after girders were unlog from wagons.  (m²) Includes superintendence and all charges after girders were unlog from wagons.  Has a footway on each side supported on wrought-iron brackets provided with a hand rail.  (m) Excludes cost of viaduct, R1,40,505.  (m) Excludes cost of viaduct, R1,40,505.  (m) Excludes cost of viaduct, R1,40,505.  (n) Includes R74,543. being cost of erection of girders.  Lattice girders carrying the rails below and the carriage road above. bridge is built for and carries the standard gauge.  (p) Includes some special items not separately detailed.  Triangulated girders—designed to carry the rails above and a carroad below.  (q) Includes two abutment spans.  (r) Includes some special items not separately detailed.	2,84,610	•••	11,32,077	619		44	The cost does not include the expenditure incurred on the old bridge, R1,72,576.
3,63,332 38,568 9,94,930 453 (m²) 12 46 (m²) Includes superintendence and all charges after girders were unform wagons.  7,29,506 48,244 (n)12,84,883 614 61 47 Has a footway on each side supported on wrought-iron brackets provided with a hand rail.  (n) Excludes cost of viaduct, R1,40,505.  (n) Excludes cost of viaduct, R1,40,505.  (n) Excludes cost of viaduct, R1,40,505.  (n) Excludes cost of viaduct, R1,40,505.  (n) Excludes cost of erection of girders.  Lattice girders carrying the rails below and the carriage road above. bridge is built for and carries the standard gauge.  (n) Includes some special items not separately detailed.  Triangulated girders—designed to carry the rails above and a carrical below.  (n) Includes two abutment spans.  (n) Includes some special items not separately detailed.	3,85,833		13,58,194	509	`.,,,	45	The cost does not include the expenditure incurred on the old bridge, R3,54,705.
3,63,332 38,568 9,94,930 453 (m²) 12 (m²) Includes superintendence and all charges after girders were unto from wagons.  7,29,506 48,244 (n)12,84,883 614 61 47 Has a footway on each side supported on wrought-iron brackets provided with a hand rail.  (a)3,29,522 6,95,694 14,29,172 570 65 85 49 Lacked scots of viaduct, R1,40,505.  (b)18,33,877 786 85 49 Lacked scots of viaduct, R1,40,505.  (c) Includes R74,543, being cost of erection of girders. bridge is built for and carries the standard gauge.  (b) Includes some special items not separately detailed.  Tangulated girders—designed to carry the rails above and a carrical below.  (c) Includes two abutment spans.  (r) Includes some special items not separately detailed.	•. •••		(m <sup>1</sup> )1,62,354			3 46	
(a) 3, 29, 522 6, 05, 694 14, 29, 172 6, 90, 683 48,776 (b) 18, 33, 877 786 85 6, 90, 683 4, 42, 205 777 (r) 18, 73, 925 660 106 106 107 108 108 109 109 109 109 109 109 109 109 109 109	3,63,332	38,568	9,94,930	453	(m <sup>3</sup> ) 12	1 40	(m²) Includes superintendence and all charges after girders were unloaded from wagons.
(a) 3, 29, 522 6, 05, 694 14, 29, 172 6, 90, 683 48,776 (b) 18, 33, 877 786 85 6, 90, 683 4, 42, 205 777 (r) 18, 73, 925 660 106 106 107 108 108 109 109 109 109 109 109 109 109 109 109	• .			:			•••
(a) 3, 29, 522 6, 95, 694 6, 90, 683 6, 90, 683 48, 776 (b) 18, 33, 877 (c) 18, 73, 925 650 650 650 650 650 650 650 650 650 65	7,29,506	48,244	(n)13,84,883	614	61	47	Has a footway on each side supported on wrought-iron brackets and
6,90,683 48,770 (p)18,33,877 786 85 49 Lattice girders carrying the rails below and the same age. (b) Includes some special items not separately detailed.  4,42,205 777 (r)18,73,925 660 106 50 Triangulated girders—designed to carry the rails above and a carry of the carry the rails above and a carry of the carry of the rails above and a carry of the carry of the rails above and a carry of the carry of the rails above and a carry of the carry of the rails above and a carry of the carry of the rails above and a carry of the carry of the rails above and a carry of the carry of the rails above and a carry of the rail	(0)3,29,522	6,05,694	14,29,172	570	65	48	(n) Excludes cost of viaduct, K1,40,505.
4,42,205 777 (r)18,73,925 660 106 50 Triangulated girders—designed to carry the fails above and a carry road below.  (q) Includes two abutment spans.  (r) Includes some special items not separately detailed.	6,90,683	48,776	(φ)18,33,877	786	85	49	bridge is built for and carries the standard gauge.
(y) Includes some special recting the same level.	4,42,205	777	(r)18,73,925	660	106	1 -	Triangulated girders—designed to carry the rails above and a carriage road below.  (q) Includes two abutment spans.
	3,72,000	14,194	(s)8,49,000	728	. 35	51	Has a combined road and railway on the same level.
4.71,097 26,419 8,30,772 343 73 52 (s) Includes some special items not separately detailed. 7,48,444 47,852 11,39,641 322 74 53 4.79,402 5,474 7,50,104 318 54	7,48,444 4,79,402	47,852 5,474	11,39,641 7,50,104	322 318	74	53 54	(s) Includes some special items not separately detailed.
1,21,173 7,64,445 §19 55 55 3,61,198 405 6,95,537 10,384 100 56 (t) The height is from ground to underside of girders.			i _	]	ļ	1	(t) The height is from ground to underside of girders.
			1	,		ł	(a) Subject to further alteration on account of charges to be incurred on

STATEMENT

# Cost and particulars of the important

1	1	•	•	•			1	Lung			Total cost,
	Serial No.	Name of tunnel.	*Position of tunnel (Nearest station).	Single or double line.	Gauge.	Unlined.	l lined.	# lined.	Complete- ly lined.	TOTAL.	including tools and plant.
						Feet.	Feet.	Feet.	Feet.	Feet.	R
EAST INDIAN.	. 1	Monghyr (§)	Below Jamalpur . {	Built for double line, but 2' too narrow.	Standard .	434			466	900	No record.
9 (	2	Darekasa	Darekasa	Single	Standard	735		***		735	1,82,984
BENGAL-NÁG- PUR.	3	Saranda	Goilkera	Single	Standard	388		1,253		1,641	8,72,201
BB (	4	Bhortank	Khodri	Single	Standard .			***	1,000	1,000	2,09,674
RAIPUTANA- MALWA.	5	Mhow Ghâts	Pátal Páni to Kála- khund.	Single	Standard .		<b></b>	345		345	1,94,925
. ± (	6	Bear's Rock	Castle Rock	Double	Standard .		(   ,	•	471	.471	3,63,606
RN MA	.7	Castle Rock	Castle Rock	Double	Standard .		·	-,-	1,242	1,242	9,08,615
SOUTHERN MAH- RATIA.	8	No.2	Álandi	Single	Metre	630	<b></b>			630	1,53,963
w (	9	Nandicanama	Chelama •	Single	Standard .			•••	- 1,527	J,527	4,41,418
	10	Soháwa No. 1	Soháwa	Single	Standard .	***	   	539	•••	539	(a) 1,67,629
TATE)		<i>;</i>	•				ļ				
Western (STATE) Main line.		Margalla No. 3	Sarai Kála	Single	Standard .		450	500		950	(a) 1,87,150
Main	12	Attock No. 4	Khairabad	Single	Standard .		} 	776	٠	7764	(a) 1,80,924
North	. 13	Attock No. 5	Khairabad	Single	Standard		·	7211	•••	7213	(a) 1,63,003
\	14	Khairabad No. 7 .	Khairabad	Single	Standard			404	•••	404	(a) 1,55,540
	<u>.</u>	•			·			•			
(	15	. Gundakinduff	Midway between Bábar)				-	•			•
. []		•	Midway between Bábar Kach and Kócháli.		Standard	***		577	***	- 577	2,08,826
	16	Kóchálí, Lower	Kóchálí Dirgi	Single	Standard .		•••	512		512	1,84,061
1 1	.,		Diigi	Single	Standard	806	•••	-	***	806	1,32,382
North Western (state) Sind-Pishin section.	18{	Karez No. 2	Dirgi ,	Single	Standard	2,034	•••		•••	2,034	4,41,963
ORTH WRS								-		• !	
Z .	19	Lower Chapper Arching	Mangi.	Single	Standard .			592		592	1,62,657
. ]]	20	Iron Gates	Mangi	Single	Standard	1,233		•	•••	1,233	3,12,679
	2)	Mudgorge Arching	Mudgorge	Single	Standard .		   <b></b>	1,092	4.,	1,092	4,12,344

No. .
tunnels on the railways in India.

Cost per	'Time .	TIME TAKEN TO C	OMPLETK TUNNEL,		۔ ا
Cost per foot run.	taken to drive heading.	· From	To .	REMARKS GIVING NATURE OF GROUND PASSED THROUGH, ETC.	Serial No.
R	•		<del>,</del>		
	•	<b>.</b>			
•••	Not known .	March 1856 .	June 1861 during one year.)	Quartz and slate	
240	Not known	May 1879	6th Nov. 1883 .		
249				All hard rock	
532	1°75 years	January 1883	Sept. 1892	Very hard slaty rock, with a great deal of water	
210	1'00 year	14th March 1888 .	6th Dec: 1890	Gneiss interspersed with veins of quartz. The total cost excludes the cost of plant.	
565	Not known .	1873	December 1877	Columnar basalt. It was originally intended that the line at this place should be in an open cutting, but owing to numerous slips due to the existence of clay between the basaltic columns, it was found necessary to construct an arched covered way and fill in above with moorum.	
772	About 2 years .	April 1883	October 1889 .	Loam	
732	About 3 years .	'April 1883	October 1889	Loam	
244	About 2 years .	1884	1886	Black trap rock	
289	About 2) years .	1884	1890	Limestone rock	
311	6 months	November 1878	15th March 1880 .	Red clay and sandstone. War prices were paid. Owing to the Afghan war,	
<b>3</b>	•		73	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.	
197	o'54 year	4th April 1881 .	15th Aug. 1882	Nummulitic limestone shaken with clay seams	
233	*****	Not recorded .	******	Treacherous shale	
220		Not recorded .	******	Treacherous shale	
385	*****	Not recorded .	##1+9E+	Treacherous shale	
		•		<ul> <li>(a) The charges do not include tools and establishment, for which an addition of, say, 15 to 20 per cent, should be made to the figures given.         Cost of faces is included.         Probably charges for timber, etc., have not been exactly distributed; a safe rate for a completely lined tunnel would apparently be about \$\mathbb{R}230\$ per foot.</li> </ul>	
			1	•	
362	40400>	1884	1886	Sandstone in hard and soft beds	
359	*******	1884	1886	Soft sandstone with beds of soft earth	
164	#19+ <b>9</b> +	******	* *****	Hard limestone. The frequent openings near the roof, as in some Karez's, give the tunnel its name.	
	•		<i>.</i>		
217	·	*****	•	Hard limestone	-
				•	,
275	470.00	40-111		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.	,
254	******			Hard limestone	   
378				Middle eocene Gypsiferous deposits. This was originally intended to be an open cutting, but owing to the constant slips, etc., it was eventually covered in.	3

STATEMENT

# Cost and particulars of the important

	1		•						LENG			mportant
`RAILWĄ	¥.	Serial No.	Name of tunnels	Position of tunnel (Nearest station).	Single or double line.	Gauge.	Unlined.	l lined.	lined.	Completé- ly lined.	TOTAL.	Total cost, including tools and plant.
			•				Feet.	Feet.	Feet.	Feet.	· Feet,	R
78)		23	Koják	Shelabagh	Double	Standard .	•••	3,730	9,140	••••	12,870	65,24,872
NORTH-WESTERN (STATE) (Chaman extension.)		23	No. 1	. 34 miles below Shela- bagh.	Double	Standard			756		756	2,24,028
овти-W.	ļ				•				-			
ž (		24	No. 3	64 miles below Shela- bagh.	Double	Standard .		***	800	•••	800	2,57,291
					•		•	•		}		
•	I	25	Thull Ghat tunnel No. 2 .	Kására	Double	Standard .	444	•••	1,625	401	1,625	3,9%394
•		26	Thuli Ghat tunnel No. 4.	Kására	Double	Standard .	628	145	85	411	713	1,15,170
•		27	Thull Ghat tunnel No. 7.	lgatpuri	Double	Standard .	1,461		***	140	1,461	I,77,255
		28	Thull Ghat tunnel No. 8 .	Igatpuri	Double	Standard ,	1 <b>,24</b> 7				1,247	1,52,325
		29	Thull Ghật tunnel No. 11	Igatpuri	Double	Standard	777	•••			777	94,605
		30	Bágra	Bágra	Double : .	Standard .			910		910	2,15,747
PRNINSUL		31	Bhore Ghât tunnel No. 7	Palasd hari	Double	Standard	837				837	1,06,627
GREAT INDIAN PENINSULA:		32	Bbore Ghát tunnel No. 8	Palasdhari	Double	Standard .	858		     		858	1,13,907
· .		33	Bhore Ghát tunnel No. g	Thákurvádi	Double	Standard	825	: •••	ļ 	· .	- 825	1,08,677
:		34	Bhore Ghất tunnel No. 13	Thákurvádí .	Double	Standard	1,305	•••			1,305	1,73,649
		35	Bhoge Ghất tunnel No. 22	Reversing station	Double	Standard . •	828				828	<b>4,12,98</b> 2
		36	Bhore Ghât tunnel No. 2	Reversing station	Double	Standard .	405	 	363		768	2,09,783
		37	Bhore Chát tunnel No. 24	Reversing station	Double	Standard .	975		· <b>4</b> 8		1,023	1,50,352

No. 6—concld.

tunnels on the railways in India.

- 1	Time	TIME TAKEN TO C	OMPLETE TUNNEL.	
Cost per oot run.	taken to drive heading.	From	То	REMARKS GIVING NATURE OF GROUND PASSED THROUGH, ETC.
R				
507	2'01 years	13th April 1889 .	September 1891	Shales bearing water and layers of soft mud
, !			. •	
296	4°13 months .	December 1888 .	June 1890	Hard and soft shales with beds of mud. This is a cut and cover on 902 ft. radius
				•
322	5*33 months .	April 1889	November 1890 .	Through soft and hard shales bearing water on 819 ft. radius
	•	•	•	
240	4'75 years	February 1858	March 1864	Lobse rock
162	3'58 years	December 1860 .	July 1864	Rock
121	4'08 years	March 1859 .	May 1864	Rock
122	5'08 years	July 1859	August 1864	Rock
122	3'17 years	February 1859	September 1863 .	Loose rock
<sup>2</sup> 37	•	About 6	years	Through hard rock with fissures
		January 1857 •	December 1862	Trap rock
127	5'17 years	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Detember 1802	Trap rock
133		***	October 1862	Trap rock
. 132	5'25 years	October 1856	December 1862	Trap rock
133	5'08 years	October 1856 .	December 1862 .	Trap rock
•	•		Juan 25	T
136	4'25 years .	May 1856	June 1862	Ттар тоск
, <sup>273</sup> °	4°00 years	August 1856	February 1862	Trap rock
٠.		January 1857 .	March 1861	Trap rock

<sup>1</sup> lakhs of rupees each are not inleuded in this list.

#### CHAPTER III.

#### STATISTICS OF INDIAN RAILWAYS, 1891 AND 1892.

#### 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 1892. The following paragraphs briefly review the salient points connected with the expenses on working of the standard and metre gauge railways for the same period, as compared with 1891, on an annual basis.

#### Maintenance per mean mile maintained (standard gauge).

2. During the year, the total expenses on maintenance of way, works and stations of the standard gauge lines amounted to  $\mathbb{R}_{2,04,80,02}\delta(a)$  or an average rate of R2,000 per mean mile maintained on the total mean mileage (miles 10,195'19) of these lines, while in 1891 the expenses were, on the standard gauge lines, R2,33,73,361,(b) giving an average of R2,372 per mean mile maintained on a total mean mileage of 9,852'09 miles.

#### Maintenance per mean mile maintained (metre gauge).

3. Similarly, on the metre gauge lines, the total expenses on maintenance of way, works and stations amounted to R69,64,635,(c) averaging R972 per mean mile maintained on the total mean mileage (miles 7, 163 31) of these lines; similar expenses in 1891 on metre gauge lines, amounting to R74,36,473 or an average of R1,124 per mean mile maintained on a total mean mileage of 6,616.56 miles.

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

4. On the standard gauge lines, the cost of maintenance per mile of track including sidings, is compared in the following table:

	18	B91.	۱. ا	892.
RAILWAY.	Mean age of line.	Cost per mile of track, including sidings.	Mean age of line.	Cost per mile of track, including sidings.
	Years.	R	Years.	R
East Indian, including— .	28.47	)	28 42	)
Delhi-Umballa-Kalka .	•••	7,425	} 1.84	1,313
Bengal Nágpur	3.43	766	4 43	· 8 <sub>9</sub> 8
Bhopal-Itársi	4·23 7·60	819	{ 5.53 8.60	805
ing— Amritsar-Pathánkot Hyderabad-Umarkot Rájpura-Bhátinda Jammu and Kashmir (native	7.89  2.94	2,490	0'37 3'94	1,764
	East Indian, including— Patna-Gya Delhi-Umballa-Kalka Tarkessur Bengal Nágpur Indian Midland, including— Bhopal-Itársi North Western (state), including— Amritsar-Pathánkot Hyderabad-Umarkot Rájpura-Bhátinda	RAILWAY.  Mean age of line.  Years.  East Indian, including— Patna-Gya Delhi-Umballa-Kalka Tarkessur Bengal Nágpur Indian Midland, including— Bhopal-Itársi North Western (state), including— Amritsar-Pathánkot Hyderabad-Umarkot Rájpura-Bhátinda Jammu and Kashmir (native	RAILWAY.  Mean age of line.  Years.  R  East Indian, including— Patna-Gya Delhi-Umballa-Kalka Tarkessur Bengal Nágpur Indian Midland, including— Bhopal-Itársi North Western (state), including— Amritsar-Pathánkot Hyderabad-Umarkot Rájpura-Bhátinda Jammu and Kashmir (native	RAILWAY.  Mean age of line.  Mean age of line.  Mean age of line.  Mean age of line.  Years.  Years.  Years.  Years.  Patna-Gya Delhi-Umballa-Kalka Tarkessur Bengal Nágpur Indian Midland, including— Bhopal-Itársi North Western (state), including— Amritsar-Pathánkot Hyderabad-Umarkot Rájpura-Bhátinda Jammu and Kashmir (native  Mean age of line.  28'42 1,425 184 8:00 4'43 5'23 8'60  13'94 7'89 0'37 3'94

<sup>(</sup>a) Excluding the Calcutta Port Commissioners' railway, and the direct charges incurred by the State for special renewal of sleepers on the Wardha coal state railway.

(b) Includes the cost of maintenance of the Rajpura-Bhatinda railway, the expenses on which are not shown under their appropriate heads in Part I of the Administration report for 1891-92, but entered in a lump under special and miscellaneous expenditure in Statement No. 30.

(c) Exicuding the West of India Portuguese and the Deoghur railways.

			<del></del>		
		189	)I.		892.
Serial number.	RAILWAY.	Mean age of line.	Cost per mile of track, in- cluding sidings.	Mean age of line.	Cost per mile of track, including sidings,
	•	Years.	R	Years.	R
Xj		16.72	1,125	17.72	1,302
XII	Eastern Bengal (state)	22.06	2,196	23 06	1,155
XIII	Bengal Central	8 20	753	6.50	663
XVIII VII XXIII XXIV XIX	Great Indian Peninsula, including— Wardha Coal Dhond-Manmad Khamgaon Amraoti Bombay, Baroda and Central	27'34 15'66 13'74 21'83 20'87	2,492	28.34 16.66 14.74 22.83 21.87	11
·	India including—	25'34		26.34	
XXVII	The Gaekwar's Petlad (a)	1 60	343	2 66	1 -
XX	Madras The Nizam's Guaranteed State,	27.70	1,300	28.40	1,439
viii	including—  Bezwada extension	9 04 2 69		{ 10.04 3.89	} 1,109
	•				

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

Serial number.	Railway.	1891.	1892.
• • .		R	R,
XXI	East Indian, including— Patna-Gya Delhi-Umballa-Kalka Tarkessur	889	775
XXII II	Bengal-Nagpur Indian Midland, including—	488	407
IV & XXV	Bhopal-Itársi North Western (state) including— Amritsar-Pathánkot	} 436 }	443
X . XXIX XXX	Hyderabad-Umarkot	1,319	, 721
ΧI	Oudh and Rohilkhand (state)	697	806
XII	Eastern Bengal (state)	1,726	780
IIIX	Bengal Central	459・	362
, XVIII	Great Indian Peninsula, including—	)	
VI	Wardha Coal	Ì	•
· vii	Dhond-Manmád	<b>⊁1,36</b> 0	1,099
XXIII	Khámgaon ,	1	
YXIV.	Amráoti	J	•
XIX	Bombay, Baroda and Central India, including-	1,278	1,096
XXVII	The Gaekwar's Petlad	, ,	
XX	Madras	567	689
. XXVI	The Nizam's Guaranteed State, including—	776	<b>6</b> 9 <b>0</b>
VIII	Bezwada extension	J 110	. 090
	•		

<sup>(</sup>a) Maintained by revenue since May 1891.

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

5. On the metre gauge lines the cost of maintenance per mile of track including sidings, is shown in the following table:

	•	189	ı.	189	2.
Serial number.	Railway.	Mean age of litte.	Cost per mile of track, foclud- ing sid- ings.	Mean age of line.	Cost per mile of track, includ- ing sid- ings.
		Years.	· R .	Years.	R
XXXIII  XXXVI  XXXVIII  XXXIII  XXXIX  XLIII	Bengal and North-Western— Tirhoot section Company's section Rajputana-Malwa, including— The Gaekwar's Mehsana Southern Mahratta, including— Mysore section Kolhapur South Indian Eastern Bengal (state)— Northern and Behar sections, (including the Kaunia-Dharlla 2' 6" gauge branch)	7'98 6'33 12'30 1 82 5'42 5'50 0'70 13'99	} 461 836 204 } 635 1,589	8'87 7'12 13'30 2'82 6'42 6'11 1'70 12'39	<pre>} 500 } 816 } 633 I,123 } 931</pre>
XLIV     XLV     XLVII     XXXIV     XLIX     LIII	Dacca section  Burma (state), including— Toungoo-Mandalay Mu Valley  Rohilkund and Kumaon, including— Lucknow-Bareilly section  Dibru-Sadiya Jodhpore-Bickaneer— Jodhpore section Bickaneer section Bhavnagar-Gondal-Junagarh-Porbandar	7.73 0.46 7.25 3.99 7.99 2.93 7.54	}1,761 }425 1,502 522 1,019	8.73 9.97 8.25 4.99 8.99 4.43 1.06 8.54	391 1,367 391 1,557 473 319 1,405

The expenses on permanent-way alone per mile of track, including sidings (where known), are compared in the following table:

Serial number.	Railway.					1891.	1892.
	-				<u>-</u> -	R	R.
IIIXXX	Bengal and North-Western—				ا:		
	Tirhoot section Company's section	,		•		} 232	257
XXXV	Rajputana-Malwa, including-	-			i		
LI	The Gaekwar's Mehsana .		•	•	•	464	456
XXXAI	Southern Mahratta, including-	•			- 1		
XXXVIII	Mysore section	•	•	•		306	292
LI	Kolhápur	٠	•	•	- 1	,	•
XXXIX	South Indian	•	•	•	•	1,001	771
xtm.	Northern and Behar sections (in	clud	ling th	e Kaui	nia-	·	
•	Dharlla 2' 6" gauge branch)	•	••			1,147	643
	Dacca section	•	• 1	•	•	)	
XLIV	Burma (state), including-					·	
XLV.	Toungoo-Mandalay Mu Valley	:		•,	•	} 1,194	<b>7</b> 9 <b>8</b>

Serial number.	RAILWAY.	1891.	1892.
	•	R	R
XLVII XXXIV XLIX LIII	Rohilkund and Kumaon, including— Lucknow-Bareilly section Dibru-Sadiya Jodhpore-Bickaneer— Jodhpore section Bickaneer section Bhavnagar-Gondal-Junagarh-Porbandar	} 193 870 } 457 726	216 1,000 { 391 286 1,080

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

6. The maintenance charges per 1,000 gross ton-miles of traffic on the standard gauge lines are shown in the following table:

		1891	•	1892	·
Serial number.	RAILWAY,	Ton-mileage per mean mile worked.	Cost of main- tenance per 1.000 gross ton- miles.	Ton-mileage per moon mile worked.	Cost of main- tenance per 1,000 gross ton- miles.
	·	Miles.	R	Miles.	R
i xxi	East Indian, including— Patna-Gya Delhi-Umballa-Kalka Tarkessur	2,110,801	1.03	. · 1,990,648	<b>0</b> .9 <b>7</b> ,
II	Bengal-Nágpur	473,288	1.81	607,823	1.62
III VXX & VI	Indian Midland, including— Bhopal-Itársi	604,297	1.49	629,953	1.41
X X XIX <b>X</b> XXX	North Western (state), including— Amritsar-Pathánkot Hyderabad-Umarkot Rájpura-Bhátinda Jammu and Kashmir (native state section)	1,230,800	2.48	1,427,659	2.31
ıx	Oudh and Rohilkhand (state)	1,035,705	1.22	1,050,038	1'43
XII XIII	Eastern Bengal (state), including— Bengal Central	} 1,451,761	1.40	1,417,431	1.01
VI VII XXIII XXIV	Great Indian Peninsula, includ- ing— Wardha Coal Dhond-Manmád Khamgáon Amráoti	1,992,799	1.82	1,932,391	• 1.69
XIX	Bombay, Baroda and Central India, including—	<b>1,882,32</b> 4	1.92	1,877,205	1.85
XXVII XX	The Gaekwar's Petlad Madras	8 <sub>5</sub> 6,746	181	819,282	5.11
. xxvi	The Nizam's Guaranteed State, including—	} 561,871	2.40	549,435	2*20
VIII	Bezwada extension	)		<u> </u>	

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

7. On the metre gauge lines, the maintenance charges per 1,000 gross tonmiles of traffic are compared in the following table:

	·	1891		1892.	· · · · ·
Serial number.	RAILWAY.	Ton-mileage per mean mile worked.	Cost of main-tenance per 1,000 gross ton-miles.	- 3	Cost of main- tenance per 1,000 gross ton- miles.
		Miles.	R	Miles.	R
XXXIII	Bengal and North-Western— Tirhoot section Company's section	} 417,219	1.54	424,034	1.33
XXXV LI	Rajputana-Malwa, including— The Gaekwar's Mehsána	829,407	1.12	786,333	1,10
XXXVI XXXVIII LII	Southern Mahratta, including— Mysore section Kolhápur	283,007	1	275,678	2.23
XXXIX	South Indian	510,445	3.41	459,903	3.71
<b>XLIII</b>	Eastern Bengal (state)— Northern and Behar sections (including the Kaunia-Dharlla z'ô' gauge branch) Dacca section	485 333	3 98	463,133	2'33
XLIV XLV	Burma (state), including— Toungoo-Mandalay Mu Valley	558.998	3'74	568,353	2.83
XLVII XXXIV	Rohilkund and Kumaon, including— Lucknow-Bareilly section	217,127	1-92	262,377	1.67
LIV	Bhávnagar-Gondal-Junágarh- Porbandar	212,81	5 5.28	229,516	6.8

#### Locomotive expenses per train-mile (standard gauge).

8. The locomotive expenses on the standard gauge lines open for traffic amounted to R (a) 2,64,80,449 on a train-mileage of (a) 41,106,811, giving an average cost of (a) 10'31 annas per train-mile; while in 1891 the expenditure was, on standard gauge lines,  $R_{2,79,15,755}$  (b) on a train-mileage of 42,047,302 (b), or an average of 10'62 (b) annas per train-mile.

#### Locomotive expenses per train-mile (metre gauge).

9. On the metre gauge lines open for traffic during the year, the total expenses were R99,62,867, the train-mileage 18,972,708, and the average cost per train-mile 8.40 annas; corresponding figures for the metre gauge lines open for traffic in 1891 being total expenses R96,84,792, train-mileage 18,121,998, and the average cost per train-mile 8.55 annas.

<sup>(</sup>a) Excludes the Calcutta Port Commissioners' railway.

<sup>(6)</sup> Includes the locomotive expenses of the Rajpura-Bhatinda railway, which have been shown under special and miscellaneous expenditure in a lump in Part I of the Administration report for 1891-92.

### Locomotive expenses per train-mile (standard gauge).

10. The locomotive expenses per train-mile on the standard gauge lines are shown in the table below:

ĺ	·		189	1.		i	189	2.	
Serial Number.	- RAILWAY.	Consump- tion of fuel (in terms of Kurhur- baree coal) per train- mile,	age cost	mileage	per		age cost	Train- mileage per mean mile worked.	Loco- motive ex- penses per train- mile.
7	East Indian, including-	) lbs.	R	Miles.	Ans.	lbs.	R	Miles.	Ans
ıxx XXII	Patna-Gya Delhi-Umballa-Kalka Tarkessur	50.00	2.13	5,443	6.82	51'74	2.00	5,579	6.01
II	Bengal-Nágpur	54.75	4.38	1,424	10'91	52 56	3.20	1,767	9.79
IV & XXV	Indian Midland, including—* Bhopal-Itarsi	43.07	11.26	2,036	10.81	48.93	10'37	2,073	10.86
ix	North Western (state), includ-		• ¯	' •		1	1	1	
X XXIX XXX	ing— Amritsar-Pathánkot Hyderabad-Umarkot Rájpura-Bhátinda Jammu and Kashmir (native state section)	47.07	15.42	3,729	11-61	49 99	12.87	3,150	12.21
XI	Oudh and Rohilkhand (state)	41.30	13.20	3,281	8.23	39.75	9.38	3,522	6.86
IIX IIIX	Eastern Bengal (state), includ- ing— Bengal Central	\$1.00	4.24	5,260	6.66	49.66	5'45	5,240	6.63
XVIII VII XXIII XXIV	Great Indian Peninsula, in- cluding— Wardha Coal Dhond-Manmád Khámgaon Amráoti	46.70	£1'41	6,996	13'22	45.51	10-17	6,564	12.68
XIX	Bombsy, Baroda and Central India, including— The Gaekwar's Petlad	44.36	16.63	5,500	12.22	43*95	13.40	5,506	12:37
XX	Madras	46.99	15'98	3,005	13'41	47'49	14'40	3,002	11.82
XXVI	The Nizam's Guaranteed State, including— Bezwada extension	64.89	6.13	1,787	10.43	45'94	5.79	1,702	9.87

#### Locomotive expenses per train-mile (metre gauge).

11. On the metre gauge lines, the locomotive expenses per train-mile compare as follows:

•		Ì	189	ı.			189	2.	
Serial number.	RAILWAY.	Consumption of fuel (in terms of Kurhurbaree coal) per trainmile.	age cost	mileage	motive ex- penses	Consump- tion of fuel (in terms of Kurhur- baree coal) per train- mile,	age cost	Train- mileage per mean mile worked.	Loco- motive ex- penses per train- mile.
$-\overline{x}\overline{x}\overline{x}\overline{u}$	Bengal and North-Western-	) lbs.	R	Miles.	Ans.	lbs.	R	Miles	Ans.
	Tirhoot section Company's section	31.10	7.20	2,144	4'93	31.86	6.88	2,162	4.20
XXXV	The Gaekwar's Mebsana	32.07	19.44	3,890	9.70	32.02	17.78	3,876	9 5 <b>3</b>
XXXVI	Southern Mahratta, includ- ing-	l <b>?</b> i	ام ا		امما		_ :		
XXXVIII	Mysore section Kolhápur	30.99	16:24	1,803	8.82	32.42	13.76	1,729	9.02
	South Indian	33.76	18.22	3,291	9'17	43.89	11.01	3,015	8.83
XLIII	Eastern Bengal (state)— Northern and Behar sections (including Kaunia-Dharlla 2' 6" gauge branch). Dacca section	32.53	6°03	2,984	4 <sup>.</sup> 88	33450	6.33	2,8°5	4.98
<b>X</b> LIV	Burma (state), including - Toungoo-Mandalay	32.79	15.21	2,875	9.84	31-73	13'95	2.753	9'67
XLV	Mu Valley				-	- /-			
XLV		34'50	6.00	3,009	5.31	36.61	5'57	3,040	5.28
XLVI	cluding—	28.37	15'74	1,331	7.09	32·86	12'27	1,542	6.00
XXXIV	Dibru-Sadiya	24'24	8.57	1,961	5'98	26.00	7.65	2,512	5'54
Lill		28.20	28.33	1,315	7'92	28.89 28.24	27°53 27°53	1,232 901	9°26 9°96
Lly		26.28	22.74	. 1,390	8 41	25.16	18-81	1,477	7.53

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

12. The locomotive expenses on the standard gauge lines based on the comparative cost per 1,000 gross ton-miles hauled give the following results:

			1891.	•		1892.	• .
Serial number.	Railway.	Consumption of fuel (in terms of Kurhurbaree coal) per 1,000 gross tonmiles.	Ton-mile- age hauled per mean mile worked.		Consumption of fuel (in terms of Kurhurbaree coal) per 1,000 gross tonmiles.	age hauled	Locomotive expenses per 1,000 gross ton-miles.
		lbs.	Miles.	R	lbs.	Miles.	R
I XXI	East Indian, including— Patna-Gya Delhi-Umballa-Kalka	139.94	1,987,959	1'17	141 00	1,990,648	1.31
XXII 11	Tarkessur Bengal-Nágpur	159.60	473,288	2.02	152.77	607,823	1.78
	Indian Midland, including— Bhopal-Itarsi	145'15	604,297	2'28	161.03	629,953	2'23
XXXX	North Western (state), including— Amritsar-Pathánkot Hyderabad-Umarkot Rájpura-Bhátinda Jammu and Kashmir (native state section).	142'64	1,230,800	2.30	163:34	1,2,9,274	2.25
XI	Oudh and Rohilkhand (state)	130'54	1,035,705	1 69	133'30	1,050,038	1'44
XII XIII	Eastern Bengal (state), including— Bengal Central	188.33	1,451,761	1.21	183'57	1,417,431	1.23
VIII VII VII VIXXII XXIV XIX	Great Indian Peninsula, including- Wardha Coal Dhond-Manmád Khámgaon Amráoti Bombay, Baroda and Central	163.95	1,992,799	2.30	154'59	1,932,391	<b>2</b> .69 .
XXVII	India, including—	129.35	1,886,020	2.58	126:23	1,877,205	3,33
XX	The Gaekwar's Petlad	164.84	856,746	2.01	174 03	819,282	2.41
XXVI	The Nizam's Guaranteed State, including—	206.41	561,871	2.07	142.35	549,435	1'91
VIII	Bezwada extension	ן ין		_	ļ		•

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

13. For the metre gauge lines, a similar comparison gives:

			1891.	-		1892.	
Serial number.	RAILWAY.	Consumption of fuel (in terms of Kurhurbaree coal) per 1,000 gross tonmiles.	Ton-mile- age hauled		Consumption of fuel (in terms of Kurhurbaree coal) per 1,000 gross tonmiles.	Ton-mile-	Loco- motive expenses per 1,000 gross ton- miles.
	,	lbs.	Miles.	R	lbs.	Miles.	R
XXXIII	Bengal and North-Western — Tichoot section Company's section	159.83	417,219	1.60	162.40	424,034	   1.43
XXXV LI	Rajputana-Malwa, including- The Gaekwar's Mehsana	163.49	829,437	2.95	1 57 99	786,333	294
XXXVI XXXVIII . LII	Southern Mahratta, including— Mysore section Kolhápur	197'40	283,007	3.21 	203'50	275,678	3 <sup>-</sup> 54
XXXIX	South Indian	213'94	519,445	3 <sup>-6</sup> 3	287 74	459,903	3.63
XLIII	Northern and Behar sections, (including the Kaunia-Dharlla 2' 6" gauge branch).	198.17	4 <sup>8</sup> 5,333	1:88	202 93	463,133	1'89
XLIV	Dacca section Burma (state), including— Toungoo-Mandalay	} 168·94	<b>5</b> 58,998	3'17	154'44	568,353	2 94
XLV XLVII	Mu Valley Robilkund and Kumaon, includ- ing—	173.73	217,127	2.23	193.08	262,377	2.30
LIV	Lucknow-Bareilly section Bhávnagar-Gondal-Junágarh Porbandar	173 29	212,815	3'43	163'49	229 516	3.06

#### 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 R2·13 on the East Indian railway to R28·33 on the Jodhpore-Bickaneer railway in 1891, and from R2·06 on the East Indian railway to R27·53 on the Jodhpore-Bickaneer railway in 1892, 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:

Serial number.	RAILWAY.	1891.	1892.
		R	R
· I	East Indian, including—	)	
	Patna-Gya .		0
xxı	Delhi-Umballa-Kalka	1.04	1.08
. XXII	Tarkessur	) .	
11	Bengal-Nágpur	1,69	1.21
III	Indian Midland, including-	} 1'37	1.32
IV & XXV	Bhopal-Itársi	) - 3/	• 33
įX	North Western (state), including-	· ··	
	Amritsar-Pathánkot	1	•
X.	Hyderabad-Umarkot	1.50	1'55
XXIX	Rájpura-Bhátinda	1	•
xxx	Jammu and Kashmir (native state section)	Ĵ	
χı	Oudh and Rohilkhand (state)	0,00	o*8 <b>8</b>
XII	Eastern Bengal (state), including-	} +11	1.02
XIII	Bengal Central	,	- 0,
XVIII	Great Indian Peninsula, including-	۱.: ۱	
VI	Wardha Coal	/	,
vii	Dhond-Manmád	1.94	1.87
XXIII	Khámgaon .	) 1	
XXIV	· Amráoti	'	
XIX	Bombay, Baroda and Central India, including—	1'42	****
xxvii	The Gaekwar's Petlad	<b>1 42</b>	1,23
xx	Madras	1'94	1.42
xxvi	The Nizam's Guaranteed State, including-	} 1.20	1'47
VIII	Bezwada extension .	5 . 30	- 4/

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

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

Serial number.	RAILWAY.	1891.	1892.
!		R	R
XXXIII *.	Bengal and North-Western— Tirhoot section Company's section	} 1.07	0.01
. XXXV	Rajputana-Malwa, including —  The Gaekwar's Mehsana	} 1.60	1.68
XXXVI	Southern Mahratta, including— Mysore section	2.16	5.3 A
· LII XXXIX XLIII	Kolhápur section South Indian Eastern Bengal (state)—	1.86	2'09
······	Northern and Behar sections (including the Kaunia- Dharlla 2' 6" gauge branch) Dacca section	1.34	1.31
XI.IV	Burma (state), including— Toungoo-Mandalay Mu Valley	2.06	1.08
XLV XLVII	Rohilkund and Kumaon, including-	1149	1'15
LIV	Lucknow-Bareilly section Bhavnagar-Gondal-Junagarh-Porbandar	1.84	1.68

#### 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, based on the comparative cost per 1,000 home vehicle-miles, are shown in the following table:

	•		189 t.		ĺ		1892		
Serial number.	. RAILWAY,	Total vehicle- mileage.	Average mileage per coaching vehicle.	Average mileage per goods vehicle.	Carriage and wagon expenses per 1,000 home vehiclemiles.	Total vehicle - mileage.	Average mileage per coaching vehicle,	Average mileage per goods vehicle.	Carriage and wagon expenses per 1,000 home vehicle- miles.
	East Indian, including—	Miles.	Miles.	Miles.	R	* Miles.	Miles.	Miles.	R
XXI	Patna-Gya Delhi-Umballa-Kalka Tarkessur	269,260,918	61,099	20,384	4.60	271,605,366	58,893	20,879	4.66
11	Bengal-Nágpur	39,524,467	36,281	18,071	4'37	50,262,423	42,210	14,824	3.61
111 V & XXV	Indian Midland, including— } Bhopal-Itársi	38,689,346	28,977	12,952	5'71	40,183,486	29,591	12,863	5.85
ix	North Western (state), in- cluding— Amritsar-Pathánkot		•			' "			
· XXIX · XXX	Hyderabad-Umarkot Rájpura-Bhátinda Jammu and Kashmir (native state section).	212,515,974	29,447	15,377	10'70	169,239,241	30,925	10,645	8-07
XI XII	Oudh and Rohilkhand (state) Eastern Bengal (state), in- )	77,030,823	34,699	12,988	4'00	79,446,727	34,514	13,564	3.8
XIII XVIII	cluding—  Bengal Central  Great Indian Peninsula, in-	42,518,296	35.389	14,011	9,03	41,799,136	35,313	13,250	7.5
VII VII XXIII XXIV	cluding— Wardha Coal Dhond-Manmád Khámgaon Amráoti	184,366,832	30,055	16,913	12'08	166,612,010	29,847	14,736	12'26
XIX	Bombay, Baroda and Cen-	68,719,670	40,255	13,969	9'33	68,640,641	41,107	13,821	12'0
XXVII	The Gaekwar's Petlad Madras	50,762,207	1	10,557		48,150,589	25,978	9,572	10'7
XXVI	The Nizam's Guaranteed State, including— Bezwada extension	15,788,978	31,065	15,292	2.99	14,941,312	30,889	14,138	2"3"

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

18. On the metre gauge lines the carriage and wagon expenses, based on the comparative cost per 1,000 home vehicle-miles, are as follows:

1	<u> </u>		1891.		<del></del>	<del></del>	1892.	<del></del>	
Scrial number.	RAILWAY,	Total vehicle- mileage,	A verage mileage per coaching vehicle.	Average mileage per goods vehicle.	Carriage and wagon expenses per 1,000 home vehicle- miles,	Total vehicle- mileage,	Average mileage per coaching vehicle,	Average mileage per gonds vehicle.	Carriage and wagon expenses per 1,000 home vehicle- miles.
XXXIII	Bengal and North-Western-	Miles.	Miles.	Miles.	R	Miles.	Miles.	Miles.	R
	Tirhoot section Company's section	41,666,311	45,881	11,659	3,50	42,508,836	45,009	11,776	3.30
xxxv Li	Rajputana-Malwa,includ- ing— The Gaekwar's Mehsana	160,766,282	27,626	16,112	6-77	159,842,753	27,503	16,000	5'15
XXXVII XXXVIII	Southern Mahratta, in- cluding— Mysore section Kolhápur	45,230,351	18,655	6,277	6'53	44,007,714	17,370	6,023	7*04
XXXIX	South Indian . Eastern Bengal (state)— \	55,773,593	39,138	9,671	5'13	59,963,997	37,751	9,861	6.28
	Northern and Behar sections (including the Kaunia-Dharlla 2'6" gauge branch).	37,490,759	33,359	12,812	3.40	35,238,068	31,160	10,858	3.33
XLIV	ing— Toungoo-Mandalay Mu Valley	48,363,072	34,410	8,834	2,13	54,041,343	34.973	9,534	4'57
XXXIV	including-	6,600,685	22,558	5,762	4'32	9,096,586	24,432	7,660	4*46
LIV	Bhavnagar-Gondal-Juná- garh-Porbandar	9,910,432	24,155	5,667	3'43	10.388,636	22,120	6,200	4.27

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:

			1891.		<u>.</u>	1892.	
Serial number.	Railway.	Train- mileage per mean mile worked.	Average distance between stations.	Traffic expenses per train- mile.		Average distance between stations.	Traffic expenses per train- mile.
I	East Indian, including-	Miles.	Miles.	Ans.	Miles.	Miles.	Ans.
xxı	Patna-Gya Delhi-Umballa-Kalka	-5,443	3.50	5'01	5,579	7.67	4.24
IIXX II	Tarkessut ) Bengal-Nágpur	1,424	10.03	5.36	1,767	9,00	5.09
. III	Indian Midland, including - ?	2,036	8.35	4.66	2,073	7.73	4.57
1V & XXV 1X	Bhopal-Itársi North Western (state), includ-		1			ļ ļi	
X XXIX XXX	ing— Amritsar-Pathánkot Hyderabad-Umarkot Rájpura-Bhátinda Jammu and Kashmir (na-	3,729	7'37	4.08	3,150.	7.33	4.96
XI XII	tive state section) Oudh and Rohilkhand (state) Eastern Bengal (state)	3,281	6.72	4.82	3,522	6.72 3.55 5.68	4'23 7'27
XIIIX	Bengal Central Great Indian Peninsula, in- cluding —	2,390	4.63	5.85	2,393	300	5.24
VI VII XXIII	Wardha Coal Dhond-Manmád Khámgaon	6,996	7.24	4.61	6,564	7.06	4.91
XXIV	Amráoti	-		1	İ		
XIX	Bombay, Baroda and Central India	5,617	5'55	5.14	5,506	5.49	5.36
XX IVXX	Madras The Nizam's Guaranteed	3,005	6.17	5.42	3,002	6.08	5.36
viii	State, including— Bezwada extension	1,787	8.23	5.46	1,702	8.16	5.87
_xxvii	The Gaekwar's Petlad	1,462	6.67	2.05	1,463	6.67	3.01

### Traffic expenses per train-mile (metre gauge).

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

•			1891.			1892.	
Serial number.	Railway.	Train- mileage per mean mile worked.	Average distance between stations.	Traffic expen- ses per train- mile.	Train- mileage, per mean mile worked-	Average distance between stations.	Traffic expen- ses per train- mile.
. •		Miles.	Miles.	Ans.	Miles.	Miles.	Ans
XXXIII	Bengal and North-Western— Tirhoot section Company's section	2,144	6.15	3.41	2,162	6.10	3'97
XXXV	Rajputana-Malwa, including— The Gaekwar's Mehsana	3,89 <b>0</b>	7.24	3.31	3,876	7.51	3'34
XXXVI XXXVIII LII	Southern Mahratta, including— Mysore section Kolhápur	1,803	7.2	4.63	1,729	7.21	4.21
XXXIX	South Indian	3,291	6.88	2.96	3,015	7.00	3.18
XLIII	Eastern Bengal (state) — Northern and Behar sections (including the Kaunia-Dharlla 2' 6" gauge branch). Dacca section	2,984	6.86	4.63	2,805	•7.32	4'53
XLIV XLV	Burma (state), including— Toungoo-Mandalay Mu Valley	2,875	6.51	5.60	2,753	6.35	5:98
XLVI	Deoghur	3,009	4.79	5.01	3,040	4.19	4.41
· XLVII	Rohilkund and Kumaon, in cluding— Lucknow-Bareilly section	1,331	7.31	6.02	1,542	7.51	5*44
XLIX	Dibru-Sadiya	1,961	5.50	3.08	2,512	5.20	3.14
LIII	Jodhpore-Bickaneer— Jodhpore section Bickaneer section	1,315	8.31	1.94	901	7.98	2·39 2·45
LIV	Bhávnagar-Gondal-Junágarh- Porbandar	1,390	6.81	5.50	1,477	6.28	5.02

#### General charges, percentage on gross earnings (standard and metre gauges).

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

1	•	189	)1,	189	)2.
•Serial number.	RAILWAY.	Gross earn- ings ex- cluding steam-boat, per mean mile worked.	charges per cent.	Gross earn- ings, ex- cluding steam-boat, per mean mile worked.	charges per cent.
		R	Per cent.	R	Per cent.
I XXI	East Indian (S), including— Patna-Gya (S) Delhi-Umballa-Kalka (S)	29,037	3.41	27,850	3'57
XXII	Tarkessur (S) Bengal-Nágpur (S)	6,732	11.18	7,316	9.82

•		18	91.	18	94.
Serial number.	RAILWAY.	Gross earn- ings,exclud- ing steam- boat, per mean mile worked.	General charges, per cent. on gross earnings, excluding steam-boat.	Gross earn- ings, exclud- ing steam- boat, per mean mile worked.	General charges, per cent, on gross earnings, excluding steam-boat.
	•	R	Per cent.	R	Per cent.
III IV & XXV	Indian Midland (S), including — Bhopal-Itársi.	6,308		6,737	9:30
IX	North Western (state)(S), including— Amritsar-Pathánkot (S)	)	_		
X XXIX XXX	Hyderabad-Umarkot (S) Rájpura-Bhátinda (S) Jammu and Kashmir (S) (native	13,254	3.47	10,491	4 44
371	state section).	1			
XI XII	Oudh and Rohilkhand (state) (S) .  Eastern Bengal (state) (S) .	12,366 29 238		27,046	4'7' 4'25
XIII XVIII	Bengal Central (S) Great Indian Peninsula (S), includ-	6,493		6,154	12.77
VI VII XXIII	Wardha Coal (S) Dhond-Manmád (S) Khámgaon (S)	30,390	2.88	27,277	3 26
XIX ·	Amráoti (S) Bombay, Baroda and Central India (S).	30,674	3.62	30,906	4.09
XX XXVI	Madras (S) The Nizam's Guaranteed State (S),	11,132	6.07	11,468	5.61
VIII	including— Bezwada extension (S)	7,848	9.59	7,860	9.89
XXVII	The Gaekwar's Petlad (S)	4,428	3'71	4,587	4.18
XXXIII	Bengal and North-Western— Tirhoot section (M) Company's section (M)	6,285	8.11	6,256	8 13
XXXV Li	Rajputana-Malwa (M), including— The Gaekwar's Mehsana	12,570	5'35	12,826	5.18
XXXVI XXXVIII LII	Southern Mahratta (M), including— Mysore section (M) Kolhápur (M)	4,51	3 11.74	4,289	12.31
XXXIX XLIII	South Indian (M) Eastern Bengal (state)—	7,99	7'17	7,110	7.64
	Northern and Behar sections (M), (including the Kaunia- Dharlla 2' 6" gauge branch).  Dacca section (M)		5'07	7,953	2.4o
XLIV	Burma (state) (M), including— Toungoo-Mandalay (M).	10,05	0 5,30	10,237	5.36
XLV XLVI		) . 6,50	6 8 88	5,629	11.31
XLVII	Rohilkund and Kumaon (M), in-		1.		
XXXIV XLIX	Lucknow-Bareilly section (M) Dibru-Sadiya (M)	6,39	3 15.73	6,601	16.67
LIII	Jodhpore-Bickaneer— Jodhpore section (M)	3,38	į	C 2 8 2 6	3'15
LIV	Bickaneer section (M) Bhávnagar-Gondal-Junágarh-Porban dar.	1)			

The initial letter (S) indicates the standard gauge and (M) the metre gauge.

#### Compensation.

22. The total expenses on the standard and metre gauge lines for compensation for goods lost or damaged, personal injury, or other claims connected with

railway working, amounted to R2,35,320, being 0.10 per cent. on the gross earnings, against R1,14,612 equal to a percentage of 0.05 on gross earnings in 1891.

#### Summary of working expenses compared with gross earnings.

23. Taking the whole of the Indian railways, the expenses under the main abstracts compare as follows with the gross earnings (excluding steamboat services), which amounted to R23,07,72,682) in 1892, compared with R23,86,64,660 in 1891.

•	1	891.		1892.					
• • .		Working expenses.	Per cent. on gross tarnings.		-	Working expenses.	Per cent. on gross earnings.		
Maintenance . Locomotive . Carriage and wagon Traffic . General . Miscellaneous .		£ 3,10,08,618 3,78,72,397 1,04,39,364 1,72,53,387 1,13,58,577 30,36,821	12'99 15'87 4'37 7'23 4'76 1'27	Maintenance Locomotive Carriage and wagon Traffic General Miscellaneous	•	R 2,76,94,982 3,67,12,805 94,12,667 1,75,85,598 1,16,15,550 34,18,272	12.00 15.91 4.08 7.62 5.03 1.48		
TOTAL	•	(a)11,16,59,431	46.79	TOTAL	•	(b) 10,70,41,438	46.38		

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

	1	89 <b>1.</b>	1892.				
		Working expenses.	Per cent, on gross earnings.			Working expenses.	Per cent. on gross earnings.
Maintenance Locomotive Carriage and wagon Traffic General Miscellaneous		2,33,73,361 2,79,15,755 80,62,742 1,27,16,726 75,11,151 25,90,633	12.72 15.19 4.39 6.92 4.09 1.41	Maintenance . Locomotive . Carriage and wagon Traffic . General . Miscellaneous .		2,05,65,081 2,65,04,784 71,78,531 1,27,74,342 75,99,301 27,773,78	11.89 15.33 4.15 7.39 4.40 1.61
TOTAL		(a)8,28,60,636	45.10	TOTAL		(8)7,80,00,981	45'11

for the metre gauge lines as follows:

	180	91.	. 1892.					
•		Working expenses.	Per cent. on gross earnings.			Working expenses.	Per cent. on gross earnings.	
Maintenance . Locomotive . Carriage and wagon Traffic . General . Miscellaneous .		R 74,36,473 96,84,792 22,95,732 43,89,255 37,18,039 4,22,082	13.87 18.06 4.28 8.19 6.93	Maintenance I ocomotive Carriage and wagon Traffic General Miscellaneous		\$\mathcal{R}\$ 69,68,937 99,62,868 21,55,747 46,83,290 39,01,541 6,20,258	12.32 17.61 3.81 8.28 6.90	
TOTAL	-	<b>2,79,</b> 46, <b>3</b> 73	52.12	· Total		2,82,92,641	50.01	

<sup>(</sup>a) Includes R6,90,267 paid by the North Western (state), the Great Indian Peninsula, and the Nizam's Guaranteed State railway as rent of leased lines, not included under any of the above heads.

<sup>(</sup>b) Includes R6,01,564 paid by the North Western (state), the Great Indian Peninsula, and the Nizam's Guaranteed State railways as rent of leased lines, not included under any of the above heads.

18,	μ.	1892.					
•	Working expenses.	Per cent. on gross earnings.			Working expenses.	Per cent. on gross earnings.	
Maintenance Locomotive Carriage and wagon Traffic General Miscellaneous	# 1,98,784 2,71,850 80,890 1,47,406 1,29,387 24,106	14'94 20'44 6'08 11'08 9'73 1'81	Maintenance . Locomotive . Carriage and wagon Traffic . General . Miscellaneous .	•	R 1,60,964 2,45,153 78,389 1,27,966 1,14,708 20,636	12'45 18 96 6 06 9'89 8'87 1'60	
TOTAL .	8,52,423	64.08	Total		7,47,816	57.83	

#### CHAPTER IV.

#### REVENUE TRANSACTIONS—TRAFFIC AND WORKING.

A map showing the several systems of Indian railways, corrected up to the 30th-September 1893, is inserted at the commencement of the report.

2. The details of the earnings and expenses 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 revenue transactions and traffic working of the more important railways during the year 1802:

#### East Indian Railway system (standard gauge).

. 3. The length of line open for traffic on the 31st December 1892, exclusive of sidings, was as follows:

East Indian railway pro								Miles.
and the Nalhati state Indian railway) .								1,610.28
Tarkessur railway *	•					•		22 23
Delhi-Umballa-Kalka ra	ilway	٠.	•	•	•	•	•	161.40
Rajputana-Malwa railwa	ay—A	gra e	a <b>st</b> ba	ank to	Agra	fort †		1'00
Eastern Bengal (state)	railwa	y—C	alcutt	a to N	aiháti	ţ.	•	23.24
					To	TAL	• =	1,818-15

There was an increase of 84'84 miles in the length of the East Indian railway owing principally to —

- (i) 27.48 miles of the late Nalhati state (4' gauge) railway having been taken over by the East Indian railway from the 1st April and converted to the standard gauge on the 1st July 1892:
- (ii) 57.20 miles of the late Patna-Gya state railway having been incorporated with the East Indian railway from the 1st July 1892.
- The mileage of the East Indian railway with the incorporated lines (Patna-Gya and Nalháti), together with that of the Rajputana-Malwa railway and the Eastern Bengal (state) railway as above, over which the East Indian railway has running powers, amounted to 1,634.52 miles.

The following table shows the general results of the year's working as

General results. compared with those of 1891:

								_
Year.	Mean mileage worked.	Train- mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.		Percentage of net earn- ings on total capital outlay, including suspense.
1891 1892	Miles. 1,765*13 1,811*32	Miles 9,602,680 10,104,550	# 5,14,88,020 5,05,17,043	R   1,47,40,66c  1,47,39,93	# 3,67,47,36n 3,57,77,112	28·63 29·18	₽ 561 536	9.66 9.39
Increase or de- crease	+46.19	+501,870	-9,70,977	<b>—72</b> 9	-9,70,248	+ 0.22	25	<b>—</b> 0°27
Percentage of increase or decrease .	+ 2.62	+5:23	-1.89	ee.	-2.64	•••	<b>—</b> 4·46	•••

- · Worked by the East Indian Railway Company.
- † Laid on a mixed standard and metre gauge, worked over by the East Indian railway.
- t Worked over by the East Indian railway.
- Includes contribution to the Provident Fund.
- Includes R18,154 for Government supervision and control, Delhi-Umballa-Kalka railway, and R36,000, special grant, to Mr. D. W. Campbell, late Agent, East Indian railway.

Compared with 1891, a year remarkable for its exceptionally heavy pilgrim traffic, the earnings of 1892 showed a net decrease of R9,70,977, but excepting the year 1891, the earnings of 1892 were the highest ever obtained. The increase in train-mileage was chiefly due to increased length of line worked.

The surplus profits for the 1st and 2nd halves of 1891 and 1892 compare as follows:

	189	)1.	189	2.
•	ıst-half,	2nd-half.	ıst-half.	2nd-half.
Government share of East Indian rail- way proper Government share of Patna-Gya net	61,87,784	R • 43,93,784	£ 56,78,254	£ 26,76,787
earnings	1,87,905	1,59,978	1,63,462	•••
TOTAL .	63,75,689	45,53,762	58,41,716	26,76,787
East Indian Railway Company's share of East Indian Railway Company's share for	15,46,946	10,98,446	14,19,563	6,69,197
working branch lines— Patna-Gya Tarkessur	46,976 23,969	39,995 16,900	40,865 21,746	 1 <b>6</b> ,964
TOTAL .	16,17,891	11,55,341	14,82,174	6,86,161
Tarkessur railway share of net earnings	95,878	67,600	86,983	67,854
Delhi-Umballa-Kalka railway share of net earnings	1,89,839	2,64,009	2,76,375	*2,64,509

The decrease in the surplus profits is due to the low rate of exchange at which the charges for interest and annuity in sterling were converted into rupee currency in 1892. The rate was 1s.  $4\frac{3}{4}d$ . against 1s.  $6\frac{1}{2}d$ . to the rupee in 1891. The increase in the Delhi-Umballa-Kalka railway is the result of 12 months' working compared with 10 months of 1891; this line having been opened for traffic on the 1st March 1891.

The following table shows the gross earnings under main heads as Gross earnings. compared with 1891:

			•				1891.	1892.	Decrease.
							R	R	R
Coaching .		•	•	•	•	•	1,69,48,352	1,63,72,818	5,75,534
Goods .			•	•	•	•	<b>3</b> ,36,07,926	3,32,71,350	3,36,576
Electric telegraph	ì		•	•	•		84,000	83,854	146
Steam-boat		•	•		• '	• .	75,145	7 <b>9</b> ,97 <b>7</b>	4,168
Sundries ,	,	•	•	•			7,72,597	7,18,044	54,553
•.				Тота	L.	•	5,14,88,020	5,05,17,043	9,70,977

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.		SECONE	CLASS.	INTERMEDIATE CLASS.		THIRD	CLASS,	TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
1891 1892 .	53,161 53,221	£ 5,44,163 5,44,063	179,401 186,053	# 6,98,800 7,36,003	3,16,503 8,49,720	7,53,349 8,36,795		2 1,30,94,655 1,24,40,357		
Increase or decrease.	+ 60	-101	+6,652	+ 37,203	+ 33,217	+ 83,446	+ 156,937	<b>6,54,298</b>	+ 196,866	<b>—5,33,75</b> 0

The improvement in second class traffic, which occurred principally in local booking, is said to be chiefly due to the tendency on the part of the European passengers to leave first class accommodation and travel in the second class,

particularly when reserved accommodation is required, and to the fact that the well-to-do natives are travelling second class to a greater extent than formerly. Under troops and police there-was a falling off, which is ascribed to the movement of troops for the Manipur expedition in 1891.

The increase in the intermediate class traffic was due to the incorporation of the late Nalhati state railway with the undertaking and to the extensive booking by mail trains, due to the advantages to be derived from specdy travelling, and to the exclusion of third class passengers from mail trains above Allahabad. It is satisfactory to notice that there is a steady growth of traffic in this class, the results for the year 1892 being the highest yet recorded.

In third class traffic the increase in number with a decrease in earnings was due chiefly to a larger number of passengers having travelled for shorter distances. Notwithstanding the exceptionally heavy pilgrim traffic in 1891, the decrease in earnings in 1892 would have been considerably reduced had the booking of ordinary pilgrim traffic to Hardwar in March and April 1892 not been suspended under the orders of Government on account of an outbreak of cholera at that place.

The average sum received for carrying a passenger one mile amounted to 2.73 pies against 2.72 pies in the previous year.

The coaching earnings per passenger train-mile were R3'78 against R4'00.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1891:

	1	891 <u>.</u>	,	892.	Increase or	decrease.
	Tons,	. R	Tons	R	Tons.	R
General merchandise	2,762,753	2,40,73,886	2,728,837	2,44,19,229	-33.916	+3,45,343
Military stores	9,591	4,25.403	8,535	3,82,893	-1,056	-42,510
Railway materials for construction	3.03		1000			
(Home line only) - ·	37,664	25,186	116,885	1,23,025	+ 79,221	+ 97.839
Coal and coke for the public and	_,	_			-	-
foreign railways -	1,694,774	77,52,222	1,786,851	69,60,099	+ 92,077	-7,92,123
Coal and coke for construction		•	_	l		
(Home line only)	1,423	б,150	1,670	6,590	+ 247	+440
Coal and coke for revenue only .	247,594	5,91,319	259,623	8,14,291	+ 12,029	+ 2,22,972
Revenue stores other than coal and			١ .			
coke	303,292	4,10,275	322,871	3.99,591	+ 19.579	<b></b> 10,68₄
Live-stock.	3,501	1,64,393	2,988	1,23,662	-513	-40,731
Rents, miscellaneous, etc	•••	2,37,476	) ···	1,39.084		98,392
Total .	5,060,592	3,36,86,310	5,228,260	3,33,68,464	+ 167,668	-3,17,846
Less - Outstandings irrecoverable .	***	78,384	•••	97,114	•••	+ 18,730
Ner total .	5,060,592	3,36,07,926	5,228,260	3,32,71,350	+ 167,668	-3,36,576

The noticeable fluctuations in the traffic under "General merchandise" are shown below:

							. INCRE	ASB.	DECREASE.		
							Tons.	Ř	Tons.	₽.	
Grains .		•		•	•		•••	3,61,157	50,446	••• .	
Jute .	•		•	•	•	•		•••	8,511	99,422	
Lac .		•	•	•	•	• ]	•••	•••	6,244	63,165	
Cil-seeds				•		• 1			27,801	84,476	
Opium	•	•	•	•		- [			2,114	50,623	
Provisions			•	•	•	• 1		• • •	165	87,199	
Saltpetre		•	•		•		3,912	43,729	•••	•••	
Sugar	•	•	•	•	•		22,027	1,16,769	•••	•••	
Stone and l	ime				•	• • •	17,694	85,090	•••		
Timber			•		•	.	14,812	56,025		•••	
Tobacco	•				•	. ]	3,486	57,972		•••	

Grains.—The increase in earnings was principally in the traffic in gram, and was due chiefly to increased traffic from up-country stations to Howrah for shipment to coast ports and Burma. The decrease in the tonnage was principally due to the smaller quantity of wheat and rice carried during the year.

Jute.—The decrease was chiefly in traffic from the Eastern Bengal (state) railway vid Naihati and Sahebgunge to Howrah and Bhadreswar respectively, in consequence of depletion of stocks and bad crops.

· Oil-seeds.—The decrease occurred mainly in the second-half of the year, and was principally in linseed, due, it is said, to the exhaustion of stocks in the interior, to a falling off in the demand for shipment, and to bad crops.

Sugar.—The increase was principally in despatches from the East Indian railway stations in the Patna and Shahabad districts, from the Qudh and Rohilkhand (state), the North Western (state) and the Bengal and North-Western railways, and from Behar to stations on foreign lines vid Jubbulpore, Agra and Delhi.

The increase in "Railway materials for construction (Home line only)" was chiefly due to the carriage of materials for the conversion of the Azimganj branch from the 4 foot to the standard gauge and for the Jherriah extension.

The increase in weight of coal carried for the public and foreign railways, as compared with 1891, was apparently due to the reduction of freight charges which took place in October 1891 which has led to a development of this traffic. Allowing for the special credit of R6,00,932 for arrear charges recovered from state railways in 1891, there was a decrease in earnings in 1892 of R1,91,191 only.

The increase in coal and coke for revenue was due to enhanced charges and a longer average lead. The rate having been raised from 0.06 pie to 0.09 pie per maund per mile.

The decrease in "Rents, miscellaneous, etc.," was chiefly in the receipts at Howrah owing to the extension from 48 hours to 72 hours in the free time allowed for clearing goods, which was in force during the whole of the year 1892.

The average sum received for carrying one ton of goods one mile amounted to 5'34 pies against 5'72 pies in the previous year.

The goods earnings per goods train-mile were R5.77 against R6.27.

The following table compares the working expenses of the railway system Working expenses. during the years 1891 and 1892:

	1891.		1892.		•	Per-
,	Amount.	Per cent. on gross earnings.	A mount.	Per cent. on gross earnings.	Increase or decrease in amount.	of in- crease or de- crease
	R		R		R	
Maintenance. Locomotive. Carriage and wagon Traffic. General Steam-boat Special and miscellaneous	35,49,518 41,08,904 12,22,655 30,07,031 17,65,249 64,024	6.89 7.98 2.38 5.84 3.43 0.13	34,97,347 43,63,317 12,66,688 28,65,313 18,02,230 80,829	6.92 8.64 2.51 5.67 3.57 0.16	- 52,171 + 2,54,413 + 44,033 - 1,41,718 + 36,981 + 16,805	-1'47 +6'19 +3'00 -4'71 +2'09 +26'25
TOTAL .	1,47,40,660	28.63	1,47,39,931	29:18	<b>—729</b>	

The decrease under maintenance was chiefly due to less renewals owing to non-receipt of rails and sleepers.

The increase in the locomotive expenses was due mainly to the expenditure for new boilers having been charged off in the second half of 1892, and to the application of the new coal and stores rates from October 1891.

The increase in the carriage and wagon expenses was chiefly under "Repairs and renewals of vehicles," owing to a greater number of vehicles (chiefly covered goods wagons) having been rebuilt during the year.

Under traffic, the decrease was mainly in "Station staff" due to the amount recoverable from foreign railways and other working charges at joint stations which were formerly credited to earnings having, from July 1891, been credited to this head, and to lower rates paid to contractors.

The increase in general charges was chiefly under "Home expenditure" owing to a lower rate of exchange, to the charges for rent, maintenance, etc., of wires and instruments of the Delhi-Umballa-Kalka railway from 1st March 1891 having been charged in 1892, to the larger amount of inspection fees on stores paid in England, and to extra labour and lighterage owing to larger importation of materials.

The decrease under special and miscellaneous expenditure was entirely due to a sum of R1,82,246 having been charged to this head in 1891 for working the Delhi-Umballa-Kalka railway. Under the authority of Government the procedure as regards this debit has been altered and this entry is not now made.

Rates and fares. The following alterations in the goods tariff may be noted:

The rate for indigo-seed was reduced to equalise with the charge by the Oudh and Rohilkhand (state) railway route vid Saháranpur.

The rates for sugar and jaggree, bones and manure, cotton pressed and several other articles of merchandise vid Jubbulpore were equalised with the charges by the Indian Midland railway route vid Itarsi.

The rates for wheat and common seeds vid Asansol to Calcutta were assimilated with those charged by the Bengal-Nágpur railway to attract the traffic which last season went to Bombay.

The rate for kerosine oil at owner's risk to Katni was equalised with the charge by the Bengal-Nágpur railway route.

To divert traffic, hitherto carried by canal or road, rates for firewood in minimum loads of 150 maunds were reduced on the Delhi-Umballa-Kalka railway.

The upward rate for raw tobacco was adjusted so as to equalise the charge by the alternative route by way of the Bengal and North-Western and the Oudh and Rohilkhand (state) railways.

The rate for raw tobacco consigned to Kalka was reduced to attract traffic to the Delhi-Umballa-Kalka railway.

The upward rate for turmeric was adjusted to equalise with the charges by way of the Bengal and North-Western railway.

The rates for certain articles booked to Umballa for consumption at Simla were reduced to attract the traffic to the Umballa-Kalka section of the line.

A lump-sum rate of \$2500 per wagon for country cloth at owner's risk in full wagon loads from Cawnpore to Howrah was introduced to assist the Cawnpore mills in their competition with the Bombay mills which despatch by sea to Calcutta.

The rates for piece-goods, yarn and cotton twist at owner's risk from Bombay via Jubbulpore were equalised with that via Itarsi.

Class rates for goods booked from and vid Asansol to and vid Katni were equalised with the Bengal-Nágpur railway route, that railway having abolished terminals on cross traffic.

The class rates from Delhi and vid to vid Umballa cantonment for traffic to Bhátinda, and vid Bhátinda, were equalised with those of the Bombay, Baroda and Central India railway route vid Rewári.

The double mileage charge on the Umballa-Kalka section of the Delhi-Umballa-Kalka railway was cancelled in connection with the goods traffic generally, including minerals and live-stock chargeable at goods rates.

The rates for bhoora, sugar and jaggree from all stations between Howrah and Cawnpore were adjusted with those on all competing routes.

The class rates for traffic to and from Agra were equalised with the Indian Midland railway vid Manikpur and vid Itarsi.

The class rates between Howrah and Sakrigali Ghât were adjusted with those by the Eastern Bengal (state) railway route vid Dámukdia.

The rates for gunny, screwed, hemp and jute, and hides and skins between Agra and Cawnpore in consignments of 270 maunds and over were equalised with the Indian Midland railway route.

The rates for soda, caustic soda, coarse soda, crystal soda and refined soda in consignments of 270 maunds and over from Howrah to Gháziabad were reduced to equalise with those from Kurrachee for traffic to the Meerut Soap Works.

#### Bengal-Nágpur Railway (standard gauge).

4. The mean mileage worked during the year was 831.58 miles against 810.72 miles in 1891.

The increase in the mean-mileage was due to the Jharsuguda-Goilkera and Birsinghpur-Biláspur sections having been worked for only a portion of 1891.

General results,

The following table shows the general results of the year's working as compared with those of 1891:

YEAR.	Mean mileage worked,	Train- mileage.	Gross earnings	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings,	Gross earn- ings per . mean mile worked per week.	Percentage of net earn- ings on total capital out- lay includ- ing sus- pense,
	Miles.	Miles.	R	R	R	1-	· R	
1831	810.72 831.28	1,154,004 1,469,596	54,57,356 60,83,561	27,72,904 30,75,396	26,84,452 30,08,165	50*81 50*55	129 141	3.10 3.20
Increase or decrease .	+ 20'86	+315,592	+6,26,205	+ 3,02,492	+ 3,23,713	-0.56	+ 12	+0.53
Percentage of increase or decrease	+ 2.57	+ 27.35	+11'47	+ 10,01	+ 12'06		+9'30	•••

Gross earnings.

The following table shows the gross earnings under main heads as compared with 1891:

		•						1891.	1892.	Increase or decrease.
		•					•	R	·R	·R
Coaching Goods Electric te Sundries	elegr	aph	•	•	•	•		9,30,522 39,96,661 22,961 5,07,212	11,11,283 45,61,506 18,427 3,92,345	+ 1,80,761 + 5,64,845 - 4,534 - 1,14,867
· ,		•		•	Тот	AL	. •	54,57,356	60,83,561	+6,26,205

\* 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.	
Year,	No.	Earn- ings.	No.	Earn- ings.	No.	Earn- ings.	No. *	Earn- ings.	No.	Earn- ings.
,		R		R		R		N.		R
1891 1892	5,695 4,926	24,710 22,314	20,596 22,194	25,815 27,419	35.365 29,864	18,406 14,289		7,51,518 9,25,3231		
Increase or decrease .	-769	-2,396	÷1,598	+ 1,604	-5,501	-4,117	+410,844	+1,73,805	+400,172	+ 1,68,896

During the year 1891 a considerable number of passengers, connected with gold-mining companies, travelled over the Ásansol-Chakardharpore section of the railway, and the decrease in first class traffic was largely attributable to the collapse of these ventures.

The decrease in number and earnings of the intermediate class was due chiefly to reduction in the third class fares.

The large increase in the third class traffic was, in a great measure, due to the line having been opened throughout for the whole of the year, and to the reduction in fare from  $2\frac{1}{2}$  to 2 pies per mile since October 1891; the improvement is also partly attributed to the introduction from October 1892 of an accelerated train service. The earnings under this head were to some extent favourably affected by pilgrim traffic to the Magh mela at Allahabad in February and to Hardwar in March 1892. The result would have been more favourable but for a severe epidemic of cholera in several districts bordering the line. While this epidemic lasted the villagers would not venture from their homes, and business generally suffered in consequence.

The average sum received for carrying a passenger one mile amounted to 2.08 pies against 2.42 pies in the previous year.

The coaching earnings per passenger train-mile were R2.98 against R3.23.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1891:

•	189	91	189	2.	Increase o	r decrease.
•	Tons.	R	Tons	R	Tons.	R
General merchandise Military stores Railway materials for con- struction (Home line	506,681 404	32,85,830 2,800		36.83,877 1,696	—48,053 —119	
only) Coal and coke for the pub-	189,011	2,69,457	257,260	3,31,402	+68,249	+61,945
lic and foreign railways  Coal and coke for con- struction .(Home line	361,964	2,79,844	<b>400, 1</b> 40	3,33,879	+38,176	+54,035
only) Coal and coke for revenue	3,311	<b>9</b> ,339	3,215	17,249	<b>.</b> —96	+ 7,910
only	31,134	1,03,378	46,997	1,70,727	+ 15,863	+67,349
coal and coke Live-stock	10,442			33,888	<b>+ 30,</b> 691 —100	. ,
Rents, miscellaneous, etc.	 113	25,421	_	-11,427	-100	—7,104 —36,848
Total .  Less—Outstandings irreco-	1,103,060	3 <b>9</b> ,96 <b>,7</b> 18	1,207,671	45,61,581	+ 104,611	+ 5,64,863
verable	•••	57	•••	. 75		+ 18
NET TOTAL .	1,103,060	39,96,661	1,207,671	45,61,506	+ 104,611	+5,64,845

The noticeable fluctuations of traffic under "General merchandise" are shown below:

:						Increas	se.	Decrease.		
	•	•		•	ľ	Tons.	· <b>R</b>	Tons.	R	
Cotton, raw				•		1,846	52,721		• • • •	
Cotton twist and	yarn	• .			.	731	10,430			
Dyes and tans		•	•			3,925	32,206			
Hides and skins		•	•	•		1,446	11,214		***	
Oils .	• .		•	•		4,936	96,589			
Spices .	•	•	•		.	1,515	65,020		***	
Sugar .	•		•	•		1,930	35,638		***	
Grains .			•	•		***	92,544	31,712	•••	
Jute .		•	•	•			•••	2,092	21,557	
Oil-seeds .	•					• • • •		22,688	85,96 <b>5</b>	
Stone and lime	•			•	•	•••		8,203	9,568	

Cotton, raw, and cotton twist and yarn.—The increase in cotton, raw, was chiefly due to despatches from Hinganghat and Berar to Cawnpore and other places in the North-Western Provinces and Oudh, via Nágpur and Katni. The increases in twist and yarn appear to be due to larger despatches from the Nágpur Empress Mills.

Oils.—The increase was due to larger quantities of kerosine oil having been imported by all stations on the line up to Nagpur from Howrah and Budge-Budge.

Spices.—The increase was mainly due to an improvement in the traffic in chillies from Bengal carried for local consumption. Considerable quantities were also booked vid Asansol and Nagpur to the Bombay Presidency.

Grains.—The falling off in the quantity carried was chiefly due to the failure of the wheat crops; the demand for export to Europe was not brisk, and owing to low prices ruling in the Bombay market such supplies as were available were held back in the hope of obtaining better rates. The increase in earnings was chiefly attributable to a larger quantity of rice having been booked to the famine-stricken districts in the Madras Presidency.

Oil-seeds.—The large decrease was chiefly attributable to failure of crops in the Nagpur, Chhattisgarh and other districts.

The decrease in the sundry earnings was due to a special credit in 1891, on account of arrear charges for interest and depreciation of rolling-stock lent to construction in previous years.

The average sum received for carrying a ton of goods one mile amounted to 7.77 pies against 7.96 pies in the previous year.

The goods earnings per goods train-mile were R4'16 against R4'62.

Working expenses.

The following table shows the working expenses during 1891 and 1892:

		<u> </u>	<u> </u>			
	. 189	1.	189	)2.	Increase	Percentage
•	Amount,	Per cent. on gross earnings.	. Amount.	Per cent on gross earnings.	or decrease in amount.	of increase or decrease,
Maintenance Locomotive Carriage and wagon Traffic General Special and miscellaneous	# 6,93,416 7,86,679 1,89,170 3,86,540 6,10,008 1,07,091	12'71 14'41 3'47 7'08 11'18 1'96	8,36,792 8,98,924 1,81,342 4,67,556 5,97,217 93,565	13.75 14.78 2.98 7.69 9.82 1.53	# 1,41,376 +1,12,245 -7,828 +81,016 -12,791 -13,526 +3,02,492	+ 20.68 + 14.27 4.14 + 20.96 2.10 12.63

The increase in the maintenance charges was due to a write-back of R2,00,462 on account of engineering establishment charges of previous years credited to this head in 1891.

The increases in the locomotive and traffic expenses were chiefly due to the working of the Asansol-Chakardharpore section having been taken over from the East Indian Railway Company.

The increase in the traffic expenses was also partly due to arrear charges on account of the Asansol and Kátni joint stations having been adjusted during the year.

The principal alterations in coaching fares and goods rates will be found noted on pages 141 and 142 of Part I of the Administration report.

#### Indian Midland Railway system (standard gauge).

5. The mileages of the several sections of the railway system were as follows: •

•									Miles.	
Indian Midland railway—	-				•					• .
Jhánsi to Bhopal	•	•	•	•	• •	•	•		180.20	
Jhánsi to Agra .	•	٠.	•	•	•	•	•	•	135 02	
Jhánsi to Cawnpore	•.	•	•	•	•	•	•	•	135 22	
Jhánsi to Mánikpur	•	•	•	•	•		•		180.37	
Bina to Saugor	•	•	•	•			•	•	46 24	
										677:35
Bhopal-Itársi railway	•	. •	•	•	•	•	•	•		• 57'11
Foreign lines worked over	F	•	•	•	•	•	•	•	•	19'32
•		•								753.78

The following table shows the general results of the year's working as General results. compared with those of 1891:

<b>У</b> еат.	Mean mileage worked.	Train- mileage.	Gross earn- ings.	Working expenses.	· Net earnings.	Percent- age of working expenses on gross earnings.	earnings per mean mile worked	Percentage of net earnings on total capital outlay, in- cluding suspense.
1891	Miles. 753 <sup>-6</sup> 5 753 <sup>-</sup> 78	Miles. 1,534,738 1,562,449	# 47,53,675 50,78,521	R 31,79,741 31,29,981	<i>R</i> 15,73,934 19,48,540	66·89 61·63	# 121 - 130	1.72
Increase or decrease .	+0.13	+ 27,711	+ 3,24,846	<b>-49,7</b> 60	+ 3,74,606	-5.26	+9	+037
Percentage of increase or decrease	+ 0.03	+ 1781	+6.83	—1·57	+ 23.81	***	+ 7'44	•

The following table shows the gross earnings under main heads as compared Gross earnings. with 1891:

						<u> </u>		
						1891.	1892.	Increase or decrease.
						R	R	R
Coaching Goods Electric telegraph Sundries	•	•	•	•	•	18,38,501 26,87,909 13,811 2,13,454	19,90,028 28,65,714 14,271 2,08,508	+1,51,527 +1,77,805 +460 -4,946
•		-	То	TAL	•	47,53,675	50,78,521	+ 3,24,846

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

	Yea			FIRST	CLASS.	SECOND CLASS.		THIRD CLASS, MAIL.			CLASS, NARY.	Total.	
				No.	Earn- ings.	No.	Earn- ings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
					R		R		R		R		R
1891		•	•	8,711	72,263	31,774	1,07,067	365,015	4,16,609	1,154,135	10,06,962	1,559,635	16,02,901
1892	•	•		8,986	75,664	29,969	1,03,483	396,790	4,66,560	1,294,192	11,08,784	1,729,937	17,54.491
Incre	ase or	decr	ease	+ 275	+3,401	1,805	-3,584	+31,775	. + 49,951	+ 140,057	+ 1,01,822	4 170,302	+ 1,51,590

• The ordinary passenger traffic was further developed and improved during the year, but a large part of the increased earnings from third class passengers is attributed to the occurrence of bathing festivals of exceptional importance at various places on the Ganges.

The average sum received for carrying a passenger one mile amounted to. 2.82 pies against 2.83 pies in the previous year.

The coaching earnings per passenger train-mile were R2'89 against R2'63.

Goods.—The following is a summary of the tonnage of goods listed and the earnings therefrom, as compared with 1891:

	18	91.	1892.		Increase of	or decrease.
	Tons.	R	Tons.	R	Tons.	R
Military stores	1,132	24,23,222 17,890	365,103 1,373	26,35,008 23,164	+34,870 +241	+ 2,11,786
Railway materials for construc- tion (Home line only)	11,697	48,768	23,463	30,639	+ 11,766	-18,129
Coal and coke for the public and foreign railways.  Coal and coke for construction	6,405	35,389	5,639	24,201	<b>-76</b> 6	-11,188
(Home line ony)  Coal and coke for revenue only	355 35,877	1,965 1,22,696	268 40,515	1,021 1,06,142	.,	
Revenue stores other than coal and coke	184,955	29,709 4,076	185,795	38,314		
Live-stock Rents, miscellaneous, etc.	,	4,194		4,413		+219
TOTAL	57%793	26,87,909	622,282	28,65,714	+ 51,489	+ 1,77,805

The noticeable fluctuations of traffic under "General merchandise" are shown below:

			$\cdot$	Inc	rease.	. Decre	ase.
Cotton, manufactured. Grains. Salt. Sugar and jaggree.	•	:	•	Tons. 1,620 8,578 3,066 8,624	23,359 43,875 21,390 1,05,627	Tons	R 

Grains.—There was a large decrease in the wheat traffic in the second-half of the year, but this was to some extent counterbalanced by an increase in rice and other grains, due, it is said, to the preference for these grains over wheat.

Sugar and jaggree.—The increase was due chiefly to an improvement in the local traffic, to increased imports into the districts served by the railway, and

to an increase in the cross traffic between the Oudh and Rohilkhand (state) and Great Indian Peninsula railways.

The increase in quantity carried under "Railway materials for construction (Home line only)" was chiefly due to a much larger quantity of ballast (which was carried at lower rates than other materials) having been moved during the first-half of the year. The decrease in earnings was the result of the adoption of the lower rates for the carriage of this material, recently prescribed by Government.

The increase in quantity under "Coal and coke for revenue only" was due to a larger quantity having been carried for the locomotive department in the first-half of the year. The decrease in earnings is accounted for by the East Indian railway having conveyed the coal for the Gwalior station to Agra instead of handing it over to the Indian Midland railway at Mánikpur.

The average sum received for carrying a ton of goods one mile amounted to 6.60 pies against 6.48 pies in the previous year.

The goods earnings per goods train-mile were R3.28 against R3.22.

The following table compares the working expenses during the years

Working expenses. 1891 and 1892:

. (	1891	i.	189	2,		Parcento de
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	Increase or decrease in amount.	Percentage of increase or decrease.
	R	<u>'                                    </u>	R	1	R	<u>,                                     </u>
Maintenance	6,77,080	14.54	6,67,316	13.14	<b>—</b> 9,764	— 1·44
Locomotive	10,36,911	21.81	10,60,353	20 88	+ 23,442	+ 2.27
Carriage and wagon .	2,21,033	4.65	2,35,179	4.63	+ 14,146	+ 6.40
Traffic	4,46,856	9.40	4,45,809	8.78		o.53
General	4,63,848	9.76	4,72,537	9.30	+ 8,689	+ 1.87
Special and miscellaneous	3,34,013	7.03	2,48,787	4.30	- 85.220	- 25.22
Total .	31,79,741	66.89	31,29,981	61.63	— 49,76 <b>o</b>	<b>— 1.22</b>

The increase in the locomotive expenses was principally due to the increased outlay under "Repairs of engines" necessitated by the increasing age of the engines.

.The increase in the carriage and wagon expenses was principally due to the increased expenditure on rolling-stock.

The decrease in special and miscellaneous expenditure was due to the fact that in 1891 a large sum was included to provide for payment, with arrears, for accommodation, etc., at certain joint stations.

The principal alterations in the coaching fares and goods rates will be found noted on pages 141 and 142 of Part I of the Administration report.

North Western Railway system (standard gauge).

6. The open mileage of the railway system was as follows:

•								2,610
the Khusálgarh branch		•	•	•	•	•	•	8464
Commercial section—(Main Military section—Sind-Pish	in an	d Sind	l-Saga	er rail:	wave	includ	ing.	

The mileage of the commercial section includes 108 miles of the Rájpura-Bhátinda railway and 59 miles of the Hyderabad-Umarkot railway worked by,

. and 16 miles of the Jammu and Kashmir railway (native state section) leased to, the North Western (state) railway.

The Amritsar-Pathankot railway, which had hitherto been treated as a provincial leased line, was, under the new Provincial Contract, transferred to the Imperial charge, and absorbed into the North Western (state) railway system, with effect from 1st April 1892.

The mean mileage worked during the year was 2,574\* miles against 2,503\* miles in 1891.

The increase in the mean mileage was principally due to the opening during the year of the following lengths of lines:

Kundian to Mari	 •	_	Miles.
Hussainiwala to Ferozepore City.	•	-	2
	•	•	3
Killa Abdulla to Chaman			281
Hyderabad-Umarkot railway, Giddu		-	59

The Wazirabad-Khanki branch, 11 miles, was taken over by Punjab Irrigation Department from the 1st May 1892.

Separate accounts are maintained of the earnings of the Rajpura-Bhátinda and the Hyderabad-Umarkot railways, but, for the purposes of this review, the transactions of these railways have been included with those of the North Western (state) railway.

The following table shows the general results of the year's working, as General results. compared with those of 1801:

YEAR.	Mean mileage. worked.	Train- mileage.	Gross . earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earn- ings.	mean mile worked per	ings on total
1891	Miles. 2,503 2,574	Miles. 9,335,871 8,108,226	2,31,85,955 2,70,32,924	2,07,13,725 1,72,86,524	R 1,24,72,230 97,46,400	62'42 63'95	255 202	3 <sup>0</sup> 3 2 <sup>2</sup> 4
Increase or decrease	+71	—1,227,645	—61,53,031	——————————————————————————————————————	-27,25,830	+1.23		-0*79
Percentage of increase or decrease.	+ 2'84	—13.12	—18.24	—16·55	<b>—2</b> 1 86	. •••	<b>—20°78</b>	444

The figures relating to the three sections, viz. the main line and branches the Sind-Sagar and Khusálgarh branches, and the Pishin section for 1891 and 1892 are given below:

	Main line and branches.			r and Khu- branches.	Pishin	section.	TOTAL.		
-	18g1.	1892.	1891.	· 1892.	189r.	1892.	1891.	1892.	
Gross earnings Working expenses.	<b>2</b> ,96,01,898 1,63,26,571	<b>2</b> ,39,97,491 1,33,07,753	# 15,36,550 11,13,469	2 13,78,810 11,84,621	20,47,507 32,73,685	R 16,56,623 27,94,150	2 3,31,85,955 2,07,13,725	2,70,32,924 1,72,86,524	
Net earnings .	1,32,75,327	1,06,89,738	4,23,081	1,94,189	—12,26,178	-11,37,527	1,24,72,230	97,46,400	

The net earnings of the main line were less by R25,85,589 than in the previous year, due chiefly to a lighter wheat traffic in consequence of failure of the crops and the dull state of the English market. The breaches in the line caused by the floods also, to some extent, affected the flow of traffic. The net earnings of the main line yielded a return of 3'42 per cent. on the total capital

Includes 13 miles of the East Indian railway, between Ghaziabad and Delhi, worked over by the North Western

outlay including suspense. The net earning of the Sind-Sagar and Khusálgarh branches amounted to R1,94,189 against R4,23,081 in 1891, giving a return of 0.57 per cent. on the capital cost of the line; the decrease mainly occurred under "General merchandise." The Pishin section continues to be worked at a loss; the gross earnings of the line decreased by R3,90,884, as compared with the earnings of the previous year, but as the working expenses were less by R4,79,535, the net loss amounted to R11,37,527 against R12,26,178 in 1891.

The following table shows the gross earnings under main heads as com-Gross earnings. pared with 1801:

•				•	1891.	1892.	Increase or decrease.
Carabian	•				R	<i>R</i> 98,23,101	R 5,40,414
Coaching Goods	•	•	•	•	1,03,63,515 2,23,41,351	1,66,99,145	-56,42,206
Electric telegraph	•	•	•		79,446	73.443	-6,003
Steam-boat .		•	•	•	6,550	26,577	+ 20,027
Sundries	•	•	•	•	3,95,093	4,10,658	+ 15,565
		To	TAL	•	3,31,85,955	2,70,32,924	-61,53,031

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

			Train-	Average number of trains over		R TRAIN-MI	LB.	•Average	Average weight of
		mileage worked.	mileage.	the whole line daily in both direc- tions.	Gross earnings.	Working expenses.	Net earnings.	of passengers in a passen- ger train.	goods in a goods train.
1891 . 1892 .	•	Miles. 2,503 2,574	Miles. 9,335,871 8,108,226	No. 10'22 8'61	2°55 3°55 3°33	22 2.13	7.33 1.30	No. 208.65 189.10	Tons. 126.99 115.57

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

=	Firs	Γ CLASS.	SECON	D CLASS.	INTERMED	IATE CLASS.	S. THIRD CLASS. Tota		Тота	L,
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
1891 1892 Increase or decrease	42,776 40,857 —1,919	2 3,26,427 3,06,433 —19,994	125,420 130,377 +4,957	# 10,078	·		10,432,420 10,707,903 + 275,483	73,36,532		85,25,786

The improvement in the second class passenger traffic was mostly due to the movement of European soldiers from Kurrachee to Meerut, Umballa and Quetta, and in the intermediate class to the more extended use of this class by the upper class of natives. The decrease in earnings from third class passengers may be attributed generally to a sickly season, slackness of trade and breaches on the line. The increase in number carried with decreased earnings is accounted for by the average distance travelled by passengers having been greater in 1891.

The other items of coaching traffic are compared in the following table:

	·		Military bag- gage, horses, carriages, etc.	Passengers' luggage.	* Carriages, horses, dogs, etc.	Parcels.	Special trains.		
•					K	R	R	R	K
1891	•		•	•	5,10,532	2,47,946	1,55,522	4,69,232	28,36 <b>2</b>
1892	•	• .	•	•	3,00,039	2,17,225	1,44,104	4,40,853	18,098
Decreas	e	•	•		2,10,493	30,721	11,418	28,379	10,264

The decrease under "Military baggage, etc.," was due to fewer movements of troops, and to the refund of about \$57,000 on account of re-adjustment of charges on mule trains during the preceding year.

The decrease under "Passengers' luggage" was due to a smaller third class passenger traffic.

In 1891 the parcel traffic was abnormally high, due to large bookings of parcels for the Frontier expedition. Had not this been the case, the parcels traffic, which shows a steady increase since 1888, would have resulted in an increase in 1892.

The average sum received for carrying a passenger one mile amounted to 2.62 pies, the same as in the previous year. The coaching earnings per passenger train-mile were R2.97 against R3.36.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom, as compared with 1891:

	• 189	)1.	18	92.	Increase or decrease.	
	Tons.	R	Tons.	R	Tons.	R.
General merchandise	2,399,569	1,97,37,497	1,669.689	1,43,10,011	<b>-729,880</b>	- 54,27,485
Military stores	33,280	4,92,056	25,479	5,74,000	7,801	+81,934
Railway materials for con- struction (Home line only). Coal and coke for the public	504,110	2,40,317	375,348	3,01,447	- 128,762	+ 61,130
and foreign railways	18,208	53,224	11,306	43,071	-6,902	-10,15
Coal and coke for construction (Home line only) Coal and coke for revenue	71086	22,507	5,951	18,202	—r,135 <sup>1</sup>	-4.30
only:	143,577	4,57,068	158,892	4,06,325	+ 15,315	-50,74
Revenue stores other than coal and coke	1,116,077	12,17,253	£,257,290	9.29,080	+ 141,213	-2,88,17
Live-stock	2,036	77.557	2,353	70,122	+317	-2,00,170 -7.435
Rents, miscellaneous, etc.		43,862	•,	46,887		+ 3.02
Total .	. 4,223,943	2,23,41,351	3,506,308	1,66,99,145	<b>-717,635</b>	- 56,42,200

The noticeable fluctuations in the traffic under "General merchandise" are shown below:

		1	Incr	EASE.	DEC	REASE.
•		Ī	Tons.	R	Tons.	* #
Cotton, raw	•			,,,	3,517	60,009
Cotton piece-goods	•	- 1			1,308	74,251
Grains	• •	i	•••		470,088	49,30,349
Jute, including gunny bags and cl	oth		i		10,789	67,695
Provisions	• .	.	15,550	1,13,381	•••	•••
Railway plant and rolling-stock	•	-1	8,912	94,330	***	
Sugar		•	825	87,381	***	
Stone and lime	•	- {	***	***	163,164	2,67,204
Wool	•		***		i,336.	75,176
• •		1				•

Grains.—The large decrease the bulk of which was in wheat, and amounted to 376,839 tons and R46,51,263, was due to a short crop and to dull European markets. There were also large importations of grain in 1891.

Provisions.—The increase was chiefly in the traffic from the East Indian railway vid Umballa and from Kurrachee and Kiámári; there was also a considerable increase in the outward traffic of Kurrachee, Chaman and Kila Abdulla.

Stone and lime.—The decrease was due to the completion of the Chenab Weir works.

Wool.—The decrease was in the bookings from Kila Abdulla and Chaman. The decrease in tonnage under "Military stores" was due to large bookings having been made in 1891 from Quetta to Quetta sidings. The increase in earnings occurred in bookings from Quetta, Ferozepore, Ráwalpindi and Pesháwar.

The decrease in tonnage under "Railway materials for construction (Home line only)" was due to a smaller number of ballast trains having been run for the gradient works, but the increase in amount indicates longer leads of other railway material.

The increase in tonnage and decrease in earnings under "Coal and coke for revenue only" was probably due to shorter leads in 1892, arising from the extended use of Dandot and Khost coal.

There was an increase in tons of 141,213 and decrease in earnings of R2,88,173 under the head "Revenue stores other than coal and coke." The former was chiefly due to more ballast trains having been run on the line, while the decrease in earnings is accounted for by reduction in bookings of stone from quarries for bridge protection and other works.

The average sum received for carrying a ton of goods one mile amounted to 5.78 pies against 5.40 pies in the previous year.

The goods earnings per goods train-mile were R3.48 against R3.57.

The following table shows the working expenses of the railway system Working expenses. during 1891 and 1892:

	1891	t.	. 1892	2,		
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	Increase or decrease in amount.	Percentage of increase or decrease.
• .	R		Ė		Ř	
Maintenance .	. 76,39,938	23.02	54,93,800	20'32	-21,46,138	- 28'09
Locomotive .	. 67,74,753	20'41	63,39,534	23.45	-4,35,219	-6.42
Carriage and wagon	. 22,74,730	6.85	13,65,657	5.02	-9.09,073	- 30.06
Traffic	. 24,37,761	. <b>7</b> 35	25,13,892	9.30	+ 76,131	+3.13
General	11,83,614	3.57	11,86,392	4 40	+ 2,778	+ 0.33
Steam-boat	. 80,607	0.24	70,139	0.26	<b>—</b> 10,468	-12'99
Special and miscell	la-			<b> </b> .		]
neous .	3,22,322	<b>o</b> .08	3,17,110	1.12	-5,212	- 1.63
TOTAL	. 2,07,13,725	62.42	1,72,86,524	63:95	-34,27,201	-16.22

The decrease in the maintenance charges chiefly occurred under "Maintenance and renewal of permanent-way," although the number of miles of rail renewed were 354.18 against 244.66 in 1891. This was due to the fact that a large debit on account of permanent-way material was raised in 1891, while the material was actually laid in 1892. The restoration of the flood damages cost about R8,36,000.

The decrease in the locomotive expenses chiefly occurred under "Fuel" (R2,94,544), and "Carriage of revenue stores" (R1,04,491), due to lighter traffic in 1892.

The decrease in carriage and wagon expenses mainly occurred under "Repairs and renewals of vehicles" (R8,20,715), the number of vehicles renewed in 1892 having been 32 coaching and 93 goods against 17 coaching and 544 goods in the preceding year.

The increase in traffic expenses occurred chiefly under "Station" and "Train" staff, due to extra staff engaged for the Kundián-Mári branch and the Chaman extension of the Sind-Pishin section.

Out-agencies at Mussoorie, Dehra, Rajpur, Chakrata and Murree were open during the year. Additional Out-agencies were also opened at Kalsi, Palampur, Dharmsala, and Dalhousie; the one at Kalsi from 1st January, and the other three from the 15th February 1893.

The chief alterations in the goods rates will be found noted on page 142, .

Rates and fares. Part I, of the Administration report.

#### Oudh and Rohilkhand (state) Railway (standard gauge).

7. The following table shows the general results of the year's working as General results. compared with those of 1891:

Year.	Mean- mileage worked.	Train- mileage,	Gross	Working expenses.	Net carnings.	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.
1891 1892	Miles. 692.55 692.55	Miles. 2,272,452 2,438,993	85,64,209 85,42,836	26,21,751 35,26,507	# 49,42,458 50,16,329	42.29 41.28	238 237	5 33 5 43
Increase or de- crease		+ 166,541	-21,373	<b>-</b> 95,244	+73,871	—1.01	• -1	+0.10
Percentage of increase or decrease .		+7:33	-0.52	-2.63	+1.49	•	-0.42	

The increase in the train-mileage was due to a larger number of ballast trains having been run for engineering purposes and to the light running caused by the stoppage of the Hardwar fair.

The following table shows the gross earnings under main heads as compared Gross earnings. with 1891:

			,,		•		•	
,		•				1891.	. 1892.	Íncrease or decrease,
,		-			.	R	• R	R
Coaching	•	•		•		38,42,518	37,57,481	-85,037
Goods Electric telegraph	•	•	•	:	•	42,75,549 26,589	44,12,793 26,808	+1,37,244 +219
Sundries	•	•	•	•		4,19,553	3,45,754	-73,799
	•	•	Тот	ΓA <b>L</b>	•	85,64,209	85,42,836	-21,373

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 OR LOWEST CLASS.		TOTAL.		
	No.	Earnings	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
1891 1892 •	20,098 20,532	R 1,12,921 1,15,907	54,103 57,351	£ 1,20,640 1,35,110	99,193 104,383	R · 1,04,214 1,05,246	5,080,888 5,161,860		5,254,282 5,344,126	. R 34,95,397 34,08,527
Increase or decrease	. +434	+2,986	+3,248	+14,470	+5,190	+1,032	+80,972	-1,05,358	+ 89,844	-86,87a

The increase in the number of passengers carried was mainly due to the National Congress held at Allahabad in December 1892 and to the Kartikie bathing fair which took place during the second-half of the year. The increase in the number of third class passengers carried with decreased earnings was due partly to the shorter distance travelled and partly to refunds made to passengers who were booked and not permitted to proceed as far as Hardwar during the fair.

The average sum received for carrying a passenger one mile amounted to 2.67 pies against 2.65 pies in the previous year.

The coaching earnings per passenger train-mile were R3.45 against R3.66.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1891:

•	. 18	91.	18	92	Increase o	r decrease.
<b> </b>	Tons.	R	Tons.	R	Tons.	R
General merchandise	824,792	37,27,098	870,163	40,30,863	+45,371	+3,03,765
Military stores	2,632	26,406	3,453	35,890	+821	+ 9,484
(Home line only).  Coal and coke for the public and	45,534	23,621	22,014	38,238	<b>—23,520</b>	+14,617
foreign railways	46,382	2,70,374	18,048	67,948	-28,334	-2,02,426
Coal and coke for construction (Home						• .
line only)	•••		1,383	5.047	+1,383	+5,047
Coal and coke for revenue only Revenue stores other than coal and	36,931	1,37,067	38,085	1,25,922	+1,154	-11,145
coke · · ·	79,898	. 62,313	274,658	78,507	+94,760	+16,104
Live-stock	298	10,329	284	9.045	-14	68 <sub>4</sub>
Rents, miscellaneous, etc.	•••	18,341		20,733		+2,392
TOTAL .	1,136,467	42,75,519	1,228,088	44,12,793	+91,621	+1,37,244

The noticeable fluctuations in the traffic under "General merchandise" are shown below:

						-	Incr	BASB.	DECREASE.			
•		•				į.	Tons.	R	Tons.	R		
Grains	•	•	•	•	. •.	•	1:.		54,538	1,57,427		
Oil-seeds	•	•		í	•	•	12,235	63,475				
Sugar .		<u> </u>		•	•	· •   =	74,788	3,21,185		•••		

Grains.—The decreases occurred mainly under the following staples:

		-			1	ons.	R	
Wheat .	***		***		25	,250	93,120	
Gram	•••		144	•	<b>.~</b> 16	495	44,771	
Other grains	•••		•••		9	,800	33,090	

The large falling off in the wheat traffic is attributed to the dull tone of the European market. The exports during the second-half of 1891 were abnormal.

Oil-seeds.—The increase was mainly due to a fair demand for export of linseed to Europe.

Sugar.—The large increase was in sugar, undrained, and was due mainly to the sugar-cane crop of 1891, which was much later than usual, having been carried in the year under review.

The large decrease under "Coal and coke for the public and foreign railways" was due to coal booked from Bengal to the Punjab having been diverted from the Moghal Sarai-Saháranpur route over the Oudh and Rohilkhand (state) railway to the Moghal Sarai-Gháziabad route over the East Indian railway.

The average sum received for carrying a ton of goods one mile amounted to 5'80 pies against 5'44 pies in the previous year.

The goods earnings per goods train-mile were R3.27 against R3.50.

The following table compares the working expenses of the railway during Working expenses. 1891 and 1892:

	· 18ġ	τ.	189	2.	Increase or	Percentage of increase
•	Amount	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	decrease in amount.	or decrease
•	R	•	R		R	
Maintenance	8,98,275	10'49	10,38,951	12.16	+ 1,40,676	+ 15.66
Locomotive	12,11,926	14 15	10,45,427	12.24	-1,66,499	- 13.74
Carriage and wagon	3,08,051	3.60	3,06,789	3.28	-1,262	-0.41
Traffic	6,84,369	7.99	6,44,454	<b>7</b> 55	39,915	- 5 <sup>.8</sup> 3
General	4,35,660	. 5*09	4,02,438	4.41	-33,222	<b>— 7</b> .63
Special and miscellaneous	83,470	<b>0</b> *97	88,448	1.03	+ 4,978	+ 5.96
TOTAL	36,21,751	42.59	35,26,507	41.38	<b>-</b> 95,244	<u>- 2.63</u>

The increase in the maintenance charges was chiefly due to heavy renewals of permanent-way, and to the cost of materials having been higher owing to the fall in the rate of exchange.

The decrease in the locomotive expenses was nominal as the expenditure in 1891 included a payment of Re2,14,462 to the East Indian railway for arrear freight charges for coal. Eliminating this payment the expenditure in 1892 showed an increase of R47,963, mainly due to the issue of coal at a higher rate than in 1891.

The chief alterations in the coaching fares and goods rates will be found noted on pages 141 and 142, Part I of the Administration report.

## Eastern Bengal Railway system (standard, metre and special gauges).

8. The mean-mileage worked during the year was 902.15 miles against 902.04 miles in 1891. The open mileages of the several sections were as follows:

								Miles.
Eastern and Southern sec	tions	•	• •	. •	•	.•	•	248.72
Northern, Assam-Behar a	ind D	acca s	ection	is .	•	•	•	491'39
Kaunia-Dharlla branch	•	•						37.03
Bengal Central railway	•	• •	•	i	•	•	•.	125.01
·					•		_	
		•						905.12
•						-		

The following table shows the general results of the year's working as com-General results. • pared with those of 1891:

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 earn- ings on total capital out- lay, includ- ing suspense.
<del></del>	Miles.	Miles.	R	R	R		R	
1891.	902'04	3,542,698	1,34,87,106	66,27,270	68,59,836	49'14	270	6.13
1892	902.12	3,440,625	1,23,25,793	57,79,163	65,46,630	46.88	249	5'75
Increase or decrease	+0.11	102,073	11,61,313	+8,48,107	-3,13,206	-2.52	-21	-o.38
Percentage of increase or decrease	+0.01	<b>—2</b> 88	—8·61	-12·80	<b>-4</b> '57	<b>***</b> ·:	<b>—</b> 7.78	•••

The following table shows the gross earnings under main heads as Gross earnings. compared with 1891:

******										
	•	<u> </u>	<del></del>	<del> </del>	•	1891.	1892.	Increase or decrease.		
•	•				•	R	R	R		
Coaching Goods Electric telegraph Steam-boat Sundries	•	•	••	•	•	\$1,12,643 72,36,618 · 34,293 8,13,244 2,90,308	45,70,884 67,97,966 35,367 6,26,933 2,94,643	-5,41,759 -4,38,652 +1,074 -1,86,311 +4,335		
•	٠,		To	ΓA <b>L</b>		1,34,87,106	1,23,25,793	-11,61,313		

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

<del></del>	FIRST 'CLASS.		CLASS.	SECOND	CLASS.		CLASS. • THIR		CLASS.	TOTAL.			
	•	;		No.	Earnings	No.	Earnings	No.	Earnings.	No.	Earnings.	No.	Earnings
	•	•	Ì		R		R		R	-	R	•	R
1891	:•	• .		45,120	1,51,349	167,385	1,80,700	1,195,776	5,39,117	9,051,938	37,08,470	10,460,219	45,79,636
1892	•	•	•	46,510	r,59,040	160,721	1,79,517	1,213,054	5,08,256	8,820,204	32,54,614	10,240,489	41,01,427
Increa	se or d	lecreas	æ.	+ 1,390	+7,691	-6,664	-1,183	+ 17,278	<b>—30,86</b> 1	-231,734	-4,53,856	-219,730	-4,78,209

The increase in the number of intermediate class passengers carried with a decrease in the earnings was due to the extended use of intermediate class return tickets for short journeys.

The decrease in number and earnings from third class traffic was due to the heavy third class traffic in 1891 on the occasion of an important bathing festival.

The average sum received for carrying a passenger one mile amounted to 2.75 pies against 2.74 pies in the previous year.

The coaching earnings per passenger frain-mile were R2.71 against R2.98.

Goods.—The following is a summary of the tonnage of goods lifted, and the earnings therefrom, as compared with 1891:

	13	891.	. 1	892.	Increase or decrease.		
•	Tons.	R	Tons.	R	Tons.	R	
General merchandise .	1,040,880	66,37,926	1,013,018	63,56,357	-27,862	-2,81,560	
Military stores	891		867	4,479	-24		
Railway materials for construction (Home line						, 400	
only)	57,781	1,07,466	53,371	1,00,148	-4,410	<b>—7</b> ,318	
Coal and coke for the public and foreign rail-				•	}		
ways	129,765	1,69,495	171,398	1,35,074	+41,633	<del>-34,42</del> 1	
Coal and coke for revenue		27.130			' ' ' '	37,72.	
only	111,018	1,47,003	80,020	87,174	-30,998	· <del></del> 59,829	
than coal and coke .	69,537	1,15,808	48,592	74,470	-20,945	41,338	
Live-stock	591	9,636	99	1,471	,,,,,	—8,16s	
Rents, miscellaneous, etc.		45,273		38,793	<del>-</del> 492	<b>—</b> 6,486	
TOTAL .	1,410,463	72,36,618	1,367,365	67,97,966	<b>—43,09</b> 3	<b>—4,38,65</b> 2	

The noticeable fluctuations of traffic under "General merchandise" are shown below:

				Incre	ase.	Decrease.		
	•	•		Tons.	<i>R</i> .	Tons.	<i>R</i> .	
ds		•		4,526	51,387	***		
•	•	•	1	•••		38,819	1,21,812	
•	•			•			2,31,351	
:	•		•	27,020	27,854	•••	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
•	•		1	. 9,415				
•				3,763		]	•••	
•	•			2,700	27,292	• •••		
	•	ds .		ds .	Tons.  4,526 27,020 9,415 3,763	Tons. R  4,526 51,387 27,020 27,854 60,591 3,763 31,052	Tons. R Tons.  4,526 51,387 38,819 38,819 12,300 12,300 12,300 12,300 3,763 31,052	

Cotton piece-goods.—The increase was due to large despatches from Calcutta and the Port Trust railway stations to the districts served by the Northern, Central and Dacca sections, and also by the Rivers Steam Navigation Company's Steamer Service to Assam via Goalundo.

Grain.—The decrease was on account of short crops, due to scanty rainfall. Fute.—The decrease occurred in the first-half of the year, and is attributed to the failure of the jute crop of the season 1891-92.

Kerosine oil.—The increase was due to larger despatches from Budge-Budge consequent on the prohibition of carriage by boat within certain limits of the Port of Calcutta.

The increase in quantity under "Coal and coke for the public and foreign railways" was chiefly due to the opening of Messrs. Mackinnon, Mackenzie's coal depôt at Brace Bridge Hall; the decrease in earnings was due to the low rates charged for all coal.

The decrease under "Coal and coke for revenue only" was due to a smaller consumption for locomotive purposes, owing to the decrease in the train-mileage

The decrease under "Revenue stores other than coal and coke" was due to the completion of relaying works on the Northern section, for which more stores were carried during 1891.

The average sum received for carrying a ton of goods one mile amounted to 8.51 pies against 8:80 pies in the previous year.

The goods earnings per goods train-mile were R3 68 against R3 96.

The following table compares the working expenses of the railway during Working expenses. . 1891 and 1892:

	. 18	91.	. 189	2.		
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	Increase or decrease in amount.	Percentage of increase or decrease.
Maintenance Locomotive Carriage and wagon Traffic General Steam-boat Special and miscellaneous Total	 19,44,987 12,99,922 5,22,765 13,05,713 6,04,830 7,42,667 2,06,386	14*42 9*64 3*88 9*68 4*48 5*51 1:53	11,04,458 12,73,012 4,32,123 12,78,198 6,10,766 6,29,020 4,51,586 57,79,163	8.96 10.33 3.50 10.37 4.96 5.10 3.66	28,40,529 -26,910 -90,642 -27,515 +5,936 -1,13,647 +2,45,200	-43'22 -2'07 -17'34 -2'11 +0'98 -15'30 +118'81

The decrease in the maintenance charges occurred chiefly under "Maintenance and renewals of permanent-way," due principally to more extensive relaying on the Eastern and Northern sections in the previous year. During the year under review only 0.03 miles of rails were relaid on the standard gauge portion, and 24.05 miles on the narrow gauge portion, against 12.43 miles and 39.47 miles, respectively, in 1891.

The decrease was also due to a write-back to capital of R52,898 on account of the value of additional Denham and Olphert's sleepers put into the line, and to a considerable decrease under "Repairs of bridges," owing to the abnormal expenditure on repairing damages on the Assam-Behar section by the floods of 1890 having been included in the accounts for the first-half of 1891.

The decrease in the carriage and wagon expenses occurred principally under "Repairs and renewals of coaching and goods vehicles."

The decrease in the steam-boat expenses was principally due to compensation claims paid during 1891, on account of goods lost and damaged by the sinking of a flat at Kooshtea in October 1889, and by the burning of another flat at Raita in November 1890.

The increase in the special and miscellaneous expenditure was chiefly due to arrear freight charges on coal, from January 1889 to September 1891, amounting to R2,23,278, paid to the East Indian railway.

On and from the 8th July 1892 the Megna Junction feeder steamer service was discontinued, and the India General Steam Navigation Company's Cachar steamers ran into and from Narayanganj.

The chief alterations in the goods rates will be found noted on page 142,

Rates and fares. Part I of the administration report.

### Calcutta Port Commissioners' Railway (standard gauge).

9 The following table shows the general results of the year's working as
General results. compared with those of 1891:

YEAR.	Mean mileage worked,	Train- mileage.	Gross ear dings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earnings per mean mile worked per week.	Percentage of net earn- ings on total capital outlay, including suspense.
1891	Miles. 6'22 6'22	Miles.	3,10,459 2,70,920	# 1,47,029 1,40,005	1,63,430 1,30,915	47'36 51'68	960 838	2'83 2'26
Increase or decrease	401		-39,539	<b>−7,</b> 024	-32,515	+4'32	-122	-o·57
Percentage of in- crease or decrease	644	***	-12'74	-4.18	19'90		·—12·71	ę ·

There are only two sources of revenue, viz., goods and sundries, the earnings obtained from which are shown in the following table:

•			•	٠.			1891	1892.	Increase or decrease.
			•				R	R	R
Goods Sundries	•	•	:	••	: :	•	2,99,089 11,370	2,48,662 22,258	-50,427 +10,888
	• •	•			TOTAL	• .	3,10,459	2,70,920	-39,532

Working expenses.

The following table shows the working expenses during 1891 and 1892:

	1891		18	92.	Increase	Da
•	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	or decrease in amount.	Percentage of increase or decrease.
Maintenance Locomotive Carriage and wagon Traffic Greneral Special and miscellaneous TOTAL	R 12,344 21,197 7,597 82,115 12,033 11,743	3.97 6.83 2.44 26.45 3.88 3.79	24,337 10,703 72,171 12,091 7,643	4'82 8'99 3'95 26'64 4'46 2'8	# 7,16 +3,140 +3,106 -9,944 +58 -4,100	+5.80 +14.81 +40.88 -12.11 +0.48 -34.91 -4.78

No record of train-mileage is kept.

#### Great Indian Peninsula Railway system (standard gauge).

10. The mean mileage worked during the year was 1,490.08 miles against 1,489 13 miles in 1891. The open mileages of the several sections were as follows:

						Miles.
vay		•	•			1,286.77
•		•	•	•	•	44.88
y	•		•			145'44
•	•	•	•	•	•	7.55
•	•	•	•	•	•	5.44
						1,490.08
)	•	, .	· · · · · ·	,		

The following table shows the general results of the year's working as compared with those of 1891:

Year.	Mean mileage• worked.	Train- mileage.	Gross earnings.	Working expenses.	Net earnings.	*Percent- age of working expenses on gross earnings,	Gross earn- ings per mean mile worked per week.	Percentage of net earn- ings on total capital outlay, including suspense.
	Miles.	Miles.	#		R	12:50	R	0
1891 1892	1,489°13 1,490°08	9,785,576	4,06,65,627	2,15,49,976 2,00,05,340	2,06,60,287	47.62 49:19	584 525	8·05 7·02
Increase or decrease .	+ 0.02	<u>632,439</u>	<del>-45</del> ,89,706	-15,44,636	<u>-30,45,070</u>	+ 1.57	<b>—</b> 59	-1.03
Percentage of increase or decrease .	+ 0.06	— 6·0 <b>7</b>	—10·14	<b>—</b> 7'17	— 12 <sup>.</sup> 85	******	— 10·10	

The divisible surplus profits of the first-half of 1892 at the date of submission of accounts amounted to \$76,17,155 as against \$1,03,52,684 in the first-half of 1891, the decrease being R27,35,529. There were no surplus profits in the second-half of 1892, the net earnings amounting to R62,34,316 having fallen short of the guaranteed interest charges by R5,04,151.

After deducting from the net earnings of the year the Great Indian Peninsula Railway Company's moiety of surplus profits, charges for guaranteed interest and contribution to Provident Fund, the net result showed a gain to the State for the year of R33,04,427 as against the gain of R49,67,416 in 1891, or a falling off of R16,62,989.

The following table shows the gross earnings under main heads as compared with 1891: Gross carnings.

						-		
						1891.	1892.	Decrease.
,						R 0 00 .		R
Coaching	•	•	•	•	•	90,87,884	89,58,793	1,29,091
Goods		•	•	•	•	3,57,37,728	3,13,19,876	44,17,852
Electric telegraph	•	•	•	•	•	73,105	72,931	174
Sundries		•	•	•	•	3,56,616	3,14,027	42,589
			Tot	AL	•	4,52,55,333	4,06,65,627	45,89,706

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

<del>*</del>	First	CLASS. SECOND		ECOND CLASS. THIRD CLASS BY MAIL.		THIRD C		Total.		
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
1891 • 1892 •	75,683 .77,708		568,075 542,975		549,246 655,900		11,604,477		12,897,481	
Increase or decrease	+ 2,025	17,095	-25,100	+ 34,137	+6,654	-18,635	+91,496	-61,080	+ 75,075	-62,673

Including contribution to the Provident Fund, and expenses incurred direct by the State on leased lines.

The decrease in first and the third class and the increase in second class earnings were chiefly due to shorter and longer leads respectively.

The average sum received for carrying a passenger one mile amounted to 2'70 pies against 2'71 pies in the previous year.

The coaching earnings per passenger train-mile were R262 against R272.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1891:

	ı	891 <b>.</b>	1	892.	Increase or decrease.		
	Tons.	R	Tons.	R	Tons.	R	
General merchandise Military stores Railway materials for construc-	2,275,670 9,258	3,32,10,429 2,46,576	2,063,596 10,006	2,90,68,123 2,30,959	-212,074 +748	-41,42,306 -15,617	
tion (Homeline only) Coal and coke for the public and foreign railways	75,699 87,281		112,994	•			
Coal and coke for construction (Home line only)	24				—3,514 —8	,	
Coal and coke for revenue only Revenue stores other than coal	229,885	1			•	_	
and coke Live-stock Rents, miscellaneous, etc.	520,520 9,059 				<del>-397</del>		
Total .	3,207,396	3,57,37,728	2,961,305	3.13.19,876	—246,091	<del>44,17,852</del>	

The noticeable fluctuations of traffic under "General merchandise" are shown below:

•				Increase. Decrease.			rease.	
•	٠				Tons.	A.	Tons.	R
Cotton, raw . Cotton piece-goods	•	•			1,217	•••	 1,188	1,42,765
Dyes and tans .	•	•	•		6,332	79 823		55,509
Grains	•	•	•	•		***	149,340	24,03,772
Jute	•	•	• •	•		•••	5,076	83,755
Oils	•	•	•	• ]	•••	***	1,333	. I,44,452
Oil-seeds	•	••	•	· i			35,851	8,94,689
Provisions		•	•	•			27,173	4,00,314
Sugar	•	•	•	•		}	• 3,753	1,81,426

Cotton, raw. - Decrease in earnings due to shorter average lead.

Cotton piece-goods.—The decrease was probably the result of the fall in exchange.

Grains.—The large decrease under this head was chiefly in wheat, jawar, and bajra. There was less demand in the European markets for wheat in 1892, and a larger importation of jawar and bajra into Madras and the Southern Mahratta country in 1891 due to scarcity.

Oils.—The decrease was partly due to a falling off in the kerosine oil traffic sent from Calcutta viā the Bengal-Nágpur railway to stations on the Nágpur branch of the Great Indian Peninsula railway and partly to failure of the castor-oil crop.

Oil-seeds.—The decrease was principally due to failure in the linseed and tilseed crops in the districts served by this railway.

Provisions.—The decrease occurred in the traffic in groundnuts and was due to a smaller area having been under cultivation.

Sugar.—The decrease in this traffic was due to partial failure of the sugarcane crop in the South-East district and to the falling off in the imports into Bombay from Mauritius.

The average sum received for carrying a ton of goods one mile amounted to 8.17 pies against 8.46 pies in the previous year.

The goods earnings per goods train-mile were R4.92 against R5.05.

The following table shows the working expenses of the railway system during Working expenses, 1891 and 1892:

	1891		1892.	<del></del>	_	Percent-
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	Increase or decrease in amount.	age of increase or decrease.
ı	R		R		R	
Maintenance	54,92,062	12'13	49,53,999	12.18	<b>—5,38,062</b>	- 9.8o
Locomotive	86,10,191		77,52,128	19.06	-8,58,063	-9.97
Carriage and wagon .	22,27,021		20,43,153	-	-1,83,868	
Traffic .	29,99,568	6·63	30,05,587	7'39	+6,019	+020
General	13,17,440	2.01	13,41,977	3.30	+ 24,537	+1'09
Special and miscellane-					_	1
ous	9,03,694	2.00	9,08,496	2.24	+4,802	+ 0.23
TOTAL .	2,15,49,976	47.62	2,00,05,340	49'19	-15,44,636	-7:17

The decrease in the maintenance charges was chiefly due to the shorter length of line renewed and relaid.

The decrease in the locomotive expenses was principally due to a decrease in the consumption and cost of carriage of fuel consequent on a decrease in the train-mileage run. The lower price of English coal also accounts in some measure for the decrease.

The decrease in the carriage and wagon expenses was chiefly due to smaller outturn of coaching and goods vehicles and to economies effected in the shops at Parel.

The increased general charges were principally due to an increase in loss by exchange caused by the fall in the value of the rupee.

The following are the principal alterations in goods rates during the year Rates and fares. 1892:

	· PIES PE	R TON PER MILE.
•	Rates in force prior to 1892.	Rates brought into force in 1892.
Wheat, other grain and seeds from stations on the Delhi-Umballa-Kalka railway, as also from certain stations on the North Western (State) railway to Bombay vid Itarsi	2'14 4'24	3.56 wheat. 3.63 grain and seed.
Cotton, pressed, class A, from stations on the Delhi-Umballa-Kalka railway to Bombay via Itarsi	8.28	761.
Cotton, pressed, class A, from certain stations on the North Western (State) railway to Bombay vid Itarsi	8.28	6 <sup>.</sup> 93.
Kerosine oil from Bombay to stations on the Jhansi-Cawnpore section	10.43	{ Varying from 6.46 to 6.18.

	Pies pe	R TON PER MILE.
	Rates in force prior to 1892.	Rates brought into force in 1892.
• Wheat, grain, and seeds from certain stations on the Bengal-Nagpur railway and from Nagpur itself to Bombay .	5 92	From Nágpur 4'73. From stations on the Bengal Nágpur railway, varying from 4 36 to 3'375 These were actually brought in force from 20th December 1891
Grain and seeds from stations on the Jhansi Agra section of the Indian Midland railway to Bombay via Itarsi	Varying from  6.43 to 4.44 6.54 to 4.54	Varying from  5.87 to 4.34 for wheat.  5.87 to 4.44 for grain and seed.
Grain and seeds from Nagpur and via Nagpur to stations between Barsi and Raichur and via	8.67 to 6.63	6.08 to 4.97.
Gunny bags, screwed to not more than 4 c ft. per maund, in bales weighing not more than 10 maunds each, in consignments of 290 maunds, from Bombay to Nagpur and to certain stations on the Bengal-Nagpur railway, i.e., Kamptee to Raipur	) 10°70 to 10°28	10.28 to 6.80.
Wheat, grain, and seeds from and via Raichúr to Bombay	} 9.02 to 8 53	8 05.
Matches, cruckers, fireworks and fuses from Bombay to or viá stations on the Great Indian Peninsula railway:	} 40 to 25	Lowest rates are now from 39'46 to 11'70.
Kerosine oil from Bombay to Nágpur and viá Nágpur— For consignments of 270 maunds and over For consignments of under 270 maunds	} 10'70 to 10'28	{ 8·98. 9·24·
Wheat, grain, and seeds from certain stations on the Nágpur branch of the Great Indian Peninsula to Agra viá Itársi for traffic to Delhi	8-66 to 8-58	8.59 to 6.77.
Grain and seeds from certain stations on the Nagpur extension of the Great Indian Peninsula to and via Cawnpore via Itarsi	8.76 to 8.58	675 to 4.66

# Bombay, Baroda, and Central India Railway (standard gauge).

# 11. The open mileages of the several sections were as follows:

M. I. M. D. A. D. A. D. A. D. D. D. D. D. D. D. D. D. D. D. D. D.					Miles.
Main line—Bombay to Sabarmati'	•	•	•		312.20
Wadhwan extension—Sabarmati to Wadhwa	n				76.75
Ánand-Godhra branch—Ánand to Godhra	,				49'25
Pátri branch-Viramgám to Khárághoda	•	•	•	•	22.40
					460.00

CHAP. IV.—REVENUE TRANSACTIONS—TRAFFIC AND WORKING. 113

The following table shows the general results of the year's working as com-General results. pared with those of 1891:

Year.	Mean mileage worked.	Train- mileage.		Working expenses.	Net earnings	working	worked	Percentage of net earnings on total capital outlay, including suspense and state expenditure on the Pátri branch.
1891			# 1,41,37 769 1,42,44,478				<b>R</b> 590 594	8·54 8·45
Increase or decrease.	,	-51,198	+1,06,709	+ 2,00,870	-94,161	+1 10	+4	-0.03
Percentage of in- crease or decrease	·	-1.98	+ 0.75	+ 3.40	1.14		+ 0.68	

The total amount payable to the Bombay, Baroda, and Central India Railway Company on account of surplus profits, in comparison with 1891, is shown in the following table:

	189	or.	1 <b>8</b> 9	2.
•	ıst haif.	2nd-half.	ı st-half.	2nd-half.
	R	R	R	R <sub>e</sub>
Net earnings	54,85,545	28,22,657	55,76,834	26,36,256
Deduct— Guaranteed interest	22,12,386	22,02,175	22,78,725	22,78,725
Interest on overdrawn capital	93,188	1,04,675	•••	•••
Contribution to Provident Fund	***	83,082	***	82,131
- Total	23,05,574	23,89,932	22,78,725	23,60,856
Balance surplus profits	31,79,971	4,32,725	32,98,109	2,75,400
Moiety payable to the company	15,89,985	2,16,363	16,49,055.	1,37,700
Add— Guaranteed interest	22,12,386	22,02,175	22,78,725	22,78,725
(a) Total payable to the company	38,02,371	24,18,538	39,27,780	24,16,425
rerest, vis., R9,58,77,818 for 1891 and	3'97	2.23	4·10	. 2.23
(i) Amount payable to the company for Rajputana-Malwa railway (the surplus profits)	8,30,217	3,74,291	9, / 1,472	3,81,518
Total payable 10 the company $(a+b)$	46,32,588	27,92,829	48,99,252	<b>27</b> ,97,943
Percentage on total capital bearing interest	4.83	2.01	2.11	2.03

<sup>•</sup> Includes contribution to the Provident Fund.

Gross earnings.

The following table shows the gross earnings under main heads as compared with 1891:

								1891.	1892.	Increase or decrease.
						•		R	R	R
Coaching	•	•	•	•	•	•	٠	45,11,243	46,57,496	+ 1,46,253
Goods	•	•	•	•	•	•		93,74.364	92,99,145	-75,219
Electric te	legra	ph	•	•		•	٠	39,817	46,457	+ 6,640
Sundries	•	•	• ,	•		•	٠	2,12,345	2,41,380	+ 29.035
						LATO	٠	1,41,37,769	1,42,44,478	+ 1,06,709

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.	SECONE	CLASS.	INTERMI CLA		THIRD	CLASS.	То	FAL.
į	No.	Earn- ings.	No.	Earn- ings.	No.	Earn- ings.	No.	E arnings.	No.	Earnings.
•		R	-   	R		R		R		R
1891	109,203	1,25,114	1,029,618	3,14,061	461,681	7,72,819	12,769,631	28,04,359	14,370,133	40,16,353
1892	109,185	1,29,893	1,050,225	3,31,888	449,314	7,73,901	13,002,913	28,84,980	14,611,637	41,20,662
Increase or decrease.	-18	+ 4,779	+ 20,607	+ 17,827	- 12,367	+ 1,082	+ 233,282	+80,621	+ 241,504	+1,04,309

The improvement in passenger traffic may be ascribed to general development of traffic. The decrease in number and increase in earnings under intermediate class were due to passengers having travelled longer distances.

The average sum received for carrying a passenger one mile amounted to 2 62 pies, which was the same as in the previous year.

The coaching earnings per passenger train-mile were R3.55 against R3.51. Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1891:

	189	91.	18	y <b>2.</b>	Increase o	r decrease.
	Tons.	R	Tons,	R	Tons.	R
General merchandise Military stores Railway materials for construction (Home	1,157,264 648	85,48,233 21,753	1,145,963 880	83,34,303 30,383	-11,301 +232	- 2,13,930 +8,6:0
line only)  Coal and coke for the public and foreign	14,035	16,195	25,422	29,090	+ 11,387	+ 12,895
railways  Coal and coke for construction (Home line	35,676	2,01,381	46,810	2,58,870	+11,134	+ 57,489
only)	40	211	40	6		- 205
Coal and coke for revenue only	39,582	1,01,120	53,688	1,31,608	+ 14,106	+ 30,488
Live-stock	131,030	3,24,059	138 009 18,906	1,51,829	+ 6,979	+1,008
Rents, miscellaneous, etc.		10,609		3,56,555 6,511	+ 536	+ 32,496 4,098
Less—Outstandings irrecoverable	1,396,645	93,74,382	1,429,718	92,99,155	+33,073	- <sub>75,227</sub>
TOTAL .	1,396,645	93,74,364	1,429,718	92,99,145	+ 33,073	-75,219

The noticeable fluctuations of traffic under "General merchandise" are shown below:

•							Incre	ZASE.	Decre	ASE.
					•	·	Tons.	R	Tons.	R
Grains *	• -	•	•.						74,195 2,565	5,64,761
Metals	•	•	•	•	•	•	***	***	2,565	23,703
Oil-seeds	•	•			•		48,650	3,97,059		••• .
Railway pl	lant a	nd rol	ling-st	ock c	arried	for	. , •			•
foreign r	ailwa	ys	•	•			2,098	41,449		•••
Sugar	•	•	•	•	•		•••		1,069	65,213
			•			1	`		<u>l</u>	

Grains.—The decrease was chiefly in wheat traffic received at Bombay from the Rajputana-Malwa railway and beyond vid Sábarmati.

Oil-seeds.—The increase was chiefly in traffic received at Bombay from stations on the Godhra branch and from the Rajputana-Malwa railway and beyond via Sabarmati.

The average sum received for carrying a ton of goods one mile amounted to 7 68 pies against 7.71 pies in the previous year.

The goods earnings per goods train-mile were \$7.58 against \$7.20.

The following table shows the working expenses of the railway during Working expenses. 1891 and 1892:

•	-	31	91.	18	92.			
		-Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	Increase or decrease in amount.	Percentage of increase or decrease.	
		R		R		R		
Maintenance Locomotive	us	. 17,09,193 . 20,32,309 . 6,40,981 . 8,31,180 . 5,12,368 . 1,86,618	12.09 14.38 4.53 5.88 3.62 1.32	16,41,575 19,68,271 8,23,793 8,32,911 5,82,040 2,64,929	11.52 13.82 5.78 5.85 4.09 1.86	-67,618 -64,038 +1,82,812 +1,731 +69,672 +78,311	-3 96 -3 15 +28 52 +0 21 +13 60 +41 96	
	Total	. 59,12,649	41.82	61,13,519	42'92	+2,00,870	+3'40	

The decrease in maintenance charges was chiefly under "Maintenance and renewal of permanent-way" and "Repairs of stations and buildings."

The decrease in the locomotive expenses was almost wholly due to reduction in the rates at which English coal was purchased during the year.

The increase in the carriage and wagon expenses was due to the repairs and renewals executed during 1892 having been more numerous, and of a heavier nature than usual. It is also attributable to the unfavourable rate of exchange ruling during the year.

The increase in general charges was due chiefly to the expenditure for the year having been increased by the commission and stamp charges on a debenture loan raised in 1891, and to heavy inspection fees and printing charges incurred in England and the exchange charges connected therewith.

The increase in special and miscellaneous expenditure was due to special payments on account of personal injuries sustained in the Nadiad and Clerk Road accidents, to an increase in the amount of claims settled for goods damaged by untimely rains, and to the payment of the usual contribution to the education fund which was omitted in 1891.

The principal changes in the goods rates made during the year are given Rates and fares. below:

With effect from the 1st April 1892, a revised scale of rates as noted below was adopted on the Bombay, Baroda, and Central India railway system for coal, coke and patent fuel in consignments of 160 maunds for the public or for railways:

•	-			Per maunu per	r mile.
				Pie.	
From 1 to 100 miles	•	•	•	• / O'20 )	•
,, 101 ,, 200 ,,	•	•	•	. 0.18	With the addition of
,, 201 ,, 400 ,,	•		•	0.12	ordinary terminals.
Over 406 miles				0.10	•

In conjunction with the East Indian and North Western state railways the concession as to the free carriage of returned empty salt gunny bags, after having been carried full, was withdrawn with effect from the 1st April 1892.

With effect from the 1st September 1892, special rates were quoted for permanent-way materials (rails, chairs, bolts, spikes, keys, etc.) in consignments of 160 maunds and over; loading and unloading to be done by owners.

Under the arrangement come to between the Bombay, Baroda, and Central India railway on the one part and the East Indian, Indian Midland and Great Indian Peninsula railways on the other part, the rates for cotton, wheat, other grain and common seeds from stations on the Delhi-Umballa-Kalka railway and stations on the North Western (state) railway beyond Umballa Cantonment to Bombay in through-booking via Agra and Sabarmati were equalized with those quoted by the East Indian, Indian Midland, and Great Indian Peninsula railways via Delhi, Agra and Itársi, with effect from the 1st May 1892, subject to the following conditions:

- 1. That, as provided by contract, the Delhi-Umballa-Kalka railway is to quote equal rates in through-booking with the Bombay, Baroda and Central India railway at Delhi as in through-booking with the East Indian railway.
- 2. That the East Indian railway is to quote equal rates in through-booking with the Bombay, Baroda, and Central India railway at Agra as with the Indian Midland railway.
- 3. That the combined through rates from the Delhi-Umballa-Kalka railway route via Agra to Bombay shall not be lower than the combined through rates from the Delhi-Umballa-Kalka railway via Delhi to Bombay.

#### Madras Railway (standard gauge).

12 The following table shows the general results of the year's working as
General results. compared with those of 1891:

Year,	Mean mileage worked.	Train- mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earn- ings per mean mile worked per week.	Percentage of net earnings on total capital outlay including suspense.
	Miles.	Miles.	R	R.	R		R	
1891 1892	839.30 839.30	2,522,227 2,519,724	93,44,688 96,24,670	54,38,158 53,32,537	39,06,530 42,92,133	58·20 55·40	214 221	3'28 3'59
Increase or de- crease.	-0.04	- 2,503	+2,79,982	-1,05,621	+3,85,603	-2·8o	+7	+0.31
Percentage of						· · ·		
decrease		-0.10	+3.00	-1.04	+9.84	***	+3'27	

The small decrease in the mean mileage worked was due to the difference between the approaches of the old and the new Pápaghni bridges.

The following table shows the gross earnings under main heads as com-Gross earnings. pared with 1891:

				•		1891.	1892.	Increase or decrease.
	•					R	R	R
Coaching	-	•	•	•		36,14,372 55,38,084 20,056 1,71,576	37,54,832 56,90,713 18,479 1,60,646	+ 1,40,460 + 1,52,029 - 1,577 - 10,930
		•	To	ral		93,44,685	96,24,670	+2,79,982

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.
1891 1892	: :	17,534 <b>,</b> 17,789	R 1,62.585 1,58,923	70,341 69,260	<b>R</b> 2,06,090 <b>2</b> ,10,203	8,465,339 8,966,014	27,43,620 28,06,036	8,553,214 9,043,063	# 31,13,195 32,35,162
Increase crease		+ 255	-3,662	-1,081	+ 3,213	+ 500,675	÷1,22,416	+ 499,849	+ 1,21,967

The third class traffic showed a large increase both in number and earnings. This was mainly due to a development of traffic in the second-half of 1892.

The average sum received for carrying a passenger one mile amounted to 1.79 pies against 1.86 pies in the previous year.

The coaching earnings per passenger train-mile were R2'96 against R3'02.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1891:

.	189	ı.	189	92.	Difference.		
Ţ	Tons.	R	Tons.	R	Tons.	R	
General merchandise Military stores Railway materials for	820,020 1,640	50,73,163 82,683	745,836	51,32,000 92,977	74.184 +424	+58,837 +10,294	
construction (Home line only) Coal and coke for the public and foreign	23,448	36,019	49,442	44-345	+ 25,994	+7,426	
railways Coal and coke for re-	33,475	1,55,549	51,506	2,43,909	+18,031	+88,360	
venue only Revenue stores other	10,017	15,273	20,109	21,402	+ 10,092	+6,129	
than coal and coke	289,310	1,26,375	249,900	1,03,632	~ 39,410	-22,743	
Live-stock	1,695	34,920	1,417	38,732	278	+3,812	
Rents, miscellaneous, etc.		13,802	-41	13,716	***	<del>-</del> 86	
• }-	<del></del>  -	<u> </u>			•		
TOTAL .	1,179,605	55,38,684	1,120,274	56,90,713	-59,331	+1,52,029	

The increased earnings under "General merchandise" were chiefly owing to the introduction of terminal charges. These charges, at the rate of 4 pies per maund at each end for local and at the Madras end for foreign traffic, came into force on 1st January 1892. The noticeable fluctuations in the traffic under "General merchandise" are shown below:

						Increa	ASR.	DECRE	ASB.
						Tons.	Ŗ	Tons.	R
Railway plant an	d rol	ling-s	tock	•				11.249	1,36,907
Grains .	•	•	*	•		3,66o		57,530	95,492
Hides and skins	٠	•	•	•	• 1	3,000	80,110	•:-	***
Cotton, raw	•	•	•	•	•	•••		8,431	77,511
Dyes and tans	•	•		•	.	2,984	50,925	•••	
Provisions .		•	•	•	• 1	149	46,707	•••	
Tobacco .				•	•	2,458	31,212	•••	•••
Kerosine oil		•	•			2,561	29,282		•••
Coffee .					. 1	2,615	28,352		
Sugar, undrained				•		1,290	26,618		•••

Railway plant and rolling-stock.—The decrease was mainly due to the completion of the Villupuram-Guntakal railway.

Grains.—The decreases occurred mainly under the following staples:

w. j					i ons.		Earnings.
•							R
Cholum and camboo	•	•	•	•	10,167	_	56,346
Raggy	,	•	•	•	<b>24</b> ,6 <b>66</b>	•	59,206

The falling off in cholum and camboo occurred in the second-half of 1892, and was confined to traffic from the Great Indian Peninsula line vid Raichúr, and from Timmanacherla, Raichúr, Kondápuram and other stations on the north-west line. The decrease in raggy was due to smaller despatches from the Mysore dominions and stations on the Bangalore branch.

The increase of 18,031 tons and of R88,360 under "Coal and coke for the public and foreign railways" was due to larger exports of coal from Madras to Kólár Road for the gold mines.

The average sum received for carrying a ton of goods one mile amounted to pies 8:30 against pies 7:29 in the previous year.

The goods earnings per goods train-mile were R4.54 against R4.18.

The following table compares the working expenses of the railway during Working expenses. 1891 and 1892:

<del></del>	180	1.	189	2.	Increase	Percent-
i	Amount,	Per cent. on gross earnings.	A mount.	Per cent. on gross earnings.	or decrease in amount.	age of increase or decrease.
	. R		Æ		R	
Maintenance Locomotive Carriage and wagon Traffic General Special and miscella		13°98 22°63 5°33 9°14 6°07	14,52,779 18,61,234 5,16,752 8,43,745 5,40,155	15.09 19.34 5.37 8.77 5.61	+ 1,46.592 - 2,53,129 + 19,061 - 10 837 - 27,301	+11.22 -11.97 +3.83 -1.27 -4.81
neous .	97,879	1,105	1,.17,872	1.33	+ 19,993	+ 20.43
Total	54,38,158	58.50	53,32,53.7	55.40	—1,05,621	-1.94

The increase in the maintenance charges was R2,39,582, but this was reduced by a credit of R92,990 for return stores, the net result being an increase of R1,46,592 mainly due to increased maintenance and renewal of permanent-way and to loss by exchange.

The number of miles of rails removed during the year was 103.26, of which 65.56 miles were relaid with 75lb. steel rails.

110

The decrease in the locomotive expenses was due chiefly to the charge for eight new engines in the first-half of 1891, the cost of which was K2,31,352, less a credit of R15,897 for sale of old engines.

The Nizam's Guaranteed Railway system (standard gauge).

13. The open mileage of this railway system was as follows:

					•		Miles.
The Nizam's Guaranteed State	raily	vay	•	•	•	• .	329.29
Bezwada extension railway	•	•	•	•	•	•	21.47
•							350.67

The mean mileage worked during the year was the same as in 1891, viz., 353.77, which includes 3.10 miles worked over twice by every train.

The following table shows the general results of the year's working as com-General results. pared with those of 1891:

Year.	Mean- mileage worked.	Train- mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earn- ings.	Gross earn- ings per mean mile worked per week.	Percentage of net earn- ings on total capital out- lay,including suspense.
1891 •	Miles. 353'77 353'77	Miles. 632,283 602,288	<b>2</b> 7,76,437 <b>27,80,641</b>	<b>R</b> 14,89,878 14,27,335	<b>R</b> 12,86,559 13,53,306	51.33 53.66	₽ 151 151	3'14 3'30
Increase or decrease .		-29,995	+4,204	-62,543	+ 66,747	<b>—2</b> .33	430	+0.19
Percentage of increase or decrease	***	<b>—</b> 4'74	+0.12	<b>—4*2</b> 0	+5.19		***	***

The following table shows the gross earnings under main heads as com-Gross earnings. pared with 1891:

					<u> </u>		<u></u>	<u> </u>
<u></u>						1891.	1892.	Increase or decrease.
						R·	R	R.
Coaching		•				8,19,129	8,36,044	+ 16,915
Goods	•		•	•	- [	18,59,997	18,27,808	-32,189
Electric telegraph	•	•	•			15,332	14,232	-1,100
Sundries	•	•	•	•	•	81,979	1,02,557	+ 20,578
÷			То	TAL	•	27,76,437	27,80,641	+ 4,204

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.	SECONE	CLASS.		CLASS BY TRAINS.		CLASS BY Trains.	TOTAL	
-	No. Earnings.		No.	Earnings.	No.	Earnings.	No.	Earnings.	, No.	Earnings.
-		R	•	R		R		R		R
1891 . 1892 .	7,372 7,017	52,437 50,301	34,432 34,560	63,897 64,358	311,279 327,117	1,59,932 1,65,334	782,946 835,774	4,38,594 4,53,590	1,136,029 1,204,468	7,14,860 7,33,582
increase or decrease	— —355	-2,136	+ 128	+461	+ 15,838	+5,402	+52,828	+ 14,996	+ 68,439	+ 18,722

The improvement in the third class passenger traffic occurred chiefly in the bookings from Bezwada to Kandapalli, and vice versa.

The average sum received for carrying a passenger one mile amounted to 2.35 pies against 2.36 pies in the previous year.

The coaching earnings per passenger train-mile were R3.76 against R3.78

Goods.—The following is a summary of the tonnage of goods lifted, and the earnings therefrom, as compared with 1891:

. `	1	891.	1	892.	Increase	or decrease.
	Tons.	R	Tons.	R	Tons.	R
General merchandise Military stores Railway materials for construction (Home line	18 <sub>7,4</sub> 8 <sub>3</sub> 753	11,60,992	191,083 828	11,65,466 13,294	+3,600 +75	+ 4,474 + 929
only)	16,616	15,853	25,339	7,325	+8,723	-8,528
Coal and coke for the pub- lic and foreign railways Coal and coke for con- struction (Home line	98,337	5 68,682	105,107	<b>5</b> ,64,544	+6,770	- 4.138
only) Coal and coke for revenue	. 73	282	. 41	148	-32	-134
only	20,991	52,723	15,028	36,287	-5,963	- 16,436
than coal and coke .	161,532	41,864	91,100	29,073	<b>-70,432</b>	-12,791
Live-stock	103	2,532	358	4,524		+ 1,99
Rents, miscellaneous, etc.	•••	4,704		7,147		+ 2,44
TOTAL .	485,888	18,59,997	428,884	18,27,808	-57.004	32,189

· The noticeable fluctuations in the traffic under "General merchandise" are shown below:

. `							1	INCR	EASE.	DECK	EASR.
								Tons.	R	Tens.	R
Grains .	•	•	•	•	٠			3,384	29,812		
Metals .	٠			•	•			3,986	40,248	•••	
Oil-seeds		•	,	•	•				•••	8,428	46,279
Provisions	•	•	•	• .	. ,	• .		***		909	25,177
Salt .	•		٠.		•	•		2,032	11,829	.,,	•••
				<del></del> _							

Grains.—The improvement occurred principally in the first-half of the year, and is chiefly attributable to the inwird traffic of Hyderabad.

Metals.—The increase, which was almost entirely in iron, was due to the carriage of material for the Kistna bridge at Bezwada.

Oil-seeds.—The decrease was chiefly in castor seed, which showed a falling off of 9,300 tons and of R51,246, due to bad crops.

The average sum received for carrying a ton of goods one mile amounted to 7.43 pies against 7.12 pies in the previous year.

The goods earnings per goods train-mile were R4.81 against R4.47.

The following table compares the working expenses of the railway system Working expenses. during the years 1891 and 1892:

	1891		1892	2.	I	Percent-
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	Increase or decrease in amount.	age of increase or decrease.
Maintenance Locomotive Carriage and wagon Traffic General Special and miscellaneous	R 4,77,167 4,12,221 94,576 2,15,875 2,67,543 22,496	17.19 14.85 3.41 7.77 9.63 0.81	R 4,28,156 3,71,400 1,10,088 2,20,691 2,75,625 21,075	15'40 13'35 3'46 7'95 9'91 0'76	# -49.011 - 40.821 + 15.512 + 5,116 + 8 082 - 1,921	-10°27 -9°90 +16°40 +2°37 +3°02 -6°32
TOTAL :	14,89,878	53.66	14,27,335	51.33	-62,543	-4.50

The decrease in the maintenance charges occurred chiefly under "Maintenance and renewal of permanent-way." This was principally due to the absence of special outlay on renewals of sleepers.

The decrease in the locomotive expenses was mainly due to less expenditure under "Fuel," "Maintenance of locomotive machinery" and "Unclassified expenditure."

The increase in carriage and wagon expenses was chiefly due to heavier repairs and renewals.

The Gaekwar's Petlad Ruilway (standard gauge).

14. The following table shows the general results of the year's working as

General results. compared with those of 1891:

Year.		Mean- mileage worked.	Train- mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earnings.	Gross earn- ings per mean mile worked per week,	Percentage of net earn- ings on total capital outly, including suspense.
		Miles.	Miles.	Ŗ	R	R		R	
1891 1892	•	13'35 13'35	19,517 19,530	59,113 61,243	22,767 26,486	36,346 34,757	38'51 43'25	85 83	5'18 4'89
Increase or decrease	-		+13	+2,130	+ 3.719	<u>_1,589</u>	+4.14	+3	—o.39
Percentage of increase decrease -	• ог		+0'07	+ 3'60	+16.31	— 4°37		+3.23	

The following table shows the gross earnings under main heads as com-Gross earnings. pared with 1891:

Gloss C			<del></del> _		•		,	1891.	1892.	Increase or decrease.
Coaching . Goods . Electric telegraph Sundries .	• • •	•	•	•	•	•	•	R 38,411 19,998 503 201	# 42,150 18,584 509	R +3.739 -1,414 +6 -201
				Тот	AL	•		59,113	61,243	+ 2,130

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.	SECON	SECOND CLASS.		CLASS.	Total.	
ľ	No. Earni	ngs. No.	Earnings.	No.	Earnings.	No.	Earnings.
1891	# ## ## ## ## ## ## ## ## ## ## ## ## #		729 708	204,21 <b>5</b> 228,588	<b>26,283</b> 39,743	206,302 230,641	# 37,118 40,544
Increase or decrease	<b>—26</b> —1	3 -8	-21	+ 24,373	+3,460	+21,339	+3,426

The improvement in the third class passenger traffic was due to ordinary development of traffic.

The average sum received for carrying a passenger one mile amounted to 250 pies, the same as in the previous year.

The coaching earnings per passenger train-mile were \$3.18 against \$3.08.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1891:

	1891. 1892.			•	Increase or decrease.		
General merchandise Railway materials for construction (Home line only) Coal and coke for the public and foreign railways Live-stock Rents, miscellaneous, etc.	66	# 19,521 12  342 120	Tons. 21,616	# 17,986  4 324 270	Tons. —2,324 —56 —45 —27	# -1,538 -12 +4 -18 +150	
Total .	24,221	19,998	21,819	18,584	-2,402	-1,414	

The noticeable fluctuations of traffic under "General merchandise" are shown below:

	•				Increa	se.	Decrease.			
Stone and lime Timber . Tobacco .	:	:	•		Tons.  736 1,962	R 612 607	Tons. 7,630	R 4,151 		

The average sum received for carrying a ton of goods one mile amounted to 12.73 pies against 11.73 pies in the previous year.

The goods earnings per goods train-mile were R2'97 against R2'84.

The following table shows the working expenses of the railway during 1891

Working expenses. and 1892:

				189	1.	189	2.		
-				Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	Increase or decrease in amount,	Percentage of increase or decrease.
				R		R		R	
Maintenance Locomotive Carriage and wagon Traffic General Special and miscellaneo	us	•	•	5.192 8,609 2,769 3,562 2,190 454	8.78 14.56 4.68 6.03 3.71 0.75	7,192 8,562 3,713 3,668 2,558 793	11.74 13.98 6.06 5.99 4.18 1.30	+2,000 -47 +944 +106 +368 +348	+38.52 -0.55 +31.09 +2.98 +16.80 +78.20
	Тот	AL .		22,767	38.21	26,486	43.5	+ 3,719	+ 16'34

The increase of R3,719 in the total working expenses of the line was chiefly due to the maintenance charges from 1st January to 30th April 1891 having been borne by the contractor. It was also due to the increased percentage of expenses to earnings prevailing on the Bombay, Baroda, and Central India rail-way, on which the expenditure is based.

## Bengal and North Western Railway system (metre gauge).

15. The mean mileage worked during the year was 754'16 miles against 717'00 miles in 1891. The open mileages of the two sections were as follows:

									Miles.
Company's section									414.20
Tirhoot section	٠	•	• .	•	•	•	•	•	34 <b>1 80</b>
									75 <sup>6</sup> ·30

The increase in the mean mileage was due to the opening of the following lengths of lines during 1892: and to the Chupra-Revelganj and Gonda-Colonelganj branches of the Company's section and the Sitamarhi-Dheng branch of the Tirhoot section having been worked for a part of 1891 only:

Company's section—					Miles,
Colonelgani to Gogra Ghât on 1st Februar	у	•		•	14.00
Tirhoot section—				í	-
Dheng to Bairagnia on 1st March .	•	•		•	3.20
Increase due to re-measurement of line	•	•	•	•	1.23

The following table shows the general results of the year's working as com-General results. pared with those of 1891:

<del></del>						<del>,</del>		
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, ex- cluding steam-boat.	Percentage of net earn- ings on total capital outlay, in- cluding suspense.
	Miles.	Miles.	R	R	R		R	
1891	717:00	1,537,049	49,66,188	19,88,347	29,77,841	40'04	121	5.92
1892	754'16	1,630,258	51,23,939	21,06,870	30,17,069	41,13	120	5'85
Increase or de-	+ 37'16	+ 93,209	+ 1,57,751	+ 1,18,523	+ 39,228	+1.08	·I	-0,10
Percentage of increase or decrease	+5'18.	+6.06	+3.18	+5.96	+1,35		-o·83	***

The following table shows the gross earnings under main heads as com-Gross earnings. pared with 1891:

			•	,	1891.	1892.	Increase or decrease,
Coaching Goods Electric telegraph Steam-boat Sundries	•	:			R 19,96,749 23,57,102 22,876 4,60,395 1,29,066	20,05,445 25,20,555 24,206 4,05,950 1,67,783	# + 8,696 + 1,63,453 + 1,330 - 54,445 + 38,717 + 1,57,751

Excluding interest on capital outlay on the company's section during construction, R10,90,014.

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. SECON		CLASS.		INTERMEDIATE CLASS.		CLASS.	TOTAL.	
	No.	Earnings.	No.	Earnings.	No.	Farnings.	No.	Earnings.	No.	Earnings.
İ	•	<b>!</b> #		R		R		₩	!	<b>₽</b>
1891 1892	14,787 14,740		21,031 20,884			23,867 29,961	4,811,215 4,750,854	17,74,867	4,878,654 4,841,467	18,74.226 18,80,225
Increase or decrease.	-47	+ 2,983	-147	+ 1,972	+23,368	+6,094	- 60,361	-5,050	- 37,187	+5,999

The decrease in the number of first and second class passengers carried with increased earnings was due to the average distance travelled having been greater than in the previous year.

The decrease in the third class was caused by scarcity in Tirhoot.

The average sum received for carrying a passenger one mile amounted to 2.23 pies against 1.94 pies in the previous year.

The coaching earnings per passenger train-mile were R2.89 against R3.13.

Goods.—The following is a summary of the tonnage of goods lifted, and the earnings therefrom, as compared with 1891:

	18	91.	18	92.	Increase o	r decrease.
General merchan-	Tons. 604,957	R 22,03,678	Tons. 595,329	<i>R</i> 23,95,630	Tons. -9,628	R + 1,91, <b>9</b> 52
Railway materials for construction (Home line only) Coal and coke for	7,727	49,235	11,225	36,944	+ 3,498	- 12,291
the public and foreign railways Coal and coke	18,867	41,036	21,431	36,974	+ 2,564	4,062
for construction (Home line only) Coal and coke for	122	222	•••		—122	222
revenue only . Revenue stores	21,443	14,:44	30,783	25,560	+9,340	+11,216
other than coal and coke . Live-stock .	12.433	18,050 2,946	13.71 <b>5</b> 75	17,598	+1 282	-452 -1,914
Rents, miscella- neous, etc.		27,591		6,817		—20,77 <b>4</b>
TOTAL .	665,741	23,57,102	672,558	25,20,555	+ 6,817	+ 1,63,453

The noticeable fluctuations of traffic under "General merchandise" are shown below:

							Іпсге	ase.	Decrea	se.
Sugar							Tons.	R 31,883	Tons	R
rigal	•	•	•	•	•	•	7,217	31,003	•••	• • •
Tobacco	•	•	•	•	•	• 1	7,217 4,569	23,050	• • •	
Grains	•	•	•		•	- 1		1,04,955	8,263	

Sugar and Tobacco.—The increases under these heads were due to good harvests and a good market.

Grains.—The increase in earnings was due to the traffic having been carried over a greater distance on the company's section. The decrease in tonnage was due to failure of crops in Tirlioot in the first-half of the year.

The average sum received for carrying a ton of goods one mile amounted to 5.67 pies against 6.48 pies in the previous year.

The goods earnings per goods train-mile were R2.69 against R2.62.

The following table shows the working expenses of the railway system Working expenses. during 1891 and 1892:

				189	91.	1892	·•	•	
				Amount.	Amount. Per cent. on gross earnings.		Per cent. on gross earnings.	Increase or decrease in amount.	Percentage of increase or decrease.
			Í	R		æ		R	•
Maintenance .		•	• [	3,71,478	7'48	4,23,413	8.56	+*51,965	+13.00
Locomotive .	•	٠,		4,73,557	9'54	4,58,610	8.95	-14,911	-3.12
Carriage and wagon	٠	•		1,33,420	2.69	1,40,188	2.74	+6,768	+5°07
Traffic		4.	- 1	3,56,598	7.18	4,04.998	7'90	+ 48,40 <b>o</b>	+ 13 57
General	•	•	• [	3,65,421	7:36	3,83,365	7.48	+ 17.914	+4.91
Steam-boat service	•	•	•	2,78,438	5.00	2,16,573	4.53	- <b>—</b> 61,805	22 22
Special and miscellan	eous	•	•	9,435	0.10	79,657	1.20	+70,222	+ 741.57
	Ton	AL		19,88,347	40'04	21,06,870	41'12	+1,18,523	+5'96

The increase in the maintenance charges was chiefly due to large renewals of sleepers on the company's section and to large renewals of rails on the Tirhoot section, also to debits for establishment on the Tirhoot section previously charged to capital.

The increase in the traffic expenses was due to a large debit for stationery not utilised during the year, to arrear charges paid to the East Indian railway for transhipment of goods at Dígha Ghât, and to the opening of the Bahramghat branch.

The increase in the general charges was due to increased home and telegraph charges.

The decrease in the steam-boat expenses and the increase in special and miscellaneous expenditure were chiefly due to the working expenses of the Ajodhya, Bahramghat and Revelganj ferries having been previously charged to the former head, whereas, under recent orders, they are now charged to the latter head.

The chief alterations in the coaching fares will be found noted on page 141,\*

Bates and fares. Part I, of the Administration report.

#### Rajputana-Malwa Railway (metre gauge).

16. The mean mileage worked during the year was 1,674.02 miles against 1,672.56 miles in 1891. The open mileages of the several sections were as follows:

							Miles.
Rajputana-Malwa section	•	•	•	•	. •	•	1,035'33
Holkar section	•	•	•	•	•		8700
Rewári-Ferozepore section		•	•	•	•		291'04
Cawnpore-Achnera section	•	•	•	•	•	•	<b>2</b> 60°65
- ··							
•							1,674.02

The increase of 1'46 miles in the mean mileage was due to an additional salt siding at Sámbhar laid and opened for traffic from 1st September 1891.

The following table shows the general results of the year's working as com-General results. pared with those of 1891:

Year.	Mean mile- age worked.	Train- mileage.	Gross earnings.	Working expenses.		Percentage of working expenses on gross earnings.		on total
	Miles.	Miles.	R	R	R		K	
1891 • • • • • • • • • • • • • • • • • • •	1,672°56 1,674°02	6,718,385 6,755,454	2,17,89,570 2,24,00,454		1,23,17,066 1,32,14,775		251 257	9'44
Increase or decrease.	+ 1 46	+ 37,069	+6,10,884	<u>-2,86,825</u>	+ 8,97,709	-2.46	+6	+ 0.69
Percentage of in- crease or decrease.	1	+ 0.22	+ 2.80	-3.03	+ 7.29		+ 2:39	•••

The total amount payable to the Bombay, Baroda and Central India Railway Company on account of surplus profits of the Rajputana-Malwa Railway, in comparison with 1891, is shown in the following table:

					18	391.	18,	2.
					ıst-half.	and-half.	ıst-half.	2nd-half.
Net receipts •	•	. •	•		R 72,88,197	R 50,25,438	₽ 80,47,775	# 51,70,043
Deduct— Interest	•	•	•	•	31,37,110	31,53,985	31,92,120	32,62,454
Divisible surplus profits Government share	•	. •	•	•	41,51,087 33,20,870	18,71,453 14,9 <b>7</b> ,162	48,57,359* 38,85,887	19,07,589 15,26,071
Company's share	•	•	•	•	8,30,217	3,74,291	9,71,472	3,81,518

The following table shows the gross earnings under main heads as com-Gross earnings. pared with 1891:

			•			}	1891.	1892.	Increase or decrease,
C - Nin n						ŀ	R	- K	R
Coaching .	•	. •	•	•	•	•	62,71,473	62,03,640	<del></del> 6 <sub>7</sub> ,8 <sub>33</sub>
Goods	:	•	•	. •	•	• [	1,52,52,527	1,55,67,082	+3,14,555
Electric telegrap	h		•	•	. •	- i	56,506	62,776	+6,270
Sundries .	.•	•	•	•	•	٠	2,09,064	5,66,956	+3,57,892
					Total		2,17,89,570	2,24,00,454	+6,10,884

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.	SECONI	D CLASS.		MEDIATE ASS.	THIRD CLASS.		TOTAL.	
			No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
				R		R		·R	·	R		R
1891 . 1892 .	:	:	17,252 16,382	1,19,793 1,25,708		1,76,798 1 89,371	236,074 245,581	2,68,996 2,85,269	0,304,834 8,651,323	; 50,57,929 50,64,896	9,627,626 8,962,782	56,23,516 56,65,244
increase crease	or •	de-	<del>-</del> 870	+ 5,915	+30	+ 12,573	+ 9,507	+ 16,273	-653,511	+6,967	-644,844	+ 41,728

<sup>•</sup> Includes \$1,704, balance of net loss on sale of Cawnpore-Achnera railway unserviceable stores not taken over by the Con pany debited in Accounts for June 1892.

The large decrease in number under third class passengers was due to a write-back on account of traffic carried in Indian Midland railway trains between Agra and Tundla from March 1889, which had been credited to the Rajputana-Malwa railway in the previous accounts.

The average sum received for carrying a passenger one mile amounted to 2'12 pies against 2'11 pies in the previous year.

The coaching earnings per passenger train-mile were R2'94 against R3'04. Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1891:

	18	91.	-18	92.	Increase o	r decrease.
	Tons.	R	Tons.	R	Tons.	R
General merchandise	1,405,111	1,44,67,267	1,474,890	1,46,19,196	+69,779	+1,51,929
Military stores	5,926	1,08,014	6,154	1,40,079	+228	+32,065
(Home line only)  Coal and coke for the public and	40,994	1,00,706	72,019	1,93,381	+31,025	+92,675
foreign railways  Coal and coke for construction	8,161	75,786	8,542	62,884	+381	—12,90 <b>2</b>
(Home line only)	2,129	9,256	2,203	10,216	+74	+ 960
Coal and coke for revenue only Revenue stores other than coal and	83,053	3,08,726	93,317	3,39,009	+10,264	+30,283
coke	45,550	1,19,480	55,754	1,33,796	+10,204	+14,316
Live-stock	5,776	47,512	5,371	49,376	<del>-4</del> 05	+1,864
Rents, miscellaneous, etc	<b></b>	15,845	•••	19,145		+3,300
TOTAL .	1,596,700	1,52,52,592	1,718,250	1,55,67,082	+121,550	+3,14,490
Less-Outstandings irrecoverable	•••	65	***		•	-65
	1,596,700	1,52,52,527	1,718,250	1,55,67,082	+121,550	+3,14,555

The noticeable fluctuations of traffic under "General merchandise" are shown below:

			•	٠.			Incr	ease.	Decr	ease.
							Tons.	R	Tons.	R
Cotton, raw	7 <b>.</b>	•			•	•			16,234	2,75,018
Grains	•	•	•	. •	•	•	31,503			3,38,243
Oil-seeds	•	•	• .	•	•		40,545 .	4,25,968		***
Provisions				•	•		8,445	86,460	•••	•••
Railway pla railways	nt a	nd roll	ing-st	tock fo	or fore	ign		***	8,062	53,76 <b>7</b>
Salt .	•	•	•		•	•	4,65 <b>7</b>	65,772		•••
Sugar	•	•	•	•	•		11,387	1,55,461	•••	•••

Cotton, raw.—The decrease was in traffic forwarded to the Bombay, Baroda and Central India railway vid Sabarmati chiefly to Bombay.

Grains .- The decrease in earnings was in wheat traffic forwarded to the Bombay, Baroda and Central India railway viâ Sábarmati chiefly to Bombay.

Oil-seeds.—The increase was in traffic forwarded to the Bombay, Baroda

and Central India railway vid Sabarmati chiefly to Bombay.

Sugar. The increase was chiefly in traffic booked from Cawnpore and places beyond to stations on the Malwa section and to the Bombay, Baroda and Central India railway.

The average sum received for carrying a ton of goods one mile amounted to 6.64 pies against 6.48 pies in the previous year.

The goods earnings per goods train-mile were R3:35 against R3:28.

The following table shows the working expenses during 1891 and 1892:

			<del></del>	<del></del> -		=		
		ŀ	1891.	;	1892.		• 	
		•	Amount.	Per cent. on grossearnings.	Amount.	Percent on gross earnings.	Increase or decrease in amount.	Percentage of increase or descease.
			R		R		R	
Maintenance .	•	•	16,01,163	7'35	16,33,157	7.29	+31,994	+ 2.00
Locomotive .	•	٠	40,85,617	18.75	40,33,686	18.01	. – 51,931	- 1.54
Carriage and wagon	•		10,88,097	4.39	8,13,294	3.63	- 2,74,803	-25·26
Traffic	•		13,93,748	6.40	14,12,757	6.31	+ 19,009	+ 1.36
General	•	,	11,65,795	5'35	11,61,480	5.18	-4,315	-o.37
Special and miscella	neous		1,38,084	0.63	1,31,305	9'59	-6,779	—4·91
То	TAL	•	94.72,504	43'47	91,85,679	41'01	-2,86,825	-3.03

The increase in maintenance charges was partly due to large expenditure on a temporary bridge erected at mile 528 over the Pushmavati river, and partly to issue of iron tanks for temporary watering arrangements on the line.

Under locomotive expenses there was a large decrease under consumption of coal, which was in a measure counterbalanced by an increase in the outlay incurred on repairs and renewals of engines, machinery, etc.

The large decrease in carriage and wagon expenses is accounted for by the heavy expenditure incurred on wheel and axle changing operations in 1891. The expenditure during 1892 was normal.

The net increase in traffic expenses was chiefly due to the employment of extra staff owing to increased train service and to larger consumption of consumable stores.

The decrease in general charges was mainly due to an adjustment in 1891 of arrear contribution charges on account of the Police Department.

The decrease in special and miscellaneous expenditure was due to the recovery from the Indian Midland railway of joint station charges at Agra from March 1889 to December 1892.

The principal changes in the goods rates made during the year are noted

Rates and fares. on page 116 of this report.

#### Southern Mahratta Railway system (metre gauge).

17. The mean mileage worked during the year was 1,384'95 miles against 1,361'31 miles in 1891. The open mileages of the several sections were as follows:

•								Miles.
Southern Mahratta raily	vay ·	•		•	•	•		1,043 70
Mysore section .		•	•		٠	•		296'0 <b>0</b>
Nanjangúd extension	•	•	•	•	•	•		15'25
Yesvantpur-Dodballapui	r secti	on	•	•	•		•	19.93
Kolhápur railway .		•	•	• •	•	•	•	29.07
	_					•		
	_							1,403.62

The increase in the mean mileage was due to the opening of the Yesvantpur-Dodballapur section, 1993 miles, on the 15th December 1892, and to the following openings in 1891:

The following table shows the general results of the year's working as com-General results. pared with those of 1891:

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 earn- ings on total capital outlay, including suspense,
1891 1892	Miles 1,361'31 1,381'95 + 23'64	Miles. 2,453,964 2,394,401 —59,503	61,43,472 59,41,076 -2,02,396	40,60,915 40,87,921 +18,006	20.73.557 18,53,155 —2,20,402	66.25 68.81 + 2.56	-4	-0.02
Percentage of increase or decrease .	+1'74	2'42	-3.50	+0'44	—10·63		—4·60	,

The following table shows the gross earnings under main heads as com-Gross earnings. pared with 1891:

<u></u>									1891.	1892.	Decrease.
				•					R	R·	R
Coaching	•		•	•	•	•	•		26,52,855	26,44,918	7,937
Goods	٠.	•	•	. •	•	•	•	•	33,44,378	31,67,504	1,76,874
. Electric te	legra	ph		•	•		•	•	26,459	25,265	1,194
Sundries		•	•		•		•	. •	1,19,780.	1,03,389	16,391
		,				To	TAL	•	61,43.472	59,41,076	2,02,396

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

<del></del> -				FIRST	CLASS.	SECONI	CLASS.	THIRD	CLASS.	TOTAL.	
				No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
1891 1892	•	:	•	12,725	76,655 69,019	43,015 45,968	# 93.846 99,284	4,470,720 4.774,812	₽ 22,08,490 22,20,645	4,526,460 4,833,807	<b>2</b> 3,78,991 <b>2</b> 3,88,948
Increas	se or d	ecreas	e .	+302	<b>-7,636</b>	+ 2,953	+ 5,438	+304,092	+12,155	+ 307,347	+ 9,957

The comparatively small improvement in earnings is traceable to the reduction in third class fares introduced at the close of 1890, and on 1st July 1892, on certain sections of the company's system.

The average sum received for carrying a passenger one mile amounted to 2.36 pies against 2.44 pies in the previous year.

The coaching earnings per passenger train-mile were R2.60 against R2.50.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1891:

	189	gr <b>.</b>	189	9 <b>2.</b>	Increase o	r decrease.
	Tons.	R	Tons.	. <b>R</b>	Tons.	. R
General merchandise	584,692	30,21,874	497,538	28,48,059	<b>—87,</b> 154	-1,73,815
Military stores	987	12,144	2,550	46,475	+ 1,563	—34,331
Railway materials for construction (Home line only)	28,676	58,059	23.908	30,678	<b>—</b> 4,768	—27,381
Coal and coke for the public and foreign railways.	1,235	3,174	2,615	15,887	+ 1,380	+ 12,713
Coal and coke for construction (Home-line only)	4	12	6	. 26	+2	+14
Coal and coke for revenue only	11,913	41,545	13,654	53,052	+1,741	+11,507
Revenue stores other than coal and coke	124,743	1,93,459	105,897	1,52,591	18,846	<b>—40,868</b>
Live-stock	115	3,183	125	6,885	+10	+3,702
Rents, miscellaneous, etc	***	10,928	***	13,851	···	+2,923
TOTAL	752,365	33,44,378	646,293	31,67,504	-106,072	-1,76,874

The noticeable fluctuations of traffic under "General merchandise" are shown below:

							Incre	ase.	Decre	ase.
					•	.  -	Tons.	R	Tons.	·
Cotton, raw		•							24,829	1,70,106
Cotton piec	e-go	ods		•		\	936	11,705		,,-,
Grains -	•		•	•	•	.			54,044	1,60,042
Oils .	•	•	•	•	•	.	5,082	24,953		
Oil-seeds		•	·			.		144	14,235	84,800
Provisions	•	•	•		•	.	12,412	1,08,293		***
Railway pla	int a	nd rol	ling-s	stock	•	•		24,592	20,699	
Salt .				. <b>* .</b>		• 1	8,416	36,686		
Spices	•		•	•		- 1	2,856	44,318		
Sugar .	•	•	•	•		.	•••	•••	3,273	29,998
Tobacco		•	•	•		• 1	•••	***	1,316	14,115

Raw cotton, grains, oil-seeds, sugar and tobacco.—The decreases in these commodities were due to the failure of crops in 1891.

Oils.—The increase was due to steadily increasing importations of kerosine oil.

Provisions.—The increase was due to a heavier traffic in cocoanuts in the first-half of 1892, and to general improvement of crops.

Railway plant and rolling-stock.—The decrease in tonnage lifted and the increase in earnings were due to a long lead having been obtained for machinery, etc., required for the East Coast railway, which was booked from the Portuguese frontier to Kistna Canal terminus.

Salt.—The increase was due to large importations of Portuguese salt which finds a ready market in the districts served by this railway.

Spices.—The increase was due to improved bookings of chillies and betel-nuts from Guntur and Byadgi.

The average sum received for carrying a ton of goods one mile amounted to 7.96 pies against 8.37 pies in the previous year.

The goods earnings per goods train-mile were R2'30 against R2'40.

The following table shows the working expenses of the railway system Working expenses. during 1891 and 1892:

_	189	91.	. 18	92.		
•	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	Increase or decrease in amount.	Percentage of increase or decrease.
•	R		R		R	<del>-</del>
Maintenance	9,43,314	15'35	9,60,680 13,50,183	16·17 22·73	+ 17,366 -2,480	+1.84
Locomotive Carriage and wagon	2,95,413	4.81	3,10,000	5.55	+ 14,587	+4.94
Traffic	7,09,554	11.75	6,76,938 7,33.148	11.39 12.34	-32,616 +11,608	+ 1.61 + 1.60
General Special and miscellaneous	47,431	0.77	56,972	<b>0</b> .00	+9,541	+20.13
TOTAL	. 40,69,915	66.5	40,87,921	18-86	-l-18,0o6	+0.44

The increase in the maintenance charges was principally due to heavy expenditure incurred in repairing breaches caused by washaways and in special watering arrangements required on account of the failure of the monsoons in 1891.

The increase in the carriage and wagon expenses was due chiefly to the repairs executed to vehicles damaged at the Yeleyur and Savalyapuram accidents, to the renewals of certain carriages, and to the cost of fitting Jones' patent buffers and couplings.

The decrease in the traffic expenses was due to the decrease in the trainmileage run owing to a change in the train service.

The increase in general charges was due to the duty and commission charges paid in England on the renewal of £600,000 Debentures which fell due on the 1st April 1892.

The increase in special and miscellaneous expenditure was due to the payment of compensation for personal injuries sustained by passengers in the accident at Yeleyur and for goods booked from Bombay damaged by rain while passing over the Braganza Ghâts.

The principal alterations in coaching fares and goods rates will be found noted on pages 141 and 143 of Part I of the Administration report.

#### South Indian Railway (metre gauge).

18. The following review includes the transactions connected with the working of the Pondicherry railway and the amount received by the South Indian Railway Company for working that line, but the net earnings and results calculated thereon refer to the South Indian railway only.

The mean mileage worked, including the Pondicherry railway, was 1,087.28 miles against 883.43 miles in 1891. The increase in the mean mileage worked was due to the opening of the following lengths of line:

Miles.

							47	
Pákala to Váyalpád •	•	•	. •	•	•	•	•	471
Váyalpád to Dharmavaram	•	c	•	•	•	•	•	94
Dharmayaram to Guntakal			•	•	•	•	•	63

The first section was opened for public traffic on the 1st January 1892, and the two latter on the 1st March for goods traffic only, and for passenger traffic

on the 20th March and 1st June 1892, respectively. The increase in the mean mileage worked was also due to the Tiruvannamalai-Tirupati section having been worked during a portion only of 1891.

The following table shows the general results of the year's working as

General results. compared with those of 1891:

Year.	Mean mileage worked,	Train-miles.	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.
1891	Miles. 883-43 1,087-28							
Increase or de- crease .	+203.82	+370,410	+6,78,239	+2,51,273	+4,23,966	-2:46		+0.20
Percentage of increase or decrease .	+23.07	+12'74	<del>-1</del> 9.61	+5.52	<b>+17</b> :45	···	-11.11	***

The following table shows the gross earnings under main heads as
Gross earnings. compared with 1891:

*						1891.	1892.	Increase.	
					ľ	R	R	R	
Coaching .	•	•	•	•		37,34,924	40,70,125	3 35,201	
Goods	•	•		•	-	32.03,563	33,29,239	1,25,676	
Electric telegraph		•	•	• .		23,509	24,122	613	
Sundries	•	:				74,761	1,43,069	68,30 <b>3</b>	
Old Company's Fire	Insu	rance F	fund	•			1,48,441	1,48,441	
•		-	Тот	AL	•	70,36,757	77,14,996	6,78,239	

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.	Ño.	Earnings,
1891 . 1892 .	:	:	16,956 20,754	£ 55,117 63,000	146.435 162,274	26,451 1,39,765	9,468,071 10,317,070	2 33,38,902 36,69,709	9,631,462 10,500,098	# 35,20,470 38,72,474
locrease			3,798	7,883	15,839	13,314	848,999	3,30,807	868,636	3,52,004

The increase in the passenger traffic was almost entirely due to the greater length of line open for traffic and to the establishment of through communication between the southern and northern districts.

The average sum received for carrying a passenger one mile amounted to 206 pies, being the same as in the previous year.

The coaching earnings per passenger train-mile were R2.80 against R2.83.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1891:

	18	gr. ·	18	92.	Increase or decrease.		
	Tons.	R	Tons.	R	Tons.	R	
General merchandise Military stores	865,708 244	28,78,361 8,576	800,887 174	30,52,579 4,584	-64,821 -70	+1,74,218 -3,992	
struction (Home line only)  Coal and coke for the public	244,845	1;35,795	360,693	91,666.	+ 115,848	<del>-44,129</del> .	
and foreign railways .	1,141	3,002	5,915	6,096	+4,774	+3,094	
Coal and coke for revenue only Revenue stores other than	21,853	39,059	25,928	43,833	+4,075	+4,774	
coal and coke	488,927	1,31,202	630,435	1,19,557	+141,508	-11,645	
Live-stock	226	3,158	149	3,907	<del>-</del> 77	+749	
Rents, miscellaneous, etc		6,040		7,017		+977	
TOTAL -	1,622,944	32,05,193	1,824,181	33,29,239	+ 201,237	+1,24,046	
Loss - Outstandings irre- coverable		1,630				<b>—1,63</b> 0	
NET TOTAL	1,622,944	32,03,563	1,824,181	33,29,239	+201,233	+1,25,676	

The noticeable fluctuations in the traffic under "General merchandise" are noted below:

•							Incre	ease.	· Decrease.		
							Tons.	R	Tons.	R	
Grains		•			•			25,179	699	•••	
Oil-seeds		•		•	•			16,515	22,060	•••	
Provisions		•	.•	•	•		3,517	. 36,780		•••	
Salt .		•	•	,•	•	-	2,044	19,982	•••	•••	
Stone and li	me		•	•	•	•	•:•.	•••	65,246	43,068	

Grains.—The increase in the earnings, with a decrease in the tonnage carried, was due to a decrease in the traffic from the Tanjore district and to the requirements of the Madura and Tinnevelly districts having been met by supplies from Madras, South Arcot, Nellore, Trichinopoly and stations on the Madras railway viá Erode, which gave a longer lead.

Oil-seeds.—The decrease in tonnage was mainly owing to the failure of crops; the traffic in ground-nuts was very low and showed a falling off from Tindivanam, Panruti and Tanjore to Pondicherry; the increased earnings were due to the crops of til or gingelly seed having failed for want of rain in the southern part of the Presidency, and supplies having been imported into the Madura and Tinnevelly districts from and vid Erode, from Karúr, Vellore and other stations.

Salt.—The increase in this traffic was principally from Vencatachellum and Nellore to the Pákala-Dharmavaram section, and also in traffic from Tuticorin.

Stone and lime.—The falling off was in consequence of stone not having been carried from Pallavaram quarries to Madras for the harbour works.

The average sum received for carrying a ton of goods one mile amounted to 7.38 pies against 7.53 pies in the previous year.

The goods earnings per goods train-mile were R1.83 against R2.02.

The following table compares the working expenses of the railway during Working expenses. 1891 and 1892:

	<u></u>	ا،				
•	189	ı.	1892		Increase or	Percentage
•	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings,	decrease in amount.	of increase. or decrease.
•	R		R		R	
Maintenance .	. 15,63,789	22'22	13,54,670	17.56	-2,09,119	-13·37.
Locomotive .	. 16,67,037	23.69	18,09,661	23.46	+1,42,624	+8.26
Carriage and wagon	2,85,870	4 06	3,94,650	2.11	+ 1,08,780	+ 38.02
Traffic	5,38,496	7.65	6,58,671	8.54	+ 1,20,175	+22.32
General	5,05,853	7 19	5,90,513	7 65	+84,660	+ 16.74
Special and miscella neous	46,087	0.66	53,240	0.60	+7,153	+15.2
TOTAL	. 46,07,132	65'47	48,61,405	63.01	+2,54,273	+5.2

The decrease in the maintenance charges was chiefly attributable to the shorter length of 50 brails laid, viz., 25 66 miles against 65 80 miles laid in 1801.

The number of miles of rails removed and relaid during the year was 77.24 against 119.68. In addition 442.84 miles of extensions and sidings were opened.

The increase in the locomotive expenses was mainly due to the cost of five new locomotives obtained from England to replace condemned ones, and to heavier repairs and renewals.

The increase in the carriage and wagon expenses was due to heavier repairs and renewals to the stock and also to replacement of the old type of couplings by Jones' flexible buffer couplings.

The increased traffic expenses was attributable to increased mileage and to a larger number of stations having been worked during the year.

The increase in general charges was chiefly attributable to increased mileage and to the inclusion of arrear charges on account of Government Police supervision from the 1st of January 1891.

### Burma (state) Railway system (metre gauge).

19. The mean mileage worked during the year was 691.81 miles against 585.88 miles in 1891. The increase was principally due to the opening of the Shwebo to Wuntho section, 100 miles, of the Mu Valley railway for goods traffic on the 4th April 1892, and partly to the Sagaing-Shwebo section, 53\frac{1}{2}\text{miles, and the Myohaung branch, 6 miles, having been open tor traffic during a portion only of 1891. The mean mileages of the sections worked were as follows:

•					•	Miles,
Irrawaddy and Sittang sections	•		٠	•	•	336.00
Toungoo-Mandalay section	•	•	•	•	•	222.20
Mu Valley section	•	•	•	• •	•	133.31
•			тот	`AL	•	691.81

The following table shows the general, results of working as compared with General results. those of 1891:

Year.	Mean mileage worked.	Train- mileage.	Gross earnings.	Working expenses,	Net earnings.	Percentage of working expenses on gross earnings.	Gross earn- ings per mean mile worked per week, ex- cluding steam-boat.	Percentage of net earn- ings on total capital outlay including suspense.
	Miles.	Miles.	· R	R.	R	i	R	
1891	585.88	1,677,192	58,55,197	34,83,805	23,71,392	59.50	192	4.58
1892	691.81	1,904,349	71,00,618	37,14,531	33,86,087	52:31	197	5'39
Increase or de- crease'	+105.03	+227,157	+ 12,45,421	+2,30,726	+10,14,695	<b>-7.19</b>	· ! · +5	+0.81
Percentage of increase or decrease .	+18.08	+ 13'54	+21.52	+6.62	+42'79		+2.60	, <b></b>

The following table shows the gross earnings under main heads as com-Gross earnings. pared with 1891:

		•			,			1891.	1892.	Increase.
							-	R	R	R
Coaching	•	•	•	•	•	•	•	34,19,267	40,76,573	6,57,306
Goods	•	• _	•	•	• ;	• _	•	23,54,622	28,89,782	5,35,160
Electric te	legra	ph	•	•	•	•		21,823	25,927	4,104
Steam-boat	t	•	:	•	•	•		853	18,236	17,383
Sundries	•	•	•	•	•	٠.	•	58,632	90,100	31,468
					To	TAL	•	58,55,197	71,00,618	12,45,421

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.	Seconi	CLASS.	THIRE	CLASS.	TOTAL.	
•		No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
			R		R		₽		. R =
1891 .		14,759	80,006	136,859	1,45,037	5,388,729	29,98,888	5,540,347	32,24,931
1892		17,408	80,535	181,354	1,69,301	6,466,862	36,49,051	6,665,624	38,98,887
	-		7,			-			
Increase		2,649	529	44,495	23,264	1,078,133	6,50,163	1,125,277	6,73,956

The improvement in the passenger traffic is ascribed to the increased mileage worked, the natural expansion of traffic, the increased demand for labourers in lower Burma owing to the increased area under paddy cultivation and to the abnormal movement of population southward owing to the continued scarcity in upper Burma.

The average sum received for carrying a passenger one mile amounted to 3'11 pies against 3'12 pies in the previous year.

. The coaching earnings per passenger train-mile were R4.63 against R4.19.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1891:

•	1891.		1	892,	Increase or	decrease.
•	<del></del> -				i	
	Tons.	R	Tons.	R	Tons.	R
General merchandise	434,959	21,28,816	498,814	25,86,560	+ 63,855	+4,57,744
Military stores	1,643	40,579	1,958	38,443	+315	-2,136
Railway materials for construction (Home line only)  Coal and coke for the	100,893	43,436	132,789	<b>42,7</b> 95	+31,896	—6 <sub>4</sub> 1
public and foreign rail-	1,008	297	2,666	807	+ 1,658	+510
ways	1,000	291	2,000	","	1 1,000	, 310
struction (Home line		1	<b>\</b>	\ . \	Ì	
only)	7	38	<b></b>		<del>-</del> 7	38
Coal and coke for reve-	6		.00	65.068	16	
nue only Revenue stores other	17,652	32,445	18,778	<b>3</b> 0,368	+1,126	2,077
Revenue stores other than coal and coke.	119,204	66,524	155,193	78,440	+35,989	+11,916
Live-stock	1,674	35,993	3,958	1,04,214	+2,284	+68,221
Rents, miscellaneous, etc.		7,449		10,056	•••	+2,607
					l	
TOTAL .  Less—Outstandings irre-	677,040	23,55,577	8,14,156	28,91,683	137,116	+ 5,36,106
coverable	•••	955	···.	1,901		+946
Non Toras	655.045	22 54 600	8 14 156	28 80 882	+ 105 116	1,0,0
NET TOTAL .	077,040	23,54,022	0,14,150	28,89,782	+ 137,116	+ 5,35,160

The noticeable increases in the traffic under "General merchandise" are shown below:

				•		· 1 Oils.	44
Grains .	•	•	•	•	•	46,291	2,47,109
Provisions .	•		ι	•	•	7,563	26,891
Dyes and tans		•	•		•	<b>4,2</b> 9 <b>9</b>	 69,298

Grains.—The increase was chiefly in husked rice, which was despatched in abnormal quantities to upper Burma to meet the scarcity prevailing there.

The average sum received for carrying a ton of goods one mile was 6.70 pies against 7.18 pies in the previous year.

The goods earnings per goods train-mile were R2'82 against R2'73.

The following table compares the working expenses of the railway system

Working expenses. during 1891 and 1892:

	189	1.	189	2.	] _	-9'10' +11'57' -0'50' +21'20' +9'98' +678'33'
	Amount.	Per cent. on gross earnings.	Amount,	Per cent. on gross earnings.	Increase or . decrease.	of increase or
	R		_R		R	
Maintenance	12,19,348	20.82	11,08,391	15.61	1,10,957	-9.10
Locomotive	10,31,608 2,48,076	17 62 4 24	11,50,949 2,46,839	16 <sup>2</sup> 1	十1,19,341· 一1,237	—0'50
Traffic	5,87,001	10.03	7,11,997	10.03	+ 1,24,996	+21.59
General	3,45,211	5'90	3,79,664	5 35	+34,453	+ 5.08
Steam-boat	7,913	0'13	61,589	0'87	+53,676	+ 678.33
Special and miscellaneous	44,648	0.46	55,102	o 77.	+ 10,454	+23.41
TOTAL .	34,83,805	59.50	37,14,531	•52.31	+ 2,30,726	+6.62

The decrease in the maintenance charges was due chiefly to rails and sleepers for relaying during the financial year 1891-92 having been partly drawn at the latter end of 1891, while those for the season 1892-93 have been mostly drawn in 1893; the return to stores during 1892 of a considerable quantity of second-hand materials taken out in relaying on the Irrawaddy district also accounts to some extent for this decrease. During the year 18 miles of rails were relaid, of which 15 miles were relaid with 50th steel rails and 3 miles with 411th steel rails.

The increase in the locomotive expenses was mainly attributable to the opening of the line to Wuntho and to increased renewals of engines. There was a decrease under "Unclassified expenditure," due to the arrears of freight on coal carried over the East Indian railway having been adjusted in 1891.

The increase in the traffic expenses was mainly due to the opening of the railway to Wuntho.

The increase in general charges occurred principally under "Rents of buildings" and "Electric telegraph," the former being due to increase in the rent paid to the Rangoon Port Trust for land at Latter street and Keighley street stations, and the latter to the opening of the line to Wuntho:

The expenditure of the previous year in steam-boat service was incurred on a special launch carrying goods between Mandalay and Sagaing, while the expenditure in 1892 was on the regular ferry service opened in February between Amarapura Shore and Sagaing.

The increase in special and miscellaneous expenditure was due to an increase in the contribution for the Provident Institution bonus, owing to the extra staff employed on the opening of the line to Wuntho and to certain "Rates and taxes" not accounted for in 1891.

The goods classification was assimilated with that of the East Indian railway, and the revised tariff came into force from Rates and fares. the 1st January 1893.

### Rohilkund and Kumaon Railway system (metre gauge).

20: The mean mileage worked during the year was 252'30 miles against 223'63 miles in 1891, the increase being due to the Gola Gokaran Náth-Pilibhit section having been open for traffic during a portion only of 1891.

The open mileages of the two sections were as follows:

Company's section . Lucknow-Bareilly section 198:38

The following table shows the general results of the year's working as compared with those of 1891; 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, excluding cart-road ' service.	Percentage of net earnings on total capital outlay, in- cluding suspense.
•	Miles.	Miles.	R	R	R		R	.
1891	223.63	297,665	8,80,152	5,47,060	3,33,092	62.12	73	3 34
1892 - •	252'30	388,948	11,16,484	6,43,647	4,72,837	57.65	85	4'78
Increase or decrease	+ 28.67	+ 91,283	+ 2,36,332	+96,587	+1,39,745	_4·50	+ 12	+1'44
Percentage of in- crease or decrease	+ 12.82	+ 30.67	+ 26.86	+ 17.66	+ 41.95	***	+ 16.44	***

Includes contribution to the Provident Fund,

The following table shows the gross earnings under main heads as Gross earnings. compared with 1891:

:		•		·	• •	.	1891.	1892.	Increase.
Coaching . Goods . Electric telegraph	ph	•	:	•	:		# 4,14,290 3,33,126 4,709 1,28,027	£ 5,10,100 4,56,893 5,875 1,43,616	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
,				To	TAL ·		8,80,152	11,16,484	2,36,332

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

	FIRST	CLASS.	Seconi	CLASS,		ABS.	THIRD	CLASS.	Тот	AL.
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
•		R		R		R		R	-	R
1891 . 1892 .	7,180 5,194	38,019 35,233	7.319	27,281	12,471 11,261	35.5 <sup>8</sup> 9 20,195	782,343 967,030	2,82,663 3,57,577		3,56,271 4,40,286
Increase or decrease	-1,986	-2,786	+7,319	+27,281	-1,210	-15,394	+ 184,687	+74,914	+ 188,810	+84,015

The large increase in the third class passenger traffic was due to the opening of the Gola Gokaran Náth-Pilibhit section throughout the year.

The decreases under first and intermediate classes were due to the introduction of the second class.

The average sum received for carrying a passenger one mile amounted to 2.62 pies against 2.70 pies in the previous year.

The coaching earnings per passenger train-mile amounted to R2'89 against R2'64.

Goods.—The following is a summary of the tonnage of goods lifted, and the earnings therefrom, as compared with 1891:

	189	)1.	. 189	)2.	Increase or decrease.		
General merchandise Military stores Railway materials for construction	· Tons. 137,722 608	<b>R</b> 3,14,861 4,025	Tons. 186,505 624	# 4,35,3°3 4,439	Tons. +48,783 +16	# +1,20,442 +414	
(Home line only)  Coal and coke for the public and	6,104	*7.467	22,350	9,646	<b>+</b> 16,246	+2,179	
foreign railways	. 35	67	78	138	+43	+71	
line only)	891	1,381	168	469-	<b>—</b> 723	-912	
coke	12,688	4,011	15,099	4,854	+2,411	+843	
Live-stock	6	153	3	59	3	-94	
Rents, miscellaneous, etc.	***	1,1,61.	***	1,985	. ***	+824	
TOTAL	158,054	3,33,126	224,827	4,56,893	+66,773	+1,23,767	

The noticeable increases in the traffic under "General merchandise" are shown below:

		•						Tons.	R
Grains . •		•	•	•	•	•	•	7,484	15,322
Oil-seeds	•	•	•	•	•			4,199	11,624
Sugar .	•	•	•	•	•	•	•	17,416	45,376

Grains.—The increase was due to better crops and to the opening of the Gola Gokaran Náth-Pilibhit section.

Sugar.—The large increase in this traffic was due partly to the increased mileage worked and partly to a good sugar-cane crop.

The average sum received for carrying a ton of goods one mile amounted to 7 08 pies against 7 83 in the previous year.

The goods earnings per goods train-mile were R2.15 against R2.36.

The following table shows the working expenses of the railway system durworking expenses. ing 1891 and 1892:

	. 189	I.	189	2.	•	
	Amount,	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	Increase in amount,	Percent- age of increase.
	R		R		R	•
Maintenance Locomotive Carriage and wagon Traffic General Special and miscellaneous	93,083 1,31,898 28,542 1,12,534 1,01,428 79,575	10.58 14.99 3.24 12.79 11.52 9.03	1,10,283 *1,45,955 40,541 1,32,261 1,29,389 85,218	9.88 13.07 3.63 11.85 11.59 7.63	17,200 14,057 11,999 19,727 27,961 5,643	18 48 10 66 42 04 17 53 27 57 7 09
Total .	5,47,060	62.12	6,43,647	57.65	96,587	17.66

The increased expenditure was due to the longer length of line open.

The principal alterations in the coaching fares will be found noted on page
Rates and fares.

141, Part I, of the Administration report.

#### Dibru-Sadiya Railway (metre gauge).

21: The following table shows the general results of the year's working as
General results. compared with those of 1891:

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 earn- ings on total capital outlay, including suspense.
	Miles.	Miles.	R	R	R		R'	
1891	78.00	152,928	4,98,632	3,28,156	1,70,526	65.80	123	2'54
1892 ·	77°50	195,289	5,13,213	3,49,494	1,63,719	68*10	127	<b>2</b> 35
Increase or de- crease	o-5o	+ 42,361	+14,531	→ 21,33S	-6,807	+ 2 30	+4	<b>-0'1</b> 7
Percentage of					<u></u>			
increase or de- crease	. <del></del> o-64	+27.70	+ 2*91	+6.20	-3.66	***	+ 3-25	

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 R1,00,000. The net earnings of the year ended the 30th June 1892, R1,84,804, having fallen short of the interest charges, R2,91,754, by R1,06,950, the maximum subsidy of R1,00,000 was accordingly paid to the company.

The following table shows the gross earnings under main heads as com-Gross earnings. pared with 1891:

•	<u>-</u>			_		1891.	t892.	Increase or decrease.
		•		•		.R	R	R
Coaching Goods Electric telegraph Sundries	•	:	•	•		70,761 3,97,802 13,303 16,816	80,462 4,01,179 12,076 19,496	+ 9,701 + 3,377 - 1,227 + 2,680
•	•	•	To	ral -	•	4,98,682	5,13,213	+ 14,531

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

•	FIRST	LASS.	SECOND	CLASS.	THIRD	CLASS.	TOTAL.	
-	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
•		R		R		R		R
189 <b>t · ·</b> 189 <b>2 ·</b>	2,776 3,053	6,808 7,142	2,059 1,974	2,857 2,787	87,023 101,130	49,894 59,061	91,858 106,157	59,55 <b>9</b> 68,990
Increase or decrease	+277	+334	-85	-70	+ 14,107	+9,167.	+ 14,299	+9,433

The improvement in the passenger traffic may be ascribed to a general development of passenger traffic.

The average sum received for carrying a passenger one mile amounted to 4'44 pies against 4'54 pies in the previous year.

The coaching earnings per passenger train-mile were R3'07 against R3'70.

Goods.—The following is a summary of the tonnage of goods lifted, and the earnings therefrom, as compared with 1891:

•	ì8	91.	18	92.	Increase or decrease.		
	Tons.	R	Tons.	·R	Tons.	R.	
General merchandise Coal and coke for the public	27,907	1,76,179	33,391	1,98,009	+ 5,484	+21,830	
and foreign railways  Revenue stores other than	148,484	2,14,697	156,820	1,98,219	+8,336	<b>-</b> 16,478	
coal and coke Live-stock	2,052	5,874 808	22,782	4,474 351	+ 20,730 36	- 1,400 - 457	
Rents, miscellaneous, etc		244		126	5	- 118	
TOTAL .	178,516	3,97,802	213,030	4,01,179	+ 34,514	+ 3,377	

The principal increases under "General merchandise" are noted below:

									1005.	A
Metals	•	•	÷	•	•	•	•	•	. 616	4.522
Timber	•	•	•	• .		•	•	•	• <b>3</b> .364	6,746

The decrease in the earnings under "Coal and coke for the public and foreign railways" was chiefly due to a reduction having been made in the rate for coal.

The increase in the quantity carried under "Revenue stores other than coal and coke" was due to the fact that the weight of ballast trains was not included

in the figures of the previous year; and the decrease in the earnings was principally due to less stores having been carried during the year.

The average sum received for carrying a ton of goods one mile amounted to 6.64 pies against 7.57 pies in the previous year.

The goods earnings per goods train-mile were R2.37 against R2.97.

Working expenses.

The following table shows the working expenses during 1891 and 1892:

	18	l91.	18	192.	Increase	Percentage
	A mount.	Per cent. on gross earnings.		Per cent. on gross earnings.	or decrease in amount.	of increase
	R		R		R	
Maintenance Locomotive Carriage and wagon Traffic General Special and miscellaneous	1,29,326 57,168 23,964 38,002 78,429 1,267	25'93 11'46 4'81 7'62 15'73 0'25	1,34,256 67,655 22,191 38,268 85,533 1,591	26·16 13·18 4·32 7·46 16·67 0·31	+ 4,930 + 10,487 - 1,773 + 266 + 7,104 + 3 <sup>2</sup> 4	+ 18.34 - 7.40 + 0.70 + 9.06 + 25.57
Total	3,28,156	65.80	3,49,494	68.10	+ 21,338	+ 6.20

The increase in the locomotive expenses was partly due to the appointment of an Assistant Locomotive Superintendent and partly to the repairs done to the engines and to increased consumption of coal.

Rates and fares.

The special rate on coal was reduced from  $4\frac{1}{2}$  to 4 pies per ton per mile.

### The Gaekwar's Mehsana Railway (metre gauge).

22. The mean mileage worked during the year was 92.63 against 75.69 in 1891. The open mileages of the seweral sections were as follows:

								Miles
Mehsána-Kherálu section		•	•	•	•	•	•	27.73
Mehsána-Viramgám section	•	•	•	•	•	•	•	40'21
Mehsána-Pátan section	•	•	•	•	•	•	•	24.69
							-	92.63
							-	

The increase in the mean-mileage was due to the Mehsána-Viramgám and Mehsána-Pátan branches having been worked for a portion only of 1891.

General results. The following table shows the general results of the year's working as compared with those of 1891:

YEAR.	Mean mileage worked.	Train- mileage.	Gross earnings.	Working expenses.	Net earn- ings.	Percentage of working expenses on gross earnings.	Gross earn- ings per mean mile worked per week.	Percertage of net earnings on total ca- pital out- lay, includ- ing sus- pense.
	Miles.	Miles,			R		R	
1891 • •	75.69	83,174	1,94,247	88,446	1,05,801	45 <sup>-</sup> 53	49	3-64
1892 • • •	92.63	92,359	2,58,963	1,05,958	1,53,005	40'92	54	5'15
Increase or decrease	+ 16.94	+9,185	+ 64,716	+17,512	+47,204	-4.61	+ 5	+1.21
Percentage of in- crease or decrease	+ 0.55	+11.04	+ 33'32	+ 19.80	+ 44.63		+ 10 30	

Gross earnings. The following table shows the gross earnings under main heads as compared with 1891:

				,				1891.	1892.	Increase.
					•			R .	R	R
Coaching .	•	•	•	•	•	•		93,640	1,25,151	31,511
Goods Electric telegraph	•	•	•	•	•	•	•	99,860 529	1,31,820 1,408	31,960 879 366
Sundries .	•	•	•	•	•	•	•	218	584	366
•					To	ral .	•	1,94,247	2,58,963	64,716

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.	SECON	D CLASS.	Тнікр	CLASS.	TOTAL.	
		No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
	-		R		R		R		R
1891 .		180	356	2,021	1,498	382,402	87,068	384,603	88,922
1892 .		246	395	2,342	1,901	488,114	1,15,974	490,702	1,18,270
Increase		66	39	321	403	105,712	28,906	106,099	29,348

The improvement under all classes of passenger traffic may be ascribed generally to the mean mileage worked having being greater in 1892 and to ordinary development of traffic.

The average sum received for carrying a passenger one mile amounted to 2'28 pies, being the same as it was in the previous year.

The coaching earnings per passenger train-mile were R2.84 against R2.61.

Goods.—The following is a summary of the tonnage of goods lifted and the earnings therefrom as compared with 1891:

	18	91.	18	392.	Increase or decrease.		
·	Tons.	R	Tons.	R	Tons.	R	
General merchandise Military stores. Railway materials for con-	6 <b>3,</b> 098 	87,807 I	93.583 1	1,28,156 6	+30,485 +1	+40,34 <b>9</b> +5	
struction (Home line only)  Coal and coke for the public	19,520	11,245	5,262	2,947	<b>14,258</b>	8,298	
and foreign railways . Coal and coke for revenue	7	13	7,	15,	•••	+ 2	
only	12	5	•••		—12 <sup>'</sup>	<b>—</b> 5	
coal and coke Live-stock Rents, miscellaneous, etc.	493 	115 444 230	 83	99 <b>5</b> 9 <b>7</b>	224 410	-115 -345 +367	
TOTAL .	83,354	99,86 <b>o</b>	98,936	1,31,820	+ 15,582	+31,960	

The noticeable increases of traffic under "General merchandise," shown below, were due chiefly to the increase in the mean mileage worked:

				_					Tons.	R
Grains	•	•	•	• '	•	•	•	•	9,692	11,198
Oil-seeds	•	•	•	•	. •	` •	•	. •	10,836	7,603
Salt	•	•	•	•	•	•	•	•	3,249	7,705
Sugar	•	6	•	•	•	•		•	4,610	8.253

The average sum received for carrying a ton of goods one mile amounted to 8.18 pies against 7.25 pies in the previous year.

The goods earnings per goods train-mile were R2'73 against R2'11.

Working expenses. during 1891 and 1892:

The following table shows the working expenses

•	18	91.	18	92.		Percentage of increase or decrease.
•	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	Increase or decrease in amount.	
Maintenance Locomotive Carriage and wagon Traffic General Special and miscellaneous TOTAL	. R 17,501 36,720 9,815 12,580 10,583 1,247 88,446	9.0 f 18.90 5.05 6.48 5.45 0.64	# 18,827 46,617 9,363 16,279 13,358 1,514	7°27 18°00 3°62 6°29 5°16 0°58	R + 1,326 + 9,897 - 452 + 3,699 + 2,775 + 267 + 17,512	+ 7°58 + 26°95 - 4°61 + 29°40 + 26°22 + 21°41 + 19°80

As the working expenses are based on the same percentage of expenses on the gross earnings as obtains on the Rajputana-Malwa and the Gaekwar's Mehsana railways, no explanations of fluctuations under the several abstracts are necessary.

### Jodhpore-Bickaneer Railway system (metre gauge).

23. The mean mileage worked during 1892 was 291 miles against 1826 miles in the previous year, the increase being due to the extension from Jodhpore to Bickaneer having been open for traffic during a portion only of 1801.

The mileages of the two sections were as follows:

The following table shows the general results of the year's working as General results. compared with those of 1891:

Year.	Mean mileage worked.	Train- mileage.	Gross earnings.	Working expenses.	Net earnings.	Percentage of working expenses on gross earn- ings.	morled nor	ings on total	
	Miles	Miles.	R	R	R		R		
1891 · · · · · · · · · · · · · · · · · · ·	182.66	240,2 <b>6</b> 6 344,21 <i>7</i>	6,17,978 10,23,528	2,80,890 4,69,683	3,37,088 5,53,845	45*45 . 45*89	65 68	6°00 9°63	
Increase or dicrease.	+ 103'34	+103,951	+4,05,550	+1,88,793	+ 2,16,757	+0.44	+3	+3.63	
Percentage of in- crease or decrease,	+ 59*31	+ 43°26	+65-63	+ 67.21	+ 64.30		+ 4.62	4++	

The following table shows the gross earnings under main heads as com-Gross earnings. pared with 1891:

	•				-	1891.	1892.	Increase.
		÷				R	R	R
Coaching		. •	•	. •	. }	2,32,658	3,50,355	1,17,697
Goods	3			•	•	3,75,209	6,48,708	<b>2</b> ,73,499
Electric telegraph		•	•	•	•	9,604	22,741	13,137
Sundries	•	•	•	•	-	507	1,724	1,217
			To	TAL		6,17,978	το,23,528	4,05,550

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.	Seconi	CLASS.	THIRD	CLASS.	TOTAL.	
	]	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
-	Ì	<del></del>	R	·	R		R		
1891 . 1892 .	:	749 1,088	4,267 6,867	3,568 5,333	5,770 10,853	394,635 516,307	1,99,314 2,91,400	398,952 522,728	2,09,351 3,09,120
lucrease	•	339	2,600	1,765	5,083	121,672	92,086	123,776	99,769

The improvement in the passenger traffic was due to the extension to Bickaneer having been open for traffic throughout the year.

The average sum received for carrying a passenger one mile amounted to 200 pies against 208 pies in the previous year.

The coaching earnings per passenger train-mile were R2.88 against R2.73. Goods.—The following is a summary of the tonnaget of goods lifted and the earnings therefrom as compared with 1891:

	1	<b>891.</b>	16	92.	Increase	or decrease.
General merchandise.	Tons. 68,790	₽ 3,19,993	Tons.	<i>₽</i> 6,06,067	Tons. + 61,761	# + 2,86,074
Military stores	5	78	13	190	+8	+112
Railway materials for construction (Home line only) . • •	74,795	42,467	55,246	29,655	<b>–</b> 19,549	-12,812
Coal and coke for the public and foreign railways	916	5,425	298	1,309	-618	-4,116
Coal and coke for con- struction (Home line only)	•••	•••	24	27	+ <b>3</b> 4	+ 27
Coal and coke for revenue only	1,560	2,520	2,722	5,123	+ 1,162	+2,603
Revenue stores other than coal and coke.	1,702	1,456	3,586	3,076	+ i,884	+ 1,620
Live-stock	33	357	41	471	+8	+114
Rents, miscellaneous, etc.		2,913	•••	2,790	•••	- 123
Total .	147,801	3,75,209	192,481	6,48,708	+ 44,680	+2,73,499

The noticeable increase in the traffic under "General merchandise" occurred in grain which showed an increase of 45,950 tons and of RI,53,628 owing to demands on account of the scarcity which prevailed during the year.

The decrease in "Railway materials for construction (Home line only)" was due to the approaching completion of the Merta road, Kucháman road section.

The average sum received for carrying a ton of goods one mile amounted to 8.98 pies against 8.85 pies in the previous year.

The goods earnings per goods train-mile were R2'92 against R2'42.

<sup>•</sup> Numbers shown count through passengers over the two sections twice over.

<sup>†</sup> Tonnage shown counts through traffic over the two sections twice over.

The following table shows the working expenses of the railway system Working expenses. during 1891 and 1892:

•	18	91.	18	92.		
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	Increase in amount.	Percentage of increase.
Maintenance Locomotive Carriage and wagon Traffic General Special and miscellaneous	99,831 1,18,856 9,240 29,139 16,204	16·15 19·23 1·50 •4·72 • 2·62 1·23	# 1,34,497 2,00,894 16,270 51,565 33,079 33,378	13 <sup>1</sup> 14 19 <sup>1</sup> 63 1 <sup>1</sup> 59 5 <sup>1</sup> 04 3 <sup>1</sup> 23 3 <sup>1</sup> 26	# 34,666 82,038 7,030 22,426 16,875 25,758	34'72 69'02 76'08 76'96 104'14 338'03
. Total	2,80,890	45'45	4,69,683	45'89	1,88,793	67.21

The increase in the maintenance charges was chiefly due to the extra mileage maintained and to a larger outlay on "Maintenance and renewal of permanent-way" in the first-half of the year.

The increase in the locomotive expenses was due mainly to the increase under "Maintenance and renewal of engines" and to the heavier expenditure under "Fuel" due to the increased train-mileage run.

The increase under special and miscellaneous expenditure was almost wholly due to a larger debit on account of mileage and demurrage of foreign stock.

The principal changes in goods rates will be found noted on page 143, Part Rates and fares.

I of the Administration report.

Bhávnagar-Gondal-Junágarh-Porbandar Railway (metre gauge).

24. The open mileages of the several sections were as follows:

Bhávnagar section (Bhávnagar bandar to Wadhwán and Dhola to Dhasa)

Gondal and Porbandar sections (Dhasa to Porbandar)

Junágarh section (Jetálsar to Verával)

Miles.

119'35

67'20

The following table shows the general results of the year's working as

General results. compared with those of 1891:

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, in- cluding suspense.†
	Miles.	Miles.	R	R	R		R	
1891	333.69	463.793	14,77,263	10,01,477	4,75,786	67:79	85	2.78
1892 • •	333.72	492,859	15,78,179	11,40,302	4,37,877	72.25	91	2'54
Increase or decrease .	+0.03	+ 29,066	+ 1,00,916	+ 1,38,825	-37,909	+4.46	+6	-0.34
Percentage of increase or decrease.	+0'01	+ 6'27	+ 6.83	+ 13 86	-7'97	***	+ 7'06	***

<sup>\*</sup> Includes 4.50 miles of quarry and dock estate lines.

<sup>†</sup> Based on outlay, excluding expenditure on quarry and dock estate lines.

The following table shows the gross earnings under main heads as com-Gross earnings. . pared with 1891:

	-	•				1891.	1892.	Increase or decrease.
						R.	R	R
Coaching	•		•			8,14,967	8,11,591	-3,376
Goods	•	•	•	•	. [	6,26,142	7,23,958	+97,816
Electric telegraph	•		•			11,046	15,483	+4.437
Sundries	•	•	•	•	-	25,108	27,147	+2.039
• • .			Tot	ΓAL		14,77,263	15,78,179	+ 1,00,916

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.	SECONI	CLASS.	THIRD	CLASS.	TOTAL.		
		No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.	
1891 1892		3,142 3,402	10,741 11,547	26,707 26,207	33.812 - 32,855	1,281,328 1,314,566	7.25,587 7,15,225	I 311,177 1,344,175	# 7,70,140 7,59,627	
Increase crease	ľ	+ 260	+806	-500	-957	+ 33,238	-10,362	+ 32,993	-10,513	

The increase in number with a decrease in earnings in the third class passenger traffic is attributed to passengers having travelled shorter distances.

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 R2'99 against R3'02.

Goods.—The following is a summary of the fonnage of goods lifted and the earnings therefrom as compared with 1891:

	1891	.	1892	•	Increase or decrease.		
	Tons.	R	Tons.	R	Tons.	R	
General merchandise	122,325	5,82,012	150,682	6,90,411	+ 28,357	+ 1,08,399	
(Home line only) Coal and coke for the public and	7,465	10,354	6,755	5,031	-710	+ 5,323	
foreign railways Coal and coke for construction	2,479	7,709	1,395	3,949	- 1,084	-3,760	
(Home line only) Coal and coke for revenue only Revenue stores other than coal	6 4,327	6,502	15 2,893	20 2,271	+ 9 -1,434	+ 18 —4,231	
and coke	19,553 64 •••	18,114 494 955	18,566 34 	20,680 440 1,156	- 987 30	-2,566 -55 + 201	
Total .	156,219	6,26,142	180,340	7,23,958	+ 24,121	+ 97,816	

The noticeable fluctuations of traffic under "General merchandise" are shown below:

						INCREAS	E.	DECREA	SE.
					-	Tons.	R	Tons.	R
Cotton, raw	•	•	•	•		6,877	33,863		
Grains	•	•	•	•	•	14,297	54,819		***
Oil-seeds	•	. •	•		•	1,425	9,207		
Railway plai	nt an	d rolli	ng-sto	ock	•	1,455	5,127	•••	***
Timber	•	•	•	•	•	729	4,573	·	***
Metals .	•	•.	•	•	•	•••	•••	332	2,187
Provisions	•	•	•	•	•	•••		815	7,955

Cotton, raw.—The increase was due to better crops in Káthiáwár during the first-half of the year.

Grains.—The improvement was due to increased exports to Bombay.

The average sum received for carrying a ton of goods one mile amounted to 10.34 pies against 9.93 pies in the previous year,

The goods earnings per goods train-mile were R3 27 against R3 23.

The following table shows the working expenses during 1891 and Working expenses.

1892:

	189	)1.	£8 <u>9</u>	)2.	Increase or	Percentage
	Amount.	Per cent. on gross earnings.	Amount.	Per cent. on gross earnings.	decrease in amount.	of increase or decrease.
•	R		R	· ·	R	
Maintenance Locomotive Carriage and wagon Traffic General Special and miscellaneous	3,74,948 2,43,846 33,959 1,50,778 1,75,067	25.38 16.51 2.30 10.20 11.85	5,16,088 2,31,834 44,310 1,55,594 1,62,233	32.70 14.69 2.81 9.86 10.28	+1,41,140 -12,012 +10,351 +4,816 -12,834 +7,364	+37.64 -4.93 +30.48 + 3.19 - 7.33 +32.19
TOTAL	10,01,477	67.79	11,40,302	72.25	<del></del>	+ 13.86

The increase in the maintenance charges was chiefly due to heavy renewal of sleepers on the Bhávnagar and Gondal sections.

#### CHAPTER V.

#### SCHOOLS AND FINE FUNDS.

#### SECTION I.—SCHOOLS.

In the following statements are given details of the number of children of railway employés, 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 1892:

STATEMENT No. 7. Railway schools.

				ATTEN	DANCE.		A	NNUAL CO	NTRIBUTIO	N3.	<u> </u>
		Number	Сиг	DREN.		NTICES			•		Annual
Serial number.	RAILWAY.	of schools.	Number on the rolls.	Average daily attend- ance.	Number on the rolls.	Average daily attend- ance.	Govern- ment grant.	Railway grant.	School fees.	TOTAL.	expendi- ture,
	STANDARD GAUGE. State lines worked by						R	R	R	R	R
I	companies. East Suropean	(a)13	671	525	<b>38</b> -		3,327	(b)9,865	19,055	(c) 32.886	(d)48,156
11	Indian (Native . Bengal-Nágpur(European)	27	2,400	1,842	1,509	717	3,746	4,137	11,194	(e) 21,335	(d)21,175
111	Indian Midland	2 I	35 57	24 41	:::		***	749 1,700	537 451	1,280 2,151	1,286
	State lines worked by the State.	}						,,,,,,,	1 73-	2,,31	1,723
IX	North West- & European	3	82	67	27	19	1,184	(f)7,511	7,131	15.826	(g)16,57 <b>3</b>
•XI	ern (state) { Native . Oudh & Rohil-( European	20	71	60	1,028	399	•••	5,964		5,904	5,640
i	khand (state) & Native .	3.	4I I3	25 11	162	68	500	746 421	575	1,821	1,246
XII) and XLIII)	Eastern Bengal (state) (h)	7	13	8	272	77	•••	1,244		1,244	421 1,244
XVIII	Lines worked by guaranteed companies, Great Indian Peninsula.	- (i) 7	300	215	•		2 265	0-	( )		-
XIX	Bombay, Baroda and	(*) /		1	,	•••	3,365	14,003	$(j)^2,177$	19,625	15,880
XX	Central India	3	108	98 2پ2	•••		1,461 3,000	3,216 8,556	1,894	6,571	5,840
xxxııı	METRE GAUGE. State lines worked by companies. Bengal and North-Western—		•			••• •	3,009	1	2,924	14,459	(k)15,369
	Tirhoot section Company's section	} (l)3	42	34	<b></b>		,.,	1,735	799	2,534	2,641
XXXV	Rajputana-Malwa.	(m)9	275	227	43	37	3,746	16,325	8,356	28,427	28,349
XXXVI XXXVIII	Southern Mahratta Southern Mahratta (My-	. 1	18	13			(n)	600	254	854	790
	sore section)	r	14	13			}	76	104	180	180
	State line worked by the State.					}			1		
XLIV	Burma (state)	1			25	22	600		300	900	000
LIV	Line owned and worked by native states. Bhavnagar-Gondal-									, ,	900
	Junágarh-Porbandar .	2	19	16			115	1,200	540	1,855	2,173

(a) Includes the joint railway schools at Gháziabad and Aligarh.
(b) Includes R300 and R600, the amounts received from the Oudh and Rohilkhand (state) and North Western (state) railways, respectively, for the joint railway schools at Aligarh and Gháziabad.
(c) Includes R630 collected from other sources.
(d) The excess expenditure was met from the balance of school funds, etc., and in the case of Mussoorie Hill school a loan of R800 was granted from the Fine Fund during 1892.
(e) Includes R2,258 collected from other sources.
(f) Includes R330, being interest on promissory notes.
(g) The excess expenditure was met from other sources.
(h) Includes the Bengal Central railway.
(i) Includes the Bengal Central railway, which is also included in the number of schools shown against the Rajputana-Malwa railway.
(k) The expenditure on the joint railway school at Khandwa, which is also included hetween the Great Indian Peninsula and the Madras railways.
(k) The school at Samastipur was opened in March 1892, and that at Sonepore in June 1892.
(m) Includes the joint railway school at Khandwa, which is aso included in the number of schools shown against the Great Indian Peninsula railway.

railway.

(n) Government grant has not yet been received, but the school has been inspected and R147 have been sanctioned by Government.

STATEMENT No. 8. Local and district schools.

Serial		Number	ATTEN	B DAILY	Annual rail-	
number.	RAILWAY.	schools.		Apprentices and workmen.	way grant.	
	STANDARD GAUGE. State line worked by company.					
•	East Indian	. 2	319		- 780	
IX XI	State lines worked by the State. North Western (state)	(a) 11	186		8,786	
XII ')	Oudh and Rohilkhand (state)	. (6) 10	78	111	4,583	
and XLIII	Eastern Bengal (state) (c)	. 11	349		3,383	
	Lines worked by guaranteed companies.					
XVIII XIX	Great Indian Peninsula	• 4	(d)		1,650	
AIA	Bombay, Baroda and Central India .	15	31	•••	1,831	
<b>X</b> XXIII	METRE GAUGE. State lines worked by companies. Bengal and North-Western—					
	Tirhoot section Company's section	· } 1	25	1	240	
XXXV	Rajputana-Malwa	. 6	197		1,858	
XLIV	State line worked by the State. Burma (state)	. 11	82		1,903	
XLVII	Assisted company, Rohilkund and Kumaon (Company's se	.c-		1		
ALDVII	tion) (e) • • • • •	~,   i	5	***	68	

(a) Excludes the joint railway school at Gháziabad, which receives a contribution from the North Western (state) railway.

The particulars regarding this school are included with railway schools of the East Indian railway.

(b) Excludes the joint railway school at Aligarh, which receives a contribution from the Oudh and Rohilkhand (state) railway. The particulars regarding this school are included with railway schools of the East Indian railway. railway. The particulars regarding this school are includ (c) Includes the Bengal Central railway.
(d) Information not furnished; the number on the rolls was 149.
(e) Includes the Lucknow-Bareilly section.

#### SECTION II .- FINE FUNDS.

2. The following table exhibits the transactions of the Fine Funds during 1892-93 on state railways worked by the State.

It will be seen that the assets of the funds, including the balance (a) at the close of the previous year, amounted to R1,12,943; the expenditure to R35,322; and the balance at the end of the year to R77,621:-STATEMENT No. 9.

			Rece	PTS,	į		Cxpenditure		Balance at
Serial number.	RAILWAY.	Balange on 1st April 1893.	Fines.	Interest.	Total.	Disburse- ments.	Refunds.	Total.	the end of 1892-93.
	State lines worked by the State.	R	R	R	R	R	R	R	R
1X	North Western (state)	6,357	16,771	423	(b) 23,809	14,782	214	14,996	8,813
ХI	Oudh and Rohilkhand (state).	63,201	1,680	2,260	67,141	(è) 6,736	56	б,792	(d) 60,349
XII)	Eastern Bengal (state).	бо8	7,258	31	7,897	6,727	123	6,850	1,047
XLIV	Burma (state)	6,459	6,549	240	(e) 13,400	6,615	б9	6,684	6,716
	Cherra-Companyganj .	180	***	7	187			***	187
LVII	Jorhát	447	45	17	509		4	•••	509
	TOTAL .	77,252	32,303	2,978	(b)(e)1,12,943	34,860	462	35,322	77,621

(a) Excludes Ro8 of the late Nalháti state railway Fine Fund, the line having been incorporated with the East Indian railway from the 1st of April 1892.
 (b) Includes a write-back of R258 on account of salary and house-rent paid from the Fine Fund to the Railway Chaplain at Lahore.
 (c) Includes R4.074 unclaimed Provident Fund and security deposits of discharged employés of the Oudh and Rohilkhand Guaranteed Railway Company transferred to the "Dead Account" pending repayment.
 (d) As explained in previous reports, this large balance is due to R70,760 having been taken over by Government from the Oudh and Rohilkhand Guaranteed Railway Company.
 (e) Includes R152 on account of advance recovered and miscellaneous adjustments.

### ADMINISTRATION REPORT FOR 1892-93.

TOTAL . 35,322

3. Some details of the disbursements are given in the following state-ment:

Serial No.	Railway.	Hospitals for sick employés.	Compas- sionate al- lowances.	Schools,	Institutes, reading- rooms and libraries.	Railway gardens.	Sports.	Volun- teers.	Miscella- neous.
	State lines worked by the State.	R	R	R	R	R	R	R	*
ıx	North Western (state)	100	69	10,503	3,577	•	350	<b>,</b>	183
XI	Oudh and Rohilkhand (state)		103	1,667	192	٠ 🚚	4	•••	4,774
XII and XLIII	Eastern Bengal (state)		657	3,313	2,205				552
XLIV	Burma (state)		***	1,902	1,799		1,651	<b>6</b> 00	663

R. A. SARGEAUNT, Lieut.-Col., R.E.,

Director General of Railways.

Calcutta, the 16th December 1893.

150

#### APPENDIX A.

## INDIAN RAILWAYS.

Statistics of their working for the half-years ended the 30th June and the 31st December 1892.

## PART I.

SUMMARY OF THE REVENUE ACCOUNTS.

## CONTENTS.

					HEAD	INGS	3,										Paub,
GENERAL BESULTS .	•	•	•	•	•		•				•	•	• •				11—111
SUMMARY OF BARNINGS		•			•					•.	•						1y <b>_y</b>
DRIALL OF COACHING THAN	FIC			٠	•	٠.				•		•	•				Z117
DETAIL OF GOODS TRAFFIC									-					•			, <b>x—</b> x111
SUMMARY OF EXPENSES	•		•					ı			•	•	.•			•	zia—zaii
DETAIL OF MAINTENANCE	EXPEN	SES									•	•					1XX—111VX
DETAIL OF LOCOMOTIVE E	XPENSE	ម	•						. •		•						. <b>x</b> xII—xxv
DETAIL OF CARRIAGE AND	WAGO	N B	XPENS:	ES						•	•	•	•			.•	XXVIXXIX
DETAIL OF TRAFFIC EXPE	NSES	•										٠.	٠,	•		,	ZZZ—ZZZIII
DETAIL OF GENERAL CHAP	RGRS		•												•		XXXIV—XXXVII
DETAIL OF SPECIAL AND	Mischl	LANI	BOUS I	ex P	ENDIT	URE		,	•		٠.,				•		XXXVIII—XL
STATEMENT OF ROLLING-8	TOCK				• .			•							٠.		XLII—XLV
STATEMENT OF TRAIN-MIL	BAGB											٠.				٠.	xlvi—xlix
NET EARNINGS AND INTE	REST O	N C	APITAI				ı							,			

#### 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 1892.

#### GENERAL RESULTS.

						<del></del>		
Serial Number-	RAILWAT.	1892.	Capital expended.(a)	Mean mileage open.	Totál train- mileage.	Earnings.	Expenses.	Net éarnings.
· 1	STANDARD GAUGE. East Indian $(b)$ .	ıst half 2nd halí	R 35,32,52,826 35,80,76,551	Miles. (c) 1,563\frac{1}{2} (c) 1,634\frac{1}{2}	Miles. 5,039,988 4,485,534	R 2,67,06,607 2,21,48,499	# 72,74,917 64,11,785	R 1,94,31,690 1,57,36,714
	Patna-Gya • • • {	ıst half 2nd half	43,69,426 Incorporated	57‡ with the E	69,385   ast Indian rail	2,86,495 lway.	(d)1,23,033	1,63,462
· II	Bengal-Nágpur {	1st balf 2nd balf	8,90,41,49 <b>2</b> 9,02,80,954	8313 8313	807,239 •662,357	39,07,239 21,76,323	16,43,964 14,31,432	22,63,275 7,44,891
III	Indian Midland	ist half and half	8,34,00,076 8,40,51,885	(#)696 <del>1</del> (#)696 <del>1</del>	751,202 578,233	26,24,261 18,53,363	14,23,433 13,27,932	12,00,828 5,25,431
IV	Bhopal-Itarsi (British section) . {	1st half 2nd half	16,27,182 17,27,868	13 13	35,258 21,144	94,173 58,924	50,218 46,48 <b>2</b>	43,95 <b>5</b> 12,442
VI	Wardha Coal {	ist half and half	49,82 <b>,807</b> 49,87,68 <b>9</b>	45 45	46,634 40,842	(f)75,369 (f)32,204	(g)35,902 (g)37,576	39,467 —5,372
VII	Dhond-Manmad	1st half 2nd half	1,09,89,259 1,10,71,284	1451 1451	207,594 216,307	(f)1,92,026 (f)1,49,129	(g)6,410 (g)6,410	1,85,616 1,42,719
<b>V</b> III	Bezwada extension {	1st half 2nd half	14,17,376 14,17,674	21 } 21 }	10,388 8,998	(f)11,490 (f)17,418	(g)561 	10,929 - 17,418
17	North Western (state) (h) {	ist half and half	1	(j)2,428 <del>}</del> 2,435‡	4,264,003 3,641,930	1,49,13,537 1,15,22,128	(k)94,95,899 (l)74,88,737	54,17,638 40,33,391
!	Amritsar-Pathánkot (m) {	1st half 2nd half	(m') Incorpo	$(\vec{m}')$ rated with t	(m') he North West	) (f)28,052 ern (state) rail	way on the 1st	28,052 April 1892.
x	Hyderabad-Umarkot (n)	1st half 2nd half	16,17,397	 42}	20,360	33,206	35,155	—1,949
XI.	Oudh and Rohilkhand (state) . {	ist half 2nd half	9,05,28,559 9,06,20,467	692 <del>1</del> 6921	1,282,046 1,156,947	50,60,923 34,81,913	18,17,174 17,09,333	32,43,749 17,72,580
XII	Eastern Bengal (state)	1st half 2nd half	5,65,13,438 5,71,09,557	248} 248}	951,915	25,59,929 44,64,966	14,95,863 16,17,454	10,64,066 28,47,512
ZIII	Bengal Central {	ist half and half	99,03,57 <b>0</b> 99,69,36 <b>7</b>	125 125	147,496 151,663	3,75,912 3,93,435	2,24,284 2,32,160	1,51,628 1,61,275
XIV	Calcutta Port Commissioners' .{	1st half 2nd half	50,55,1 <b>53</b> 57,83,466	6 <del>1</del>	(o) (o)	1,20,373 1,50,547	1,13.379 26,026	6,994 <b>1,2</b> 3,921
<b>X</b> VIII	Great Indian Peninsula	ist half and half	27,17,93,645 27,21,77,576	1,288‡ 1,286‡	5,409,792 3,834,317	2,52,24,675 1,54,40,952	(p)1,08,97,015 (q)94,08,985	1,43,27,660 60,31,967
XIX	Bombay, Baroda and Central { India.	1st half 2nd half	9,28,07,604 9,37,77,980	461 461	1,468,667 1,068,919	89,26,067 53,18,411	33,49,233 20,82,155	55,76,834 26,36,256
XX	Madras	rst half and half	11,66,59,758	.839 <del>1</del> 839 <del>1</del>	1,245,122 1,274,602	47,45,102 48,79,567	26,73,052 26,59,484	20,72,050 22,20,083
XXI	Delhi-Umballa-Kalka {	ist half and half	(r)1,48,40,377 (r)1,49,07,798	1613	224,939 232,902	5,52,751 5,29,018	2,65,320 2,53,928	<b>2,</b> 87,431 <b>2,</b> 75, <b>0</b> 90
XXII	Tarkessur	ist half 2nd balf	17,28,974 17,32,567	221 221	25,92 <b>7</b> 25,875	1,63,003 1,30,581	(d)76,110 (d)02,72 <b>7</b>	86,083 6 <b>7,</b> 854
IIIXX	Khámgaon		4,85,521 4,85,521	78 78	6,688 5,888	(f)23,133 (f)7,775		<b>23,133</b> 7,775
XXIV	Amráoti	1st half 2nd half	4,41,556 4,41,556	. 5 <sup>1</sup> / <sub>2</sub>	6,720 • 10,794	(f)36,282 (f)13,241	(g)443 (g)443	35,839 12,793
XXV	Bhopal-Itársi (Nutive state section)	tet half 2nd half	50,00,00 <b>0</b> 50,00,000	- 44 - 44	104,484 69,128	2,79,075 1,68,725	1,48,818 1,33,098	1,30,257 35,627
XXVI	The Nizam's Guaranteed State . {	tst half 2nd half	3,87,24,168 3,88,25,112	33 <sup>2</sup> 1 33 <sup>2</sup> 1	<b>303,904</b> <b>27</b> 8;998	14,50,119	(s) 7,35,950 (t) 7,19,733	7,14,169 6,10,790
. XXVII	The Gaekwar's Petlad	1st half 2nd half	, ,,,,,	13 <del>1</del>	9,646 9,884	34,084 27,159	· 12,789 13,69 <b>7</b>	21,295 13,462
XXIX	Rajpura-Bhatinda	ist half and half	65,56,118 65,90,424	108 108	87,591 82,162	3,04,959 2,59,094	1,67,727 1,42,502	1,37,232 1,16,592
XXX	Jammu and Kashmir (Native {	1st half 2nd half	9,46,775 9,45,302	16 16	(m') 12,180	(f) 7,893 (f)7,551	•••	7,893 7,551
	TOTAL STANDARD GAUGE CETTIED {	1st half 2nd half	1,67,36,01,883	10,1737	22,261,932 18,844,879	9,87,03,619 7,45,94,652	4,20,31,494 3,64,47,834	5,66,72,125 3,81,46,818

<sup>(</sup>a) Capital expended on open mileage charged to final heads, inclusive of steamboat and reiling stock, but exclusive of suspense items.

(b) Includes the Azimganj branch from the 1st April and the Gya branch from the 'rst July 1892. This remark applies to all the tables.

(c) Includes a mile of the Rajputana-Malwa railway, and 2324 miles of the Eastern Bengal (statel railway worked over by the East Indian railway.

(d) Includes contribution to the East Indian railway Provident Institution, I share of net earnings payable to the East Indian railway for working, and a per cent. for use of the East Indian railway rolling-stock in the case of the Tarkessur railway only.

(e) Includes 1870 miles of the East Indian railway, 2°80 miles of the Rajputaha-Malwa railway, 1 mile of the Ondh and Rebilkhand railway, and 0°13 mile of the Grat Indian Penirsula railway works dover.

(f) Represents the smooth received as tentifor(1) case of this line.

(f) Expenditure incurred direct by the State

<sup>(</sup>h) Includes the Amritanr-Pathankot railway which was incorporated into the North Western railway from the 1st April 1892. This remark applies to all the tables (j) Includes 13 miles, Ghaziahad to Delhi, worked over by the North Western (state railway.

(i) Includes R35.045 on account of rent of leased lines.

(ii) Includes R7,551 on account of rent of leased lines.

(iii) Includes R7,551 on account of state limits.

(iv) Included with the North Western (state) limits.

(iv) Opened for traffic on the 18th August 1892.

(iv) Includes R3,26,810 on account of rent of leased lines.

(iv) Includes R3,26,810 on account of rent of leased lines.

(iv) Includes R3,26,810 on account of rent of leased lines.

(iv) Includes R3,26,810 on account of rent of leased lines.

(iv) Includes R3,26,810 on account of rent of leased line.

(iv) Includes R3,26,810 on account of rent of leased line.

## 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 1892-concluded.

GENERAL RESULTS-concluded.

<del></del>		GE:	NERAL RESU	LTS-conclu	ded.			
Serial Number,	· RAILWAY.	1892.	Capital expended. (a)	Mean mileage open.	Total train-	Earnings.	Expenses.	Net earnings
	Brought forward STANDARD {	ist half 2nd half		Miles. 10,173 10,235	Miles. 22,261,932 18,844,879			
XXXIII	METER GAUGE. Bengal and North-Western-	1						
	Tirhoot section	ist half and half			(b) (b)	11,51, <b>7</b> 38 10,33,123		
	Company's section	ıst half 2nd half	(c) 2,64,48,694	412½ 414½	(d) 865,882 (d) 764,376			
XXXIV	Robilkund and Kumaon (Luck- { now-Bareilly section).	ist half 2nd half		198½ 198½	161,563 38,922			
- <b>XXX</b> V	Rajputana-Malwa	1st half 2nd half	12,60,86,651 12,61,86,902	1,674 1,674	3,965,762 2,789,692			
XXXVI	Southern Mahratta	1st half 2nd half			924,182 843,759			
XXXVIII	Southern Mahratta (Mysore sec- { tion).	1st half 2nd balf	1,47,24,225	311}	294,027 290, <b>5</b> 58	6,41,935		1,77,111
	Southern Mahratta (Nanjangud actension.)	1st half 2nd half		151	6,773	16,478	10,315	6,163
	Southern Mahratta (Yesvantpur-{ Dodballapur.) (f)	tst half 2nd half		***	756			
XXXIX	South Indian (g)	1st balf 2nd balf	7,40,32,138	1,053}	1,581,403 1,696,217	38,11,213		
XLIII	Eastern Rengal (state)— Northern and Behar sections (including the Kaunia-Dharlla)	1st balf	3,73,97,472		(1)736,205		•	
	2' 6" gauge branch).	2nd half	3,90,40,47:1	442	(1) 746,127	22,78,378	9,78,946	12,99,432
	Dacca section	1st half 2nd half	66,88,123 66,99,363		(j) (j)	1,69,706 2,11,214		
XLIV	Burma (state)	tst half 2nd half	5,99,12,412 6,11,09,166		1,014,735 889,614			
XLVI	Deoghur	1st half 2nd half	} 2,86,179	43	14,562	26,564	17,257	9,707
XLVII	Rohilkund and Kumaon (Com- { pany's section).	1st half 2nd half	20,53,951 20,52,435	(k) 66 (k) 67	46,647 141,816	2,33,965 2,86,602		
XLIX	Dibru-Sadiya	1st half 2nd half	67,77,089 68,47,234	78 77 3	93,840 101,440	2,69,902 2,43,311	7,7	
LI	The Gackwar's Mehsana{	ist half 2nd half	29,59,023 29,71,610	921 921	52,100 40 <b>2</b> 59	1,53,830 1,05,133	1	95,132 57,873
LII	Kolhápur {	ıst balf 2nd half	22,92,466 23,18,476	29 29	22,856 22,856	44,571 45,827		
LIII	Jodhpore-Bickaneer— Jodhpore section	1st half 2nd half	49,09,990 47,61,590	247 1 247 1	163,149 141,882	5,64,041 • 3,82,938	2,15,104 2,02,934	3,48,937 1,80,004
	Bickaneer section	ist half 2nd half	8,90,984 9,48,622	431 431	<b>2</b> 2,116 1 <b>7</b> ,070	44,107 32,440	29,302	14,805 10,099
ΓΙΛ	Bhávnagar-Gondal-Junágarh-Por-	ist half 2nd half	1,67,83,145 1,68,42,743	333 <sup>3</sup> 333 <sup>3</sup>	288,667 294,192	9,67,026 6,11,152	6,62,681 4,77,620	3,04,345 1,33,532
	Special gauges.  Nalháti (4' 0") (1)	ist half	Incorporated	I33	14,298 Indian milw	24,917 y On the 1st	—411 April 1892-	25,328
-	Cherra-Companyganj (2' 6") .	1st half 2nd balf	3,51,615 3,54,994	8 8	6,664 6,579	9,479 9,091	8,801 8,901	678 - 190
FAII	Jorhát (2' 0")	1st half 2nd balf	7,31,980 7,38,472	271 26	11,720 11,134	29,115 36,964	27,038 27,253	2,077 9,711
TAIJI	Darjeeling-Himalayan (2' o") . {	1st half 2nd half	29,86,6 <b>62</b> 30,03,609	51 51	79 <b>.</b> 37 <b>7</b> 71,560	3,14,175 3,21,603	1,88,122	1,26,053 1,44,391
LIX		ist half 2nd half	17,88,028 18,29,994.	713 713	53 <b>,2</b> 03 35,939	1,47,291 91,318	76,398 55,701	70,893 35 617
LXI		rst balf 20d half	20,35,921 20,80,223	. <b>94</b> 94	81,279 75,604	1,70,011 1,39,160	91 <b>,593</b> 87,208	78,413 51,952
		ist half and half	51,32,04,428 51,82,45,469	7,3783 7,4843	10,468,368 8,937,134	3,22,98,372 2:62,07,748	1.53,70,552 1,42,32,453	1,69,27,820 1,20,65,295
-	TOTAL OF ALL GAUGES FOR THE ? YEAR. (m)		2,80,20,84,051	17,640}	60,526,875	23 19,21,355	10,80,99,590	12,38,21,765
		=	<del></del>	<del></del>			<del></del>	<del></del>

<sup>(</sup>a) Capital expended on open mileage charged to final heads, inclusive of steamboat and rolling-stock, but exclusive of suspense items.

(b) Included with the Bengal and North-Westegu railway (Company's section).

(c) Excludes Rue, 0,04 on account of interest on expital during construction.

(d. Includes the Bengal and North-Western railway (Firhoot section).

(e) Excludes Rue, 0,000 account of interest on capital during construction.

(f) the med for traffic on the 16th December 1802.

(g) Includes the Pondicherry railway, except in the case of capital outlay, net earling and carnings. The latter includes only the amount received for working the Pondicherry railway.

N.B.—This table accludes the transactions of the Pondisherry and West of India P

<sup>(</sup>h) Includes the Dacea section.

(j) Included with the Eastern Bengal (state), Northern and Behar sections, including the Kamina-bhaffla (\* 6" gauge) bratch.

(k) Includes 12 miles of the Robikkund and Kumaon railway (Lucknow-Barellly section) worked over by the company.

(l) For the first ture months only. This remark applies to all the tables.

(m) Includes the Deoghur railway for which yearly figures are shown.

### APPENDIX

## STATISTICS OF INDIAN RAILWAYS-(PART I)-continued.

SUMMARY OF EARNINGS.

Half-years ended the 30th June and the 31st December 1892.

[From No. VIII of Revenue Accounts.]

						<u> </u>	SUND	RIES.	
Serial Number.	RAILWAY.	1892.	Coaching.	. Goods.	Electrio telegraph.	Steam-boat.	Receipts from other lines for hire, mileage, and ronts.	Other items.	Total.
<del></del> -			R	R	R	R	R	R	R
i	STANDARD GAUGE. East Indian (7) : . {	1st half 2nd half	84,64,229 79,08,589	∎,87,79,786 1,44,91,564	45,778 38,075	36,355 34,022	88,914 69,525	2,03,884 2,05,723	2,77,08,946 2,28,08,098
11	Bengal-Nágpur {	ıst half 20d half	6,08,103 5,03,180	30,51,864 15,09,643	10,380 8,047		1,98,831 1,33,121	38,061 <b>22,3</b> 32	39.07,239 21,76,323
III	Indian Midland (b)	1st half 2nd half	10,78,652 9,11,377	17,94,844 10,70,809	7,088 6,284	***	62,749 45,907	53. <b>77</b> 6 40.575	29,97,509 20,81,012
VI	Wardha Coal {	ıst half 2nd half	Included wi	th the Great Ir	idian Penins	ula railway	•••		75,369 32,204
. VII	Dhond-Manuad	ist half 2nd half	} Included wit	h the Great In	dian Penins	ula railway	***	•	{ 1,92,026 1,49,129
VIII	Bezwada extension . {	1st half 2nd half	Included wit	th the Nizam's	Guarantéed	State railw	3 <b>y</b>	•	{ 11,490 17,418
IZ	North Western (state) . {	1st half 2nd half	49,76,648 45,06,931	96,46,608 67,98,295	34,98 <b>5</b> 35,203	10,000 16,577	94,795 28,0 <b>5</b> 9	1,50,501 1,37,003	1,49,13,537 1,1 <b>5,22,</b> 128
	Amritsar-Pathankot . {	ist half 2nd half	Included wit	h the North W	estern (state	e) railway 	•••	•••	28,052
x	Hyderabad-Umarkot . {	ist half 2nd half	19,212	13,641	335	••••		18	 33,206
<b>X</b> 1	Ondh and Robilkband (state).	1st half 2nd half	20,19.796 17,37,085	27,92,331 16,20,461	15,271 11,537	•••	• 1,84,857 58,976	48,668 53,254	50,60,923 34,81,913
XII	Eastern Bengal (state) {	1st half 2nd half	11,90,320 10,98,700	10,64,533	<b>7</b> ,078 <b>6,</b> 888	1,41,068	95,685 15,217	61,245 68,244	25,59,929 44,64,906
XIII	Bengal Central {	1st half 2nd half	2,81,655 2,71,702	91,647 1,10,666	1,354 1,032			1,256 3,975	3,75,912 3,93,435
XIV	Calcutta Port Commis-	ist half 2nd half	***	1,09,094 1,39,508	***	***	***	11,2 <b>7</b> 9 10,979	1,20,373 1,50,547
ZVIII	Great Indian Peninsula {	1st half 2nd half	46,68,658 42,90,135	2,03,54.577 1,09,05,299	38,471 34,460		8,211 6,651	1,54,758 1,44,407	2,52,24,675 1,54,40,952
. XIX	Bombay, Baroda and Central India.	ist half 2nd haif		62,60,695 30,38,450	25,7 <b>6</b> 9 20,688		74,470 51,135	69,791 45,984	89,26,0 <b>67</b> 53,18,411
XX	Madras {	ist half 2nd half	18,40,926 19,13,906	28,13,649 28,77,064	9,275 9,203	***	14,001 8,613	67,251 <b>7</b> 0,781.	47,45,102 48,79,507
XXIII	Khámgaon {	1st half 2nd half	1/		•	I			23,133 7,775
<b>X</b> X1A	Amráoti {	Ist half 2nd half	11	th the Great I	ndian Penin	sula railway	•••	. ***	36,282 13,241
XXVI	The Nizam's Guaranteed State.	1st half 2nd half	4,36,070 3,99,974	9,52,ç46 8,74,863	7,865 6,366	***	19,017	34,221 27,991	14,50,119 13,30,523
XXVII	The Gackwar's Petlad .	ist half 2nd half	22,519	11,305 7,279	260 249	***		400	34,084 27,159
XXXX	Rájpura-Bhátinda . {	Ist half 2nd half		1,34,384 1,06,217	1,524 1,396	,144	***	115 107	3,04,959 2,59,094
XXX	Jammu and Kashmir (Native state section).	1st half 2nd haif	Luchidad re	th the North	· •	i ite) rai <b>lway</b> 	***	>44	{ 7,893 7,551
•	l'OTAL STANDARD GAUGE {	Ist half 2nd helf		6,78,58,263 4,67,49,023	2,05,998 1,79,763	1,87,423 2,07,966	8,41,030 4,3 <sup>8</sup> ,533	9,84,806 8,97,433	9,87,03,619 7,45,94,652

<sup>(</sup>a) Includes the Patna-Gya railway for the 1st half of 1892; also the Delhi-Umballa-Kalka and Tarkessur railways. This remark applies to all the subsequent tables except the interest table.

(b) Includes the Bhopal-Itársi railway (British and Native state sections). This remark applies to all the subsequent tables except the interest

# STATISTICS OF INDIAN RAILWAYS-(PART I)-continued.

SUMMARY OF EARNINGS - concluded.

[From No. VIII of Revenue Accounts.]

Half-years ended the 30th June and

 ]	RIZS.	Son d					l .	•	
Total.	Other items.	Receipts from other lines for hire, mileage, and rents.	Steam-boat.	Electric telegraph.	Goods.	Coaching.	1892.	RAILWAY.	Serial Number
9,87,03,6 7,45,94,6	<i>P</i> 9,84,806 8,97,433	* <b>R</b> 8,41,030 4,3 <sup>8</sup> ,533	R 1,87.423 2,07,966	£ 2,05,998 1,79,703	8 6,78,58,263 4,67,49,023		1st balf 2nd balf	Brought forward stand. { ABD GAUGE. Aletre Gauge.	
•				•	, ,			Bengal and North-West-	IIIXXX
29,33,3 21,90,6	86,778 80,193	779 33	2,19,664 1,86,345	13,311 10,895	15,46,254 9,74,301	10,66,581 9,38,864	ist half and half	Tirhoot section	
3,96,2 2,86,6	5,941 3,960	4,544 1,8 <b>6</b> 7		2,678	<b>2,</b> 19,245 1,38,465	1,63,826 1,40,593	1st half 2nd half	Robilkund and Kumaon (Lucknow-Bareilly sec- ) tion).	XXXIV
1,30,08,5 93,91,9	1,64,365 3,50,705	26,052 25 <u>,</u> 834		31,382 31,394	94,57,558 61,09,524	33,29,167 28,74,473	1st half 2nd half	Rajputana-Malwa	XXXV
23,17,0 21,16,0	33,118 28,729	19,484 6, <b>9</b> 93		10,175 8,820	12,34,714 11,56,289	10,19,59 <b>8</b> 9,15,18 <b>7</b>	ist half and half	Southern Mahratta . {	ZXZVI
6,41,9 <b>7,</b> 57,5	6,576 5,858	605 1,785		2,643 3,027	3,36,023 4,18,478	2,95,998 3,28,379	1st balf 2nd half	Southern Mahratta (Mysore section).	XXVIII
 • 16,4	50	•••		155	1,€58	14,615	1st half 2nd half	Southern Mahratta ( (Nanjangád extension) {	:
<b></b> .		***		Į.,		1,506	ıst half 2nd half	Southern Mahratta (Yesvantpur-Dodballapur)	=
38,11,2	(a)2,05,458 61,221	 24,831		12,132	15,95,751	. 19,97,872	1st half 2nd half	South Indian }	XIXXX
39,03,7 18,72,2 22, <b>7</b> 8,3	18,682 23,502	24,031 	 1,18,373 2,10,725	6,926 8,723	9,63,160 13,60,802	7,65,112 6,74,626	Ist half 2nd half	Eastern Bengal (state)— Northern and Behar sections, (including the Kaunia-Dharlla	ZLIII
1,69,7	3,008 3,829	•••		1,558	25,559	1,39,581	tst half and half	. 2'6' gauge branch.) J Dacca section	
2,11,2 41,75,6	45,791	820	7,155	1,80\$ . 14,156	56,455 18,64,317	1,49,122 22,43,442	ist half and half	Burma (state)	XLIV
29,24,9 26,9	39,750	· 3.738	11,082	11,771	10,25,465	18,33,131	ist half	Deoghur	XLVI
2,33,9	73,83 <b>7</b>	•••		. 840	58,754	1,00,534	and half	Rohilkund and Kumaon	XLVII
1,99,6 2,69,9	53,467 11,254	 89	••••	640 6,595	40,429 2,10,730	1,05,146 41,234	2nd half 1st half	(Company's section).	XLIX
2,43,3 1,53,8	7,682 7	470 •••		5,481	1,90,450 86,711	39,228 66,533	2nd half 1st half	The Gaekwar's Mchsana	LI
1,05,1	. 577 5 <del>6</del>	•••	141	829 205	45,109 9,561	58,618	2nd half 1st half		1
- 45,8 5,64,0	43 714	 343	<b></b>	233 8,168	10,665 3,74,652	34,886 1,80,164	2nd half 1st half	Kolhápur } Jodhpore-Bickancer—	riii   rii
3,82,9 44,1	502	165	•••	7,598 3,295	2,29,309	1,45,364 12,787	2nd half 1st half	Jodhpore section	
32,4 9,67,0	14,170	1,341		3,680 8,832	16,721 5,12,610	12,039 4,30,073	2nd half 1st half	Bickaneer section {	LIV
6,11,1	. 10,157	1,479		6,651	2,11,348	3,81,517	2nd half	garh-Porbandar	2221
<b>2</b> 4,9	726	•••	1**	187	8,368	15,636	1st half 2nd half	SPECIAL GAUGES. Nalháti (4' o") {	
9,4 9,0	1 16	•••	***	*	8,235 7,762	1,243 1,313	1st half 2nd half	Cherra-Companyganj (2' 6") -	
29,1 36,9	57 <b>7</b> · 405		•••	***	23,8 <sub>5</sub> 4 32,230	<b>4,</b> 684 4,329	rst half 2nd half	Jorhát (2' 0")	LVII
3,14,1 3,21,6	2,498 2,365	•••	•••	1,651 1,602	1,93,191	1,16,835 1,18,936	ist half and balf	Darjeeling-Himalayan {	LVIII
1,47,2 91,3	· 700	•••		999 <b>6</b> 28	71,755 32,521	73,837 58,169	ist half and half	The Gackwar's Dabhoi . {	.LIX
1, <b>7</b> 0,0 1,39,1	189 145	•••		3,761 3,444	65,360 41,282	1,00,701 94,289	1st half 2nd half	Morvi (2' 6")	LXI
3,22,08,3 2,62,97,7	6,74,446 6,73,156	.· 54,147 67,195	3,4 <sup>&lt;</sup> ,13 <sup>2</sup> 4,08,15 <sup>2</sup>	1,30,073	1,88,94,387 1,40,31,569	1,22,00,187 1,09,96,583	1st half 2nd balf	TOTAL METRE AND SPE-{ CIAL GAUGES. }	
23,19,21,3	32,29,841	14,00,905	11,48,673	6,36.927	14,75,34,839	7,73,68,607	•••	TOTAL OF ALL GAUGES } FOR THE YEAR (b)	

 <sup>(</sup>a) Includes R1,48,441 on account of old Company's Fire Insurance Fund recredited to revenue.
 (b) Includes the Deoghur railway for which yearly figures are shown.

# APPENDIX STATISTICS OF INDIAN

DETAIL OF

Half-years ended the 30th June and the 31st December 1892.

[From Abstract H of

Tigit-lears	ended the 30th June and the			<del></del> ;=							PASSEN
Serial		1892.	·	FIRST CLAS	8.		SECOND CL	A68.		CLASS,	RMEDIATE
Namber.	RAILWAY.		Average fare.	Number.	Earnings.	Aver- age fare.	Number.	Earnings.	Aver- age fare.	Number.	Earnings.
	•		Pies.		R	Pies.		*	l'ies.		R
I	STANDARD GAUGE.	1st half 2nd half	15.24 12.34	25,84 <b>7</b> 27,374	2,68,745 2,75,317	6.21 6.21	89,567 96,486	3,40,118 3,95,885	3.49 3.23	426,256 423,464	4,05,191 4,31,004
II.	Bengal-Nágpur .{	1st balf 2nd balf	14'47 14'48	2,287 - 2,639	. 10,026 12,289	5 <sup>.8</sup> 2 6 <sup>.</sup> 37	10,986 11,208	13,203 14.210	2.70	14,677 15,188 '	7,745 6,543
ш	Indian Midland	1st balf 2nd half	11'04 11'06	4,869 4,118	36,934 <b>3</b> 8,730	4:41 4:70	13,836 16,132	49,061 54,422	(a)3.00 (a)3.00	(a)206,892 (a)189,898	(a)2,52,456 (a)2,14,105
IX	North Western (state) {	tet half and half	11.01 10.0g	21,522 18,722	1,61,953 1,40,503	3 <sup>.8</sup> 9 4 <sup>.2</sup> 3	64,384 64 <u>,</u> 018	2,14,567 1,96,8 <u>5</u> 9	3.03	200,164 200,829	2,28,150 2,27,017
X.	Hyderabad-Umarkot . {	ist half 2nd half	 11 <sup>-</sup> 04	<sub>236</sub>	<b></b> 306	4'23	 908	449	3.03	4,446	1,557
XI	Oudh and Robilkhand {	tet half 2nd half	11.13 11.13	10,854 9,679	62,706 53,202	6.00 4.20	27,644 29,707	64,765 <b>7</b> 0,344	4.00 4.00	52,262 52,121	54,512 <b>5</b> 0,735
XII	Eastern Bengal (state) {	tat half 2nd half	13'33 11'56	22,387 21,855	85,135 69,794	6·18 5·28	60,080 67,965	80,006 83,851	3.00	531,516 523:754	2,18,547 2,17,521
XiII	Bengal Central . {	ıst half 2nd half	13.33	1,301 1,095	. 2,182 1,929	6'18 5'28	15,477 17,54 <u>4</u>	7,301 8,359	3.00	79,736 78,887	36,000 36,186
XIV	Calcutta Port Com-	iet half 2nd half	Open fo	l or goods trafi [	fic only	***		): ••• :	***		• <sub>**</sub> .
XVIII	Great Indian Peninsula {	ıst half 20d half	10'95 10'86	38,256 39,452	2,00,176 2,12,348	4.03 4.03	277,229 265,746	3,37,164 3,55,106	(a)3.00 (a)3.00	(a)344,222 (a)311,078	(a) <b>5</b> ,25,365 (a) <b>4,9</b> 9,419
· XIX	Bombay, Baroda and { Central India.	ıst half 2nd balf	9'76 • 10'00	58,793 50,392	71,109 58,784	4·60 4·60	543,900 500,325	1,77,626 1,54,262	3.00	248,130 201,184	4,25,735 3,48,166
xx •	Madras	ist half 2nd half	10'32 10'32	8,701 9,088	<b>7</b> 8,345 80,578	5'29 5'34	35,153 34,106	99,471 1,10,732	***	***	***
XXVI	The Nizam's Guaran { teed State.	1st half 2nd balf	15*54 14*27	3,914 3,103	27,437 22,864	4·11 3·87	17,274 17,286	32,203 32,154	(a)2*50 (a)2*50	(a)167,310 (a)159,807	(a)86,117 (a)79,217
IIAXX	The Gackwar's Petlad	ist half 2nd half	10°00 9°76	53 68	41 52	4.66 4.60	1,028 904	372 - 336		•••	***
XX1X	Rajpura-Bhátinda .	ist half and half	10.06 11.04	1,323 1,123	2,012 1,599	3.89 4.53	2,318 2,088	1,745 1,998	3.03	12,378 12,010	5,173 5,3 <sup>0</sup> 5
							•-	·			
<del></del>	Total standard { GAUGE carried { over.	1st half 2nd half	***	200,107 188,944	10,06,8q1 9,68,355	***	1,158,876 1,130,423	14,17,602 14,78,973	•••	2,283,543 2,173,266	22,44,991 21,17,375

## RAILWAYS-(PART I)-continued.

COACHING TRAFFIC.

Revenue Accounts.]

Half-years ended the 30th June and the 31st I

Ke	venue A	Accounts. J					. H	lalf-year	ended the 3	oth June	and the 31s	ŧΙ
GE	RS.					i	•		· ·		<u> </u>	<del>-</del>
	Four	H OR LOWEST	CLASS.	Tor	AG.	Miscellane- ous, includ-	· -	Deduc-	ATTEN Marie II	-0	.Serial	
A	vorage fare.	Number	Earnings.	Number.	Eardings.	ing parcel, luggage, etc.	TOTAL.	tions.	NET TOTAL.	1892.	Number.	_
•	Pies.		<i>R</i> .		R	R	R	R.	.R			-
	2.21 2.21	8,123,685 7,243,222	65,40,109 59,00,248		75,54,163 70,03,054	9,10,661 9,09,060	84,64,824 79,12,114	595 3,525	84,64,229 79,08,589	ist half 2nd half	) I	
	1,00	988,979 915,012	5,13,213 4,12,110	5,016,929 944,047	5,44,187 4,45,158	63,916 58,059	6,08,103 5,03,217	37	6,08,103 5,03,180	ıst half 2nd balf	} 11	
	) 2°54 ) 2°54	(b) 697,397 (b) 590,795	(b) 6,21,170 (b) 4,87,613	922,994 806,943	9,59,621 7,94,870	1,19,031 1,16,507	10,78,652 9,11,377		10,78,652 9,11,377	tst half 2nd half	}111	(a) Third class by mail trains. (b) Third class by other than mail
	2'45 2'40	5,307,032 4,842,635	38,02,824 32,35,021	5,593,102 5,120,204	37,99,400	5,69,165 7,07,484	49,76,660 45,06,944	12	49,76,648 45,06,931	ıst half 2nd half	} 1X	trains.
	<b>3.</b> †0	85,610	 15,786	; 91,200	18,098	1,114	19,212		19,212	ist half and half	} x	
	2.20 2.23	2,750,823 2,411,038	16,48,951 14,03,313	2,841,593 2,502,545	18,30,934  15,77,594	1,88,889 1,60,556	20,19,823	100	20,19,796 17,37,685	rst half 2nd half		
	2.22 2.20	3,807,823 3,632,244	. 14,64,774 13,48,220	4,421,806 4,245,818	18,48,462 17,19,386	2,46,551 2,03,068	20,95,013 19,22,454	27 465	20,95,013 19,22,454	ist half 2nd half		
	2'55 2'56	695,407 692,215	2,26,641 2,14,979	791,921 789,741	2,72,124 2,61,453	9,531 10,309	2,81,655 2,71,762	***	2,81,655 2,71,702	ıst half 2nd half		
	•••			.44			•••	***	{	ıst half 2nd half		
(6	) 2'42 ) 2'41	(b)5,984,478 (b)5,711,495	(b) 29,14,980 (b) 25,91,223	6,644,185 6,328,371	39,77,685 36,58,a96	6,90,973 6,32,039	46,68,658 42,90,135		46,68,658 42,90,135	tst half 2nd half	} xviii	
	2'35 2'34	6,601,754 6,401,159	15,32,807 13,52,173		22,07,277 19,13,385	2,88,069 2,48,769	24,95,346 21,62,154	<b></b> 4	24,95,342 21,62,154	1st half 2nd half	} xix	
	1.63 1.64	4,446,919 4,519,095	14,10,401 14,55,634	4,490,773 4,562,289	15,88,217 16,46,944	2,52,709 2,66,962	18,40,026 19,13,906	****	18,40,926 19,13,906	1st half 2nd half	} xx *	
	) 2.00 ) 2.00	(b) 413,825 (b) 421,949	(b) 2,29,291 (b) 2,24,299	602,323 602,145	3,75,048 3,58,534	61,053 41,447	4,36,101 3,99,981	3 <sup>1</sup>	4,36,070 3,99,974	rst half and half	}xxvı	
	2·34 2·34	122,240	21,243 18,500	123,321	18,888 18,888	863 743 10,086	22,519 19,631 1,68,936		22,519 19,631 1,68,936	2nd half	S XXVII	
	2.45 2.46	373,614 353,991	1,49,920 1,32,981	389,633 369,212	1,50,050	9,491	1,51,374		1,51,374	2nd half	} XXIX	
		•		•								
	***	40,313,976 37,932,808	2,10,76,324 1,87,92,100	43.956,502 41,425,441	2,57,45,718 2,33,56,803		2,91,57,216 2,67 <b>,2</b> 2,411		<b>2,</b> 91,56,547 <b>2,</b> 67,18,364	ıst half 2nd half		

## APPENDIX

## STATISTICS OF INDIAN

DETAIL OF

alf-years ended the 30th June and the 31st December 1892.

[ From Abstract H of

Serial	RAILWAT	1892.	[	First CLAS		_ <del></del>	SECOND CL.	\s <b>8.</b>	THIR	D OR INTER	PASSEN MEDIATE
Number.	DAIL WAL	10921	Average fare.	Number.	Earnings.	Aver- age fare.	Number.	Earnings,	Aver-	Number.	Earnings.
	Brought forward {	1st helf 2nd balf	Pies.	200,107 188,944	<i>R</i> 10,06,801 9,68,355	Pies.	1,158,876 1,130,423	# 14,17,602 14,78,973	Pies.	2,283,543 2,173,266	R • 22,14,991 21,17,3 <b>7</b> 5.
ZZZIII	METRE GAUGE. Bengal and North- Western— Tirhoot section	1st balf	20 <sup>.</sup> 68	7,345	23,016	<b>9</b> .99	9,494	16,635	4.78	24,390	14,786
į	Company's section {	2nd half	21.04	7,396	22,293	10.12	11,390	18,503	4.02	30,599	15,175
XXXIV	Robilkund and Kuma- on (Lucknow-Bareilly section)	1st half 2nd half	26.98 27.38	1,410 789	4,275 3,252	11.62	959 1,854	1,697 3,530	9 <sup>-</sup> 64 4'00	4,113 4,165	3,434 3,189
xxxv	Rajputana-Malwa {	ist half 2nd balf	13.14 13.14	8,777 7,605	<b>7</b> 4.73 <sup>2</sup> 50,976	6°17 5°40	34,645 34,851	95,091 <b>94,2</b> 80	3.00 3.00	128,664 116,917	1,51,751 1,33,518
IVZZX	Southern Mahratta . }	ist half and half	11.14	6,579 6,035	34,783 34,230	4.68 5.36	23,521 21,218	52,683 ° 40,601		•••	•••
XXXVIII	Southern Mahratta ( (Mysore section).	1st half 2nd balf	)	9,-33	343-3	3 3		40,001	***	***	•••
,	Sonthern Mahratta (Nanjangúd exten- { sion).	1st half 2nd half	Include	d with the !	Southern <b>J</b> I	• ahratta 1	railwa <b>y</b>		<b></b>	***	401
	Southern · Mahratta (Yesvantpur-Dodbal- lapur)	1st half 2nd half	)	•			·	. •			
X	South Indian	1st half 2nd half	11.01	9,939 10,815	31,208 31,792	3.92 3.93	77,841 84,433	<b>67,</b> 766 71,998		. •••	***
X1.111	Eastern Bengal (state) Northern and Behar's sections (including the Kaunia-Dharlla '2'6' gauge branch.)	ist half		_		$\left[\begin{array}{c} \cdot \end{array}\right]$		andard gaug		····	•••
XLIV	Burma (state)	tst half 2nd half	• 13'30 13'25	8,115 9,292	40,746 39,789	5°48 5°19	86,124 95,229	85,041 84,260	:::	•••	
ZLVI	Denghur . {	1st half 2nd haif	}		•••		•••			***	<b></b>
XLVII	Cohilkund and Ku-   maon (Company's     section)	1st half 2nd half	26.98 27.38	1,596 1,409	14,37 <b>5</b> 13,331		430 4,076	2,234 19,820	o.64	2,982	13,572
XLIX	Dibru-Sadiya	1st half 2nd balf	*18.00	1,428 1,625	3,301 3,84 <b>2</b>	*0.00	1,029 945	1,496 1,290	•••	***	•••
Ll	The Gaekwar's Meh. {	1st half 2nd half	13.14 13.14	132°		6·17	1,236	• 1,005 896		***	***
LII	Kolhápur{	1st half 2nd balf	Include	d with the	Southern Ma	hraita r 	ailway	٠	•••	•••	•••
Ŀlli	Jodhpore-Bickaneer- Jodhpore section . {	1st half 2nd half	*18.00	57 <b>2</b> 393	3,5 <sup>8</sup> 5 2,771	<b>#</b> ნ∙იი •6•იი	2,743 2,093	6,103 4,090		***	***
	Bickaneer section . {	1st half 2nd half	#18.00	49 74	185 326	*6.00	· 272 225	364 296		•	***
LIV	Bhávnagar-Gondal- Junágarh-Porbandar. {	ıst half 2nd half	10.42 10.42	1,777 1,625	6,103 5,444	· 5'20	14,660 11,547	18,505 14,351		***	
•	SPECIAL GAUGES.	ist half and half	. #18.00	168 	494	<b>*</b> 6-00	1,576	1,302	•••		
	Cherra-Companyganj . {	1st half	(a)*27'00 (a)*27'00	(a) 72	(a) 67 (a) 108	***	•••	- 600 tes	•••	#44 #44	•••
LVII	Jorhát (2' 0")	Ist half 2nd balf	(a)*24.00 a)*24.00	(a) 870 (a) 813	(a)910 (a)745		•••	***		***	•
LVIII	Darjeeling-Himalayan		*72'00	2,050	(a)745 25,737	*36.00		25,897		***	•
. LIX	1 ' '	ist half		•••	21,599	*36.00 (a,*0.00	(a)3,605	28,020 (a)2,634	•••	•••	***
ΓZI	1	2nd half 1st half 2nd half	*12.00		 1,383 1,014	(a)*9'00 (a)*9'00 (a)*9'00	(a)2,717	(a)2,109 (a)7,187 (a)6,778	(c)*3*75 (c)*3*75	(c)44,871 (o)40,275	(c) 38,994 (e)35,539
•	TOTAL METRE AND SPECIAL GAUGES.	2nd ball		51,192 50,247	2,65,132 2,32,281		264,904 278,447	3,85,640 3,96,822		205,020 191,956	2,22,537 1,87,421
	TOTAL OF ALL GAUGES FOR THE YEAR.	}		490,490	24,72,569		2,832,650	36,79,037		4,853,785	47,72,324

### A-continued.

## RAILWAYS-(PART I)-continued.

COACHING TRAFFIC-concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1892.

				:		<del></del>	<del></del> -				
ERS.			Тот	'AL.	Miscellane-	,		-			
	RTH OR LOWE	BT CLASS.			ous, includ-	TOTAL.	Deduc- tions.	NET TOTAL.	1892.	Serial Number.	Remarks.
Average fare.	Number.	Earnings.	Number.	Earnings.	lnggage, etc.	ļ				21 00000	
Pies.	40,313,976 37,932,808		43,956.502 41,425,441	R 2,57,45,718 2,33,56,803	8 34,11,498 33,65,608	<i>R</i> 2,91,57,216 2,67,22,411	# 669 4,047	<b>R</b> 2,91,56,547 2,67,18,364		}	
2.52 ·	2,462,909 2,287,945	9,44,706 8,25,111	2,504,138	9,99,143 8,81,082	67,438 57,782	10,66,581 9,38,864	•••	10,66,581	ist balf	} xxiii	
2'19	437,742	1,44,054	444,224	1,53,460	10,366	1,63,826		9,38,864	ist half	} xxxiv	
2'22	380,709 4,333,536	7,19,319 27,34,641	387,517	1,29,290	2,72,961	1,40,593		1,40,593 33,29,1 <b>6</b> 7	2nd half 1st half	,	
2.00	4,317,787	23,30,255	4,477,100	20,09,029	2,65,492	28,74,521	48	28,74,473	2nd half	} xxxv	
2.33 3.33	2,336,413 2,371,161	11,34,590	2,366,513 2,398,414		1,28,289	13,50,345	3,30,747 3,79.386	9,15,187	1st half 2nd half	} xxxai	
ı			<u> </u>				(	2,05,998 3,28,379	Ist half 2ud half	} xxxviii	
•••	,		*		<b></b>		}	14,615	ist half and half	}	
		!					(	1,506	1st half 2nd half		
2.00 5.00	5,083,217 5,233,853	18,07,624 18,62,086	5,170,997 5,329,101	19,06,598 19,65,876	91,447	19,98,045 20,72,253	173	19,97,872 20,72,253	1st half 2nd half	} xxxix	
***	***				•••	***		{	ıst half 2nd half	} xriii	
3.00 3.00	3,442,191 3,024,672	20,20,587 16,28,464	3,536,430 3,129,193	21,46,374 17,52,513	97,581 80,715	22,43,955 18,33,228	513 9 <b>7</b>		ist half and half	} xriv	
	•••	•••	***	•	•••	25,367		25,367 {	ist half and half	} xrvi	
2.13 5.13	77,603 70,977	47,093 47,111	82,601 76,462	77,274 80,262	23,260 24,884	1,00,534 1,05,146		1,00,534 1,05,146	ist half and half	} xlvii	
#4.00 #4.00	48,857 52,273	30,786 28,275	51,314 54,843	35.583 33.407	5,651 5,821	41,234 39,228	•••	41,234 39,228	ist half and half	} xrix	
2.00 5.00	260,51 <b>7</b> 227,59 <b>7</b>	62,015 53,959	261,885 228,817	63,252 55,018	3,281 3,600	<b>6</b> 6,533 <b>5</b> 8,618	•••	66,533 58,618	ist half and half	} LI	
•••	***	***	•••	•••	•••	***	₩ {	34,749 34,886	ıst half 2nd half	} rii	
*2.00	254,388 212,866	1,49,515 1,21,581	257,703 215,352	1,59,203	20,961 16,922	1,80,164 1,45,364		1,80,164 1,4 <b>5</b> ,364	ist half and half	} rm	* Actual singl journey fure
#2*00 #2*00	25,955 23,098	10,632 9,672	26,276 23,397	11,181 10,294	1,606 1,747	12,78 <b>7</b> 12,041	2	12,787 12,039	1st half 2nd half	}	
- 2·75 2·75	694,140 620,426	3,74,961 3,40,263	710,577 633,598	3,99,569 3,60,058	<b>30,5</b> 04 <b>21,4</b> 59	4,30,073 3,81, <b>5</b> 17	•••	4,30,073 3,81,517	1st half 2nd half	} ria	
<b>*</b> 3.00	40,824	12,230	<b>42,</b> 568	14,026	1,610	15;636		15,636	ıst half 2nd half		- (a) Upper class.
(b)*3.00	(b) 16,734 (b) 15,502	(b) 1,169 (b) 1,139	16,806 15,621	1,236 1,247	66	1,243 1,313	•••	1,243 1,313	1st half 2nd half	}	(b) Lower class.
(b) 4.00 (b) 4.00	(b) 25,670 (b) 25,687	(b) 3,524 (b) 3,387	26,540 26,500	4,434 4,132	250 197	4,684 4,329	***	4,684 4,329	1st half 2nd half	} ran	
*15'00 *15'00	19,563 22,858	40,408	25,665 29,012	92,042 94,311	24,793 24,025	1,16,835 1,18,936		1,16,835 1,18,936	1st half 2nd half	}LVIII	
(p)+3.00 (p)+3.00	(b) 222,958 (b) 189,024	(b) 68,629 (b) 54,015	226,563 191,453	71,263 56,124	2,574 2,045	73,837 58,169		73,837 58,169	1st half 2nd half	} rix	(c) Lower class by ma train.
(d)*3*00 (d)*3*00	(d) 66,859 (d) 66,923	(d) 43,875 (d) 41,705	117,770	91,439 85,636	9,262 8,653	1,00,701 94,289	•••	1,00,701 94,289	ıst balf 2nd balf		(d) Lower class by mixe trains.
***	19,853,076 19,143,35 <sup>5</sup>	96,31,039 85,97,039		1,05,04,34 <sup>8</sup> 94,13,013	7,91,841 7,59,36 <b>9</b>	1,12,96,189	3,31,442 3,79,533	1,12,95,494 1,01,72,835	,		(f) Includes th Deoghur railway fo which you'd figures as
	117,243,218	5,80,90,352	125,420,143	6,9 1,20,482	83,28,316	7,73,74,165	7,15,691	7,73 68,607	•••		shown.
	1		1		<del></del>			<del></del>			

# APPENDIX STATISTICS OF INDIAN

DETAIL OF

Half-years ended the 30th June and the 31st December 1892.

[ From Abstract I of

Serial			General me	RCHANDISE.	MILITAR	T STORES.	RAILWAY MA CONSTRUCTION BTO	TERIALS POR AND REVENU
Number.	RAILWAY.	1892.	Ton-miles.	Earnings.	Ton-miles.	Earnings.	Ton-miles,	Earnings.
1	STANDARD GAUGE. East Indian {	1st half 2nd half	444,247,578 306,931,429	# 1,40,41,205 1,03,78,024	1,971,549 1,807,380	· R 1,98,416 1,84,477	16,132,186 20,777,145	<b>R</b> 2,34,74 2,87,87
11	Bengal-Nágpur	ıst half 2nd half	50,638,990 23,890,479	25,85,948 10,97,929	7,163 7,906	934 762	8,484,738 8,000,043	1,91,38 1,73,91
Ш	Indian Midland	ist half 2nd half	44,663,464 25,583,026	16,50,020 9,84,988	131,011 124,619	11,213	1,967,429 1,601,819	42,93 26,02
. 12	North Western (state) {	ist half 2nd half	258,941,891 160,995,134	82,43,447 58,42,204	4,119,282 2,516,387	3,20,733 2,34,604	55,787,374 30,018,164	7,75,25 4,49,22
. x	Hyderabad-Umarkot .{	1st half 2nd half	 284,251	 12,541 ·	398	 95	24,820	76
18	Oudh and Rohilkhand {   (state).	1st half 2ud half	83,968,747 39,477,272	25,97,396 14,33,467	245,868 166,028	20,540 15,3 <b>5</b> 0	4,056,292 5,000,902	49,19 67,54
XII	Eastern Bengal (state) .{	ıst half 2nd half	39,731,458 77,967,304	18,35,033 43,33,840	26,493 20,509	2,597 1,639	6,826,465 6,757,269	<b>8</b> 7,10 86,31
ZIII	Bengal Central	ıst half 2nd half	2,714,582 3,269,304	79,272 1,08,213	195 260	117 126	69,056 <b>24</b> ,411	88 31
ΧIΔ	Calcutta Port Commis-{	ıst half 2nd half	}	***	 	***	4-4	<b>to</b> :
XVIII	Great Indian Peninsula .	ist balf 2nd half	424,492,168 210,560,278	1,91,89,231 98,78,892	1,042,827 744,541	1,35,802 95,157	25,439,746 31,532,801	4,40,13 5,30,84
£1X	Bombay, Baroda and { Central India.	1st half 2nd half	136,710,163 62,958,943	56,60,030 26,74,272	164,191 99,160	18,974 11,409	4,275, <del>8</del> 15 3,592,747	1,00,59 80,32
ХX	Madras ,	1st half 2nd half	56,236,603 58,206,360	25,37,268 25,94,732	275,641 289,235	43,921 49,056	3,774,203 2,840,752	83,96 64,010
IVZX	The Nizam's Guaranteed { State.	ist half 2nd half	10,799,836 10,442,898	5,98,91 <b>9</b> 5,66,548	52,696 46,926	6,801 6,493	1,616,301 422,933	27,67 8,72
XXVII	The Gaekwar's Petiad . {	1st balf 2nd half	160,585 116,811	11, <del>0</del> 99 6,887	***	10-0	·	***
XXIX	Rajpura-Bhatinda .{	rist half 2nd half	3,046,531 2,461,4 <b>7</b> 6	1,19,097 92,662	74,333 71,694	9,378 9,190	219,566 144,174	3,219 2,059
		ret balf	1,556,355,596		8,111,249			<del></del>
	TOTAL STANDARD GAUGE	2nd balf	983,144,965	5,91,47,965 4,00,05,259	5,895,043	7,69,426 6,20,309	128,669,171 110,797,980	<b>20,37,</b> 079

A-continued.

### RAILWAYS-(PART I)-continued.

GOODS TRAFFIC.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1892.

Coa	L.	Mr	_				Serial	
Ton-miles.	Earnings.	Miscellaneous.	Total.	Deductions.	NET TOTAL.	1892.	Number.	REMARKS.
213,417,388 189,443,170	<b>£</b> 41,88,669 35,92,312	R 1,27,029 1,35,718	# 1,87,90,062 1,45,78,402	R 10,276 86,838	R 1,87,79,786 1,44,91,564	ist half 2nd half	}I	
11,357,238 10,275,610	2,68,939 2,52,916	4,663 —15,799	30,51,864 15,09,718	75	30,51,864 15,09,643	1st half 2nd half	}1I	
6,111,997 3,199,413	86,821 44,543	3,857 . 3,366	17,94,844 10,70,869		17,94, <b>8</b> 44 10,70,869	ist half and half	}111	
18,446,780 16,515,210	2,51,925 2,12,775	55,369 59,427	96,46,731 67,98,295	123	96,46,608 67,98,295	ist half 2nd half	}ix	
•••	•••	237	13,641		13,641	ist half and half	} x	 
7,624,542 5,591,961	1,12,646 86,271	12,553 17,824	27,92,331 16,20,461	***	27,92,331 16,20,461	ıst balf 2nd balf	}xı	
6,093,72 <b>7</b> 5,218,854	1,10,332 93,223	18,181 21,383	20,53,252 45,36,401	, , ,	20,53,252 45,36,401	ist half 2nd half	}x11	
535,869 382,014	10,840 7,852	537 164	91,647 1,16,666	•	91,647 1,16,666	ret half and half	} xiii	
	•••	•••	1,09,094 1,39,568		1,09,094 1,39,568	1st half 2nd half	}xiv	
23,410,219 17,539,456	5,13,307 3,82,226	76,107 78,176	2,03,54,577 1,09,65,299	***	2,03,54,577 1,09,65,299	1st half 2nd half	} xviii	
15,880,777 5,167,216	<b>2,</b> 94,301 96,184	1,86,803 1,76,263	62,60,705 30,38,450	10	62,60,695 30,38,450	1st half 2nd half	}xix	-
4,434,311 5,412,813	1,17,546 1,47,765	30 953 21,495	28,13,649 26,77,064	- 111	28,13,649 28,77,064	1st half 2nd half	}xx	
12,316,747	3,11,789 2,89,190	7,764 3,907	9,52,046 8,74,863	***	9,52,046 8,74,863	1st balf 2ud half	xxvı }	
67	4	202 392	11,305 <b>7,</b> 279		•11,305 7,279	ıst half 2nd half	} xxvii	_
10 <b>2</b> ,22 <b>5</b> 91,990	1,591 1,305	1,099 1,001	1,34,384 1,06,217		1,34,384 1,06,217	ret half 2nd half	} xxix	
					<u>.</u>			
319,731,887 270,361,270	62,68,710 52,06,562	5,25,117 5,03,554	6,88,57,391 4,82,53,193	10,409 . 86,913	6,88,46,98 <b>2</b> 4,81,66,280	1st half 2nd half	\$	

# APPENDIX STATISTICS OF INDIAN

DETAIL OF

Half-years ended the 30th June and the 31st December 1892.

[ From Abstract I of

Serial	1		GENERAL M	ERCHANDISE.	MILITAR	RY STORES.	CONSTRUCTION	TERIALS FOR AND REVENU ORES.
Number.	RAILWAY.	1892.	Ton-miles.	Earnings.	Ton-miles.	Earnings.	Ton-miles.	Earnings.
	TOTAL STANDARD GAUGE { brought forward. {	1st half 2nd half		<b>R</b> 5,91,47,965 4,00,05,259	8,111,249 5,895,04 <b>3</b>	R 7,69,426 6,20,309	128,669,171 110,797,980	20,37,079 17,77,941
ZZZIII	METRE GAUGE. Bengal and North-West-				·			
	Tirhoot section . { Company's section . {	1st half 2nd half	45,345,567 34,502,058	14,68,867 9,26,763	344 545	***	1,665,684 959,004	27,961 26,581
XXXIV	Robilkund and Kumaon (Imoknow-Bareilly section).	ist half and half	5,945,037 3,610,792	2,14,93 <b>2</b> 1,33,083	4,697 8,117	501 860	178,70 <b>7</b> 245,520	2,482 3,403
xxxv	Rajputawa-Malwa {	ist half 2nd half	255,381,669 153,928,590	89,20,391 56,98,805	. 703,439 562,003	77,236 62,843	8,853,622 8,001,342	1,65,555 1,61,622
IVXXX	Southern Mahratta	ist half and half	28,296,351 29,207,774	13,88,698 14,59,361	336.769 151,977	27,759 18,716	8,968,433	1,23,786
IIIVXX	Southern Mahratta (My-	1st half 2nd half	)	1 14,39,301	101,977	10,7.0	5,037,234	<b>5</b> 9,483
	Southern Mahratta (Nanjangúd extension).	1st half	Included with	the Southern M	abratta railway	y •••	***	•1•
	Southern Mahratta (Yes- vantpur-Dodballapur).	1st half 2nd half	)			٠		
XIXXX	South Indian	1st half 2nd half	34,248,342 38,105,862	14,18,873 16,33,706	16,038 19,895	<b>2,2</b> 49 <b>2,3</b> 35	6,134,581 5,210,432	1,43,027 68,193
XLIII	Eastern Bengal (state) — Northern and Behar sections (including the Kaunia-Dharlla 2'6" gauge branch).	ıst half	Included with	the Eastern Ben	gnl (state) rails	way (standerd :	gaugo)	
	Dacca section	2nd half	.)	•				
XLIV	Burma (state)	ıst half 2nd half	44,806,945 23,430,363	17,01,199 8,85,362	191,293 <b>2</b> 93,267	15,133 23,309	4,581,0 <b>62</b> 7,060,697	48,592 72,644
XLVI	Deoghur	1st hallf 2nd half	}	***	•••	•••	•••	404
XLVII	Rohilkund and Kumaon ( (Company's section)	1 st half 2nd half	1,130,841 640,946	51,275 36,013	21,501 7,462	2,239 819	313,419 220,590	4,976 3,120
XLIX	Dibru-Sadiya	1st half 2nd half	535,908 616,168	89,946 1,08,063	•••	•••	409,688	2,450
LI	The Gaekwar's Mehsana {	1et half 2nd balt	1,938,041 1,017,047	83,903 41,254	· 55	6	499,488 111,807 25,72 <b>7</b>	2,024 2,484 463
LII	Kolhápur	ist half and half	Included with	the Southern Ma		•••	***	
LIII	Jodhpore-Bickaneer-	-	,	1	I I	1		•••
	Jodhpore section . {	1st balf 2nd balf	7,375,419 3,218,603	3,65,015 2,00,144	758 174	134 33	303,920 1,509,306	5,257 <b>2</b> 4,630
	Bickaneer section	1st half 2nd half	577,374	24,894	88	15	269,493	2,598
LIV	Bhávnagar-Gondal-Juná- garh-Porbandar	1st half 2nd half	<sup>267,347</sup> 7,230,310 3,418,674	16,014 4,93,597 1,96,814	33	7	12,669 1,238,550 1,306,282	247 15,445 10,266
	Sprcial gauges. Nalhéti (4' 0")	Ist half	87,601	5,068		***	15,723	223
	Cherra-Companyganj	2nd balf 1st half 2nd half	 87,878 87,462	<b>7,</b> 980	***	•••	•••	***
LVII	Jorhat (2' 0")	1st half	42,489	7,518 23,451	544 E44	•	103	23
LVIII	Darjeeling-Himalayan (	2nd half	61,328 469,875	31,475 1,81,561	 1,497	 862	48 5,680	3
LIX	(2' o"). { The Gaekwar's Dabhoi . (	2nd hali 1st half	469,231 867,803	1,87,756 70,502	2,031	1,253	7,299 52,088	1,112 1,503 931
LXI	(2' 6"). { Morvi (2' 6")	2nd half 1st half	518,224 705,389	31,828 <b>6</b> 4,189		***	17,378 6,586	454
, -22		2nd balf	483,015	40,083	1,412	264	5,752	264 215
	TOTAL METRE AND SPE-	1st half 2nd half	435,081,869 293,584,084	1,65,74,341 1,16,37,042	1,276,080 1,057,026	1,26,148 1,10,445	33,109,146 30,718,768	5,47,166 4,34,853
	TOTAL OF ALL GAUGES POR THE YEAR,	•••	3,268,166,514	12,73,64,607	16,339,398	16,26,328	303,295,065	47,97,039

A-continued.

# RAILWAYS--(PART I)-continued.

GOODS TRAFFIC-concluded.

Revenue Accounts.]

COAL.							g	
Ton-miles.	Earnings.	Miscellaneous.	Тотац.	Deductions.	NET TOTAL.	1892.	Serial Number.	Remarks.
319,731,887 270,361,270	<i>R</i> 62,68,710 52,06,562	R 5,25,117 5,03,554	<b>8</b> 6,88,57,391 4,82,53,193	R 10,409 86,913	R 6,88,46,982 4,81,66,280	ist half 2nd half	}	
							-	
2,055,6 <b>2</b> 2 810,931	45,453 17,081	3,973 3,876	15,46,254 9,74,301	raa 444	15,46,254 9,74,301	ist half and half	}xxxIII	
32,221 33,311	•614 506	716 613	<b>2,</b> 19,245 1,38,46 <b>5</b>	***	2,19,245 1,38,465	1st half ,2nd half	\}xxxiv	
13,408,510 7,838,516	2,62,104 1,50,004	3 <b>2</b> ,27 <b>2</b> 36,250	94,57,558 <b>6</b> 1,09,524	***	94,57,558 61,09,524	ist half 2nd half	}xxxv	
1,803,762 2,607,902	27,701 41,263	12,353 8,384	15,80,297 15,87,207	3,45,5 <sup>8</sup> 3 4,30,918	12,34,714 11,56,289	1st half 2nd half	}xxxv1	
				(	3,36,023 4,18,478	ist half and half ist half	} xxxviii	
111	***		***		1,658	2nd half 1st balf	]	
1,227,406 1,568,509	26,360 23,069	4,742 6,183	15,95,751 17,33,488	\	118 15,95,751 17,3 <b>3</b> ,488	2nd half 1st half 2nd half	xxxxx {	
1,500,509	23,009	9,139	17,55,400		17,33,400			
					. (	ist half	XLIII	
***	***	"	•••		{	2nd half		
1,392,626 569,273	23,323 7,852	77,921 36,348	18,66,168 10,25,51 <b>5</b>	1,851 50	18,64,317 10,25,465	ist half and balf	} xliv	
•••	141		1,597	***	1,597 {	ist half 2nd half	} xlvi	
196 	6	238 477	58,754 <b>4</b> 0,429		5 <b>8,7</b> 54 <b>40,</b> 429	ıst half 2nd half	3 22.12	
5,417,559 4,119,600	1,18,01 <b>0</b> 80,209	324 154	2,10,730 1,90,450	•••	2,10,730 1,90,450		l	
298 		309 386	86,71 <b>1</b> 45,109	•••	86,711 45,109	1st half 2nd half	3	
•••	***		•••	{	9,561 10,665	ist half and half	}tii	•
145,637 178,124	2,717 3,472	1,529 1,030	3,74,652 2,29,309	   444 594	3,74,652 2,29,309	1st half 2nd half	}	
9,784 3,658	181 89	337 364	28,025 16,721	***	28,025 16,721	1st half 2nd half	3	
92,299 147,833	2,421 3,819	1,147 449	5,12,610 2,11,348	104	5,12,610 2,11,348	ıst half 2nd half	}riv	
71,826	2,724	353	<b>8,</b> 368	***	8,368	1st half 2nd half	}	
3,711	255 244		8,235 7,762		8,235 7,762	ist half and half	}	
3,604 2,140 6,362	374 712	6 40	23,854 32,230		23,854 32,230	1st half 2nd half		_
70,530 57,826	9,656 7,972	216	1,93,191	944	1,93,191	ıst half 2nd half	St.VIII	,
7,115 3,936	184 122	138,	71,75 <b>5</b> 32,521		71,755 32,521	ıst half 2ud half	}rix	
14,568 11,247	547 409	360 311	<b>6</b> 5,360 41,282	100	65,360 41,282	1st half 2nd half	}rz1	
25,755,810 17,960,632	5,23,145 3,36,823	1,36,718 95,198	1,79,07,518 1,26,14,361	3,47,434 4,30,968	1,79,05,668 1,26,14,312	ıst half 2nd half	}	
633,809,599	1,23,35,240	12,60,587	14,76,34,060	8,75,724	14,75,34,839			

# APPENDIX STATISTICS OF INDIAN

SUMMARY OF

Half-years ended the 30th June and the 31st December 1892.

[ From No. VIII of

				·	<del></del>	<del></del>
Serial Number.	RAILWAY.	1892.	Maintenance of way, works and stations.	Locomotive expenses.	Carriage and wagon expenses.	Traffic expenses.
	•		R	R	R	R
	Standard Gauge.					• [
I	East Indian	ist half and half	19,89,379 15,07,967	22,31,133 21,32,184	6,89,882 5,76,806	14,83,692 13,81,621
	Patna-Gya	ıst half 2nd halt	Included with the Incorporated with	East Indian railwa the East Indian ra	y ilwa <b>y</b>	•
. 11	Bengal-Nagpur {	ist balf and balf	4,16,435 4,20,357	5,11,271 3,87,654	92,762 88,579	2,60,250 2,07,306
ш	Indian Midland	ist half and half	3,29,41 <b>7</b> 3,37,900	6,04,837 <b>4,</b> 55,51 <b>5</b>	1,18,754 1,16,425	2,13,190 2,32,618
VI	Wardha Coel	ist half and half	(b) 35,159 (b) <b>3</b> 6,833	***	•••	***
VII	Dliond-Manmad	ist half and half	Included with the	he Great Iudian Per	ninsula railway	<b>*na</b>
VIII		ist half and half	Included with th	e Nizam's Guarant	eed State railway	
12	North Western (state)	ist half and half	32,13,218 21,76,141	34,14,237 28,05,934	7,98,421 5,29,895	12,19,525 12,46,542
X		ıst half 2nd half	 20,214	, 7,401	2,316	2,966
XI		ıst half 2nd half	5,15,187 5,23,764	5,61,899 4,83,528	1,61,519 1,45,269	3,31,678 3,12,777
XII	Eastern Bengal (state)	ist half and half	2,21,048 2,16,898 :	3,23,023 3,83,871	1,12,690 1,66,705	3,27,988 4,26,712
XIII		ıst half 2nd half	48,317 47,853	50,885 53,51 <b>8</b>	15,961 19,322	50,287 53,257
XIV	Calcutta Port Commissioners' . {	ist half and half	3,060	24,337	10,703	72,171
XVIII	Great Indian Peninsula	ist half and half	24,15,173 24,66,834	43,88,599 <b>3</b> 3,63,529	10,64,587 9,78,565	15,66,62 <b>6</b> 14,38,961
XIX	Bombay, Baroda and Central India	ist half 2nd half	9,24,996 7,16,579	11,56,113 8,12,157	3,83,047 4,40,745	4,54,368 3,78,544
XX	· ' <b>'</b>	ist half and half	6,72,733 7,80,045	9,36,122 9,25,113	3,03,882 2,12,870	4,28,521 4,15,223
XXII	Talacasur	ist half and half	Included with the	e Esst Indian railw	a <b>y</b>	•••
XXIV	Amiavii	ist half and half	ľ	ne Great Indian Per	insula railway	***
XXVI		l .	2,12,424 2,15,732	1,95,828 1,75,573	56,886 53,202	1,12,025 1,08,967
XXVII	`.	1st half 2nd half	3,532 3,659	4,414 4,147	1,463 2,251	1,735 1,933
XXIX	Rájpura-Bhátinda	ist half and half	45,538 38,689	60,533 51,429	18,936 16,088	24,253 20,666
				:		
		<u> </u>				
	·		. •			
	•		·			
•	Total standaed gauge carried over {	ist half and half	1,10,42,556 95,09,465	1,44,38,894 1,20,41,553	38,18,790 33,49,038	64,74,138 62,28,033

#### A-continued.

## RAILWAYS-(PART I)-continued.

#### EXPENSES.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1892.

General charges.	Steam-boat sorvice.	Special and miscellaneous expenses.	Total.	1892.	Serial Number,	Remares.
R	R	R	R		•	
9,04,474 8,97, <b>7</b> 5 <b>7</b>	49, <b>5</b> 21 31,308	3,25,527 1,82,977	76,73,608 67,10,620	ist half 2nd half	}.I	
***	•••	(a,42,929 	(a) 42,929	1st half 2nd half		(a) Represents contribution to the Providen Fund and the share of net earnings pair to the East Indian railway.
2,97,861 2,99,356	• • • • • • • • • • • • • • • • • • • •	65,385 28,180	16,43,964 14,31,432	ist half and half		
2,31,903 2,40,635		1,24,368 1,24,419	16,22,469 15,07,512	ist half 2nd half	3	
(b) 743 (b) 743	106	•••	(b)35,902 (b)37,576	1st half 2nd half	]}vi	(b) Expenditure incurred direct by the State.
(b) 6,410 (b) 6,410			(b) 6,410 (b) 6,410	ıst half 2ud half		
(b) 561	***	910	(b) 561 	ist half and half		
5,90,388 5,67,759	45,331 24,808	1,78,834 1,30,107	(c) 94,95,899 (d) 74,88,737	ist half and half	}ıx	(c) Includes R35,945, being the amount pa to the State as rent of leased lines no shown in any of the preceding columns.
1,752	***	506	35,155	ist half 2nd half		(d) Includes R7,551, being the amount paid the State as rent of leased lines not show in any of the preceding columns.
2,06,153 1,96,285	•••	. 40,738 47,710	18,17,174 17,09,333	ıst half 2nd half		
1,39,408 1,46,392	1,51,166 1,76,213	2,20,540 1,00,663	14,95,863 16,17,454	ist half 2nd half	}xit	
49,951 48,285	•••	8,883 9,925	2,24,284 2,32,160	1st half 2nd half	xIII {	
12,091		7,643	1,40,005	and half	xia	
6,65,090 6,61,69 <b>7</b>		4,70,130 2,97,049	(e)1,08,97,015 (f) 94,08,985	tst half 2nd balf		(e) Includes R3,26,810, being the amount pai to the State as rent of leased lines no shown in any of the preceding columns.
3,21,833 2,60,208	•	1,08,876 73,922	33,49,233 26,82,155	1st half 2nd half	}xix	(f) Includes #2,02,350, being the amount pai to the State as rent of leased lines no included in any of the foregoing column
2,70,909 2,69,246		60,885 56,98 <b>7</b>	<b>2</b> 6, <b>7</b> 3,052 <b>2</b> 6,59,484	ıst half 2nd balf	}xx	
4**		{ (a)22,843 (a)17,820	(a)22,843 (a)17,820	1st half 2nd half	}xxii	·
(b) 443 (b) 443		***	(b) 443 (b) 443	1st half 2nd balf		
1,38,003 1,37,060	***	9,294 11,781	(g)7,35,950 (h)7,19,733	ist half and half		(g) Includes R11,490, being the amount paid the State as rent of leased lines not show in any of the preceding columns. (h) Includes R17,418, being the amount pai
1,229 1,329	***	416 378	12,789 13,697	1st half 2nd half		to the State as rent of leased lines no shown in any of the preceding columns,
14,324 <b>1</b> 2,170	<b>;</b> ;;	4,143 3,520	1,67,727 1,42,502	1st half 2nd half		
					ļ [	
				_		
38,39,683	2,46,018	16,83,791 10,85,944	4,19,18,115 3,64,21,208	ist half and half	}	,

## • APPENDIX STATISTICS OF INDIAN

SUMMARY OF

Half-years ended the 30th June and the 31st December 1892.

[From No. VIII of

		<u> </u>	<u> </u>	<del></del>		
Serial Number.	RAILWAT.	1892.	Maintenance of way, works and stations.	Locomotive expenses.	Carriage and wagon expenses,	Traffic expenses.
		lst half 2nd hulf	. <i>R</i> 1,10,42,576 95,09,405	<i>R</i> 1,44,38,394 1,20,41,553	<b>8</b> 38,18,790 33,49,038	R. 64,74,138 62,28,033
	METRE GAUGE.					
XXXIII.	Bengal and North-Western—	•				•
	Tirhoot section	ist half	1,96,220	2,31,758	67,738	2,08,287
		2nd half	2,27,223	2,26,887	72,450	1,96,711
XXXIV		ist half and half	36,327 33,594	51,044 41,644	11,571 14,044	39,024 44,60 <b>5</b>
XXXV	Rajputana-Malwa	1st half 2nd half	8,64,369 7,68,789	23,18,826 17,14,860	4,09,641 4,03,653	7,35,751 6,77,005
ZZZVI	Southern Mahratta	ist half and half	3,96,531 3,22,055	5,55,842 4,53,666	1,39,535 93,223	2,65,35 <b>7</b> 2,39,852
IIIVXXX	Southern Mahratta (Mysore section) . {	1st half 2nd half	1,11,585 1,11,571	1,53,993 1,62,341	38,657 33,124	72,515 85,866
	Southern Mahratta (Nanjangúd exten-		2,412	3,531	721	1,868
	Southern Mahratta (Yesvantpur-Dod- { ballapur).	ist half	 251	B++ _		***
XXXIX	South Indian	ist half	351 7,96,480	298 8,61,479	53 1,37,825	180 3,25,066
	South Hulan	2nd half	5,58,190	9,48,182	2,50,825	3,33,004
XLIII	Fastern Bengal (state)— Northern and Behar sections (including the Kaunia-Dharlla 2' 6' gauge)	ist half	2,25,637	1,82,863	51,487	1,87,795
		2nd half	<b>2,</b> 68,944	2,08,477	46,487	1,79,964
	Dacca section	ist half and half	39,358 36,404	34,434 35,941	9,658 9,813	23.921 28,274
XLIV	Burma (state)	1st half 2nd half	4,99,871 6,08,520	6,11,104 5,39,84 <b>6</b>	1,17,770	3,50,527 3,61,470
XLVI	Deoghur	Ist half 2nd half	} 4,302	5,074	657	4,010
XLVII	Robilkund and Kumaon (Company's section).	ist half and balf	19,550 20,811	27,470 25,79 <b>7</b>	6,227 8,700	21,001 27,631
XLIX	Dibru-Sadiya	ist half 2nd half	74,067 60,189	31,316 36,339	12,371 • 9,820	18,873 19,395
LI	The Gaekwar's Mehsana	ist half and half	10,221 8,606	27,421 19,196	4,844 4,518	8,701 7,579
LII	Кольбриг	ist half 2nd balf	8,365	10,692	2,684	5,105
LIII	Jodhpore-Bickaneer-	j	7,210	9,821	2,004	5,194
	Jodhpore section	ıst half 2nd half	<b>5</b> 2,543 67, <b>77</b> 0	91,997 84,500	5,843 8,754	23,539 22,029
	Bickaneer section	ist half and balf	8,357 5,827	13,424	806	3,269
, riv-	Bhávnagar-Gondal-Junágarh-Porbandar {	Ist half	3,20,758	10,972 1,32,161	866 23,432	<b>2,728</b> 87,199
	SPECIAL GAUGES.	2nd nair	1,95,330	99,672	20,878	68,395
	,	1st half 2nd half	—11,078 	2,437	760	2,661
	Cherra-Companyganj (2' 6")	1st half 2nd half	1,466 1,416	2,916 2,828	853 1,064	2 <b>,</b> 08 2,29 <b>7</b>
LVII	Jorhát (2' 0°)	1st half 2nd half	<b>6</b> ,094 6,476	<b>6,</b> 579 6,60 <b>5</b>	1,932 1,893	8,504 <b>7,</b> 986
LVIII	Darjeeling-Himalayan (2' o")	ist half and half	36,629 . 33,714	68,84 <b>8</b> 59,041	24,745 21,666	23,32 <b>2</b> 24,785
LIX	The Gaekwar's Dabhoi (2' 6")	Ist half 2nd half	28,808 17,686	19,829	7,771	11,434
ΓZI	Morvi (2' 6")	1st half 2nd half	18,718 21,035	14,534 33,162 28,374	8,258 4,419 5,028	9,247 18,973 16,349
	TOTAL METER AND SPECIAL GAUGES.	1st half 2nd half	37,40,876 33,84,723	54,69,595 47,33,352	10,80,569	24,44,232 23,63,014
	TOTAL OF ALL CAUGES FOR THE YEAR(a)		2,76,94,982	3,67,12,805	94,12,667	1,75,85,598
		11			1 (""-""	-1101-0107-

A-continued.

## RAILWAYS-(PART I)-continued.

EXPENSES—concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1892.

deneral charges.	Steam-boat service.	Special and miscel- laneous expenses.	Total.	1892.	Serial Number.	Remares.
R 38,39,683 37,47,527	R 2,46,018 2,32,329	16,83,791 16,85,944	# 4,19,18,115 3,64,21,208	ist half and half		
•						
1,86,515	1,12,019	26,768	10,29,305	ıst half	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	• •
1,96,849	1,04,555	52,889	10,77,564	2nd half		
. 40,542 41,389	***	33,961 20,033	2,12,469 1,95,309	ıst half 2nd half	}xxxiv	
5,64,819. 5,96,661		70,358 60,947	49,63,764 42,21,915	ist half and half	]}xxxv	
2,90,69 <b>8</b> 2,59,423	***	17,81 <b>7</b> 10,509	16,65,780 13,79,328	ıst half 2nd half	xxxvI	
81,917 89,767	***	5,157 4,063	4,64,824 4,86,732	ıst half 2ud half		
 1,695	•••	88	10,315	ist half and half	}	·
	***		1,007	1st half 2nd hal		
2,74,863 3,15,651	•••	21,587 31,653	24,17,300 24,44,105	1st half 2nd half	XXXXX	•
1,10,530	1,37,206	89,608	9,85,126	ıst half	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
95,419	1,64,436	15,219	9,78,946	2nd half	1.	
9,987 <b>10,</b> 793	***	3,201 3,546	1,20,559 1,24,771	1st half 2nd half		
1,93,641 1,80,023	27,289 34,300	29,907 25,195	18,30,109 18,84,422	ist half and half	}xLIV	
3,050	• •••	164	17,257 {	ist half and half		·
<b>21,81</b> 9 <b>2</b> 5,639	111	17,415 12,829	1,13,482 1,21,407	1st half 2nd half	xraii	
41,049 44,484	***	-805 786	1,78,481	ist half and half	}xrix	
. <b>6,</b> 679 <b>6,</b> 679	* ***	832 682	58,698 47,260	rst balf and balf	} Lt	-
4,823 4.714		358 246	32,02 <b>7</b> 29,189	1st half 2nd half	}rii	
15,677 14,129		25,505 5,752	2,15,104 2,02,934	ist half	}im	
1,634 1,639	***	1,812 309	29,302 22,341	1st half 2nd half	<b> </b> }	•
86,390 75,843		12,741 17,502	6,62,681 4,77,620	ist half and half	LIV	
3,248		1,561	-411	tet half and half		•
• 1,080	••••	78	8,801	1st half	] 2	
1,223 3,662 3,991	***	73 267 302	8,901 27,038 27,253	2nd half 1st half 2nd half	STAIL	•
28,467		5,111	1,88,122	1st half 2vd half	Jrviii	•
29,562 6,098	•••	8,444 2,458	1,77,212 76,398	ıst half	'	
5,976 15,98 <b>7</b>		334	55,701 · 91,593	and half	1.	•
15,414	2,76,514	3,68,641	87,208 	2nd half 1st half	'	
20,23,074	3,03,291	2,72,089	1,42,32,453	2nd half	}	•
1,16,15,550	10,58,152	34,18,272	10,80,99,590	•••		(a) Includes the Calcutta Port Commission and the Deoghur railways for which yes figures are shown.

# APPENDIX STATISTICS OF INDIAN

### DETAIL OF EXPENSES FOR MAINTENANCE

Half-years ended the 30th June and the 31st December 1892.

[From Abstract A of

Serial Number.	Railway.	1892.	General superintendence.	Maintenance of permanent-way.	Repairs of bridges, etc.	Conservancy of
·	Ga	-	R •	. R	R	R.
	STANDARD GAUGE.	1st half 2nd half	2,52,634 2,66,541	12,90,186 7,73,735	1,14,384 84,671	•••
11	Bengal-Nagpur	1et half 2nd half	91,020 92,799	1,83,621 1,95,643	69,984 61,211	***
111	Indian Midland	ret half 2nd half	79,352 80,682	1,80,479 1,86,963	29,215 25,067	, •••
VI	Wardha Coal	ist half 2nd half	Included with th	 ne Great Indian Pen 	insula railway	
IX.	North Western (state)	1st half 2nd half	3,42,754 3,37,508	13,90,078 - 8,07,276	5,27,431 4,72,812	72,158 39,547
x	Hyderabad-Umarkot	1st half 2nd half	4,432	 15,571	33	***
XI	Oudh and Robilkhand (state)	ist half and half	\$1,885 80,947	3,12,430 3,30,918	16,633 32,771	12,442 5,450
. XII	Eastern Bengal (state) (b)	Ist half 2nd half	1,12,735 1,01,210	3,70,323 3,19,669	44,5°3 76,835	198 394
<b>X</b> III	Bengal Central	1st half 2nd half	12,045 11,919	27,036 25,505	. 4,840 · 6,603	25 648
XIV	Calcutta Port Commissioners'	Ist half 2nd hali	}	•	•••	• •••
XVIII	Great Indian Peninsula	ist half 2nd half	2,22,677 2,25,187	12,05,406 12,25,653	3,37,367 2,62,760	***
XIX	Bombay, Baroda and Central India	1st half 2nd half	97,560 98,144	3,98,050 3,02,235	2,26,956 1,55,741	410 400
XX	Madras	1st half 2nd half	1,26,214 1,35,072	3,34,109 3,61,674	93,727 1,38,013	***
. XXVI	The Nizam's Guarunteed State	1st half 2nd half	41,261 45,228	1,25,185 1,41,101	14,539 11,411	18
XXVII	The Gaekwar's Petiad	1st half 2nd half	Included with the	ne Bombay, Baroda	and Central India r	ailway
XXIX	Rajpura-Bhatinda	1st half 2nd half	Included with th	ie North Western (s	tate) railway	•••
	•	•				
	TOTAL STANDARD GAUGE carried over	Ist half 2nd balf		58,16,903 46,85,943	14,79,579 13,27,928	84,823 46,057

#### A-continued.

## RAILWAYS-(PART I)-continued.

OF WAY, WORKS, AND STATIONS.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1892.

Repairs of stations and buildings.	Other charges.	TOTAL.	Deductions.	NET TOTAL.	1892.	Serial . Number.	Remarks.
R	R	R	R	R		· .	
1,51,790 1,57,753	1,97,767 2,65,82 <b>7</b>	20,06,761 15,48,527	17,382 40,560	19,89,379 15,07,967	ret half 2nd half	}1 · · .	
49,266 38,587	22,544 32,117	4,16,435 4,20,357	<b></b>	4,16,435 4,20,35 <b>7</b>	1st half 2nd half	}11	
18,251 19,372	22,120 25,816	3,29,41 <b>7</b> 3,37,900	***	3,29,41 <b>7</b> 3,37,900	set half 2nd half	}m .	
***	***	{ (a)35,159 (a)36,833	245	(a)35,159 (a)36,833	ist half 2nd half	}vi	(a) Cost of 6,697 sleepers purchased direct by the State.
3,20,103 2,46,166	6,06,232 3,11,461	32,58,756 22,14,830	45, <b>5</b> 38 38,689	32,13,218 21,76,141	ist half 2nd half	}1 <b>x</b>	•
		20,214	•••	20,214	ıst half 2nd half	}x	•
33,410 22,856	58,387 50,822	5,15,187 5,23,764		5,15,187 5,23,764	1st half 2nd half	} x1	
68,243 97,211	56,084 55,310	6,52,086 6,50,629	1,66,043 1,28,383	4,86,043 5,22,246	ist half 2nd half	}x11 ·	(b) Includes the metre and special gauge sections of the undertaking.
4,39 <b>6</b> 2,425	562 753	48,904 47,853	587 •	48,317 • 47,853	1st half 2nd half	}x111	•
. <u></u>	***	13,060		13,060 {	1st half 2nd half	} xiv	:
1,80,590 1,41,803	5,16,964 6,23,89 <b>5</b>	24,63,004 24,79,298	47,831 12,464	24,15,173 24,66,834	ist half and half	}xviii	
47,231 45,420	1,58,731 1,18,698	9,28,528 7,20,238	3,53 <b>2</b> 3,659	9,24,996 7,16,579	1st half 2nd half	} xix	
95,519 90,044	1,20,89 <b>7</b> 1,58,175	7,70,466 8,82,978	97-733 1,02,933	6,72,733 7,80,045	ist half 2nd half	}xx	
10,369 5,483	21,070 12,491	2,12,424 2,15,732		2,12,424 2,15,732	ist half and half	}xxvi	
•••	14*		***	<b>3,532</b> 3,659	ıst half 2nd half		
	***	• • •	<b></b>	45,538 38,689	ist half and half	}xxix	
9,79,168	17,81,358	1,16,37,127	3,78,646	1,13,07,551	ist half and half	,	

# APPENDIX STATISTICS OF INDIAN

### DETAIL OF EXPENSES FOR MAINTENANCE

H If years ended the 30th June and the 31st December 1892.

[From Abstract A of

Serial Number	RAILWAY.	1892.	General superintendence.	Maintenance of permanent-way.	Repairs of bridges, etc.	Conservancy of rivers.
	TOTAL STANDARD GAUGE brought for-	ıst balf 2ud half	<i>R</i> 14,60,137 14,79,729	<b>R</b> 58,16,903 46,85,943	R 14,79,579 13,27,928	<b>₽</b> 84,823 46,057
mizzziii.	MRTRE GAUGE. Bengal and North-Western -	4 1 . 10				
	Tirhoot section	iet half 2nd half	52,939 50,368	1,00,307	7,533	3,230
VIZZIV	Robilkund and Kumaon (Lucknow-)	ret half	]_	]	15,219	2,921
	Bareilly section).	2nd balf 1st balf	1,60,700	e Rohilkund and K	[	mpany's section)
XXXA	Rajputana-Malwa	2nd haif	1,66,446	4,50,720	27,171 47,639	***
IVXXX	Southern Mahratta	1st half   2nd half 	1,16,320 1,18,698	2,34,338 2,09,207	40,292 41,808	400
ZZZVIII	Southern Mahratta (Mysore section) . {	ıst half 2nd half	)			•
	Southern Mahratta (Nanjangúd extension) {	ist half 2nd half	Included with the	i ne Southern Mahrat	ta railway	•••
•	Southern Mahratta (Yesvantpur-Dod- { bailapur.	ist half 2nd half	) .			
XXXIX	South Indian	1st half 2nd half	1,22,075 1,25,487	5,59,675 3,69,886	17,175 29,999	***
*TIII	Eastern Bengal (state)— Northern and Behar sections (including the Kaunia-Dharlla 2' 6' gauge brauch)	ıst half				•••
	Dacca section	2nd half	Indiaded with th	e Eastern Bengal (s	tate) railway (stand	ard gauge)
·XLIV	Burma (state)	1st half 2nd half	78,425 1,00,749	2,48,860 3,97,853	45,569 3 <b>9</b> ,419	14,145 1,144
XLVI	Deoghar	1st half 2nd half	}	<b></b>	•••	•••
XLVII	Rohilkund and Kumaon (Company's section)	1st half 2ud half	• 10,439 18,667	34,471 26,528	2,175 1,722	8,323 236
XLIX	Dibru-Sadiya	Ist half 2nd half	9,861 12,640	49,901 36,373	4,073 1,115	***
П	The Gackwar's Mehsana	1st half 2nd half	Included with th	' e Rajputana-Malwa	ailway	
LII LIII	Kolhápur	1st half 2nd half		e Southern Makrat	ta railway	•••
	Jodhpore section	ist half 20.1halt	4,377 4,488	40,010 58,568	1,2ç6 812	***
	Bickaneer section {	ist half 2nd half	848 553	7,488 5,248		***
LIV	Bhavnagar-Gondal-Junagarh-Porbandar . {	ist half and half	• 25,030 23,967	2,47,929 1,48,874	19,456 —1,327	***
	Nalhati (4' 0")	1st half 2nd half	1,109	620	34	
•	Cherra-Companyganj (2' 6")	ist half 2nd balf	300 300	1,050	: ····	* **
ĽVII	Jorhat (2' 0")	1st half 2nd half	702 702	1,073 4,652	••• 50	***
<b>TA</b> III	Darjeeling-Himalayan (2' 0")	Ist half	9,668 8,72 <b>7</b>	4,712 16,644 15,872	627 · 4,845	***
LIX	The Gaekwar's Dabhoi (2' 6')	rst half 2nd half	3,242 3,291	12,602	3,503 10,688	***
LXI	Morvi (2' 6")	1st hali 2nd half	4,545 3,789	11,655 13,509 16,296	72	***
	TOTAL METRE AND SPECIAL GAUGES . {	ist half 20d half	6,00,679 6,38,872	20,45,045	1,80,429	<b>25,</b> 698
	TOTAL OF ALL GAUGES FOR THE YEAR .	•••,	41,79,417	1,44,18,670	31,69,933	4,301 1,60,879

A-continued.

## RAILWAYS-(PART I)-continued.

OF WAY, WORKS, AND STATIONS-concluded.

Revenue Accounts.]

Half-years ended the 30th June and the 31st December 1892.

Repairs of stations and buildings.	Other charges.	Тотац.	Deductions.	NET TOTAL.	1892.	Serial Number	Remarks.
9.79,168 8,67,147	# 17,81,358 16,55,516	R 1,16.37,127 1,00,99,153	R 3.78,646 3,26,688	R 1,13,07,551 98,14,813	Ist half 2nd half		
18,882	13,329	1,96,220	***	1,96,220	Ist half	HIXXX.	
18,477	22,324	2,27,223	P94	2,27,223	2nd half	,	
***	***	***	•••	{ 	1st half 2nd half	5	
69,459 53,692	1,45,0 <b>72</b> 58,897	8,74,590 7,77,394	10,221 8,605	8,64,369 7,68,789	1st half 2nd halt	} xxxv	
45,596 31,020	79,935 43,466	5,16,481 4,44,199	1,19,95 <b>0</b> 1,21,544	3,96,531 3,22,655	1st half 2nd half	} xxxvi	
		•		1,11,585	ist half and hali	mvxxx {	
			•••	2,412	1st half 2nd half	}	
		•	!	351	1st half 2nd half	:12	
38,653 20,342	71,735 44,762	8,09,313 5,90,476	12,833 32,286	7,96,480 5,58,190	ist half 2nd half	xxxxx {	
100	•••	****	•	{	Ist half 2nd half	} xriii	
44,995 29,497	67,877 39,858	4,99,871 6,08,520	***	4,99,871 6,08,520	1st half 2nd half	} xriv	
•••	•••	4,302	· •••	4.302	Ist half 2nd half	xrai	
4,608 2,787	-4,139 4,105	55,877 54,405		55,877 54,405	1st half 2nd half	f   <b>'</b>	
7,379 7,93 <b>2</b>	2,853 2,129	74,067 60,189	••••	74,067 60,189	1st half 2nd half	f xrix	
***		:		{ 10,221 8,606	1st half 2nd half	f } Li	
***		***	***	{ 8,365 7,210	1st half 2nd half		
1,184 1,305	4,776 2,597	52,543 67,770	***	52,543 67,770	ret half 2nd half	{ } LIII-	
12 18	9 8	8,357 5,82 <b>7</b>		8,357 5,827	1st half 2nd half	[]}	
6,91 <i>7</i> 9,636	21,426 14,180	3,20,758 1,95,330	***	• 3,20,758 1,95,330	1st half 2nd half	f } riv	
147	161	* 2,071	13,149	-11,078	1st half 2nd hal		
 112 7	 4 36	1,466 1,416	***	1,466 1,416	1st hall 2nd hall	r  }	
689 435	τ	6,094 6,476	•••	6,094 6,476	1st hold 2nd half	r  <b>'</b>	
6,207 6,093	1,422 2,170	38,786 36,365	2,157 2,651	36,629 33,714	1st half 2nd half	1	
· 1,292 996	984	28,808 17,686	***	28,808 17,686	1st half 2nd half	LIX	
296 387	296 316	18,718 21,035	•••	18,718 21,035	ist half	XI LXI	
2,46,428 1,82,624	4,05,711 2,35,738	35,04 <b>,0</b> 20 31,14,311	1,58,310 1,65,086	34,75,881 30,79,375	rst half 2nd half		
22,75,367	40,78,353	2,83,71,973	10,28,730	2,76,94,982		]	

## APPENDIX

#### · STATISTICS OF INDIAN

DETAIL OF LOCOMO

· Half-years ended the 30th June and the 31st December 1892.

[From Abstract B of

Serial Number.	Railway.	1892.	General ° superintendence.	Wages of drivers and firemen, fuelling, clean- ing engines, etc.	Fuel.	Water.	Oil, tallow and other stores.
	Salva an alvan		R	R ·	R	R	R
ı	STANDARD GAUGE. East Indian {	1st half 2nd half	2,04,418 2,06,672	5,87,634 5,77,405	2,59,063 2,17,088	37,014 34,827	1,19,907 82,116
11	Bengal-Nágpur {	ist half and half	52,223 50,811	1,22,624 1,04,869	83,755 <b>50,</b> 666	13,495 11,960	<b>26,2</b> 93 <b>17,</b> 613
ш	Indian Midland	ist half and half	40, <b>9</b> 07 37,5 <sup>8</sup> 3	1,15,204 99,493	2,52,598 1,67,708	18,963 18,404	23,123 18,163
IX	North-Western (state) {	ıst half 2nd balf	2,21,542 2,36,675	6,40,430 5,95,253	14,09,598 10,92,522	54-943 45-5 <b>5</b> 0	89,100 77,501
. <b>X</b>	Hyderabad-Umarkot	ıst half 2nd half		the North Wester	n (state) railway ]	,	•••
XI	Oudh and Robilkhand (state)	ist half 2nd half	51,239 48,837	73,908 72,586	2,16,087 1,89,856	7,480 7,544	18,483 <b>2</b> 1,875
XII	Eastern Bengal (state) (a)	.Ist half and half	<b>6</b> 3,599 <b>6</b> 3,8 <b>73</b>	1,49,420 1,59,650	1,65,621 2,28,375	. 16,269 14,864	40,031 42,721
XIII	Bengal Central	1st half 2nd half	} Included with	the Eastern Beng	al (state) railwa	y (standard gaug	(e)
XIX	Calcutta Port Commissioners' . {	ist half and half					***
XVIII	Great Indian Peninsula	1st half 2nd half	1,73,356 1,71,610	9,30,242 7,34,032	13,77,291 9,80,832	1,06,988 82,625	• 1,36,323 91,382
XIX	Bombay, Baroda and Central India {	1st half 2nd half		2,37,503 1,82,456	3,79,952 2,38,554	32,046 21,001	32,173 25,541
xx	Madras	ist half and half	57,496 57,285	1,81,465 : 1,84,481	3,35,569 3,38,281	14,745 13,216	<b>2</b> 1,431 <b>2</b> 2,373
XXVI	The Nizam's Guaranteed State	1st half 2nd half		39,267 38,660	46,6 <b>5</b> 0 39,448	7,776 7,271	· 6,944 6,493
IIVXX	The Gackwar's Petiéd	ist half and half		the Bombay, Baro	da and Central l	India railway	***
XXIX	Rájpura-Bhátinda	ıst half 2nd balf	Included with	the North Wester	n (state) railway		<b>.</b>
	<i>'</i> .			 	-		
•	TOTAL STANDARD GAUGE carried {	ist half and half		30,81,697 27,48,885	45,26,224 35,43,330	3,09,719 2,57,262	5,13,81, 4,05,78

#### A-continued.

## RAILWAYS-(PART I)-continued.

TIVE EXPENSES.

Revenue Accounts.]

Mainten Renew	ANCE AND				<del></del>		32	oth June and the 31st December 1892.
Locomotive engines.	Machinery.	Other charges.	Total.	Deductions.	NET TOTAL.	1892.	Serial Number.	Remarks.
R	R	R	R	R	·	•	<del></del>	
5,85,756 6,05,165	40,038 21,990	· 3,97,781 3,94,534	22,31,611 21,39,79 <b>7</b>	478 <b>7</b> ,613	22,31,133 21,32,184	1st half 2nd half	} 1	
84,571 81,776	11,754 8,583	1,16,556 61,376	5,11,271 3,87,654	•••	5,11,271 3,87,654	ıst hal! 2nd half	} 11	
71,356 74,201	2,198 4,343	76,488 · 35,616	6,04,837 4,55,5 <sup>1</sup> 5	* ***	6,04,837 4,55,5 <sup>1</sup> 5	1st half 2nd half	} 111	
6,73,319 4,84,014	79,797 73,084	3,06,035 2,60,165	34,74,770 28,64,764	60, <del>5</del> 33 58,830	34,14,237 28,05,934	ist half 2nd half	} ıx	
•••		<b></b> !	•••	<b>&gt;**</b>		ist half and half	} x	
99,026 80,097	7,807 9,511	87,869 53,222	5,61,899 4,83,528	***	5,61,899 4,83,528	ist half and half	} x1	
1,91,720 1,23,108	16,174 13,217	36,423 • 41,312	6,19,257 6,87,120	78,937 58,831	5,40,320 6,28,289	ist half 2nd half	} xII	(a) Includes the metre and special gauge sections of the undertaking, also the Bengal Central railway, except in the net total.
***	•••		***	•••	50,885 53,518	1st half 2nd half	} xIII	cept in the net total.
	•••	<b></b> .	24,337	•••	24,337 {	1 sthalf 2nd half	} xiv	
7,68,628 6,21,324	58,973 45,230	8,36,798 6,36,494	43,88,599 33,63,529	 	43,88,599 33,63,529	ist half 2nd half	} xviii	
1,61,811 1,21,936	13,371 17,949	2,46,290 1,52,178	11,60,528   8,16,304	4,415 4,147	11,56,113 8,12,157	ist half and half	} xix	
2,11,427 1,95,181	49,881 52,987	64,108 61,309	9,36,122 9,25,113	***	9,36,12 <b>2</b> 9,25,113	ıst half 2nd half	} xx	
45,943 42,284	2,005 1,986	25,480 18,052	1,95,828 1,75,573	 	1,95,828 1,75,573	ist half and half	xxvi .	
624	100			<b></b>	{ 4,414 4,147	1st half 2nd half	} xxvii	
***	•••	***		<b></b>	60,533 51,429	ıst half 2nd half	} xxix	
•			•		5 5		•	
<b>28,33,557</b> <b>24,29,086</b>	2,81,998 2,48,880	21,93,828 17,14,258	1,46,84,722 1,22,98,897	1,44,363 • 1,29,421	1,46,56,191 1,22,85,971	1st half 2ud half	}	

#### APPENDIX.

#### STATISTICS OF INDIAN

DETAIL OF LOCOMOTIVE

Half-years ended the 30th June and the 31st December 1892.

[ From Abstract B of

Serial Number.	RAILWAT.	1892.	General superinten- dence.	Wages of drivers and firemen, fuelling, clean- ing engines, etc.	Fuel.	Water.	Oil, tallow, and other stores.
•	Total standard gauge brought {	ıst half 2nd half	<b>₽</b> * 9,43,885 9,51,414	R 30,81,697 27,48,885	R 45,26,224 35,43,330	R 3,09,719 2,57,262	<b>#</b> 5,13,814 4,05,782
•	METRE GAUGE.						
IIIZXZ	Bengal and North-Western -	ıst hali	28,860		87.229	6000	*
,	Tirhoot section	2nd half	29,300 29,431	56,557 53,406	72,311	6,321 6,815	12,945 11,126
XXXIV	Robilkund and Kumaon (Luck- { now-Bareilly section).	tst half 2ud half	] Included with	the Robilkund and	l Kumaon railw	ay (Company's s	ection)
XXXV	Rajputana-Malwa	ıst half 2nd half	1,54,800 1,62,440	4,28,027 3,42,492	10,44,546 6,97,9 <b>7</b> 0	57,061 37,238	56,546 35,052
XXXVI	Southern Mahratta	ist half	67,131	1,11,974	2 54,347	19,158	15,863
		2nd halt 1st half	66,852	1,05,051	2,23,072	16,501	13,307
IIIVXXX	Southern Mahratta (Mysore section) {	2nd baif 1st half	Tualudud =:41	n.a.n. <b>v</b> t.l		·	
	Southern Mabratta (Nanjangúd (extension).	2nd half	Therefored with	the Southern Mal			
	Southern Mahratta (Yesvantpur- { Dodballapur).	rst half 2nd half	[/				
ZZZIZ	South Indian {	ıst half 20d half	58,81 <b>2</b> 67,210	1,51,389 1,66,052	3,92,800 3,72,364	16,742 17,976	26,027 31,591
ZLIII	Eastern Bengal (state)—		٠	}			
•	Northern and Behar sections (in- cluding the Kaunia-Dharda 2' 6' gauge branch).	ıst half	CTualudud imich	the Eastern Beng	ul (utoto) zailmu	n (utund nd cong	a) .
	Dacca section	2nd balf	, incidued with	the Eastern Deng	ai (state) tatiwa	•   •	•
XFIA	Burma (state)	ist half 2nd half	65,930 65,434	1,41,033 1,39,841	2,22,063 1,54,233	21,001 18,264	29,49 28,47
XLVI	Deoghur	ist half and half	}	*	***	•	184
XLVII	Robilkund and Kumaon (Com-	1st balf 2nd half	8,410	11,190	40,608	1,827	3,200
XLIX	pany's section).	ıst half		7,277	29,404 6,801	1,856 1,128	2,858 1,67
		2nd half 1st half	3,949	5,870	11,197	976	2,09
ľľ	The Gaekwar's Mehsana }	2nd haif	Included with	the Rajputama-Ma	lwa railway	•••	***
LH	Kolhápur	1st half 2nd half	Included with	the Southern Mah	ratta railway	144	***
LIII	Jodhpore Bickaneer-	Ist half	2010	6,603	62,340		
-	Jodhpore section	2nd half	3,049 3,241	6,612	45,974	5,365 3,39 <b>2</b>	4,457 2,222
	Bickaneer section	1st half 2nd balf	407 380	923 786	8,187 5,417	2,427 2,194	566 <b>27</b> :
LIV -	Bhavnagar-Gondal-Junagarh- Porbandar.	1st half 2nd half	14,924 14,915	27,185 20,400	64,458 39 <sup>,0</sup> 55	2,885 2,406	<b>3,28.</b> <b>2,5</b> 5.
	- SPECIAL GAUGES.					•	
	Nalháti (4' 0')	ist half 2nd balf	665	345	687	72	12,
	Cherra-Companyganj (2' 0") . {	1st half 2nd half	600 600	390 390	1,286 898	***	13; 9;
LVII	Jorhat (2'0")	1st half 2nd half	995	875	1,715	. 29	38,
LVIII	Darjeeling-Himalayan (2' 0")	ist half	2.310	794	1,702 25,858	42 1,318	29° 3,1 <i>7</i> 0
•		2nd half 1st half	2,124	13,817	21,379	499	2,95; 870
LIX	The Gaekwar's Dabhoi (2' 6")	20d half	456	3,147	7,533 5,61 <b>5</b>	1,225 1,242	321
LXI	Morvi (2' 6")	1st half 2nd half	2,062 2,171	4,696 4,199	16,872 15,026	754 669	1,371 1,494
	TOTAL METER AND SPECIAL GAUGES,	18t half 2nd half		9,66,863 8,72,996	22,37,329	1,37,313	1, <b>5</b> 0,103
	TOTAL OF ALL GAUGES FOR THE YEAR.		27,39,455	, 76,70,441	1,20,03,100	8,14,364	12,15,010

#### A-continued.

## RAILWAYS-(PART I)-continued. .

EXPENSES-concluded. . .

Revenue Accounts. ]

Cevenue Acc		<del></del>			, <del></del>	Half-years	ended the 30th J	une and the 31st December 189
MAINTEN. RENEV	ANCE AND VAL OF	1		•			•	•
Locomotive engines.	Machinery.	Other charges.	Total.	Deductions.	NET TOTAL.	1892.	Serial Number.	Remarks.
<b>2</b> 8,33,557 24,29,086	2,81,998 2,18,880	21,93,828 17,14,258	R 1,46,84,722 1,22,98,897	R 1,41,363 1,29,421	1,46,56,191 1,22,85,971	ist half 2nd half		
-			}		ł I			
39,437 46,151	. 763 2,728	28,737 4,919	2,60,848 2,25,887	29,098	2,31,758 2,26,887	ist half and half	xxxIII	
***	•••			•••	\ {	1st half 2nd half	xxxiv	
3,61,270 3,20,908	•9,026 11,534	2,34,881 1,25,822	23,46,247 17,34,056	27,421 19,196	23,18,826 17,14,860	1st half 2nd balf	77777	
1,59,100 1,32,060	13,315 13,146	79,639 59,668	7,20,527 <b>6,2</b> 9,657	1,64,685 1,75,991	5,55,842 4,53,666	ist half and balf	}xxxvi	
		~		}	1,53,993 1,62,341	1st half 2nd half	} xxxviii	
***	•••	••• .		···	3,531	1st half 2nd half	]	
	[	•		ĺ	298	1st half 2nd half		
1,75,445 2,70,185	2,860 2,907	42,594 20,093	8,66,669 9,54,378	5,190 6,196	8,61,479 9,48,182	1st half 2nd half	}xxxix	
•							}	
, , , , , , , , , , , , , , , , , , ,	, şa <del>c</del>	***	***		{	rst half and half	}xriii	
88,775 96,579	4,416 4,156	38,376 31,862	6,11,104 5,39,846	***	6,11,104 5,39,846	1st half 2nd half	xriv .	
***			5.974		5,074	ist half and half	1	
12,195	703 678	381	78,514 67,441		78,514 67,441	1st half 2nd half	) *****	
9,765 10,994	945 1,256		31,316 36,339		31,316	ist half	IVITY	
•••		***	•••		{ 27,421 19,196	ist half and half	17.7	
•••	•••	•••			{ 10,692 9,821	ist half and half	true	
7,413	116	2,654	91,997		91,997	ist half		
19,664 532	73 15	3,3 <sup>22</sup> 3 <sup>6</sup> 7	84,500		84,500 13,424	2nd half	LIII.	
1,508	1,896	412	10,972	-	10,972	2nd balf	<b>)</b>	
1 <b>6</b> ,153 1 <b>7,</b> 673	1,118	1,370 953	· 1,32,161 99,672	***	-1,32,161 <b>9</b> 9,672	2nd half	LIV	
535	141	9	2,437		2,437	Ist half	1.	
 481	19	7	2,916		2,916	2nd balf 1st half	1	
721 2,289	119	7 185	2,828 6,579	•••	2,828 6,579	2nd half		
2,524	234	.23	6,605 68,886		6,605	2nd half 1st half	1	
10,959 12,376	1,354 827	9,773 4,830	59,109	38 68	68,848 59,041	2nd half	} LVIII	
3,569 3,701	•••	1,882 52	19,829 14,534		19,829 14,534	1st half 2nd half	}rix	
6,784 4,517	***	623 298	33,162 28,374	· ···	33,162 28,374	1st half 2nd half	}LXI .	
8,94,702 9,52,695	35,53 <sup>6</sup> 38,778	4,41,484 2,58,261	52,86,616 44,95,198	2,26,424 2,01,451	52,52,298 44,88,934	1st half 2nd half	} •	
71,10,040	6,05,192	46,07,831	3,67,94,844	7,01,659	3,67,12,805			
	١ .	<u> </u>	<u>'                                     </u>	·	<u>'</u>	<u> </u>	<u> </u>	

### APPÉNDIX STATISTICS OF INDIAN

DETAIL OF CARRIAGE
[From Abstract C of

. Half-years ended the 30th June and the 31st December 1892.

[ From Abstract C of

			General	REPAIR	S AND RENEW	ALS OF	Cleaning and
Serial Number.	RAILWAY.	1892.	General superintendence.	Coaching vehicles.	Goods vehicles.	Machinery.	cleaning an oiling.
	STANDARD GAUGE.		· R	R	R .	R	R
. 1	East Indian	1st half 2nd half	48,380 45,874	1,15,660 1,18,477	4,65,235 3,50,905	17,880 17,895	40,653 38,682
i	Bengal-Nágpur	1st half 2nd half	11,006 10,863	11,299 15,261	42,028 32,137	- 1,041 1,812	23,31 <i>2</i> 25,348
111	Indian Midland	ıst half 2nd half	13,677 14,864	46,658 .46,150	37,591 38,538	1,502 2,027	18,627 14,580
IX	North Western (state)	1st half 2nd half	52,107 44,724	2,52,498 2,28,064	3,72,711 1,62,607	12,971 12,255	1,01,888 93,493
. <b>X</b>	Hyderabad-Umarkot	ist half 2nd half	Included with the	e North Wester	n (state) railw	ay	***
, <b>x</b> i	Oudh and Rohilkhand (state)	19t half 2nd half	11,568 11,415	64,933 48,371	61,044 60,075	1,442 2,513	22,123 22,499
. XII	Eastern Bengal (state) (a)	ist half 2nd half	37,23 <u>3</u> 34,636	61,624 98,021	70,726 1,19,799	1,292 2,219	20,063 26,801
XIII	Bengal Central	Ist half 2nd half	Included with the	e Eastern Beng	al (state) railw	ay (standard g	range)
XIV.	Calcutta Port Commissioners'	1st half 2nd half	}	•••	·	••• •	•••
<b>XVIII</b>	Great Indian Peninsula	1st half 2nd half	53,242 53,862	3,48,413 3,26,761	. 3,74,499 3,39,767	23,992 18,261	1,19,514 1,07,709
XIX	Bombay, Baroda and Central India	1st half 2nd half	24,225 27,193	67,123 1,00,047	1,96,154 2,12,435	17,738 18,650	31,093 25,775
<b>XX</b>	Madras	1et half 2nd balf	18,153 13,397	69,173 46,268	1,28,922 75,143	35,001 30,779	32,367 31,656
XXVI	The Nizam's Guaranteed state	ist half 2nd half	6,311 6,469	23,090 24,573	18,760 15,128	992 685	7,733 6,332
TIAXX	The Gackwar's Petlid	1st half 2nd half	Included with the	s Bombay, Baro	da and Centra	  - India railway 	
XXIX	Rájpura-Bhátiuda	1st balf 2nd half	} Included with th	e North Wester	rn (state) railw	ay	· ·
•	•						
	TOTAL STANDARD GAUGE carried over	Ist half 2nd half	. 2,75,902 2,63,29 <b>7</b>	10,60,471 10,52,593	ī7,67,670 14,06,534	1,13,851 1,07,096	4,26,373 3,92,875

## RAILWAYS-(PART I)-continued.

AND WAGON EXPENSES.

Revenue Accounts.]

evenue Accounts.]	! 			Ha	lf-years ended	the 30th June and the 31st December 1892.
Other qharges.	Total.	Deductions.	NET TOTAL.	1892.	Serial Number.	. • Remarks.
R	R	R	R		•	
8,978 9,511	6,96,786 5,81,344	6,904 4,538	6,89,882 5,76,806	1st half 2nd half	} I	
4,076 3,158	92,762 88,579	•	92,762 88,579	1st half 2nd half	} II	
<b>6</b> 99 <b>2</b> 66	1,18,754 1,16,425		1,18,754 1,16,425	ist half 2nd half	} III	-
25,182 6,556	8,17,357 5,48,299	18,93 <b>6</b> 18,404	7,98,42 <b>1</b> 5,29,895	ıst half 2nd half	}ıx	
	•••		2,316	ıst half 2nd half	} x	
409 396	1,61,519 1,45,269		1,61,519 1,45,269	1st half 2nd hal	xı {	
3,514 2,335	2,03,452 2,83,811	29,617 60,806	1,73,835 2,23,005	1st half 2nd half	xII	(a) Includes the metre and special gauge sections of the undertaking, also the Benga Central railway except in the net total.
•			{ 15,961 19,322	1st half 2nd half	} xiii	
•••	10,703		10,703	ist half 2nd half	} xiv	
1,52,009 1,35,911	10,71,669 9,82,271	7,082 3,706	10,64,587 9,78,565	1st half 2nd half	} xaiii	
48,177 58,896	3,84,510 4,42,996	1,463 2,251	3,83,047 4,40,745	ist half 2nd half	} xix	
23,437 15,627	3,07,053 2,12,870	3,171	3,03,882 2,12,870	ist half and half	} xx	
15	56,886 53,202	<b>::</b> :	56,886 53,20 <b>2</b>	1st half 2nd half	} xxvi	
*** ,		•••	{ 1,463 2,251	1st half 2nd half	xxvII	
<u>.</u>	4,14		18,936 16,088	1st half 2nd half	} xxix	
· ·			·			
•	- ^		00 70 007	ret half		
2.65,481 2,32,671	39,10,748 - 34,55,066	67,173 89,705	38,79,935 34,05,338	ıst half şnd half	f <b>}</b>	

# APPENDIX STATISTICS OF INDIAN

DETAIL OF CARRIAGE

Half-years ended the 3oth June and the 31st December 1892.

[ From Abstract C of

Serial	•		(1,000)	Repair	S AND BENEW	ALS OF	
Number.	Pailway,	1892.	General superintendence.	Coaching vehicles.	Goods Vehicles.	Machinery.	Cleaning and ciling.
•	•		· R	R	R	R .	R
•	Brought forward STANDARD GAUGE .	ist half 2nd-half	2,75,902 · 2,63,297	10,60,471 10,52,593	17,67,670 14,96,534	1,13,851 1,07,096	4,26,373 3,92,875
	METRE GAUGE.		•			٠	•
XXXIII	Bengal and North-Western— Tirhoot section	ist half	10,222	*0.478	26,680		
! 	Company's section	2nd half	9,291	19,478	33,340	509	10,199 10,211
XXXIV	Robilkund and Kumaon (Lucknow-	1st half 2nd half	)			way (Company	•
XXXV	Bareilly section).	ist half	35,818	1,14,451	1,63,047	1,650	81,246
XXXVI	Rajputana-Malwa	2nd balf 1st half	38,50 <b>5</b> 21,489	1,43,600 <b>72,</b> 535	1,39,307 68,180	1,556 1,810	67,890 16,425
XXXVIII	Southern Mahratta (Mysore section)	2nd half 1st half	21,481	47,724	41,718	1,700	15,484
	Southern Mahratta (Nanjangid exten-	2nd half			• •	•	
1	sion). Southern Mahratta (Yesvantpur-Dodbal-	1st half 2ndhalf	Included with the	e Southern Ma	hratta railway	•	***
	lapur).	ist half 2nd half	)				
XIXXX	South Indian	1st half 2nd half	9,715 11,059	<b>6</b> 1,980 1,08,894	48,833 1,16,172	•••	17,977
· •	Eastern Bengal (state)— Northern and Behar sections (including the Kauma-Dharila 2 6 gauge branch).	1st half 2ud half	Included with the		-	vav (stundard	20,314
•	Dacca section	200 дан	, 	1	, (=1.1.1, =1.1.1	-J (	5-46-7
XLIV	Burma (state)	ist half and half	12,916 15,055	39,8 <b>02</b> 38,709	33,333 43,625	3,985 2,234	,24,249 27,063
XLVI	Deoghur	1st half 2nd half	}		***	* 404	•
XIAİI	Rahilkund and Kumaon (Company's {	ıst half 2nd half	2,804 3,121	,122 8,831	· 4,768 5,612	· 491 489	3,624 3,744
XTIX	Dibru-Sadiya	ist half and half	· 2,972 3,010	704	5,813	•••	.2,882
· LI	The Gackwar's Mehsana	ist half and half	Included with the	e Rajputana-M	4,205   iilwa railway	143	2,001
LII	Kolbápur	ist half and half	2		-		•••
LIII	Jodhpore-Bickaneer-	Sud Dati	, )		· · · · · · · · · · · · · · · · · · ·	.	•••
·	Jodhpore Section	1st half 2nd half	772 655	1,678 3,964	1,302 1,712	•••	2,018 2,390
• .	Bickaneer Section	ist half 2nd half	99 77	237	163	•••	298
ΓΙΛ	Bhávnagar-Gondal-Junágarh-Porbandar	1st half 2nd half	4,975 4,972	445 11,551 8,836	208 3,943 3,521 .	· ··· ··· 571	136 2,779 2,497
ľ		••			•	J, -	
. •	SPECIAL GAUGES.	ist half				·	
	Nalhati (4' o")	2nd half	327 	235 	86	•••	
	Cherra-Companyganj (2' 6").	ist half 2nd half	300 300	276 365	· 138 247	•••	139 152
. LVII	Jorhat (2' 0")	ist half 2nd half	249 249	377 <b>5</b> 53	. 956 862	•••	350 229
<b>T</b> AIII	Darjeeling-Himalayan (2' 0")	1st half 2nd half	1,994 2,027	6,127 7,245	13,561	1,100 380	2,001 2,076
LIX	The Gackwar's Dabhoi (2' 6")	ist half and half	152 152	4,733 3,288	1,712	***	1,172
TXI	Morvi (2' 6')	Ist half 2nd half	· 920 923	3,266 1,378 2,678	3,870 842 409	***	948 1,279 1,018
	TCTAL METER AND SPECIAL GAUGES . {	1st half 2ud half	1,05,724 1,10,877	3,41,664	. 3,73,357	9,563	1,66,749
•	TOTAL OF ALL GAUGES FOR THE YEAR		7,55,800	28,48,029	4.04,814	6,030	1,56,753

A-continued.

## RAILWAYS-(PART I)-continued.

AND WAGON EXPENSES-concluded.

Revenue Accounts.]

renue Accounts.]	<del></del>			He	alf-years ended th	he 30th June and the 31st Decem
other charges.	Total.	Deductions.	NET TOTAL.	1892.	Serial Number.	Remares.
R	R	R	R		·	•
2,66,481 2,32,671	29,10,748 • 34,55,066	67,173 89,705	38,79,9 <b>3</b> 5 34,05,338	1st half 2nd half		
650	6= ==0			[	•	
1,315	67,738	•"	67,738	ret half	liixxx{	
	72,450	***	72,450 {	2nd half 1st half 2nd half	}	
18,264	4,14,485	. 4,844	4,09,641	1	( i	
17,313 428	4,08,171	4,518	4,03,653.	2nd half	} x x x v	
1,018	1,80,876 1,29,125	41,341 35,902	1,39,535 93,22 <b>3</b>	1st half 2nd half	} xxxxi	
•			38,657 33,124	ıst half 2nd half	] xxxviii	
	, ,	}	721	ıst half : 2nd half	}	
ļ		• ()	144	1st balf	<u> </u>	
т,006	1,39,511	r,686	53 1,37,825	2nd balf 1st half	}. }xxxix	
1,139	2,57,578	753	2,56,825	2nd half	S AAAIA	
	•					
***	•••	•••		1st half 2nd half	}xrin	•
3,485	1,17,770		1,17,770	ıst balf-	. 	
2,382	1,29,068	***	1,29,068	2nd half	}xriA	
•••	657	•••	657 {	ret half 2nd half	}xr41	
—11 947	17,798 22,744	***	77,798 22,744	ıst half znd half	}xLVII	
129	12,371 9,820	•••	12,371 9,820		}xlix	
	9,020	{	4,844 4,518	1st half	) l	
. {	.	ŝ	2,684	2nd half 1st half	7	
***	• •••	{	2,004	20d half	LII	
73	5,843	,	5,81 <b>3</b>	ıst half and half	}riii	
33 9	.8,754 806		8,754 8o6		,	
•••	866	•••	, 86 <b>6</b>	1st half 2nd half	3	
184 480	23,432 20,878	***	23,432 20,878	ret half and half	} ria	
		1			.	
. 1	760	***	760	1st half	1	
1	 853	***	<del>-</del> 853	and half	3	
	1,064		1,064	and half	}	
* ***	1,932 1,893	•••	1,932 1,893	1st half 2nd half	}ran .	
	· 24,783 .	38 68	24,745 21,66 <b>6</b>	ıst half . 2nd half	} raiii .	
2	7,771 8,258	•••	7,771 8,258	ıst half 2nd half	} L1X	
	4,419		4,419 5,028	Ist half	}LXI	
	. 5,028			2nd balf 1st half		
24,091 24,756	10,21,148	47,909 41,241	10,19,424 10,96,610	2nd balf	}	
5,47,999	94,95,753	2,46,028	94,12,667			
* בְּכְנִיוּחְט	J,,,,,,,,,			<u> </u>	<u> </u>	•

#### APPENDIX

#### STATISTICS OF INDIAN

DETAIL OF

Half-years ended the 30th June and the 31st December 1892.

[ From Abstract D of

	uded the 30th June and the 31st D								
Serial Number.	RAILWAY.	1892.	General superin- tendence.	Station staff.	Train staff.	Fuel, light- ing and general stores.	Clothing.	Printing, stationery and tickets.	Charges for delivery and collection of goods.
	STANDARD GAUGE.		R	R	R	R	R	R	R
I	East Indian	Ist half	2,07,350	7,49,112	2,83,275	1,13,907	.16,275	56,25 <b>7</b>	1,800
1	Date Indian	2nd half	2,04931	7,11,266	2,58,247	98,482	12,788	49,776	1,800
11	Bengal-Nágpur	st half and half	39,91 <b>2</b> 39,328	94, <b>8</b> 11 83,719	32,938 30,209	22,547 23,396	4,097 —264	21,048 12,755	***
·		211.0 11.01	39,020		, ,,,,,,	-3,390		•	,
111	Indian Midland	rst half 2nd half	36,175 30,017	97,126 93,653	37,502 33,407	21,687 24,692	232 1,193	13,538 11,843	36 50
	•			, , , ,				!	•
1X	North Western (state)	Ist fielf 2nd half	1,74,461 1,74,165	6,00,640 6,07,007	2,58,728 2,34,317	1,22,317 1,36,405	8,266 29,742	52,050 54,21 <i>7</i>	206 136
X	Hyderahad-Umarkot	Ist half and half	Included	with the No	rth Western	(state) railw	ay		*** '
-						. '	1	•	
IX	Oudh and Rohilkhand (state) .	Ist half 2nd half	48,543 47,897	1,60,068 1,51,901	56,179 52,9 <b>51</b>	27,811 33,708	5,375 1,582	18,818 18,090	870 876
XII	Eastern Bengal (state) (a)	s ist half	86,854	3,46,469	59,321	52,888	6,505	26,404	• 1,475
	Eastern Bengal (state) (a)	2nd half	89,229	4,23,926	65,545	52,371	4,729	33,259	6,889
XIII	Bengal Central	Ist half 2nd half	Included	with the Ea	stern Bengal I	(state) railw	ay (standard	gauge)	***
								•	
XIV	Calcutta Port Commissioners' .	ist half and half		•••			•••	•••	***
•		Ist half	1,45,062	7,02,563	4.47.200	1 27 052	** 9.6	#6 m i Q	* 2 800
XVIII	Great Indian Peninsula	2nd half	1,45,439	6,46,469	3,70,662	1,26,634	11,846 23,060	56,748 61,039	3,809 3,50 <b>2</b>
XIX	Bombay, Baroda and Central	rst half	46,619	2,28,752	48,538	63,665	6,595	· 26,239	, 3,300
	India.	2nd half		2,14,181	40,914	39,132	5,319	24,453	3,084.
ХХ	Madras	1st half	69,336	1,87,281	47,246	54,831	4,218	-38-577	1,248
		2nd half	63,362	1,83,679	46,679	47,574	<b>5</b> ,588	37,953	1,003
XXVi	The Nizam's Guaranteed state	tst half	19,965 19,553	49,708	14,561	13,453	. 10	8,221	***
•		Ziid nan	19:553	50,242	14,295	10,327	856	7,145	
(XVII	The Gaekwar's Petlad	1st half 2nd half	Included	 with the Bo	l mbay, Barod	a and Centra	l India rails	ay	***
XXIX	Réjpura-Bhátinda	ist half 2nd half	Included	with the No	j erth Western	   (state) railw	ay	***	•••
	٠,					]			
			•				,		•
		-			-	\ <del></del>	-	·	<del></del>
	FORAL STANDARD GAUGE				1	1			•

A-continued.

## RAILWAYS-(PART I)-continued. TRAFFIC EXPENSES.

Revenue Accounts.]

Revenue Accour	ite.]	· ·		<del>-</del>	Half-yeal	ended th	ie 30th June	and the 31st December 1892.
Miscellaneous expenses.	Payments to other lines for expenses at joint stations.	. Other charges.	Total.	Deductions.	NET TOTAL.	1892.	Scrial Number,	Remarks.
R	R	R	R	R	R	<u> </u>	- <del></del>	•
20,210 18,706	32,850 22,419	2,569 3,206	14,83,695 13,81,621	3	14,83,692 43,81,621	1st half 2nd half	} I	
3 <sup>8</sup> 3 373	43,486 16,166 .	1,028 1,064	2,60,250 2,07,306		2,60,250 2,07,306	Ist half 2nd half	} 11	
. 1,012 952	5,522 30,379	360 442	2,13,190 2,32,618	•••	2,13,190 2,32,618	Ist half 2nd half	} iii .	
2,109 2,170	13,595 22,752	11,406 9, <del>2</del> 02	12,43,778 12,70,113	24,253 23,571	12,19,525 12,46,542	ist half and half	} ix	
				 	 { 2,966	st half 2nd half	} x	
135	13,121 - 5,047	758 695	3,31,678 3,12,777	***	3,31,678 3,12,777	sst half 2nd half	} x1	
7,417 11,084		2,700 1,507	5,90,063 6,88,539	- <b>5</b> 0,359 - <b>5</b> 3,589	5,39,704 6,34,950	ist half and half	} x11 ·	(a) Includes the metre and special gauge sections of the undertaking and the Bengal
***		***	***	•••	{ 50,287 53,257	rst balf 2nd balf	} xIII	Central railway.
•••	•••		72,171		72,171 {	iet half and balf	} xiv	
2,708 3,752	19,424 16,077	. 40,104 42,327	15,66,626 14,38,961	*	15,66,626 14,38,961	ıst half 2nd half	} xviii	
1,080 1,095	22,460 15,046	8,855 —1,376	4,56,103 3,80,477	1,735	4,54,368 3,78,544	ist half 2nd half	} xix	
3,295 3,059	4,880 5,150	17,895 <b>17,</b> 096	4,28,807 4,16,143	286 920	4,28,521 4,15,223	Ist half 2nd half	} xx	
73 <b>2</b> 747	5,346 5,772	29 30	1,12,025 1,08,967	***	1,12,025 . • 1,08,967	ıst helf 2nu half	} xxvi	
*** ·		•	***		{ 1,735 1,933	1st half 2nd half	} xxvii	
•••		• • <del>••</del>	• •••		<b>24,</b> 253 <b>20,</b> 606	Ist half and half	3 xxix	
							· 	•
					•			
39,111 41,968	1,60,684 1,38,888	· 85,704 74,193	66,86,215 64,37,522	76,636 80,013	66,85,854	1st half 2nd half	}.	

#### APPENDIX.

#### STATISTICS OF INDIAN

DETAIL OF TRAFFIC

Half-years ended the 30th June and the 31st December 1892.

[ From Abstract D of

2.1111 3	unted the 20th pune and the 3tes to			<u></u>		·····			
Serial. Number.	RAILWAY.	1 <b>8</b> 9 <b>2</b> ,	General superin- tendence.	Station staff.	Train staff.	Fuel, light- ing and general stores.	Clothing.	Printing, *stationery and tickets.	Charges for delivery and collection of goods.
	TOTAL STANDARD GAUGE i brought forward.	1st half 2nd half	8,74,277 8,59,050	# 32,16,530 31,71,043	<b>R</b> 12,85,597 11,47,286	R 6,30,249 5,92,711	84,593	3,17,900 3,10,530	R 12,744 17,340
XXXIII	METRE GAUGE. Bengal and North-Western— Tirhoot section	ist half	27,705	<b>7</b> 9,880	26,368	14,656	3,770	16,714	15,780
	Company's section	2nd half	27,601	77,198	26,172	17,049	2,046	17,861	11,305
XXXIV		iet half 2nd half	Included	vith the Rob	ikund and K	ا amaon railw: ا	ay (Company	's section)	***
xxxv	Rajputana-Malwa	1st half 2nd half	1,18,232 1,13,055	3,35,404 3,01,727	1,25,627 1,10,291	86,597 85,330	16,800 6,051	27,66 <b>6</b> 35,731	54 60
ZZZVI	Southern Mahratta	1st hali 2nd balf	<b>5</b> 8. <b>9</b> 52 59,482	1,47,443 1,42,365	41,761 38,480	47,78y 40,48g	9,979 6,53 <b>5</b>	20,144 27,309	***
ZZZVIII	Southern Mahratta (Mysore section).	ist half and half	)			• !	•		
	Southern Mahratta (Nanjangúd { extênsion). Southern Mahratta (Yesvantpur- { Dodballapur).	1st half 2nd half 1st half 2nd balf	Included	with the Sou	thern Mahr	atta railwny	·	***	,
XXXIX	South Indian	set half and balf	55,456 <b>4</b> 5,689	1,44,503 1,52,884	31,027 31,344	37,543 44,762	7,487 6,225	32,104 40,910	9
<b></b>	Northern and Behar sections, (including the Kuunia-Dharlia 2' 6' gauge branch).  Dacca section	ist half 2nd half	} Included	with the Eas	stern Bengal	(state) railw	ray (standar	d gauge)	···
XLIV	Burma (state)	ist half and half	45,153 49,185	1,90,796 1,75,380	44,046 45,705	37,002 33,865	6,858 11,300	24,574 37,474	***
. XLVI	Deoghur	ıst half 2nd half	2	<b>:</b>	***				***
XLV11	Rohilkund and Kumaon (Com-	ist half	10,512	22,691 -	5,741	6,626	877	7,069	***
XLIX		ist haif 2nd half	3,809 3,802	21,705 • 8,049	5,233 2,160	7,132 806	300 87	6,657 2,347	1,506
Li	The Gackwar's Mchaina	1st half 2nd half	l .		2,161   putana-Mal	552   sa railway	105	2,292	2,003
LII	Kollispur	Ist half	} Included	with the Sou	ithern Mahr	atta railway		•••	
LIII	Jodhpore-Bickaneer- Jodhpore section	1st half 2nd half	4,950 5,541	11,515 9,808	1,067	2.773 2,809	 —II	3,107 2,700	•••
	Bickaneer section	1st half 2nd half	618 643	1,824 1,366	120 122	413 233		293 362	***
LIV	Bhavnagar-Gondal-Junagarh- Porbandar	1st half 2nd half	14,989	40,010 31,353	6,377 5,312	12,530 6,376	613 1,407	6,638 5,413	***
	SPECIAL GAUGES. ' Nalhati (4' 0")	ist half and half		1,465	277	168	17	—416 …	***
	Cherra-Companyganj (2'6")	1st half 2ud half		1,923 1,768	180 179	j 5	***	 50	***
LVII	Jorhát (2' 0")	ist half and half	1,251 1,101	5,893 5,523	355 350	884 811	•••	106 200	***
TAIH	Darjeeling-Himalayan (2' 0") .{	1st half 2nd half	2,922 3,066	10,535	2,972 3,224	2,341 2,690	160 66	1,116 1,008	d70 845
LIX	The Gaekwar's Dabhoi (2' 6") . {	1st half 2nd half	608	5,758 4,679	· 878	576 782	141	779	***
LXI	Morvi (2' 6")	ist half and half	3,200	5,167 5,123	1,574 1,524	2,675 1,405	75 157	2,761 1,786	3,113 3,407
•			<del> </del>	<u> </u>			<del></del>	•	·
•	TOTAL METRE AND SPECIAL GAUGES.	1st half 2nd half	3,49,462 •3,37,009	10,12,886	2,90,530 2,71,994	2,53,384 2,49,285	46,864 31,292	1,45,002 1,80,456	20,539 16,784
• •	TOTAL OF ALL GAUGES FOR THE YEAR.		24,20,398	83,51,578	29,95,407	17,25,629	2,29,168	9,53,888	• 67,407

. A-continued.

## RAILWAYS-(PART I)-continued.

EXPENSES—concluded.

Revenue Accounts.]

Kevenue Account 	.s. j 		•	•		Half-ye	are	ended the	30th June s	ind the 31st December 189
Miscellancous expenses.	Payments to other lines for expenses at joint stations.	Other charges,	TOTAL.	Deductions,		NET TOTAL	<u></u> -	1892. •	Serial Number.	Ræmarks.
<b>R</b> 39,111 41,968	# 1,60,684 1,38,803	85,704 74,193	<i>R</i> 66,86,215 64,37,522	# 76,636 80,013		R 66,85,854 64,36,271		ist half and half	}	•
1,099	18	22,297	2,08,287			2,08,287		1st half	{xxxiii	
3,135 ·		14,341	1,96,711	***		1,96,711	ć	2ndhalf 1st half	1	
		<b>. **</b>	***	,		•••	Į	2nd half	}xxxiv	
4,617 4,545	28,034 26,096	1,421	7,44,452 6,84,584	8,701 7,579		7,35,751 <b>6,77,</b> 005		1st half 2nd half	}xxxv	
3,885 4,797	13,350 13,000	673 503	3,43,977 3,32,960	78,620 93,108		2,65,357 2,39,852		ıst half 2nd half	}xxxvi	
			· •		(	73,51 <b>5</b> 8 <b>5,</b> 866		1st half 2nd half	-}xxxviii	
***	•••	<b></b>	•••	<b></b>	}	1,868		1st half 2nd half 1st half.	}	
4,641	0.772		0.05.40*		\	180		2nd half	· · · · · · · · · · · · · · · · · · ·	
3,014	9, <i>777</i> 6,347	2,851 2,824	3,25,475 3,34,008	409 . 404		3,25,066 3,33,604		1st half 2nd half	}xxxix	
			***			***	{	1st balf 2nd half	}xriii	
•			·			•		•	-	
1,777 1,908	***	321 644	3,5°,527. 3,61,470	•••	'	3,50,527 3,61,470		1st half 2nd half	-}XLIV	·
• • • •	***	• •••	4,010	. ***		4,010	{	ist balf and hali	} xrai	
939 : 908	5,282 18,235	288 56	60,025 72,236			60,025 72,236		ist half and half	XLVII	
108 138		1.	18,873 19,395			18,873 19,395		1st half 2nd half	) XUX	
* ,	4 41.	• •••	-9393		{	\$,701 7,579		1st half 2nd half	}rı	
	•	***	444	•	{	5,105		1st half 2nd half	S T.II	
93		4	23,539			5,194 23,539		1st half	f riii	:
23		" I	22,029 · 3,269	***		<b>22,</b> 029 3,269		2nd half 1st half	<b>?</b> •	
. 2,005 · 2,017	 3,162 2,966	875 821	2,728 87,199 68,395	, ,		2,728 87,199 68,395	•	2nd half 1st half 2nd half	) LIV	
. 8	441	<b>—</b> 5	<b>2,</b> 661			2,661		rst half	}	'
***	. "		 2,408			 2,408		≥nd half Ist half	3	
. ••• •	* 100	]	<b>2,297</b> 8,504			2,297 8,504		2nd half 1st half	}raii	ļ.
59	3,217	1	7,986 23,322	**1		7,986 23,322		2nd half 1st half	}LVIII	
15	3,823 2,694	<b></b>	24,785			24,785 11,434		2nd half 1st half		
***	1,635		9,247	·•		9,247		2nd balf	}LIX	
<sup>1</sup> 53 80	***	156 66	18.973 16,349	•••		18,973 16,349		ıst half  2nd balf	} rxi	
19,400 20,580	. 65.675 .72,102	28,883 20,959	22,32,925 21,55,180	. 87,730 1,01,091		22,32,516 21,54,7 <b>9</b> 6		1st half 2nd half	}	
1,21,059	4,37,569	2,09,739	1,75,88,023	3,45,470	1,	,75,85,598				

#### APPENDIX

## STATISTICS OF INDIAN

DETAIL OF

Half-years ended the 30th June and the 31st December 1892.

[ From Abstract E of

Serial Number.	RAILWAY.	1893.	Home expenditure or general administra- tion.	Agent's office.	Andit, accounts and pay office.	Stores department.	Medical department.	Rents and miscellaneous.	Police.
			R	R	R	R	·R	R	R
· I	STANDARD GAUGE. East Indian	ıst half 2nd half	1,29,656 1,37,167	55,431 53,224	1,99,464 2,01,473	67,687 69,383	49,416 50,867	67,510 65,534	71,943 74,707
II	Bengal-Nágpur {	ıst half 2nd balf	80,599 82,086	27,111 30,794	53,194 58,486	13,223 18,517	10,684 11,608	32,228 17,226	13,165 13,567
III	Indian Midland {	ıst half 20d balt :	55,210 64,783	23,503 24,909	57,995 58,858	14,981 * 1 14,069	7,867 8,222	12,120 11,234	16,213 13,947
٧ı	Wardha Coal {	ist half 2nd halt	)		T. Han Dark				· .
<b>V</b> II	Dhond-Manmad	ist half 2nd half	Included wi	th the Great	Indian Penins	ula railway	•	•••	***
VIII	Bezwada extension	ıst half 2nd half	} Included w	ith the Niza	m's Guarantee	d State rails	ray .	•	•••
ıx	North Western (state) . {	ist half and half	31,208	54,359 50,430	1,58,773	39,046 44,520	30,637 31,190	· 40,042 30,194	. 36,533 38,202
X	Hyderabad-Umarkot . {	ıst half 2nd b <b>a</b> lf	Included wi	th the North	h Western (stat	te) railway	. 144		. ***
xı	Ondh and Robilkhand (state).	ist half and half	5,0 <b>9</b> 9	20,980 21,664	70,271 71,813	12,40 <b>7</b> 12,946	11,063	15,002 10,544	13,830 19,138 :
. ХП	Eastern Bengal (state) (b) {	ıst half 2nd half	8,051 	3 <sup>9</sup> ,433 3 <sup>6</sup> ,574	76,942 75,032	9,819 9,943	19,672 21,106	17,422 14,756	14,910 - 16,053
XIII	Bengal Central {	ıst half 2nd balf	17,371 18,221	3,371 3,316	3,300 3,300	348 348	426 426	921 1,335	***
XIX	Calcutta Port Commis {	ıst half 2ud half	}	• ***		***	. <b>T.</b>	***	
ZVIII	Great Indian Peninsula . {	ist half and half	49,354 48,834	48,538 48,511	1,53,367 1,52,745	54,052 53,834	30,823 30,424	31,764 30,006	68,131 <b>7</b> 0,615
XIX.	Bombay, Baroda and Cen- tral India.	ist half and half	66,667 23,053	20,034 18,010	69,939 64,944 .	26,194 26,834	13,376 14,280	23,466 25,710	27,723 25,002
XX	Madras	ıst half 2nd half	* 33,275 33,109	26,233 21,396	71;719 65,542	12,421 10,969	. 17,154 <sup>.</sup> 17,936	8,217 8,978	18,832 20,464
XXIV	Amráoti	ıst half 2ud balf	Included wi	th the Great	t Indian Penine	sula railway	. ***		
X X V·I	The Nizam's Guaranteed { State.	ıst half 2nd balí	34,623 38,513	9,818 9,865	32,385 32,613	6,455 5,270	7,174 7,070	10,671 8,550	16,207 14,536
XXVII	The Gaekwar's Petiad .	1st half 2nd half		ith the Boml	bay, Baroda and	d Central In	dia railway		
xxix	Rájpura-Blatinda . {	ıst half 2nd half	Included w	ith the Nort	h Western (sta	te) railw <b>a</b> y		***	•
•		j.					•	:	
• •					•				
	TOTAL STANDARD GAUGE {	ist half 2nd half		3,27,811 3,18,693	9,47,349 9,50,710	2,56,633 2,66,633	1,98,292	2,59,363 2,24,067	2,97,487 2,97,231

# RAILWAYS-(PART I)-continued.

GENERAL CHARGES.

Revenue Accounts.]

Advertising.	Electric telegraph.	Other charges.	TOTAL.	Deductions	NET TOTAL.	1892.	Serial Number.	Remarks.
R	R	R	R	R	R			•
6,861 2,857	2,55,356 2,40,873	1,533 1,092	9,04,857 8,97,777	383	9,04,474	1st half 2nd half	]1	
• 750 894	66,090 65,420	817 - 158	2,97,861 2,99,356		2,97,861 . 2,99,356	ist half 2nd half	}11	
· 74	43,921	19	2,31,903 2,40,635	***	2,31,903 2,40,635	ist half and half	} III	
		5	(a) 743 (a) 743	···	(a) 743 (a) 743	1st half 2nd half	}vI	(a) Expenditure incurred direc by the State.
	***	···· (	(a) 6,410 (a) 6,410	***	(a) 6,410 (a) 6,410	1st half 2nd half	}vii	1
•••	•		(a) 561	***	(a) 561	ist half and half	}v111	
3,170 L528	2,10,257 2,19,986	687 326	6,04,712 5,81,680	14,324	5,90,388 5,67,759	1st half 2nd balf		
•••		•••			{ <sub>1,752</sub>	ist half and half	}x	
· 590 325	56,688 57,455	123 4 <sup>0</sup> 7	2,06,153 1,96,285		2,06,153 1,96,285	1st half 2ud half	xr.	
724 1,509	97,247 98,055	. 919	2,84,139 2,73,965	24,214 21,361	<b>2,</b> 59,925 <b>2,</b> 52,004	ist half and half	}x11	(b) Includes the metre an  special gauge sections of the undertaking and the
***	***	***	25,737 . 26,946		(c) 49,051 (d) 48,285	1st half 2nd half	} x111	Bengal Central railway.  (c) Includes R24,214 charge by the Eastern Bengu State railway for workin
		200	12,091		12,091	1st half 2nd half	} xiv	the Bengal Central rai way, the details of whic are included with th figures of the forme
2,847 3,250	1,91,804 1,87,813	34,410 35,665	6,65,090 6,61,697		6,65,090 6,61,697	1st half 2nd balf	}xviii*	line. (d) Includes R21,339 charge by the Eastern Benga (state) railway for work ing the Bengal Centra railway, the details o which are included with
8 <sub>9</sub> 2 793	44,633 47,008	30,137 15,903	3,23,061 2,61,537	I,228 I,329	3,21,833 2,60,208	1st half 2nd half	} x1x	railway, the details of which are included with figures of the former line.
<b>7</b> ,970 2,117	64,772 68,35 <b>5</b>	18,787 23,478	2,73,380 2,72,344	2,47 <b>1</b> .3,068	2,70,909 2,69,246	1st half 2nd half	} x x	
,***	•••	. <b></b>	{ (a)443 (a)443	***	(a) 443 (a) 443	ıst balf 2nd half	}xxiv	
54 69	· 20,609 20,568	7	1,38,003 1,37,060	***	1,38,003 1,37,060	ist balf 2nd half	1vxx{	
•••		•••	•••		{ 1,229 1,329	1st half 2nd half	]xxvii	
•		•••			{ 14,324 12,170	ist half and half	} xxix.	
•					·			
18,032	10,51,377	87,439 77,991	30,63,033 38,56,878	42,620 39,729	30,60,200	1st half 2nd halt	}	

# APPENDIX STATISTICS OF INDIAN

DETAIL OF

Half-years ended the 30th June and the 31st December 1892.

[From Abstract E of

Serial Number.	RAILWAY.	1892.	Home expenditure or general administra- tion.	Agent's office.	Audit, accounts aud pay office.	Stores department.	Medical department.	Rents and miscellaneous.	Police.
•.	Brought forward STAND {	ist half and half	<i>R</i> 5,11,113 4,46,366	2,27,811 3,18,693	<b>P</b> *9,47,349 9,50,710	<b>R</b> 2,56,633 2,60,633	1,98,292 2,04,122	2,59,363 2,24,067	R 2,97,487 2,97,231
	METRE GAUGE.	)				]			
ZZZIII	Bengal and North Western— Tirhoot section (	ıst balf	) 38,181	26,334	36,030	6,998	6,300	7,887	14.420
	Company's section	2nd half	}	26,916	35,753	6,594	6,587	7,740	14,429
XXXIV	Robilkund and Kumaon ( (Lucknow-Bareilly section)	ışt half 20d half	Included wit	-	und and Kums			- 1	, "3/33"
XXXV	Rajputana-Malwa .	ist half	1,13,488	30,306	1,07,685	35,725	25,610	26,787	55,202
		2nd half 1st half	1,27,014 1,16,664	33.083	1,19,565 64,201	35,220 13,680	25,732 14,225	39,27 <b>7</b> 16,541	44,764 27,853
XXXVI	Southern Mahratta .	2nd half 1st half	95,082	20,181	64,694	17,479	14,341	15,544	20,082
IIIAXX	Southern Mahratta (My-	2nd half	)		•	i .			
•	Southern Mahratta (Nan- jangúd extension).	ist half and balf	Included wit	th the South	eru Mahratta i	railway		•	.***
. •	Southern Mahratta (Yes- { vantpur-Dodballapur).	ıst half 2nd half	,			. •			•
ZXXIZ.	South Indian	ist balf and half	83,479 93,846	20,433 20,796	56,003 58,6 <u>5</u> 8	12,856 13,398	10,423	13,362 18,390	8,813 31,445
XLIII	Eastern Bengal (state) — Northern and Behar sections (including the	v 4.316							
-	Kaunia-Dharlla 2' 0" (gauge branch).  Dacca section	Ist half 2nd half	Included wit	th the Easter	n Bengal (stat	e) railway (s	tandard gau	te)	***
XLIV_	Burma (state)	ist half	•••	. 32,185	49,579	17,490	7,437	12,501	7,014
•		2nd half 1st half	,	22,825	51,617	15,731	7,259	10,680	7.389
XLVI	Deoghur	2nd half	}	•••	•••	***	•••	··· .	•••
XLVII	Robilkund and Kumaon (Company's section).	ist half and half	16,032 16,441	<b>7</b> ,786 11,935	13,084 13,425	2,784 3,710	1,054 1,382	6,174 5,570	1,782 1,836
XLIX	Dibru-Sadiya	ist half and half	12,921 12,921	<b>6</b> ,673 - <b>6,</b> 835	6,523 6,447	1,814 3,587	2,082 2,092	4,277 5,155	***
LI	The Gaekwar's Meheana	ist half and balf	`		tana-Malwa r		-,-,-		***
rii	Kelhapur	ist half 2nd half	,		hern Mahratta	-	•		***
LIII	Jodhpore-Bickaneer— Jodhpore section . {	ist half and half	***		· 8,157 5,706	1,284	· 333 360	249 240	407 964
	Bickaneer section	ist half and half	*** *	•••	63 <i>7</i> 531	151 171	6o 6o	18 16	ç
LIV	Bhávnagar-Gondal-Juná- { garh-Porbandar	1st half 2nd half	939 765	14,112 9,413	22,073 19,961	3,497 1,113	5,474 5,752	5,001 4,121	• 13,625 13,714
••	· Special gauges. Nalháti (4' 0").	ist half 2nd half	•	1,333	1,050	222	. 85	. 121	82
	Cherra-Companyganj.	Ist half	•••	210	284	•••	 349	237	• •••
. •	(2' 6")	2nd half 1st half	•••	210 1,581	442 569		338	233	•••
LVII	Jorhát (2' 0")	2nd half	•••	1,581	885	331 284	30 30	341 436	***
LVIII	Darjeeling-Himalayan {	and palt	3,913 3,826	11,115	5,718 5,933	•••	1,865 1,915	2,661 2,483	***
LIX	The Gaekwar's Dabho {	Ist half 2nd half	···	608 608	1,608 1,608	154 152	300 300	311 631	1,533 975
<b>LX</b> I	Morvi (2' 6") {	Ist half 2nd half	•••	3,948 3,837	<b>4.</b> 376 <b>4.</b> 555	1,406 1,416	239 611	1,910 804	* 922 1,137
	TOTAL METER AND {	1st half 2nd half	3,85,617 3,98,577	1,76,833	3,77,877 3,89,780	98,392 1,00,376	75,866 77,767	99,381	1,31,671 1,42,242
	TOTAL OF ALL GAUGES }	•••	17,41,673	9,93,611	26,65,716	7,22,034	5,56,047	6,93,131	8,68,631

## RAILWAYS-(PART I)-continued,

GENERAL CHARGES-concluded.

Revenue Accounts.]

evenue Account	s.]		·	. ,	Half-year	s ended th	e 30th June ar	nd the 31st Decen
• Advertising.	Electric telegraph.	Other charges.	TOTAL.	Deductions.	NET TOTAL.	1892.	Serial Number.	Remark
18,032 13,662	R 10,51,377 10,49,807	R 87,439 77,991	39,63,053 38,56,878	R 42,620 39,729	# 39,60,200 38,53,739	ist half 2ud half	}	<del></del>
								•
189	50,038	129	1,86,515	•••	1,86,515	1st half	XXXIII	
282	<b>50,</b> 835	124	1,96,849	•••	1,96,849	2nd half 1st half	1	
,,,					" { " 61 840	1st half 2nd half 1st half	I .	
458 1,242	1,75,750 1,77,106	487 331	5,71,498 6,03,340	6,679 6,679	5,64,819 5,96,661	2nd half	] -	
1,080 . 370	1,02,569 1,01,4 <i>7</i> 0	· 417 —133	3,77,437 3,55,710	86.739 96,287	2,90,698 2,59,423	1st half 2nd half	xxxxi.	
•					81,917 89,767	1st half 2nd half	} xxxviii	
	. •		•	•	j)	1st half	<b> </b> }	·
	***		•••	•••	1,695	2nd half 1st half		
					[\ . III	2nd half 1st half		
1,313 1,995	65,979 65,122	2,205 1,023	2,74,866 3,15,681	30	2,74,863 3,15,651	2nd half	XXXIX	
spr		14*			{	1st half 2nd half	} xriii	<b>)</b>
	65,896		1,93,641.		1,93,641	Ist half	} xliv	
1,537 965	69,542	15	1,86,023	•••	1,86,023	2nd half	,	
			3,050		3,050 {	1st balf 2ud half		
713 . 144	12,943 12,579	•	62,361 67,028		62,361 67,028	1st half 2nd half	XLVII	
	6,757		41,040		41,049 44,484	1st balf 2nd half	} XLIX	· 
***	7,387	60	44,484	· ""	6,679	1st half	l Li	
••• ·••	<b>:</b> **		•••	•••	{ 6,679 4.823	2nd half 1st half	I.	
	•••	•••••••••••••••••••••••••••••••••••••••		/	{ 4,823 4,714	2nd balf		
***	4.947		15,677 14,129		15,677 14,129	1st half 2nd balf	} LIII	
<b></b>	5,309 759	•••	1,634.		1,634	ist half and half	}	
2 . fio	. 859 20,601	 os8	1,639 86,390	·	1,639 86,390	1st helf-	3 LIV	
257	20,262	958 485	75,843	<b></b>	75,843	2nd half		
	352	****	3,248		3,248	ist half	<b>}</b>	
			1,080			2nd half 1st half		
	***	•••	1,223		1,223 3,662	1st half 2nd balf 1st half	1.3	
***	810 775	***	3,662 3,991		3,991	2nd half	],	
181	3,553 3,805		29,006 30,225	539 663	28,467 29,562	ist half 2nd half	} LVIII	
209	1,584	400	6,098		6,098 5,976 •	1st half 2nd half	} rix	
•	3,156 2,015	 : 30	5,9 <b>7</b> 6 15,987 15,414		15,987	1st half 2nd balf	1 7.37	
316	3,045	'	.	=				
5,581 5,501	5,15,604 5,19,798	4,237 1,920	· 18,70,149 19,17,555	93,950 1,03,659	18,69,608 19,16,862	ist half and half	}	
42,776	31,36,676	, 1,71,587	1,16,22,776	2,79,968	1,16,15,550	-		
		1	<u></u> _	<u> </u>	<u></u>			====

#### APPENDIX

### STATISTICS OF INDIAN

SPECIAL AND MISCEL

Half-years ended the 30th June and the 31st December 1892.

[From Abstract G of

Scrial Number.	RAILWAY.	1892.	Law charges.	Compensation.	Rates and taxes.	Payments to other lines.
I	STANDARD GAUGE. East Indian	ıst half 2nd half	. R 8,235 7,9 <sup>6</sup> 3	<b>&amp;</b> 6,891 25,45 <b>7</b>	<b>R</b> 33,597 29,70 <b>5</b>	<b>.2</b> 2,07,708 64,083
. 11	Bengal-Nágpur {	ist half 2nd half	1,806 . 81	2,189 753	 	47,164 15,558
111	Indian Midland	ıst half zud half	··· 1	1,093 3,210	540 559	87,330 87,186
. ix	North Western (state) • {	ist half and half	3,682 · —1,982	<sup>2</sup> 5,557 6,709	9,669 <b>6,</b> 035	44,643 30,131 .
<b>x</b>	Hyderabad-Umarkot	1st half 2nd half	Included with th	he North Western (s	 state) railway 	•
XI	Oudh and Rohilkuud (state) {	1st half 2nd half	165	823 1,802	***	6,454 11,831
XII	Eastern Bengal (state)	tst halí 2nd half	1,876 244	16,839 4,961	15,157 11,384	29,594 71,128
. XIII	Bengal Central	ist half 2nd half	} 117			
XIV	Calcutta Port Commissioners'	1st balf 2ud balf	}	440		
X VIII	Great Indian Peninsula	ist half and half		26,526 18,793	22,29 <b>7</b> 23,813	3,97,330 2,30,682
XIX	Bombay, Baroda and Central India . {	1st half 2nd half	382 1,035	18,706 24,504	15,719	37,399 19,522
xx	Madras	ist half 2nd half	524 - 658	5,765 2,402	3,985 15,722	24,727 11,323
XXII	Tarkessur	1st half 2nd half	Included with t	he East Indian rail	way .	***
XXVI	The Nizam's Guaranteed State	1st half 2nd half	506 501	268 432	±179 807	1,140
XXVII	The Gackwar's Petlad	ist half and half	Included with t	he Bombay, Baroda	and Central India	
. **!*	Rajpura-Bhatinda .	ist half and half	Included with t	he North Western	(state) railway	
•						•
			•	-		
•						
	TOTAL STANDARD GAUGE carried {	ist half and half	19,064 9,515	1,04,657 89,023	1,00,785	8,83,489 5,42,584

### RAILWAYS-(PART I)-continued.

LANEOUS EXPENDITURE.

Other charges.	Total.	Deductions.	NET TOTAL.	1892,	Serial Number.	Remarks.
<i>R</i> 69,096	₽ 3,25,527	R	3,25,527	ist half		
55,769	1,82,977	*** .	1,82,977	2nd half	Į į	
14,226 11,788	65,385 28,180	••• ·	65,385 28,180	1st half 2nd half	} 11	•
35,405 33,463	1,24,368 1,24,419	•••	1,24,368 1,24,419	ist half 2nd half	} 111	
99,426 93,240	1,82,977 1,34,133	4,143 ° 4,026	1,78,834 1,30,107	set half 2nd half	} 1 <b>x</b>	
· ·	•••		506	1st half 2ud half	} x	
33,459 33,9 <sup>12</sup>	40,738 47,710	•••	40,738 47,710	1st half 2nd half	} xı	
2,58,765 · 41,519	3,22,231 1,29,236	8,8<2 9,808	3,13,349 1,19,428	1st half 2nd half	xII	
. • •	. I 117	••• •••	(a) 8,883 (b) 9,925	1st half 2nd half	} xIII	(a) Includes R8,882 charged by the Easter Bengal (state) railway for working the railway, the details of which are in cluded with the figures of the form
<b></b>	7,643		7,643 {	1st half 2ud half	} xiv	(b) Includes Ro, Sos charged by the Easter Bengal (state) railway for working this railway, the details of which a included with the figures of the form
39,631 25,796	4,87,834 2,99,816	17,704 2,767	4,70,130 2,97,049	1st half 2nd half	} xviii	line.
47,924 14,390	1,20,130 74,299	11,254 377	1,08,876 73,922	1st half 2ud half	3 xix	
29,592 27,693	64.593 <b>57.7</b> 98	?,708 811	60,885 56,987	1st half 2nd half	} xx	
· 22,843 17,820	• 22,843 17,820	e	22,843 17,820	1st half 2nd half	} xxII	
<b>7</b> ,559 <b>8,</b> 901	9,294 11,781	***	9,294 11,781	1st half 2nd half	} xxvt	
•••			{ 416 378	1st half 2nd half	} xxvii	
			4,143 3,520	1st half 2nd haif	} xxix	
		•				
!	•				,	
	•	•				]  -  -
•						
					•	

1st half 2nd half

17,**7**6,600 11,04,709

45,691 17,789

18,08,850 11,08,286

7,00,855 3,64,291

APPENDIX

## STATISTICS OF INDIAN

SPECIAL AND MISCEL

Serial	RAILWAY.	1892.	Law charges.	Compensation.	Rates and taxes.	Payments to other
Number.	MAILWAI.	1092,	Law onerges.	Compensation.	Rates and taxes.	lines.
		•	R	R.	R	
,	Brought forward STANDARD GAUGE .	1st half 2nd half		1,04,657 89,023	1,00,785 1,02,873	·8,83,489 5,42,584
	MRTRE GAUGE.					
XXXIII	Bengal and North Western-		·			1
	Tirhoot section	1st half.		551	• 1,413	***
VIXXX	Rohilkund and Kumaon (Lucknow-)	1st half	. 879	i,330 e Rohilkund and K	3,181	mnoun's section
**************************************	Bareilly section).	2nd half 1st half	1,584	3,732	101	11,633
XXXV	Rajputana-Malwa	2nd half	- 696	6,220	1,433	
ZZZVI	Southern Mahratta	2nd half	806 2,57 <b>6</b>	15,000 570	2,415 3,982	242 2,153
IIIVZXZ	Southern Mahratta (Mysore section)	1st half 2nd half	}	•		
	Southern Mahratta (Nanjangud exten- {	1st half 2nd half	Included with the	e Southern Mahrati	a railwa <b>y</b>	***
	Southern Mahratta (Yesvantpur-Dod-{	ist half and half	)	•		
XXXIX	South Indian	1st half 2nd balf	124 171	1,407 2,346	2,184 10,461	6,076 4,58 <b>2</b>
XLIII	Eastern Bengal (state)—	<b> </b> • •		-,544		4,502
•	Northern and Behar sections (including the Kaunia-Dharlla 2' 6" gauge		_		•	
	brauch).  Dacca section	1st half   2nd half		e Eastern Bengal (	state) railway (stan	dard gauge)
XLIV	Burma (state) ,	1st half 2nd half	715 —40	1,011 709	10,338 7,980	•••
ZTAI	Deoghur	1st half 2nd half	}	•	***	. •
XLVII	Rohilkund and Kumaon (Company's section)	1st half 2nd half	. 18 344	186 · 249	130 115	678 -3,828
ZLIZ	Dibru-Sadiya	1st half 2nd half	. 685 . 667	. 81 84	36	•••
LI	The Gackwar's Mchsana	1st half 2nd half		e Rajputana-Malwa	36 railway	
LII	Kolhápur	1st half 2nd half	Included with the	e Southern Mahvat	ta railway	
LIII	Jodhpore-Bickaneer		] '			
	Jodhpore section	1st half 2nd half	•	319 170	••••	25,186 5,498
•	Bickaneer section	1st half 2nd half	•••	35		1.777
PIA	Bhávnagar-Gondal-Junágarh-Porbandar {	Ist half 2nd half	47 241	20 299 <b>7,</b> 273	•••	285 1,371 1,394
•	SPECIAL GAUGES.	ist half			<del></del>	-7,054
	Nalháti (4' o")	2nd half		·: 15	***	***
	Cherra-Companyganj (2' 6")	1st half 2nd half	***	. 144	***	· ·
LVII	Jorhát (2' 0")	1st half- 2nd half	•••	77 33 ·	<b>45</b>	· · · · · · · · · · · · · · · · · · ·
TAIII	Darjeeling-Himalayan (2' 0")	1st half 2nd balf	285 1,676	107 108	3,450 8,416	***
LIX	The Gackwar's Dabhoi (2' 6")	rst half and half	2	2,456	• •••	414
LXI	Morvi (2' 6")	1st half 2nd half	101	172 356	***	
	TOTAL METER AND SPECIAL DAUGES	1st balf 2nd half	5,150	. 25.481	20,007	46,963
	· · ·	Ziiu naii 	7,311	19,465	30,64)	10,084
	TOTAL OF ALL GAUGES FOR THE YEAR		41,040	2,38,626	2,54,404	14,83,120

#### RAILWAYS-(PART I)-continued.

LANEOUS EXPENDITURE-concluded.

Revenue Accounts,]

Other charges.	Total.	Deductions.	NET TOTAL.	1892.	Serial Number.	Remarks.
<b>R</b> 7,00,355 3,64,291	R 18.08,850 11,08,286	<b>R</b> 45,691 17,789	₽ 17,76,600 11,04,709	1st half 2nd half	·	·
		· 				
<b>23,890</b> 47,499	26,768 52,889	***	26,768 52,889	1st half 2nd half	}xxxiii	
	***		<b></b> . {	1st half_ 2nd half	}xxxiv	
<b>54,140</b> 53,280	71,190 61,629	832 682	70,358 60,947	ist half and half	}xxxv	
4,870	23,333	5,516	17,817	1st half 2nd half	) veru	
5,639	14,920	4,411	10,509	1st bulf	) * * * * * * * * * * * * * * * * * * *	
			4,063	2nd-half 1st balf	1	
***	***	<b>"</b>	88	2nd half 1st half	] \$ ] }	
** ***			. 14	2nd half		
11,796	21,587 31,653	***	21,587 31,653	1st half 2nd half	XIXXX {	
	-		(	1st half	,	
•••			}		XLIII	
17,813	90.007		29,907	2nd half	)	
16,546	29,90 <b>7</b> 25,195	***	25,195	1st half 2nd half	ì	
***	164	***	164 {	1st half 2nd half	}xr41	
(a) [50,364 35,982	51,37 <b>6</b> 32,86 <b>2</b>	•••	51,376 32,862	1st half 2nd half	}żraii .	(a) Includes R46,784 on account of cart-re
•••	805 786	•••	805 786	1	} xrix	
2		***	832	1st half 2tid half		
•	500		\{\ 682 \{\ 358	1st half	3	
494	•••		246	2nd half	, are	
•••	25,505	100	25,505	rst half	}rm	
84	5,752 1,812	•••	5,752 1,812	2nd balf 1st holf	;	
4	309	,	309	2nd half	ł	
11,024 8,594	12,741 17,502	•••	12,741	1st half 2nd half	} LIA	
1,546	1,561		1,561	1st half	2.	
. 78	78		78	2nd half 1st half		
73	73	116	73	2nd half		
190	26 <b>7</b> 30 <b>2</b>	***	267 302	tst half 2nd half	}raii	
2,269 3,244	6,111 8,444	***	6,111 8,444	rat half 2nd half	}rviii	
3,244	2,458		2,458	1st half	Triv	
162 551	. 334	•••	334 1,008	2nd half 1st half 2nd half		
1,78,142	2,75,833	6,348	2,75,832	1st half		
1,85,815	2,53,324	5,093	2,53,324	2nd half		
14,29,103	34,54,100	74,921	34;18,272		1	

# APPENDIX STATISTICS OF INDIAN

STATEMENT OF

Half-years ended the 30th June and the 31st December 1892.

[From No. XII of

				LOCOMOTIV	ES.	•	
Serial		•\$00			Average number	Coac	CHING.
Number.	RAILWAY.	1892.	Total stock on the list.	apared or hired out.	constantly under repair.	Total stock on the list.	Average number constantly under repair.
•	STANDARD GAUGE.					•	
I	East Indian	ıst half 2nd half	573 562	16 7	68:00 74:00	1,229 1,218	56.39 56.43
11	Bengal-Nagpur {	1st half 2nd half	93 97	• •••	74'54 18'72	195 233	15'73 18'96
* III	Indian Midland {	ist half 2nd half	(a) 100 (a) 105	***	10.00 11.00	3 <sup>5</sup> 5 3 <sup>6</sup> 5	37.00 21.00
IX	North Western (state)	ıst half 2nd half	(e) 590 (e) 590	49 24	105°45 99'26	(c) 1,507 (c) 1,508	154'03 151'00
. <b>x</b>	Hyderabad-Umarkot	Ist half 2nd half	Worked by the	North Western	(state) railway	***	•••
	Oudh and Rohilkband (state) {	18t half 2nd half	156 156	i r	30 <sup>.</sup> 66 32 <sup>.</sup> 59	459 459	60·76 60·88
<b>X</b> II	Eastern Bengal (state)	1st half 2nd half	97 97	• •	25'38 16'15	437 439	49'34 • 49'73
· <b>X</b> III	Bengal Central	ist half 2nd ha\f	Worked by the	Eastern Bengal	(state) railway	•••	****
XIV	Calcutta Port Commissioners {	ıst half 2nd balf	} 6		•••		•••
<b>XV</b> III	Great Indian Peninsula .	1st half 2nd half	605 605	•••	165'00 183'00	1,054 1,04 <b>5</b>	134*00 109*00
XIX ·	Bombay, Baroda and Central India.	1st half 2nd half	: 127 127		• 18'00 16'00	(d) 428 (d) 427	40'00 59'00
XX	Madras	ist half 2ud half	152 153	•••	39°00 40°00	627 629	54'00 53'00
<b>x</b> x vi	The Nizam's Guaranteed {	1st half 2nd half	. 50 . 50	1	15·50 14·59	109 109	7°r8 8°72
XXVII	The Gaekwar's Petlad	ist half 2nd half	Worked by the	 e Bombay, Barod	a and Central Ind	ia railway	***
XXIX	Rájpara-Bhátinda . {	ıst half 2nd half	Worked by th	e North Western	(state) railway	***	***
	TOTAL STANDARD GAUGE {	ıst half 2nd half		66	495'53 510'31	6,410 6,432	622'47 603'68

A-continued.

### RAILWAYS-(PART I)-continued.

ROLLING-STOCK.

Revenue Accounts.]

=	VЕН	ICLES.		<u>_</u> :					
Ĭ	Go	ODS.	Braki	E-VANS.		TOTAL.			
	Total stock on the list.	Average number constantly under repair.	Total stock on the list.	Average num- ber constant- ly under repair.	Vehicle stock on the list.	Average number of vehicles con- stantly under repair.	1892.	Serial Number.	Railway.
	8,98 <i>7</i> 8,956	198·22 294·67	343 341	23'65 23'94	10,559 10,515	278·30 375·00	ist half 2ud balf	}r	
	2,591 2,739	27 <sup>.</sup> 92 30 <sup>.</sup> 55	82 84	5'37 8'62	2,868 . 3,056	49°02 58:13	1st half 2nd half	}11	
	2,160 2,148	75.00 75.00	(b)85 (b)86	3.00 10,00	<b>2,</b> 610 <b>2,</b> 599	173°00 -115°00	1st half 2nd half	}m .	(2) Includes 3 ballast (construc- tion) engines. (b) Includes 16 composite brake- vans (3rd class) and 12 construc-
	° (c) 9,962 (c) 10,092	463'71 445'35	- 513 513	50'45 61'41	11,982	668 <sup>,</sup> 19 65 <b>7</b> ,76	ist half 2nd half	}1 <b>x</b>	tion brake-vans.  (c) Excludes 4 engines, 12 coaching and 10 goods vehicles belonging to the Ferozepore tramway, and 19 engines, 8 coaching and 51 goods vehicles belonging to the metre gauge line.
	•••		•••	•••	•••	{	ist hali 2nd half	}x _	and 51 goods vehicles bekinging to the metre gauge line.
	4,3 <sup>8</sup> 4 4,3 <sup>8</sup> 4	246·35 297·63	120 120	15°92 14°62	4,963 4,963	3 <sup>2</sup> 3'03 373' <sup>1</sup> 3	ist balf 2nd balf		
	1,865 1,866	211 <sup>,2</sup> 2	63 63	11°06 4°60	2,365 2,368	271-62 171-60	ist half and half	}xII	
	•••	***	•••	***	••• •	{	ist half 2ad half	}zm	
	150		<i></i>	•••	150	{	ıst half 2nd balf	} x1 <b>v</b>	
	7,99 <b>9</b> 7,999	560°00 450°00	579 588	37.00 61.00	9,632 9,632	731'00 620'00	1st half 2nd half	} xviii	
	3,557 3,5 <sup>6</sup> 7	276°00 246°00		. 7.00 8.00	4,069 4,078	323'00 313'00	ist half and half	}xix	(d) Includes 25 third class carriages with brakes.
	2,883 2,880	71.00 103.00	164 163	15'00 15'00	3,674 3,672	· 172'00 139 00	ist half and half	} xx .	
	735 735	29 <sup>.</sup> 92 • 24 <sup>.</sup> 72	41 41	2.31 2.30	885 885	39'40 35'75	1st half 2nd half	} xxvi	
	***	<b>.</b>		••• ·	<b></b>	{	1st half 2nd half	}xxv11	
	****	***		300	640	{	1st half 2nd half	}xxix	
	45,123 45 366	2,228·34 2,052·19	<b>2,</b> 074 <b>2,</b> 083	177'75 202'50	. 53,607 53,881	3,028·56 2,858·37	1st half 2nd half	}.	

# APPENDIX STATISTICS OF INDIAN

STATEMENT OF

Half-years ended the 30th June and the 31st December 1892.

[From No. XII of

	1		1	LOCOMOTIVES.			·
Serial	7	-900	•			COACE	ING.
Number.	RAILWAY.	1892 <b>.</b>	Total stock on the list.	Average number spared or hired out.	Average number constantly under repair.	Total steek on the list.	Average number constantly under repair.
	Brought forward STANDARD {	1st half 2nd half	2,543 2,542	66 33	495'53 510'31	6,410 6,432	622 <sup>.</sup> 47 603 <sup>.</sup> 68
- xxxIII	METRE GAUGE.  Bengal and North-Western—  Tirhoot section	Ist half	100		20'30		
 XXXIV	Company's section	2nd half 1st half	100	Patrilana and 1	24.88	344 344	28·65 28·62
	(Lucknow-Bareilly section).	2nd half 1st half	422		oi.11	Company's section)	
XXXV	Rajputana-Malwa · . {	2nd half 1st half	424	***	97'37	1,301	105.47
IVXXX	Southern Mahratta	2nd half	179 179	. 34	45.26 48.01	552 55 <b>2</b>	44.40 54.35
IIIVXXX	Southern Mahratta (Mysore { section). Southern Mahratta (Naujan- {	ist half and half ist half	42 42	6 7	11.27	162 162	7:35 ·
•	gúd extension). { Southern Mahratta (Yesvant- )	2nd half 1st half	Worked by th	ne Southern Mah	ratta railway	•••	***
XXXIX	pur-Dodballapur).	2nd half 1st half 2nd half	184 184		27.99	641	27:76
XLIII	Eastern Bengal (state)— Northern and Behar sections, (including the Kaunia-Dharlla 2' 6" gauge branch).	ıst half 2nd hulf	. 84 89	***	18·14 16·76	<b>6</b> 69 - 347 348	49'39 35'42 30'01
ΧLIÝ	Dacca section	1st half	114	]	13'31	552	57:80
XLVI	Deoghur	2nd half 1st half	120	1	19.91	583	66.2 <b>0</b>
XLVII	Rohilkund and Kumaon	2nd half 1st half			• •••	10	*114
	(Company's section).	2nd half ist half	27 27	4	5'74 6'27	. 138 148	21'25 23'24
XLIX	Dibru-Sadiya	2nd half	15 15	*** .	2.00	17 21	1'00 2'00
LI	The Gaekwar's Mehsana . {	Int half	Sworked by th	e Rajputana-Mal	wa railway	***	***
LII	Kolhápur	ist half and hali	Worked by th	e Southern Mahi	ratta railway	150	***
LIII	Jodhpore-Bickaneer  Jodhpore section . {  Bickaneer section . {	ist half 2nd half ist half	Information n	ot furnished		•	
LIV	Bhávnagar-Gondal-Junágarh- Porbaudar.	2nd balf 1st balf 2nd half	33 33	***	5 <sup>-86</sup>	186 186	20'71 19'46
•	SPECIAL GAUGES.			{			
•	Nalhati (4' o")	ist half and half	5	110	0'54	11	1'02
	Cherra-Companyganj (2' 6") {	1st half 2nd half	4		. "0'53	4 4	_ 0'17
LVII	Jorhát (2' 0")	ist half 2nd half	7	•••	0'53	10	0°17 1'00 .
LVIII	Darjeeling-Himalayan (2' o") {	1st half 2nd half	16 16		0.62	. 60	0°17 5'08
rıx	The Gackwar's Dabhoi (2' 6") {	ist half and half	8 8	***	1.00	60 32	2.00 2.00
LXI	Morvi (2' 6")	1st hålf 2nd half	10	***	0.20 1.00	29 33 32	5.00 1.00 5.00
	TOTAL METRE AND SPECIAL {	Ist half 2nd half	. 1,250 1,258	45 35	246·15 282·58	4,390 4,449	356·16 415·44
	TOTAL OF ALL GAUGES FOR THE YEAR.	•••	3,809	179	1,534'57	10,891	1,997'75

## · RAILWAYS-(PART 1)-continued.

ROLLING-STOCK - concluded.

Revenue Accounts.]

<b>V</b> EH	ICLES.				·	7			1	
Go	ons.	Brak	E-VANS.	7	COTAL.	-				
Total stock on the list.	Average number constantly under repair.	Total stock on the list.	Average num- ber constant- ly under repair.	Vehicle stock on the list.	Average number of vehicles constantly under repair.	r	1892.	Serial Number		Remarks,
45,123 45,366	2,228 34 2,052 19	2,074 2,083	177 <sup>-</sup> 75 202 <sup>-</sup> 50	53,607 53,881	3,028·56 2,858·37		ist half and half	}		
2,052 2,052	49°17 103°36	67 6 <b>7</b>	1.68 . 4.77	2,463 2,463	79 <sup>.</sup> 50		ist half 2nd half	} xxx	111	
•••		•••	***	•••	` {	{	ist half 2nd half	} xxx	17	
7,268 7,270	333 60 335 14	282 282	21.48 20.00	8,851 8,853	456·93 460·70		ist half 2nd half	} xxx	v	
4,610 4,010	212,30 195,04	158 158	16·60 23·50	4,720 4,720	223.04 290.15		ıst half 2nd half	xxx {	vi	
695 695	26·64 38·37	30 30	1.34 3.63	88 <i>1</i> 88 <i>7</i>	35'33 59'97	ı	ist-half and balf	, } xxx	VIII	
•••		***	3°3			<b>{</b>	ist half and half ist half	}		
3,194 3,197	47.43 226.20	. 132 141	8.86	3,967 4,007	84°05 287°80		2nd half 1st half 2nd half	} xxx	1 <b>x</b>	
1,982 2,177	164°60 156°03	62 62	9 <sup>-</sup> 44 8 <sup>-</sup> 48	2,391 2,587	200.46 200.52		ist half	} xLII	I	
3,091	157'27	• 114	7.89	3,757	222.96		ist half   2nd half	}.XIIX		
3,235 8	164.26	117	9,40	- 3,935 20	240'85	,	rst half	·	ſ	
665	61'53	. 27	4'35	830	87-13	`	2nd half 1st half	XTAI		
665 562	81.21 16.00	27 12	4'30	840 591	109.02	ا	2nd half 1st half	} XLIX	·	
. Š75	24.00	12	1,00	608	27.00		2nd half 1st half	,	•	
÷ ***	· •••	• •••	·· <u>·</u>			~ 1	2nd half 1st half	} LI		
•••	***	***	•••	. ***	}	ł	2nd haif	LII		•
•••	<b></b> ·	•••		• •••			ist half and half ist half	} LIII		
0.0			ا ر	•	(	-	2nd half 1st half	} >		
896 8 <b>9</b> 6	32·26	39 <b>39</b>	4.69 2.83	1,121 1,131	57'50 57'55		2nd half	FIA		
32	0'19	. , , 2		45	1.31		ıst balf 2nd half	} .		
139	. 1'50	•••		143 143	1.67 1.64		ist half and half	}	Ì	
139 71	3'33	•••	, 	81 81	4'41 .2'41		ıst half 2nd half	} LVII		
71 167	2°24 6°00			227	11.00	ļ	ist half and half	} LVII	ı -	
176 216	6 oo 3 3 3	 6	•••	236 254	8.00	1	rst half 2nd half	} rix		
216 100 105	4.00 4.00 2.00	6 7 6	 	251 140 143	5.00 2.00	١	1st half 2nd half	} LXI		
25,140	1,068:40	938	79'63	30,468 30,875	1,504'19	-{-	1st half 2nd half	}		
25,479	1,392'44	947	93.21	<del></del>		- -	<del></del>		}	
71,003	· 6,741'37	3,032	553'39	84,926	9,292'51		101	,	.	

# APPENDIX STATISTICS OF INDIAN

STATEMENT OF

Half-years ended the 30th June and the 31st December 1892.

[ From No. XIV

Serial	_		1892.	·	Train-miles.							
Number.	RAILWAT.		1892.	Passengers.	Goods.	Mixed.	Light.					
1	Standard gauge. East Indian		1st half 2nd half	761,898 736,611	2,639,940 <b>2,</b> 077,553	1,709,661 1,741,983	248,740 188,159					
11	Bengal-Nagpur	سئم	ıst half 2nd half	1,064 319	361,706 105,895	443,011 493,772	1,458 2,371					
111	Indian Midland • • •	نز	ıst half 2nd balí	208,038 207,460	372,455 165,138	282,147 284,369	28,304 14,538					
. <b>IX</b>	North Western (state) • •	.{	1st half 2nd half	426,061 468,765	2,008,244 1,376,325	1,748,978 1,789,947	80,720 . 79,073					
X	Hyderabad-Umarkot	.{	1st half 2nd half	•••	 2,507	 17,784	<b></b> 69					
ΧI	Oudh and Robilkhand (state)	.{	ist half 2nd balf	230,660 224,606	239,652 147,152	776,872 . 769,439	34,862 15,750					
XII	Eastern Bengal (state)	.{	ist half 2nd half	273,340 280,222	181,750 433,440	244,316 225,796	7,813 12,457					
<b>3111</b>	Bengal Central	.{	ıst balf 2nd balf	24,956 20,369	53 2,496	127,460 . 122,792 .	27 6					
. <b>Z</b> IA	Calcutta Port Commissioners' .	.{	1st half 2nd half	Information no	t furnished	•••	***					
XVIII	Great Indian Peninsula	.{	ist half 2nd half	1,425,655 1,529,534	3,640,469 2,085,663	- 407,00 <b>7</b> 390,845	204,297 102,106					
XIX	Bombay, Baroda and Central India	.{	1st half 2nd half	629,889 638,668	794,777 372,049	43,956 58,100	· 45					
XX.	Madras	.{	1st half 2nd half	429,557 435,084	219,883 234,884	569,59 <b>2</b> 579,726	26,090 24,908					
XXVI	The Nizam's Guaranteed State .	.{	1st half 2nd half	46,154 45,973	41,702 14,702	226,095 227,321	341					
, IIVX <b>X</b>	The Gackwar's Petlad ,	.{	1st half 2nd half	119		9,646 9,752	" 13					
XIXX	Rájpura-Bhátinda	.{	ist half and half	1,022 726	7,175 1,601	78,442 79,3°4	95 <b>2</b> 531					
						•						
	TOTAL STANDARD GAUGE Carried ove	٠. {	1st half 2nd half	4,458,294 4,534,456	10,507,806 7,079,405	6,662,183 .6,790,935	633,649 440,083					

A-continued.

## RAILWAYS-(PART I)-continued.

TRAIN-MILEAGE.

of Revenue Accounts.]

f Revenue Acco	unts.j		•		Half-year	s ended the 30t	h June and the 31st December 1892
TRAIN-MILES TIONING MIXE MILE	D AND LIGHT	Total	Assisting, shunt- ing and mis-	T-1-1			
Coaching.	Goods.	train-mileage.	cellaneous mileage.	Total engine-mileage.	1392.	Serial Number.	Remarks,
2,182,400 2,152,649	3,177,839 2,591,662	5,360,239 4,744,311	918,991 809,021	6,279,230 5,553,332	ist half and balf	} I	
1 <i>7</i> 6,769 195,802	630,470 466,495	807,239 602,357	89,999 76,828	897,228 <b>7</b> 39,185	ist half and half	} 11	
345,772 342,990	545,172 328,515	890,944 671,505	75,392 55,630	966,336 747,135	ist half and half	} m	
1,605,396 1,606,265	• 2,657,607 2,047,845	4,261,003 3,654,110	455,000 467,299	4,719,003 4,121,409	ist half and half	} ıx	
10,903	 9,457	 20,360	 1,271	21,631	ist half 2nd half	} x	
507,010 583,380	775,036 . 573,5 <sup>6</sup> 7	1,282,046 1,156,947	234,113 218,843	1,516,159 1,375,790	ist half zud h al	} x1	
421,369 - 422,871	285,850 529,044	707,219 951,915	214,984 257,11 <b>7</b>	922,203 1,209,032	ıst half 2nd half	} x11 ·	
96,661 98,58 <b>7</b>	50,835 53,076	• 147,496 151,663	14,814 12,990	162,310 164,653	ıst balf 2nd balf	.} x111 .	
··· -	101	•••	4+4	{	ist half and half	} xiv .	
1,674,742 1,748,198	4,002,686 <b>2,</b> 359,959	5,677,428 4,108,148	<b>722,</b> 078 549,986	6,399,506 4,658,134	1st half 2nd half	} xyiii	
645,564 665,495	823,103 403,424	1,468,667 1,068,919	164,17 <b>7</b> 114,284	1,632,844 1,183,203	ıst half 2nd half	} xix	
626,600 639,360	618,522 ,635,242	1,245,122 1,274,602	236,786 227,731	1,481,908 1,502,333	1st half 2nd balf	} xx	
108,213 114,060	206,079 173,936	314,292 287,996	36,643 37,823	350,935 325,819	1st half 2nd half	} xxvi	
6,035 <b>7,2</b> 35	3,611 2,649	9,646 9,884	1,499 1,712	11,145 11,596	1st half 2nd half	} xxvii	
41,087 46,735	46,504 35,427	87,591 82,162	8,502 7,7 <sup>6</sup> 9	96,09 <b>3</b> 89,931	ist half and half	} xxix	
	•						
8,438,618 8,634,590	13,823,314	22,261,932 18,844,879	3,172,968 2,838,304	25,434,900 21,683,183	1st half 2nd half	} .	

# APPENDIX STATISTICS OF INDIAN

STATEMENT OF

Half-years ended the 30th June and the 31st December 1892.

.[ From No. XIV

Serial .	•		•	TRAIN	-Kiles.	
Number.	Railway.	1892.	Passengers.	Goods.	Mixed.	Light.
	Brought forward standard gavos .	ıst half 2nd half	4,458,294 4,534,436	10,507,806 . 7,079,405	6,662,183 6,790,935	633,649
XXXIII	METER GAUGE. Bengal and North-Western—					
	Tirboot section	ist balf 2nd half	11,669 11,011	195,391 71,635	642,222 663,802	16,600
XXXIV	Rohilkund and Kumaon (Lucknow- Example)	ist half 2nd half	Included with th	e Rohilkund and I	Zumaon railway (C	1
XXXV	Rajputava-Malwa	1st half 2nd half	375,816 372,175	2,365,210 1,242,285	1,125,240	99,496
<b>338</b> 71	Southern Mahratta	ist half and half	145,704	251,214	1,134,766 510,458	16,806
IIIVZZZ	Southern Mahratta (Mysore section)	1st half	108,536	179,159 63,802	488,193 120,340	10,252 1,349
	Southern Mahratta (Nanjangúd exten-	2nd half 1st half	99,896	81,951	115,083	2,628
	Southern Mahratta (Yesvantpur-Dod-	2nd balf 1st balf	1,920	***833	4,020	
******	ballapur).	2nd half 1st half	1 402	•••	294	***
XXXIX	South Indian	2nd half	456,456 402,46 <b>5</b>	594,508 <b>656,211</b>	515,067 559,409	15,372 18,132
XLIII	Eastern Bengal (state)— Northern and Behar sections (including) the Kaunia-Dharlla 2' 6" gauge)	ist half	. 133,690	202,443	394,627	5,445
	branch.) Dacca section	2nd half	, . 135,29 <b>5</b>	236,084	369,993	. 4,755
XLIV	Burma (state)	1st balf 2nd half	223,441 223,636	335,440 203,532	419,000 428,7 <b>2</b> 0	36,854 33,726
XLVI	Deoghur	1st half 2nd half	}	***		
XLVII	Robilkund and Kumaon (Company's Section)	ist half and half	3,910	46,999	153,054	4,247
XLIX .	Dibru-Sadiya	1st half 2nd half	. 1,544 	16,775 63,008	158,588 30,932	3,831
TT	The Gackwar's Mehsana	1st balf	*•• 80	53,529 18,607	47,920 33,124	289
ы	}	2nd half 1st half	<b>'''</b>	7,577	32,658	24
LII	Kolhápur	2nd half	462 - 11,817	616 860	10,436 10,06 <b>2</b>	35
THI	Jodhpore section	ıst half	1,245	47,862	TTO TOT	57.5
ı	]	2nd half	572	50,450	90,860	517
	Biokaneer section	1st half 2nd half	*** 87	6,429 931	15,68 <b>7</b> 16,052	***
LIV	Bhavnagar Gondal Junagarh Porbandar { SPECIAL GAUGES	ist half and half	40,861 40,525	77.779 24,92 <b>7</b>	162,653 135,311	7,374 3,429
	Nalháti (4' o")	1st half 2nd half	55	4,324	9,919	} 
ľ	Cherra-Companyganj (2'6")	tet half 2nd half	147		6,517 .	
<b>L</b> VII	Jorhát (2' 0")	1st half 2nd half	1,594	8	6,376	***
TAIII	Darjeeling-Himalayan (2' 0")	1st half	18,636	60,741	10,278	***
IIX	The Gaekwar's Dabhoi (2' 6")	2nd balf 1st half	2,477	52,916 24,538	26,148	
	Morvi (2' 67)	2nd half 1st half	800 34,607	8,500 12,456	26,325 34,216	314
LXI	MINITA (2 0 )	2nd half		6,075	34,592	***
	TOTAL METER AND SPECIAL GAUGES .	1st half 2nd half	1,559,386 1,573,992	.4,371,375 2,894,238	4,333,183 4,333,302	· 204,424 135,602
	TOTAL OF ALL GAUGES FOR THE YEAR .	•	12,126,128	<b>24,</b> 852,824	22,119,603	1,413,758

A-continued.

## RAILWAYS-(PART I)-continued.

TRAIN-MILEAGE -concluded.

of Revenue Accounts.]

Revenue Acco		· · · · · · · · · · · · · · · · · · ·	,	<u>.</u>	Half-yea	rs ended the 30	th June and the 31st December 189
TIONING MIX	AFTER APPOR- ED AND LIGHT BAGE.		Assisting obun-			<u> </u>	
Coaching.	Goods.	Total train-mileage.	Assisting, shunt- ing and mis- cellaneous mileage.	Total engine-mileage.	1892.	Serial Number.	Benabes.
8,438,618 8,634,590	13,823,314 10,210,289	22,261,932 18,844,879	3,172,968 2,838,304	25,434,900 21,683,183	ist half and half	}	<u> </u>
316,315 376,618	549,567 387, <b>7</b> 58	865,882 764,376	157,958 155,621	1,023,840 919,997	iet half and half	xxxiii	
***	***	***	. <b>***</b>	{	1st helf 2nd half	} xxxiv	
1,069,149 1,042,105	2,896,613 1,747,587	3,965,762 2,789,692	423,640 376,678	4,389,402 3,166,370	1st half 2nd half	}	
360,659 346,762	5 <sup>6</sup> 3,5 <b>23</b> 496,997	924,182 843,759	93,814 87,605	1,017,996 931,364	ist half and half	} xxxv	
148,814 132,625	145,213 157,933	294,027 290,558	26,206 31,470	320,233 <b>3</b> 22,028	1st half 2nd half	ivxxx {	
5,498	 1,275	6,773	 49	6,822	ist half and half	xxxviii	
<sub>673</sub>	83	756	21	777	ist half and half	}	
713,051 744,644	868,352 951,573	1,581,403 1,696,217	271,633 272,919	1,853,036 1,969,136	ist half and half	} xxxix	
325,070	411,135	736,205	124,158	860,363	ıst half	) xriii	•
319,883	426,244	746,127	135,725	881,852	and half	l I	
438,039 441,914	576,696 447,700	1,014,735 889,614	172,641 155,741	1,187,376 1,045,355	1st half 2nd half	} XTIA	
•••	•••	14,562	***	14,562 {	1st half 2nd half	xrat	-
82,986 93,781	125,224 86,957	208,210 180,738	31,063 27,987	239,273 208,725	1st half 2nd half	XTAII	
10,277	- 83,563 8 <b>5</b> ,476	93,840 101,449	31,895 32,643	125,735 134,092	1st half 2nd balf	} xrix	
21,635 22,460	30,465 17,799 ·	52,100 40,259	11,578 5,60 <b>6</b>	63,678 45,865	ıst half 2nd half	} LI	
7,181 16,296	4,368 6,560	11,549 22,856	1,164 245	12,713 23,101	ist half and half	} LII	
51,142 52,516	112,007 89,366	163,149 141,882	13,375 7,977	176,524 149,859	1st half 2nd half	} im	
7,834 10,349	14,282 6,721	22,116 17,070	1,633 485	23,749 17,555	ıst half 2nd half	}	
142,049 129,711	146,618 74,481	288,667 204,192	18,178 10,272	306,845 . 214,464	1st half 2nd half	} ria.	
6,671	7,627	14,298	717	15,015	ist half and half	3	
35 <b>6</b> 557	6,308 6,022	6,664 6,579	370 338	7,034 6,91 <b>7</b>	ist half	}	
5,408 4,310	6,312 6,824	11,720	***	11,720 11,134	1st half 2nd half	} TAII	
18,636 18,644	60,741 52,916	79,377 71,560	***	79,377 71,560	ist half 2nd half	} raiii	
18,203 18,990	35,000 16,949	53,203 35,939	167 249	53,370 36,188	ist half and half	} LIX	
53,593 55,880	27,686 19,724	81,279 75,604	3,360 1,590	84,639 77,194	iet half and half	} rxi	
3,797,068 3,850,189	6,671,300 5,086,945	10,468,368	1,383,550 1,303,221	11,851,91 <b>8</b> 10,240,355	ist half 2nd half	}	
24,720,465	35,791,848	60,526,875	8,698,043	69,224,918	,,,,		

#### APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93. APPENDIX A-continued.

## STATISTICS OF INDIAN RAILWAYS-(PART I)-continued.

### NET EARNINGS COMPARED WITH INTEREST ON CAPITAL.

[From Nos. VIII and XVII of the Revenue Accounts.]

				37 4 Yu an an	Difference.		
Serial Inmber.	RAILWAY.	1892.	Interest on capital.	Net carnings of the half-year.	Excess.	Deficiency	
	STANDARD GAUGE.	•	R	R	R	R	
I	East Indian	1st balf	(a)1,23,33,872 (a)1,23,90,730	1,94,31,690 1,57,36,714	70,97,818 33,45,984	 •••	
_	(	1st half	87,147	1,63,462	76,315	} <u>.</u>	
	Patna-Gya	2nd half	1	East Indian Railwa	-		
11	Bengal-Nágpur	1st half 2nd half	18,51,123 20,54,222	22,63,275 7,44,891	4,12,152	13,09,331	
ш	Indian Midland	ist balf and half	17,73,281 19,50,704	12,00,828 5,25,432	•••	5,72,453 14,25,272	
IV	Bhopal-Itársi (British section) {	ist half	34,796	43,95 <b>5</b>	9,159		
14	Disopartical (Milital section)	2nd half 1st balf	34,335 99,632	12,44 <b>2</b> 39,467	***	21,893 60,165	
VΙ	Wardha Coal	2nd half	99,705	-5:372	***	1,05,077	
· vII	Dhond-Manmad	1st half 2nd half	2,21,237 2,21,298	1,85,616 1,42,719	***	35,621 78,579	
VIII	Bezwada extension	1st half 2nd half	28,23 <b>3</b> 28,350	10,929 17,418	***	17,304 10,932	
. ·ıx	North Western (state) {	1st half 2nd half	1,06,42,519	54,17,569 40,33,391	400	52,24,950 66,31,368	
	Amritsar-Pathánkot	1st balf 2nd half		28,052 	***	28,041	
x	Hyderabad-Umarkot	ist half and half		 —1,949	9+1 +44	31,536	
XI	Oudh and Rohilkhand (state) {	1st half 2nd half	25,66,036	32,43,749 17,72,580	6,77,713	8,91,681	
ХII	Eastern Bengal (state)	1st half 2nd half	18,36,114 18,92,236	10,64,066 28,47,512	, 9,55 <b>,276</b>	7,72,048	
XIII	Bengal Central	1st half 2nd half	2,58,274	1,51,628 1,61,275	***	1,06,646 · 1,10,701	
XIV	Calcutta Port Commissioners'	1st balf 2nd balf	Information not	furnished.	•••	•••	
XVIII	Great Indian Peninsula	ist half and half	(a) 66,77,435 65,36,118	1,43,27,660 60,31,967	76,50,225 	5,04,151	
XIX	Bombay, Baroda and Central India . {	1st half 2nd half	22,78,725 (a) 23,60,856	55,76,834 26,36,256	32,98,109 2,75,400	***	
XX	Madras	1st half 2nd half		20,72,050 22,20,083	*** ,	8,25,547 6,91,210	
ıxx	Delhi-Umballa-Kalka	ist half and half	1				
XXII	Tarkessur	1st half 2nd half	Information not	inroished.	***	•••	
XXIII	Khámgaon	1st half 2nd half	9,790 9,788	23,13 <b>3</b> 7,775	13,343	2,013	
XZIA	Amraoti	ret half and half		35,839 12,798	26,847 3,794	***	
XXV	Bhopal-Itarsi (Native state section) . {	1st half 2nd half		1,30,25 <b>7</b> . 3 <b>5</b> ,626	3°,257	64,374	
xxvi	The Nizam's Guaranteed State {	ist half and half		7,14,169 <b>6</b> ,1 <b>0</b> ,790	***	5,98,92 <b>2</b> 7,13,346	
xxvII	The Gackwar's Petlad	1st half 2nd half		21,295 13,462	<b>7,2</b> 72 	<b>"</b> 66o	
XXIX	Rájpura-Bhátinda	1st half		1,37,232 1,16,592	5,512	15,967	
xxx	Jammu and Kashmir (Native state sec. {	1st half 2nd half	21,993	7,893 7,551	***	14,100	
	Total STANDARD GAUGE carried (	Ist balf		5,62,90,648 3,76,79,953	1,10,48,925	80,39,007	

<sup>(</sup>a) Includes contribution to Provident Fund.
(b) Includes contribution to Sinking Fund.
(c) Excludes the Calcutta Port Commissioners', Delhi-Umballa-Kalka and Tarkessur railways.

#### APPENDIX A.

#### APPENDIX A-continued.

## STATISTICS OF INDIAN RAILWAYS-(PART I) -concluded.

NET EARNINGS COMPARED WITH INTEREST ON CAPITAL-concluded.

[From Nos. VIII and XVII of the Revenue Accounts.]

<u> </u>				<u>,</u>	h June and the 31s	
Serial Number.	Railway.	1892.	Interest on capital.	Net earnings of the half-year.	Excess.	Deficiency.
	Brought forward STANDARD GAUGE { METER GAUGE.	ıst half 2nd half		£ 5,62,90,648 3,76,79,953	R 1,10,48,925	80,39,007
XXXIII	Bengal and North-Western— Tirhoot section	1st half 2nd half		<b>8,27,</b> 472 4,88,343	3,57,372 8,418	**** ***
•	Company's section {	iet half zud half	5,61,168 5,64,41 <i>7</i>	10,76,530 6,24,724 ·	5,15,362 60,30 <b>7</b>	***
XXXIV	Robilkund and Kumaon (Lucknow-Ba-{ reilly section).	rst half 2nd half	(a) 1,53,113 (a) 1,54,994	1,83,765 91,293	30,652	63,701
<b>XXXV</b>	Rajputana-Malwa {	ist half and half		80,44,760 51,70,015	43,71,406 20,51,111	***
IVXXX	Southern Mahratta	ist half and half	(b)& (c)15,68,237 (b)& (c)19,26,229	6,51,309 7,36,690	454 -	9,16,928 11,89,539
XXXVIII	Southern Mahratta (Mysore section) . {	1st half 2nd half	(a)& (b) 3,98,155 (a)& (b) 4,46,811	1,77,11 <b>1</b> 2,70,795	111	2,21,044 1,76,016
	Southern Mahratta (Nanjangud exten- {	1st half 2nd balf		•		
	Southern Mahratta (Yesvantpur-Dodballa- { pur).	1st haif 2nd half	Information n	ot furnished.		
XXXIX	South Indian	1st half 2nd half		13,93,913 14,59,678	1,44,517 1,89,935	*** ,
XLIII	Eastern Bengal (state)   Northern and Behar section (including the Kaunia-Dharlla, 2' 6" gauge branch)	ist half 2nd half		8,87,12 <b>7</b> 12,99,432	1,40,815 5,46,591	***
	Dacca section	1st half 2nd half		49,14 <b>7</b> 86,443		84,615 47.432
XLIV	Burma (state)	1st half 2nd hal		23,45,572 10,40,515	11,05,237	2,12,093
X L V I	Deoghur	ist half and balf				
<b>X</b> LAII	Rohilkund and Kumaon (Company's sec- {	1st half 2nd half		furnished.		***
XLIX	Dibru-Sadiya · · · · {	1st half 2nd half				1
LI	The Gaekwar's Mehsana {	1st half 2nd half	59,307	95,132 57,873	35,513	1,4:4
LII	Kolhápur	1st half 2nd half	)		 	2
LIII	Jodhpore-Bickaneer— Jodhpore section {	1st half 2nd half		furnished.		••• f
	Bickaneer section	1st half 2nd half				
<b>L</b> 1∇	Bhavnagar-Gondal-Junagarh-Porbandar . {	1st half 2nd hal		3,04,345 1,33,532	•••	37,696 2,09,782
	SPRCIAL GAUGES. Nalbáti (4' 0")	1st hali 2nd hali		25,328	19,711	•••
	Cherra-Companyganj (2' 6").	1st balt 2nd halt		678 190	***	14,801 <b>#</b> 6,876
<b>L</b> VII	Jorhát (2' 0")	1st half 2nd half		2,077 9,712	***	12,95 ( ^ 5,3 <sup>6</sup> 7 ·
FAIII	Darjeeling-Himalayan (2' 0") {	1st half	Information not	furnished.		•1•
LIX	The Gaekwar's Dabhoi (2' 6") {	1st half 2nd half	36,086	70,893 35,617	34,807	1,602
LXI	Morvi (2' 6")	ıst half 2nd half	40,718 42,090	78,418 51,952	37,700 9,862	•••
	TOTAL METER AND SPECIAL GAUGES (6) {	ist half and half		1,62,13,577 1,15,56,804	55,05,057 9,52,982	***
	TOTAL OF ALL GAUGES FOR THE YEAR .		11,22,73,025	12,17,40,982	94,67,95 <b>7</b>	•••

<sup>(</sup>a) Includes contribution to Provident Fund.

(b) Includes share of surplus profits payable to the working company.

(c) Includes contribution to Provident Fund and interest on advance by the Secretary of State.

(c) Includes contribution to Provident Fund and interest on advance by the Secretary of State.

(d) Excludes the interest on capital expended on the Barsoi-Kissengunge branch.

(e) Excludes the Southern Mahratta Railway (Nanjangúd and Yesvantpur-Dodballapur sections), Darjeeling-Himalayan, Kolhápur, Jodhpore-Bickancer railways.

#### APPENDIX A .- continued.

## INDIAN RAILWAYS.

Statistics of their working for the hulf-years ended the 30th June and the 31st December 1892.

### PART II.

SUMMARY OF ANALYSIS OF WORKING.

#### CONTENTS.

				I	HEAD	INGS.								Pagr.
DESCRIPTION OF RAILWA	wo	RKED	•	•		•		•	•			•		. liv—lv
FINANCIAL RESULTS	•	•	•	•	•			•	•	•	•	•		• liv—lv
Outlay, EARNINGS AND	BXPE	NSES		.•		•		•				•		. liv—lv
Division of expenditur	B BBT	CWBEN	CO	CHING	AND	GOODS	S TRA	PITC			•			. lvi—lvii
COACHING TRAPPIC .		•		•		•		. •		•				. lvi—lxiii
Goods TRAFFIC .		•				•		•	•	•				. lxii—lxv
DETAILED PERCENTAGES	OF E	ARNING	S A	ND BXI	PBND	ITURB		•	•.	•	•	•	•	. lxiv—lxv
Working expenses—											•			
Maintenance of w	AY, W	ORKS	AND	STATI	ONS	•	•	•	•	•	• .	•	•	. lxvi—lxvii
LOCOMOTIVE EXPENS	SBS	•			•	•	•	•	•	•	•	•	•	. lxviii—l <sub>xx</sub> i
CARRIAGE AND WAGO	N E	CPENSI	s ·	•	•	•	•	•	• ,	٠	•		•	<ul> <li>lxx—lxxi</li> </ul>
TRAPPIC EXPENSES					•	•	•		•	•	•	•	•	. lxxii—lxxiii
GENERAL CHARGES		•		•			•	•				•	•,	. lxxiv—lxxv
SPECIAL AND MISCEL	LANE	ous				•	•	•			•	•	•	. lxxiv—lxxv
EXTRACTS FROM TABLES F	RINT	ED AS	APPB	NDICES	S TO :	THE AN	A <b>L</b> YS	BS .			•.	•		. lxxvi—lxxix

#### APPENDIX STATISTICS OF INDIAN

									1	STANDARI
				INES WORE	ED BY	STATE LI	NES WORKE STATE.	. В В ТНК	LINES	TEED CO
	Headings. -	1892.	l. East Indian railway system.	II. Bengal- Nágpur.	III. Indian Midland railway system. •(b)	1X. North Western (state) railway excluding mi- litary lines. (e)	XI. Oudh and Rohil- khand (s:ate).	XII. Eastern Bengal (state). (h)	XVIII. Great Indian Peninsula railway system. (1)	XIX. Bombay, Baroda and Central India.
	. •						ļ			
Ì	DESCRIPTION OF RAILWAY WORKED.									
1	Gauge of railway	ıst 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″	5′ 6″ 5′ 6″	5′ 6″ • 5′ 6″
2	Mean mileage worked Miles	ıst half	(a)1,804*52 (a)1,818*15	831'58 831'58	753°78 753°78	1,721°05 1,756°31	692'55 692'55	373'72 373'73	1,491°55 1,490'08	460'90 460'90
3	Number of stations	ıst half	235	85 85	(c)96 (c)98	241 249 .	104 104	94 94	208 212	8 <sub>5</sub> 8 <u>5</u>
٠,	Total length of the following gradients:	2nd ,,	235	v <sub>3</sub>	(1)90	249		74		-0
	(a) to and less Miles	ıst half 2nd ,,	5'78 5'78	1,13	***	5.20 2,30		•••	10,31	• '''
	(b) At to B · · · · · · · · . {	ıst half and ,,	7*12 7*11	0'14 0'14	6°75 <b>6</b> °75	28'01 28'01	•••	***	2°36 2°36	1.32 1.32
	(c) 1 to 10 5	ıst halí and "	16°98 16°97	82°36	4°20 4°20	71°22 71°22	•••		62,10 65,10	0'24 0'24
	(d) 101 to 100	ist half	106:56	276'01	199*00	73*90	5*04	o.22	\$16.04 \$10.04	5.83 5.83
		and ,, ist half	118.03	276'01 78'00	199,00	75'68	5'04 18'05	1*20	204.48	12'90
5	(e) 101 to 100	and "	118.03	78.00	67 32	78.27	18.02	1.09	204.78	12'90
۱ ٔ	(a) Inclination	ist half	70 40	33. 32.	र्गेष रोब	, p	110 110	104 104	37 37	. हरे वर्ष
1	(b) Length	ist half and ,,	3.88 3.88	1'13 1*13	2°40 2°40	1,10	0°40 0°40	0'14 0'14	5·85 5·85	1,37
	TANAMAN I BROWN TO						,			
6	FINANCIAL RESULTS.  Percentage of net earnings (including				•			•		_
l	steam-boat traffic) for each half-year on capital outlay	ist half and "	5°26 4°18	2'43 0'79	(d)1°40 - (d)0°61	(f)1:97 (g)1:47	3.20 1.85	1°81 4'82	5'25 2'25	5·82 2'75
7	Percentage of net earnings on paid-up capital	rst half and	•••	2'39 0'76	(d)1.38 (d)0.29	414		***	2·25 2·29	5.82 2.75
Ì									•	
	OUTLAY, EARNINGS AND EXPENSES.  (Exclusive of Steam-boat Service.)					,				
8	Capital outlay per mile open R	ıst half 2nd ,,	2, to, 244 2,08,379	1,07,075		(f)1,81,396 (g)1,82,291	1,30,718	2,19,064 2,21,877	2,10,981 2,11,520	2,03,114 2,03,461
ا و	Total earnings per mile open per week . ,,	ist half	590	181	153	303	281 101	288 484	650	745
0	Total working expenses per mile open per	2nd ,, 1st half	482 167	101 76	106	228 166	193	161	399 276	444 284
1	week	and " ist half	145	66 4'84	77	128 3'67	95	172 3°27	238 4*44	220 6°0l
•	Total earnings per train-mile , , }	2nd ,,	5'16 4'80	3.58	3,10 3,30	3.27	3.01 3.32	4'26	3.76	4*9
2	Total working expenses per train-mile . " {	ist half and ,,	1°46 1°44	3,1Q 3,01	1.82 2.5	1,83 3,01	1'42 1'48	1*84 1*52	1'89 2'24	2'32 2'54
3	Net earnings per train-mile, {	ıst halí 2nd ,	3'70 3'36	2'80 1'12	1'54 0'85	1.66 1.44	2'53 1'53	- 1'43 2'74	2'55 1'52	3.44 3.44
4	Cost per 1,000 gross ton-miles moved (freight and dead-weight)	ıst half	- 3*70 3'99	5'33 6'44	5'43 7'09	6.00 2.81	4'15 5'32	7'02 4'91	6.06 2.86	5°9: 7°8:
5   5	Percentage of total working expenses upon total earnings	ıst half	28.36	43'07	54"13	54*75	35'91	56.14	42.46	38.15
6	Percentage of total working expenses upon total earnings, excluding from both sides of the account the charges for	and ,,		65°77 40°18	72'44 52'70	55'93	49'09 34'32	35°59 55°39	59*62 40*68	36.8
		and "	27.99	64'44	71.70	54'30	47'82	34.89	57'51	49'99
17	(Inclusive of Steam-boat Service.)  Percentage of total working expenses on total earnings (for details, see items 123-29)	ıst hali 2nd ,,	28'40	42.07	. 54"13	55,03	35'91	58 <b>*</b> 59	42'46	38*15

<sup>(</sup>a) Includes 23'24 miles of the Eastern Bengal (state) railway and 1 mile of the Rajputana-Malwa railway worked over by the undertaking.
(b) Includes the Bhopal-Itarsi railway, except where otherwise stated.
(c) Includes Agra Junction and Tundla.
(d) Indian Midland railway only.
(e) Includes the Amritsar-Pathánkot, the Rájpura-Bhátinda, and the Jammu and Kashmir railways, except where otherwise stated. The figures for the second-half of 1892 include, in addition, the transactions of the Hyderabad-Umarkot railway.
(f) Excludes the Rájpura-Bhátinda and the Jammu and Kashmir railway (Native state section).
(g) Excludes the Rájpura-Bhátinda, the Jammu and Kashmir railway (Native state section), and the Hyderabad-Umarkot railway.
(h) Includes the Bengal Central railway excepting items 6, 8 and 196 to 199.
(e) Iacludes the Dhond-Manmád, the Wardha Coal, the Khámgaon, and the Amraoti railways, excepting items 8 and 196 to 199.

#### RAILWAYS-(Part II).

GAUGE.				1	METRE GA	UGE.			<del></del>	
GUARAN- PANIES.	LINE OWNED BY NATIVE STATE AND WORKED BY COMPANY.	STATE LI	NES WORKED	BA CONÈVNI	ES.		NES WORKED E STATE.	Assisted COM- PANY.	LINE OWNED AND WORKED BY NATIVE STATE,	
XX. Madras.	XXVI. The Nizam's Guaranteed State railway	XXXIII.  Bengal and North-Western railway system.(k)	XXXV. Rajputana- Malwa.	XXXVI. Southern Mahratta railway	XXXIX. South Indian. (0)	XLIII. Eastern Bengal (state), includ- ing the Kau- nia-Dharlla (2' 6" gauge)	XLIV. Burma (state).	XLVII,  Rohilkund and Kumaon railway	LIV. Bhávnagar- Gondal- Junágarh-	1892.
- <del>-</del>	system.(j)		<del></del>	system.		branch.		system.	Porbandar.	
5' 6" 5' 6"	5' 6" 5' 6"	3′ 3³″ 3′ 3³″	3′ 3³″ 3′ 3³″	3′ 3‡″ 3′ 3‡″	3′ 3 <sup>3</sup> ″ 3′ 3³″	3′ 3∄″ 3′ 3∄″	3′ 3∄″ 3′ 3∦″	3′ 3 <sup>‡″</sup> 3′ 3 <sup>‡″</sup>	3′ 33″ 3′ 33″	ist half .
839'30 839'30	353'77 353'77	752°03 756°30	1,674'02 1,674'02	1,384°02 1,385°86	1,061°25 1,113°04	528*42 528*42	661.64 212.20	252'30 252'30	333'72 333'72	ist half
139	44 44	735 35 125 125	233 233	184 188	1,113 04 160	78 78	112	36 36	50 50	ist half . }
445	·		3*40	2'94	***	•••	***	•••	***	ist half .
17'99		494	3'40 0'23	2°94 48°37	***	400		4'84	444 . 444 .	rst half
17'99 48'09 48'09	83.49 83.49		0°23 18°75	60°86 439°74	139*12	0°07 0°07		4'84 6'12 6'12	0,12 0,12	ret half
197'14 197'14	111'65	3'46 4'01	298'68 298'68	440°76 198°03 199°17	139°12 199'74 199'74	10'21	53,55 53,55	3.87 3.84	90.88 90.88	ist half
123'86 123'86	80.00	3.06	137.82	79°05 79°13	98:99 199 /4	7,11	63,10	5'02 5'02	42'97 42'97	rst half .
होट हर	700 700	च ऐंत	. हेर हरे	1 40	100	100 100	3 nn	नेत र	100 100	sst half .
0,80 0,80 99	2'52 2'52	1'43 3'42	3'40' 3'40	2'94 2'94	3,13 3,13 190	100 0'07 0'07	1°38 1°38	3,00 3,00	0,12 0,12	ist half
		34-	3 40							
1'73	r*8:	3*76	6*18	0.75	1.60	2.13	3'77 1'66	3*07	1.78	ist half . ]
1.82	1'54	2°16	3°96	(m) 0°92	1,86	3.11	·	1'71 2'93 1'64	°'77	2nd ,,
1'84	1'16			(n) o'88		····				
1,38,997	1,14,471	63,350	75,320	78,927	66,986	81,671	83,794	38,348	(p) 50,9 <u>7</u> 9	ist half .
1,39,300	1,14,760	63,903	75,380	(m) 79,186 83	67,477	82,614	84,598 242	38,534 96	(ρ) 51,160	and ,, . }
224 122	79 76	102 ( <i>l</i> ) 47	216 114	8 <sub>2</sub> 6 <sub>0</sub>	135 88	166 70 68	156	74 50	70 76 55	ist half
3.81	4'61	49 3'13	97 3*28	. 2*44	84 2'32	3.91	99 4'11 3'28	48 3.03 2.69	3'35 2'99	ist half . }
3.83	30	2·62 (l) 1·06	3°37	2.22 1.46	2°30	3.05 1.35 1.36	1.78	1'57 1'75	2°30 2°34	ist half . }
2.00 1.00	2'44 2'31 2'18	(l) 2.07	1°52 2°03 1°85	o 68 o 88	1'44 0'79 0'86	1°29 1°79	2'33	1*46 0*94	1'05 o'65	ist half .
1'74 7'50 7'49	6.61	(/) 4'62 6'16	5'81 6'89	10.86 9.89	9°78 9°30	7'91 7'91	7°97	6·85 8·31	14*10 15*02	ist half .
56'33 54'50	49'96 52'78	(1) 33'80 48'55	38°16 44°95	72°28 65°26	65.83 62.21	50'35 41'22	43°25 63°49	51'72 65'13	68:53 78:15	ist half .
53'95	49°15 53'07	(I) 32*90 48*17	36.21	71°06 64°30	64 <sup>,</sup> 85 61 <sup>,</sup> 92	49'63 40'24	42°50 62°79	64.86 21,23	68°07 77°82	ist half . }
56'33 54'50	49°96 52°78	' (l) 35'09 49'19	38'16 44 <sup>-</sup> 95	72°28 65°26	. 65'83 62'51	54*15 44*33	43:83 64:43	51'72 65'13	68·53 7 <sup>8·</sup> 15	rst half .

<sup>(</sup>j) Includes the Bezvada extension, excepting items 6 and 7.
(k) Although for convenience classed amongst the state railways, the company's section of the line is the property of the Bengal and North-Western Railway Company.
(l) Excludes contribution to P. ovident Fund.
(m) Excludes the Yesvantpur-Dodballapur section.
(n) Figures taken from Part I of the Administration Report for 1892-93.
(o) Includes the Pondicherry railway, excepting items 4, 5, 6 and 8.
(p) Calculated on the mileage, excluding the state mileage in Dock Estates and Quarry lines constructed and maintained by the states themselves.

#### \* STATISTICS OF INDIAN

per.			STATE	LINES WO		STATE LINE	S WORKED BY	THE STATE.	Ling	S WORKED E
e num	Headings.	1892.	1.	11.	III.	IX.	X1.	xn,	XVIII.	XIX.
Progressive number.		-	East Indian rail- way system.	Bengal- Nágpur.	Indian Midland rail- way system.	North West- ern (state) railway ex- cluding mili- tary lines.	Oudh and Rohilkhand (state).	Eastern Bengal (state).	Great Indian Peninsula railway system.	Bombay, Baroda and Central India
	DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC.									
18	Total working expenses for both coaching and goods traffic	ıst half 2nd ,,	73,92,990 64,69,655	15,48,359 13,85,495	14,98,456 14,08,746	72,65,979 56,86,409	17,46,781 16,32,712	14,62,336 15,78,045	1,05,10,082 90,21,117	32,72,041 26,22,324
	Proportions, dividing expendi- ture in ratiot of gross ton- mileage (freight and dead- load).	į	<u> </u>							-
19	Coaching	ist half and "	18,62,026 19,39,858	3,17,738 3,96,824	4,61,103 5,88,968	21,11,638 22,12,420	5,38,639 7,25,043	7,34,575 5,08,673	22,07,112 29,08,532	8,50,848 11,32,399
20	Goods	ist half	55,30,964 45,29,797	12,30,621 9,88,671	10,37,353 8,19,778	51,54,341 34,73,989	12,08,142 9,07,669	7,27,761	83,02,970 61,12,585	24,21,193
	Multiplier for converting re- sults based on the ton-mileage division of expenses into re- sults based on—		<u> </u>   			-		1	, ,,,,,	14,89,925
	Coaching (items 77 to 80 and items 81 to 88 partially);	ıst half and "	1*62 1*51	1°07 1°03	1°26 1°22	1·35 1·18	1°23 1°14	1°20 1°46	1°41 1°32	v 1.69 1.44
!	items 116 to 118 partial-	2nd ,	- 0°79 0°78	0.88 0.88	o:88 o:84	0.86 0.88	0.83 0.83	0·78 0·78	0.82 0.83	0°76 0°66
	Coaching (items 77 to 80 and items 81 to 88 partially);		1°23 1°18	0.87 0.82	1*22 1*10	1.03	r 36 1.17	0.83 1.11	0.87 0.89	I.10 0196
	earnings.   Goods (items 113 to 115a and items 116 to 118 partial-	ist half	0.92	1.02	0.83 0.80	0.08 0.03	0 <sup>.</sup> 84 0 <sup>.</sup> 87	0·88 1·04	1.00 1.03	0.93 0.97
	COACHING TRAFFIC.  Gross receipts and train-mileage—	ıst half	P.4.5				·			
21	Receipts from coaching traffic R	2nd ,,	79,08,589	6,08,103 5,03,180	10,78,652 9,11,377	45,15,460 40,96,129	20,19,796 17,37,686	14,71,974 13,70,468	46,68,658 42,90,135	24,95,342 21,62,154
	Coaching train-miles run No.	ist half	2,152,650	176,769 195,862	345,772 342,990	1,453,641 1,465,007	507,010 <b>5</b> 83,380	518,030 521,458	1,674,742 1,748,198	645,564 665,495
23	Average coaching receipts per train-mile	rst half and ,,	3·88 3·67	3°44 2°57	3°12 2'66	3.11 3.11	3.08 3.08	2.84 2.63	2.45 2.45	3'8; 3'2;
	Units and Unit-mileage— Number of units carried one mile—				•					
24	ist class Unit-miles	ist half and ,,	3,290,007 3,446,898	133,001 162,921	642,082 672,306	2,548,793 2,221,744	1,003,290 917,467	937,422 684,981	3,510,707 3,754,839	1,365,149 1,155,950
25	2nd ,, a a ,,	ist half and ,,	9,936,219 12,243,497	435,612 428,685	2,135,922 2,220,876	9,577,219 8,322,585	2,072,494 2,961,477	1,731,778 1,952,158	15,998,492 16,690,031	7,322,78; 6,440,19
26	3rd or intermediate class . ,,	ıst half 2nd "	22,112,434 23,754,428	532,077 463,372	(a)16,157,158 (a)13,715,396	13,636,496 13,867,840	2,616,567 2,435,251	12,258,164 12,120,454	(a)33,648,667 (a)31,976,766	27,247,020
27	4th or lowest 3, 39	ıst halí 2nd "	498,103,211 451,067,709	49,411,230 39,701,707	(b)46,954,619 (b)36,858,958	273,119,097 232,171,314	126,639,424 106,633,575	76,097,908 70,802,319	(b) 231,042,987 (b)206,151,651	125.422.74
28	Total passenger unit-mileage	rst half	533,441,871 490,512,532	50,511,920 40,756,685	65,889,781 53,467,536	298,881,605 256,583,483	132,331,775 112,947,770	91,025,272 85,559,912	284,200,853 258,573,287	161,357,70
29	Other coaching traffic . Ton-miles .	ıst half 2nd ,,	5,521,614 5,924,474	329,670 236,620	661,785 660,198	2,796,946 3,582,932	859,520 769,012	610,655 473,529	3,501,817	1,896,89
i	Average sum received for carrying a unit							4,035-5	2,919,325	1,595,33
30	1st class Pies	st half	15'68	14.47	11.04	10'90 10'85	12'00	10'38	10*95	10.0
31	2nd ,	st half	Į.	5'82 6'37	4°41 4°70	3.84	6.00	12.67 5'91	10'86 4'05	9:70
32	3rd or intermediate class . ,,	set half		2'79	(a)3.00 (a)3.00	3.06	4*56	3'01	4'09 (a)3'00	4·6
33	4th or lowest	st half	1	1.00	(b)2.54		4*00 2*50	3'00 2'57	(a)3'00 (b)2'42	3.0
34	Average for all classes . ,,	sst hal	2'72	1 99 2 07	(b) 2·54	2.26	2.23 2.66	2°59	(b)2.41 2.60	2·3.
35	Other coaching traffic per ton-mile ,,	f rst half	1 0		2 8 <sub>5</sub> 34 5 <sub>3</sub>	2°59	2'68 42'10	2.80	2'72	2.6 2.6 20.1
35	Excluding steam boat expenses, and af     For "freight" passenger units litema.	2nd "	29.35	47'11	34·53 33·88	33.21	42°19 39°97	49°24 50'33	37'89 41'57	

Excluding steam boat expenses, and after deducting telegraph and sundry receipts, and leaving only the balance of payments to other lines for mileage, &c.

First class passenger with free luggage

Second

Third or fourth class passenger with free luggage

plus the ton-mileage of other coaching traffic.

(a) Third class by mail trains.

(b) Third class by other than mail trains,

# RAILWAYS-(Part II) -continued.

r 180	ecembe	nd the 31st D	30th June a	ended the	Half-year	· ·	<del></del>			<del></del>	.====
		LINE OWNED	<del></del>	<del></del>	E GAUGE.	METR				LINE OWNED BY	GAUGE.
ımber	.0	AND WORKED BY NATIVE STATE.	Assisted Com- Pany,	WORKED BY	STATE LINES THE ST	s		ES WORKED E	·	NATIVE STATE AND WORKED BY COMPANY,	GUARAN- PANIES.
Progressive number	1892.	LIV. Bhávnagar- Gondal- Junágarh- Porbandar,	XLVII. Rohilkund and Kumaon railway system.	XLIV. Burma (state).	XLIII.  Eastern Ben- gal (state), inclu- ding the Kaunia- Dharlla (2' 6" gauge) branch.	XXXIX. South Indian.	XXXVI. Southern Mahratta railway system.	XXXV. Rajputana- Malwa.	XXXIII,  Bengal and North- Western railway  Bystem,	XXVI. The Nizam's Guaranteed State railway system.	Madras.
H											1
} "	rst half and "	6,38,339 4,59,417	2,42,576 2,55,902	17,42,052 17,94,863	9,44,423 9,01,419	23,64,762 23,76,275	21,17,330 18,66,021	47,56,385 38,39,815	(c)8,17,198 8,81,922	6,81,234 6,66,×17	25,82,525 25,70,887
} 1 <u>1</u>	ıst half 2nd "	2,77,770 2,62,088	90,097 1,24,047	5,89,675 7,59,014	3,47,75 <b>7</b> 3,00,287	10,77,253	8,25,773 7,58,792	8,67,093 10,28,343	(c)2,62,134 3,63,29 <b>3</b>	1,94,596 2,25,265	10,18,438
} 2	rst half 2nd ,,	3,60,569 1,97,329	1,52,479 1,31,855	11,52,377 10,35,849	5,96,666 6,01,132	12,87,509 13,36,888	12,91,557 11,07,229	38,89,292 28,11,472	(c)5,55,064 5,18,629	4,86,638 4,41,552	15,64,087 15,36,330
	ıst half 2nd ,,	1·13 1·11	1°07 1°07	1°28 1°17	1°20 1°29	0*99 1*66	1.08 1.08	1°48 1°39	• 1°14 1°20	1°21 1°17	1.58 1.52
	ıst half 2nd ,,	o.82 0.82	o 93	0.86 0.87	o·88 o·86	1.00 1.00	o:95 o'96	o:89 o:86	0.8Q 0.8Q	0-92 0-92	0.83 0.83
	rst half 2nd .,	1.13	1.10 1.10	1·6r 1·52	r:30 1:10	1·22 1·25	1.10 1.18	1.43 1.18	1°27 1°19	0.83 1.10	7.00 0.99
	ıst half 2nd ",	0.06 0.83	0·82 0·82	0.63 0.63	o·82 o·95	0.82 0.80	0.88 0.03	0,83 0,80	0·87 0·87	0.96 1.04	1.00
} 2	st half and ,, ist half	4,30,073 3,81,517 142,049	2,64,361 2,45,739 <b>82,</b> 986	22,43,442 18,33,131 438,039	9,04,694 8,23,748	20,10,170 20,83,390	13,50,345 12,94,573 516,654	33,29,167 28,74,473 1,069,149	10,66,581 9,38,864 316,315	4,36,070 3,99,974 108,213	18,40,926 19,13,906 626,600
} 2	2nd "	129,711	93,781	441,914	325,070 319,883	713,051 744,644	501,853	1,043,105	376,618	114,060	639,300
} 2 	2nd ,,	2.03	3'19 2'62	5'12 4'15	2'78 2'58	2*82 2*80	2.28 5.28	2.76	2'49	3.21	2'99
} 2	ist half and "	110,236 99,980	132,734 116,276	588,172 576,490	513,396 348,399	546,955 522,850	597,010 574,566	1,049,266 744,755	213,723 203,139	339,083 307,701	1,457,151 1,498,864
1 2	st half and ,,	683,741 541,199	64,800 328,995	2,980,684 3,114,330	978,925 1,397,962	3,313,415 3,542,208	2,162,614 1,669,570	2,960,555 3,349,291	- 319,609 350,167	1,503,020 1,594,445	3,611,779 3,981,253
} 2	ist half and ,,	***	338,537 153,076	***	3,957,231 4,100,625	***	***	9,712,084 8,545,169	594,053 592,586	(a)6,613,779 (a)6,083,846	•••
} 2	ist half and ,,	26,179,137 23,756,612	16,736,569 14,363,074	129,322,431 104,227,230	51,327,437 46,562,121	174,619,453	93,529,902 93,906,930	262,526,016 223,704,259	. 80,620,755 . 79,184,485	(b)23,011,908 (o)21,532,716	165,916,373 170,929,363
} 2	ist half and ,,	26,973,114 24,397,791	17,272,640 14,961,421	132,891,287 107,918,050	56,776,989 52,409,107	178,479,823 183,816,163	96,289,526 96,151,006	276,247,921 236,343,474	81,748,140 80,330,377	30,467,790 29,518,708	170,985,303 176,409,480
} 2	ist half and "	124,932 88,123	79,142 92,343	289,198 323,511	391,480 337,915	319,083 367,375	559,279 558,109	1,668,690 1,404,149	287,235 238,115	276,265 180,076	1,279,435 1,389,761
} 3	rst half and ,,	10'63 10'45	26198 27138	13°30	13.70 14.02	11'04 11'73	11'19 11'44	13'67 13'14	20°68 21°07	15*54 14*27	10'32 10'32
} 3	ıst half 2nd 1,	5'20 5'20	• 11.65 13.63	5*48 5*19	6·66 4·72	3'95 3'93	4.68 2.36	6°17 5°40	9,88	4'11 3'87	5 29 5 34
} 3	rst half and "	•••	9.64 4.00	, 	3*03 3.00	1		3,00	4.78 4.92	(a)2°50 (a)2°50	***
} 3	1st half 2nd ,,	2°75 2°75	2.13 5.13	3,00	2'51 2'51	2*00 2*00	2,33 5,33	2'00 2'00	2°25 2°00	(δ)2.00 (δ)2'00	1'63 1'64
3	rst half 2nd ,,	2.84 2.83	2.26 3.69	3'10 3'⊪2	2.72 2 <sup>.</sup> 69	2°06 2°06	2'44 2'33	2'12 2'12	3.35 3.35	2.36 2.33	1'78 1'79
} 3	ıst half and "	46:58 <b>4</b> 6:75	81*58 75*24	64°78 47°90	48·78 50°70	55'40 55'82	44°04 43°92	36.30 31.41	45'08 46'59	42'41 44'18	37 92 30 88

<sup>(</sup>c) Excludes contribution to Provident Fund.

\$ To arrive at the average profit on working, convert the items showing cost per unit (77 to 80 for coaching, and 113 to 715(a) for goods) into their respective equivalents on the train-mileage coaching and good earnings basis, and then deduct the Items so converted from the receipts per unit (items 23, 34, and 56 to 60 for coaching, and 91, 93 and 102 for goods).

APPENDIX STATISTICS OF INDIAN

Half-years ended the 30th June and the 31st December 1892.

If-	years ended the 30th June and the 31st	Decem	Der 1392.				•			
<u></u>	<u>·</u>		-		<del></del>					STANDAR
	•			LINES WO		STATE LI	NES WORKE STATE.	D BY THE	LINE	WORKED E
	Headings.	1892.	I. East Indian railway	ll. Bengal- Nagpur.	III. Indian Midland railway	IX. North West- ern (state) railway ex- cluding	XI. Oudh and Robil- khand	XII. Eastern Bengal (state).	'XVIII. Great Indian Peninsula railway	XIX, Bombay, Baroda and Central
_		<u> </u>	system.		system.	military lines.	(state).		system.	India.
	COACHING TRAFFIC—contd.  Units and Unit-mileage—concld.  Average number of units in a train—		 				•			
5	ist class No. {	ıst half	1.20	o.83	1.86	1'75 1'52	1'98 1'57	1.81 1.31	2'10 2'15	2'11 1'7.
,	2nd	ist half	4°55 5°69	2'47 2'19	6°18 6°48	6.20 2.08	4'09 5'68	3'34 3'74	9°55 9°55	11,3
8	3rd or intermediate class . ,,	ıst half	, 10,13	3.01	)	9'38	5'16 4'17	23°66 23°24	(a)20'09 (a)18'29	42·2 33·4
	4th or lowest	ist half	228.24	2°37 279°52	182°52	187.89	249*77	146*90 135*78	(b) 137'96 (b) 137'96	194*2
١	Total passenger units	and ,, ist half	214,43 200,24	202.70	190'56	205'61	182*79 261'00	175*71	169'70	249'0
		and ,, ast half	227.86 2.53	205'09	1.01.	175*14	193 61	104.07	2.09	211'7
•	Other coaching traffic . Tons	2nd ,,	2*75	1.31	1.03	2 15	1.33	• 0,01	1'67	2'4
	VEHICLES AND VEHICLE-MILEAGE  Number of coaching vehicles hauled one							•	 	
2	mile- 15t class Vehicle-miles {	ıst half	3,330,026 3,156,663	274,783	778,554 774,356	2,074,825 2,110,685	838,557 907,414	633,472 636,307	2,789,293 2,979,635	591,52 • 597,66
3	2nd	1st half 2nd ,,	3,374,410 3,260,474	410.708 482,285	705,257 713,561	2,036,893 2,074,204	824,557 859,863	700,361 694,276	3,500,993 3,722,097	1,005,90 1,016,59
4	grd or intermediate class . ,, {	ist half and ,,	2,695,483 2,418,427	69,469 129,646	(a)948,346 (a)965,847	1,734,297	809,138 843,449	1,162,254 1,164,939	(a) 1,818,753 (a) 1,781,121	818,25 775,40
,     	4th or lowest ,, . ,, {	ıst half	22,784,259 22,228,248	2,066,902 2,693,551	(b)1,945,779 (b)1,790,284	13,184,838	5,016,254	4,232,492 4,182,242	(b) 10,336,667 (b) 10,105,485	4,399,42 4,441,42
5	Other vehicles	ıst half 2nd ,,	4,061,128 3,771,466	182,354 199,520	511,155 530,595	2,696,302 2,737,340	1,085,472 909,541	1,111,216 1,070,611	2,647,729 2,551,589	715,87 737,15
7	Brake-vans » {	st half	4,906,231 4,597,520	329,600 388,906	682,341 698,344	2,938,091 3,049,951	825, 192 902, 175	554,205 550,790	3,319,662 3,482,911	801,73 819,35
s	Total	ist half	41,101,537 39,432,798	4,233,916 4,294,865	5,571,432 5,478,987	24,665,246 24,936,417	9,399,170	8,394,000 8,299,171	24,413,007 24,022,838	8,332,71 8,387,05
1	Average number of vehicles in a coaching train—							. •		-
9	1st class No. {	ıst half 2nd ,,	1'53 1'47	1.26 3.02	2'25 2'26	1'43 1'44	1.65 1.55	1'22 1'22	1.67 1.40	. oʻg
•	2nd ,,	ist half 2nd ,,	1°52 1°51	2°32 2°46	2'04 2'08	. 1°40 1°42	1.63 1.47	1°35	2'09 2'13	1,2
,	3rd or intermediate class . ,, {	ist half	1°24 1°12	0'37 0'66	8:37	1'19	. 1'60 1'45	2'24	(a)1'09 (a)1'02	1,1 1,3
,	4th or lowest ,,,, {	ıst half 2nd "	10'44 10'33	16 <sup>-</sup> 78	8.05	9.07	9:89	8·17 8·02	(b)6*17 (b)5*78	6·8
,	Other vehicles, {	1st half 2nd ,,	1'86	1'03	1*48 1*55	1'86 1'87	2°14 1°56	2'15 2'15	1'58	1*1
   	Brake-vans ,, {	ist half and ,,	2°25 2°14	1'87	1°97 2'03	2°02 2°08	1°63 1°65	1.07	1,68	1°2
	Total , , {	ıst half 2nd "	18·84 18·32	23'95 21'93	16'11 15'97	16'97 17'02	18*54 16*48	16.30 12.31	14-58	12'0
	Average earnings per coaching vehicle per		· ·	} <u></u>		·				
,	1st class Pies	ıst half	. 15°50	7°01 5'88	9,00 9,11	13'43 11'48	14*36 11*26	15°36 13°64	13'78 13'68	· 23.0
,	and ,, ,,	ist half	19'64 23'31	6·17 5·66	13'36 14'64	18°15	· 15*08	14.62 15.99	18.35 18.10	33°9 29°1
3	3rd or intermediate class - ,,	ıst half 2nd "	28·86 34'27	21'38 9'69	(a)51/11 (a)42/56	24'13 21'37	12*94 11*55	31.42 31.42	(a)55°46 (a)53°84	99°9 86°2
,	4th or lowest ,, , ,	ıst halí 2nd "	50'96 55'11	33°21 29°38	(½)61*29 (b)52*12	50°16 43'51	63-11 52*48	46°24 43°78	(b)54°14 (b)49°23	66·8 58·4
,	Other vehicles ,,	ıst halí 2nd ,	43°03 46°10	67°30 55°88	44°71 42°16	36°71 43°86	33°41 33°70	27 of 22 26	50'11 47'56	77°2'

(a) Third class by mail trains.
(b) Third class by other than mail trains.

# RAILWAYS—(Part II) — continued.

	December		<del></del> ,	•	<del></del>	METRE (	<del></del>				UGE.
ber.		LINE OWNED AND WORKED BY NATIVE STATE.	Assisted COMPANY.		STATE LINES THE ST	<u>-</u> !	COMPANIES.	ES WORKED BY	STATE LIN	CONDANA TINE STYLE O MOUKED BA	RAN- 189.
Progressive number.	1892.	LIV.  Bhávnagar- Gondal- Junágarh- Porbandar,	XLVII. Rohilkund and Kumaon railway system.	Burma (state).	XLIIL  Eastern Bengal (state), including the Kaunia- Dharila (2' 6" gauge) branch.	XXXIX. South Indian.	XXXVI, Southern Mahratta railway system.	XXXV.  Rajputana- Malwa.	XXXIII.  Bengal and North- Western railway System.	XXVI, · ne Nizam's uaranteed State way system.	XX.
_==						•					
} 3	tst half .	0.7 <u>7</u> 0.77	1°60 1'24	1*34 1*30	1*58 1*09	0'77 0'70	1°15 1°14	0'98 0'71	o*68 o*54	3'13	2*33 2*34
) } :	ist half .	4'81 4'17	0 78 3 51	6·8a 7°05	3°01 4°37	4.64 4.76	4*19 3*33	2'77 3'21	1'01 0'93	13.89	5°76 6°23
} :	ist half	***	4°08 1'63	, , , , , , , , , , , , , , , , , , ,	12.14		411	9°08 8°20	1.88	(a) 61°12 (a) 53°24	
) } :	ist half .	184·30 183·15	201'68 153'16	295°23 235'85	157°90 145°56	244°89 241°39	181°03 187°12	245'55 214'67	254'87 210'25	(b) 203'41 (b) 188'78	264*79 267*34
} .	ist half .	189'88 188'09	208°14	303'37 244'20	- 174°66 163°84	250°30 246°85	186.37	258'38 226'79	258'44 213'29	281°55 258'80	272'88 275'91
, } .	ist half	o.e8 o.88	0.08 0.08	o'66 o'73	1'20 Y06	0°45 0°49	1,11	1.26	o'91 o'63	2,22 3,22	2.04 3.12
						•					
4	ıst half .	199,561 181,706	183,966 214,380	805,421 804,504	525,724 478,400	724,210 728,036	565,977 <b>52</b> 0,889	1,510,595	652,52 <b>3</b> 697,711	274,659 259,285	855,015 923,613
} 4	ıst half . )	232,709 203,954	26,666 143,883	1,346,507 1,357,726	509,520 477,699	1,565,213	616,665 575,153	1,417,350 1,436,144	569,087 634,409	257,256 252,742	986,915 976,058
4	ist half . )		191,844 189,461	;:• •:1	596,829 626,267	***	***	934,474 883,912	319,122 328,492	1,110,490	··· ,
} 4	ist half .	1,612,802 1,408,684	1,139,095 1,296,489	7,670,915 6,995,967	3,641,852 3,485,055	9,596,884 9,931,206	5,001,133 5,065,067	13,833,716 13,539,062	6,276,715 6,159,204	1,238,992	5,138,850 5,341,064
•	ıst half .	88,715 90,348	155,590 138,483	570,838 564,814	625,121 451,831	1,727,778 1,702,683	413,071 433,740	1,206,544 1,094,736	219,967 ° 202,054	229,187 202,726	755,633 697,505
4	ist half . }	409,857 353,804	123,040 123,624	857,280 830,359	390,794 <b>.</b> 385,481	137,944 161,486	1,088,615	2,679,882 2,767,680	627,486 686,183	327,169 . 317,523	,372,725 ,384,119
4	ist half .	2,543,644 2,238,496	1,820,201 2,106,320	11,250,961 10,553,370	6,289,840 5,994,733	13,752,029 14,048,516	7,684,861 7,714,981	21,582,561 21,299,081	8,664,900 8,708,053	2,198,761 2,271,268	0,109,138 0,322,359
		·									
4	ist half .	1°41 1°40	2,30 3,33	1*84 1*82	1°62 1°50	0,08 1,03	1°09 1'04	1'4t 1'51	2*0 <b>6</b> 1*85	2°54 2°27	1°36 1°44
} :	ist half .	1.64 1.27	0°32 1°53	· 3°07 3°07	· 1*57 1*49	2°05	1°15	1,38	1.80 1.80	2.32 3.32	1°57
5	ist half .	***	2°31 2°02	***	. 1*84 1*96	:::	***	o'87 o'85	0.87	10,52	110
} :	ist half .	11,32	13'73 13'82	15.83	11.30 11.30	13°46 13°34	10,03 3,68	12 <b>'</b> 94 12 <b>'</b> 99	19*84 16*35	10.86	9.80 9.80
} !	ist half .	0.20 0.20	1.87 1.48	1°30 1°28	1*92 1*41	2°42 2°38	o:86 o:86	1,02	o'70 o'54	2*11 1'79	1,31
} !	ist half . ]	2'89 2'73	1*48 1*32	1°96 - t°88	1,31 1,30	0,13 0,13	2'11 2'23	2°51 2°66	1'98 1'82	3*00 2*78	3,10 3,18
} s	ist half . 2nd ,, .	17'91 17'26	21'93 22'46	25.68 23.88	19'35 18'46	19*29	14*87	20°19 20°44	27*39 23*12	10.31 30.32	· 16.13 16.14
		ma0 -							•		
5	Ist half	5*87 5*75	. 19'46 14'85	9°50	13,38	8*34 8*42	11.80	9'50 6'20	6·77 6·13	16,83 16,18	17.29 16.42
- 5	ist half .	15°27	31.19 38,31	11,03	12*80 13'82	8·37 9·12	16.45 12.20	12°88 12°60	5.60 2.61	24°04 24°43	19°35 21°78
5	ist half	***	3'23	***	20 <sup>-</sup> 11 19 <sup>-</sup> 66	••• •••	***	31'18 29'00	8'90 8'87	54'53	.411
} s	ist half	44°64 46'38	32'22 24'65	50*57 44*69	35'44 33'58	36°19	*43'56 41'17	37°95 33°05	28'90 25.72	47'03	44*11 44*07
	1st half	66°02 45°60	41°50 50°18	32 <b>·82</b> 27 <b>·4</b> 4	30°55 37°92	10°23 12°04	20.23 20.23	43*44 46*55	58*86 - 54*91	51'12 39'25	64°21 73°49

# APPENDIX STATISTICS OF INDIAN

1							<u> </u>			STANDAR
			STATE	LINES WOR		STATE LINE	WORKED BY	тне Ѕтате.	Lines	COMPANI
	Headings.	1892.	· l.	11.	III.	1X,	XI.	XII.	XVIII. Great	XIX.
	•		East Indian railway system.	Bengal- Nágpur.	Indian Midland rail way system.	North Western (state) rail- way excluding military lines.	Oudh and Rohilkhand (state).	Eastern Bengal (state).	Indian Peninsula railway system.	Bombay, Bard and Centra India.
	COACHING TRAFFIC-contd.		•			,				
	VEHICLES AND VEHICLE-MILEAGE —concld.		-		•					
l	Carrying capacity hauled one mile (excluding brakes)—	τst half	41,188,160	4,080,840	10,462,227	29,637,839	16,726,623	8,825,804	39,050,102	12,639,4
	ist class Seats	2nd ,, 1st half	39,800,645 78,092,732	5,303,733 6,217,578		128,791,454 46,742,782	20,629,321	8,846,674	41,714,897 94,122,033	13,139,5
ļ	2nd 3,	2nd ,	76,866,351	7,942,758	11,983,571	41,366,224	20,654,261	11,802,692	99,978,205 (a)	44,882,
١	3rd or intermediate class »	ıst half	144,258,041		(a)48,284,002	55,543,356	26,841,743	69,735,240	90,937,650	,
ŀ	4th or lowest ,, ,, (	2nd ,,	129,748,218		(a)49,175,318	60,503,616	28,018,735	69,896,340	\$9,056,050 (8)	51,431,
l	4th or lowest ,, ,, ,,	and ,,			(b)116,139,340	695,392,770	268,921,729	245,316,630 243,917,580	;16,833,350 (b)	'''
	Other vehicles	ıst half	52,029,521		(8) 109,088,460 2,189,628	704,134,799 25,202,139	286,217,516 14,687,834.	6,981,969	505,274,250 7,807,158	
	Percentage of freight upon capacity	2nd ,,	47,552,110	447,621	2,059,740	27,359,112	14,304,396	6,313,032	7,058,330	2,476,
ŀ	ist class Per cent }	ist half	7'99 8'66	3°26		8.60 7.72	6'00 5'16	10'62 7'74	8,00	
	2nd ,, ,,	ist half	12'72			20'49 20'12	10'35 14'34	14'55 16'54	17.00 16.60	
	3rd or intermediate class "	ist half	18.31			24'55 22'92	9°75 8°69	17'58 17'34	(a)37'00 (a)35'91	5
,	4th or lowest 30 30	ist half	37.24	33.81	(6)40'43	39°28 32°97	47'09 37'26	31 °02 29 °03	(b)44*70 (b)40*80	4
	Other vehicles . ,,	ist half	1	78.62	30,55	11,10	5'8 <sub>5</sub> 5'37	8.75	44*85	7
1	WEIGHT OF TRAIN AND TON-MILE-			32 30	30 03	13 10	- 33/	7 30	4. 30	6.
	AGE-Gross ton-mileage of all coaching		ļ			ļ		i		
	freight Ton-miles. {	ıst half 2nd ,,	37,858,451 35,737,972			21,023,339	8,881,008 7,641,806	6,144,303 5,673,566	21,014,266 18,917,716	
	Dead weight , ,,	ıst halí and "	465,202,993 450,761,282	56,242,811	80,279,903	342,421,580 345,748,480	120,812,304 128,517,653	98,489,447	343,004,912 351,025,667	131,779
	Total ,	ist half and "		59,617,229	84,963,476 83,088,516	363,444,919 364,981,742	129,693,312 136,159,459	104,633,750	364,019,178 369,943,383	143,559
1	Average weight of a coaching train-		1	<del>-                                   </del>	-3,,5	3-4,3-1,4-			375 10,0	
	Freight Tons	ıst half 20d "	17.35			14'46 13'13	17°52 13°10	10.88 11.80	12'55 10'82	
	Dead weight ,,	ist half	213'16 209'40			235'56 236'00	238°28 220°30	190*12 187*82	204'81 200'79	204
5	Total ,	ıst half 2nd "	230'51	337°26 314°55		250°02 249°13	255'80 233'40	201'98 198'70	217'36	222
	Cost of Working and Profit-	·	\	<u> </u>	<del></del>	<u> </u>	<u> </u>	·		
	Average cost of hauling a coach- ing train one mile	rst half	0.85	1.80		7745	****	****		
	Average cost of hauling a coach- ing vehicle with its load one	2nd ,,	0.00	2*03	1.72	1'45 1'51	1'06 1'24	0'98	1°32 1'66	
	mile	ist half 2nd ,,	10,68			18.66 19.41	12°06	17.99 12.60	20'09 26'42	2
٠	Per passenger unit . Pies	ist half	o 60 o 68			1'21 1'46	0'70 1'13	1°37	1,58	
,	Other traffic per ton , ,,	ist half	6·55 6·27	0.00	12:00	15.64	12'13 15'26	27.09	16.46	
•	Average profit on working a coaching train one mile . R	ist half and ,,	3'03 2'77	1.64	1.79	1.66	2'92 1'74	23'45 1'42 1'65'	1'47 0'79	· .
	Average profit on working a coach- ing vehicle one mile— 1st class . Pies	1st half 2nd ,,	1		1	-5'23	2'30	-2'63	-6.31	
3	2nd ,, , ,,	st half	1 7/1	—9°46	-4'75	<b>−7</b> ′93	-4·82	1'04 3'37	-12'74 -1'60	
4	and or intermediate class	{ 2nd ,, { 1st half	18'98	-13.85	-0.01	-2·8 <sub>5</sub>	-0'37 0'88	3'39	-8.10	1
5	4th or lowest	2nd ,,	23.25	-9.8	(a)18.01	1.96	<del>-4</del> '53	18.62	(a)35'37 (a)27'42	5,
	,	2nd ,,	40'2	9.8	(6)28'47	31°50 24'10	51°05 36°40	31,18 38,32	(b)34°05 (b)22'81	· 45
6	Other vehicles ,,	Ist half	33'I! 35'4			18.05 24.42	21°35	9°07 9°66	30.03	55

<sup>(</sup>a) Third class by mail trains.

<sup>(</sup>b) Third class by other than mail trains.

# RAILWAYS-(Part II) -continued.

GAUGE.	.	1 -	<u>-</u>	<del></del>	METRE G			30th June a		== 	T	=
RANTEED	LINES OWNED BY NATIVE STATE AND WORKED BY COMPANY.	STATE L	INES WORKEI	BY COMPAN		STATE LINES		Assisted Company.	LINE OWNED AND WORKED BY NATIVE STATE.	_	mber,	
xx	XXVI. The Nizam's Guaranteed	XXXIII. Bengal and	XXXV.	XXXVI. Southern Mahratta	XXXIX.	XLIII.  Eastern Bengal (state), includ- ing the Kaunia-	XLIV.	XLVII.  Rohilkund and Kumaon	LIV. Bhávnagar- Gondal-	1892.	Progressive number,	
Madras.	State railway system.	North-Western railway system.	Malwa.	railway system.	Indian.	Dharlla (2' o" gauge) branch,	(state).	railway system.	Junágarh- Porbandar.		Prog	_
10,655,631 10,007,976	3,317,408 3,330,210	8,503,810 9,177,306	15,966,989 16,674,672	5,617,528 5,240,842	9,547,474 9,680,799	6,453,n80 5,735,470	9,313,685 9,779,220	2,207,592 2,572,560	2,593,253 2,334,795	ıst half	Ì,	δı
33,062,506 19,700,290	4,406,308 4,330,566	8,418,570 9,345,772	17,716,875	9,257,538 8,714,644	32,266,552 31,260,115	6,114,234 5,732,388	29,220,120 25,709,835	319,992 1,726,596	4,630,465 3,985,606	ist half . 2nd , .	}	62
***	,	7,020,684	23,399,229			14,473,016	•••	4,877,584	***	ist half .	3	63
	67,399,835	7,883,808	22,133,156	•		15,140,816	•••	3,991,408	***	2nd , .	)	-
337,112,277	}	191,900,533	450,810,526	192,778,721	320,009,021	117,202,876	244,785,877	36,177,720	54,238,850	ist balf .	1 6	64
323,774,728	2 255 282	191,138,468	5,127,812	185,268,985	330,016,167 5,380,624	112,156,862	234,925,802 2,715,901	40,376,336 426,278	47,175,065 295,424	ıst balf .	12	٤.
3,768,588 2,706,926	2,255,980 2,057,604	579,737 506,501	5,407,996	1,067,000	5,091,614	1,178,255	2,703,516	385,218	317,509	2nd ,, ,	3	65
13.67 14.98	10'22 9'24	2'51 2'21	6°57 4°47	10.00 10.00	5°73 5°40	7'96 6'07	6'32 5'90	6'01 4'52	4°25 4°28	1st half	<b>}</b> .	66
10'92 20'21	34°11 36°82	3.80 3.72	18.66	23°36 19°16	10°27 11°33	16'01 24'39	10,50 15,11	20°25 19°05	14°77 13°58	ist half .	}	67
	)	8·46 .	41'51 38'61	•		27'34 27'08	***	6'94 3'84		ist haif .	}	68
49 <b>'22</b> 52'79	36'94	42'01 41'43	58·23 50·93	. 48°52 50°69	54°57 54°47	43'79 41'52	52'83 44'37	46'26 35'57	48°27 50°36	ist half .	}	69
33'95 51'34	12*24 8*75	49 55 47 01	· 32'54 25'96	51*48 52'31	5'93 7'22	24°18 28°68	10.62 11,63	18'57 23'97	42 29 27 75	ist half .	}	70
i .												_
11,669,074	2,147,956 1,995,395	5,207,065 5,073,067	18,344,747 15,681,533	6,403,783 6,383,547	11,116,019	3,838,214 3,524,357	7,345,816 6,882,940	1,122,106 · 1,001,259	1,761,403 1,566,814	ist half .	}	71
124,073,516	27,294,061 28,849,083	51,472,186 53,871,703	130,913,891	69,618,446 69,605,243	99,025,7 <b>7</b> 7 101,448,129	40,120,241 37,841,524	66,642,848 66,116,698	12,032,771 13,919,013	17,936,919	ıst half .	}	72
135,742,590 138,179,935	29,442,017 30,844,478	- <del></del>	149,258,638	76,022,229 75,988,790	110,141,796 112,936,232	43,958,455 41,365,881	73,988,664 73,000,638	13,154,877	19,698,822	4st half .	}	 73
18°62 18°95	19'85	16·46 13·47	17°16 15°05	12'39 12'72	15°59 15°43	11'81 11'02	, 16·77 15·58	13,25	12'40 12'08	ıst half .	}	74
198-01	252,33 2,43	162'72 143'04	122.45	134°75 138'70	r38·88 136·23	123'42 118'30	152°14 149°61	145'00 148'42	126'27 123'41	ıst half . 2nd ,, .	}	75
1.63 216.13	272'07 270'42	179'18	139.61	147'14 151'42	154'47 151'66	135'23 129'32	168,01	158'52	138·67 134·49	ist half .	}	<i>7</i> 6
!					-				1'96	rst half .	,	
1.63 1.63	1.80	(c) 0.83 0.83	0'99 0'81	1,21	1°51 1°40	0'93	1°35 1°72	1'09 1'32	2'02	and , .	ζ.	7 <del>7</del>
22°38	19,9g	(c) 6·26 8·70	10'65 8'81	22'04 22'09	15'19 14'37	11*32 10*45	10°89 14°99	10'19 12'01	<b>24'</b> 99 <b>26'7</b> 0	ist half ,	}	78
1°04 -1°03	1'05	(c) 0.60 0.84	o'56 o'78	1.26 1.43	0.8e	1°06 1'07	o·80 1°27	0'69 1'47	1'90 1'97	ist half .	}	79
13'29 11'81	19'72 22'94	(c) 5'33 8'05	6·95	15°39 14°91	77*28 62*69	16.64 11.60	22°67 • 26°32	15'43 19'26	17'72 25'35	ist half	}	Sa
1'31 1'37	2°23 1°54	(c) 2°54 ! 53	2'30 1'77	1.01	1*31 1*40	1.42	3'77 2'43	2°10 1°30	1°0 <b>7</b> 0'92	rst half . 2nd ,, .	}	81
-4'79 -5'47	-0.48 -2.50	(c) 0'51 —2'57	o'69 —4'45	—12°24 —9°47•	6·85 5·95	2°06 0°20	—1°18 —5'49	9°27 2°84	-20,02 -10,13	ist half .		82
3°03 0°44,	4.08	(c) -0.62	4°07 1°95	-7.62 -6.23	-6·82 -5·25	1'48 3'37	—3°07	18'12 19'15	-13.13 -13.13	isthalf .	<b>'</b>   <b>'</b>	81
411	1)	(c) 2.64 0.12	22°37.		411	8°79 9°21	•••	6·83 —8·78	***	ist half	}	84
21 73 21 85	34'57	(e) 22.64 17.02	29°14 22°40	19'52 19'08	21'19	24°12 23°13	39°68 39°70	22'03 12'64	19'68 19'65	ist half.	}	85
41'83 51'27	31.16	(¢) 52'60 46'21	34.63 35.80	35'59 34'43	-4·96	19°23 27'47	21'93 . 12'45	31°31 38°17	18'90 18'03	ist half	1	86

#### APPENDIX STATISTICS OF INDIAN

ı	l		<u> </u>		· · · ·		<del></del>			STANDARI
ěť.	•			NES WORKE MPANIES.	D BY	STATE LINES	WORKED BY	THE STATE.	LINES WO	RKED BY GU Comp
Progressive number.	Headings.	1892.	I. East Indian railway system,	II, Bengal- Nágpur.	III. Indian Midland railway system.	IX. North West- ern (state) railway ex- cluding mili- tary lines.	XI. Oudh and Rohilkhand (state).	XII. Eastern Bengal (state).	XVIII. Great Indian Peninsula railway system.	XIX. Bombay, Baroda and Central India.
-	COACHING TRAFFIC-concid.					,				
87	Cost of Working and Profit —concld.  Average profit on working a coaching unit one mile—  Per passenger unit . Pies {	ist half and ,,	2°12 2°06	0'92 0'33 28'13	1°59 0°95	1,32 1,13	1°96 1°55	1*40 1*79 22*15	I'40 0'84	1'7a 1'19 22'06
83	Other traffic per ton ,, {	and "	25*to 23*o8	30,35	21*54 16114	19,42	24.71	26.88	#1'43 16'50	18'85
89	GOODS TRAFFIC.  GROSS RECEIPTS AND TRAIN-MILEAGE—  Receipts from goods traffic	ıst half 2nd ,, ıst half	a 1,87,79,786 1,44,91,564 3,177,839	30,51,864 15,69,643 630,470	17,94,844 10,70,869 545,172	88,07,469 61,56,018 2,250,034	27,92,331 16,20,461 775,036	11,56,180 32,35,810 336,685	2,03,54,577 1,09,05,299 4,002,686	62,60,695 30,38,450 823,103
90	Goods train-miles run No. {	2nd ,, 1st half	2,591,661	466,495	328,515	1,719,845	573,567	582,120	2,359,950	403,424
91	Average goods receipts per train-mile R	2nd ,,	5'91 5'59	3'24	3,30	3.28	3.60 2.83	3'43. 5'56	5'09 4'65	7.61 7.53
92 93	Units and Unit-MILEAGE— Tons of goods carried one mileTon-miles  Average sum received for carrying a ton one mile	ist half and ,, ist half and ,,	519,686,491	70,488,995 42,234,580 8°31 6°86	52,875,256 30,509,762 6'52 6'74	312,294,057 ,186,334,927 5'42 6'34	95,914,972 50,279,934 5°59 6°19	31,679,953 65,887,285 7'01 9'43	474,932,679 261,091,558 8'23 8'06	158,930,688 73,548,279 7°56 7°93
94	Average number of tons in a train Tons	ıst half	Į.	111'80	96'99 92'87	138·80 108·34	123'76 87'66	94*09 113*18	119,62	193°09
95 96	VEHICLES AND VEHICLE-MILEAGE—  Number of goods vehicles hauled one mile— Loaded Vehicle-miles {  Empty	ıst half 2nd ,, ıst half 2nd ,,	57,252,243 28,237,313 22,793,839	8,763,162 5,500,009 5,115,041 3,284,485	8,133,483 5,509,088 5,494,216 2,787,270	42,108,886 29,058,647 15,235,922 8,077,242	16,305,291 9,820,380 6,730,715 3,326,669	5,852,355 11,206,764 1,965,177 6,360,563	62,189,790 37,988,244 29,578,193 14,274,535	23,499,445 12,224,065 8,828,363 2,796,804
97	Brake-vans ,, {	rst half and ,,	2,586,708 1,991,743	879,059 751,297	891,737 566,231	2,787,271 2,227,607	1,191,285 887,293	328,249 578,350	7,712,465 4,495,160	730,011 329,897
98	Total , ,	tst half and ,,	110,362,390 82,037,825	14,757,262 9,535,791	14,519,436 8,862,589	60,132,073 39,363,496	24,227,291	8,145,781 18,145,677	99,480,448 56,757,939	33,057,819 15,350,766
99	Average number of vehicles on a goods train—Freight vehicles No. {	ist half and ,,	30.89	22'or 18'83	25°00 25°25	25'49 21'59	29°72 22'92	23 <b>'</b> 22 30'18	22'15 22'92	39°23 37°23
00	Brake-yans	ist half and "	0.11	1.91	1.23 1.23	1.30	1.22	0.88 0.84	1'93 1'93	o*89 o*82
01	Total , . , ,	ıst half 2nd "	34°72 31°66	23'40 20'44	26·63 26·97	26'73 22'89	31°26 24°47	24'19 31'17	24'85 '24'05	40°16 38°05
102	Average earnings per goods vehicle per mile (excluding brakes) Pies	rst half and ,,	33.46 34.76	42°22 33°00	25.29 24.78	29'49 31'83	23*27 23*67	28*40 35*37	42'59 40'28	37°18 38'84
Log	Carrying capacity hauled one mile (excluding brakes)	ıst hali		ı	147,397,210	577,659,584	233,907,028 134,214,289	76,874,369 172,930,986	992,326,698 565,208,677	340,378,001
104	Percentage of freight upon capa- city hauled	ist half	53'25	44°54 41°91	35.87	54.06	41'01	41'21	47.86	153,819,298 46.69
105	Average load of a goods vehicle (including both loaded and empty) . Tons	ist half and	54°21 6°27 6°49	. 5°08 4'81	33.98 3.68	47 '62 5'45 ' 5'02	. 37'46 4'16 3'82	38·10 38·10	46'19 5'18	47'81 -4'92 4'90
105	Average load of a loaded goods vehicle	ist half	8·50 9·08	8·04 7·68	6·50 5·54	7'42 6'41	2,13 2,88	5'41 5'88	7.64 6.87	6·76
	Weight of Train and Ton-mileage— Gross ton-mileage of all goods trains—		-		•		•	-		
107	Freight	ist haj	676,197,888 519,686,491	70,488,995 42,234,580	52,875,256 30,509,762	312,294,057 186,334,927	95,914,972 50,279,934	31,679,953 65,887,285	474,932,679 261,091,558	158,930,688 73,548,279
108	Dead-weight . , ,,	1st half 2nd ,,	818,096,369 616,346,591	160,412,730 111,258,574	138,268,776 85,140,119	574,846,508 386,767,241	194,980,793 120,175,596	71,983,286 151,938,383	894,476,698 516,38 <b>3</b> ,070	°249,584,671 116,688,625
109	Total , ,	1st hal	f 1,491,294,257 1,136,033,082	230,901,725	191,144,032	887,140,565	290,895,765 170,455,530	103,663,239	1,369,409,377	408,515,359 90,236,904

# RAILWAYS-(Part II) -continued.

18	_		<del></del>		•	Ε,	TRE GAUGI	ME	•		1	AUGE.
nber,			LINE OWNED AND WORKED BY NATIVE STATE.	Assisted COM-	WORKED BY	STATE LINES THE ST			NES WORKED	STATE LI	LINE OWNED BY NATIVE STATE AND WORKED BY COMPANY,	ANTEED
Progressive number,	•	1892.	LIV. Bhávnagar- Gondal- Junégarh- Porbandar,	XLVII. Rohilkund and Kumaon railway system.	XLIV. Burma (state),	XLIII.  Eastern Bengal (state) including the Kaunia-Dharlla (2' 6" gauge) branch.	South Indian.	XXXVI. Southern Mahratta railway system.	XXXV. Rajputana- Malwa.	XXXIII.  Bengal and North- Western railway system.	XXVI. The Nizam's Guaranteed State railway system.	XX. Madras.
} ;		ıst half	0.94	1.84	2'30	1'66	1'04	o·88	1'56	(a)1°75	1,31	0'74
「 ` } ፡	-	end ,,,	o*86 29*16	66.12	1°85 42` 1	1'67 32'14	1'10 21'88	0°90 28°65	1°34 24°46	(a)39°75	1°00 22°69 21°24	0°76 24°63 25°07
		2nd ,,	ž1*40	55,88	21.28	39.00	-6.87	29.01	27.10	38'54		
} 1	:	ıst haif 2nd ,,	5,12,610 ,2,11,348	2,77,999 1,78,894	18,64,317 10,25,465	9,88,719°	16,09,283 17,38,436	15,80,297 15,87,207	94,57,558 61,09,524	15,46,254 9,74,301	9,52,946 8,74,802	28,13,648 28,77,064
} ,		ıst half 2nd "	146,618 74,481	125,224 86,957	576,696 447,700	411,135 - <b>4</b> 26,244	868,352 951,573	713,104 662,850	2,896,613 1,747,587	549,567 387,758	206,079 173,936	618,522 635,242
· •	_:	ist half and ,,	3.20 2.84	2°22 2'06	3,53	2°40 3'32	1.82 1.83	2·39	3°27 3°50	2'81 2'51	4°62 5'03	4.22 4.23
2		ıst half 2nd ,,	8,571,848 4,874,154	7,626,820 4,766,771	51,348,9c0 31,509,659	24,324,629 27,758,114	42,029,318 45,042,056	39,432,828 37,025,327	278,626,342 171,222,303	49,073,734* 36,302,733	24,807,857 22,453,880	64,863,833 66,833,402
- 9		ıst half and "	11'48 8'33	7'00 7'21	6 <sup>,</sup> 97 6 <sup>,</sup> 25	7*80 9:80	7.35 7.41	7.69 8.53	6·52 6·85	6'05 5'15	7.18	8·33 8·27
- 9	: }	ıst half 2nd ,,	58·46 65·44	• бо•91 54*83	89°04 70°38	59°16 65°12	48'40 47'33	\$5.86 \$2,30	96°19 97°97	93.63 89.53	120°37 129°09	104'87
		ıst half	2,639,161	Y 000 005	, , , , , , , , , , , , , , , , , , , ,				#0.100 #E0	• 10,053,685	3,429,249	10,729,275
- g		and ,,	1,067,729	782.423	11,477,867 8,000,887 5,586,583	8,127,979 8,613,832	10,711,313	10,304,843 9,836,816	50,490,562 33,144,958	6,653,715 4,113,517	2,458,582 1,864,712	3,460,296
<b>-</b> 9		and ,,	549,489 89,533	675,599	5,003,285	2,645,840 = 2,748,832	3,814,338 4;933,122	3,249,5€0 2,976,775	16,080,946 8,567,208	2,580,337	1,478,540	3,077,498
9	-   - -	2nd ,,	37,108	123,041	1,080,683 805,488	448,267 458,745	545,847 620,527	974,574 898,976	2,948,742 1,720,291	853,578 <b>7</b> 02,665	234,797	1,205,466
9	. ]	ist half and "	3,796,423 1,814,217	2,9°4,771 2,254,913	18,145,133 13,809,660	11,222,086 11,821,409	15,071,498	14,528,977	69,520,250 43,432,457	15,020,780 9,936,717	5,570,686 4,171,919	15,392,813 15,130,746
99		ist half and "	25°28 · 23°86	22'22 24'51	29*59 29*05	26*20 26'66	16.73 17.26	19'01 19'33	22.98 23.87	25'78 23'82	25.70 22.64	22°94 21'93
- 100		ist half	o.20	0'98 1'42	1*87 1*80	1'09 1'07	o 63 o 65	1°36 1°36	1,05 0,08	1,22	1,32	1.82 1.82
tol	: }	ist half and ,,	25 <sup>-89</sup>	23°20 25°93	31'46 30'85	27·29 27·73	17.36	20°37 20°69	24°00 24°85	27'33 25'63	27°03 23°99	24.89 23.83
· [02	: }	1st half 2nd ,,	26°55 22°83	10.11	. 20'98 15'15	17.62 23.95	21'27 20'32	22'39 23'78	27'28 28'12	20'96 20'26	34'56 42'66	38°07 · 39°65
103	:}	ıst half		19,024,934 22,330,735		59,608,088 62,231,350	88,736,840 100,337,107	82,413,983 77,910,278	470,279,587 270,164,976	94,005,297 72,787,846	58,497,865 41,373,105	153,829,730 1 <b>5</b> 1,231,124
104	: }	ıst half 2nd ,,	42°12 50°05	40'09 21'35	48 79 40'85	40'81 44'60	47*36 44*89	47 <sup>-85</sup> 47 <sup>-52</sup>	59°25 63°38	52'20 49'87	42'41 54'27	42'17 44'19
105	: }	ıst half 2nd "	2'31 2'74	2°74 2°24	3°01 2'42	2°26 2°44	2'89 2'74	2'91 2'89	4'10 4'19	3'46 3'93	4'69 5'70	4°57 4°80
106	: }	ist half and ,,	3'25	3.51	4'47 3'94	2'99 3'22	3,85 3,85	3.83 3.46	5°52 5°17	4*88 5'46	7'23 9'13	6.10 6.02
		ıs <b>t half</b>	8,571,848	7,626,820	51,348,900	24,324,629	42,029,318			•		•
- 10 <b>7</b> - 10 <b>8</b>	T,	and ,, ist half	4,874,154 16,998,232	4,766,771 14,636,462	31,509,659	27,758,114	43,042,056 45,042,056 89,609,634	39,432,828 37,025,327 79,470,243	278,626,342 171,222,303	49,073,724 36,302,733	24,807,857 22,453,856	64,863,833 66,833,402
108	-	2nd ,,		11,092,537	68,116,455	55,050,483	100,219,535	73,857,608	390,863,581 236,723,415	70,943,314 47,845,347	48,819,506 38,005,934	143,605,743 138,365,378
109	:	tst half and ,,	25,570,080 13,134,291	22,263,262 15,859,308	144,593,110 99,626,114	75,423,001 82,808,597	131,638,952	118,903,071 110,882,935	669,489,923 407,945,718	120,017,038 84,148,080	73,627,363 60,459,820	208,469,576 205,198,780

# APPENDIX

_		•		<u> </u>						STANDAR
mber.				NES WORKE MPANIES.	D BY	STATE LINE	WORKED BY	THE STATE.	LINES WORE	CED BY GUA
e n	Headings.	1892.	l.	II.	m,	1Xı	XI.	XII.	XVIII.	XIX.
Progressive number.	•		East Indian railway system.	Bengal- Nágpur.	Indian Midland railway system.	North Western (state) railway excluding military lines.	Oudh and Rohilkhand (state).	Eastern Bengal (state),	Great Indian Peninsula railway system.	Bombay, Baroda and Cen- tral India.
	GOODS TRAFFIC—concld.		·							
	WEIGHT OF TRAIN AND TON-MILEAGE—concid									
10	Average weight of a goods train—  Freight	ıst hali	212'79	111'80	<b>96</b> '99	138'80 108'34	123'75	94,00	118'65	193109
11		and ,, ist half	200°52 257°44	90°53 254°43	92·87 253·62	255.48	87 66 251 58	313.80 113.18	223'47	182'31 303'22
**	Dead-weight ,, {	2nd ,,	237'82	238,20	259.17	224'89	209'53	261.01	218.81	289'25
12	Total , ,, {	ıst half and "	470'23 438'34	366'23 329'03	350°61 352°94	394.58 333,53	375°33 297°19	307.89 374'19	342*12 329*45	496'31 471'56
	Cost of Working and Profit—					-				
13	Average cost of hauling a goods train one mile	ıst halí 2nd "	1'74 1'75	1°95 2°12	1,30 5,20	2.03 3.03	1°56 1°58	2°16 1°84	2*07 2*59	2'94 3'69
14	Average cost of hauling a goods vehicle	ıst half 2nd ,,		17'03 21'61	14'62	17'26 17'96	10°07	17*87	17.37	14'38
15	with its load one mile								22'46	10.01
154	(vis., one ton) one mile	ist half and "	1.24	3'35 4'49	3°77 3°77	3°58	2'42 3'47	4'41 3'12	3°36 4°50	3.93 3.03
	mile, including interest on capital ex- pended on open line at the rate of	ıst half		8.38	8-42	6'49	5.63	9:45	5:57	5,00
16	5 per cent, per annum	and "	4°13 4°17	2°89	1,36	8'44 1'62	8°37 2'04	6°43 1°27	7°95 3°02	7°44 4°67
17	one mile	and ,, st half	3'84	25'19	10.64	1.26	1.52	3'72 10'53	25'22	3'84 22'80
	cle with its load one mile	2nd ,,	23.89	11,30	5.81	13'87	10'41	23.68	17.82	19.80
18	Average profit on working a goods unit (vis., one ton) one mile ,, {	ıst half 2nd "	3·76 3·68	4°96 2°37	2°75	2.10 3.22	3'17	6.31 5.60	4.87 3.26	4°64 4°04
	•		•							
	DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE.			-						
	Percentage on Total Earnings-						[			1
19	Coaching traffic Percent.	rst half 2nd ,,	30°55 34°67	15°56 23°12	35'98 - 43'80	33°26	39'91 49'91	50'14 28'21	18.21 27.78	27 <b>'</b> 96 40 <b>'</b> 65
120	Goods traffic	ıst half 2nd ,,	67'77 63'54	78*11 69:37	59.88 51.46	64.89 59.06	55'17 46'54	39°38	80°69	70*14
31	Sundries, including telegraph	ıst half	1'55	6.33	4'14	1.85	4'92	5.68	0.80	57°13
	Steam-boat earnings	and " ist half	0.13	7'51	4.74	1'64	3'55	1'96 4'80	1.30	3.22
27	Steant-poat earnings , , , , , ,	2nd ,,	0.12	***	′		•	3'23		
	Тотаl . " {	1st half and "	100	100	100	100	100	100	100	. 100
				_						
_	Percentage of Working Expenses upon Total Earnings—	ıst half		10*66	10'99	16.02	10*18	o. 18	9.24	10'36
23	Maintenance Per cent. {	2nd ,, 1st half	8.02	19'31	16.24 20.18	13'77 21'06	15.04	5.42	15'98	13.47
24	Locomotive expenses . , , {	2nd ,,	9'35	17.81	31.89	21'93	13.89	9.00	21.40	12.02
25	Carriage and wagon expenses , ,, {	rst half 2nd ,,	2'49 2'53	2'37 4'07	3.26 2.26	5'38 4'64	3°19 4°17	4'38 3'83	4.33 6.33	4*29 8*29
26	Traffic expenses {	ist half and ,,	5'35 6'06	6·66 9·53	11,18	7'53 10'10	6·56 8·98	12.88 9.88	6.31 6.31	5'09 7'12
27	General charges	ıst half 2nd "	3°26 3°93	7'62 13'76	<i>Ī</i> *74 11*56	3*53 4'37	4'07 5'64	6'45 4'01	2'64 4'29	3.61 4.80
28	Miscellaneous expenses , , , {	1st half 2nd ,,	1,20 1,80	1.64 1,50	4°15 5'98	1'20 1'12	0.81	7.81	2'42	1.82
29	Steam-boat expenses , .	tst halí 2nd "	0°18 0'14	 		0'27		2°27 5'15	1'92	1.89
-	,					0.00		3.63		
30	TOTAL WORKING EXPENSES . ,,	ıst half 2nd "	28'40 30'12	42'07 65'77	54°13 72°44	55°02 56°02	35,81	58.20	42'46	38-15

#### RAILWAYS-(Part II) -continued.

Half-years ended the 30th June and the 31st December 1892.

GAUGE.		<del></del>		M	ETRE GA			John Jun	e and the 31st	December	1092
IIES.	LINE OWNED BY NATIVE STATE AND WORKED BY COMPANY.	STATE L	INES WORKED	BY COMPANI	es.	STATE LINES V	VORKED BY ATE,	Assisted Com- PANY.	LINE OWNED AND WORKED BY NATIVE STATE.		mber.
XX. Madras.	XXVI. The Nizam's Guaranteed State railway system.	XXXIII.  Bengal and North- Western railway system.	XXXV. Rajputana- Malwa.	XXXVI. Southern Mahratta railway system.	XXXIX. South Indian.	XLIII. Eastern Bengal (state), including the Kaunia- Dharlia (2'0" gauge) branch,	XLIV.  Burma (state).	XLVII. Rohilkund and Kumaon railway system.	LIV. Bhávnagare Gondal- Junágarh- Porbandar.	1892.	Progressive number.
				,				<u> </u> 			
104.87	120'37 129'09	89*29 '93*62	96°19 97'97	55*30 55*86	48'40 47'33	59°16 65°12	89 <sup>.</sup> 04 <b>7</b> 0 <sup>.</sup> 38	60 <b>'</b> 91 54'82	58°46 65°44	ist half	} 110
232°17 217'81	236·90 218·51	129:09 123:39	134 <b>°</b> 94 135°46	111'44 111'42	103°20 105°32	124'28 129'15	161.69 152.12	1:6:88	115'94 110 <b>'</b> 90	ist half .	} 12
337'04 323'02	357°27 347°60	218·38 217·01	231'13 233'43	166°74 167°28	151.60 152.65	183*44 194*27	250°73 222°53	177*79	174'40 176'34	1st half .	} ::
2'53 2'42	2'36 2'54	(a)!*01 · · · · · · · · · · · · · · · · · · ·	1'34 1'61	1.81 1.64	1*48 1*40	1,42 1,41	2'00 2'00	1'23 1'52	2°46 2°65	rst half .	} 11
21°17 21°16		(a)7°52 10°78	11°22 12'94	16'59 16'30	17'02 15'63	10°63 10°16	12°97 15°29	10'52	18.68 21.32	tst half .	11
4'63 4'41		(a)2'17 2'74	2*68 3*15	6°29 5°74	5·88 5·79	4'71 4'16	** 4'31 6'31	3.84 5.31	8·o8 7·77	ist half .	} 11
10°00		(a)4'91 6'59	4°51 5°83	14°57 14°34	10'71 10'39	0,10 10,00	8·13	7°75 10'44	13'49 15'03	ist half	} 11
2'02 2'11		(a)1*80 1*17	1.03 1.89	0'41 0'72	0°37 0°43	1,81 0,82	1'23 —0'02	1°00 0°54	1°04 • 0°19	rst half	} 11
16.91 18.48		(a)13'44 9'48	15'18 16'06	4'09 7'19	4°25 4°69	6·99 13·79	8.01 0,14	8·67 4°23	7 <sup>.8</sup> 7	rst half	} 11
3'70 3'86	3.61 3.40	(a)3.88 2.41	3.84 3.40	1'40 2'49	1°47 1°71	3'09 5'64	2·66 —0·06	3°16 1'90	3'40 0'56	1st half . 2nd ,, .	}
38·80 39·22	30'07	36'36 42'86	25°59 30°61	44°96 44°07	(b)54°74 53°29	44°30 33°09	53°73 62°67	41'95 50'53	44°47 62°43	ist half .	} 11
59'29 58'96	65.72	52'71 44'48	72 <b>.1</b> 0 65.02	52.61 54.03	(b)43.83 44.46	48·42 56·93	44 <b>*</b> 65 35*06	44'11 36'79	53°01 34'58	ist half	) } 12
1'91 1'82	4'21	3'44 4'16	1'71 4'34	2°43 1°90	(b) 1'43 2'25	1*48	1°45 1°89	13°94 12'68	2°52 2°99	rst half .	} 12
•••		7*49 8·50			***	5'8o 8'46	0*17 0*38	141		1st half .	} 12
100	100	100	100	100	100 100	100	100	100	100	ist half .	
14'18		6:69	6.64	17.30	21.69	12'98	11'97 20'81	8.87	33'17	1st half .	} 12
15.08	13.20	7'91 10'36	8°19 17'83 18'26	15°12 23°98 21°44	23°46 24°25	10°64 9°82	14°64 18°46	11'19 12'46 13'87	31°96 13'67 16'31	rst half .	} 12
18:96	3'92	[2:31	3,12	6°02 4°40	3.12 9.24	2'99 2'26	2°82 4°41	2'82 4'68	2°42 3°42	st half	} 12
4°36 9°03 8°51	7'73	7*10 8*98	5,00.		8·85 8·53	10°37 8°36	8:39 12:36	9152 14.85	9'02	1st half .	1
5'71 5'52	9'52	6·36 8·99	4°34 6°35	12'57	7.49 8 o7	5*90 4*27	4°64 6°36	9'90 13'78	8'93 12'41	tst half	  } 12
. 1.38 1.14	0.64	(a) 0'90 2'41	0'54 0'65	• 1°06	0,20 0,20	· 4'55 0'75	o*72 o*86	- 8'15 6'76	1*32 2'86	rst half	} 12
		3 <sup>82</sup> 4 <sup>77</sup>				6°72 6°61	o'65	***		rst half .	} 12
- 56'33 54'50		35.09 49.19	38·16 44·95	72°28 65°26	65.83 62.21	54°15 44'33	43 <sup>.8</sup> 3 64 <sup>.</sup> 43	51°72 65°13	68'53 78'15	tst half	) } 13

(a) Excludes contribution to Provident Fund.
(b) Calculated on total earnings less the credit on account of Fire Insurance Fund repaid by the old company. This remark applies to all items calculated on the total earnings.

# APPENDIX STATISTICS OF INDIAN

WORKING

Half-years ended the 30th June and the 31st December 1892.

TABLE A .- MAINTENANCE OF WAY

	•		STATE LINES	WORKED BY	COMPANIES.	STATE LINES	WORKED B	Y THE STATE.	LINES WO
Progressive number.	HEADINGS.	1892.	I. East Indian railway system.	II. Bengal- Nagpur.	III. Indian Midiand railway system.	IX. North Western (state) railway execluding military lines.	XI. Outh and Rohil- khand (state).	XII, Eastern Bengal (state).	XVIII. Great Indian Peninsula railway system.
-	Mean age of lines on the 31st December 1892 . Years	•,,,	25'77	4'43	5'49	16.64	17:72	18.42	26.61
_	PER MILE OF LINE MAINTAINED.			. •	•				•
tα	General superintendence (including office expenses)	ıst half	146°33 148°58	109°45 111°59	108'04 109'85	113'00 113'00	118.33	163'70 146'74	149°29 151°12
2a	Maintenance and renewal of permanent-	and " ist half	747'30	220'81	245'73	598'24	451'!3	507'74	808-16
ļ	way	and ,, ist half	431°31 66°25	235°27 84°16	254 <b>*5</b> 6 39*78	321.26	477°83 24°02	424*29 77.06	822.54
30	Repairs of bridges, &c ,	2nd ,,	47.30	73.91	34'13	125'(1	47'32	84:70	167.98
140	Conservancy of rivers ,, $\left\{ \right.$	ist half		***		25°30 13°53	7.87 7.87	0°60 2°30	***
54	Repairs of stations and buildings ,, {	ist half	8 <sub>7</sub> ·92 87·94	59°24 46'40	24.85 26.38	136·58 11 <b>5</b> ·74	48°24 33°00	125.76 176.57	210°97
60	Other charges (net) , ,	ist half and;	104°48 125'58	27°11 38°62	30'11 35'14	314'84 138'31	84·31 73·38	-154°10 -126°20	346·59 418·70
70	Total maintenance, &c ,,	ıst half	1,152°28 840°61	500'77 505'49	448 51 460 06	1,281°07 823°21	743'90 756'28	720°76 708°40	1,619:23
-	PER MILE OF TRACK, INCLUDING SIDINGS.	\				<del>-</del>	- <del>-</del> -		
316	General superintendence (including office expenses)	rst half		97.64	95'92	91.92	103.21	117.68	100'75
320	Maintenance and renewal of permanent-	and "	98°68 491°40	99`54	97'21	88.60 486.68	391.23	365.03	101°70
	way	2nd ,,	286.46	209.87	. 225'26	261'46	414.65	300*12	553'55
33 <i>b</i>	Repairs of bridges, &c ,	st half 2nd ,,	43°57 31°35	75°07 65°66	35,35 30,50	75°75	20'85 41'06	55°40 59°91	137.8
346	Conservancy of rivers ,,	ist half				11,01	15.20 6.83	0°43 1°63	
350	Repairs of stations and buildings ,,	st half	57'81 56'40	52'85	22.06	111,111	41'87 28'64	90°41 124'80	74.8
	Other charges (net) ,,	and ,, st half 200 ,,	1	41'39 24'18 34'45	23'34 26'74 31'11	94°11 256°13 112°45	73'17	. —110'78 —89'27	64'05 233'90 281'78
374	Total maintenance, &c ,,	st half	757'71 558'29	446°71 450°91	398°20 407°12	1,042'17 669'36	645·62 656·29	518'16 501'08	1,092'73 1,114'12
	PER TOTAL TRAIN-MILE.								
31	General superintendence (including office expenses)	st half	o*76 o*90	1'80 2'24	1°42 1°92	o.83	1'02 1'12	1°14 0'79	· 0.63
32	Maintenance and renewal of permanent-	st half	3'90	3'64	3'24	4.40	3.90	3.22	3'40
	way , , ]	and ,, st half	2.61 0.35	4'73 1'39	4.46 0.23	2'82 0'68	4.28 0.51	2'30 0'54	4.77 0.86
33	Repairs of bridges, &c ,,	2nd ,,	0.33	1.48	0.60	1,10	0*45	0'46	0.03
340	Conservancy of rivers	st half				0,13	0.12	· 0.01	
<b>3</b> 5¢	Repairs of stations and buildings , , ,	st half	0°46 0°53	0.08	0°33 0°46	1'00 1'01	0'42 0'31	o:88 o:96	0'40 0'55
36¢	Other charges (net)	rst half	1	0.44	0'39 0'61	2°31 1°21	0°73 0°70	-0.08 -0.08	1'40
370	Total maintenance, &c ,,	ist half and "	6°02 5'08	8:25- 10:15	5*91	9*41	6·43 7·34	5*04 3*84	6.8
_	PER 1,000 GROSS TON-MILES.	<del>                                     </del>		<del></del>		·  <del></del>		-	<del></del>
31 <i>d</i>	General superintendence (including office expenses)	f ist half	f 0'13 '	0'31	0*29	0'16	0.10	0'29	0*1
32 <i>d</i>	Maintenance and renewal of permanent-	2nd ,,	0'16	0'43	0'41	0,50	0,30	0.12	0'2
	way , ,	{ rst half { 2nd ,,	0°65 0°48	0,03	0'65	0.60	0.14 1.08	0,20	0.6
33 <i>d</i>	Repairs of bridges, &c ,	{ ist half	f 0°06 0'0 <b>5</b>	0°24 0°28	0,13		0°04 0°11	0°14 0°10	0°1,
34 <i>d</i>	Conservancy of rivers ,,	ist hal	( ·	,	·	0.03	0,03	***	
1354	Repairs of stations and buildings ,,	f 1st hal		0'17	0.07	0.10	. 0.08	0.33	
36 2	Other charges (net)	} 2nd " ∫ ist hal	0°09,	0.08	0.08	1	0'07	0'20 0'28	1
J	, , , , , , , , , , , , , , , , , , ,	2nd "		0.12	0,13			-0'15	
	1	f 1st hal	1	1	1	1.72	1	Ī	1.3

A-continued.

### RAILWAYS-(Part II)-continued.

EXPENSES.

WORKS AND STATIONS.

AUGE.	•				]	METRE GA	UGE.	•	<del></del>		.	1.
ORKED SY		Line owned by Native State and worked by Company.	- STATE LINE	S WORKED	ву Сомра	N 183,	STATE LINE		Assisted COM-	LINE OWNED AND WORKED BY NATIVE STATE,		umber,
XIX. Bombay, Baroda and Cen-	XX. Madras.	XXVI. The Nizam's Guaranteed State	XXXIII.  Bengaland North- Western railway	XXXV. Raj- putana-	XXXVI. Southern Mahratta railway	South Indian.	XLIII Eastern Bengal (state), including the Kaunia Dharl-	XLIV. Burma (state).	XLVII. Rohil- khand and Kumaon railway	LIV. Bhávnagar- Gondal- Junágarh-	1892.	Progressive number,
tral India.		railway system.	system.	Malwa.	system.	<del>:</del>	branch,		system.	Porbandar.		Δ.
26-34	28.70	9.66	7.01	13'30	6'25	12'39	992	7.01	5.69	8.54	***	-
205'71 206'94	160,38 120,38	117.66 128.98	70'39 66'60	91'02 94'21	84°05 85°65	115°03 112°74	120'36 110'30	118*53 14*042	41 38 73 99	76'03 72'80	ist half. 2nd., .	} 13
839·32 637·28·	398°08 430'97	356.99 402.38	133'38	267°22 255°13	169°32 150°96	527'37 332'32	392.88 353.13	376'13 554'50	136 63	753°08 452°20	ist half .	} 13
478°56 328°39	111'67	41*46 32*54	10.03	15'38	29°11° 30'17	16°18 26°95	38.88	68:87 54'94	8.62 6.83	59°10 -4°03	ist half .	} 13
		0.02	4'30 3'30				<sub>0</sub> *34	21'38 1'59	32'97 0'92		ıst half . 2nd ,, .	) } ::
99°59 95°77	113'81	29°57 15°63	25°11 24°43	39 32 30'39	32.38 22.38	36*42 18*28	48·52 63·68	68.01 41.11	18°26	21 °01 29 °26	ist half .	h.
334.69 334.69	27.60 65.83	32,03 ga.00	17.72 29.52	82°12 33°34	57.75 31.36	55.21 11.51	-99°16 -47°60	102158 53155	-16'41 17'70	65*08 43*08	ıst half . 2nd ,, .	1
1,957.87 1,518.67	801°54 929'49	605'77 615'20	260°92 300°44	495 o6 440 o4	373'17	750°51	501'48 577'85	755'50 848'11	221'47	974'30 593'31	ist half .	} 13
152'64 153'53	125'12 133'74	106.31	_ <b>62*6</b> 5 59*25	79°48 82°18	76 <sup>-</sup> 73 78 <sup>-</sup> 15	103'63	95.08 103.81	100'04 119'97	36 98 60 12	68 o6 65 27	ıst half .	) } 13
622°76 472°83	731°23 358°10	324°37 365°56	118.71	233'33 232'54	154'59 137'75	· 475'12		317'45 473'75	122'10 93'97	674°21 405°46	ıst half .	<b>,</b>
355 <b>.0</b> 8 243.64	92°92 136°65	37.67 29.55	8°91	13'42 23'52	26°58 27°53	14.28	33*53	58'13 46'94	7.71	-3.01 -3.01	ist half .	<b>)</b>
::-			3°82 3°44	***			. 0.30	18 04 1 <b>3</b> 6	29'48 0'84		ist half . 2nd ,, .	) }.
73.89 71.06	94°69	26·86	22'35 21'74	34'33 26'51	30°08 20°42	32-81 16'48	41.85	57°40 33°13	16'32 9'87 •	18'81 26'24	ist half .	, } ,
248°34 185°70	22'96 51'70	154*60 32*35	15'77 26'2 <b>6</b>	71.72 29.07	52°73 28°02	10,11 20.00	85'52	86·59 47·46	-14.91 -14.91	58·27 38·63	ist half .	} ;
1,452'71	666 <sup>-</sup> 92 77 <sup>2</sup> -34		232'21	432°28 383°82	340*71 292'47	676·14 452·29		637.65 724.61	197'92 192'71	872°26 531°99	ist half	} 1
1'05	• 1'62	2'10	0.08	0.64	. 1*51	1.54	1*38	1.24	0.80	1.39	ist half	1
1°46 4°31	1.70	2,23	1.02	0.88	1.63 3.02	5.67	1,52	1 81 3 92	1'65 2'63	13.78	ist half	ĥ.
. 4,48	4'54 1'20	7.84	2°47 0°14	2.22	2.88	3*49 0*17	4'00	7°16 0'72	2°35 0°16	11.71	2nd ,, .   Ist•half ,	) }
3,31	1*73		0'32 0'06	0'27	0'57	oʻ28		0'71 0'22	0'15	-0.10	and ,, ast half	
 0.21	1.53		o*06	0'28	o'59	0.39	0.26	· 0'02	0.03	0.39	ıst half .	ľi.
0'67 1'72	1,13	0.30	0 39 0 24 0 47	0'31	0°43 1°04 0°59	0,15 0,19	-1'14	0 53 1 07 0 71	0'25 —3'31 u'40	1,11 1,10 0,10	and ,, , ist half .	ĺ.
1°76 10°05 10°08	8·64 9'79	10'81	3'62 4'76	3'48	6.10	8:06	5'76	7°88 10'94	4°29 4°82	17.83	ıst half	-
0,14	0'36		0.30	0,10	0.60	• 0'50	0'53	0,36	0.50	0'55	ist half .	}
0°29	0,40	0,49	0'35	0'30	o*63	0'49 2'31	0'47	0.58 1.14	0.08 0.00	oʻ78 5ʻ50	رر and. • sthalf	,
0'90 0'41	1.02		0.82	0.80	1'12	1'43	1,20	2'31 0'21	0.86 0.06	4' <sup>8</sup> 9 0'43	and ,, . Ist half	. 5
0.46	0'40	0,12	0'11	80.0	0*22	0.12	o*42	0°23 0°06	0°06 °	-0'04	and ,, . ust half .	{  }
	····	0.10	0'02 0'11	0,00	0'23	0:16	0.33	0.3 <i>j</i> 0.01	0.13	o.12	and ,, . ist half .	1
0'09 0'14	0.52	0.00	0'13	0°10	0°17	0.07	0°27 —0°44	. 0'17 0'31	0'09 -0'12	0°32 0°48	and ,, .	,
°0,32 0,38	0'07 0'16		0.16	0,10	0'24	0.02	0.30	0.53	0'15	0'46	2nd ,,	\ -
1'67 2'14	1.92	2'06 2'36	1,11	1.08	2.65 2.38	3.70 3.50	2,19 3,19	2°29 3°53	1'58	7°11 6°41	ist half . 2nd ,, .	}

# APPENDIX STATISTICS OF INDIAN

WORKING.

Half-years ended the 30th June and the 31st December 1892.

TABLE B.-LOCOMOTIVE

			<u> </u>			<del>, -</del>			STANDARD
<u> </u>			STATE LINI	Es WORKED B	Y COMPANIES.	STATE LINE	S WORKED I	BY THE STATE.	LINE
Progressive number.	HEADINGS.	1892.	1. East	11.	III.	IX. North West- ern (state)	XI. Oudh and	XII.	XVIII.
Progres			Indian railway system.	Bengal- Nagpur.	Indian Midland railway system.	railway ex- cluding mili- tary lines.	Rohil- khand (state).	Eastern Bengal (state).	Great Indiar Peninsula railway system.
. <b>†</b>	Average price of fuel coal	ıst half 2nd ,,	2°10 2°04	7.68 ·	12.02 11.01	13'80 12'87	9°20 9°59	5'52 6'08	11.86
	per ton in terms of wood	ıst hali 2nd ,,	 			***	•••		
	PER TOTAL TRAIN-MILE.								
1 <u>3</u> 8 <i>a</i>	General superintendence (including office expenses). Annas {	ist half and ,,	0.63	1°04 1°23	0'73 0'90	0°77 0°94	o:64 o:68	o.48 o.ço	0°49 0°67
1394	Running expenses . , , , , }	ist half and ,, ist half	1.42	2'43 2'53 1'66	2'14	2°17 • 2°34	0'92 1'00	1,21	2°62 2°86
1404	Fuelt , , , , , ,	2nd "	0°77 0°73	0'27	4*54 4*00	5'01 4'41 0'18	2°70 2°63 0°00	1.88 2.22	3.83 3.83
1414	Water , {	and ,,	0'12	0.23	0'44	0.18	. 0.10	0.12	0'30 0'30
1.124	Oil, tallow and other stores ,	2nd ,,	0°36 0°28	0.43	0'42 0'43	o'33 o'33	0'30 0'23	0'51 0'41	o-38 o-36
143 <i>a</i>	Maintenance and renewal of locomotives ,, {	rst half and ,,	2'04	1.67	1.76	2°47 2°06	1,11	1°75 1°29	2'17 2'42
143A (a)	Maintenance and renewal of machinery, tools and plant . , , , }	1st half 2nd ,,	0°12 0°07	0°23 0°21	0°10	0.31 0.50	0,13 0,10	0'23 0'14	0.18 0.14
1 444	Other charges (net) , . {	ist half and,,	1°19 1°19	2°31 1°48	1°37 0°85	0.03	1'10 0'74	0'06 0'14	2°36 2°48
1454	Total locomotive expenses ,, {	ist half and ,,	6·66 7'18	9,3g 10,13	10.86	12,32	7'01 6'69	7°00 6°34	13.11
t	Fuel consumed in terms of	ıst half 2nd "	50.30	57'56 46'47	52'71 48'18	50°85 47°96	41'04 38'31	. 47'72 51'16	45'80 45'11
_	(wood ,, {	ıst hålf 2nd ,, .		*** .	•••	*** .	* ***	•••	
	PER ENGINE-MILE.				-				
138 <i>b</i>	General superintendence (including office expenses)	rst half 2nd ,,	0°52 0°59	0.03	o·68 o·83	o'6g o'83	0°54 0°57	0'47 0'39	0°43 8
1398 ,	Running expenses ,, {	rst half 2nd ,,	1'50 1'66	2·19 2·27	1'97 2'19	1'95 2'06	oʻ78 oʻ84	1,40 1,40	2'33 2'52
1408	Fuelt	ıst half 2nd ,,	o.63	1°49 1°10	4°18 3°69	3.80 3.80	3,31 3,38	1°48 1°79	3.44 3.37
1416	Water ,, {	rst half 2nd ,,	0,11	0'24 0'25	0*31 0*40	0.1 <b>0</b> 0.1 <b>0</b>	o*o8 o*o8	0,11 0,12	0°27 0°28
1428	Oil, tallow and other stores , , ,	ıst half 2nd ,,	0'31 0'24	0°47 0′38	0*38 0*40	0°29	0:20 0:26	0'40 0'33	0'34 0'31
1436	Maintenance and renewal of locomotives ,, {	ist half and ,,	1'49 1'74	1'51 1'77	1,63	2°22 1°82	1'04 0'93	. 1°38	1'92
143A (6)	Maintenance and renewal of machinery, tools and plant	ıst haif 2nd ,,	0,00 0,10	0,10 0,51	0°04 0°10	o*27 o*28	0,11 0,08	0.11	2'13 0'15
1446	Other charges (net)	ist half and ,,	1,11	2.08	0'78	1,05 0,81	0'93 0'62	0,01	2'19 2'09 2'15
1458	Total locomotive expenses , ,, {	1st half 2nd ,,	5.68 6.14	9°12 8°39	10,03	11'11 10'14	5'93 5'62	5.21 2.21	10°97 11°54
	[coal lbs. {	ıst half	44'62	51'78	48·6o	45'70	, 34*70	37.61	40'63
†	Fuel consumed in terms of wood	and ,, ist half and ,,	42'89 	41.64 	44°50 	· 42°34	32'22	41'10	39.78

A-continued.

### RAILWAYS-(Part II) -continued.

EXPENSES—continued.

EXPENSES.

Bombay, Baroda and Cen- tral India.	AND WOS COMP.  XX. XX'  The Ni Guara State re system  12.85	STATE SKED BY NAV.  VI. izam's nteed ailway em.	STATE LINE  XXXIII.  Bengal and North- Western ra-lway system.  6.87 6.89  0.53 0.61 1.05 1.12 1.51 0.12	XXXV.  Raja putana- Malwa.  17'68 17'95  0'62 0'92 1'71 1'93 4'16	XXXVI. Southern Mahratta railway system.  14'49 13'02 0'87 0'92 1'46 1'44	JES.  XXXIX.  South Indian.  16.79 15.03  0.59 0.63	STATE LINE BY THE S  XI.III. Eastern Beoga' (state) includ- ing the Kaunia- Pharila (2' 6" gauge) branch.  *5.89 6.76 0.69 0.65		ASSISTED COM- COM- PANY.  XLVII. Rohil- khand-and Kumaon railway system.  6'43 5'76	LINE OWNED AND WORKED BY NATIVE STATE.  LIV. Bhávnagar- Gondal- Junágarh- Porbandar.  18.92 18.03	ist half .  ist half .  ist half .  int half .  ist half .	Progressive number,
Bombay, Baroda and Central India.  12'59 11'93  0'62 0'84 2'57 2'71 4'11 3'54 0'35 0'35 0'38 1'75 1'81	XX. XX. XX. The Ni Guarat State resystem 12.85 12.39 6	VI. izam's izam'	6.87 6.89  0.53 0.61 1.05 1.12	Rajz putana- Malwa. 17.68 17.95  	Southern Mahratta railway system.  14'49 13'02 0'87 0'92	South Indian.  16'79 15'03  0'59 0'63	Eastern Benga' (state) includ- ing the Kaumia- Kaumia- Tharlla (7 6" gauge) branch.  *5:89 6'76	Burma (state) .  16.28 11.57	Rohil- khand-and Kumaon railway system.	Bhávnagar- Gondal- Junágarh- Porbandar. 18.92 18.03 	ist half .  2nd ,, .  ist half .  2nd ,, .	} + .
0'62 0'84 2'57 2'71 4'11 3'54 0'35 0'31 0'35 0'38	0'74 1'0'72 1'2'33 2'33 2'32 2'4'25 2 0'19 0'16 0'28 0'28 0'28 0'28 2'72 2'45 2	*10 119 101 114 138 120 140 140 135	0'53 0'53 0'51 1'05 1'16 1'61	0.62 0.92 1.71	0.87 0.92	o*59 o*59	*5:89 6:76  		6.43 5.76	18:03  	and ,, .  1st half .  2nd ,, .	} + .
0'62 0'84 2'57 2'71 4'11 3'54 0'35 0'31 0'35 0'31	0'74 1'0'72 1'2'33 2'33 2'32 2'4'25 2 0'19 0'16 0'28 0'28 0'28 0'28 2'72 2'45 2	*10 119 101 114 138 120 140 140 135	0'53 0'53 0'51 1'05 1'16 1'61	0.62 0.92 1.71	0.87 0.92	o*59 o*59	6'76  		6.43 5.76	18:03  	and ,, .  1st half .  2nd ,, .	} + .
0'62 0'84 2'57 2'71 4'11 3'54 0'35 0'31 0'35 0'38 1'75 1'81	0'74 1'0'72 1' 2'33 2 2'32 2 4'31 4'25 2 0'19 0'16 0 0'28 0 0'28 0 2'72 2 2'45 2	'10 '19 '01 '14 '38 '20 '40 '40	1.01 1.02 1.02 1.02	0'62 0'92 1'71 1'93	o <sup>1</sup> 87 o <sup>1</sup> 92 1 <sup>1</sup> 46	o'59 o'63	0.69	. 1'04	5.76	0.83	2nd ,, .	)
0°84 2°57 2°71 4°11 3°54 0°35 0°31 0°35 1°75 1°81	0'72 1' 2'33 2' 2'32 2' 4'31 2' 4'25 2' 0'19 0'016 0 0'28 0 0'28 0 0'28 0 2'72 2'45 2	'19	1.21 1.02 1.13 -	0'92 1'71 1'93	0'92 1'46	o'63					ıst half .	
0'84 2'57 2'71 4'11 3'54 0'35 0'31 0'35 1'75 1'81	0'72 1' 2'33 2' 2'32 2' 4'31 2' 4'25 2' 0'19 0'016 0 0'28 0 0'28 0 0'28 0 2'72 2'45 2	'19	1.21 1.02 1.13 -	1'71 1'93	1'46	o'63	u 65	1'20	0.85	1'17		1
2.71 4°11 3°54 0°35 0°31 0°35 0°38 1°75 1°81	2'32 2 4'31 2 4'25 2 0'19 0'0'16 0 0'28 0 0'28 0 2'72 2 2'45 2	14 '38 '20 '40 '40	1.21 0 1.61 1.13	1,63			1.16	2,53	0.86	1'51	and ,, .  1st half .  2nd ,, .	
3'54 0'35 0'31 0'35' 0'38 1'75 1'81	4'25 2 0'19 0'16 0 0'28 0 0'28 0 2'72 2 2'45 2	'40 '40 '35	1.21		3,31	1'57	1'19	2°52 3'50	0'90 . 3'12	1°60 3'57		}
0°35 0°38 1°75 1°81	0'16 0 0'28 0 0'28 0 2'72 2 2'45 2	'40 '35	0.15	3'95	3'07	3.21	1 61	2.77 0.33	2.61	3.11	ist half . 2nd ,, . 1st half .	J 140
0°38 1°75 1°81	0'28 0 2'72 2 2'45 2	35 36	0'14	0°23 0'21	0°25 0°23	0,12	0,11	0,33	0.10	0.10	2nd ,, .	§ 141
1*81 0*14	2 45 2	17	0°23 0°23	0'22 0'20	0°18 0°21	0.26 0.29	0°31	0,41 0,41	0°24 0°25	0'19 0'20	ist half .	j-
	- ne 1	133 135	o'73 o'97	1°44 1°81	2°07 1°81	1°78 2°55	0'83 0'72	1°40 1°74	0°94	0.80 1.38	ist half . 2nd ,, .	1
· .		11.	<b>0</b> .00 <b>0</b> .01	0°03 0°07	0°17 0°18	0.03 0.03	0.03	o*07 o*08	0°05 0°06	6.00 0.10	rst half . 2nd ,, .	(a)
2.67		'30 '00	0,11 -0,01	0.03 0.41	1 '03 0 82	0.18 0.10	0°12 0°57	0.20 0.20	0.03	0.08	ist half . and ,, .	} 144 
		.97 .75	4°28 . 4°75	9°34 9°80	9°37 8°65	8·71 8·94	4'72 5'24	9 <sup>.</sup> 64 9 <sup>.</sup> 71 .	6°03 5'97	7.33	ist half .	145
	47°06 56 47°97 41	·61 ·80	32:83 30°75	32*94 30*79	31.96 31.96	33'14 32'71	33.67 33.33	30°11 33'57	- 200	26.44 23.36	ıst half . 2nd ,, .	} ,
		- 11		111	•••			* 117	63.44		ist half .	)
										.	· • • • • • • • • • • • • • • • • • • •	
o*56 o*76		'99 '05	. 0*45 0*51	ი:56 ი:8ა	o:79 o:83	0°51 0°54	· 0*59 0*55	o:89 1*02	oʻ56 oʻ72	o'78 1'11	ıst half . 2nd ,, .	
2°31 2°44	1,96 I	179 189	o·88 o·93	1'54 1'71	1,31 1,33	1,31	1,01	1°90 2°14	o.42 o.42	1'42 1'52	ıst half .	} 139
3.40 3.50	3.62 2	'13 '94	1'36 1'26	3.75 3.48	3'01 • 2'78	3 39 3 02	1,36	2*99 2*36	2°73 2°26	3°36 2°90	ıst half . 2nd ,, .	•
0.31	0,10	35 35	0'10 · 0'12	0,18 0,31	0'23 0'21	0°14 0°15	0.03 0.11	0.28	0°12 0°14	0°15 0°18	rst half .	} 141
0'31 0'34	0'23 0	32 32	0,10 0,50	o'20 o'18	0°17	0.53 0.50	0°24 0°27	0°39 0°43	0,5 <b>5</b>	. 0'17 0'19	ıst half . 2nd ,, .	ľ
1'57	2*29 2	09	0.62 0.80	1'30 1'60	1.88	1 51 2 20	0,41	1°20 1'48	0.81	0·84 1·32	ıst half . 2nd ,, .	l .
0°13 0°24	o 54 ° o	10	0.01	0.03	0,16	0'02 0'03	0'07	0,00 0,00	0°05	0'10 0'08	ist half .	Ι.
2'40 2'03	0'69 1	16	0'09	0 63 0 63	0°94 0°74	0'33 0'16	0'10 0'48	0°52 0°49	0.03	0°07 0°07	ıst half	ļ.
11'29	0,82 8.	'93 '62	3.62 3.95	8·43 8·64	8·53 7·85	7°44 7°70	4°04 4°43	8·23 8·26	5°25 '5°17	6·89 7·43	est half .	} 145
		•70 •60	27*77. 25*55	29'72 27'12	29'10 29'90	28·28 28·17	28'81 28'20	<sup>25</sup> '73 28'57		24*87 2 <b>2</b> *24	ist half .	)
		.			,,, ,,,			***	59'09 54'74	494	est half .	<b>\}</b> *

# APPENDIX STATISTICS OF INDIAN

WORKING.

Half-years ended the 30th June and the 31st December 1892.

TABLE B.-LOCOMOTIVE

						<del></del> .			STANDAR
Jer			STATE LIN	ES WORKED I	Y COMPANIES.	STATE LINE	S WORKED E	BY THE STATE.	LINI
Progressive number.	. Hkadings,	1892.	East Indian	ll.  Bengal- Nágpur.	III. Indian Midland railway system.	IX. North Western (state) railway excluding mili-	XI. Oudh and Robil- kband	XII.  Eastern Bengal (state).	XVIII. Great India Peninsula railway
<u> </u>		_ <del>-</del> _	system.			tary lines.	(state).	<del></del>	system.
, <b>†</b>	Average price of fuel coal	ıst half and "	2°10 2°04	4.04 3.68	12 05 11 61	13.80	9`20 9`59	5*52 6·08	. 11.86
•	per ton in terms of wood	ıst halt 2nd "	***		•••		•••	•	
	PÓD MORAL EDANA ANTE	 							
.8 <i>a</i>	PÊR TOTAL TRAIN-MILE.  General superintendence (including office expenses)	ıst halí		1.04	0.73	0.77	0'64	0.00	o'49
	1	and " est half	1.42	2'43	0'90	0°94 2°17	o*68 o*92	1.78	0'67 2'62
19 <i>1</i> 1	Running expenses	2nd ,, 1st half	0.77	2·53	2°37 4°54	• 2'34 5'01	1'00 2'70	1.21	3.88
tou	Fuelt	2nd ,, Ist half	0'73	0.52	4°00	4'41 0'18	2*63 0*09	2'22 0'19	3'82
414	Water	2nd ,, 1st half	0,13	0'29	0'44	0°18	0'10	0,12	0'32
†3 a	Oil, tallow and other stores ,, {	2nd ,,	0.58	0'43	0.43	0'33	0.30	0'51 0'41	o'38 o'36
43 <i>a</i>	Maintenance and renewal of locomotives ,, {	ist half and ,,	2'04	1'97	1.46	2.42	1,11	1'75 1'29	2·17 2·42
143A (a)	Maintenance and renewal of machinery, tools and plant . , , }	ist half	0°12 0°07	0.51	0,10	0,31 0,31	0.13	0'23 0'14	0.18 0.14
На	Other charges (net)	ist half and.,	1'19 1'30	2'31	1°37 0°85	0'92	0.4	0'06 0'14	2 36 2 48
454	Total locomotive expenses ,, {	ist half and "	6·66 7·18	9.36	10,82	11,40	7°01 6'69	7'00 6'34	13,11
t	Fuel consumed in coal !hs. }	ıst half 2nd "	52°27 50°20	57°56 46°47	52.71 48.18	50°85 47°96	38'31	. 47'72 51'16	45'11 45'80
	terms of wood	ıst hålf 2nd ,, .	:::	*** .	•••	•	***	112	. ***
	PER ENGINE-MILE.								· ,
38 <i>b</i>	General superintendence (including office expenses)	ıst half 2nd ,,	0°52 0°59	0,03	o'68 o'83	0.60 0.83	0°54 0°57	0'47 0'39	0'43 0'59
396 .	Running expenses ,, {	rst half 2nd ,,	1,20	2'19 2'27	1,04 1,04	1'95 2'06	0°78 0°84	1,40	2'33 2'52
top	Fuelt	ıst half 2nd "	o.63	1°49 1°10	4*18 3*69	4.21 3.89	3.31 3.38	1°48 1°79	3°44 3°37
41 <i>6</i>	Water , . , , ,	rst half and "	0'09 0'11	0°24 0°26	0°31 0°40	0,1Q 0,1Q	o.o8 o.o8	0,11 0,12	0'27 0'28
42 <i>6</i>	Oil, fallow and other stores , , {	ist half and "	0°31 0°24	0°47 0°38	o*38 o*40	0'29 0'29	0:20 0:26	0°40 0'33	0'34 0'31
43 <i>b</i>	Maintenance and renewal of locomotives ,, {	ist half and "	1'49 1'74	1.21 1.22	1'18	2'22 1'82	1°04 0°93	. 1'38	I'92
3A (6)	Maintenance and renewal of machinery, tools and plant	ıst half 2nd ,,	1	0,10	0°04 0°10	0°27 0°28	0,08 0,08	0.11 0.18	0.12 0.13
44 <i>b</i>	Other charges (net) ,, {	ıst half 2nd "	1,11	2.08	1°27 0°78	1°02 0'81	0'93 0'62	0'05 0'11	2'09 2'15
45 <i>b</i>	Total locomotive expenses ,, {	ıst half 2nd ,,	5.68 6.14	9·12 8·39	10'01 10'02	11,11	5°93 5°62	5°51 5°09	10'97
1	Fuel consumed in	rst half and ,,	44.62 42.89	51'78 41'64	48°60 44°50	45'70 · 42'34	. 34°70 32°22	37'61 41*10	40°63
•	terms of (wood	ıst half						<b>4</b>	39.78

A-continued.

### RAILWAYS-(Part II) -continued.

EXPENSES—continued.

EXPENSES.

EXPENSES	· ,						Hair-years	ended the	30011 June	and the 31st	Decembe	
GAUGE.		<u> </u>			ΛI	ETRE GA	UGE.					
WORKED BY		I INE OWNED BY NATIVE STATE AND WORKED BY COMPANY.	STATE LIN	ES WORKEI	э ву Сомра	jes.	STATE LIN	es worked State.	Assisted Com- Pany.	LINE OWNED AND WORKED BY NATIVE STATE.		ımber.
XIX.  Bombay, Baroda and Central India.	XX. Madras.	XXVI. The Nizam's Guaranteed State railway system.	XXXIII.  Bengal and North- Western railway system.	Raja putana- Malwa.	XXXVI. Southern Mahratta railway system.	South Indian.	XLIII. Eastern Bengat (state) including the Kaunia-Pharita (2'6" gauge) branch.	XLIV. Burma (state).	XLVII, Rohil- khand-and Kumaon railway system.	· LIV.  Bhávnagar- Gondal- Junágarh- Porbandar.	. 1892,	Progressive number.
12'59 11'93	12.82 13.82	5,88	6.87 6.83	17:68 17:68	14°49 13°02	16·79	5·89 6·76	16.52	***	18.03 18.03	ıst half	<b>\</b>
	• • • • • • • • • • • • • • • • • • • •	111	•••	:::	*		107	·••	6·43 5·76		ist half .	
o*63 o*84	0°74 0°72	1,10	oʻ53 oʻ61	0,83 0.23	0°87 0°92	o'59	0°65 0°65	1'04 1'20	0.65	0.83	1st half ,	1-
2.21 3.21	2,33 3,33	2'01 2'14	1,02 1,13	1,33	1'46 1'44	1.23	1,10	2.25 5.25	0.80 0.80	1°51	ist half .	1-
4'11 3'54	4'31 4'25	2,38 5,38	1.61 1.21	4'16 3'95	3°31 3°07	3°97 3°51	1 '42 1 '61	3,20 3,20	3.15	3°57 3°11	ist half .	1-
0,31 0,32	0.10 0.10	0'40 0'40	0'12 0'14	0°23 0°21	0°25 0°23	0'17 0'17	0,13	o,33 o,33	0°14 0°16	0,18 0,19	ist half .	} 1410
o.38	oʻ28 oʻ28	0'35 0'36	0"24 0'23	0.30 0.35	0.18 0.51	0°26 0°29	0°28 0°31	0°47 0°51	0°24 0°25	0°19 0°20	rst half .	} 142a
1.42 1.81	2,12 3,12	2·33 2·35	o*73 o*97	1°44 1°81	2°07 1°81	1 78 2 55	0'83 0'72	1.40 1.40	0°94 1°17	0.8d	ist half .	} 143a
0'14 0'27	0.64 0.66	0,11 0,10	0,00 0,01	0°03 0°07	0.18	0.03	0.08	0°07 0°08	0°05 0°06	6,08 0,10	ıst half .	} 143A (a)
2.67 2.25	0.85 0.44	1,30	-0,01 -0,01	0'93 0'71	1.03 0.85	o*38 o*19	0°12 0'57	0.20 0.20	0.03	o*o8 o*o7	ist half . and ,, .	
12'56	12'03 11'61	9°97 9°75	4'28 . 4'75	9°34 9°80	9°37 8°65	8·71 8·94	4'72 5'24	9.64 9.21	6°03 5'97	7.33	rst half .	} 1450
45'72 41'52	47°00 47°97	56 <sup>-</sup> 61 44 <sup>-</sup> 80	32:83 30'75	32'94 <b>30'7</b> 9	32.86 31.86	33°14 32°71	33.67 33.33	30'11 33'57	•••	26 <sup>.</sup> 44 23 <sup>.</sup> 36	ist half	1/
***	•••	•••		#4 <u>1</u> #4 f	•••	***		* ***	63,44 63,44	***	ist half and "	
,									, .		٠	
o'56 o 76	0.Q1	0'99	o'45 o'51	ი:56 ი:8ი	0.43 0.83	0°51 0°54	° 0.22	0·89 1'02	0°56 0°72	0.18	ıst half . 2nd ,, .	386
2'31 2'44	1,60 1,61	1'79 1'89	o'88 o'93	1.21 1.21	1,31	1,32	1.01	1 '90 2' 14	0°75 0°77	1'42 1'52	ist half .	396
3.70	3.65 3.60	2°13 1°94	1'36 1'26	3°75 3°48	3.01	3'39	1,30	2·36 2·36	2.12 3.26	3°36 2°96	ist half .	12
0°31 0°28	0°16 0°14	o'35 0'35	0°10 - 0°12	0,18 0,31	0'23	0°14 0°15	0,08	0°28 0°28	0°12 0°14	0.18 0.12	ist half .	<b> </b>
o'31 0'34	0°23 0°24	0'32 0'32	o*20 o*19	0'20 0'18	0,13	0,52	0°24 0°27	o.39 o.43	0'21	0,13 0,14	rst half	
1'57 1'64	2·29 2·08	2'09 2'08	0.62 0.80	1,30	1.88 1.65	1,21	0,21	1°20 1°48	0.81	0·84 1'32	ist half,	ı
0°13 0°24	0'54 0'56	0,10	0°01 • 0°05	0.03	0,10	0'02 0'02	0,04	o'o6 o'o	0'05	0.08	ist half .	
2'40 2'03	0.62 0.92	0.88	0,08	e*84 e*63	0°94 0°74	0,10	0°10 0°48	0°52 0°49	0'03	0°07 <b>0</b> °07	ist half .	<b>b</b> .
10,03	. 10°11 9°85	8°93 8°62	3.62 3.95	8'43 8'64	8.23 1.82	7°44 7°70	4'04 4'43	8·23 8·26	5.52	6°S9 7°43	ıst half . 2nd .	} 1456
41°11 37°49	39.49	50'70	27`77.	29.72	29'10 29'90	28°28 28°17	28°81 28°20	<sup>25</sup> .73 28.57		24.87 22.24	ıst half "	)
	40,20	39 <sup>.</sup> 60	25'55 	27.13	419			***	59.09	***	rst half .	+
	***	***		••••	· · · · · · · · · · · · · · · · · · ·	•				'* <b>`</b>	, ,	! <b>*</b>

# APPENDIX STATISTICS OF INDIAN

WORKING

Half-years ended the 30th June and the 31st December 1802,

TABLE B.-LOCOMOTIVE

	eyears ended the 30th June and the 31st Dece				····			Table B.—I	<del></del>
					<del> </del>	1		<u> </u>	STANDARD
nber.	•		STATE LIN	RS WORKED	BY COMPANIES.	STATE LINE	S WORKED	by the State.	Line:
/e nui	- HEADINGS.	1892.	1.	II.	III.	lX.	XI.	XII.	XVIII.
Progressive number.	•		East Indian railway system.	Bengal- Någpur.	Indian Midland railway system.	North Western (state) railway exc.uding mili- tary lines.	Robil-	Eastern Bengal (state).	Great Indian Peninsula railway system.
	PER 1,000 GROSS TON-MILES.					•		•	
138c	General superintendence (including office expenses)	ıst half 2nd "	010	0'18 0'23	0,12 0,12	0'14	0°12 0°16	0,10	0'15 0'10
139c	Running expenses	ıst halí 2nd "	0°29 0°35	0'42 0'49	0°43 0°50	0'40 0'50	0°18 0°24	0.46 0.32	0*54 0*64
140€	Fuel†	ıst halı 2nd ,,	0.13	0°29 0°24	0'01 0'\$5	0.03	0°51 0°62	0.48 - 0.48	o.80
1416	Water	rst half 2nd ,,	0°02	0.02	0'07 0'09	0°03 0°04	0°02 0°03	0'04 0'03	o:06 o'07
1420	Oil, tallow and other stores , . {	rst half and ,,	0.06	0,08 0,00	0.08 0.08	0°06 0°07	0.04	0°13 0°09	0°08 0°08
1430	Maintenance and renewal of locomotives ,, {	ıst half 2nd ,,	0°29 0°37	0'29 0'38	0°26 0°37	0'46 0'44	0°24 0°26	0°45 0°28	0'44 0'54
143A (c)	Maintenance and renewal of machinery, tools and plant	ıst half 2nd ,	i	0'04	0.05 0.05	0.02	0.03	ი'ინ ი'ივ	0'03
14 <u>1</u> ¢	Other charges (net) , , , , {	ıst halí 2nd "	0°20 0°24	0'40 0'2\$	0°28 0°18	0'21 0'20	0°21 0°17	0'02 ' 0'03	oʻ48 oʻ55
1450	Total locomotive expenses , . , , ,	ıst half 2nd ,,	1,11	1°76 1°80	2°19 2°29	2°28 2°45	1,34 1,28	1'79 1'36	2°53 2°93
	(coal lbs	ıst half	140.58	159.93	170.00	150.60	125'10	195*83	150.01
†	Fuel consumed in terms of wood , , , ,	end ,, est half and ,,	,	143'10	162'80	162.83	144*56	175'03.	161.20
	•		<del></del>	<del></del>					***
146a	PER TOTAL TRAIN-MILE.  General superintendence (including office					]		Tabie C	.—Carriage
	expenses) Annas {	est half and ,,	0°14 0′16	0°25 0°26	o¹25 o⁻35	. 0°20 0°20	0°14 0°16	0.31 0.31	0,12 0,12
1474	Repairs and renewals of coaching vehicles	ıst halí and "	0'34 0'40	0°22 0°37	0'84 1'10	0°96 1°∪2	o:81	0'80 1'17	0'96 1'27
148a	Repairs and renewals of goods vehicles ,, {	ıst half 2nd ,,	1.18	o.83	- 0°68 0°93	1°45 0°72	oʻ76 oʻ83	1°01 1°54	1°05 1'31
(n) 1184	Repairs and renewals of machinery, tools and plant , , , , , , , , , , ,	ıst half 2nd ,,	0.00	0'02 0'04	0°02 0°05	0,02	0°02 0°04	0'01 0'02	0'07 0'07
1494	Cleaning and oiling ,	ıst half and ,,	0'12 0'13	0'46 0'61	o.32	0°39 0°41	0°28 0°31	0°35 • 0°24	0°34 0°42
150#	Other charges (nct) , , , {	ıst hali 2nd ,,	0°01 0°02	0.08 0.08	0.01	0°10 0°03	o'o1 	-0.28 -0.28	0°43 0°53
1514	Total carriage and wag on expenses , , {	1st half 2nd ,,	2°05 1°95	1'83 •	2°13 2°77	3 <sup>-15</sup> 2'43	2'02 2'01	2'41 • 2'70	3.81
	PER 1,000 VEHICLE MILES RUN BY HOME VEHICLES.								
1468	General superintendence (including office expenses)	ıst halí 2nd "	0'33 0'37	0.38	0*59 	• o <u>*5</u> 5	0'23	1'25	0'54 . 0'80
1476	Repairs and renewals of coaching vehi-	1st half	2.83	2'36	0 88 1 99	6.01 8.02	6'57 6'57	6.80 2.16	14.08
1486	Repairs and renewals of goods vehi-	sst half	7.77	3'04 1'74	7'73 2'15	7"35 5'8t	4'79 1'50	9.65 7.09	13'40 4'99
148a (b)	Renairs and renewals of machinery, tools and plant	1st half	1	0.03	3'53	3.83	3°20	0°05	7'77 0'24
149b	Cleaning and oiling ,,	1st half	,	0.80	0'12	1'06	0*09	0°05.	0'27 1'21
150 <i>b</i>	Other charges (net)	ıst half	0.01 0.01	0.14	0'03 0'02	0°27 0°09	0,01 0,01 0,48	0°63 —0°45 —1°53	1,23
f#12	Total carriage and wagon expenses	ıst halí	-	<del></del>					
1516	Total carriage and wagon expenses	2 nd ,,	4.67	4°15	6.30 2,10	8·55 7·46	-3.50 2.50	7'1 <b>7</b>	10'75 14'47

.a) These two items are calculated respectively upon the coaching and goods vehicle mileage;

#### RAILWAYS-(Part II) -continued.

IXPENSES—continued.

EXPENSES - concluded.

Half-years ended the 30th June and the 31st December 1892.

1.14217		•	·						<del>_</del>			,
AUGE.		Line ownen by	<u> </u>	7		METRE	GAUGE. •		Ι.	LINEOWNED	}.	
ORKED BY	Y GUARAN-	NATIVE STATE AND WORKED BY COMPANY.	STATE LIE	ES WORKE	D BY COMPA	N195.	STATE LINES THE S		Assisted Com- Pany.	AND WORKED BY NATIVE STATE.		mber,
XIX. Bombay, Baroda and Cen- ral India.	XX. Madras	XXVI. The Nizam's Guaranteed State railway system.	XXXIII. Bengal and North- Western railway system.	Raj- putana- Malwa,	XXXVI. Southern Mahratta railway system.	XXXIX. South Indian.	XLIII. Enstern Ben- gal (state) in- cluding the Kaunia-Dharl- la(a o" gauge) branch.	XLIV. Burma (state).	XLVII, Rohil- khand and Kumaon railway system.	LIV. Bhávnagar- Gondal- Junágarh- Porbandar.	1892.	Progressive number,
			•				·			•		}
0'17 0'17	-0'17 0'1 <i>7</i>	0'22 0'23	0'1 <b>6</b> 0'21	0'19 0'29	• 0,32 0,32	0°24 ° 0°26	0°26 0°25	o:39 o:30	o'24 o'30	0'33 0'49	ist half . and ,, .	384
0°43 0'54	o*53 o*54	0°38 0'43	0°32 0°37	0,01 0,21	o.26 v.26	0°63 0°64	0'46 0'45	o:65 o:81	0°32 0°33	o.60 o.62	1st half .	396
o:69 o:71	0.08 0.08	o*45 o*43	0°49 0°51	1 '26 1 '24	1,10	1°62 1°44	0°55 0°60	1'02 0'89	0,7Q 1,12	1'43 1'29	ist half . 2nd ,	١,
0,0Q 0,0Q	0'04 0'04	o*07 o*08	0°04 0°05	0°07 0°07	0.00 0.10	0°07 0°07	0'05 0'04	0,11 0,10	0,0Q 0,02	o.08	ist half . 2nd ,,	1
0.08 0.06	0.00 0.00	0°07	0.04 0.08	0°07 0°06	0°08 0'07	0°11 0°12	0,11	0°13	0.00	o'07 o'08	1st half .	l
0°29 0°36	. 0'61 0'57	9'45 0'46	0'22 ° 0'32	0'44 0'57	0.82 0.41	0°72 1°05	0°32 0°27	0°40 0°56	0'34 0'43	o 36 o 58	ist half	l -
0°03	0'15 0'15	0°03	0°01	0,03	0°07 0°07	0.01	0'03	0°02 0'02	0°02 0°02	0°04 0°04	ıst half . 2nd ,	-  } 1424
0'44 0.45	0,18 0,18	0°25 0°19	0.03	o'28 o'22	6'40 0'32	o*16 o*08	0'04	0,18 0,18	0.01	0.03	ist half .	l
2'09 2'42	2.72	1'90 1'92	1,20 1,21	2·84 3·08	3'70 3'37	3.26 3.64	1'82 1'97	3.13 5.80	2'22 2'19	2·92 3·26	ist half .	} 1450
122°05 133°12	170°00 178°08	172'62 141'31	160°90 164°26	160°16 154-81	201.65 205.44	216.73	207'65	139.49		168:57 155:96	ıst half	17
··· .		 	•	**-	***	***	***		399'17 371'20		ist half and ,, .	} †
nd Wag	on Expe	nsos.									 	
oʻ26 oʻ40	0°23 0°17	0'31 0'36	0'19 0'20	0'15 0'21	0,30 0,58	0,10 0,10	0°37 0°30	0'20 0'28	0.38 0.33	0°27 0°39	ist half .	} 1464
0°73 1°49	o:\$9	1,32	o'36 o'38	0,42 0,81	0°94 0°66	0.63 1.03	0'4I 0'37	0.63 0.70	0.42 0.48	o:64 o:69	ıst half . 2nd ,, .	} 1474
2°12 3°15	1*66 0*94	o:95 o:85	0°49 0°70	0.83 0.62	o'89 o'57	0'49 - 1'10	o*38 o*29	0°52 0°79	0°37 0°50	0°22 •Q°28	ıst half . 2nd ,, .	} i484
o*19 o*28	o'45	0°05 0°04	0,01		0°02 0°02	***	0'01	0'07 <sup>®</sup> 0'04	0°03 0°04	 9`04	ist half .	ľ
0°34 0°38	0'41 0'40	0'40 0'35	0'19 0'21	o-32 o-38	0,31 0,31	0'18 0'19	0'22 0'23	0°38 0°49	0.33 0.33	0,18 0,19	ist half .	1494
o'52 o'87	0°26		, 0,01 , 0,05	0'07 0'09	0,01	0*01	-0°07	0,02 0,00	 o o 8	0.01 0.01	ist half . 2nd ,, .	} 1504
4°16 0°57	3'90	2'90	1'25	1.65	2°35 1°77	1'39 2'42	1,31	1'86 2'32	3,01 1,39	1'30	ist half .	} 1514
o*56 1*08	0-77 0-55	0°77 0°97	0°43 0°49	o*38 o*58	o'99 o'96	oʻ34 oʻ35	0'99 0'78	0'44 0'62	0,21 0,60	0°78 1°22	ıst half . 2nd ,, .	} 1468
7'18 10'83	6179	10 29 10 82	2'11	5°22 6'64	9'26 6'09	4.48	2°S8 2°80	3.21 3.63	3,36 4,10	4'54 3'95	rst half . 2nd ,, .	} 1474
5'75	4°45 9'56	3.10	1*84 3*51	2 27 3 14	4.69 3.03	3'25 6'84	1'56 1'16	1.83 3.12	1*64 2*49	1'04 1'94	ıst half . 2nd ,, .	} 148
13'33 0'41	5°33	3'41	0*03	0'02-	0.08		0'04 . 0'05	0,00	0,10	0'14	ist half . and ,, .	} :48 (6)
0'74 0'72	1,32	0'10	0'43	0.87	0'73 0'72	o'62 o'65	0'59 0'59	o'82	o'77 o'86	0°44 0°62	ist half .	1
1'02 1'11 2'34	0*85 0*63	0.95	0°54 0°03 0°07	0°19 0°27	0'02 0'04	-0.03 0.13	-0.18 0.03	0°12 0°08	0'22	0'13 0'13	tst half .	l
8.85 17.60	12.84	6°90 7°94	2*85 3*86	4,45	8·o8 5'97	4'78 8'26	3°49 3°18	3*99 5*26	3.76 2.76	3°70 5°15	ist half	} 151

all other items in the table being calculated upon the aggregate of both coaching and goods vehicle mileage.

#### APPENDIX STATISTICS OF INDIAN

WORKING
TABLE D.—

, i									STANDAR
١.			STATE LINES	WORKED BY	COMPANIES.	STATE LINES	WORKED BY	THE STATE.	Lin te
Progressive number.	· Headings.	1892.	I. East Indian railway system.	II. Bengal- Någpur.	III. Indian Midland railway system.	IX. North Western (state) railway excluding military lines.	XI.  Oudh and Rohilkhand (state).	XII. Eastern Bengal (state).	XVIII. Great Indian Peninsula railway system.
	PER TOTAL TRAIN-MILE.					:	į		
520	General superintendence (including office expenses)	ıst half 2nd "	0,03 0,03	o*79 o*96	o 66 o 86	• 0.21 • 0.21	0.0Q	0,81 0,81	0'41 0'57
3 <i>a</i>	Station staff	ıst half 2nd ,,	2,54 3,40	1.88 3.03	1'74 2'23	2'11 2'47	2'00 2'10	4'32 4'44	1°98
540	Train staff	rst half and ,,	0°84 0°87	o*65 o*73	0.67• 0.80	0°92 0°99	0'70 0'73	0°70 0°60	1°26 1'44
55a	Fuel, lighting, water, and general stores	ıst half 2nd "	0'34 0'33	0°45 0°56	o,28 o,38	0°44 0°59	0'35 0'47	o'64 o'55	0,10 0,10
56a	Clothing	ıst half 2nd ,,	0°05 0°04	-0.01 80.0°	0,03	0,13 0,03	0'0 <i>7</i> 0'02	o,02 o,08	0.03 0.03
57a	Printing, stationery and tickets ,,	rst half and ,,	0°17 0°17	0,43 0,43	0°24 0°28	o'19 o'23	oʻ23 oʻ25	0,31 0,58	0°16 0°24
58a	Charges for delivery and collection of goods, &c.	ıst hali 2nd.,,	0.01	***	***	0,01	0,01 0,01	0°10	0,01 0,01
59 <i>a</i>	Miscellaneous expenses ,	ıst half 2nd ,,	o o6	0.01 0.01	0'02 0'02	0,01 0,01	•	0.10 0.08	<b>⊕</b> '01 0'01
60 <i>a</i>	Payments to other lines ,	ıst half 2nd "	0.08	o.86	0'10 0'72	0,11 0,00	0'16 0'07	•••	0°05 0'06
51 <i>a</i>	Other charges (uct) ,	ıst half 2nd ,	0.01	0°02 0°03	. 0.01 0.01	0°04 0°04	0,01 0,01	···	0°17 0°17
62 <i>a</i>	Total traffic expenses , {	ıst half	4°43 4'66	5·16	3 <sup>.8</sup> 3 5 <sup>.54</sup>	4*42 5*28	4'14 4'32	7°08 - 6°96	4*41 5*60
	•	. <u></u>				ļ			
	PER CENT. ON TRAFFIC EARNINGS.					,			
52b	(Abstracts H and I of Revenue Accounts.) General superintendence (including office								0
-	expenses)†	ist half and ,,	0,03	1'09	1 26 1 82	1,92 1,02	1 '01 1 '42	1,31 1,31	0.28 0.22
53 <i>b</i>	Station staff , ,	ist half and ,,	3.18	2°59 4°16	3'38 4'72	3*66 4*79	3'33 <b>4'</b> 52	8·76 6·66	2'81 4'24
546 556	Train staff , , , , , Fuel, lighting, water, and general	ist half and ,,	1.12	0°90 1°50	1,20	. 1.05	1'17 1'58	1*44 0*90	1 79 2 43
"3"	stores	ist balf and ,,	0'42 0'44	0°62 1°16	0'75 1'25	0'78	0'58 1'00	1°30 0°82	o*55 o*83
56 <i>b</i>	Clothing	ist half and ,,	0.0Q	0.01 0.11	0'0f 0'0f	0°06 0°25	0,02 0,11	0°17 0°07	0°05
576 586	Printing, stationery and tickets ,,	ıst half 2nd ,,	0°21 0°22	0°57 0°63	° 0°47 0°60	0°33 0°45	0'39 0'54	0'57 0'46	0°22 0°40
000	Charges for delivery and collection of goods, &c	1st half 2nd ,,	0,01	***		***	0°02 0°03	0.12 0.00	0°01, 0°02
596	Miscellaneous expenses , , , {	ist half and ,,	0.02	0°01 0°02	0°04 0°05	0.03 0.01	***	o.12 o.19	0°01 0°02
50ð	Payments to other lines ,	ist half and ,,	0'12 0'10	1'19 0'80	0'19	0'10 0'22	0'27 0'15	•••	0°13 0°10
616	Other charges (net) ,, {	ist half and ,,	0.01 0.01	0°03 0°05	0,03 0,01	0*07 0*08	0°01 0°02 •	0°02	o*16 o*28
62 <i>b</i>	Total traffic expenses ,,	ist half	5°45 6°17	7°11 10'29	7'41 11'74	7.67 10.52	6.89	. 14°39 10°42	6°26 9°43
+	General superintendence per cent, on traffic earnings (including steamboat)  Per cent.	rst half	0°76 0°91	1°09 1°98	1,36	.r*o6 1*39	1,01		o.28

# tAILWAYS—(Part II)—continued.

XPENSES—continued.

RAPPIC EXPENSES.

AUGE.							ETRE GAUGE	S		<del> </del>	.	<del></del>
ORKED BY )MPANIES.	GUARAN-	LINE OWNED BY NATIVE STATE AND WORKED BY COMPANY.	STATE LINES	S WORKED	ву Сомра	NIES.	STATE LINES BY THE S		Assisted Com- PANY,	LINE OWNED AND WORKED BY NATIVE STATE,		nber.
XIX. Bombay, Baroda and Central India.	Madras.	XXVI. The Nizam's Guaranteed State railway system.	XXXIII.  Bengal and North-Western railway system.	Raj- putana- Malwa,	XXXVI Southern Mahratta railway system.	South , Indian.	XLIII, Eastern Bengal (state)including the Kaunia- Dharlla (2' 6" gauge) branch	XLIV. Burma (state.)	XLVII, Rohil- khand and Kumaon railway system,	LIV. Bhávnagar- Gondal- Junágarh- Porbandar.	1892.	Progressive number.
o·50 •'57	o.80	1'01 1'01	0°51 0°58	0'47 o'64	0'77 0'82	o*56 o*43	0°79 0°71	0'71 0'89	0.80	0°83 1°00	ıst half .	} 152a
2.48 3.18	2'41 2'37	2'53 2'79	1.48 1.61	1'33 1'71	1°92 1°95	1°46 1°44	2'52 2'52	3'01 3'17	1'74 . 1'92	2°22 2°46	ıst half	I ·
o:53	0'58 ,	0'74 0'79	o*49 o*55	0'50 0'62	0.24 0.23	0°31 0°29	0°47 0°52	o:69 o:82	0'44 0'46	0*35 0*42	ist half . 2nd ,,	I .
o*69 o*58	0'70 0'60	·69 o'57	0'27 0'36	. 0'34 0'48	0.62	0°38 0°42	0'41 0'32	o'58 o <b>70</b>	0,21	o*69 o*50	ist half .	1
oʻo7 oʻo8	0'07 0'05	 oʻo5	0°07 0°04	ó'07 o'03	0,03 0,13	0.0Q 0.08	0'05 0'04	0'11 0'20	0*07	0°03 0′11	ist half	I
. 0.38 0.36	₽.20 0.48	0'42 0'39	, 0'31 0'37	0°20 0°11	0°26 0°37	0,33 0,33	0°25 0'25	0°39 0°67	0'54 0'59	0°37 0'42	ist half .	i i
0°05 0°05	0,01 0,03	***	0°29 0°24		***	 	***	4		***	ist half .	1
0,01 0,01	0°04 0°04	0°04 0°05	0°02 0°07	0°03	0.00	0.02 0.02	0.04 0.08	0°03 0°04	0.08	0,1Q 0,11	ist half	[
0'24 0'22	0.00 0.00	0°27 0°32	 	0'15 0'15	0.18	0°10		•••	0'4! 1'62	0'18 0'23	ist half .	1
0°09 —0°02	0°23 0°20	•••	0'41 0'30	0.01	0.01 0.01	oʻo <u>3</u>	o'05 o'03	0,01 0,01	0.02	o*o5 o*o6	ist half .	1
4'93 5'64	5,21 2,21	5°70 6°05	3.85 4.12	2'96	4'48 4'57	3°29 - 3°15	4.61 4.47	5'53 6'50	4'60 6'39	4.83 5.36	ist half . 2nd ,, .	1624
!		,										
0°53 0°74	1,49 1,35	1'43 1'54	1°06 1°44	0'92 1'25	2'0I 2'06	1'53 1'19	1,48 1,48	1'10 1'72	1'94 2'83	3,12 1,20 .	ist half . and ,, .	1528
2.60 4.10	4'02 3'94	3*58 · 3*94	• 3'06 4'04	2'59 3'32	5'03 4'94	3 99 4 00	6'13 • 5'24	4.64 6.12	4,16 2.11	4°24. 5°29	sst half . and ,, .	1536
o'55 o'78	1'01 0'98	1'05	1°01 1°37	0'97 1'31	1'43 1'33	o'86 o'82	1'14  1'08	1,00 1,04	1.06 1.53	o*68 o*68	ist half .	} 1546
0'72 0'75	1'18 0'99	o*97 o 82	oʻ56 oʻ89	o:67 o:94	1.63 1.40	1°04 1°17	o 66	1.3ę 0.3o	1,98	1.01 1.01	ist half .	} 1556
0,10 0,08	0'09 <b>0</b> '12	0.0Q	0'15 0'11	0'06 0'06	0°34 0°23	0,1Q 0,50	0°07	0'1 <i>7</i> 0'40	0°16 0°07	0°07 0°24	rst half .	} 1566
0'30 0'47	o:83 o:79	o.20 o.20	o <sup>.</sup> 64 o <sup>.</sup> 93	0°21 0°39	o.82	0°89 1°07	0,23 0,23	0.60 0.80	1°30 1°57	0'70 0'70	ist half .	\$ 1576
0'04 0'06	0°03 0°02	***	o*60 o*59			} 		***	0.01	***	ıst half .	} 1588
0'01 0'02	0 07 0 06	0.02 0.02	0°04 0°16	0.02	0'13 0'17	0.08 0.13	0'1 <i>7</i> 0'17	0°04 0°07	0'17 0'17	0°21 0°34	ıst half 👂	} 1596
oʻ26 oʻ29	0,11 0,10	0°39 0°45	***	0°22 0°29	0°46 0°45	0°27 0°17	•	843 843	0°97 4°29	0°34 0°50	ıst half .	} 1600
-0.03 -0,10	oʻ38 Oʻ34	***	o·85 o·75	0,03 0,01	0'02 0'03	0.00 0.00	90.0 90.0	0'01	0°05 0°02	0°09 0°14	ist half , and ,,	1618
5*19 7'28	9°20 8°67	8-o6 8-55	7°97 10°28	5'75 7'53	11'74	8-98 8-72	11°18 9°29	8·53 12·65	11,01	9 <sup>-2</sup> 5 11 <b>-</b> 54	ist half . and ,, .	1628
o'53 o'74	1'49	1*43 1'54	0'98 1'31	0'92 1'25	2°05	1'53 1'19	1,36	1'10 1'71	1°94 2°83	1°59 2°15	rst half .	} +

#### APPENDIX STATISTICS OF INDIAN

WORKING

Half-years ended the 30th June and the 31st December 1892.

TABLE E. - GENERAL

ا			Cause		C	C	e weeke		STANDAR Line
number	HEADINGS.	1892.		WORKED BY		l,		Y THE STATE.	TEE
Progressive number.			I. Fast lodian railway system.	II. Bengal- Nagpur.	III. Indian Midland railway	IX. North Western (state) ranway excluding military lines.	XI. Oudh and Rohil- khand (state).	XII. Eastern Bengal (state).	XVIII Great India . Peninsula railway
<u>-</u>		-	system.		sy-tem.		(state).	<u> </u>	System.
i3 <i>a</i>	PER TOTAL TRAIN-MILE.  Home expenditure Annas	st half	(a)0°39 (a)0°40	1.00 3.00	(a)0.97* (a)1.22	0,11	o.og	0'26 0'16	0'14 0'19
ųa.	Agent's office-salaries and expenses ,,	{ ist half and "	0.18 0.19	0*51 0`74	0°42 0°59	0,31 0,50	o:30	0 42 0 34	0'14 0'19
sa	Audit, accounts, and pay office ,, , ,,	st half 2nd ,	o*60 o-68	1°05 1,"41	1°04 1'41	0°58 0°70	o:99 o:88	0,08 0,81	0,13
611	Stores department ,,,	{  ist half 2nd ,,	0°20 0°24	oʻ26 oʻ45	0°27 0°33	0'15 0'15	0'15 0'18	0,00 0,10	0,12
70	Medical ,,	{ ist half 2nd ,,	0°15 0°17	0°21 0°28	* .0*14 0*19	0°10 0°12	0,12 0,14	0'20 0'19	0.13
3 <i>a</i>	Rents and miscellaneous ,, , , ,	1st half   2nd -,,	0°20 0°22	0'64 0'42	0°22 0°27	0'13	0'19 0'14	0'18 0'14	0,13
ga	Police	{ ist half and ,,	0°22 0°25	o*26 o*33	0,33 0,30	0'11 0'14	0°17 0°14	0°15 0°14	0°19. 0°28
ъa	Advertising	{ ist half and ,,	0°02 0°01	0°01 · 0'02	0,01	0,01 0,01	10.0 10.0	0,01 0,01	0,01 0,01
ı a	Electric telegraph ,,	ist half 2nd ,,	0°76 0°81	1°31 1°58	0'79 1'05	o-66 o-79	0°71 0°79	0°98 0°85	0'54 6'73
20	Other charges (net) ,,	{ st half 2nd "	0,01	0.03	:	0.01	0,01	***	0'09 0'14
30	Total general charges . , , ,	15t half 2nd ,,	2·70 3·03	5'90 7'23	4'16 5'73	2.07	2'57 - 2'71	3°11 2°60	1.87 2.28
 i3 <i>b</i>	PER CENT. ON TOTAL EARNINGS. Home expenditure	{ ist half	(a)0°47 (a)0°60	2*06 3*80	(a) 1·84	0.10	0,10	0.21	0°20
i48	Agent's office-salaries and expenses. ,;	{ ist half 2nd ,,	1	0'70 1'42	0.80 1,50	9'34 0'41	0°41 0°62	0'25 0'84	0,10
55¢	Audit, accounts, and pay office ,, . ,,	1st half 2nd ,,	0°72 0°88	1°36 2°69	1'93	1°00 1°34	1,30 -	0'54 1'61 1'08	0'31
6/	Stores department ,, , , ,,	1st halí 2nd "	0°24 0°31	0'34 0'85	0.49	0'25 0'36	0°25 0°37	0°21 0°14	0,32
76	Medical ,, ,, ,,	{  1st half 2nd ,,	0,18 0,18	0°27 0°53	0°26 0°39	0°17 0°23	0°32	0 40 0 20	0.13
\$ <i>b</i>	Rents and miscellaneous	ist half	0°24 0°29	0'82 0'79 .	0*41 0*54	0°25 ' 0°24	0°30 0°31	0°37 0°22	0,13
gb	Police	ist half 2nd "	0°26 0°33	0134 0162	0°54 0°67	0'20 0'27	0°27 0°39	. 0.30	0.34
102	Advertising	{ ist half 2nd ,,	0.03	0°02 . 0°04	0'02	0,01	0.01 0.01	0°02 0°02	0,01
16	Electric telegraph "	{   ist half 2nd ,,	0:92 1:06	<b>3'00</b> <b>3'6</b> 9	1.47 2.13	1,20	1'12 1'65	1'95 1'33	0.76
26	Other charges (net)	{ st half and ,,		0'02 0'01	***	0.03	0'01	0,05	0'14
38	Total general charges .	{ ist half 2nd ,,	3*26 3*94	7*62 †3*75	7°74 11°56	3°53 4°39	4°07 5'64	6'23 4'09	2.64 4.50
_	PER CENT. ON GROSS EARNINGS. Law charges	∫ 1st half	0.03	• 0.02		0.03	1	.Table G	-Special
	Compensation	l 2nd ,, ist half	0.04	0.06	0.03	-0.02 0.16	0,01	o*o4 •···	0.01 0.01
5	Pates and taxes	2nd " 1 st half	0'11	0'04	0°16	0'06 0'07	0,02 0,01	0°34 0°07	0°03
	Payments to other lines	and ,, st half	0.13	1'20	2.02	0.00		0.12	0,12
8	Ol has abargar (sat)	ر, 2nd ist haif	0°28 0°25	0'72 0'36	4'19	c.50	0'13 0'34 0'66	0'59 0'97	1°57 1°49
		} 2nd "	·	0.24	1.91	0.43	0.00	5°20 0'57	0°16 0'17
9	Total special and miscellaneous ex-	{ st half 2nd ,,	1.18 0.80	1°67 1°30	4'15 5'98	1 19 1 19	0'80 1 <b>'</b> 37	6.47 1.76	1.86 1.92

A-continued.

## RAILWAYS-(Part II) -continued.

EXPENSES—concluded.

CHARGES.

GAUGE.						METRE	GAUGE.	· · · · · · · · · · · · · · · · · · ·	<u> </u>		İ	
WORKED BY COMPANIES		LINE OWNED BY NATIVE STATE AND WORKED BY COMPANY,	STATE LINE	S WORKED	BY COMPAI	NIES.		ES WORKED	Assisted Com- Pany,	LINE OWNED AND WORKED BY NATIVE STATE.	•	umber.
XIX. Bombay, Baroda and Cen- tral India.	XX. Madras.	XXVI. The Nizam's Guaranteed State railway system.	XXXIII. Bengal and North- Western railway system.	XXXV. Raj- putana- Malwa.	XXXVI. Southern Mahratta railway system.	XXXIX. South Indian.	XLIII. Eastern Bengal (state) including the Kaunia- Dharila (2'6" gauge) branch,	XLIV. Burma (state).	XLVII. Rohilkund and Kumaon railway system.	LIV. Bhávnagar- Gondal-Juná- garh-Porban- dar,	1892.	Progressive number.
0°72 0°34	0°43 0°41	1°76 2°14	(a)0°71 (a)1°02	0'45 0'72	. 1.52. 1.31	(a)0.85 (a)0.89	1	•••	(a)1'23 (a)1'46	0°05 0°06 · -	ist half .	1634
0°22 0°27	0'34 <b>0</b> '27	o*5o . 0'55	0.2 <u>0</u>	0'12 0'19	0°26 0°28	0°21 0°20	<b>{</b>	0'51 0'41	0°60 1°06	0°78 0°74	set half .	1644
o*76 o*96	0'92 0'82	1.64 1.81	0'67. 0'74	0'43 0'67	0.84 0.83	o:57 o:55	ļ	0'78 0'92	1,10	1,52 1,25	ist half .	
0°28 0°40	o'16 o'14	0°33 0°29	0°13 0°14	0'14 0'20	0°18 0°24	0.13 0.13		0'28 0'29	0'21 0'33	0°20	ist half .	
0°15 0°21	0'22 0'22	oʻ37 oʻ39	0'11 0'14	0'10 0'15	0,10 0,10	0,10 0,10	<b> </b> .	0'11 0'13	0 08 0 12	0°30 0°45	ist half .	1
o*25 o*38	0,11 0,10	0°54 0°48	. 0'15 0'15	0,11 0,11	0°21 0°22	0°13 0°17		0'20 0'19	0.48 0.49	o'28 o'32	ist half .	ľ
0°30 0°37	0°24 · 0°26	0.81 0.83	0°27 0°28	0'22 0'25	0°36 0°37	0.00 0.30		0'11 0'14	0'14 • 0'16	oʻ76 1'07	ıst half .	ľ
0,01	0°03 0°03	••• •		0,01	0.01	0'01 0'02		10102 0103	0.02 0.02	0,03 0,01	ist half .	l'
o'48 o'70	o <sup>.</sup> 83 o'80	1'05 1'14	0'92 1'07	0°71	1'33 1'39	o.61		1'04 • 1'25	0,00	1*14 1*59	ist half .	1
0°32 0°24	0'21 0'26	***	***	***	0.01	0°02 0°01			:::	0.02	ist half .	
3'49 3'88	3'48 3'38	7°02 7°61	3'45 4'12	2·28 3·4 <sup>I</sup>	4°91° 4°89	2°78 2°98		3.02	4°79 5°93	4'79 - 5'94	ist half .	} 1734
0°75 0°43	0°70 0°68	2°39 2°89	(a)1°30 (a)2°2 <b>2</b>	o 86	3*89 3*24	(a)2°27 (a)2°40	gį.	***	(a)2°55 (a)3°38	0.13	ist half .	} 1638
0'22 . 0'34	o 55 o 44	o*68 o*74	0'90 1'23	0'23 0'35	0.62 0.63	o•56 o•53	d gaug	0·77 o·78	1'24 2'45	1°46 1°54	ist half .	} 1646
0'78 1'21	1'51 1'34	2·24 2·45	1°23 1°64	o'82 1'26	2°14 2°20	1.20 1.20	tandar	1°19 1°76	2'07 2'76	2°28 3°27	ist half ,	ı
0.20	0°26 0'22	6°45 . 0°40	0'24 0'30	0°27 0°37	0°46 0′59	o,31 o,32	ed with standard gauge.	0'42 0'54	0°44 0°76	0°36 0°18	1st half . 2nd ,, .	1666
0°15 0°27	o'36 o'37	0°49 0'53	0'30 0'30	0°19 0°27	0°47 0°49	0°28 0°28	Included	0°18 0°25	0°17 . 0°28	oʻ56 oʻ94	ıst half . 2nd ,, .	1
oʻ26 oʻ48	0'17 0'18	0°74 0°64	0°27 0°35	0°21 0'41	0°55 0°53	0°36 0°47	, <del>4</del>	o'30 o'37	0.08	0°52 0°67	ist half .	
0'31 0'47	0'40 0'43	1°12	0'49 0'61	0'42 0'47	*0'93 0'91	0'24 . 0'80		0°17 0'25	o·28 o·38	1'41 2'25	rst half . 2nd ,, .	1698
0,01 . 0,01	0°04 0°05	0.01	0,01 0,01		0°04 0°01	0'04 0'05		0'03 0'04	0,03	0°01 · 0°04	tst half . and ,, .	
o'50 o'88	1 '37 1 40	1°41 1°55	1'71 2'32	1'33 1 87	3'41 3'45	1.80		1'58 2'37	2°06 2°59	2*13 3*31	ıst half .	1716
o-30	0°35 0°42	***	***	0,01	0.01	0°05 0°03		***	•••	. 0.08	ist half .	1726
3'60 4'89	5.23 2.21	9°52	6°36 8°98	4'34 6'35	12'57 12'11	7°49 6°07		4'64 6'36	9*90 13*78	8*93 12*41	ist half .	} 1736
Miscellane	0us pe	nses.	21-2				•	0.03	***	0.01	ıst half	,
0'02	0'02	0'04	0'03 0'04	0,01 0,01	0,03			0,03	0'07	0'04	znd "	} 174 )
0'46 0'18	0.02	0.03	0°02 0°06	0'03	0'50 0'02 0'08	0°04 0°06 • 0°06		0.52	0'05	1'19	ist half	
0'28 0'42	0.33	0.08	0.12	0,01	0'14	0'27 0'17		0'27	0'02	0'14	2nd ,,	} 170
0'36 0'41	0.23	0,08	***	a.09	0.01	0'12		0'42	-0.78 7.99	0°23 1°14	2nd ,, .	} 177 
0'27	0.22	o'52 o'67	3,1Q 0,8I	0'41 0'56	0.10	- 0'32 - 0'36	 	0'57	7.39	1'40	2nd ,, .	}178
1'22 1'39	1°17	o*64 o*88	. 0.01 5.41	0'54 0'65	0.18 0.21	o.81 o.20		0°72 0°86	8:15 6:75	1,2 5 86	ist half .	} 179

# APPENDIX STATISTICS OF INDIAN

Half-years ended the 30th June and the 31st December 1892.

EXTRACT PROM TABLES PRINTED

	•			<u> </u>				<u> </u>	STANDARI
mber			STATE LINE	S WORKED B	Y COMPANIES.	Stati	E LINFS WORK THE STATE.	ED BY	Line:
Progressive number.	Headings.	1892.	I. East Indian railway system.	II. Bengal- Nagpur.	III. Indian Midland railway system.	IX. North Western (state) railway ex- cluding mili- tary lines.	XI. Oudh and Rohilkhand (state).	XII. Eastern Bengal (state).	XVIII, Great Indian Peninsula railway system,
	FROM APPENDIX I.			•					
180	Average number of locomotives on the line $No.$ {	ist half and ,,	557 555	93 97	97 102	442 446	156 155	97 97	605 605
181	Average miles run per locomotive per diem	ıst half 2nd "	61°79 54'38	53.01 41.42	56.00 39.61	51°18 43°98	53°75 48°27	61°43 76′97	58°12 41'84
182	lbs. coal per engine-mile (coal-burning engines)—  Coaching	sst half and ,,	38°00 37°75	69°16 41°85	)			. •	
183	Grods	ıst half 2nd ,,	50°25 48°50	51°08 36'47	48.60 44.20	45*70 42*34	34°70 - 32°22	37°61 41°10	40.63 39.78
184	Mixed ,, {	ıst half 2nd "	41°12 38°50	52°45 44°21	) •				,
185	lbs. wood per engine-mile (wood-burning engines) —  Coaching	ıst half 2nd ,,	·	***	***	*** .		***	411
186	Goods , , {	ıst half 2nd "	'	***		•••	, 	***	***
187	Mixed , , , , {	ıst half and "	***	***	***	***	•••	***	***
188	Average gross weight of trains -  Coaching	ıst half 2nd "	168·55 153·54	251.60 136.42	179'62 142'57	203°41 165'13	165°16	135'78 149'21	158't1 152'36
189	Goods ,, {	ıst half 2nd ,,	445.68 416.70	281.81 212.34	307'90 288'96	349'09 291'21	327'73 264"75	271'37 378 <b>'0</b> 9	283'92 271'25
190	Mixed ,, {	ist half and	217:08 214:41	283°55 259°45	230°31 256°92	199°60	216.3d 303.81	172 <b>'</b> 73 198 <b>'62</b>	
191	Average through speed of trains—  Coaching Miles per hour	ist half and ,,	24'92 25'00	13°67 22°88	24°23 24°21	17*92 18*39	27°91 27°87	17*30 17*63	23'54 23'26
130	Goods ,, {	ıst half 2nd ,,	13'27	10'97 9'92	11 48 11 26	10*54 11*71	10,32	11.79 11.83	11'47
193	Mixed ,, {	ist half	18'53 18'57	13'39 14'81	15°53	14 <sup>-8</sup> 4 14 <sup>-8</sup> 2	13'93 14'34	13'74 13'68	16°07 15°57
	FROM APPENDIX II.	-						· · ·	.]
194	Average mileage per diem of coaching tehnicles, including brakes	ıst half 2nd ,,	219,477 207,917	26,635 27,194	32,173 31,432	150,469 148,565	54,338 - 154,577	45,728 45,501	134,137 133,820
195	Goods ditto ditto "	ist half and "	614,264 453,896	78,661 48,629	78,272 46,588	316,746 202,199	130,894 74,492	45,150 98,221	546,59 <b>6</b> 308,467
	Average lead of passengers Miles {	ıst half 2nd ,,	· 61°58 . 62°96	49°67 43°17	71°39 66°26	56°27 54°72	46.27 45.13	27°55 26°70	42'77 40'86
	Average lead of goods	ıst half 2nd ,,	236'26 219'43	103'96 79'74	147°65 115°54	164 <b>'27</b> 139 <b>'</b> 91	127°00 106°28	89·69	264'54 224'59
	Total tomage of goods lifted Tons {	ıst half 2nd "	2,860,279 2,364,991	678,029 529,629	358,107 264,049	1,872,348 1,464,558	755,111 472,693	341,541 507,249	1,793,306 1,159,33 <b>7</b>

#### APPENDIX A.

A-continued. .

# RAILWAYS-(Part II)-continued.

as Appendices to the Analyses.

GAUGE,						ME	TRE GAUGE	:			1	T
VORKED BY	GUARAN-	LINE OWNED BY NATIVE STATE AND WORKED BY COMPANY.	STATE LIN	ES WORKED	BY COMPA	NIES.	STATE LIN BY THE	es worked State,	Assisted COM- PANY.	LINE OWNED AND WORKED BY NATIVE STATE.		mber,
XIX. Bombay, Baroda and Cen- tral India.	XX. Madras.	XXVI. The Nizam's Guaranteed State railway system.	XXXIII.  Bengal and North- Western railway system.	XXXV. Raj- putana- Malwa.	XXXVI. Southern Mahratta railway system.	XXXIX. South	XLIII. Eastern Bengal (state) including the KauniaDharita (2' 6" gauge) branch.	XLIV. Burma (state.)	XLVII. Rohilkund and Kumaon railway system.	LIV. Bhávnagar- Gondal- Junágarh- Porbandar.	1892.	Progressive number.
· 127 · 127	, 152 153	50 <b>4</b> 9	100 100	422 424	181 187	184 181	84 89	113 119	2 <del>§</del> 25	33 33	ıst half . 2nd ,, .	} 180
51°13	53°57 53°36	.8°57 36°36	56.52 20.00	57°98 41°17	41°01 37°32	55'34 59'12	56·28 53·85	5 <sup>8</sup> ·77 47·74	57°16 45'37	51°09	ist half . and ,, .	} 181
34'39	)	43°41 28°86 50°86	)	22°45 20°86	28'49 28'8 <u>4</u> 30'66	25'38 23'42 26'03	)	23'31		)	ıst half 2nd "	1
46.44 41.94 36.64 33.58	39'49	52'92 41'24	27.77	31°06 28'53 21'34 21'27	33°30 28°49 28°84	25.13 25.13 28.73 30.48	28.81	24°03 22°42 28°80 32°79	   	24.87	ist half . 2nd ,, . 1st half . 2nd ,, .	1
***			***	404	***	***		41.	)	) ::: .	ıst half . 2nd ,, .	Ī
***		::: -	•••	***	•••	***	4	***	59'09	<b></b>	ist half .	} 186
•••	***		***	***	444	***		***	).	) :::	ist half . 2nd ,, .	} 187
161°43 156°72	128'07 129'49	142°71 128°96	196°37 144°59	90.02 90,10	69°49	108.63	87°53 89'32	119'04 122'95		68.89 62.06	ist half . 2nd ,, .	} 188
445°86 426°49	363.86 341.66	261.60 243.12	159'17 146'61	192'90 195 <b>'2</b> 6	225'60 226'60	100'94 107'03	185'01 198'27	222°01 . 188°15	***	157'27 168'28	ıst half .	1
228'37 196 <b>'</b> 30	235'06 236'76	322°47 304'36	. 171'82 155'15	120'51 120'51	174'64 181'80	147°59 138'74	117.69	202'05 181'44	133'39	121170 125144	ist half .	} 190
19:36 18:05	19·67 19·67	19°49 20°45	14'14 14'14	17:85 18:00	15.83 15.83	16.00 16.00	17°51 17°45	16.81 16.81		18'73 20'26	ıst half . 2nd ,, .	} 191
8·51 12·43	10,88 10,88	10,23 10,32	11.20 11.20	9'48 9'83	9,41 6,41	<b>6.20</b> 6.20	11'03 11'04	11,43		9°98	ist half .	} 192
12.78 14.02	12·56	12'08	12'02 12'02	13'74 13'73	12'31	12'00	12'91 12'98	14'23 14'02	13.41	11'77	ist half . and ,, .	} 193
50,623 49,793	55,563 56,116	12,117 12,331	50,780 50,307	118,120 115,385	42,994 42,533	75,938 <b>76,</b> 71 <b>3</b>	35,517 33,286	62,319 57,925	10,017	13,97 <b>6</b> 12,166	ist half .	} 194
176,909 79,308	84,603 82,295	30,637 22,704	79,754 51,604	327,579 236,592	79,848 74,718	82,646 92,572	60,703 63,051	99,899 <b>7</b> 5,323	25,991 12,260	20,859 9,860	ist half . 2nd ,, .	195
21.62 19.68	38·07 38·67	50.23	32'65 34'37	61°31 52°79	40.69 40.69	• 34'52 34'49	29"73 28"58	37°58 34°49	32'79 32'26	37°96 38°51	1st half . 2nd ,, .	}
164 18 158 07	115.88	93'97 136'17	125'86 128'34	272'96 246'60	116'51	47°75 47°15	95,69 134,12	107'04 93'87	57.89 51.51	71.81 71.81	rst half . and ,, .	<b>{</b> }
956,476 <b>4</b> 54 <b>,</b> 336	558,497 560,360	263,758 164,768	389,852 282,632	1,019,719 693,160	338,209 308,544	871,740 952,292	265,181 253,295	476,201 333,997	131,737 93,087	112,451 67,354	ist half .	}

lxxviii

### APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

'APPENDIX STATISTICS OF INDIAN

Half-years ended the 30th June and the 31st December 1892.

EXTRACT PROM TABLE PRINTED

		•									•	_			STANDARD
number.			· .	KADII	NGS.		. • • • • • • • • • • • • • • • • • • •	1892.	STATE LINE	S WORKED BY	COMPANIES.	STATE LINE	ES WORKED B	Y THE STATE.	Lines TERD
Progressive		FROM APPENDIX V.					I. East Indian railway system.	11, Bengal- Nágpur.	III. Indian Midland only.	IX. North Western only.	XI. Oudh and Rohilkhand (state).	XII. Eastern Bengal only,	XVIII. Great Indian Peninsula only.		
		F	ROM	Appi	ENDIX	v.	•								
	Average age	of al	еерег	s <del></del>		•		J		J	] :	J	]		•
196	Wood	•	٠	•	•	•	· Years	st half	9'04 9'37	5'45 5'91	10'50 11 <b>'00</b>	9°48 9°27	15'87 16'14	10.20 10.00	(c) (c)
197	Iron .	•	•	٠		•	• **	1st half 2nd ,,	(a) 6.66 (a) 6.88	(b) 3°07	3°50 4°00	19°01 10°17	15°39 15°58	<b>5'50</b>	(c) (c)
•	Percentage o	of ren	ovals	<u> </u>			•			•				-	
198	Wood	•	٠.	•	٠	٠	Per cent.	st half and "	3°22	0 08 1 51	1 '28 1'74	4°77 4°78	2°22 0°96	2'38 3'17	4'70 7'61
199	lrqn	•	•	•		•		sst half and "	0°77 0°77	(b) 0°04 (b) 0°04	0.03 0.02	2°14 1°54 °	1,60	. 0.08	0.43 0.43

<sup>(</sup>n) Average age of "D. O." iron sleepers only. The average age of other iron sleepers has not been furnished.
(c) Information not furnished.
(d) Excludes Adam's No. 2 Geosoted sleepers.

#### APPENDIX A.

A-continued.

## RAILWAYS-(Part II) -concluded. .

AS APPENDIX TO THE ANALYSES. -concluded.

GAUGE.		<u> </u>	_		,	METRE	GAUGE.						
WORKED BY		LINE OWNED BY NATIVE STATE AND WORKED BY COMPANY,		STATE LIN	ES WORKED	ВУ СОМРАН	iles.	STATE LINES		Assisted COM-	LINE OWNED AND WORKED BY NATIVE STATE.		number.
XIX. Bombay, Baroda and Cen- tral India.		XXVI. The Nizam's Guaranteed State railway system.	Bengal a	XIII, and North- stern Company's section,	Kajputana.   Malwa	XXXVI. Southern Mahratta only.	XXXIX. South Indian only.	XLIII. Bastern Ben- gai (state) in- cluding the Kaunia- Dharila (2' 6" gange) branch.	XLIV. Burma (state).	XLVII. Rohil- kund and Kumaon railway system.	LIV. Bhávnagar- Gondal- Junágarh- Purbandar.	1892.	Progressive nu
(d)10°23 (d)10°18 12°88 13°14	22,04 21,60 (4)10,00 (5)0,80	(\$)19.00 (\$)18.20 11.00	9°59	6.59 . 7.02	8.00 10,00	(%)2,20 6,20 6,00	14.85 14.95 (h)9.07 (h)9.38	(g)6'50 8'50 8'6'00	10.85	35 S	5.36 2.20 (9)5.20	ist half 2nd ,, ist half 2nd ,,	; } 196 ; } 197
(d)4°98 (d)5°27 1°84 1°86	(#) 3.60 (#) 0.04 0.001	23°42 5°68 (f)0°52 (f)5°13	0°58 0°54 0°20 0°16	0.74 -0.76	2°52 2°27 0°35 1°17	0°37 0°14 (g)0°39 (g)0°03	(#)0.01 (#)0.01 0.10 0.82	(g)0.03 (s)0.03 1.31	3'23 2'09	(i) (i) (ii) (ii) (ii) (ii) (ii) (ii) (	21'44 6'38 (b) 0'32 		198

<sup>(</sup>e) Excludes creosoted pine sleepers.
(f) Excludes pea-pod steel sleepers.
(g) Total iron and steel sleepers.
(h) Excludes D. and O. cast iron sleepers.
(i) Information for the entire system not available.

APPENDIX

		- ME	AN MILE	AGE WO	RKED –M	ILES.		·	·	<del></del>
Serial No.	RAILWAY.	<del></del> ,							· .	COAC
		1888.	1889,	1890.	1891.	1892.	1 <b>8</b> 8\$.	1889.	1890.	1891.
-	•									
1	STANDARD GAUGE.  East Indian (a)	1,540	1,552	1,550	1,550	(8)1,811	1,45,24,861	1,48,26,514	1,44,04,649	1,56,93,343
. II	Bengal-Nágpur	179	300	546	811	832	<b>2,7</b> 6,338	3,80,567	5,43,378	9,30,522
111	Indian Midland (a)	· 128	575	697	697	(c) 754	2,04,587	11,09,605	14,69,837	16,67,165
ıx	North Western (state)	2,440	2,383	2,400	2,396	(d)2,444	85,47,530	87,31,938	89,75,931	. 1,00,51,057
ХI	Oudh and Rohilkhand (state).	692	693	693	693	693	32,20,607	34,07,831	33,95,454	38,42,518
XII	Eastern Bengal (state)	670	709	<b>7</b> 57	249	249	34,10,103	36,43,839	37,09,721	26,33,664
xvIII	Great Indian Peninsula	1,501	I,444	.1,445	1,489	1,491	86,38,960	87,46,965	87,76,053	90,87,884
XIX	Bombay, Baroda and Central India.	461	461	461	461	461	40,70,15,7	43,42,090	44,11,394	45,11,243
xx	Madras	839	839	839	839	839	36,33,005	37,17,890	37,64,490	36,14,372
XXVI	The Nizam's Guaran- teed state (a).	<b>2</b> 90	349	354	354	354	6,91,622	7,87,582	8,28,094	8,19,130
	METRE GAUGE.									
XXXIII	Bengal and North- Western—				•					
	Tirhoot section	262	273	671	<b>7</b> 17	. <b>7</b> 54	<b>7,79,</b> 760	8,16,104	18,04,772	19,96,749
•	Company's section	376	376		-		( 8,08,403	8,66,875	)	
×xxν	Rajputana-Malwa .	1,664	1,667	1,672	1,673	1,674	57 <b>.7</b> 6 <b>,7</b> 30	60,16,333	57,75,759	62,71,472
XXXVII XXXVIII	Southern Mahratta .  Southern Mahratta (Mysore section).	854 140	} 1,124	1,309	1,341	1,356	15,75,863 • 3,19,195	21,37,011	24,81,123	26,07,961
XXXIX	South Indian . ,	745	745	751	883	1,087	30,22,330	32,32,129	33,18,412	37,34.924
XLIII	Eastern Bengal (state) - Northern and Behar sections (including the Kaunia-Dharlla 2' 6" gauge branch).	Incl	uded w astern B (state) rai tandard g	engal lway	528	530	Included v (state) ra	with the Easter	rn Bengal rd gauge).	18,81,847
XLIV	Dacca section Burma (state)	369	535	554	583	600	مهر مو دوم	20.00.505	07 96 101	91 10 26*
11217	· ·	309	333	354	5.03	692	18,38,460	29,02,195	31,86,431	34,19,265
LIV	Bhávnagar-Gondal- Junágarh-Porbandar.	198	275	333	334	334	5,16,984	7,01,977	8,28,561	8,14,967

B.

principal railways during the years 1888-1892.

I	EARNINGS-R	UPEES.			• •		
NG.			Goods.				•
1892.	1888.	1889.	t8go.	1891.	1892.	Serial No.	Remarks.
	<u> </u>		<del></del>			<del></del> .	
•		•	_				
1,63,72,818	3,01,86,941	2,94,64,256	2,81,17,801	3,30,54,067	3,32,71,350	1 ,	(a) The figures for 1892 include the branch lines worked. This remaining portion this Appendix.
11,11,283	12,71,655	14,82,236	21,01,475	39,96,661	45,61,50 <i>7</i> •	II.	(b) Includes one mile of the Ra putana-Malwa railway and 23°: miles of the Eastern Bengal (state railway worked over.
19,90,028	4,31,481	15,37,840	15,48,725	• 23,00,032	28,65,714	111	(c) Includes 15'30 miles of the Ea Indian railway, 2'89 miles of th Rajputana-Malwa railway, 1'00 mi of the Oudh and Rohilkhand (stat
94,83,579	1,66,42,598	1,87,98,297	1,78,01,062	2,19,37,447	1,64,44,903	ıx	railway and o'13 mile of the Grea Indian Peninsula railway worke
37,57,481	34,33,3 <sup>8</sup> 3	37,38,722	37,20,159	42,75,549 -	44,12,793	XI ·	(d) Includes the Jammu and Kashm railway (Native state section), also in inies of the East Indian railwa
22,89,026	62,21,155	64,46,104	67,41,067	43,81,629	41,83,677	ХII	Ghaziabad to Delhi, and 3'47 miles the Chenab Wier branch worked ove (e) Includes the Northern ar Behar sections, the Kaunia-Dharl (2'6' gauge) branch, and the Dacc section up to 1890.
89,58,793	3,20,11,504	2,79,43,119	2,89,38,849	3,57,37,728	3,13,19,876	XVIII	section up to 1890.  (f) Includes branch lines worked.
<b>4</b> 6,57,496	84,07,068	86,49,481	82,90,012	93,74,364	92,99,145	xıx	
37,54,832	46,65,304	52,04,228	53,56,233	55,38,684	56,90,712	xx	
8,36,044	10,00,301	14,56,856	16,83,446	18,59,997	18,27,809	xxvi	
			·			·	
	8,43,979	8,72,747				,	
20,05,445	10,92,330	10,49,173	22,85,143	23,57,101	<b>2</b> 5,20,555	XXXIII	
62,03,640	1,25,91,097	1,36,73,491	1,13,81,314	1,52,52,527	1,55,67,082	xxxv	
	21,20,071	)				XXXVI	
25,75,282	2,42,890	26,80,905	`-30,73,617	33,31,169	31,47,280	(xxxvIII	
40,70,125	25,41,908	26,00,436	29,43,747	32,03,562	33,29,239	xxxix	
17,28,441	Include	with the Easte	rn Bengal	26,48,762	24,05,976	XLIII	
	(state)	railway (standar	d gauge).	•	3.5.		
40.76,573	14,63,254	17,10,793	22,19,785	23,54,622	28,89,782	XLIV	
8,11,590	5,27,840	6,21,172	<b>7,0</b> 5,468	6,26,142	<b>7,23</b> 958	LIV	

APPENDIX

									EARNINGS
Serial No.	RAILWAY.			AT SERVICE	RUPEES.		 	Sundr	IES, INCLUDING
•		1555.	1889.	1890.	1891.	1892.	1888.	1989.	. 1890.
	STANDARD GAUGE.							,	
I	East Indian	45,691	44,256	64,246	<b>75</b> ,145	70,977	6,79,408	6,22,875	8,52,659
11	Bengal-Nágpur	,	***	•••	***		35,300	1,78,141	2,19,725
III	Indian Midland	,•	•••	·	•••	•••	20,768	74,712	1,05,803
ix	North Western (state)	1,21,374	67,667	3,907	6,550	26,577	3,83,910	5,10 936	5,05,921
XI	Oudh and Rohilkhand (state).	•••	•••				4,23,063	3,93,130	<b>2,</b> 65,783
XII	Eastern Bengal (state)	6,72,064	7,65,492	8,09,933	4,41,063	2,97,8 <sub>35</sub>	2,15 <b>,8</b> 88	3,21,239	2,17,661
xvIII	Great Indian Peninsula.	•••	•••				4,08,755	3,78,731	4,30,340
XIX	Bombay, Baroda and Central India	***	•••				2,61,708	2,42,800	2,38,965
·	Madras	***			<u>-</u> -		. 2,32,744	1,88,777	3,85,411
XXVI	The Nizam's Guaranteed state.	•••	743	• •••	B++	·	84,152	89,695	70,459
xxxııı	METRE GAUGE.  Bengal and North-Western— Tirhoot section	1,26,549	1,59,036			•	56,995	49,788	
	Company's section .	2,17,361	1,94,935	3,78,701	4,60,396	4.05 950	91,449	1,00,841	1,32,976
XXXV	Rajputana-Malwa .	.,.		***			2,46,887	2,40,181	2,71,208
xxxvi	Southern Mahratta .		•••	•••	•••		1,42,682	)	(
XXXVIII	Southern Mahratta (Mysore section).	•••	<b></b>	··· .	••• .	• . •••	8,573	1,09,961	1,02,674
xxxxx	South Indian	•••	***	• •••		·	94.444	1,06,813.	1,63,351
XLIII .	Eastern Bengal (state)— Northern and Behar sections (including Kaunia- Dharlia 2' 6" gauge branch).	gal (st.	with the Ea	stern Ben- (standard	3,72,181	3,29,098	Included v	with the Eas	tern Bengal
:	Dacca section .	gauge)	<u>.</u>	. • .					
XLIV	Burma (state)	***	•••	•••	853	18,237	74,504	77,275	• 65,216
LIV	Bhávnagar-Gondal-Juná- garh-Porbandar	*** ; ·	3+4	***	***		75,436	. 57,268	37,759

B-continued.

principal railways during the years 1888-1892-continued.

-concld.						<del></del>	<u> </u>	
TELEGRAPH-	-Rupees.	· ·	<u> </u>	TOTAL—RUPEK	: :5.			
1891.	1892.	1888.	1889.	1890.	1891,	1892;	Serial No.	Remarks.
		•			•			
8,44,924	8,01,898	4,54,36,901	4,49,57,901	4,34,39,355	4,96 <b>,</b> 6 <b>7</b> ,476	5,05,17,043	I	
5,30,173	4,10,772	15,83,293	20,40,944	28,64,578	54,57,3 <sub>5</sub> 6	60,83,562	11	
1,95,164	2,22,7 <b>7</b> 9	6,56,836	27,22,157	31,24,365	41,62,361	50,78,521	III .	
4,71,043	4,80,606	2,56,95,412	2,81,08,838	2,72,86,820	3,24,66,097	2,64,35,665	ıx .	
4,46,142	3,72,563	70,77,053	75,39,683	73,81,397	85,64,209	85,42,837	ХI	•
2,63,002	<b>3</b> ,54,357	1,05,19,210	1,11,76,674	1,14,78,382	77,19,358	70,24,895	XII	,
4,29,721	3,86,958	4,10,59,219	3,70,68,815	3,81,45,242	4,52,55,333	4,05,65,627	xviii	
2,52,162	2,87,837	1,27,38,933	1,32,34,371	1,29,40,371	1,41,37,769	1,42,44,478	XIX	
1,91,631	1,79,125	85,31,053	91,10,895	95,06,135	93,44,687	96,24,669	xx	
97,311	1,16,788	17,76,075	23,34,133	25,81,999	27,76,438	27,80,641	XXVI	].
	•						•	
				,				
		• ( 18,0 <b>7,</b> 283	18,96,675				}	
1,51,942	1,91,989	}	10,90,075	46,01,591	49,66,188	51,23,939	xxxın	
		22,09,543	22,11,824	<b>)</b>	_			
2,65,570	6,29,732	1,86,14,714	1,99,30,005	1,74,28,280	2,17,89,569	2,24,00,454	xxxv	
		; 38,38,616	١			. (	xxxvi ,	
1,45,961	1,28,116	}	49,27,877	56,57,413	60,85,091	58,50,678	xxxviii	
		5,70,658			·		XXXVIII	
99,270	(a) <b>3</b> ,15,632	56,58,682	59,39,378	64,25,511	<b>7</b> 0, <b>3</b> 6,756	<b>77,</b> 14,996	xxxix	(a) includes R1,48,441 on account of old company's Fire
•							,a	Insurance Fund re-credited to Revenue.
53,293	68.036	Included with	the Eastern	Bengal (state)	49,56, <b>0</b> 83	45,31,551	XLIII	•
	1-0*	railway	(standard ga	uge).				
80,456	1,16,026	33,76,218	46,90,263	54,71,432	58,55,196	71,00,618	XLIV	
36,154	. 42,630	11,20,200	13,80,417	15,71,788	14,77,263	15,78,178	LIV	
	•	<u> </u>					· <del>· · · · · · · · · · · · · · · · · · ·</del>	<u> </u>

#### APPENDIX

	·					D # 66			ing th						===
													<del>_</del>		EXPE
		MAINT	ENANCE,	PER MI	LE OF	TRACK,						1	Locom	OTIVE.	
Serial No.	RAILWAY.	INC	LUDING	SIDINGS	s—Rupe	ES-	Т	otal per	train-mil	e—Anna	ıs.	Cost of f	fuel per t	rain-mile	-Anna
•		1888.	1889.	1890.	1891.	1892.	1888.	1889.	ı890 <b>.</b>	1891.	1892.	. 18S8.	1889.	1890.	1891.
	STANDARD GAUGE.					•									
1	East Indian	2,157	2,274	1,618	(a) 1,425	1,310	7.19	7.07	7.03	(b) 6.85	6.91	0.83	0.13	0.25	(b) 0.27
,			:							(c)					(c)
. II	Bengal-Nágpur	930	1,246	1,432	766	896	12'27	16.32	14.07	11.31	9.78	3.66	4.68	3.92	3.01
•	Indian Midland		1,002	7.007		805	13.10	*****	10'17	11.36	10:86	5'17	5.00	3.80	(d) 4'29
III	Indian ividiand	735	1,002	1,091	779	805	עי ני	****	10.7	30		3.7	300	3 00	
ıx	North-Western (state)	1,845	2,087	1,814	(e) 2,557	1,815	13.28	12.96	12'12	11.Q1 (6)	12.27	4.50	4 38	4.78	(f) 4.79
ΧI	Oudh and Rohilkhand (state).	1,244	1,013	1,435	1,125	1,302	9.06	7.24	6.03	8.23	6.86	343	2.74	5.10	3'97
IIX	Eastern Bengal (state)	1,428	1,330	1,410	2,156	1,155	7.02	6.96	6.10	6.81	6.83	2'08	1.24	1'45	1.20
	,		130	^`		1 00		1							
XVIII	Great Indian Penin- sula.	2,319	2,215	2,234	2,463	2,207	13.00	14.51	13.08	13.55	12.68	4'41	4.62	4.21	4.39
xix	Bombay, Baroda and Central India.	2,912	2,662	2,535	2,743	2,630	12:35	13.95	12.03	12.26	12.41	4'67	2.55	4'99	4.74
xx	Madras	1,401	1,547	1.254	1,301	1.430	10.81	11:78	11'40	13'41	11.83	3.14	4'29	4.56	4.26
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-,547	-,-54	1.,301	-,439		,-					1.7	•	
XXVI	The 'Nizam's Guaran- teed state.	1,142	1,686	1,477	1,236	1,109	10.40	9.30	9.64	10'43	9'87	3.39	3 06	2'74	2:90
	W								!	1	•				
XXXIII	METRE GAUGE.  Bengal and North-						·								
	Western-						 		  _				 		[   
	Tirhoot section .	640	531	} 528	461	500	6'22	5'95	5.24	4'93	4.20	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1.23	} 1.01	1.20
	Company's section	599	570	)			6.45	6.12	)			(2.35	2.32	)	
xxxv	Rajputana-Malwa .	1,030	886	734	836	850	9.61	9,90	10.31	9'73	9.22	4.40	4.23	4.32	4'45
xxxvi	Southern Mahratta	1,021	<b>b</b>				(8·5 <b>8</b>	)				( 3.89			
XXXVIII	Southern Mahratta (Mysore section).	1,269	995	1,066	634	<b>6</b> 36	9.09	9.11	8.97	8-80	6.01	4.10	3.87	3.66	3'40
XXXIX	South Indian	2,027	1,982	1,435	1,589	(b) I,I12	8.67	9'41	8.87	9.17	(b) 8·83	3'25	3'45	<b>3:</b> 66	4.47
XLIII	Eastern Bengal (state)-														
·	Northern and Behar sections (includ- ing the Kaunia- Dharlla 2' 6" gauge branch).	Incl Ea (st	uded w stern B tate) rai	engal Ilway		773	Eas (st	ded wistern Boate) raii	engal way	4.88	4.98	Incl	uded wi	th the	Eastern
<b></b>	Dacca section .	/	]			_		} _	}	•		İ			
XLIV	Burma (state)	1,518	1,868	1,482	1,761	1,367	8.86	9.80	9.61	9.84	9.67	3.84	4.10	3,83	<b>3'4</b> 3
ŁIV	Bhávnagar-Gondal- Junágarh-Porban- dar.	462	563	797	1,019	1,405	7*23	9.83	8.31	8'41	7:53	3.36	4.60	4.16	3.00

B-continued.

#### principal railways during the years 1888-1892-continued.

DITU	JRE.					٠			•		_		<del></del>	_			
			_						CARR	IAGE AN	D WA	GON.					
	Repa	irs per t	raio-mil	e —An	nas.		Per t	rain-mil	e—Anna	ıs.	Rep	airs of si	ock per Annas.	train-	mile	Serial No.	Remarks.
1892.	:883.	1889.	1800.	1891.	1892.	1888.	1889.	1890.	1891.	1892.	1888.	1889.	1890,	1891,	1892.		
												•					
0.12	1.97	2'00	1.98	(b) 1.02	1.08	2.13	2.36	2,32		2'01	1.71	1.94	1.04	(b)	1 72	1	(a) Includes branch lines worked excepting the Ásansol-Chakardhar pore section.  (b) Includes branch lines worked.
1*46	3,50	<b>5</b> °34	.4'72	(c) 2.16	<b>2</b> .03	3,13	2.76	3.42	(c) 2·66	1.97	2.17	1'73	2'24	(c) 1.41	1.13	II	(c) Excludes the Asansol-Chakar dharpore section.
4.30	1,30	1,13	1.49	( d) 1.42	1.20	2*85	2.13	2.62	2'43	2'41	1.62	1,32	1:89	(d) 1.70	1.22	ш	(d) Includes the Bhopal-Itars
4'94	3,30	3.26	3.01	(f) 2°28	2.29	3'64	3'93	4.40	(ė) 3'90	2.68	2.77	3-16	3'59	(f)	2:06	ıx	(e) Includes the Amritsar-Pathán kot and the Jammu and Kashmi railway (Native state section).
2.66	1.49	. 1.37	1*19	1 34	1'29	2.50	2.08	2'09	2'17	2,01	1.24	1.61	1.64	1.68	1.26	ХI	(f) Includes the Amritsar-Pathan kot, the Rajpura-Bhatinda and the Jammu and Kashmir railways.
3.55	2.03	2.42	1.62	1.61	2.32	2'98	2'02	2.25	<b>3'2</b> 5	2'69	2.83	2.52	<b>2</b> '33	2.31	2.89	ХII	
3-86	2.31	2.62	<b>2°2</b> 3	<b>2'4</b> 0	2.41	3.23	4.09	3'49	3'42	3'34	2.24	2'93	2.23	2.48	2'34	XVIII	
3.87	1,00	2.34	2'23	1.99	1.97	<b>4</b> °24	3.66	4.00	3.96	5.13	3'25	2'73	3.13	3.06	3.83	XIX	
8د ب	3.03	3.18	3.02	4'25	3.34	4*40	4 <sup>.8</sup> 5	3.62	3.16	3.58	3'43	3'75	5.92	2*37	2.42	ХX	
2.29	1.62	1.65	1.89	2.30	<b>2·4</b> 5	2°07	2'46	2.01	2:39	2.92	1,34	1.42	1.50	1.4	3,31	XXVI	
						4			-			•					
	و <b>۰</b> 93 ح	0.28	,		,	1.25	1.84			(	o·87	1,10	`				
1.24	1.10	0.80	δ 0.68	oʻ75	0.87		1,13	1.53	1.39	1.38	<b>o</b> ·40	0.54	,	0.63	0.96	XXXIII	
4.07	1.47	1.37	1.68	1.49	1.64	1.86	5.31	4.50	2.20	1.03	1.32	1.65	3.20	1.08	1'32	xxxv	
3, 18 (9)	£8.03	} 1,50	1,36	1'57	(b) {	1.13	1.20	1. <b>Q</b> o	1.02	2'07	0.67	6.04	1.09	• 1*44	(b) 1.26	XXXVI	
(6)	1.27	•			(b)	1.22	)   		•	(6)	o·8n				(b)	XXXVIII	
3.74	1.71	1'94	1.61	1.85	2.30	1.94	2.32	1.89	1.24	1,03	1-45	1 <b>.4</b> 9	1*44	1.19	1'64	XXXIX	
Ben	gal (stat	e) railw	ay (sta	       	d gaug	e).			1,41	1'27	Incl B	luded w engal (s (stand	ith the state) re ard gas	ailwa	ern y	XLIII	
3.15	1.13	1'24	1,30	1.20	· 1·63	1.00	1 .84	2'35	2'37	2'07	1.36	1,52	1.69	1.69	1 36	XLIV	
3,38	1				1.30		0'97			1'44	0.49	0.20	<b>o</b> '37	o: <b>6</b> 8	0'92	LIV	

							•							EXPEN
		TRAF		CENT.	OF TRAF	FIC			R CENT.					STBAM-
Serial No.	RAILWAY.	1888.	1889.	1890.	1891.	1892.	1888.	1889.	1890.	1891.	1892.	1888.	1889.	1890.
	STANDARD GAUGE.			1							!			
1	East Indian	6.20	6.63	6.82	5.98	5.77	4.53	4.52	4.30	<b>3</b> *43	<b>3</b> 57	74,322	57,308	<b>7</b> 8,951
. 11	Bengal-Nágpur	11'20	12.95	10.03	9.81	8-24	10.50	15.61	15'53	11'52	9.82	•••		***
ш	Indian Midland .	13.83	10.89	11.18	10.02	9°18	16.22	13'29	12'75	9-96	<b>9</b> ,30			
ıx	North-Western (state) .	9.35	7-93	8.23	7'44	9·2·	5'33	4.54	4'35	3.21	4.39	2 <b>,0</b> 9,577	1,24,147	81,094
ХI	Oudh and Rohilkhand (state).	9.76	9'47	9:53	8.43	<b>7:8</b> 9	7:55	5.48	5'97	5'09	4.41		•••	υ.
. XII	Eastern Bengal (state)	11.39	10.00	11.62	10.22	11. <b>6</b> 6	4 55	4.43	4.77	3.63	<b>4.3</b> 2	4,87,117	5,88,878	6,22,739
. xviii	Great Indian Peninsula	6.90	7.46	7.38	6.69	7.46	3.11	3.47	3.37	2.88	3.56	· •••		•••
XIX	Bombay, Baroda and Central India.	6.12	6.11	6.31	5'99	5`97	4'13	3.86	4.06	3.63	4.08			
xx	Madras	9.66	8.97	8-99	9.34	8-93	5 <sup>-8</sup> 3	5'83	5.80	6.03	5.61		•••	
xxvi	The Nizam's Guaran- teed state.	10,30	9.22	8.52	8.06	8.30	10'74	10.18	9'45	9,23	<b>9</b> .89	***	***	•••
×xxIII	METRE GAUGE Bengal and North-					:	:			•				
	Western— Tirhoot section .	13.21	11.20	,			9°06 ع	8-34				1 02 421	1,09,553	1
	Company's section	10.5	<b>.</b>	9.94	8.19	<b>8</b> *95	11		8.92	8.11	8.13		1,09,963	2,25,766
XXXV	Rajputana-Malwa .	7.79	7:17	7.82	6.48	<b>6</b> ·49	6.09	5'54	6'34	<b>5'3</b> 5	2.10		<b></b>	•••
xxxvi	Southern Mahratta	12.45	)				(12.13	)					:	
xxxviii	Southern . Mahratta (Mysore section).	9.5	12.23	11.64	1 11.83	11.65	12.73	13.53	12.77	11.76	12.37	•••		
xxxix	South Indian	8.62	8.28	7'95	5 <b>7</b> ·76	(a) 8:85	6 89	6.23	-5 <sup>-</sup> 97	7.19	(a) 7·64	•••	 •	•••
• XLIII	Eastern Bengal (state) -					}						·		
	Northern and Behar sections (including the Kaunia Dharila 2' 6" gauge branch).  Dacca section	Incl Ea (s	luded w stern E tate) ra ndard g	Bengal ilway	10.08	3 10.16	Eas (stat	uded witern Betel rails	engal Vav	4*64	5'40	Eastern	ded with Bengal (standard	(state)
XLIV	Burma (state) .	14.5	 3	10.3	6 10-17	10.5	7:02	6.76	6.46	5.89	5.36	***	,	
LIV	Bhávanagar-Gondal • Junágarh-Porbandar.	11'70	 	10.0	7 10*46	10-1	11.26	11.67	11'49	11·8 <sub>5</sub>	10.38	•••	•••	•••

B-continued.

principal railways during the years 1888-1892-continued.

DITURE-	-concluded	•				_			<del>=</del> -	<del> </del>			1
BOAT-1	Rupees.	MISCE	S BARNI	US, PER	CLUD	OF		т	OTAL—RUPE	. · R <b>s.</b>	-		_
1891.	1892.	1888.	1889.	1890.		1892.	1888.	1889.	1800.	1891.	1892.	Serial No.	REMARKS.
(a) 64,024	80,829	0.45	0.48	0.42	(a)	I.o.i	1,51,06,225	1,55,48,840	1,36,16,581	1,35,15,647	(b) 1,43,84,228	I	(a) Includes branch lines worked.
٠		1.03	1,02	2.18	1.02	1.21	10,65,832	16,37,783	23,17,115	27,72,904	30,75,396	II	(b) Excludes con- tribution to Pro- vident Fund.
. •••	•••	2.37	3.50	<b>2</b> '55	6-78	4.90	4,76,407	21,26,108	25,24,585	28,10,189	31,29,981	III	
80,607	70,139	0.84	<b>o</b> .86	1.00	0.06	1.12	1,74,12,706	1,79,22,079	1,71,41,434	<b>2,04,45,</b> 966	1,69,41,140	1X	
•••		6.01	1,15	1.52	0.97	1.01	40,61,048	33,35,606	36,26,918	36,21,751	35,26,507	хı	
3,36,516	3 <b>,27,3</b> 79	1°77	1.34	1.95	1.87	4.77	49,93,786	49,85,048	54,08,059	33,66,195	31,13.317	XII	
•••		1.50	1.20	1.21	1.65	1.89	1,92,80,263	1,50,59,340	1,89,94,983	2,18,34,585	1,97,76,840	XVIII	•
***		0.79	0.78	o·66	0.13	1.58	56,19,575	56,17,117	54,42,193	58,29,567	60,31,388	XIX	
•••	•••	0.20	0.42	+0.25	1.02	1,55	<b>50,09,</b> 408	53,72,474	49,84,654	54,38,158	53,32,537	xx	
•••		1'49	0 70	0.43	0.81	0'76	10,18,608	15,61,620	15,42,409	15,18,578	14,26,775	XXVI	
									•				
2 <b>,78,</b> 438	2,16,574	or82		0.70	0.51	<b>1.6</b> 9	10,08,407	9,18,429 11,57,860	20,28,228	19,88,347	21,06,870	XXXIII	
•••		o <u>.</u> 63	0.81	o·84	ი 63	<b>o</b> '59	89,82,987	91,32,787	87,85,756	94,72,504	91,85,679	XXXV	
		0.42	0.25	o·68	0.43	0.64	29,05,750 4,35,273	37,44,228	44,20,975	<b>40,11,45</b> 5	40,07,987	XXXVIII	
414	;;	0.34	0.21	1.12	o:6 <u>5</u>	(a) 0'69	40,26,991	41,76,267	37,58,204	46,07,132 •	(7) 48,61,405	x#xix	
4,06,152	3,01,642	Eas (sta	ded wit stern B ate) rail ndard	engal		2.65	Included wi (state) railw	th the Easte ay (standar	ern Bengal d gauge).	<b>27,77, 14</b> 5	<b>22,09,4</b> 02	XLIII	
7,913	61,509	o·89	0.11	o'8 <i>7</i>	0.42	0.48	21,04,257	31,16,711	31,23,241	34,83, <sup>80</sup> 5	<b>37,14,5</b> 31	XLIV	
•••		1.33	1.48	1.38	1.22	1.05	5,66,585	7,80,585	9,71,521	10,01,477	11,40,302	.LIV	
•			,										<u> </u>

APPENDIX

-	·										,	RE	SUL	'S EXC	LUSI	VE OF
		GRO		INGS PE	R TRAIR	<b>1</b> -	E	XPENDI:	TURE PE		IN-	NET	BARN	INGS PE	R TR/	
Serial No.	RAILWAY.	1888.	1889.	1890.	1891.	1892.	1888.	1889.	1890.	1891.	1892.	1888.	1889.	1890,	1891.	1892,
I	STANDARD GAUGE. East Indian	2.16	5.46	5.36	5.46	4'99	1.81	1*88	1.67	1.48	1.41	3.62	3.28	3.69	3.08	3.28
11.	Bengal-Négpur	2.87	3.89	4.71	4.13	4'14	1.03	3.13	3.81	2.40	2.09	0'94	0.77	0.00	2.33	2.02
111	Indian Midland	4.11	2.53	2.82	3'20	3'25	2.98	2.29	2.58	2.16	3,00	1.13	0.64	0.21	1'04	1.25
. 1X	North-Western (state) .	3.46	3.63	3.28	3'55	3°34	<b>2</b> *33	2.30	3.35	2'23	2.13	1.13	1.35	1,33	1.23	1.30
ХI	Oudh and Rohilkhand (state)	3'44	3.49	3.50	3'77	3.20	1.01	1.24	1.62	1.20	1.42	1'47	1.02	1.67	3.18	<b>2.0</b> 5
XII	Eastern Bengal (state)	3.88	3,60	3'58	4 <sup>-</sup> 63	4.02	1.78	1.62	1.91	2.01	1.68	2.10	2.52	1*97	2.63	2*37
XVIII	Great Indian Peninsula .	4:46	4.48	4.58	4'34	4.16	2.00	2.30	2.13	2.00	2'02	2:37	2.18	2.12	2.22	2.13
хıх	Bombay, Baroda and Central India.	5'46	5'71	5.60	5.46	5-61	2'41	2.42	<b>2</b> '36	2,52	2.38	3'05	3.50	3.31	3,51	3'24
xx	Madras	3.26	3.84	<b>3.8</b> 6	3.10	3.85	<b>2</b> *10	2.56	2.03	2.12	2.13	1.47	1.28	1.83	1.22	1.70
xxvı	The Nizam's Guaranteed state	3.90	3.88	3'94	4'39	4 <sup>-</sup> 62	3.51	2.60	2.36	2.40	2'37	1.6 <b>6</b>	1.58	1.29	1.99	2'25
	METRE GAUGE.										,					
XXXIII	Bengal and North-Western-								:							4
	Tirhoot section  Company's section	2·68		3.03	2.63	2.89	1.44	1.42		I .I 1	1.16	1.54	[.Q3		1.83	I /3
xxxv	Rajputana-Malwa	3.07			3'24	3.35	1-48	•	1.67	1.41	1,36	1.23	1.21	1'65	1.83	1.06
xxxvi	Southern Mahratta	2.31	17			ر (	1.24				(	o'57 )				
XXXVIII	Southern Mahratta (Mysore section).	3.52	3.60	2.20	2.20	2'48}	2.48	1.98	1.95	1.02	1.76 }	o·77	0.62	• 55	<b>o</b> ·85	0.78
XXXIX	South Indian	2.24	2.71	2.40	2.42	2.35	1.83	1'91	1:58	1.28	1'48	0.4	0.80	1'12	0.84	o:8 <i>7</i>
XLIII	Eastern Bengal (state)—  Northern and Behar sections (including the Kaunia-1) harlia 2' 6" gauge branch).  Dacca section	Inch East (stat	ided wi ern E e) ra idard g	lengal ailway	3.12	2.83	Ea (st	luded w istern I ate) r	ith the Bengal ailway	1.40		East (stat	ern E e) ra	ith the Bengal uilway gauge).	1.30	1 <b>.2</b> 5
ΧLIV	Burma (state)	3'14	3.29	3'42	3'49	3.72	1,00	2,10	1,02	2.08	1.05	1.18	1.10	1'47	1'41	1.80
LIV	Bhávnagar-Gondal-Junágarh- Porbandar.	2.01	5.01	2.80	3.10	3.50	1.47	1.64	1.43	2.16	2·3 <b>I</b>	1'44	1.52	• 1.01	1.03	ø·8g

B-continued.

# principal railways during the years 1888—1892—continued.

		<del> </del>		<del>-</del>		<u> </u>					
AVE	RAGE R MIL	GROSS I	EARNI VEBK-	NGS	CAPITAL EXP	ENDED ON OPE ND STEAM-BOAT	N LINE, INCLUS BUT EXCLUDIN	IVE OF ROLLING SUSPENSE—R	G-STOCK UPERS,		
1889.	1889.		1891.	1892.	1888.	1889.	1890,	1891	1892.	Serial No.	Remarks.
一	_			l	- <del></del>					·	
567	557	538	615	536	<b>3</b> 5,04,52,693	35,17,58,908	35,17,49,640	35,22,43,240	37,53,16,917	1	
170	131	tot	130	141	2,90,27,605	3,49,61,327	6,22,72,468	8,51,80,388	9,02,86,954	П	
99	91	86	115	130	1,22,84,140	7,42,50,955	7,88,56,496	8,15,71,338	<b>9,07,7</b> 9,753	111	·
201	226	220	261	208	37,10,68,811	37,47,52,493	38,28,65,195	38,80,65,777	41,46,87,574	ıx ,	,
197	209	205	238	237	8,91,5 <b>7</b> ,048	9,01,38,067	9,04,18,812	9,04,92,957	9,06,20,467	хі	
283	282	271	596	520	8,70,76,194	9,48,69,043	9,74,27,275	5,59,86,968	5,71,09,557	<b>х</b> п	
524	491	508	584	<b>5</b> 25	26,66,74,869	26,83,25,816	26,98,48,349	27,12,92,449	28,91,63,636	XVIII	·
531	552	540	590	594	9,18,78,575	9,24,52,414	9,21,07,465	9,34,43,154	9,37,77,980	XIX	
196	209	218	214	221	11,30,73,456	11,42,76,811	11,49,41,050	11,62,45,354	11,69,03,761	xx	
118	129	140	151	151	3,31,14,508	3,50,85,528	3,68,35,942	3,81,19,211	4,02,42,786	xxvı	
133	122	17	121	120	<b>2,04,51,849</b>		2,28,51,202	2,33,67,592	2,36,38,810	xxxiii	
113	103	<u>ر</u>			2,44,79,993	2,46,86,064	2,47,87,907	2,51,14,472	2,67,78,556	לן.	
215	230	200	252	257	12,43,12,627	12,48,93,585	12,51,86,464	12,57,04,691	1,26,18,06,902	xxxv	
86	84	83	87	83	7,20,11,558	<i> </i>	10,50,42,640	10,65,44,578	10,77,97,971	XXXVIII	
78	,				68,83,123	J		[.	,	CXXXVIII	
146	153	165	153	137	4,57,15,607	4,59,5 <sup>8</sup> ,914	4,62,65,978	6,32,42,123	7,45,74,660	xxxix	
East (sta	ern e) ra	vith the Bengal ailway gauge).	181	152	Included ( (stąte) rai	with the Easte lway (standar	ern Bengal rd gauge).	4,37,75,804	4,57,39, <sup>8</sup> 34	XLIII	
176	169	190	193	197	3,38,20,621	4,94,14,183	4,99,69,474	5,35,58,537	6,11,09,166	XLIV	
109	97	91	85	91	93,82,33 <u>5</u>	1,58,40,843	1,64,45,102	1,67,11,505	1,68,42,743	LIV	

APPENDIX

		•				
0 1 1 14			Ne	r barnings—Rui	PRES.	•
Serial No.	RAILWAY,	. 1888.	1889.	• 18go.	1891.	1892.
	STANDARD GAUGE.		•	•		
	East Indian	3,03,30,676	2,94,09,061	2,98,22,775	3,61,51,830	3,61,32,815
11	Bengal-Nágpur	5,17,461	4,03,161	5,47,463	26,84,452	30,08,166
ın	Indian Midland	1,80,429	5,96,049	5,99,780	. 13,52,172	19,48,540
iX	North Western (state)	82,82,706	1,01,86,759	1,01,45,387	1,20,20,131	94,94,525
ХI	Oudh and Rohilkhand (state)	30,16,005	42,04,077	37,54,478	49,42,458	50,16,330
. <b>X</b> II	Eastern Bengal (state)	55,25,424	61,91,626	60,70,323	43,53,163	39,11,578
XVIII	Great Indian Peninsula	<b>2,17,</b> 78,956	1,80,09,475	1,91,50,259	2,34,20,748	2,08,88,787
xix	Bombay, Baroda and Central India	71,19,358	76,17,254	74,98,178	83,08,202	82,13,090
xx 1	Madras	35,21,645	37,38,421	45,21,480	39,06,529	42,92,132
xxvi	The Nizam's Guaranteed state	7,57,467	7,72,513	10,39,590	12,57,860	13,53,866
	·	,				
	METRE GAUGE.	•				
XXXIII	Bengal and North-Western-		.			
	Tirhoot section.	. 7,98,876	9,78,246	}	0	_
·	Company's section	9,88,844	10,53,964	25,73,364	29,77,841	3 <b>0,</b> 17 <b>,</b> 069
XXXV R	Rajputana-Malwa	96,31,727	1,07,97,218	86,42,525	1,23,17,065	1,32,14,775
xxxvi s	Southern Mahratta	(a) 9,32,866	) (	4	•	
XXXVIII	Southern Mahratta (Mysore section)	(a) 1,35,385	(11,83,649	(b) 12,24,074	(b) 20,52,900	(b) 18,24,332
XXXIX S	South Indian	16,72,271	16,88,131	25,08,432	24,29,624	28,53,591
1	Castern Bengal (state)—					,
	Northern and Behar sections (including the Kaunia-Dharlla 2'6" gauge branch).	Included wi	th Eastern Ben andard gauge).	gal (state)	21,78,938	23,22,149
	Dacca section	'.				·
. XLIV B	urma'(state)	12,71,961	15,73,552	23,48,191	23,71,391	33,86,087
LIV BI	hávnagar Gondal-Junágarh-Porbandar .	5,53,675	5,99,832	6,00,267	4,75,786	4,37,876

B-concluded.

principal railways during the years 1888-1892.-concluded.

Pg	RCENTAGE C	• WORKIN		SON	CAPITAL	EXPENDIT	T EARNING URE ON UPP UT EXCLU	IN LINE, IN	CLUDING		
1888.	1889.	1890,	1891.	1892.	1888.	1839.	1890.	1891.	1892.	Serial No.	REMARKS.
						·					
33'25	34.29	31'35	·27·2I	28 <sup>.</sup> 47	8·65	8-36	8·48	10.51	9.63	I	
67:32	80.52	80.89	50.81	50.22	1.78	1.12	o·88	3,12	3'33	п	
72'53	78.10	80.80	67.21	61-63	1 47	0.80	0.76	1.66	2.12	ш	
67.77	63'76	62.82	62.98	64.08	2'23	2.23	2.64	3.10	•2.29	ıx	
57'38	44.54	49'14	42'29	41.58	3.38	4.66	4.12	5 46	-5.24	хі	•
. 47'47	44.60	47'12	43 <sup>.</sup> 61	44'32	6.32	6.2	6.53	7.82	6.85	хи	
46.96	51.41	49.80	48'25	48 <sup>.</sup> 63	8-17	6.71	7 10	8.63	7.22	xviii	
44'11	42'44	42.06	41'23	42.34	7.75	8.24	8.07	8:97	8.76	xix	
58'72	58.97	5 <sup>2</sup> '44	58.30	55.40	3.11	3'27	3 <sup>-</sup> 93	3.36	. 3.67	xx .	
<b>57</b> '35	66.90	59'74	54'70	51·3 <b>1</b>	2'29	5.50	2.83	3'30	3.36	xxvi	
			· •								
						•		· ·			
55'86 55'25	1	44'08	40'04	41.15	3.91 4.04	4 <sup>.</sup> 73	} 5'39	6.14	5.98	xxxIII	
48.26		50.41	43'47	41.01	7.75.	8.65	6.90	<b>č.</b> 80	10.47	xxxv .	(a) Net earnings before paying
(c) 75.70 (c) 76.28	75.98	( <i>d</i> ) 78·36	(d) 66·26	(d) 68 <sup>.</sup> 82	(e) 1'30 (e) 1'97	) (e) 1°25	(/) 1.11	(f) 1'93	( <i>f</i> ) 1.69	xxxviii	(a) Net earnings before paying contribution to Provident Fund. (b) Net earnings after paying contribution to Provident Fund. (c) Calculated on working expenses, excluding contribution to Provident Fund.
69'17	70:30	57'50	65:47	63.01	3.66	3.67	5'64	3.81	3.83	XXXIX	(d) Calculated on working expenses, including contribution to Provident Fund.  (e) Contribution to Provident Fund included in net earn-
Beng	d with the al (state) r andard gan	ailway	56.03	48•76	Bengal	with the (state) radard gau	ailway	4-98	5.08	XLIII	ings.  (f) Contribution to Provident Fund treated as a part of working expenses.
62'3	66.45	57.08	20.20	• 25.31	3.76	3.18	4'70	4'43	5'54	XLIŸ	
20.2	56.22	61.81	67.79	72.25	5'90	3.43	3.62	2'85	2.60	ĽΙ <b>V</b>	

#### APPEN

#### Statement showing the mileage, age, cost and general results

[Steam-boat earnings and expenses, and suspense items

		340	Mean	Mean age	. \	•					ENTAGI TAL CO	DST.	Gross arnings	Per cen of
Serial	RAILWAY.	Miles open at lend of year.	nileage open during year.	of line at end of year.	Capital out- lay at end of year.	Cost per mile open.	Gross earnings.	Working expenses.	Net earnings.	Gross earn- ings.	Work- ing ex- pen- ses.	Net earn- ings.	per mean mile open per week.	wor ing expe ses gro ear ing
•		Miles.	Miles.	Years.	R	R	R	R	R				R	
	STANDARD GAUGE.							d.				·		
	State lines worked by companies.							·			1	. :		
1	East Indian (a)	1,610'28	1,575°01 (8)		35,81,27,912	2,22,401	4,87,84,129	1,36,05.873	3,51,78,256	13.61		9.82	(e) 587	27
11	Patna-Gya (d) Bengal-Nagpur .	57°20 831°58	28'44 831'58		43,69,426 9,02,86,954	***	2,85,495 60,83,562	1,23,033 30,75,396	1,63,462 30,08,166	6.26			193	4 <sup>2</sup>
111	Indian Midland	677*35	(e)	1 1			44,77,624	27,51,365	17,26,259	1	1 * '		(f)124	6:
١V	Bhopal-Itarsi (British section)	13.00			17,27,868	1.32.013	1,53,097	<b>ე</b> ნ,700	-	•	5.60			6
VI VII	Wardha Coal Dhond-Manmad .	44 88 145 44		16 66 14 74	49,87,689 1,10,71,284	1,11,134	(A) 1,07,573	(1) 73,478	34,095	•••	***	0.68 3.92		:
AIII	Bezwada extension .	21,44	(f)	3,80	14, 17,674		(h) 28,908		28,347		•••	3,00	••• .	•
	State lines worked by the State.			'							•	į		1
1X	North Western (state)	(Å) 2,427 38	( <i>l</i> ) 2,431°28	14'05			(n) 2,64,09,088		94,94,591	(n) 6 44	(n) 4'12	3,33	(0) 208	6
х	Amritsar-Pathankot (p. Hyderabad-Umarkot	58.91		0'37	15,92,06		(A) 28,052		28,052 -1,949		2.31	-0,13 0,20		10
XI	(state)	602'5'												4
XIIX		125'01												4
XIV	Calcutta Port Commis	6.3	6.3	11.04	57,83,460	16,52,419	2,70,920	1,40,00	1,30,91	4 68	2'42	2.36	838	5
	Lines worked by					ļ	}							
	guaranteed com- panies.		(s)		1					(t)	(4)		İ	
XVIII	Great Indian Peninsula		7 1,490'8	1 28.34	27,21,77,57	2,11,520	4,06,65,627	2,03,06,001	2,03,59,62			7:48	<b>5</b> 25	4
XX	Central India	460°9 839°2			9,37,77,98									4
	MIRGING		3	120,70	11,09,03,70	1,39,300	90,24,003	, 33,3-23	42,92,13,	3	4.20	3.67	221	5
хXI	Assisted companies Delhi-Umballa-Kalka		0 161'4	0 1-84	(u) 1,49,07,79	92,360	10,81,769	5,19,249	5,62,52	7'26	5 4.45	a:9		4
XXII		22.3				77,93						3'78 8'94		4
•	Lines owned by native states and worked by com-													
XXIII	panies. Khámgaon	7.5		22'8		al a	(h) 30,908		30,90	_1		6.37	,	
XXIV		5'4		31.8	1 1/1/05	1	1 , , , , , ,	1 .				11.01		
XXV			(v)			1,13,353		1		(w)	(w)		·	1
XXVII	teed state The Gaekwar's Petlac	13.3					(w)27,80,64: 61,24;	14,55,68; 26,48						
	Lines owned by native states and worked by state railway agency.													ŀ
XXIX		107'9	4 107'9	3'9	65,90,42	4 61,0 <u>5</u> ;	5,64,05	3,10,22	2,53,82	4 8.5	6 4.7	3.85	100	;
4144	(native state section)		2 (q)	2.8	9,45,30	2 59,37	(h) 15,44	• '	15,44	4		1.63		
	TOTAL AND AVERAGE	J <del></del>	-	-	<del> </del>	<u> </u>	<del> </del>	<del> </del>	<del></del>	-  <del></del>	-	╬╌		-
	STANDARD GAUGE .	10,196.6	0 10,144'8	18.3	3 1,67,65,84,49	4 1,62,85	17,29,02,88	7,80,00,98	9,49,01,90	0 10'3	4.6	5.60	(x) 326	١.

DIX C.

of working of Indian railways for the year 1892.

have been excluded from the following figures.]

	•							<u> </u>			ENTAG		Gross earn-	Per cent.
Serial Number.	RAILWAY.	Miles open at end of year.	Mean mileage open during year.	Mean age of line at end of year.	Outlay at	Cost per mile open.	Gross earnings.	Working expenses.	Net earnings.	Gross carn- ings.	Work- ing ex- pen- ses.	Net carn- ings.	ings per mean mile open per week.	work- ing expen- ses on gross earn- ings.
•	METRE GAUGE. State lines worked by companies.	Miles.	Miles.	Years.	R	R	R	R	R				R	
וווצצצ	Bengal and North-West-				] 			·						•
xxxıv	Tirhoot section .  Company's section . Rohilkund and Kumaon	341°80 414°50	340'61 413'38	7.13	2,30,93,715 (a) 2,52,35,845	67,565 60,883	47,17,989	18,90,297	28,27,692	9.46	3,31	5.82	120	40'07
XXXV	(Lucknow-Bareilly sec-	198'38 1,674'02	198'38 1,674'02	4'99 13'30	(b) 76,69,568 12,61,86,902	38,661 75,380	6,82,836 2,24,00,454	4,07,778 91,85,679	2,75,058 1,32,14,775	8·90 17·75	5.32 2.38	3 58 10 47	66 257	59'7 <b>3</b> 41 <b>°</b> 01
XXXVII	Southern Mahratta Southern Mahratta (My- sore section)	331*18		6'42	9,24,98,256	88,625 46,198	44,33,107	30,45,108	13,87,999 4,54,693	4.79 g.26		1°50 2°97	82 87	68·69 67·92
xxxix	South Indian	1,105'19	-	12.39	7,45,74,660	67,477	(c) 77,14,996	(c) 48,61,405	28,53,591	10.32	6.2	3'83	137	63.01
XLIII	Northern and Behar sections (including Kaunia-Dharlla 2' 6"	477'94	444*15	9.77	3,81,09,178	79,736	38,21,533	16,62,430	21,59,103	10,03	4'36	5.67	165	43*50
XLIV XLV	gauge branch) Dacca section Burma (state) Mu Valley	85.92 558.50 159.00	85°92 558°50 133'31	7.48 8.43 0.84	5,13,46,745 93,52,302	77,972 91,937 58,819	3,80,920 68,73,c22 2,09,359	2,45,330 32,65,689 3,87,253	1,35,590 36,07,333	5.68 13.39 2.34	3 66 6 36	7.03 -1.03	85 237	64'40 47'51 184'97
XLVI XLVII. XLIX	Assisted companies. Deoghur Rohilkund and Kumaon (Company's section) Dibru-Sadiya	4'79 53'92 77'50	4'79 53'92 77'50	9·88 8·25 8·99	2,86,179 20,52,435 68,26,045	59.745 38.064 88.078	26,964 4,33,647 5,13,213	17,257 2,34,889 3,49,494		9'42 21'12 7'52		3'39 9'68 2'40	108 (d)127 127	
	Lines owned by native states and worked by companies													
LI) LII	The Gaekwar's Mehsana	92.63 29.03	92.63 29.07	2.82 1.40	29,71,610 23,18,476	32,080 79,755		1,05,958 61,216		8.71 3.30		5'15 1'26		40°92 67 72
Lili	·	247°50 43°50	247'50 43'50	4°43 1°06	47,61,590 9,48,622	19,239	9,46,980 76,548	4,18,039 51,644				11.11	74 34	44°14 67°47
LIV		329.22		8.54		51,160	15,78,178	11,40,301	4,37,877	9*37	1	2*60	91	72.22
	TOTAL AND AVERAGE METRE GAUGE	7,268-26	7,166-21	9.26	50,70,73,949	69,766	5,65,76,678	2,82,92,645	2,82,84,033	11,19	5.28	5.28	(f) 152	50°01
	SPECIAL GAUGES. State lines worked by the State.		 					, 				n: c6		
<b>L</b> VII	Nalháti (4' o") (e). Cherra-Companyganj (2' 6") Jorhát (2' o")	8.00 8.00	6·78 8·00 26·66	6·55 7·58	3,54,994 7,38,472	44,374 26,187	24,917 18,570 66,079	-411 17,702 54,291	25,328 868 11,788	7.63 5.23 8.95	4'99	7°76 0°24 1°60	• 70 45 48	95'33 82'16
LVIII	Assisted company.  DarjeelingHimalayan (2' o")	21,00	21,00	12'12	30,08,609	58,894	6,35,778	3,65,334	2,70,444	21.16	12'16	9,00	240	57:46
Lix*	Line owned by native state and worked by company. The Gaekwar's Dabhoi (2'6")	<b>71'6</b> 6	71.66	13,01	18,29,994	25,537	2,38,609	1,32,099	1,06,510	13*04	7-22	5'82	64	55.36
LXI	Lines owned and worked by native state.  Morvi (2' 6")	94'00	94'00	5'37	20,80,223	22,130	3,09,171	<b>1,7</b> 8,801	1,30,370	14'87	8°60	6.27	63	57.83
1	TOTAL AND AVERAGE SPECIAL GAUGE	252.86	<del></del>		80,07,292	31,667	12,93,124	7,47,816	5,45,308	16.12	9 <sup>.</sup> 34	6.81	96	57.83
ļ	COAND TOTAL AND	<del></del>	— <u>·</u> -—-				23.07.72.685	10,70,41,444	12,37,31,241	10.23	4.88	<b>5</b> .62	252	46.38

<sup>(</sup>a) Excludes interest on capital during construction (R10,90,014).
(b) Excludes interest on capital during construction (R41,029).
(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 on 65'92 miles, including 12 miles of the Rohilkund and Kumaon railway (Lucknow-Bareilly section) worked over by the Rohilkund and Kumaon railway (Company's section).
(e) Transactions for 3 months ending the 31st March 1892, after which date the line was incorporated with the East Indian railway and converted to the standard gauge.
(f) Calculated on 7,178'21 miles, vide foot-note (d).

#### APPENDIX D.

Statement of Indian railways and of steam tramways outside municipal limits constructed and in progress on the 31st March 1893.

INDEX.

Railway.	Classification.	Serial No.	Railway.	Classification	C!-1 N-
		501123 1101	Nallway.	Classification.	Serial No.
•			•		
A Amréoti • • • •	Line owned by native state	•	Jamma and Vasharia (N	7. 11 11 1	
Assam-Bengal .	and worked by company State line worked by com-	XXIV	Jammu and Kashmir (Na- tive state section).	Line owned by native state and worked by state rail- way agency	xxx
- -	pany	XL	Jetalsar-Rájkot	Line owned and worked by native state	LIVA
B Bareilly-Rámpur-Moradabad	See under Oudh and Rohil-		Jodhpore-Bickaneer	Line owned and worked by	
Bengai and North-Western	khand (state). State line worked by com-	ХI	Jorhát	native state State line worked by the State	LIII LVII
Bengal Central*	pany . State line worked by the	XXXIII	к	State	
Bengal Dooars	State	XIII	Khamgáou	Line owned by native state	xxııi
Bengal-Nágpur	State line worked by com-	II	Kolhápur	and worked by company. Line owned by native state	
Bezwada extension (includ-	State line worked by com-	_		and worked by company.	Lii
ing the Bezwada-Godávari section of the East Coast	pany	VIII	Lucknow-Bareilly section,	State line worked by com-	
railway). Bhávnagar-Gondal-Junágarh-		_ <u> </u>	Rohilkund and Kumaon railway	pany	XXXIV
Porbandar. Bhopal-Itársi (British sec-	1	) LIV	Lucknow-Rae Bareli-Bena- res.	See under Oudh and Rohil- khand (state)	l xı
tion). Bhopal-Itársi (Native state		{ xxv	. м		
section). Bhopal-Ujjain	and worked by company. Line owned and worked by	,	Madras	Line worked by guaranteed company	xx
Bina-Guna	native state Line owned and worked by	IXXXII	Mári-Attock	State line worked by the State	XVI
Bombay, Baroda and Cen-	native state	XXXI	Máyavaram-Mutupet .	State line worked by com-	XLI
tral India.	company	XIX	Morvi	pany Line owned and worked by	
Burma (state)	State line worked by the State	XLIV	Mushkaf-Bolán	native state State line worked by the	LXI
С		.	Mu Valley	State line worked by the	XV
Calcutta Port Commissioners	State line worked by the	XIV	Mysore gold-fields	State Line owned by native state	XLV
Cooch Behar	Line owned by native state and worked by state rail-		Mysore section, Southern	and worked by company .	XXVIII
D	way agency	LX.	Mahratta railway.	pany	xxxviii
Darjeeling-Himalayan .	Assisted company	×VIII	N/I N		.
Delhi-Umballa-Kalka. Deoghur	Assisted company	xîvi	Nilgiri Nizam's Guaranteed State.		
Dhond-Manmád	State line worked by com-	VII	North Western (state) .	and worked by company. State line worked by the	ļ
Dibru-Sadiya	Assisted company	XLIX	o	State	IX
E		1	Oudh and Rohilkhand (state)	State line worked by the	XI
East Coast	State line worked by the	XVII	P Pálanpur-Deesa	State line worked by com-	
Eastern Bengal (state) Dacca section			Pondichercy	pany	XLII LVI
Northern and Behar sec- tions (including the		}	R		•
Kaunia-Dharila, 2' 6"	State line worked by the	XLIII	Rájpura-Bhátinda	Line owned by native state	
gauge, branch).  Standard gauge sections.	)	XII		and worked by state rail- way agency	XXIX
East Indian	State line worked by com-	· 1	Rájputana-Malwa	State line worked by com-	xxxv
G		<b> </b> .	Rohilkund and Kumaon (Company's section).	Assisted company	XLVII
Gaekwar's Dabhoi	Line owned by native state and worked by company.	LIX	s		
Gaekwar's Mehsána	Line owned by native state and worked by company.	LI	Southern Mahratta	State line worked by com-	XXXVI
Gaekwar's Petlád	Line owned by native state	XXVII	South Indian	State line worked by com-	XIXXX
Godhra-Rutlam	and worked by company . State line worked by com-		т	, , , , , , , , , , , , , , , , , , ,	^^^
Great Indian Peninsula .	Line worked by guaranteed	V	Tarkessur	Assisted company	XXII
Guntakal-Mysore frontier .	State line worked by com-	XVIII	Tirhoot section, Bengal and North-Western railway	State line worked by com-	xxxiii
н	pany	XXXVII	Tramways outside muni- cipal limits.	· · · · ·	See after No. LXI
Hyderabad-Umarkot	State line worked by the	. x	w		
Indian Midland	State line worked by com-		Wardha Coal	State line worked by com-	V
	pany	111	West of India Portuguese.	Foreign line	LV

<sup>\*</sup> Although for convenience classed among the state railways the company's section of this line is the property of the Bengal and North-Western Railway Company.

Bengal Central

#### APPENDIX D.

Statement of Indian railways and of steam tramways outside municipal limits constructed and in progress on the 31st March 1893.

INDEX.

				,	
Railway.	Classification.	Serial No.	Railway.	Classification.	Serial No.
	<del></del>				<del></del>
A			. J	•	
Amráoti	Line owned by native state	•	Jammu and Kashmir (Na-	Line owned by native state	
Assam-Bengal	and worked by company State line worked by company	XXIV XL	tive state section).  Jetalsar-Rájkot	and worked by state rail- way agency Line owned and worked by	xxx
В	pany		•	native state	LIVA
Bareilly-Rámpur-Moradabad	See under Oudh and Rohil-		Jodhpore-Bickaneer	Line owned and worked by native state	LIII
Bengal and North-Western*	khand (state). State line worked by com-	XI	Jorhát	State line worked by the State	LVII
Bengal Central	pany State line worked by the	XXXIII	K		
Bengal Dooars	State	XIII   XLVIII	Khamgáon	Line owned by native state and worked by company.	xxiii
Bengal-Nágpur	State line worked by com-	II I	Kolhápur	Line owned by native state and worked by company.	Lti
Bezwada extension (includ-	State line worked by com-	VIII	•	was welled by company	
ing the Bezwada-Godávari section of the East Coast railway).	pany	A 111	Lucknow-Bareilly section, Rohilkund and Kumaon	State line worked by com-	XXXIV
Bhávnagar-Gondal-Junágarh- Porbandar.	Line owned and worked by native states	LIV	railway Lucknow-Rae Bareli-Bena-	See under Oudh and Rohil-	
Bhopal-Itársi (British sec- tion).	State line worked by com-	)	tes,	khand (state)	XI
Bhopal-Itársi (Native state section).	Line owned by native state and worked by company	xxv	. M Madras	Line worked by guaranteed	
Bhopal-Ujjain	Line owned and worked by	XXXII		company	XX
Bina-Guna	native state . Line owned and worked by		Mári-Attock	State line worked by the	XVI
Bombay, Baroda and Cen-	native state	XXXI	Máyavaram-Mutupet .	State line worked by com-	XLI
tral India. Burma (state)	company	XIX	Morvi	Line owned and worked by native state	LX
	State	XLIV	Mushkaf-Bolán	State line worked by the State	xv
C Calcutta Port Commissioners'	State line worked by the	1 ·	Mu Valley ,	State line worked by the	XLV
	State	XIV	Mysore gold-fields	Line owned by native state	
Cooch Behar	Line owned by native state and worked by state rail-	LX	Mysore section, Southern Mahratta railway.	State line worked by company .	IIVXXX
D	way agency	1 _		pany	
Darjeeling-Himalayan . Delhi-Umballa-Kalka .	Assisted company Assisted company .	XVIII	Nílgiri	Assisted company	. 1
Deoghur	Assisted company State line worked by com-	XLVI	Nizam's Guaranteed State.	Line owned by native state and worked by company.	
Dibru-Sadiya	pany	XLIX	North Western (state) .	State line worked by the	ט
E			O Oudh and Rohilkhand (state	State line worked by the	
East Coast	State line worked by the		P	State	.  X
Eastern Bengal (state)-	State	XVII	Pálanpur-Deesa	State line worked by com-	j XLI
Dacca section	)		Pondicherry	Foreign line	LV
tions (including the Kaunia-Dharlla, 2' 6"	State line worked by the	XLIII	R Rájpura-Bhátinda	Line owned by native state	
gauge, branch). '	State		, and the second	and worked by state rail-	
Standard gauge sections .  East Indian	State line worked by com-		Rájputana-Malwa	State line worked by com-	
G	pany	I	Robilkund and Kumaon	Assisted company	XXXX
Gaekwar's Dabhoi	Line owned by native state	719	(Company's section).		
Gaekwar's Mehsána	and worked by company. Line owned by native state	LIX	Southern Mahratta	State line worked by com-	xxxv
Gaekwar's Petlád	and worked by company. Line owned by native state	į –	South Indian	State line worked by com-	. 1
Godhra-Rutlam	and worked by company. State line worked by com-	XXVII	т	pauj	
Great Indian Peninsula .	Line worked by guaranteed	· ·	Tarkessur	Assisted company	XXI
Guntakal-Mysore frontier .	State line worked by com-	XVIII	Tirhootsection, Bengal and North-Western railway Transparent outside puni-	pany	XXXII See afte
н	pany	XXXVII	Tramways outside muni- cipal limits.	• • • •	No. LX
Hyderabad-Umarkot	State line worked by the	. x	W	Clobe line marks 1 has a	
I I	State line worked by com-		Wardha Coal	State line worked by com-	.[ ▼
Indian Midland	1 State lille Mother of com-		West of India Portuguese .	Foreign line	L'

<sup>\*</sup> Although for convenience classed among the state railways this line is the property of the Bengal and North-Western Railway Company.

Bengal Central

# Constructed and in progress

### STATE

No.	Name of line and mileage sanct	ioned.	Total mileage.	Date of opening for public traffic.
	East Indian—	Miles.	Miles.	• Miles.
•	Main line-		•	Main line-
	Khána junction to Luckeeserai junction	3 t ot 1,018t		Howrah to Hooghly 15-8-54* 23\frac{1}{2}\$ Hooghly to Pundooah
		— 186⅓		Jumna bridge to Allahabad . 15-8-65 3 Allahabad to Cawnpore . 3-3-59 1194
	Hooghly junction (23½ miles from Howrah) to Naihati on the Eastern Bengal (state) railway (Hooghly bridge branch)  Ondal junction (41½ miles from Khana junction on the chord line) to Toposi (Singharon branch)  Sitarampur junction (62½ miles from Khana junction on the chord line) to Barakar (Barakar branch)  Barakar to Kooreedeeh, including branch to Chanch (Therria branch)  Toposi to Khorabad, Nandi to Panooria and Salanpur to Mohanpur (Toposi branch	2 to 1 to 1 to 1 to 1 to 1 to 1 to 1 to		Cawnpore to Etawah . 1-7-61 868 Etawah to Shikohabad . 13-11-61 348 Shikohabad to Tundla junction . 1-4-62 228 Tundla junction to Aligarh . 1-3-63 488 Aligarh to Chola (Bulandshahr road) . 1-4-64 358 Chola to Delhi (south bank, Jumna) . 1-8-64 411 1-1-67 13 1,0184 Chord line—  Khána junction to Raneegunge Raneegunge to Siársol . 21-7-63* 13 Siársol to Sítarámpur . 1-1-65* 158 Sítarámpur to Luckeeserai junction . 1-1-71*1238
-	Madhupur junction (1081 miles from Khána junction on the chord line) to Kurhurbaree collieries (Kurhurbaree	9‡		Branches—
	Nalhati (144% miles from Howrah via the loop line to Azimganj) (Azimganj branch)  Tinpahar junction (194% miles from Howrah via the loop line) to Rajmehal (Rajmehal	63 71 73		Bhadreswar branch Hooghly bridge branch Singharon branch— Ondál to Bahasole Babasole to Mangalpur Mangalpur to Toposi Barákar branch Chanch branch— For goods traffic Kurhurbaree branch Azímganj branch Rajmehal branch  15-7-92 Rajmehal branch 6-12-82 2\$ 15-3-87* 4½ 2-2-63 2\$ 2-2-63 2\$ 1-1-65 5½ 1-1-65 2 2-2-63 2\$ 1-1-65 5½ 1-1-71 263 2-2-63 2-2
***	Carried over . 15			Carried over $\left\{\frac{1,205}{841}\right\}$

D-continued.

RAILWAYS

on 31st March 1893.

### LINES

### COMPANIES.

Details of construction.	Remarks.
	· · ·
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.	commenced in January 1851. The first section, 234 miles, was opened on 15th August 1854.  The chord line was commenced in February 1866, and
	was opened on 1st January 1871. This line diminishes the distance between Howrah and Upper Provinces by 64 miles.
The Singharon branch is a single line throughout. The rails are laid on transverse timber sleepers and castiron bowl and plate sleepers.	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.  A branch line of railway has been constructed by the Beerbhoom Coal Company from their colliery at Borreah to a point on the East Indian railway. It was opened for coal traffic at the end of February 1885.  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.
	The Jherria branch was sanctioned for construction and orders for the commencement of work issued on 9th March 1892.  The Toposi branch extension was sanctioned in sections in July and August 1892.
The Kurhurbaree branch is constructed for a single line.  The width of formation in the embankments is 16 feet.	
The road on the Azimganj branch 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 line was originally laid with 31lb. rails on teak, sål, and pine sleepers. On its conversion to the standard gauge, the permanent-way was replaced by 82lb. iron rails laid on Denham-Olphert's plate sleepers over a bed of laterite ballast. The ruling gradient is 1 in 100. The line is unfenced throughout.	The line from Nalháti to Azímganj, which was constructed by the Indian Branch (afterwards the Oudh and Rohilkhand) Railway Company, was purchased by the State on the 31st of March 1872 for a sum of £30,000. On the 1st April 1892 this line was incorporated with the undertaking and, on the 15th July 1892, opened on the standard gauge under the name of the "Azímganj branch."  The old Nalháti (4' o" gauge) line was opened for traffic on 21st December 1863.
	The construction of the Sultangunge branch was sanctioned in March 1893.
	•

Constructed and in progress

# STATE WORKED BY

			WORKED BY
No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	. Miles.	Miles.	Miles.
I	East Indian—concld.  Brought forward . 150% 1,205		Brought forward $\begin{cases} \frac{1,205}{84^{\frac{1}{3}}} \end{cases}$
	Branches—concld,  Jamálpur junction (297½ miles from Howrah viá the loop line) to Monghyr (Monghyr branch)  Mokameh junction (282 miles from Howrah viá the chord line) to the river bank (Mokameh branch)  Bankipore junction (337¾ miles from Howrah viá the chord line) to Gya (Patna-Gyabranch)  Bankipore junction (337¾ miles from Howrah viá the chord line) to Digha ghát (Digha ghát branch)  Dildárnagar (433 miles from Howrah viá the chord line,		## Patna-Gya branch  Bankipore Junction to  Bankipore to Jehanabad 21-4-79 28  Jehanabad to Gya 2-6-79 29  Digha ghat branch 2-4-85 5½  Dildárnagar to Gházipur 5-10-80 12  Jubbulpore branch 1-8-67 223  Allahabad fort branch 3-3-59 28  Cawnpore city branch 15-2-79  Agra branch 1-4-62 13  408  ### Agra branch 1-4-62
	to Tárighát on the Ganges opposite Gházipur  Naini junction (559\frac{3}{4}\) miles from Howrah viá the chord line, or 4\frac{1}{4}\) miles east of Allahabad) to Jubbulpore (Jubbulpore branch)  Allahabad junction (564\frac{1}{4}\) miles from Howrah viá the chord line) to fort (Alla- habad fort branch)  Cawnpore junction (684\frac{1}{4}\) miles from Howrah viá the chord line) to the corn market in the city (Cawnpore city branch)  Túndla junction (827\frac{1}{4}\) miles from Howrah viá the chord line) to Agra (Agra branch)  13\frac{3}{4}  474\frac{1}{2}		Double-main line and branches.   Howrah to Serampore   10-3-57   11\frac{1}{8}   Serampore to Chander-nagore   1-2-58   3\frac{1}{8}   Chandernagore to Hooghly   1-5-58   3\frac{1}{8}   Hooghly to Magra   1-10-58   5\frac{1}{8}   Magra to Pundooah   25-2-59   8\frac{1}{8}   Pundooah to Burdwan   1-10-59   28\frac{3}{8}   Raneegunge   1-6-70   31\frac{3}{8}   Raneegunge to Sitarámpur   19-12-70   16\frac{1}{8}   Sitarámpur to Luckeeserai   1-1-71   124\frac{1}{8}   Luckeeserai to Burhee   22-6-70   9\frac{3}{8}   Barh to Futwah   1-11-68   25\frac{1}{8}   Futwah to Dinapore   20-3-67   19\frac{1}{8}   Dinapore to Bihta   13-8-68   10\frac{1}{8}   Bihta to Arrah   28-3-70   13\frac{1}{8}   Arrah to Buxar   13-8-68   42\frac{1}{8}   Buxar to Dildárnagar   15-4-82   22\frac{1}{8}   Dildárnagar to Zamánia   20-5-82   8\frac{1}{8}   Zamánia to Sakaldiha   20-9-82   16\frac{1}{8}   Sakaldiha to Moghal Sarai   10-8-82   11\frac{1}{8}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   4\frac{1}{4}   Hooghly bridge branch   15-3-87   15-4-82   15-4-82   15-4-82   15-4-82   15-4-82   15-4-82   15-4-82   15-4-82   15-4-82   15-4-82   15-4-82
•	TOTAL	1,679]	TOTAL DOUBLE LINE 4748
1			TOTAL OPEN MILEAGE . 1,613}

)-continued. RAILWAYS

n 31st March 1893.

**JINES** 

COMPANIES.

The first 29 miles of the Patna-Gya branch are laid with
rails, 64lbs. per yard, on the existing metalled road with
deviations in places. For the remainder a new alignment
has been adopted.

Details of construction.

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 exected. On the first 54 miles, rails, 82 lbs. to the yard, have been used; the rest of the line has rails, 74 lbs. to the yard. The rails are generally laid on wooden sleepers of creosoted fir and sal.

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.

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.

The length of road relaid with steel rails up to the 31st December 1892 was 1,360'14 miles, as follows:

			wiles.
Howrah district .		•	180.22
Chord line .	•	•	321.49
Dinapore district.	•	•	408:38
Allahabad district	•	•	243'33
Delhi district .	•	•	206.39
			1,360.14
•			1,300 14

The line is double fenced throughout, excepting the Azímganj branch.

REMARKS.

The Mokameh branch was originally 13 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 aths of a mile and opened to passenger traffic on 1st May 1883.

The length from Bankipore to Gya was constructed by the The survey was carried out under orders issued by the Government of Bengal in April 1877, and construction was commenced on the 13th February 1878. The line was worked by state agency from the date of

opening up to 1st January 1883, on which date it was made over to the East Indian Railway Company to be worked under an agreement.

On the 1st of July 1892 the line was incorporated with

the East Indian railway.

There is a branch, iths of a mile, from Patna (3311 miles from Howrah vid 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.

The branch from Bankipore to Digha ghat has been constructed to connect by a ferry across the Ganges with the Bengal and North-Western railway at Paleza ghât near Sonepore. Sanction to construction was given on 30th July 1884, and the branch was opened to traffic on

the 2nd April 1885.

The Jubbulpore branch was commenced under contract in February 1863, and was completed in 31 years.

The East Indian railway was acquired by the State from the late guaranteed company on 1st January 1880. On the 1st of January 1889, the Dildarnagar-Ghazipur

state railway was incorporated with the East Indian railway.

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.

The East Indian Railway Company works under agreement the Tarkessur and the Delhi-Umballa-Kalka rail-The terms on which these branch lines are worked will be found in appendices N and H, Part II of the Railway Administration Reports for 1887-88 and 1888-89, respectively.

## APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93

# APPENDIX STANDARD GAUGE

# Constructed and in progress

### STATE

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
11	Miles. Bengal-Nágpur—	Miles.	Miles
	Main line-	ļ	Ásansol to Damoodur—
	Asansol (131% miles from Howrah, on the chord line, East Indian railway) to Biláspur		For coal traffic
	Biláspur to Nágpur (519\frac{1}{2} miles from Bombay on the Nágpur branch of the Great Indian Peninsula railway) 255\frac{2}{2}	627	Purulia to Chakardharpore—
			For goods traffic
		·	Chakardharpore to Goilkera—
			For goods traffic
;			Goilkera to Jharsuguda •
			For goods traffic . 1-2-91 For passenger traffic . 28-3-91
			Jharsuguda to Raighar—
			For goods traffic 20-4-90 For passenger traffic 1-8-90
			Raighar to Biláspur—
		•	For goods traffic . 10-2-90 } 82 For passenger traffic : 24-3-90
	•		Biláspur to Raipur—
	•		For goods traffic 10-1-89 68 For passenger traffic 14-2-89
			Raipur to Ráj-Nándgaon . 4-12-88 42  Ráj-Nándgaon to Nágpur . 27-11-88 145
!		•	
	Carried over	627	. Carried over . 627

>-continued.

**LAILWAYS** 

n 31st March 1893.

INES

COMPANIES.

The line from Nágpur to Ráj-Nándgaon was originally constructed on the metre gauge with rails, weighing 40lbs. per yard, laid on creosoted pine, sal and teakwood sleepers. It has since been converted to the standard gauge. This has necessitated the rebuilding of many bridges, the changing of girders and the flat-

Details of construction.

tening of curves.

On the main line 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 on the first 220 miles out of Ráj-Nándgaon is exceptionally heavy.

On the Umaria-Bilaspur section, the permanent-way consists of 75lbs. steel rails laid on transverse cross sleepers. Between Khodri and Khongsara, the line passes over high banks and through heavy cuttings. The ruling gradient is I in 100 and the curves are 1,000 feet in radius. This section includes a tunnel, 1,100 feet long, and a viaduct of 2 spans of 200' girders, 116' high from rail level.

On the section from Nágpur to Kamptee, 83 miles, the old fencing has been taken down preparatory to putting up new and improved fencing. There are at present 21 miles of line fenced at Kamptee and 1 mile at Dongargarh. The remainder of the line is unfenced. REMARKS.

Sanction for the 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

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.

In 1887 the Bengal-Nagpur Railway Company was formed under contract with the Secretary of State, and took over the metre gauge Nágpur-Chhattísgarh 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.

The system extends from Asansol on the East Indian railway to Nagpur, the eastern terminus of the Great Indian Peninsula railway, with a branch (1603 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 Asansol to the mines of the Equitable Coal Company.

The Umaria-Katni line was taken over by the company on

the 1st April 1888.

The dates of orders for survey and construction and of opening of the original metre gauge line are as fol-

Dates for survey.

Någpur to Dongargarh, 4th February 1871. Extension from Dongargarh, 11th September 1880.

Dates for construction.

Nágpur to Dongargarh, 9th May 1878. Dongargarh to Ráj-Nándgaon, 15th March 1881.

Dates of opening.	
Nágpur to Tumsar—	Miles.
For goods traffic	. 6-4-80)
For passenger traffic—	
Nagpur to Kamptee (9 miles)	· 26-7-80 \ 53
Kamptee to Tumsar (44 miles)	. 8-11-80
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	· 16-12-82 } 51

TOTAL MILEAGE NOW CONVERTED TO STANDARD GAUGE

The line was opened through for goods traffic on 1st February 1891 and for passenger traffic on 28th March 1801.

The Saranda tunnel was completed and opened for traffic on the 1st October 1892, the diversion, over which traffic previously passed, being eliminated. It is lined almost throughout.

Excludes the branch line for Dowháli to Tumsar (3 miles), which has been abandoned.

Constructed and in progress

## STATE WORKED BY

No.	Name of line and mileage sanctioned.	Total Mileage.	Date of opening for public traffic.
II	Miles.  Bengal Nagpur—concld.  Brought forward  Branches—  From (Damoodur) a point at 4.88 miles from Asansol junction to the mines of the Equitable Coal Company (Sanctoria Coal branch)  Biláspur to Katni (Katni branch)  From Jharsuguda (382½ miles from Nágpur) to Sambalpur (Sambalpur branch)  30½	Miles. 627	Brought forward . 627  Branches—  Sanctoria Coal branch—  Damoodur to the Sanctoria coal mine— For coal traffic . 12-6-89 7  Katni branch—  Biláspur to Birsinghpur— For goods traffic . 1-2-91 For passenger traffic . 9-3-91  Birsinghpur to Umaria— For goods traffic . 11-5-90 For passenger traffic . 9-3-91  Umaria to Katni . 2-11-86 364  Sambalpur branch—
	•		Jharsuguda to Sambalpur—  For goods traffic  For passenger traffic  10-3-93  301  2341
. •	Тотац	8613	TOTAL OPEN MILEAGE . 8612
III.	Indian Midland—  Main line—  Bhopal (57 miles from Itársi on the Bhopal-Itársi railway) to Jhánsi	3151	Main line—  Bhopal to Jhánsi
	Branches—  Jhánsi to Mánikpur (617½ miles from Howrah on the Jubbulpore line of the East Indian railway) (Mánikpur branch)  180½  Jhánsi to Cawnpore transfer sidings (684¾ miles from	-	Mánikpur branch—  Jhánsi to Mau Ranipur . 5-6-89 40  Mau Ranipur to Bánda . 1-8-89 78½  Bánda to Mánikpur . 15-2-89 62
	Howrah on the East Indian railway) (Cawnpore branch)  Bina (143 miles from Itarsi on the main line) to Saugor (Saugor branch)  464	3613	Cawnpore branch—  Jhánsi to Chaunrah . 1-2-88 95 Chaunrah to Cawnpore . 1-4-86 401  Saugor branch—  Bína to Saugor 5-6-89 461
	Carried over	6771	· Carried over 6771

D-continued.

RAILWAYS

on 31st March 1893.

#### LINES

#### COMPANIES.

Borwa

Ohan .

Paisuni .

Details of construction. REMARKS. The Katni-Umaria section is laid with second-hand East Indian railway permanent-way on sal sleepers; 82lb. rails on three-fourths of the distance, and 74lb. rails on the remainder. The ruling gradient is 1 in 100. The curves are 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. The Sambalpur extension is laid with the same type of The survey of the Sambalpur branch was sanctioned on permanent-way as the main line. The work is fairly and October 1890. Orders for construction issued in heavy and contains one bridge of 6 spans of 100 feet July 1891, and work was commenced in October 1891. girders across the Bonum river. On the 2nd October 1885 the Indian Midland Railway The main line and branches are constructed for a single line, with flat-footed steel rails, 8olbs. to the yard, and Company, Limited, entered into a contract with the · oval pot sleepers, weighing 8olbs. each bowl, excepting Secretary of State for the construction of this line, the line from Cawnpore to the south bank of the which embraces the original projects for the Bhopal-Jumna river near Kalpi, where the rails are 75lbs. per yard, double-headed, on Denham-Olphert's sleepers, Jhánsi-Cawnpore, the Jliánsi-Gwalior, and the Jhánsi-Manikpur railways with the section from Bina to Saugor of the Bilaspur Itawa state railway. with 20 feet width formation. There were no engineer-The contract also provides for the possible extension ing difficulties on this section. from Saugor to a point on the East Indian railway at From Bhopal to Jhánsi the ruling grade is 1 in 200; the or near Katni. chief bridges are-Spans. Feet. Work was started on the several sections of the Indian . 9 of 150 · Betwa (Makrari) . Midland railway on the dates given below: Narain 4 ,, 150 · 4 ,, 150 · Cawnpore-Kalpi section • Bína . Oct. 1884 5 ,, 100 8 ,, 60 Kalpi-Jhansi section Bhopal Bhilsa section Keotan . Jan. 1886 . Mar. 1886 Newan Bhílsa-Básoda section
Jhánsi-Lalitpur section
. . Apl. 1886 . May 1886 Betwa (Bhilsa) . 4 ,, 100 and 5 of 75. Básoda-Lalitpur section . From Jhansi to Gwalior the ruling grade is 1 in 150 with June 1886 heavy rock cuttings in the Antri pass and a bridge of 9 . Aug. 1886. Jhansi-Gwalior section . . Aug. 1887 spans of 100 feet and 1 of 60 feet over the Sindh river. Bina-Saugor section From Jhansi to Manikpur the ruling grade is 1 in 125; The Jhansi-Manikpur section was originally sanctioned the principal bridges areon 23rd August 1883, but work was stopped on 31st Spans, Feet. March 1885. A revised estimate was sanctioned on 25th January 1886, and work was resumed about that Betwa (Sujanpura) .\*13 of 150 and 1 of 60 Dhassan (Mau) . . 13 ;; 100 1 ,, 250 and 12 of 100 Ken On the 1st January 1889 the Indian Midland Railway Company took over the working of the Bhopal-Itarsi railway. The terms of working will be found in appendix J, Par II, of the Railway Administration Report Bagain . . 8 ,, 100 '

1,, 100 and 4 of 40

1,, 100 and 4 of 40

for 1891-92.

4 ,, 100

Constructed and in progress

### STATE

<del></del> ,	·	I	WORKED B
No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic
.111	Miles. Indian Midland—concld. Brought forward	Miles.	Miles Brought forward 6774
			•
·v	TOTAL .  Godhra-Rutlam—  Godhra (3181 miles from Bombay, on	6771	TOTAL OPEN MILEAGE 6771  Godhra to Limkhérá 16-1-93 25
	the Bombay, Baroda and Central India railway) to Rutlam (537½ miles from Ahmedabad, on the Malwa section of the Rajputana-Malwa railway)	1727	Goulia to Limknera . 15-1-93 25
VI	Wardha Coal—  Wardha (471 miles from Boinbay, on the Nágpur branch of the Great Indian Peninsula railway) to Wardra	45*	Wardha to 8½ miles

<sup>\*</sup> Excludes 13 miles at Warora retained by the colliery as sidings on the transfer of the working of this railway to the Great Indian Peninsula Railway Company.

D-continued.

RAILWAYS

on 31st March 1893.

#### LINES

### COMPANIES.

Details of construction.

REMARKS.

The Jumna bridge at Kalpi, 10 spans of 250 feet, is the only important work between Cawnpore and Jhansi. It was finished in November 1887. The piers and abutments are built of sufficient width to take a second line

The ruling grade on the Bina-Saugor branch is 1 in 100.

The only important works on this length are the heavy cutting at Banhat and the Dhassan bridge (4 spans of

100 feet).

he late Sindia state railway which now forms a part of the Indian Midland railway extends from Agra cantonment to Gwalior, and is laid with rails, The late bolbs, to the yard, on transverse deodar sleepers. The principal work on this section is the bridge over the Chambal river, which consists of 12 spans of 186 feet each, and 2 spans of 136 feet each. Up to the end of 1892 the company relaid 163 miles of track with Indian Midland railway pots, and 124 miles with Indian Midland railway 8olb. rails.

The line is senced throughout, except on the Jhansi-Manikpur section between Banda and Jhansi.

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 will be found in appendix H to Part II of the Railway Administration Report for 1890-91.

The line traverses a very difficult country, the greater part of the length being on a gradient of 1 in 200. The rails are flat-footed 75lbs. to the yard laid on steel trough sleepers, except for 35 miles in the Rutlam section, where deodar sleepers will be used.

The line was surveyed in 1883 and 1884, but on the representation of the Bombay, Baroda and Central India Railway Company, a re-survey was ordered in October 1886.

Sanction to the commencement of work was given on the 29th October 1890 and work was started on the first section from Godhra to the 24th mile on the 1st January 1891. In June 1891 work was started from Rutlam to the 60th mile, and between the 60th and 24th miles, in both cases by petty contract. Work is sufficiently advanced to justify the expectation of its being ready for opening throughout on or about 1st March 1894. The open section is being worked by the Bombay, Baroda and Central India Railway Company.

The line is constructed for a single track. The first 21 miles are laid with Great Indian Peninsula rails, 68lbs. per yard, and the remainder with iron rails, 67lbs. to the yard. The rails on the first 181 miles were laid principally on creosoted pine sleepers, and on the rest of the line on teak and sal sleepers.

The re-sleepering of the line is progressing steadily, 19,688 new sleepers having been put in during 1892.

The line is fenced throughout.

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.

Constructed and in progress

STATE

		·	
No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
<del></del>	Miles.	Miles.	Miles.
vii	Dhond-Manmád—	[	•
	Dhond (1661 miles from Bombay on the south-east line of the Great Indian Peninsula railway) to Man- mad (1611 miles from Bombay, on		Dhond to Ahmednagar . 15-3-78 . 501  Ahmednagar to Manmad . 17-4-78 . 95
Ţ	the north-east line of the Great Indian Peninsula railway)	1453	TOTAL OPEN MILBAGE . 1451
	•		
VIII	Bezwada extension (including the Bezwada-Godávari section of the East Coast railway)—		
•	Hyderabad frontier to Bezwada . 214 Bezwada to the right bank of the		Hyderabad frontier to Bezwada 10-2-89 213
	Godávari gr	1121	Bezwada to the right bank of the Godávari 20-2-93.91
_	N.	• .	TOTAL OPEN MILEAGE . 1123
			•
	TOTAL STATE LINES WORKED BY COM- PANIES (STANDARD GAUGE)	3,650 <del>*</del>	• 3,493 <b>}</b> *

<sup>\*</sup> Includes the length (13 miles) of the Bhopal-Itársi railway (British section) which has been shown under "XXV-Bhopal-Itársi (native state section)."

D—continued.
RAILWAYS

on 31st March 1893.

# LINES

## COMPANIES.

Details of construction.	· ·REMARKS.
•	
The line is constructed for a single track; the fails are double-headed steel, 70lbs. to the yard, laid on iron pot sleepers, weighing 94lbs. each. The line, as originally constructed, was unfenced, but fencing is being provided gradually. The total length fenced up to 31st March is 90 miles.	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 Ghâts. 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, Part II of the Railway Administration Report for 1881-82.
	· · · · · · · · · · · · · · · · · · ·
The Bezwada extension 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 661 lb. steel rails on pea-pod sleepers.  There are no large bridges, and the line is fenced only at stations.  The permanent-way on the Bezwada-Godávari section consists of 75 lb. flat-footed steel rails, laid partly on transverse wooden and partly on steel sleepers. The ballast used is gravel, moorum, sand or stone. The ruling gradient is 1 in 200 and the sharpest curve is 4°.	The Bezwada line extends from the frontier of His Highness the Nizam's dominions to Bezwada. It is worked by the Nizam's Guaranteed State Railway Company as part of their system. For terms of working, see appendix P, Part II of the Railway Administration Report for 1889-90.  The survey of the Bezwada-Godávari line was ordered in September 1889 and the construction sanctioned in July 1890. This section is being worked, as a temporary measure, by the Nizam's Guaranteed State Railway Company on the same terms as the Bezwada extension railway. It is expected to be taken over by the State from the 1st January 1894.

## APPENDIX

STANDARD GAUGE

Constructed and in progress

# STATE

		•	WORKED BY
No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
IX	North Western (state)— Miles.	Miles.	Miles.
	MAIN LINE AND BRANCHES (Commercial).  Main line— Gháziabad (13 miles east of Delhi, on the East Indian railway) to Amritsar Amritsar		MAIN LINE AND BRANCHES (Commercial).  Main line— Gháziabad to Meerut city 18-4-67 273 Meerut city to Umballa cantonment 1-1-69 121 Umballa cantonment to Ludhiána 12-10-69 704 Ludhiána 15-10-70 84 Phillour to Jullundur cantonment 1-4-70 244 Jullundur cantonment to Beas 15-11-69 254 Beas to Amritsar 111 67 204 Amritsar to Lahore 10-4-62 324
	Lahore to, Ráwalpindi		Temporary line on metre gauge (62 miles), Lahore to Wazirabad, 12th April 1875.  Wazirabad to Naurungabad (38½ miles), 10th April 1876.  Naurungabad to Jhelum (2½ miles), 14th September 1876.  Lahore to Jhelum
	Carried over . 6144		Carried over . \{\frac{3334}{174}}

)—continued. **KAILWAYS** 

m 31st March 1893.

LINES

THE STATE.

Details of construction.

REMARKS.

From Gháziabad to Phillour the earthwork and the bridge foundations and superstructure are for a single line.

The original folb. bull-headed iron (steel-faced) rails on wooden and cast-iron round pot sleepers are being renewed with steel rails; 105 miles have been relaid with 68lb. bull-headed steel rails, 28 miles with 68lb. double-headed steel rails, 10 miles with 68lb. doubleheaded iron rails and 65 miles with 75lb, flat-footed

steel rails up to 31st March 1893. 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.

The original Delhi section bull-headed 60lb. rails have been renewed with the bull-headed 68lb rails, with the

exception of some short lengths on bridges.

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 11 miles), the rails are flat-footed 70lb. steel, laid on longitudinal timbers.

From Amritsar to Lahore the earthwork and bridges are for a single line; 17 miles have been relaid with bullheaded 68lb. steel rails, of which 81 miles are on castiron pots and 81 miles on wooden sleepers: the remaining 151 miles of the old Punjab section 68lb. rails have been relaid with 75lb. flat-footed rails on wooden

sleepers. The line from Lahore to Peshawar is constructed for a single track. From the Ravi bridge, mile 3, to the 25th mile, the old flat-footed folb. iron rails have been replaced by double-headed 75lb. steel rails on wooden sleepers, and from mile from Lahore to the Ravi bridge with 75lb. flat-footed rails on wooden sleepers.

From the 25th mile to Gujrát the rails are 75lb. flat-footed steel, with the exception of the station-yards of Kamoke, Gujranwala, Ghakkhar and Wazirabad, where the rails are of iron 6olb. flat-footed; also excepting two lengths, making up 4 miles, where flat-footed 62lb. steel rails are laid. The sleepers throughout are wooden. •

From Gujrát to Pesháwar the rails are flat-footed 62lb. steel, with the exception of isolated lengths, making up rot miles of 64lb. double-headed, 1 mile of 72lb. double-headed, and 40t miles of 75lb. flat-footed, steel rails. The whole length is laid with wooden sleepers, except 1 mile (1,091 to 1,092), which is laid on cast-

iron pots.

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  $\frac{1}{50}$  grades are now being improved to  $\frac{1}{100}$ ; and the Taraki quarry.

The first period of the contract with the Sind, Punjah and Delhi Railway Company having expired, the State assumed charge of the undertaking on the 1st January 1886, and amalgamated it with the Punjab Northern, the Indus Valley, the Sind-Sagar, and the southern section of the Sind-Pishin state railways, to be worked as one Imperial system under the name of the North Western railway

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, 1918 miles are in the Punjab, and 112 in the North-Western Provinces.

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. The section from Amritsar to Lahore was commenced on

8th February 1859.

The Delhi section of the late Sind, Punjab and Delhi railway suffered during 1871 and 1872 considerable damage at the Beas, the Sutlei, and elsewhere, necessitating interruption to through communication for some The section between Amritsar and Jullundur also suffered severely during the floods of 1875.

In August 1876, two piers of the Sutlej bridge were carried away, and through communication was not reestablished till the middle of December.

In August 1878, the line was again considerably damaged, and through communication stopped until 3rd October. In 1886 the line between Umballa and the Jumna river (mile 1,048) was much damaged by floods, resulting in through communication being interrupted for three weeks.

Again in 1887 heavy floods between Sirhind and Umballa resulted in through communication being interrupted for a week.

The dates of orders for survey and construction of the Lahore-Pesháwar section are as follows:

#### Dates for survey.

Ihelum to Rawalpindi, 8th November 1864. Ráwalpindi to Khusálgarh, September 1879. Lala Musa to Miani junction, September 1877. Jhelum to Rawalpindi, for improvement of grades. February 1885

APPENDIX

STANDARD GAUGE

Constructed and in progress

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
įΧ	North Western (state)—contd. Miles.	Miles.	Miles
-	Brought forward . 6141	-	Brought forward $\begin{cases} 335 \\ - \end{cases}$
	MAIN LINE AND BRANCHES (Commercial)		(174
	contd. •	•	MAIN LINE AND BRANCHES (Commercial)-
			contd. Rawalpindi to Haji Shah (59
			miles) opened on 1st Jan- uary 1881, and Haji Shah
			to Fort Attock (4 miles) on .1st May 1881, but this
	j		aggregate of 63 miles to Fort Attock was reduced to
			581 miles to Attock bridge consequent on the opening
			of the permanent line be- tween Golra and Margala
			and the section from mile 1,048 to 1,058 (Campbell-
			pur to Khairabad) on 31st May 1883.
			Thus, Ráwalpindi to Attock
			Attock to Khairabad . 31-5-83 2
			Peshawar city to Peshawar
•			
		<b>)</b> .	278
	Branches-		Branches-
	Siálkot branch—		Siálkot branch—
	Wazirabad to Sialkot 26½		Wazirabad to Siálkot 1-1-84 261
	•		
•			
	Kashmir. branch—		Kashmir branch—
	Sialkot to the frontier of the Kashmir state		Sialkot to the frontier of the Kashmir state . 15-3-90 84
	35		.35
		•	
	, }		
	1		
		1	

D-continued.
RAILWAYS

on 31st March 1893.

#### LINES

#### THE STATE.

Details of construction.	Remarks.
The chief works on the Pindi Pesháwar section are the Indus (Attock) and the Haro bridges, and the tunnels at the Margala pass, and the Indus approach.  The main line has, for the most part, a wire fencing on both sides. The section from Lála Músa to Pesháwar, however, is only partially fenced.	Dates for construction.  Lahore to Jhelum

The line from Wazirabad junction to the frontier of the Kashmir state is constructed for a single track. The rails are flat-footed iron, 60 lbs to the yard, spiked to transverse wooden sleepers, except where there are dips in the road to pass surface floods, steel transverse sleepers being used in such places. On the Kashmir section, the ballast used is broken stone of excellent quality.

The Sialkot and Kashmir branches are unfenced.

Lahore to Peshawar (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 Wazir-abad) 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 Naurung-abad 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.

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.

# Constructed and in progress

# STATE WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
IX	North Western (state)—contd. Miles. Brought forward . 6491  MAIN LINE AND BRANCHES (Commercial)—	Miles.	Miles Brought forward 6499 MAIN LINE AND BRANCHES (Commercial)
	contd. Main line— Lahore to Khánpur 355t		tontd.  Main line— Lahore to Mooltan 24-4-65 208  Mooltan to Muzaffarabad junction 21-8-70 68  Muzaffarabad junction to Khánpur 1-7-78 1408
	Khanpur to Rohri 132½ Rohri to Sukkur		Khánpur to Rohri
	Kotri to Kurrachee canton- ment  Kurrachee cantonment to Kurrachee city  Kurrachee city to Kiámári (in- cluding Napier Mole line)  Branches—  Sukkur to Sukkur bandar	•	Kotri to Kurrachee cantonment  ment  Kurrachee cantonment to  Kurrachee city  Kurrachee city  Kurrachee city to Kiámári,  including Napier Mole line  For goods traffic, 16-6-89  For passenger traffic, 5-11-91  Branches  Solding So
·	Meean Meer chord line*  Meean Meer chord line*  Meean Meer east to Meean  Meer west*		Sukkur to Sukkur bandar 1-10-78 12 Kotri to Kotri bandar 1-4-89 14  3  Meean Meer chord line*  Meean Meer east to Meean Meer west*  10-12-91† 2
	Carried over 1,4773	•	Carried over 1,477

This is a military line and is not intended to be used for ordinary public traffic. The line was completed on 1st July 1888.

† This was the date on which the line was ready for being open for traffic after the Consulting Engineer's inspection.

-continued.

AILWAYS

1 31st March 1893.

INES

HE STATE.

Details of construction.

REMARKS.

From Lahore to Ráewind the earthwork and bridges are

for a single track.

From Raewind south distant signal to Muzaffarabad (1884 miles) the earthwork and bridges are for a single The Punjab section double-headed 68 lb. iron rails have been in parts (making up 112 miles) replaced with double headed 68 lbs., flat-footed 75 lbs. and bullheaded 771 lbs, steel rails.

Muzaffarabad to Khanpur is constructed for a single The line was originally laid with flat-footed iron rails, 60 lbs. to the yard, but 183 miles have been replaced with 62 lbs. flat-footed steel rails, and 90 miles with 75 lbs. flat-footed steel rails. The sleepers throughout are wooden, except 76 miles, which are steel transverse sleepers.

On 1st January 1889 Muzaffarabad junction was closed, and Sher Shah junction was opened in connection with

the Sind-Sagar loop.

The section from Khanpur to Kotri is constructed for a single track, and is laid with flat-footed iron rails 60 lbs and steel 62 lbs. and 75 lbs. to the yard on transverse sleepers of creosoted pine, deodar and steel. The chief works on this line are the Lansdowne bridge

over the Indus between Sukkur and Rohri, and the

cutting through the Laki pass.
The lengths relaid with 75 lbs. and 62 lbs. flat-footed steel rails up to 31st March 1893 are 286 miles and 87 miles, respectively.

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 Bahrun is for a double line.

Ordinary double headed rails, 65 lbs. to the yard, were originally laid on sleepers of creosoted pine, but they are being renewed with steel rails, 24 miles having been relaid with 75 lbs. flat-footed, 31 miles with 68 lbs. double-headed, and 4½ miles with 77½ lbs. bull-headed, steel rails up to 31st March 1892.

From Kurrachee cantonment station to Kurrachee city

station the line is double.

from Meean Meer east to Meean Meer west, with siding to commissariat yard, the line is constructed of secondhand 68 lbs. double-headed iron rails and second hand wooden sleepers. The line is unballasted, but is fenced.

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.

The dates of orders for survey and construction of the section from Muzaffarabad junction to Khanpur 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. It was opened partly on 21st August 1870 and partly on 1st July 1878.

The dates of orders for survey and construction of the section from Khánpur to Kotri are as follows:

Date for survey.

Khánpur to Kotri . 30-10-69

Dates for construction.

Khánpur to Rohri . . .

The construction of the Lansdowne 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; it was originally treated as a siding, butis now shown as a branch line.

The line from 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 The extension of the line from 29th April 1858. Kurrachee city to Kiámári was virtually completed on the 12th November 1887.

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.

Constructed and in progress

# STATE WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.		
IX	Miles. North Western (state)—contd. Brought forward . 1,477	Miles.	M Brought forward 1,4		
	MAIN LINE AND BRANCHES (Commercial)—		MAIN LINE AND BRANCHES (Commercial) -		
	concld. Ferozepore branch— Ráewind to Ganda Singhwála 23½ Ganda Singhwála to Ganda Singh bandar . 2¾ Ganda Singh bandar to Hus- sainiwala . 2½ Hussainiwala to Ferozepore city . 2 Ferozepore city to Feroze- pore cantonment . 2 32¾		concld. Ferosepore branch— Ráewind to Kasúr . 15-4-83 16 Kasúr to Ganda Singhwála 10-6-83 Ganda Singhwála to Uanda Singh bandar . 15-12-83 2 Ganda Singh bandar to Hussainiwala . 8-5-87 Hussainiwala to Ferozepore city . 1-10-92 Ferozepore city to Ferozepore cantonment . 1-10-88		
-	Hussainiwala to Ferozepore cantonment		Hussainiwala to Feroze- pore cantonment 8-5-87		
			·		
•					
•	P-4L ()		•		
	Pathánkot branch— Amritsar viá Batála and Gurdáspur to Pathánkot	* #\$*	Amritsar to Dinanagar 1-1-84 5 Dinanagar to Pathankot . 8-6-84 1		
		1,5°1	TOTAL MAIN LINE AND BRANCHES . 1,58		
	FRONTIER SECTION (MILITARY) —  Sind-Sagar railway and  Khusálgarh branch—		FRONTIER SECTION (MILITARY)-		
	Khusálgarh branch—		Khusálgarh branch-		
	Golra junction to Khusalgarh 70}	-	Golra junction to Langar . 1-4-81 60 Langar to Khusálgarh . 16-4-81 Khusálgarh, new station . 13-7-83		
	•				
	Carried over 702	1,5%1	Carried over $\begin{cases} 1.58 \\ 70 \end{cases}$		

D -continued. RAILWAYS

on 31st March 1893.

LINES

THE STATE.

Details of construction.

REMARKS.

The Ferozepore branch was originally laid with partly worn Delhi section bull-headed 60 lbs. steel-faced rails on second class wooden sleepers. These have been replaced on 6 miles with 68 lbs. bull-headed steel rails on cast-iron pots, 151 miles with 75 lbs. flat-footed rails on deodar sleepers and 101 miles with 75 lbs. flat-footed rails on steel trough sleepers. The station-yards of Raokhanwala, Kasur and Ganda Singhwala, have not been renewed. A new length of 2 miles has been constructed from Hussainiwala to Ferozepore city. The old line between Hussainiwala and Ferozepore cantonment is closed to traffic, but has not been dismantled. The new line is laid with 75 lbs. flat-footed rails on deodar sleepers, and is fully ballasted and fenced. The rails on the Kaiser-i-Hind bridge also are 75 lbs flat-footed steel.

The line is three-fourths ballasted 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 Hussainiwala, the line is carried on a raised em-

bankment through the old bed of the river.

The Kaiser-i-Hind bridge oonsists 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.

The Ferozepore branch is wholly fenced.

The Pathankot branch commences 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 Doab canal and its branches. The line presented no engineering difficulties; the rise on the whole length between Amritsar and Pathankot is 355 feet, the steepest gradient being 1 in 170, and the sharpest curve 2 300 feet radius

Steel rails, 62 lbs. to the yard, have been used.

The whole line is fenced.

The line from Golra junction to Khusálgarh is construct-

ed for a single track.
The rails are flat-footed steel, 62 lbs. to the yard, spiked to transverse wooden sleepers.

The Khusálgarh branch is unfenced, except at stations.

The construction of the branch line from Raewind to Ganda Singhwala was sanctioned on the 9th November 1882, and an extension of the branch from Ganda Singhwala 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.

The construction of the branch from Hussainiwala to Ferozepore city was sanctioned on the 20th October 1891, and was opened for traffic on the 1st October 1892.

The survey of this line was undertaken by the Govern-ment of the Punjab in 1879, and its construction was sanctioned on the 6th December 1881.

The line was at first worked under agreement by the North Western (state) railway. It was absorbed into the North Western (state) railway system on the 1st April 1892.

Constructed and in progress

# STATE WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
ıx	Miles. North Western (state)—contd.	Miles.	Miles
	Brought forward 704	1,581	Brought forward 704
	FRONTIER SECTION (MILITARY)—contd.		FRONTIER SECTION (MILITARY)—contd.
	Sind-Sagar railway-		Sind-Sagar railway-
	Main line— Lála Músa (821 miles from Lahore) to Malakwál . 451 Malakwál to Chenab west bank		Main line— Lála Músa to Malakwál . 10-2-86 45! Malakwál to Bhakkar . 15-8-87 175 Bhakkar to Chenab west bank
	east bank	   	cast bank
	3454	. ·	
	Branches-		Branches—
	Bhera branch-	-  -	Bhera branch-
	Malakwál to Bhera 171		Malakwal to Bhera 15-3-87 17
,	Khewra branch—	•	Khewra branch—
	Haranpur to Khewra sall mines Khewra to Kalapani 2		Haranpur to Khewra salt mines
	Mári branch–		Mári branch—
	Kundián to Miánwáli . 9 Miánwáli to Mári 27		Kundián to Mári 15 3-92 36
	Dera Ghási Khan branch— 36		Dera Gházi Khan branch-
	Mahmud Kot to Gházi ghát . 104		Mahmud Kot to Ghazi ghat 1-4-87
	. 744		74
•			Total Sind-Sagar railway and Khusálgarh branch . 490
•			•
		[   ·	
ļ		}	
;			
	Carried over 4904	1,581	Carried over $\begin{cases} \frac{1,581}{490} \end{cases}$

D-continued. RAILWAYS

on 31st March 1893.

Details of construction.

#### LINES

THE STATE.

The Sind-Sagar, eastern section (formerly known as the The Sind-Sagar line connects the frontier stations of Salt branch of the Punjab Northern state railway), was made chiefly for salt traffic, and was laid for a metrerailway systems. gauge single track with 40 lbs. rails. It has since been converted into a single standard gauge line. From Lála Músa junction to Malakwál, the rails are flat-footed steel, 75 lbs. to the yard, laid on transverse wooden sleepers; and from Malakwal to Bhera the rails are old iron flat-footed, 60 lbs. to the yard, taken from the main line, laid on wooden sleepers. The rails used on the Sind-Sagar, western section, are steel, 75 lbs. per yard. About 18ths of the line are laid with steel sleepers and the remainder with wooden The steepest gradient on the main line is 1 in 2187. The Sind-Sagar railway is unfenced, except on the portion from Sher Shah to Chenab west bank. On the Khewra branch there are gradients of \$ of a mile each of 1 in 53 and 1 in 60, and ½ a mile of 1 in 100. 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°. The earthwork is light throughout. The bridging is light. With the exception of the bridge over the river Jhelum between Malakwal and Haranpur, the longest on the main line is a bridge of 10 spans of 40 feet on wells sunk 30 feet below the tively. level of the bed of the river. On the Kundián-Miánwáli section of the Mári branch, the permanent-way consists of 75 lbs. flat-footed steel rails laid on steel trough sleepers, the ballast used being construction. sand with a capping of ballast 4 feet to foot run.

The Mianwali-Mari section is laid with second-hand iron rails, 60 lbs. to the yard, on wooden sleepers, and ballasted with 8 cubic feet of shingle per foot run. The branch is unfenced throughout. The bridging is light between Kundián and Mianwáli, but is heavy between Miánwáli and Mári, especially towards Mári. The largest is the bridge over the Tabba nullah, 5 spans of 40 feet girders. The ruling gradient is 1 in 200 and the sharpest curve is 1,433 feet in radius. 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. Over the river Khewra, on the Khewra branch, is a bridge of 4 spans of 40 feet on a gradient of 1 in 53. The bridge over the Chenab at Ramuwala is of 17 spans 1880. of 200 feet on wells founded 107 feet below rail-level, and 77 feet below low-water. 1880. 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 low water level. .

Dera Ismail Khan and Dera Gházi Khan with the Indian

REMARKS.

The orders for the survey were issued in October 1884, . and in December 1884 the Government sanctioned the construction of the Victoria bridge over the Jhelum at Chak Nizam, and the work on the portion of the line (3½ miles) between Malakwál and the Jhelum river.

The lengths from Kundián to Miánwáli and Miánwáli to Mári were sanctioned for construction on the 27th February 1886 and the 10th December 1889, respec-

The branch runs parallel to the Indus ending at Mari on the Indus opposite Kalabagh. It will eventually be connected with the branch from Attock, now under

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

[ The lines from Lala Musa to Malakwal and from Malakwal to Bhera have superseded the old metre-gauge line,

Lála Músa to Miani on the Jhelum 53<sup>2</sup> 8<sup>2</sup> opposite Pind Dádan Khán Miani to Bhera Miani to Khewra (abandoned) 10 721

The dates of opening of the metre-gauge line were as

Lála Músa to Bahá-uddín (281 miles) on 1st January Bahá-uddín to Hariah (102 miles) on 1st February

Hariah to Miani (143 miles) on 10th April 1880.

Miani to Bhera (83 miles) on 2nd February 1882. Miani to Khewra (10 miles) on 1st January 1883].

Constructed and in progress

## STATE WORKED BY

· No.	Name of line and mileage sanctioned.	n	Total nileage.	Date of opening for public traffic.
. IX.—	North Western (state)—concld. Mi	iles.	Miles.	• Miles.
	Brought forward . 49	901	1,581	Brought forward . $ \left\{ \begin{array}{c} 1,581 \\ \hline 4904 \end{array} \right] $
			,	
			•	
	FRONTIER SECTION (MILITARY)—concld Sind-Pishin railway— Main line—	<i>i</i> .		FRONTIER SECTION (MILITARY)—concld. Sind-Pishin railway— Main line—
	Ruk junction to Sibi . 133½ Sibi to Bostán . 134 Bostán to Gulistán . 30½ Gulistán to Kila Abdulla . 8½		-	Ruk to Sibi— For coaching traffic For goods traffic  1-7-80  For goods traffic
	Kila Abdulla to Chaman . 291 33	351		Sibi to Sharigh— For goods and parcels traffic 20 3-87 For coaching traffic 28-8-87  7334
				Sharigh to Bostán 28-8-87 60}
		•		For goods traffic
			ļ	Kila Abdulla to Chaman . 1-1-92 291
ļ			į	Total Sind-Pishin railway . 335t
		-		
	Quetta loop—		ļ	Quetta loop—
	Quetta to Bostán	201	8 <sub>4</sub> 6‡*	Quetta to Bostán 28-8-87 201
				Total Quetta loop 201
		. }		TOTAL PRONTIER SECTION . 8461*
į		<b>4</b>		DOUBLE — MAIN LINE AND BRANCHES (COM- MERCIAL)— Kurrachee cantonment to Kurrachee
				city
		•	•	West 10-12-91 2 DOUBLE—MAIN LINE AND BRANCHES— (MILITARY)—
			_	Gulistan to Chaman . 20-9-92 363
,	Тотац			TOTAL DOUBLE LINE . 41
<del>s. ss</del>	TOTAL	_•	2,4271	TOTAL OPEN MILEAGE . 2,427 }

<sup>\*</sup> Includes fractional difference of 1 mile.

D-continued.
RAILWAYS

on 31st March 1893.

#### LINES

#### THE STATE.

Details of construction. REMARKS. The wells of the Victoria bridge are continued as piers to girder-bed level. The brick steining is 51 feet thick. All the wells are hearted with a 10-foot plug of Portland cement concrete, above which is ordinary semihydraulic lime concrete, the tops of the piers being finished off with solid brick masonry over the concrete. 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. Somewhat extensive protective works have been carried out to train the river through the bridge.

The length from Ruk to Sibi is a single line, and Orders for the survey and construction of the section the permanent-way is of several varieties, comprising 62 lb. steel rails on wooden sleepers, 68 lb.double-headed from Ruk to Sibi issued in October 1879. rails on cast-iron pots, 82 lb. East Indian railway (very old) rails and 84 lb. Great Indian Peninsula steel bullheaded rails on wooden sleepers. From Sibi for a length of 39 miles the line is laid with double-headed rails, 75 lbs. to the yard, on Denham-Olphert's sleepers. The remainder of the line is laid with flat-footed steel rails, 75 lbs. to the yard, on steel trough sleepers. The line throughout has been constructed for a single Sanction was given for the construction of the Bostántrack only, except from Gulistan to Chaman, which is Gulistán section in May 1885, and of the Gulistán-Chaman section in November 1887. double. The regrading operations between Sibi and Násák have Ruling gradients are-1 in 200 between Sibi and Nárí. been completed; there is now no grade on that section I in 55 between Nari and Dalujas.
I in 68.4 between Dalujal and Spintangi. virtually steeper than 1 in 55. between Spintangi aud Násák frontier. 1 in 55 between Násák frontier and Sharigh. I in 45 1 in 50 between Sharigh and Khost.
1 in 42.3 between Khost and Khanai.
2 in 81.2 between Khanai and Bostán. 1 in 100 between Bostán and Gulistán. 1 in 40 hetween Gulistan and Chaman. From Nari (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 in bridging, tunnelling, and earthwork. At the Khojak pass (316th mile) the Khojak tunnel, 2½ miles long, occurs; the approaches to it on either side involve very heavy earthwork.

The Sind-Pishin main line is fenced from Ruk junction to Jhatpat; the remainder of the line is unfenced. The line from Quetta to Bostán was completed in October 1886. The remaining portion of the Quetta loop, vis., The Quetta-Bostán section has been laid with 75 lb. flatfooted rails on steel sleepers. from Sibi to Quetta, together with the Mithri chord The works are light and the ruling gradient is I in 100. line, was made over to the Mushkaf-Bolan railway from 1st November 1894, for reconstruction on a new align-This section is unfenced. The Jammu and Kashmir and Rájpura Bhátinda railways are worked by the North Western (state) railway. The terms of working will be found in appendices S and Part II of the Railway Administration Report for 1890-91 and 1892-93, respectively.

Constructed and in progress

## STATE WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage	Date of opening for public traff	îc.
x	Hyderabad-Umarkot— Miles	Miles.		Miles.
	Gidu bandar on the Indus near Hyderabad to Shadipalli	59	Gidu bandar to Shadipalli . 18-8-92	59
	Note.—The total sanctioned mileage is 77½ miles, o which 18½ miles are in abeyance.	of	•	
XI	Oudh and Rohilkhand (state)			
	Main line— Joining the East Indian railway at Moghal Sarai, the main lines passes through Benares cantonment, Jaunpur, Fyzabad, Bara Banki (late Nawabganj) junction, Lucknow (junction for Cawnpore), Sháhjahánpur, Bareilly and Chandausi (junction for Aligarh) and joins the North Western (state) railway at Saháranpur  Branches— Ránupáli junction (126¾ miles from Moghal Sarai) to the right bank of the Gogra river at Ajodhya (Ajodhya branch)  Bara Banki (late Nawabganj) junction (191¼ miles from Moghal Sarai) to Bahramghat (Bahramghat branch)  Lucknow junction (209 miles from Moghal Sarai) to the East Indian railway at Cawnpore (Cawnpore branch)  Chandausi junction (398¼ miles from Moghal Sarai) to the East Indian railway at Aligarh (Aligarh		Moghal Sarai to 3½ mile . 22-12-62 From 3½ mile over the . Dufferin bridge to near Rajghât (Benares Ganges river station) . I-10-87 From near Rajghât (Benares Ganges river station) to Benares cantonment to Shahganj	34 · 44 · 11 · 56 · 7 · 92 · 36 · 6 · 17 · 33 · 39 · 32 · 12 · 47 · 13 · 47 · 13 · 58 · 44 · 58
	Lhaksar junction (512) miles from		Branches—	
	Moghal Sarai) to Hardwar (Hard- war branch)		Ajodhya branch— Ránupáli to Ajodhya . 15-11-86  Bahramghat branch—	• 31
·			Bara Banki to Bahram- ghat	· 21½
•			Left bank Ganges to junction with the East Indian railway at Cawnpore 15-7-75 Passenger approach to the East Indian railway at	• 31
	•		Cawnpore 21-2-88	‡
	€arried over . 1474	5444	Carried over	45½ 615

**D**—continued.

RAILWAYS

on 31st March 1893.

#### LINES

#### THE STATE.

Details of construction. REMARKS. The construction of this line from Gidu bandar to This line is constructed for a single line of railway. The ruling gradient is I in 200 and the earthworks are light. The permanent-way is second-hand Indus valley flat-Shadipalli was sanctioned on 5th March 1891. It is worked by the North Western (state) railway for 45 footed folb. iron rails laid on deodar sleepers. Earth per cent. of the gross earnings, including the hire of rollballast is used except at points and crossings. ing stock, plus actual cost of maintenance and telegraph department charges. Land is taken up for a double line, but the formation is for The branch from Lucknow to Cawnpore was commenced a single way; between Lucknow and Bara Banki (late in January 1864. Like the Nalhati and Azimganj line, this branch was begun under subsidy by the Indian Nawabganj) the masonry of bridges is constructed for a double line. Branch Railway Company, but a guarantee was subse-The permanent-way at first adopted for the system was a quently granted. 6olb. iron rail, laid partly on cast-iron oval bowl and In 1880 the company was relieved from its obligation partly on wrought-iron saddle-back sleepers. under the original contract to make a line of railway from Buxar to Akbarpur, and it was agreed that in lieu thereof the company should construct a bridge over the The Cawnpore branch was originally laid with 36lb. rails Ganges at Benares and should form a junction with the on corrugated iron pressure plates; these have since East Indian railway at Moghal Sarai. The work was started in 1881, and the Dufferin bridge over the Ganges been entirely removed, and a large number of steel bowl sleepers have been worked in. Up to 1889, the original iron rails had been replaced by 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 bolb. steel rails over 1731 miles (vide statement below), and since 1889, all renewals have been made with 75lb. steel rails of the Indian state railway pattern. between Moghal Sarai junction station and the Dufferin On the northern extension from Moradabad to Sahábridge. The construction of the Moradabad-Saháranpur extension ranpur and the Hardwar branch, 75lb. steel rails were originally laid on steel bowls. Renewals of sleepers are was sanctioned on the 29th August 1881, and the Oudh made either with steel bowls still in stock or with castand Rohilkhand Railway Company commenced the work for Government, pending negotiations as to its incorporairon bowls locally made. The length of permanent-way of the different types, as tion in the general system of that company. The inclusion of the Roorkee-Hardwar line in the extension existing on 31st December 1892, is shown in the followwas sanctioned on the 17th February 1883, but this ing table:route was subsequently abandoned in favour of that from Lhaksar to Hardwar, sanction to which was given Rails. on 15th May 1883. Sanction to the construction of the Moradabad line and flat-footed and Rohilflat-footed rail; 75lb. flat-footed Indian state rail-way steel rail. Hardwar branch, as an integral part of the company's flat-f rail. undertaking, was given on the 10th September 1883. LOCALITY. 75lb. f Oudh a: khand pattern s Sanction to the construction of the Ajodhya branch was 6olb, steel given on 16th December 1884. folb. Miles. Miles. Miles. Miles. Miles. Miles From Moghal Sarai-zero to 2'99 miles . From mile 2'99 to Moradabad, includ-ing Bahramghat, 2'99 Moradabad, including Bahramghat, Cawnpore and Aligarh branches Ajodhya branch Moradabad to Saháranpur and Hardwar branch 117:87 549'91 3'21 255'33 6.32 36 44 36.44 692.25 TOTAL MILES 255 33 117'87

Constructed and in progress

## STATE

	•		WORKED BY
No.	Name of line and mileage sanctioned.	Total* mileage.	Date of opening for public traffic.
XI	Miles. Oudh and Rohilkhand (state)—concld. Brought forward . 1473		Brought forward 615  Branches—concld.  Aligarh branch—  Aligarh to Rajghat 128-10-72 30  Rajghat to Chandausi 28-10-72 30
	Branches—concld Lucknow junction (209 miles from Moghal Sarai junction) via Rae Bareli to Jaun- pur (Lucknow-Rae Bareli-Benares chord line) Bareilly junction (355 miles from Moghal Sarai junction) via Rampur to Morada- bad (4252 miles from Moghal Sarai junction) (Bareilly-Rampur-Morada- bad chord line) 56	355	Hardwar branch—  Lhaksar junction to left bank, Ganges canal, near Jawálapur . 1-1-86 . 13½  Left bank, Ganges canal, near Jawálapur, to Hardwar 20-8-86 . 3½
	Total	9001	Total open mileage . 6921
XII `	Eastern Bengal (state)—  EASTERN SECTION—  Main line—  Calcutta to Jagati junction . 107½  Jagati junction to 145th mile . 37¾  ———————————————————————————————————		EASTERN SECTION—  Main line—  Calcutta to Ránaghat 29-9-62 . 45‡  Ránaghat to Jagati junction . 15-11-62 . 62  Jagati junction to 145th mile 1-1-71 . 37‡
•	Branches—		Branches—
•	Jagati junction to river Ganges (Kooshtea branch)	•	Jagati junction to river Ganges (Kooshtea branch) 16-2-64 3\frac{3}{4} Kooshtea loop line 1-8-81 1\frac{1}{4} Canal junction to Chitpore (Chitpore branch) 25-8-73 1\frac{3}{4} Portion in Chitpore yard for goods traffic 13-4-88 \frac{1}{4} Rajbári to Goalundo 10-6-87 4 Mile 145 to Puchoorea 1-4-90 4\frac{3}{4}
	Carried over . 1603		Carried over . 160}

D-continued. RAILWAYS

on 31st March 1893.

LINES

THE STATE.

Details of construction.  Sleepers.					REMARKS,	
Cast-iron oval	Wrought-iron saddle.	Steel, Maclellan and Smith's patent,	Wooden.	TOTAL.		
Miles.	Miles. 65'39	Miles. 203'03	Miles. 17:32	Miles. 692°55		
the Indian	ampur-Mora state railw on steel sle fenced thro	ay pattern, epers.	s is 75lb. si laid partly	teel rails of	Sanction to the construction of the Lucknow-Rae Bareli Jaunpur and the Bareilly-Rampur-Moradabad railways was given on the 5th August and the 4th December 1891, respectively. Of the former, only the length from Lucknow to Rae Bareli (48½ miles) is at present under construction, the alignment of the remaining portion (which will probably be substituted by a line of railway from Rae Bareli to Benares, now under survey, being still under consideration.  A tramway, constructed at the expense of Messrs. Carev & Co.; connects the Rosa sugar factory with the Oudh and Rohilkhand railway near Shahjahanpur. This tramway is 3½ miles long, and is worked by manua power. It is used for goods traffic only. The Powayan steam tramway also joins the Oudh and Rohilkhand railway at Shahjahanpur.  The Oudh and Rohikhand railway was acquired by the State from the late guaranteed company on the 1st of January 1889.	

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 Naihati, which was doubled in 1886, and from Naihati to Ranaghat doubled in 1892. The rails are double-headed, weighing 74 lbs. per yard, except over 87 miles, where the 74lb. rails have been replaced by steel 3u' rails, weighing 73lbs. to the yard. The second track between Sealdah and Ránaghat has been laid with double-headed steel rails, weighing 73lbs. per yard, on Denham-Olphert's sleepers.

The Goalundo extension embankment is for a single track 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 old main line.

The line from Calcutta to Kooshtea was commenced on 16th April 1859. The Kooshtea branch was opened for passenger traffic in 1868.

The Goalundo extension was commenced in the cold sea-

son of 1865-66 and completed in 1871.

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.

There is a branch, & mile in length, at Shamnagar, which is treated as a siding. It was opened in April 1868.

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.

In 1887 the terminus at the Goalundo end was removed from old Goalundo to a point north of Rajbári. extension to Puchoorea, 6 miles east of Rajbari, 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.

The Kooshtea branch has been reduced from 4 to 33 miles, owing to part of it having become a siding since

the construction of the Kooshtea loop line.

The rails on the portion of line from Kooshtea engineshed to old Kooshtea, 3ths mile, have been taken up. 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 Poradaha branch of the Northern Bengal state railway was permanently amalgamated with the Eastern Bengal

railway.

APPENDIX

STANDARD GAUGE

Constructed and in progress

# STATE

	·		WORKED BY
No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XII	Miles.  Eastern Bengal (state)—contd.  Brought forward . 160}	Miles.	Miles.  Brought forward . 1604
	EASTERN SECTION—concld.		EASTERN SECTION—concld.
	Poradaha branch Poradaha (1023 miles from Calcutta) to Bhairamara on the right bank of the Ganges . 12		Porádaha branch—  Porádaha to Bhairámára . 19-1-78.12 Bhairámára to Golabnuggur (Dámukdia ghát) . 8-12-83.53
	Bhairámára to Golabnuggur (Dá- mukdia ghát station) . 53 — 173	1781	Total Eastern section . 178½
•			
	Southern section-	-	Southern section—
	Original line—		Original line-
	Calcutta to Port Canning . 28		Calcutta to Chámpaháti . 2-1-62. 15 Chámpaháti to Port Canning . 15-5-63 . 13  28
•	Diamond Harbour line—  Sonarpur to Magra Hat		Diamond Harbour line—  Sonarpur to Baruipur 10-6-82 . 5 Baruipur to Magra Hát18-12-82 . 10 Magra Hát to Diamond Harbour
<del></del>	Carried over . 561	1781	Carried over $\left\{ \frac{178\frac{1}{3}}{56\frac{1}{4}} \right\}$

D-continued.
RAILWAYS

on 31st March 1893.

LINES

THE STATE.

Details of construction. REMARKS. The Porádaha branch is laid with rails, 74 lbs. to the yard, Sanction to the construction of the Poradaha-Damukdia on iron pot sleepers. and Dámukdia-Golabnuggur sections was given on 4th The Damukdia ghat extension has been laid on sal April 1876 and 22nd September 1883, respectively. sleepers with second-hand rails, 74lbs. per yard; obtained A steam ferry in connection with the train plies on the Ganges between Golabnuggur and Sára ghát. from the East Indian railway. This section is fenced throughout. The doubling of the line between Naihati and Sealdah was sanctioned in July 1884 and completed in 1886-87, and that between Naihati and Kanchrapara and Kanchrapára and Ránaghat was sanctioned in May 1891 and October 1891, respectively, and completed in 1892. The Raita extension, 5 miles in length, was surveyed in 1886, sanctioned in May 1890, and completed in September 1890. It branches off from Dámukdia junction, about 16 miles from Porádaha station, and is treated as a siding. The line from Calcutta to Port Canning was constructed The line from Calcutta to Port Canning is laid with a single track, but sufficient land has been taken up for a double under guarantee. In consequence of its having been line, and portions of embankment have been formed for a double line. The masonry of the bridges is worked at a loss since its opening, the company surrendered it to Government, under the provisions of the built for a double line, but the girders are laid for a single line only, except on the Tolly's Nullah and Piali contract, on 1st April 1868. 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, & mile, has been laid with Greaves' bowls. With the exception of the Usti Khal bridge, one span of Orders for the Diamond Harbour survey were issued by 100 feet, there are no large or difficult engineering works the Government of Bengal in November 1878, and on 9th September 1880 sanction was accorded to the comon the Diamond Harbour line. This line is laid for the mencement of work on the Sonárpur-Magra Hát secfirst 2 miles with iron rails on wooden sleepers, the remaining length being laid with new steel rails, 64lbs. to the yard, partly on ordinary iron pot sleepers, but mostly on Denham-Olphert's sleepers. On the 1st April 1887, the Eastern Bengal and the Calcutta and South-Eastern railways were amalgamated with the Northern Bengal, the Kaunia-Dharila, the Dacca and the Assam-Behar railways, and these lines are now worked as one combined system. The Beliaghata 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. The Eastern Bengal (state) railway was re-transferred from Provincial to Imperial control with effect from the 1st April 1892.

Constructed and in progress

## STATE WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage	Date of opening for public traffic.
XII	Miles. Eastern Bengal (state)—concld.	Miles	. Miles.
	Brought forward. 561	178½	Brought forward $\begin{cases} \frac{178\frac{1}{2}}{2} \end{cases}$
	Southern section—concld.		Southern section—concld.
	Budge-Budge extension—		Budge-Budge extension—
	Ballygunge (41 miles from Sealdah on the Southern section) to Budge-Budge	69₹	Ballygunge to Budge-Budge—  For goods traffic . 1-5-90 For passenger traffic . 1-6-90  Total Southern section . 693
		·	Double—Eastern section—
			Main line—' [ 1-8-86 . 23]
			Calcutta to Naiháti { 1-8-86 . 23
			471
			Double—Southern Section—  Main line—
			Sealdah to Ballygunge . { 20-10-88 . 3 }
			TOTAL DOUBLE LINE . 512
	Total .	248‡	TOTAL OPEN MILEAGE (STANDARD GAUGE SECTIONS)
XIII	Bengal Central*—		
	Dum-Dum (41 miles from Calcutta on the Eastern section, Eastern		Dum-Dum junction to Datta- pukur 2-4-83 . 142
	Bengal (state) railway vid Baraset and Bongong to Khoolna . 1041		Dattapukur to Gobardánga 7-12-83 . 17
•		}	Gobardánga to Bongong . 22-4-84 . 12
·			Bongong to Khoolna . 16-2-84 . 611
	Ranaghat (45½ miles from Calcutta on the eastern section of the Eastern Bengal (state) railway) to Bongong		1041
			Ránaghat to Bongong . 16-10-82 . 201
		.125	TOTAL OPEN MILEAGE . 125
	•		•

Although for convenience classed among state railways, this line is the property of the Bengal Central Railway Company.

D-continued. RAILWAYS

on 31st March 1893

LINES

THE STATE.

Details of construction.

Sanction to the construction of the Kidderpore dock 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 line, which formed a part of the projects for the accom-modation of the traffic of the railways converging at and Budge-Budge. The laying of the second line is in Calcutta, was given in July 1886. The estimate amountprogress. 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 73 lbs. per yard and of steel throughout, mostly 30 feet in length, ing to R9,92,058, 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. and the sleepers are almost entirely Denham-Olphert's. The extension to the docks undertaken by the Port The total length of fencing provided on the southern section, including the Budge-Budge extension, is 47½ Commissioners has been finished. Sanction to the construction of the Budge-Budge extension was given in November 1888 on an estimate amounting to R6,41,590. It was completed and opened to traffic in 1890. The Port Commissioners' tramway from Tolley's Nullah to Akra junction (4\frac{1}{8}\text{ miles}) has been taken over and now forms part of the Budge-Budge extension.

Sanction to the construction of the double line from Ballygunge to the Port Commissioners' Dock junction No. 2 was given in November 1889. A branch line, 2½ miles long, was laid in November 1891 for the British India Steam Navigation Company from Dock junction No. 2 to Brace Bridge Hall. It is treated as a siding. The Bengal Central railway is worked by the Eastern
Bengal (state) railway under an agreement, the terms of which will be found in appendix R, Part II of the Railway Administration Report for 1890-91.

This line is single throughout. The permanent-way consists of steel rails of the Vignole section, 62 lbs. to the yard, laid on sleepers of creosoted pine. Sal sleepers are now being used for renewals instead of creosoted pine, and in all curves sal sleepers have been put in at the joints in place of creosoted pine sleepers, and sal sleepers have also been put in at middle of pairs of rails in some of the curves.

At first the line was sand-ballasted, and brick ballast was used at bridges, level-crossings 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 completed, and ballasting has also been done over curves and where the earth of which the embankment is composed is not very good, vis., between Singia and Khoolna.

The line is fenced throughout; iron gates are provided at level-crossings.

Viaducts and bridges are constructed for a single line.

The surveys were carried out by the Government of Bengal in 1877-78, and construction was commenced by the company in March 1881.

REMARKS.

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.

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 the rainy season of 1891 and were found correct.

Additional waterways and protective works necessitated by the floods of September 1890 were completed during the year 1892-93.

An estimate for ballasting the line between 101 and

1051 miles has been sanctioned.

The line is worked by the Eastern Bengal (state) railway under agreement, the terms of which will be found in appendix R, Part II of the Railway Administration Report for 1890-91.

Constructed and in progress

# STATE

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
xiv	Miles.  Calcutta Port Commissioners'—  Cossipore to Chandpal ghát, Calcutta 4	Miles.	Miles.  Bagbazar to Meerbohur ghat 1-11-75. 13 Bagbazar to Cossipore 1-6-78. 13 Meerbohur ghat to Jetties . 1-6-78. 3 Jetties to Chandpal ghat . 1-12-80. 3
•	Chandpal ghát to Kidderpore docks . 21	6‡	Chandpal ghát to Kidder- pore docks 1-1-87 . 21  TOTAL OPEN MILEAGE . 61
•			
xv	Mushkaf-Bolán—  Bolán junction (449½ miles from Kiámári on the North Western (state) railway) to Nárí bank  Nárí bank 4  Nárí bank to Kolpur 56½  Kolpur to Quetta 25	85%	
	· •		

on 31st March 1893.

#### LINES

#### THE STATE.

The line is laid partly with iron and partly with steel rails weighing 60 lbs. to the yard on Maclellan's patent embossed steel sleepers; packing and boxing is done with coal cinders generally, and in some places with 2nd class ballast. The line is fenced with wire and iron standards.

Details of construction.

The line is laid partly with new rails laid on Maclellan's embossed sleepers and partly with East Indian railway second-hand material laid on transverse wooden sleepers, and packed with ballast. This section is fenced on the east side with wooden posts and rails. REMARKS.

The line from Cossipore to Chandpal ghát is laid along the east side of the foreshore road; and junctions are effected at Chitpore and Bagbazar with the Eastern Bengal (state) railway and the Municipal railway, respectively.

This line serves the godowns, warehouses, and mills along the foreshore road and also the jetties, and is used for goods traffic only. It was sanctioned in

The line is generally treble except small portions at Golabary, Hooghly bridge level crossing and Colvin ghát, where it is only double. There is a bridge over the circular canal, the platform carrying the rails of which is constructed to lift and lower. This is to

enable boats to pass, when necessary.

From Chandpal ghát to Kidderpore docks a single line was at first laid in 1886, being included in the general sanction for the docks, and was used solely for the carriage of material for the construction of the docks. It was doubled and opened to general goods traffic in 1891. There are 5 bridges and a culvert on this line: a lifting bridge at Tolley's Nullah, the same as that over circular canal; a wrought-iron cylinder viaduct of 8 spans of 30 feet each over a slip in the river bank north of Fort Point; an arched viaduct over the steps of Baboo ghát of 22 spans of 12 feet and 3 spans of 20 feet; two small girder bridges, one over Eden garden outfall sluice and one over entrance to north water gate of the Fort. The culvert is an extension of the one at the south water gate, Fort William.

The line runs along the old Quetta loop from Bolán junction to Nárí bank and from Kolpur to Quetta, excepting about a mile between the first two stations. This portion and the length intermediate between Nárí bank and Kolpur are under reconstruction on a new alignment.

The first 10 miles from Narí bank to the mouth of the Mushkaf valley are over flat ground, whence to the 474th mile from Kurrachee the country is very difficult, involving eight tunnels, and four crossings of the Mushkaf river. On the 475th mile is a tunnel, 3,000 feet long, through a high range of limestone hills dividing the Mushkaf from the Bolán, the latter being 200 feet lower than the former.

For the first 6 miles along the Bolán valley, the works are very heavy, there being three tunnels of varying lengths with some high embankments and deep cuttings. Thence to Mach, on the 406th mile, the works are all lighter. From Mach to Hirók (503rd mile), with the exception of a high embankment and bridge near Mach, and a tunnel at Siri-Bolán, the works are comparatively light.

Between Hirók and Kolpur (511th mile) the works are again heavy, involving numerous rock cuttings, three tunnels, and large bridges for nine crossings of the

Bolan river, at high levels about its bed.

The ruling gradient from Sibi to mile 488 is 1 in 55 compensated, from mile 488 to Mach 1 in 33 compensated, and from Mach to Kolpur (511th mile) 1 in 25 compensated. The total rise between Sibi and Kolpur is 5,463 feet.

The surveys of the Upper Bolán between Hirók and Kolpur were commenced about the middle of November 1890; and between Sibi and Hirók about the beginning of January 1891. The field work was finished in June 1891, the plans and estimates being submitted to the Government of India in September 1891.

The estimates were for a single line of railway on the standard gauge. Orders have since been received to make the tunnels and bridging for a double line.

The line was sanctioned for construction in October 1891, and orders for commencement of preliminary work issued in November 1891.

Revised Estimates have been prepared showing the probable cost of this railway with all the bridges and tunnels made suitable for a double line.

APPENDIX STANDARD GAUGE

Constructed and in progress

STATE

### WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles	Miles.	Miles.
χуΙ .	Mári Attock—  Roumia to New Pind Sultáni	85	
xvII	East Coast—		
	Main line— Kistna canal terminus of the Southern Mahratta railway to Bezwada (terminus of the Bezwada extension railway)  Left bank of the Godávari to Naraj (on the right bank of the Mahanuddy river, about 5 miles from Cuttack)  4092  4133		
	Branches— Samalkot to Cocanada 10 Gopalpatnam to Waltair (Vizagapatam)	4301	
	TOTAL STATE LINES WORKED BY THE STATE (STANDARD GAUGE)	4.3671	3,558}

on 31st March 1893.

### LINES

### THE STATE.

Details of construction.	REMARKS
The scheme completes the Cis-Indus line from Attock to Rohri through the mountainous tract of the Sind-Sagar Kohistan.  The works are those of a ghát line of the heaviest class.  There are 9 tunnels aggregating some two miles in length, besides several heavy rock cuttings and 8 viaducts over 120 feet high, besides other heavy bridging. The ruling gradients are now 12 per 1,000 compensated throughout for curvature.	The length between New Pind Sultani and Langar, 16 miles, is a part of the open mileage of the Khusalgarh branch of the North Western (state) railway.  The alignment from mile 74 to a point near Mari for a junction with the Mari branch of the North Western (state) railway is under investigation.  The works excepting tunnel headings are now closed owing to financial exigencies, and, when re-opened, will take 3 years to complete.
The works on the line present no special difficulty.  The ruling gradient is 1 in 150. The permanent-way to be of 75 lbs. flat-bottomed rails on steel sleepers for 300 miles, and on timber for 200.  The following are the important bridges:—  Kistna	The survey of this line 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, and is now approaching completion on the southern section, as well as on the northern section. The survey, with the exception of some modifications on the northern section, is now complete.

### APPENDIX STANDARD GAUGE

# Constructed and in progress LINES WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles
XVIII	Great Indian Peninsula—		NORTH-EAST LINE-
	N		Main line— Bori bandar to Thána . 18-4-53 204
	NORTH-EAST LINE-	1	The transfer of the transfer o
		•	I Molecular to Marinal
•	,	· ·	Vising to Assess
	Main line—		Asangaon to Kására . 1-1-61 22
•	•	l	Kására to Igatpuri (Thul
	Bombay (Victoria terminus) to		ghât)
	. Kalyan junction		igatpuri to Nasik • 28-1-61 311
	Kalyan junction to Bhusaval		Násik to Chálisgaon . 1-10-61 874
	junction		Chálisgaon to Jalgaon . 6-10-62 571 Jalgaon to Bhusával . 20-5-62 15
•	Bhusaval junction to Jubbulpore (point of .junction with		Physographs Ducks
	East Indian railway) 338		Rushannur to Khandana
	615	.]	Khandwa to Rin
	_		Bir to Itársi
	,	1	Itarsi to Sohagpur . 1-2-70 204
ļ	•		Sohagpur to Jubbulpore 8-2-70 1211
			victoria terminus to Bori .
			bandar ( • 1-1-82 1
	•	ļ	6151
			i
	Branches-		Nágpur branch—
	Bhusaval junction (2771 miles from Bombay) to Nagpur		Bhusával junction to Mal- kápur
	(point of junction with the	}	Walliday to Change
	Bengal-Nágpur railway)		Change As Dad
	(Nagpur branch) 243}		Bodners to Pulmon
_		<b>)</b> .	Pulgaon to Sindi . 5-11-66 384
·	,		Sindi to Nágpur 20-2-67 291
	•		·
•	Gádarváda junction (535½ miles from Bombay) to Moh- páni coalfields ( <i>Mohpáni</i>		2431
	branch) 124		Mohpáni branch-
		870	Gádarváda to Mohpáni—
	•	'\	For coal traffic only . 3-9-72
	•	] '	For public traffic
•	Course and the		!
l	SOUTH-EAST LINE-		SOUTH-EAST LINE
	Main line—	ł	
	Kalyán junction (33) miles		Main line—
	from Bombay) to Raichúr (point of junction with Whe		Kalyan to Palasdhari (Kar-
	Madras railway) 408	1	jat)
-	4004	1	(Rhore what)
	, ·		Khandála to Lonávla
	· · · · · · · · · · · · · · · · · · ·	1	(Bhore ghat) . 14-6-58 24
		1	Lonávla to Poona . 14-6-58 301
			Poona to Diksál
			Diksál to Bársi road 23-10-59 501
		}	Bársi road to Mohol . 20-1-60 284 Mohol to Sholápur . 6-6-60 203
•		1	Sholdour to Gulberry
	Khopoli branch-		1 Gulhagan to the 12: 1
	Palasdhari (64 miles from		Kistna to Reliable
	Bombay) to Khopoli 71		1-5-71 15½
	• -	416	4083
	-	Ţ	I' I
			Khopoli branch—
	·		Palasdhari to Khopoli . 12-5-56 77
	Carried over	1,286	Carried over . 1,2863
<del></del>		<u> </u>	1,200
			<u> </u>

### RAILWAYS

on 31st March 1893.

#### GUARANTEED COMPANIES.

Details of construction.	REMARKS. •
The north-east line to Khandwa, 352½ miles, ¾ mile near Bágra, 46½ miles from Kalyán junction to Lonávla on the south-east line, and 62½ miles from Bhusával to Shegaon on the Nágpur branch; in all 461¾ miles, are double. On the rest of the line generally the earthwork is for a single line, and the bridges and viaducts for a double line.  The rails originally laid were iron, weighing 68 lbs. and 84 lbs. per yard. These are now being gradually replaced by steel rails weighing 69 lbs., 82 lbs. and 86lbs. per yard.  The sleepers originally laid were chiefly wooden. These are now being in part replaced by iron bowls.	REMARKS.  The line from Bombay to Thana was commenced on the 31st October 1850, and that from Bhusaval junction to Malkapur towards the close of 1859.  The dates of orders for the construction of other section on the north-east line including branches, are as follows:—  Thana to Persick
iron bowls.  he whole line is fenced, with the exception of the Mohpáni and Khopoli branches.	
•	From Sholapur to Gulbarga the contractors commence work on 3rd August 1865, and from Gulbarga to R chur the contract was let in December 1865. T Kistna bridge on the Gulbarga-Raichur section wopened on 9th October 1873.  The remaining portions of the south-east line were sat tioned for construction on the following dates:  Kalyan to Neral  Kalyan to Palasdhari  Palasdhari to Poona  Poona to Sholapur  Khopoli branch  Solapur

The Khopoli branch is worked during fair weather only.

**APPENDIX** 

STANDARD GAUGE

Constructed and in progress

### LINES WORKED BY

	Name of line and mileage sanctioned.	Total	Date of opening for public traffic.
No.	Mile	mileage.	Miles
XVIII.	Great Indian Peninsula – concld.		Brought forward . 1,2863
	Brought forward	1,286	DOUBLE—NORTH-EAST LINE— Bori bandar to Thána . 18-4-53 20½ Thána to Kalyán . 1-5-54 12¾ Kalyán to Vásind . 22-10-66 16½ Vásind to Átgaon . 20-2-67 9¾ Átgaon to Kására . 25-4-67 16 Kására to Igatpuri . 1-1-65 9½ Igatpuri to Násik . 10-1-69 31¼ Násik to Chálisgaon . 10-1-69 87½ Chálisgaon to Kajgaon . 10-1-69 12 Kajgaon to Páchora . 17-3-69 16 Páchora to Máheji . 27-5-69 9½ Máheji to Mhasávad . 6-6-73 35 Between Itársi and Sohágpur Bhusával to Khandwa . 11-1-89 76½ Bori bandar to Victoria terminus . 1-1-82 ½  DOUBLE—SOUTH-EAST LINE— Kalyán to Palasdhari . 25-7-70 30½ Palasdhari to Khandála Khandála to Lonávla . Bhore ghát { 14-5-63 13½ Khandála to Lonávla . 14-6-58 24  DOUBLE—NÁGPUR BRANCH— Bhusával junction to Nádgaon 11-1-89 17½ Nádgaon to Shegaon . 1-4-90 44¾
	Total	1,286	TOTAL DOUBLE LINE . 462  TOTAL OPEN MILEAGE . 1,2863
XIX	Bombay, Baroda and Central India—  Main line— Bombay (Colába) terminus to Ahmedabad . 309½ Extension to Viramgám junction and Wadhwán . 80  — 389	1	Main line— Colába to Marine lines
	Carried over . 38	9 <del>1</del>	Carried over . 3891

on 31st March 1893.

### GUARANTEED COMPANIES.

Details of construction.	Remarks.
	This company works, under agreement, the Dhond-Manmad railway, the Berar branches, and the Wardha Coal 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 Report for 1881-82 and 1890-91, respectively.
The line is double from Colaba to Virar, 38½ miles; from Sachin to Amroli, 11½ miles; and from Barejadi to Ahmedabad, 10½ miles; in all 60 miles. On the rest of the line except the Nerbudda and Bassein valleys, the earthwork is for a single line, and the bridge piers and abutments for a double line; superstructure for a	in May 1865.  The estimates of the extension to Wadhwan were sanctioned on the 24th October 1870.  The following are the dates of sanction of the remaining sections of this line:—
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 1831. This bridge is constructed with piers for a double road, but only one set of girders has been erected.	Marine lines to Charni road
The line is laid with double-headed steel rails, weighing 69 lbs. to the yard.  The rails are laid generally on a wooden road, but in suitable places iron bowls have been used in renewing the wooden sleepers.  The Wadhwan extension is laid with rails, 60 lbs. to the yard, on iron bowl sleepers.  The main line is wholly fenced.	

### APPENDIX STANDARD GAUGE

### Constructed and in progress

		LINES WORKED BY
 Name of line and mileage sanctioned.	Total	Date of opening for public traffic.

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
VIV	Miles. Bombay, Baroda and Central India—concld.	Miles.	Miles.
XIX	Brought forward . 389‡		Brought forward 3891
	Branches— Anand junction (260) miles from Bombay) to Godhra (Godhra branch) • • 491		Goahra branch— Anand to Dákor
	Pátri, in the Runn of Cutch, to.Vi- ramgám junction (3943 miles from Bombay on the Wadhwan extension on the Bombay, Baro- da and Central India railway)		Pátri branch— Pátri to Viramgám 12-5-73 . 221
	(Pátri branch)	460 <del>3</del>	Double—Main line— Colába to Marine lines
	Total .	460}	TOTAL DOUBLE LINE . 60  TOTAL OPEN MILEAGE . 460
XX	Madras—		South-west Line—
	SOUTH-WEST LINE—  Main line—  Madras to Veyasarpaudy junction		Main line—  Madras to Veyasarpaudy Veyasarpaudy to Arcot Arcot to Kátpádi Arcot to Kátpádi Kátpádi to Gudiyáttam Gudiyáttam to Ambúr Ambúr to Vániyambádi Vániyambádi to Tirupattúr Tirupattúr to Salem Salem to Sankaridrug Sankaridrug 1-12-61 23 Sankaridrug 1-12-62 71 Pódanúr to Pádanúr Pódanúr to Pattámbi Auttippuram Kuttippuram to Tirúr Tirúr 1-5-61 9 Tirúr to Kadalundi Kadalundi to Calicut  Rávapuram branch— Veyasarpardu de Pádanach—
	Káyapuram (Ráyapuram branch) 21		Veyasarpaudy to Ráyapuram 1-7-56 2
	Carried over . 21 414		Carried over . 416

on 31st March 1893.

### GUARANTEED COMPANIES.

Details of construction.	Remarks.
The formation and earthwork of the Godhra branch are	
for a single line, and rails, weighing 60 lbs. to the yard, are laid on iron pot sleepers. The line is located on the trunk road, and is all but completely fenced.	
The rails are flat-footed, weighing 48 lbs. to the yard. The Pátri branch is unfenced.	This line was constructed by the Bombay, Baroda an Central India Railway Company at the expense of th State, and is worked under agreement by that compan as part of their own system. The capital outlay in curred by the State was charged against the Civil Work grant.  The dates of orders for survey and construction are 26t May 1870 and 13th June 1871, respectively.  The Gaekwar's Dabhoi, Mehsana and Petlad railways ar
	worked under agreement by this company.  The Rajputana-Malwa state railway has been leased to this company from 1st January 1885 to 30th June 1900. The terms of the lease will be found in appendix Jart II of the Railway Administration Report for 1884-85.
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 iron rails, which vary in weight from 65 lbs. to 84 lbs. to the yard, are laid on iron pot sleepers. The rails are being renewed with 75 lbs. steel rails.  The section between Madras and Arkonam, 42½ miles, is double.  The south-west line was originally laid with sleepers of indigenous woods, but an experiment was made of using stone blocks 2' × 2' × 1' as sleepers. As the experiment however proved unsatisfactory, the blocks were all removed in 1857.  ungle-wood sleepers were found to be very short-lived, and in 1861 it was decided to replace them by Greaves' patent cast-iron bowl sleepers; the alteration has proved to be economical and in every way satisfactory. Bowl sleepers of an improved and stronger design with steel rails, 30 feet in length, and a heavier type of fish plate, are now being introduced.	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 Veyasarpaudy junction and the Central station, this became a portion of the main line, and the old line, from the junction to Ráyapuram, was then treated as a branch.  The extension of the south-west line from near Beypore to Calicut was sanctioned in August 1884. This extension has cost about 19 lakhs of rupees, and of this 1½rd 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 2½ miles short of Beypore, which length, together with the Beypore station, has been abandoned.

#### APPENDIX .

### STANDARD GAUGE

#### Constructed and in progress

### LINES WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XIX	Miles. Bombay, Baroda and Central India—concld.	Miles.	Miles
•	Brought forward . 3891		Brought forward . 3891
	Branches— Anand junction (269½ miles from Bombay) to Godhra (Godhra branch) 49½		Branches— Gouhra branch— Anand to Dákor
	Pátri, in the Runn of Cutch, to.Vi- ramgám junction (394) miles from Bombay on the Wadhwan extension on the Bombay, Baro- da and Central India railway)		Pátri branch— Pátri to Viramgám 12-5-73 . 22t
	(Pátri brauch) 22\frac{1}{2}	- 460 <sup>3</sup>	DOUBLE—MAIN LINE— Colába to Marine lines . 18-1-70 . 2 Marine lines to Charni road 19-5-69 . 3 Charni road to Bellasis road 13-9-68 . 1 Bellasis road to Máhim . 20-7-65 . Máhim to Bándra . 23-2-66 . Bándra to Santa Cruz . 23-5-66 . Santa Cruz to Andheri . 29-8-67 . 13 Andheri to Bháyndar . 27-4-85 . 13 Bháyndar to Virár . 1-10 85 . 10 Sachin to Kánkra Khádi . 4-7-87 . 6 Kánkra Khádi to Surat . 5-6-68 . 23 Surat to Amroli . 9-10-67 . 24 Bárejadi to Ahmedabad . 2-6-87 . 10
•			·
	Total .	4603	TOTAL DOUBLE LINE . 60  TOTAL OPEN MILEAGE . 460
XX	Madras— SOUTH-WEST LINE—  Main line—  Madras to Veyasarpaudy junction. 21		SOUTH WEST LINE—  Main line—  Madras to Veyasarpaudy . 7-4-73 21  Veyasarpaudy to Arcot . 1-7-56 63  Arcot to Kátpádi . 7-5-57 15  Kátpáci to Gudiyáttam . 19-5-58 15  Gudiyáttam to Ambúr . 16-1-50 17  Ambúr to Vániyambádi . 1-2-60 10
	Veyasarpaudy junction to Arkónam junction 401 Arkónam junction to Calicut . 3711 ———————————————————————————————————		Vániyambádi to Tirupattúr       23-5-60       14         Tirupattúr to Salem       1-2-61       70         Salem to Sankaridrug       1-12-61       23         Sankaridrug to Pódanúr       12-5-62       71         Pódanúr to Pattámbi       14-4-62       64         Pattámbi to Kuttippuram       23-9-61       11         Kuttippuram to Tirúr       1-5-61       9         Tirúr to Kadalundi       12-3-61       16         Kadalundi to Calicut       2-1-88       9
	Arkonam junction 401 Arkonam junction to Calicut . 3711		Vániyambádi to Tirupattúr       23-5-60       14         Tirupattúr to Salem       1-2-61       70         Salem to Sankaridrug       1-12-61       23         Sankaridrug to Pódanúr       12-5-62       71         Pódanúr to Pattámbi       14-4-62       64         Pattámbi to Kuttippuram       23-9-61       11         Kuttippuram to Tirúr       1-5-61       9         Tirúr to Kadalundi       12-3-61       16

on 31st March 1893.

### GUARANTEED COMPANIES.

Details of construction.	
Details of construction.	REMARKS.
The formation and earthwork of the Godhra branch are for a single line, and rails, weighing 60 lbs. to the yard, are laid on iron pot sleepers. The line is located on the trunk road, and is all but completely fenced.	
The rails are flat-footed, weighing 48 lbs. to the yard. The Patri branch is unfenced.	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.  The Gaekwar's Dabhoi, Mehsána and Petlád railways are worked under agreement by this company.  The Raiputana-Malwa state railway has been leased to this company from 1st January 1885 to 30th June 1900.  The terms of the lease will be found in appendix J, Part II of the Railway Administration Report for 1884-85.
·	
	•
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 iron rails, which vary in weight from 65 lbs. to 84 lbs. to the yard, are laid on iron pot sleepers. The rails are being renewed with 75 lbs. steel rails.  The section between Madras and Arkonam, 42½ miles, is double.  The south-west line was originally laid with sleepers of indigenous woods, but an experiment was made of using stone blocks 2' × 2' × 1' as sleepers. As the experiment however proved unsatisfactory, the blocks were all removed in 1857.  Jungle-wood sleepers were found to be very short-lived, and in 1861 it was decided to replace them by Greaves' patent cast-iron bowl sleepers; the alteration has proved to be economical and in every way satisfactory. Bowl sleepers of an improved and stronger design with steel rails, 30 feet in length, and a heavier type of fish plate, are now being introduced.	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 Veyasarpaudy junction and the Central station, this became a portion of the main line, and the old line, from the junction to Ráyapuram, was then treated as a branch.  The extension of the south-west line from near Beypore to Calicut was sanctioned in August 1884. This extension has cost about 19 lakhs of rupees, and of this 1½rd 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 2½ miles short of Beypore, which length, together with the Beypore station, has been abandoned.

### APPENDI3 STANDARD GAUGI

## Constructed and in progres LINES WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XX	Miles.  Madras—concld.  Brought forward . 2\frac{1}{2} 414  SOUTH-WEST LINE—concld.  Branches—concld.  Jalarpet junction (132 miles from Madras) to Bangalore cantonment (Bangalore branch) 84\frac{1}{2}  Bangalore cantonment to Bangalore city	Miles.	Miles.  Brought forward . 416\(\frac{1}{4}\)  SOUTH-WEST LINE—concld.  Branches—concld.  Bangalore branch—     Jalarpet junction to Bangalore cantonment . 1.8-64 84\(\frac{1}{4}\)  Bangalore cantonment to Bangalore city . 1-7-82 2\(\frac{3}{4}\)  Nilgiri branch—     Pódanúr junction to Coimbatore . 1.2-73 3\(\frac{3}{4}\)  Coimbatore to Méttupálaiyam . 31-8-73 22  25\(\frac{3}{4}\)  Palghat branch—     Olavakkót to Palghat . 2-1-88 2\(\frac{1}{4}\)
	NORTH-WEST LINE—  Main line— Arkonam junction (42½ miles from Madras) to Guntakal . 232½ Guntakal to Ráichúr (point of junction with the Great Indian Peninsula railway) . 75	3071	NORTH-WEST LINE
	Total	2,5863	Perambur to Avadi Ávadi to Tiruvallur Tiruvallur  Tiruvallur to Arkonam  28-8-77  164  421  TOTAL OPEN MILEAGE  8394

on 31st March 1893.

### GUARANTEED COMPANIES.

Details of construction.	Remarks.		
The whole line is fenced.	The following are the dates of sanction of the remainisections of the south-west line, including branches:—Madras to Veyasarpaudy . April 1868.  Veyasarpaudy to Arkonam . Between July 1853 a February 1854.  Arkonam to Kadalundi . Between February 18 and May 1857.  Râyapuram branch . July 1853.  Bangalore branch . 1862 and March 1881.  The line from Bangalore cantonment to Bangalore c was constructed as a part of the Mysore state railwabut was subsequently made over to the Madras Railwas Company.  The construction of the Palghat branch was sanction on the 4th January 1887.  The station buildings at Palghat town are at present a temporary nature. The bridge over the Ponáni rivis of four 64-foot girders; it is 16'6" wide between railings, and carries the railway as well as a put road. The local authorities contributed R30,000 towathe construction of the bridge.  The Bellary branch from Guntakal junction to Bellary		
	was purchased by, and handed over to, the Souther Mahratta Railway Company on the 1st February 188 The new bridges over the Pennér and Chitrávati river north-west line, consisting of 13 spans of 131 feet at 19 spans of 131 feet, respectively, were opened on the 1st October 1889 and 6th March 1890. The bridge over the Pápaghni river, consisting of 15 spans of 131 feet was opened to traffic on the 1st July 1892. The extensive works in connection with the junction of this line with the Villupuram-Guntakal state railway in the state of		
	Kátpádi are completed.  The waterway of the Matagapalli bridge, north-west line has been reduced from 7 to 4 spans of 63 feet, and to weak girders have been replaced by those of a strong type.  The weak girders of the Rollananka bridge on the northwest line have been replaced by those of a strong		
	type. The old girders of the Thootha bridge, south-west line have been replaced by stronger girders, and the relevel of the bridge raised nearly 4 feet.		
•	The dates of sanction of the various sections of the north-west line are as follows:—  Arkónam to 64th mile from Madras . 23-6-64th mile to 87th , , , , . 3-1-6		
	87th ,, to 108th ,, ,, ,, . 31-1- 108th ,, to 130th ,, ,, ,, . 26-5- 130th ,, to 172nd ,, ,, ,, . 18-11- 172nd ,, to 192nd ,, ,, ,, . 20-7-		
	192nd ,, to 203rd ,, ,, ,,		
	250th ,, to 207th ,, ,, ,, 22-0 267th ,, to 278th ,, ,, ,, . 31-7 278th ,, to 288th ,, ,, ,, , 20-11 288th ,, to 294th ,, ,, ,, . 4-3 294th ,, to 305th ,, ,, ,, . 3-12		
	305th ,, to 314th ,, ,, ,, 27-5. 314th ,, to 325th ,, ,, ,, , 24-9 325th ,, to 334th ,, ,, ,, ,, 23-8. 334th ,, to Ráichúr		

APPENDIX

STANDARD GAUGE

Constructed and in progress

ASSISTED

No.	Name of line and mileage sanctioned.	Total mileage,	Date of opening for public traffic.
XXI	Miles.  Delhi-Umballa-Kalka—	Miles.	Miles.
į	Delhi, on the East Indian railway, viá Karnál and Umballa to Kalka	161 <u>‡</u>	Delhi to Kalka 1-3-91 1611
;	·		·
		•	
XXII	Tarkessur—		
	Seoraphuli (14 miles from Howrah on the East Indian railway) to Tarkessur in the Hooghly district.	221	Seoraphuli to Tarkessur . 1-1-85 221
·•			
	TOTAL ASSISTED COMPANIES (STANDARD GAUGE)	1833	1834

cxli

D-continued.
RAILWAYS

on 31st March 1893.

### COMPANIES.

Details of construction.	- REMARKS.
The line passes through a country generally level and open till above Umballa, where the rise towards the Himalayas commences. In the last 10 miles into Kalka, the country is hilly and the ascent very steep.  The permanent-way consists of double-headed steel rails, 75 lbs. to the yard, laid on Denham-Olphert's sleepers. The minimum radius of curve is 1,350 feet; the steepest gradient is 1 in 40 for about 5 miles into Kalka.  The whole length is fenced.	The Delhi-Umballa Kalka Railway Company was formed in January 1889, and the capital share lists closed on the 26th of that month.  The survey between Delhi and Umballa was carried out 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.  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.
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.  The whole length is fenced.	The construction of this railway was sanctioned on 20th February 1883. It is one of the first railways in India constructed 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.  The 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.

APPENDIX D.

### APPENDIX STANDARD GAUGE

Constructed and in progress

### LINES OWNED BY NATIVE STATES

No.	Name of line and mileage canctioned.	Total mileage.	Date of opening for public traffic.
XXIII	Miles.	Miles.	Miles.
	Jalamb junction (332) miles from Bombay on the Nágpur branch of the Great Indian Peninsula railway) to Khámgaon	7 1	Jalamb to Khamgaon . 4-3-70 71  TOTAL OPEN MILEAGE . 71
XXIV	Amráoti— Badnera junction (412½ miles from Bombay on the Nágpur branch of the Great Indian Peninsula railway) to Amráoti	51/2	Badnera to Amráoti 16-2-71 51 51 51 51
			•
xxv	Bhopal-Itársi— Itársi (463½ miles from Bombay on the north-east line of the Great Indian Peninsula railway) to Bhopal	57	Itársi to Hoshangabad . 1-6-82 . 11½ Hoshangabad to Bhopal .18-11-84 . 45½  TOTAL OPEN MILEAGE . 57
-			
	•		
xxvı	The Nizam's Guaranteed State—  Main line— Wadi (375% miles from Bombay on the south-east line, Great Indian Peninsula railway) viā Secunderabad to south-east frontier 310%		Main line— Wadi junction to Secunderabad and to junction of new line . 9-10-74 115% Junction of new line to Warrangal 8-4-86 86% Warrangal to Dornakal . 1-1-88 52% Dornakal to Bóna Kálu 5-8-88 31% Bóna Kálu to British frontier . 10-2-89 23%
	Branches— Husain Ságar junction (111½ miles from Wádi) to Hyderabad (Hyderabad branch)  Dornakal to Singareni coalfields (Mineral branch)	3321	Branches— Hyderabad branch— Husain Ságar to Hyderabad
			TOTAL OPEN MILEAGE 3321

on 31st March 1893.

### AND WORKED BY COMPANIES.

#### Details of construction, REMARKS. The Khamgaon line has been constructed for a single The dates of orders for survey and construction are as track with a formation of 16 feet, and is laid with flatfooted rails, 60 lbs. to the yard, on oval bowl sleepers. Date for survey. Dates for construction. 8th Ápril 1870. 7th June 1869. 11th June 1876. The permanent-way used on the Amráoti line is of iron, These branches have been constructed from the surplus the rails weighing 68 lbs. to the yard. revenues of the Berars, with a view to facilitate the Fencing has been provided at stations only. transport of cotton from the cotton marts of Khamgaon 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 •8go-g1. The line has been laid for a single track with 62 lbs, steel The dates of orders for survey and construction are 4th June 1879 and 31st July 1880, respectively. The British Government has paid for the portion, 13 miles, in its own territory, and a moiety of the cost of rails. The sleepers were partly of steel and partly of creosoted pine and other kinds of wood. The ghat 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 80 lbs. per bowl. A similar 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 shared between Her Highness the Begum and the British Government in proportion to the capital contrioperation is now in progress on those portions of the line where wooden sleepers are in use. Wire fencing is now being erected all along the line, buted by each party at the close of the period for which accounts are made up. The line was constructed on contract by Messrs. Glover & Co., and is being worked which originally was practically without protection of any kind. by the Indian Midland Railway Company from 1st January 1889. The terms of working will be found in appendix I, Part Il of the Railway Administration Report for 1889-90. The whole line from Wadi to His Highness the Nizam's The dates of orders for survey and construction are 30th October 1869 and 25th March 1871, respectively. frontier is constructed for a single track. About 53 miles are laid with double-headed 68 lbs. iron railst on cast iron bowl sleepers, obtained from the Great Southern of the British Government constructed the line. India Railway Company; 9 miles with double-headed The standard gauge was finally adopted on the 30th October 1871. Up to the end of 1878, the line was worked by the Great Indian Peninsula Railway Company with 68 lbs. steel rails on cast-iron bowl sleepers; one mile with Vignole's 60 lbs. and 62 lbs. flat-footed steel and iron rails

on Bessemer steel sleepers; and the remainder of the main line with 664 lbs. flat-footed steel rails on steel

pea-pod sleepers.
The branch line to Trimulgherry is laid with second-hand folls. flat footed iron rails on timber sleepers, and the branch line to the mines with 60 lbs flat-footed iron

rails on steel pea-pod sleepers.

The branches are also constructed for a single track. The line is fenced from Wadi to Secunderabad, and from Secunderabad to the frontier only the station-yards.

The Government of the Nizam provided the capital, and

its own rolling stock; from January 1879 to 31st December 1884, it was worked by state agency, and from January 1885 by His Highness the Nizam's Gua-

ranteed State Railway Company.

This company was formed for the purpose of acquiring and working the then existing line of 119 miles and of constructing, on the same (standard) gauge, and working, the new lines, 373 miles in length.

The construction of the first section between Secunderabad and Warangal was commenced in November 1884

and completed in March 1885.

The construction of the section from Warangal to Dornakal and the coal branch was commenced in May 1886. The extension between Dornakal and the frontier was commenced in January 1887 and completed in January 1889.

This company works, under agreement, the Bezwada extension railway as part of its own system. The terms of working will be found in appendix P, Part II of the Railway Administration Report for 1889-90.

The Bezwada-Godávari section of the East Coast railway is also being worked by the company, as a temporary measure, on the same terms as the Bezwada extension railway.

APPENDIX STANDARD GAUGE

. Constructed and in progress

### LINES OWNED BY NATIVE STATES

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XXVII	Miles.  The Gaekwar's Petlád—  Anand (2691 miles from Bombay on the Bombay, Baroda and Central India railway) to Petlád	Miles.	Miles. Ánand to Petlád 5-5-90 . 131
XXVIII	Mysore Gold-fields—  Bowringpet (175½ miles from Madras on the Madras railway) to the Kolár gold mines .	10	
•	TOTAL LINES OWNED BY NATIVE STATES AND WORKED BY COMPANIES (STANDARD GAUGE)	4121*	402}*

<sup>•</sup> Excludes 13 miles of the Bhopal-Itárs railway (British section) included in the total for "State lines worked by companies."

on 31st March 1893.

### AND WORKED BY COMPANIES.

Details of construction.	REMARKS.
The rails used are flat-footed, 66½ lbs. to the yard, laid on steel sleepers. 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. The whole line is fenced.	The orders for the survey of this line were given in December 1887. Construction was sanctioned in December 1888; work was commenced in January 1889 and completed on 5th May 1890.  The cost of construction has been defrayed by His Highness the Gaekwar.  This line is worked and maintained by the Bombay, Baroda and Central India Railway Company.
The permanent-way will consist of Madras railway second-hand double-headed 75 lbs. rails laid on new cast-iron Greaves' pot sleepers. The ruling gradient is 1 in 663 and the sharpest curve 1,685 feet radius.	The line was sanctioned for construction in July 1892. It is being constructed by the Mysore Darbar and, when completed, will be worked, as a tentative measure by the Madras Railway Company on the same percentage of gross earnings as obtains on the company's general system, plus 5 per cent, for the use of rolling stock.

APPENDIX

STANDARD GAUGE

. Constructed and in progress

### LINES OWNED BY NATIVE STATES AND

No.	Name of line and mileage sauctioned.	Total mileage.	Date of opening for public traffic.
XXIX	Rájpura-Bhátinda— Miles.	Miles.	Miles.
	Rájpura (179 miles from Delhi on the North Western (state) railway, main line), viá Patiála to Bhátinda.	108	Rájpura to Patiála 1-11-84 16 Patiála to Bhátinda 13-10-89 92
			•
xxx	Jammu and Kashmir—		
	Frontier of the Kashmir state to the left bank of the Tawi river near Jammu	16	Frontier of the Kashmir state to the left bank of the Tawi river 15-3-90 16
	TOTAL LINES OWNED BY NATIVE STATES AND WORKED BY STATE RAILWAY AGENCY	<u> </u>	
	(STANDARD GAUGE)	124	124

#### APPENDIX D.

D-continued.

RAILWAYS

# on 31st March 1893. WORKED BY STATE RAILWAY AGENCY.

Details of construction.	Remarks.
The country traversed is eminently favourable. The line is practically a surface one for a single track, with steel rails, 68 lbs. to the yard, laid on deodar sleepers, from Rájpura to Patiála, and with 75 lbs. flat-footed steel rails, laid on deodar sleepers, from Patiála to Bhátinda. The sharpest curve is 1,146 feet in radius and the steepest gradient is 1 in 250.  The line is fenced from Rájpura to Patiála only.	The line from Rájpura to Patiála was sanctioned on the 7th December 1883, and was constructed by the late Sind, Punjab and Delhi Railway Company at the expense of the Patiála Darbar.  The extension to Bhátinda was surveyed in 1837, and construction was commenced in April 1888.  The line is worked and maintained by the North Western (state) railway under an agreement, the terms of which will be found in appendix V, Part II of the Railway Administration Report for 1892-93.
This line has been constructed according to standard dimensions.  The rails are 75 lbs. flat-footed. The sleepers are of deodar, except where there are dips in the road to pass surface floods: steel transverse sleepers have been used in such places. There are about 1,900 sleepers to the mile. The ballast used is of stone throughout and of excellent quality.	25th February 1888.  The line has been constructed by the Kashmir Darbar, by whom also the capital was provided.  It is maintained and worked by the North Western state) railway as a leased line under agreement for five years.

\*cxlviii

### APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

APPENDIX STANDARD GAUGE

Constructed and in progress

### LINES OWNED AND WORKED

No.	Name of line and mileage sanctioned.	Fotal mileage.	Date of opening for	public traffic.
XXXI	Miles.  Bína-Guna—  Bína (143 miles from Itársi on the Indian Midland railway) to Gunā.	Miles	·	Miles.
•	.•		•	
XXXII	Bhopal-Ujjain—  Bhopal (57 miles from Itársi on the Indian Midland railway) to Ujjain (600½ miles from Ahmedabad on the Ujjain branch of the Rajputana-Malwa railway)	1131		
<u>.</u>	TOTAL LINES OWNED AND WORKED BY NATIVE STATES (STANDARD GAUGE)	187		•

#### APPENDIX D.

D-continued.
RAILWAYS

on the 31st March 1893.

### BY NATIVE STATES.

Details of construction.	REMARKS.
The permanent-way will consist of 75 lbs. steel rails laid on steel transverse sleepers.  There will be three large bridges:—the "Betwa," 16 spans of 100 feet; the "Or," 5 spans of 60 feet, and the "Sindh," 5 spans of 100 feet. The earthwork is generally light throughout.	Construction was sanctioned on 2nd March 1802, and.
	The construction of this line was sanctioned in November 1892.  Earthwork was started in miles 32 to 46 from Bhopal.  Final alignment is nearly finished.
•	,

## APPENDIX METRE GAUGE

### Constructed and in progress

### STATE

### WORKED BY

			. WORKED BY
No	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XXXIII	Bengal and North Western* - Miles.	Miles.	TIRHOOT SECTION— Miles.
	FIRHOOT SECTION—  Main line—  Semaria ghat on the opposite bank of the Ganges, 4 miles below Mokameh, to Bettiah	<b>1</b> 45₹	Semaria ghat to Dalsinghsarai 1-5-83 22½ Dalsinghsarai to Samastipur 1-11-75 14¾ Samastipur to Mozufferpore 24-2-77 32 Mozufferpore to Motiharee . 1-2-83 49½ Motiharee to Bettiah . 20-12-83 27
	Kosi extension— Samastipur to Bhaptiahi	984	Kosi extension— Samastipur ghát to Durbhunga 1-11-75 Durbhunga to Jhanjharpur . 1-2-83 . 24 Jhanjharpur to Ghoghardiha— For goods traffic . 8-4-86 For passenger traffic . 6-5-86 Ghoghardiha to Nirmala— For goods traffic 8-4-86 For passenger traffic 1-11-86 Nirmala to Bháptiáhi— For goods traffic 1-11-86
			For goods traffic15-11-87 For passenger traffic1-1-88 Bháptiáhi to Pratápganj — For goods traffic . 1-10-88 For passenger traffic . 1-1-89 Pratápganj to Khanwa ghát 14-11-90 . 8
	Bairagnia branch— Durbhunga to Dheng Dheng to Bairagnia (fair weather line) 3½	6c}	Durbhunga to Sitamarhi—  For goods traffic . 1-7-90 }  For passenger traffic . 1-11-90 }  Sitamarhi to Riga—  For goods traffic . 1-11-91 }  For passenger traffic . 2-11-91 }  Riga to Dheng—  For goods traffic . 1-7 91 }  For passenger traffic . 2-11-91 }  Dheng to Bairagnia—  For goods traffic . 1-3-92
-	Sonepore branch—  Mozufferpore to Sonepore (point of junction with the company's section)  Hajeepore branch—  Hajeepore to Hajeepore ghat	341	For passenger traffic . 15-3-92 } 3½  Sonepore branch — 60½  Mozusterpore to Hajeepore 26-10-84 31¼ Hajeepore to Screpore— For goods trassic . 1-8-87 For passenger traffic . 25-4-87 } 3½  Hajeepore branch — 34¾ Hajeepore branch — Hajeepore to Hajeepore ghat 26-10-84 2
	COMPANY'S SECTION—  Main line—  Sonepore opposite Patna, vid Chupra, Sewan and Gorakhpur to Mankapur and thence to Ajodhya		Total Tirhoot section . 341\frac{3}{4}  COMPANY'S SECTION—  Main line—  Sonepore to Mankapur 15-1-85 218\frac{1}{2}  Mankapur to Naw\(\delta\) bganj . 2-4-84 14  Naw\(\delta\) bganj to Ajodhya 1-12-84 6  Loop line—  Sonepore to Bunw\(\delta\) rchak . 15-1-85 9\frac{1}{2}
	Carried over . 248	3413	Carried over $\begin{cases} \frac{341\frac{3}{4}}{248} \end{cases}$

on 31 st March 1893.

#### LINES

#### COMPANIES.

Details of construction. REMARKS. The line is laid partly with iron rails, 40 lbs. to the yard, The Tirhoot line was started in February 1874 for the and partly with steel rails, 41½ lbs. to the yard, on transverse sleepers of sal and deodar, and Denham-Olphert's and Denham's iron sleepers. The 40 lbs. iron 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 perrails are being replaced with 50 lbs. steel rails, and 31 miles of the latter have been laid to end of December manently opened for public traffic on the 1st Novem-The country through which the line passes is 1802. ber 1875. easv. The construction of the line from Dalsinghsarai to Semaria ghat was sanctioned on the 3rd February 1882 in consequence of the silting up of the river Ganges and The line is fenced throughout with wire and stone posts. the formation of a har opposite Barh. On the opening of this line, the route vid Bajitpur and the Barh branch was closed. The survey for the permanent line was ordered on the 8th December 1874, and its construction on 6th January 1876. With the opening of the section from Pratapganj to Khanwa ghat, the construction of the Kosi extension project was brought to completion. The Bairagnia branch is laid with second-hand iron rails, 60 lbs. to the yard, received from the North Western (state) railway, the sleepers used being of pynkado wood from Burma. The survey for this line was ordered on the 5th March 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 188. The construction of the line was sanctioned on the 18th May 1882.
From the 1st January 1883 it was handed over to a and Sonepore and Gorakhpur and Maghar, the banking is especially heavy. As the line crosses the drainage Limited Liability Company, with a free gift of land, but of the country between the Gunduk and Gogra rivers, the bridging is in places heavy, and the Rapti bridge no guarantee. The line is connected with the Tirhoot state railway by means of the Gunduk bridge between Sonepore and

has been a difficult and expensive undertaking: on the Uska bazar branch, the works, both earthwork and

bridging, are heavy.

Hajeepore, sanctioned on 19th October 1883.

### APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

APPENDIX
METRE GAUGE

Constructed and in progress

### STATE

### WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XXXIII	Miles.  Bengal and North-Western—concld.  Brought forward . 248  COMPANY'S SECTION—concld.	Miles.	Brought forward  Branches—  Uska basar branch—  Miles. $ \frac{34^{1\frac{3}{4}}}{248} $
	Branches— Gorakhpur to Uska bazar (Uska basar branch) Mankapur to Naipálganj road (Naipálganj road branch) Chupra to Revelganj (Revelganj branch) Gonda to Gogra ghát (Bahramghat branch)  7 Gonda to Haranch) 313 1664	4141	Gorakhpur to Uska bazar . 15-12-86 39‡  Naipálganj road branch— Mankapur to Bahraich . 2-4-84 55 Bahraich to Naipálganj road .15-12-86 33‡  Revelganj branch— Chupra to Revelganj— For goods traffic . 15-4-91 For passenger traffic . 15-5-91  7
			Bahramghat branch— Gonda to Colonelganj— For goods traffic 29-10-91 For passenger traffic 1-2-92 14 Colonelganj to Gogra ghát 1-2-92 14  Total Company's section 4142
	Total .	7561	Total open mileage 756
XXXIV	Rohilkund and Kumaon (Lucknow-Bareilly section)—  Main line— Lucknow (209 miles from Moghal Sarai on the Oudh and Rohilkund (state) railway) to Bareilly (355 miles from Moghal Sarai, on the Oudh and Rohilkhand (state) railway)	1981	Main line—  Lucknow to Sitapur
	Dudhwa branch— Mailáni (118 miles from Lucknow) to Dudhwa	26	Dudhwa branch — Mailáni to Sárda 1-1-93 15  Sárda to Sohela— For goods traffic 10-3-93 82
	Total	224	TOTAL OPEN MILEAGE * 2214

on 31st March 1893.

#### LINES

#### COMPANIES.

Details of construction.	Remarks.		
The line is laid with 41½ lbs. steel rails on sleepers of sål and crepsoted pine.  It is generally unfenced, except in front of villages and on each side of level-crossings and near stations.	On the 1st November 1884, the company took over bridge-of-boats at Fyzabad from Government an removed it to the railway ferry at Ajodhya. Durin the rains this bridge is lifted and the ferry worked ba steamer.  The branch from Gorakhpur to Uska bazar was sand tioned on the 3rd August 1885 in substitution of branch from Gorakhpur to Bansi, 36 miles.  During 1888 a preliminary survey was made for a branc line from Chupra to Revelgani, and the construction of the line was sanctioned in November 1889.  The construction of the Gonda-Bahramghat branch wa sanctioned in November 1889.  Communication across the Ganges between Digha ghas station of the East Indian railway and Paleza ghas station of the Bengal and North-Western railway is maintained by means of a steam ferry.  The wagon ferry of the Bengal and North-Western railway was transferred from Digha to Mokamel and the working commenced on the 7th February 1893. The latter place is now the chief junction for exchange of traffic with the East Indian railway for the combined system of the Bengal and North Western and Tirhoot railways.  The working of the Tirhoot railway was taken ove by the Bengal and North-Western Railway Compan 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.		
The country traversed is flat, and there have been no engineering difficulties. The line is laid for a single track principally with 41½ lbs. steel rails on sål, teak and deodar sleepers. The Bareilly-Pilibhit section is ballasted throughout, and fenced for the first 4½ miles from Bareilly; the remainder is unfenced.  The only bridges of any magnitude are those over the Gumti at Lucknow and the Deoha at Pilibhit.  Only a few miles of fencing has been provided in this	The sanction of the Secretary of State to commencement of work was received on the 8th October 1884, and orders for construction issued on the 13th November 1884.  The line from Gola Gokaran Nath to Pilibhit was sanctioned by the Government of the North-Western Provinces and Oudh on 27th December 1889.  The Dudhwa branch is a fair weather line only.  Orders for the construction of the first 45 miles from		

Only a few miles of fencing has been provided in this

A temporary wooden bridge, 500 feet long, has been erected over the Sarda river for dry weather traffic

section, chiefly at stations and level-crossings.

during 1893.

Orders for the construction of the first 48 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 Rohilkund and Kumaon Railway Company's system has been established at Bhojeepura, 12 miles from Bareilly.
The length from Mailáni to Pilibhit (413 miles), which

was closed to traffic on the 5th July 1891, was permanently re-opened on the 25th October 1891.

The Lucknow-Gola Gokaran Náth section and the Pilibhit-Bareilly section, which were previously worked by the Oudh and Rohilkund (state) railway and by the Rohilkund and Kumaon Railway Company, respectively, were made over, together with the Gola Gokaran Nath-Pilibhit section, to the latter company on the 1st January 1891. These sections now form one line, called the Lucknow-Bareilly section of the Rohilkund and Kumaon railway. The terms of working will be found in appendix M, Part II of the Railway Administration Report for 1890-91.

APPENDIX METRE GAUGE

### Constructed and in progress

### STATE

### WORKED BY

XXXV	Rajputana-Malwa—  STANDARD GAUGE.  Junction of East Indian railway, Agra (Jumna east bank) to the limit of Agra cantonment  METRE GAUGE.  RAJPUTANA SECTION.  Main line— Delhi to Bándikui (Junction with the Agra branch) Bándikui to Ajmere  Ajmere, east of Abu, and through Pálanpur to Ahmed- abad on the Bombay, Baroda and Central India railway.	Miles.	Miles.	Miles  Jumna east bank to Agra cantonment  RAJPUTANA SECTION.  Main line—  Delhi to Rewari— For salt traffic only . 14-2-73 For passenger traffic . 1-7-73 For passenger traffic . 1-7-73 Rewari to Ulwur . 15-9-74 461 Ulwur to Bandikui . 7-12-74 373 Bandikui to Dausa . 20-4-74 773 Dausa to Jeypore . 12-10-74 38 Jeypore to Phulera . 1-3-75 344 Phulera to Ajmere . 1-8-75 493 Ajmere to Beawar . 15-5-78 324
XXXV	STANDARD GAUGE.  Junction of East Indian railway, Agra (Jumna east bank) to the limit of Agra cantonment  METRE GAUGE.  RAJPUTANA SECTION.  Main line— Delhi to Bándikui (Junction with the Agra branch) Bándikui to Ajmere  Ajmere, east of Abu, and through Pálanpur to Ahmed- abad on the Bombay, Baroda	· · ·		Section   Sect
	STANDARD GAUGE.  Junction of East Indian railway, Agra (Jumna east bank) to the limit of Agra cantonment  METRE GAUGE.  RAJPUTANA SECTION.  Main line— Delhi to Bándikui (Junction with the Agra branch) Bándikui to Ajmere  Ajmere, east of Abu, and through Pálanpur to Ahmed- abad on the Bombay, Baroda		3*	RAJPUTANA SECTION.  Main line—  Delhi to Rewari—  For salt traffic only . 14-2-73   514  For passenger traffic . 1-7-73   514  Rewari to Ulwur . 15-9-74 46  Ulwur to Bandikui . 7-12-74 37  Bandikui to Dausa . 20-4-74 77  Dausa to Jeypore . 12-10-74 38  Jeypore to Phulera . 1-3-75 344  Phulera to Ajmere . 1-8-75 498  Ajmere to Beawar . 15-5-78 324
	Junction of East Indian railway, Agra (Jumna east bank) to the limit of Agra cantonment  METRE GAUGE.  RAJPUTANA SECTION.  Main line— Delhi to Bándikui (Junction with the Agra branch) Bándikui to Ajmere  Ajmere, east of Abu, and through Pálanpur to Ahmed- abad on the Bombay, Baroda		3*	RAJPUTANA SECTION.  Main line—  Delhi to Rewari—  For salt traffic only
	Agra (Jumna east bank) to the limit of Agra cantonment  METRE GAUGE.  RAJPUTANA SECTION.  Main line—  Delhi to Bándikui (Junction with the Agra branch) Bándikui to Ajmere  Ajmere, east of Abu, and through Pálanpur to Ahmedabad on the Bombay, Baroda		. 3*	Main line—         Delhi to Rewari—         For salt traffic only       14-2-73         For passenger traffic       1-7-73         Rewari to Ulwur       15-9-74       46         Ulwur to Bandikui       7-12-74       37         Bandikui to Dausa       20-4-74       77         Dausa to Jeypore       12-10-74       38         Jeypore to Phulera       1-3-75       34         Phulera to Ajmere       1-8-75       49         Ajmere to Beawar       15-5-78       32
	METRE GAUGE.  RAJPUTANA SECTION.  Main line—  Delhi to Bándikui (Junction with the Agra branch) Bándikui to Ajmere  Ajmere, east of Abu, and through Pálanpur to Ahmedabad on the Bombay, Baroda		3*	Delhi to Rewari— For salt traffic only
	METRE GAUGE.  RAJPUTANA SECTION.  Main line—  Delhi to Bándikui (Junction with the Agra branch)  Bándikui to Ajmere  Ajmere, east of Abu, and through Pálanpur to Ahmedabad on the Bombay, Baroda			For salt traffic only
	RAJPUTANA SECTION.  Main line— Delhi to Bándikui (Junction with the Agra branch) Bándikui to Ajmere  Ajmere, east of Abu, and through Pálanpur to Ahmedabad on the Bombay, Baroda		•	For passenger traffic Rewari to Ulwur Ulwur to Bandikui Bandikui to Dausa Dausa to Jeypore Jeypore to Phulera Phulera to Ajmere Ajmere to Beawar  1-7-73 15-5-78 1-7-73 15-5-78 15-5-78 15-5-78 15-5-78 15-5-78
	RAJPUTANA SECTION.  Main line— Delhi to Bándikui (Junction with the Agra branch) Bándikui to Ajmere  Ajmere, east of Abu, and through Pálanpur to Ahmedabad on the Bombay, Baroda		•	Rewari to Ulwur  Ulwur to Bandikui  Bandikui to Dausa  Dausa to Jeypore  Jeypore to Phulera  Phulera to Ajmere  Ajmere to Beawar  15-9-74  20-4-74  12-10-74  1-3-75  34  Phulera to Ajmere  1-8-75  32
	Main line— Delhi to Bándikui (Junction with the Agra branch) Bándikui to Ajmere  Ajmere, east of Abu, and through Pálanpur to Ahmedabad on the Bombay, Baroda			Ulwur to Bándikui
	Delhi to Bándikui (Junction with the Agra branch) Bándikui to Ajmere Ajmere, east of Abu, and through Pálanpur to Ahmedabad on the Bombay, Baroda			Bandikui to Dausa
	with the Agra branch) Bándikui to Ajmere Ajmere, east of Abu, and through Pálanpur to Ahmed- abad on the Bombay, Baroda			Jeypore to Phulera . 1-3-75 344 Phulera to Ajmere . 1-8-75 498 Ajmere to Beawar . 15-5-78 324
	Bándikui to Ajmere  Ajmere, east of Abu, and through Pálanpur to Ahmedabad on the Bombay, Baroda			Phulera to Ajmere . 1-8-75 498 Ajmere to Beawar . 15-5-78 32
	Ajmere, east of Abu, and through Palanour to Ahmed-abad on the Bombay, Baroda	*394		Ajmere to Beawar . 15-5-78 32
	through Pálanour to Ahmed- abad on the Bombay, Baroda		i	Didman to 15. 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1
	through Pálanour to Ahmed- abad on the Bombay, Baroda	_ ^	1	Beawar to Haripur 12-8-79 21
		_ /	1	Haripúr to Sojat road 20-10-80 201
	and Central India railway.	• • • • • • • • • • • • • • • • • • •	1	Sojat road to Palanpur 1-1-81 148
		3041		Palanpur to Ahmedabad . 15-11-79 83
j		<b>─</b> 579₹		
	Branches-		1	Farukhnagar salt branch—
I	Garhi Harsaru junction (251			For salt traffic only . 14-2-72 )
	miles from Delhi) to Farukh-		}	For passenger traffic 1-7-73 } 72
	nagar (Farukhnagar salt	_ 2		Agra branch—
	branch) . Bandikui to Agra fort (Agra	7₹		Bándikui to Bhurtpore Bhurtpore to Agra fort—  20-4-74 601
1	branch)	93 <del>1</del>	]	For goods traffic
!	Agra fort to Jumna east bank	14	ŀ	For goods traffic
1	Phulera junction (1831 miles		-	1 - 6 J
	from Agra) to Sámbhar		İ	Sambhar lake salt branch 1-3-75 4
	(Sámbhar lake salt branch)	41/2	}	Japog extension . Oct. 76
	Extension of Sambhar branch	_	}	Extension of Sámbhar branch to Jhowra
i	to Japog	41	]	Kankaroola siding
	Extension of Sambhar branch across the lake to Gudha,	-		Additional salt sidings in the
	and thence viá Kucháman			Sambhar lake 1-9-91 5
	road to Jhowra	17		
	Kankaroola siding	1 4	Ì	135
	Additional salt sidings in the Sambhar lake	-1		Total Rajputana section . 715
ľ	Sambuat lake	1351	715	}
1		- 334	· '-3	DOUBLE—RAJPUTANA SECTION—
	•			Agra branch—
		-		Agra fort to Agra cantonment— For goods traffic
	•			For goods traffic . 11-8-73 For passenger traffic . 20-10-73
1	M	_		1 20-10-73 ]
-	. MALWA SECTION.	•		MALWA SECTION.
	Main line-			Main line—
	Khandwa (352‡ miles from			Khandwa to Sanáwad . 1-2-74 344 Sanáwad to Mortakka
	Bombay on the Great Indian		-	1 M-4-11 C1 7/T 3%
	Peninsula railway, north-	_		Choral to Mhow
1	east line) to Indore	87		Mhow to Indore
1	Indore, vid Fatehabad junc-		ļ	Nerbudda bridge
	tion, Rutlam, Jaora and		1	Indore to Fatehabad 3-8 76 241 Fatehabad junction to Rutlam 11-7-78 48
ļ	Mandsaur, to Neemuch .	1557		Rutlam to laces
}	•	2423	Į į	Jaora to Mandsaur
}				Mandsaur to Neemuch 2-7-80 304
(	•			304
- 1		-		2423
.	Carried over	. 242	715	$C_{2m-1} = \sqrt{7!5}$
<u></u>	nese 3 miles are laid on both the standard and		J '*3	Carried over

on 31st March 1893.

### LINES

### COMPANIES.

Details of construction,	REMARKS.
The line is constructed for a single track. Sufficient land has been taken up to admit of another track being laid hereafter, if necessary.  The rails originally used were 36 lbs. and 40 lbs. per yard,	The dates of orders for survey and construction are as follows:  Dates for survey.  Delhi and Agra to Nusseerabad 17-5-69
laid on transverse deodar and creosoted pine sleepers. The 36 lbs. iron rails have nearly all been replaced by 41½ lbs. 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.  The pine sleepers, which are perishing fast, are being renewed with good deodar sleepers.  The chief works on the Rajputana line are the Banganga, Shallas, Dhúnd, Amanishah, and Jumna bridges, and the descent of the Aravally range west of Ajmere.  The total length of line fenced on the Rajputana section	Ajmere to Ahmedabad  Khandwa to Indore  Rewari to Hissar  Hissar to Ferozepore  Dates for construction.  Delhi-Rewari section and Salt branch  Rewari to Bandikui  Agra to Phulera  1-11-72  8-4-70  1-3-71  10-3-81  10-3-81  13-9-81  13-9-81
is 548 miles, or about three-fourths of the whole section.	Phulera to Sámbhar Phulera to Ajmere 9-4-73 Ajmere to Nusseerabad 14-4-74 Sámbhar to Japog 14-7-75 Ajmere to Nusseerabad Sámbhar extension to Jhowra and extension of Japog siding Khandwa to Indore Indore to Rutlam, with branch to Ujjain Rutlam to Neemuch Neemuch Neemuch to Nusseerabad 13-9-81 Hissar to Ferozepore Extension of Ujjain branch to Ujjain city 6-12-82
The principal marks on the Heller will now ove the ascent	The Deodani siding, 2 miles, was dismantled in 1891 and the Japog siding was reduced to 4½ miles in the same year; also 5½ miles of new sidings were laid and opened for traffic on the 1st September 1891.  The Meharaia Hellian lead the British Gavernment and
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.	The Maharaja Holkar lent the British Government one hundred lakhs of rupees at 4½ per cent. per annum, for the construction of the Khandwa-Indore section, and is entitled to a moiety of surplus profits.
With the exception of the bridging, the works on the Sindia-Neemuch section are light.	The Maharaja Sindia lent the British Government seventy- five lakhs, at 4 per cent. per annum, for the construc- tion of the Indore-Neemuch section and the branch to Ujjain.

### APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

### APPENDIX

METRE GAUGE

### Constructed and in progress

## STATE WORKED BY

No.	Name of line and mileage sa	nctioned.	Total mileage.	Date of opening for public traffic.
xxxv	Rajputana-Malwa—concld. Brought forward	Miles.	Miles.	Brought forward $ \begin{cases} \frac{7^{15}}{242^{\frac{3}{4}}} \end{cases} $
	MALWA SECTION—cond Main line—concld. Neemuch to Ajmere	cld.		MALWA SECTION—concld.  Main line—concld.  Neemuch to Nímbahera . 10-3-81 163  Nímbahera to Chítorgarh . 19-3-81 18  Chítorgarh to Nusseerabad . 1-12-81 101  Nusseerabad to Ajmere . 14-2-76 143
	Ujjain branch— Fatehabad junction (24½ miles from Indore) to Ujjain Extension of Ujjain branch across the Sipra river to Ujjain city	12 	• 407 <del>1</del>	Ujjain branch—  Fatehabad to Ujjain . 3-8-76 12 Ujjain branch extension across Sipra river to Ujjain city . 1-3-84 21  141
	CAWNPORE-ACHNERA SEC Main line—  Cawnpore (683\frac{1}{2}\) miles from  Howrah, viā the chord line, on the East Indian railway) to Farukhabad  Farukhabad to Háthras road junction  Háthras road station (856\frac{2}{2}\) miles from Howrah, on the East Indian railway) to the left bank of the Jumna oppo-	86 <del>1</del> 101 <del>1</del>		CAWNPORE-ACHNERA SECTION.  Main line—  Cawnpore to Kanauj
•	Jumna bridge and approaches Right bank of the Jumna at Muttra to Achnera, a station on the Rajputana section, 16 miles from Agra	29 1 212 2391		### ### ##############################
	Branches— Mandhana to Brahmávart (Brahmávart branch) Kásganj (153¾ miles from Cawnpore city) to Soron (Soron branch) Muttra to Brindaban (Brindaban branch)  REWÁRI-FEROZEPORE RAI Main line— Rewári (51¼ miles from Delhi,	5  9  7 1/2  21 1/2.	261	REWARI-FEROZEPORE RAILWAY.  Main line—  Rewari to Hissar—  For goods traffic  For passenger traffic  Hissar—  For goods traffic  For passenger traffic  For passenger traffic  For goods traffic  For goods traffic
	vid Hissar, Sirsa, Bhátinda and Farídkot) to Ferozepore  Fásilka branch—  Kot Kapúra (212½ miles from		2003	For goods traffic . I-I-84 So 1/2 Sirsa to Ferozepore . I-I0-84 Ioi 1/2 240 3/4 Fázilka branch— Kot Kapúra to Fázilka . I-I-85 50
	Rewári) to Fázilka	TOTAL .	290¾ 1,674	Total Rewari-Ferozepore railway . 2903  TOTAL OPEN MILEAGE . 1,674

REMARKS.

D-continued.
RAILWAYS

on 31st March 1893

Details of construction.

LINES

COMPANIES.

The Sipra bridge consists of 6 spans of 150 feet girders, state railway type, laid on masonry piers. The Malwa section is generally unfenced, except at stations. The Cawnpore-Farukhabad section is constructed for a The orders for survey of the Cawnpore-Farukhabad section issued on 27th November 1877, and for construction single track, and is laid with steel rails, 40 lbs. to the yard.
The line from Farukhabad to Háthras road has been laid with 41 lbs. Bessemer steel rails. on 13th October 1878. The construction of the extension from Farukhabad to Hathras road was sanctioned on 13th July 1882. 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 The Háthras-Muttra line is laid for a single track and for 22 miles borders on the metalled road. Rails, 30 lbs. 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 412 lbs. steel rails. The construction of the Brahmávart branch was sanc-The bridge over the Jumna consists of 7 spans of 150 feet tioned on the 18th March 1884 and of the Soron branch on stone piers. The Muttra-Achnera section has been laid with steel on the 16th March 1883. The survey of the line from Hathras to Muttra was ordered on 2nd March 1874, and that from Muttra to Achnera on 5th March 1878. The construction of the rails, 411 lbs. to the yard. The Cawnpore-Achnera section is partially fenced, and the fencing is chiefly confined to one side of the line former section was ordered in April 1874, of the latter between Cawnpore and Farukhabad, and Hathras city and Muttra cantonment. There are a few miles of in February 1880, and of the bridge over the Jumna double fencing at stations. in July 1882. The principal portion of the earthwork of the Muttra-Achnera section was carried out as a famine relief work in 1878. 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. 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. No engineering difficulties were encountered on the The Rajputana-Malwa railway, of which, for the present, Rewari-Ferozepore line. the Rewari-Ferozepore railway with its branch is to The country through which the length from Sirsa to be considered as an integral part, was leased to the Bombay, Baroda and Central India Railway Company Ferozepore runs is exceedingly easy; the line is at present unfenced, except about 56 miles of main line from 1st January 1885 until 30th June 1900. The terms of working will be found in appendix J, Part II of the and at stations. Railway Administration Report for 1884-85. The Fazilka branch is laid with steel rails and Denham-Olphert's and Molesworth's iron sleepers; the line is unballasted and unfenced, except at stations.

## APPENDIX METRE GAUGE

Constructed and in progress

### STATE

### WORKED BY

	<u> </u>		WORKED BY
No.	Name of line, and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
xxxvi	Miles. Southern Mahratta—  Main line— Portuguese frontier near Dhárwár viá Guntakal and Nandyál to the Kistna river opposite Bezwada	Miles.	Miles.  Main line— Frontier to Castle Rock 3-2-88 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	Branches— Hubli to Harihar (Harihar branch) . 811  Gadag to Hotgi (Bijápur branch) 1722  Londa to Poona (Poona branch) 278  5321	1,0.133	Harthar branch— Hubli to Harihar (temporary station) Temporary station to permanent station  Bijápur branch— Gadag to Hotgi For goods traffic. For passenger traffic  Poona branch— Londa to Belgaum Belgaum to Miraj Miraj to Koregaon Koregaon to Ghorpuri Ghorpuri to Poona  18-10-90 1 278
<b>*</b>	TOTAL .	1,0434	Total open mileage . 1,043

on 31st March 1893.

#### LINES COMPANIES.

Details of construction.

REMARKS.

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:

Main line-Spans. Feet. Hagari 64 34 38 Tungabhadra 6о 60 Burra Nalla 10 Banni Nalla 9 60 60 Kondia 9 40 ı 100 Dorapillay 1 20 100 3 Doratangi 150 Dorabhani I 250 664 6 66 Budicherla 60 1 E Gundlacama 8 Mile 205 40 40 Colair Harihar branch-6о Wardha 60 Tungabhadra Bijápur branch-14 8 150 Bhima 40 Gunki 7 100 Don 21 150 Kistna 100 Malaprabha Poona branch-12 Nira бo 10 Yerla 14 150 Kistna 1 I 30 Jagnoor 40 Ghataprobha 45 60 5 Markandie 100 40 Malaprabha 20 Main line-The following are the tunnels on this line: 471 feet. Bear's rock . . . 1,242 Castle rock 1,569 The Ghat incline for 31 miles from the Portuguese frontier has been constructed for a double line up to formation level Nulla-Mulla hills The maximum gradient on the Ghat incline is 1 in 40 and on the rest of the line I 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.

The line from Hotgi vid Bijápur and Bágalkot 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 Guntakai was made over to the Southern Mahratta Railway Company on the 1st February 1887, and was converted from standard 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.

## APPENDIX METRE GAUGE

Constructed and in progress

### STATE

### WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XXXVII	Miles.  GUNTAKAL-MYSORE FRONTIER—	Miles.	Miles Guntakal to Dharmavaram—
	Guntakal (2341 miles from Portuguese frontier on the Southern Mahratta railway) to Mysore frontier	119}	For goods traffic . 1-3-92 For passenger traffic . 1-6-92 63
•			
	·		
•	. •		
xxxviii	SOUTHERN MAHRATTA (MYSORE SECTION)-		·
	Mysore viá Bangalore to Gubbi . 1393 Gubbi to Harihar 1562 Mysore to Nanjangúd 154 Yesvantpur to Mysore frontier . 514	•	Nanjangúd to Mysore . 1-12-91 15 Mysore to Mandya . 25-2-82 27 Mandya to Channapatna . 20-3-81 23 Channapatna to Bangalore . 1-2-81 34 Bangalore to Tumkur . 11-8-84 43 Tumkur to Gubbi . 26-12-84 11 Gubbi to Birur 12-8-89 76 Birur to Harihar . 21-2-89 79 Yesvantpur to Dodballapur 15-12-92 20
,			
	·.		
	Total .	362 <del>4</del>	TOTAL OPEN MILEAGE . 3312

D-continued.

#### **RAILWAYS**

on 31st March 1893.

#### LINES

#### COMPANIES,

On the Guntakal-Dharmavaram section, the permanent-way consists of 41½ lb. flat-footed steel rails, laid on steel transverse sleepers of the pea-pod pattern. The line is unfenced, except at stations. The ruling gradient is 1 in 100. The country traversed is moderately easy; but the waterways are considerable, and include the following principal bridges:

Details of construction.

		Spans.	Feet.
Pennér	•••	ir	150
Thada Kalairu	•••	8	64
Penna Mairu	***	14	64

The Dharmavaram-Hindupur section is heavy in earthwork on the Penu Konda section, but the bridges are unimportant. The permanent-way is of the same description as on the Guntakal-Dharmavaram section. The ruling gradient is 1 in 100, and the sharpest curve 1,042 feet in radius.

REMARKS.

The length between Dharmavaram and Guntakal was sanctioned in June 1889, and work was commenced almost immediately. The construction of the line was carried out principally by Government Engineers under the direction of the Chief Engineer, South Indian Railway Company. The working was made over to the Southern Mahratta Railway Company on 1st January 1893.

The extension to Hindupur was sanctioned on 26th January 1891: this together with the length from Guntakal to Dharmavaram comprises the project originally known as the Hindupur extension. In August 1891, 7\frac{3}{4} miles to the Mysore frontier were sanctioned. The extension is being constructed by the South Indian Railway Company, and, when completed, will be made over to the Southern Mahratta railway for working. It will probably be opened throughout for traffic in September 1893.

The line is worked by the Southern Mahratta railway on the same percentage of its gross earnings as obtains between the gross earnings and working expenses of the company's whole system for the time being.

No works of special engineering difficulty occur on the Mysore section.

The line has been laid for a single track with rails, 41½lbs. to the yard, spiked to wooden sleepers partly of creosoted pine and partly of teak, the width of formation being 14 feet on the Gubbi-Mysore section and 16 feet on the Harihar-Gubbi section.

The sleepers on the Bangalore-Tumkur section are of creosoted pine, which is being gradually replaced by Mysore teak.

The maximum gradient is 1 in 100, except between Bangalore and Mysore, where the maximum gradient is

The construction of the line from Yesvantpur to Mysore frontier, a portion of which has already been opened to traffic, has been undertaken by the Mysore Government. The rails used are of the state railway type, weighing 50lbs. per yard, on the Ghát section, 11 miles in length, and 41½lbs. per yard on the remainder of the line. The sleepers are of Mysore teak throughout. The ruling gradient is 1 in 89 and the sharpest curve 603 feet radius on the Ghát section, and 1 in 100 and 1,910 feet radius on the rest of the line.

The dates of orders for survey and construction of the Mysore railway are as follows:—

Date for survey.

1st April 1870. Mysore line, 20th September 1877.

Tumkur line, 6th October 1882. Tumkur to Gubbi, 18th January 1884.

Earthwork between Bangalore and Channapatna 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.

The construction of the Mysore-Nanjangúd extension was commenced in September 1890 and completed in November 1891.

The first 20 miles of the Yesvantpur-Mysore frontier line were opened in December 1892, and the remainder is expected to be opened in September 1893.

## APPENDIX METRE GAUGE

Constructed and in progress

### STATE

### WORKED BY

<del></del>	•	<del></del>	WORKED BY
No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XXXIX	South Indian- Miles.	Miles.	Miles.
•	Madras-Tuticorin section—		MADRAS-TUTICORIN SECTION-
	Main line — Madras (Park) to Tticorin 444		Main line—  Madras (Park) to Tindivanam 1-9-76 76 Tindivanam to Cuddalore 1-1-77 52 Cuddalore to Porto Novo 1-7-77 17 Porto Novo to Chidambaram 1-10-78 63 Chidambaram to Coleroon 1-7-79 4½ Coleroon to Shiyali 1-1-78 6 Shiyali to Mayavaram 1-1-77 12½ Mayavaram to Tanjore 15-2-77 43¾ Tanjore to Trichinopoly junction 11-3-62 31 Trichinopoly junction to Madura 1-9-75 96 Madura to Tuticorin 1-1-70 98¾
	Branches—		Branches—
	Madras (Park) to Beach 13		Madras (Park) to Beach . 1-1-79
	Chingleput (351 miles from Madras) to Arkonam (421 miles from Madras on the Madras railway) (Arkonam branth)		Arkonam branch— Chingleput to Walajabad . 1-8-80 13½ Walajabad to Conjeeveram . 1-1-81 8 Conjeeveram to Arkonam . 8-5-65 17½
	Villupuram (99 miles from Mad- ras) to the Gingee river to con- nect with the Pondicherry railway (Pondicherry branch) 164		Pondicherry branch- Villupuram to Gingee river . 16-12-79 164
	Tanjore (218½ miles from Mad- ras) to Negapatam (Negapatam branch)		Negapatam branch— Tanjore to Tiruvallút . 2-12-61 33% Tiruvallúr to Negapatam . 15-7-61 14½  48½
	Trichinopoly (2404 miles from Madras) to Erode junction (243 miles from Madras on the Madras railway, south-west line) (Erode branch)		Erode branch— Trichinopoly junction to fort 11-:-62 2½ Trichinopoly fort to Karúr . 3-12-66 44½ Karúr to Kodumudi . 1-7-67 16¾ Kodumudi to Erode . 1-1-68 23½  87¼
	Maniváchi (425½ miles from Madras) to Tinnevelly (Tinnevelly branch)		Tinnevelly branch— Maniyachi to Tinnevelly . 1-1-76 181  Total Madras-Tuticorin sec-
1	2101		tion 6543
	Carried over .	6543	Carried over . 6543

D-continued.

RAILWAYS

on 31st March 1893.

#### LINES

#### COMPANIES.

Details of construction. REMARKS. The old line from Negapatam to Erode, which was con-The line from Negapatam to Erode was commenced in structed on the standard gauge, was converted to metre May 1859 by the late Great Southern of India Railway gauge in sections as follows: Company, and was completed on the standard gauge. Negapatam to Trichinopoly, June and July 1875; Tri-chinopoly to Karúr, July 1879; Karúr to Erode, The line from Arkonam to Little Conjeeveram was commenced on the 11th March 1864 by the Indian Tramway Company under the subsidy system, and was completed on the 2'6" gauge.

A 3 per cent. guarantee accorded on the 1st January December 1879. 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 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 double way. On the old line between Negapatam and Erode, the rails, weighing 68lbs. to the yard, are laid partly on iron pots and partly on wooden sleepers. About 29 miles of the Negapatam branch have been the metre gauge in July 1878. On 1st July 1874, the above two undertakings were amalgamated under the renewed with 50lb bull headed rails on cast-iron pot title of the South Indian Railway Company, and the sleepers; and on the Arkonam-Conjeeveram line, 171 whole system is now on the metre gauge.
The estimates for the extensions from Trichinopoly to miles in length, the rails, weighing 35 lbs. to the yard, have also been renewed with 50lb, bull-headed rails. Tinnevelly and Tuticorin were sanctioned on the 2nd The remainder of the system, which was laid with 40'3lb. March 1872, and those for the sections from Madras to Cuddalore and Cuddalore to Tanjore on the 25th Febrails on creosoted pine sleepers, is being gradually ruary 1873 and the 12th June 1874, respectively. Since the opening of the line throughout between Madras renewed with 50lb. bull-headed rails on cast-iron pot sleepers, 404 miles having been laid on the main line up to 31st March 1893. There are 61 miles of 40 3lb, rails laid on pot sleepers. and Tuticorin, this has become the main line with branches to Arkonam, Pondicherry, Negapatam, Erode, and Tinnevelly. The Madras-Tuticorin section is wholly fenced. The estimate for the connecting link between Chingleput and Conjeeveram, the earthwork of which was completed by famine labour, was sanctioned in November 1879. The estimate for the Villupuram-Gingee river section was sanctioned in May 1879.

Constructed and in progress

# STATE

# WORKED BY

			- WOKKED BY
No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XXXIX	Brought forward South Indian — concld.  VILLUPURAM-DHARMAVARAM SECTION— Main line— Villupuram (99 miles from Madras on the South Indian railway) to Dharmavaram (397 miles from Madras on the South Indian railway) 279\frac{3}{4}	Miles. 654\frac{3}{4}	Brought forward .654\$  VILLUPURAM-DHARMAVARAM SECTION —  Main line— Villupuram to Tiruvannámalai . 17-11-90 42\$ Tiruvannámalai to Pákala . 18-3-91 96 Pákala to Váyalpád . 1-1-92 47\$  Váyalpád to Dharmavaram— For goods traffic . 1-3-92 For passenger traffic . 20-3-92  94  Nellore branch— Pákala to Tirupati . 18-3-91 24\$ Tirupati to Nellore . 15-9-87 83  107\$  Total Villupuram-Dharmavaram section . 387\$  TOTAL OPEN MILEAGE . 1,042\$
XL	Assam-Bengal—  Main line— Chittagong to Makum	7421	

on 31st Murch 1893.

#### LINES COMPANIES.

Details of construction.

REMARKS.

On the Villupuram-Dharmavaram section, the ruling gradient is 1 in 100. The country traversed is moderately easy; but the waterways are considerable, and include bridges over the Cheyár, Palar, and Chitrávati rivers.

The rails are of steel, flat footed, 412lbs. to the yard (except for 25 miles south of Chitravati, which has been laid with 40lb. second class iron rails), 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, 12 miles to the west of Katpadi station, where extensive junction arrangements have almost been completed.

On the Nellore branch, the ruling gradient is I 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, 414 lbs. to the yard, laid partly on Denham-Olphert's 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.

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 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 from Villupuram to Dharmavaram. and Tirupati was sanctioned in November 1888, and work was commenced in January 1889.

On the 1st January 1891, the South Indian railway was purchased by the Secretary of State and handed over, together with the Villupuram-Guntakal state railway, to a new company, called the "South Indian Railway Company, Limited," the whole now forming the South Indian railway system. The Dharmavaram-Guntakal section of the latter railway was made over for working to the Southern Mahratta Railway Company on 1st ing to the Southern Mahratta Railway Company on 1st January 1893, and now-forms a part of the Guntakal-Mysore frontier railway.

The company works under agreement the portion (7% miles) of 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 1891-92.

On section I, which includes the main line from Chittagong to Badarpur and the branches, Badarpur to Silchar and Laksam to Chandpur, the country is mostly low-lying necessitating long continuous embankments.
North of Comilla, it crosses four ranges of low hills,
covered with dense jungle. The important bridges are those crossing the Feni, 20 spans of 100 ft., the Mohuri and the Gumti rivers.

Section II, which comprises the hill section of the main line between Badarpur and Lumding, runs through very difficult country, a grade of 1 in 70 being freely used throughout. There are many tunnels and high viaducts. The bridge over the Barak river at Badarpur is designed for two 250 ft. spans and two 100 ft. spans.

Section III, which includes the main line from Lumding , to Makum junction and the branch Lumding to Gauhati, passes partly through flat country requiring long lengths of embankment, and partly through low hills covered with dense jungle. The principal bridges on this section are those crossing the Kopili and the Dihing. It is intended to lay the line throughout for a single track

with 50lb, rails on pynkado and sål sleepers.

The branch from Gauhati to Lumding and the portion of the main line Lumding to Dimapur was sanctioned in May 1891. Work was commenced in November 1891 and was carried on till October 1892, when the line was taken over by the Assam-Bengal Railway Company. This company having been formed in England in 1892, the Agent and Chief Engineer, together with the staff of Engineers, arrived in India in October

The work of re-alignment has been put in hand and construction started on section I and continued on

section III.

Constructed and in progress

STATE

# WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XLI	Miles. Máyavaram-Mutupet—	Miles.	Miles.
	Máyavaram (1733 miles from Madras on the South Indian railway) to Mutupet	533	
		i	
	·		
XLII	Pálanpur-Deesa -		•
	Pálanpur (496% miles from Delhi on the Raj- putana-Malwa railway) to the cantonment of Deesa	171	
	TOTAL STATE LINES WORKED BY COMPANIES (METRE GAUGE)	6,0364	5,1321

D.—continued.

### RAILWAYS

on 31st March 1893.

### LINES

# COMPANIES.

Details of construction.	. REMARKS
The line traverses an easy country, the ruling gradient being 1 in 200. It crosses the Cauvery irrigation, and is consequently costly in bridges and culverts. It is proposed to use second class 40lb. flat-footed iron rails, taken out of the South Indian railway, main line, with pynkado transverse sleepers.	cess and by the Madras Government from provincial
	This line was sanctioned for construction on the 22nd March 1892.  The Palanpur Darbar to provide land free, and to contribute the sum of Rs 1,85,000. The Government of India to provide the money required to construct the line and stores from stock so far as available; also to provide hereafter such capital for improvements and additions to the open line as may from time to time be necessary.  The branch when constructed to be worked and maintained by the Bombay, Baroda and Central India Railway Company as a part of the Rajputana-Malwa railway system for the same percentage of gross earnings in any half-year as may obtain on the entire Rajputana-Malwa railway system in the same period: such payments to include the use of rolling-stock.  The line to be metre-gauge, with substructure suitable for standard gauge, if deemed necessary hereafter.  The period during which the branch will be worked by the Bombay, Baroda and Central India Railway Company will be co-terminus with their contract for working the Rajputana-Malwa railway, unless it be decided to extend the branch, in which case the company may be called upon to cease working it on six months' notice being given to them.
·	

Constructed and in progress

STATE

WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XLI	Miles. Máyavaram-Mutupet—	Miles.	Miles
	Máyavaram (1733 miles from Madras on the South Indian railway) to Mutupet	534	·
	·		
	·		
XLII	Pálanpur Deesa -		•
	Palanpur (4963 miles from Delhi on the Raj- putana-Malwa railway) to the cantonment of Deesa	171	
		_	
-			
	TOTAL STATE LINES WORKED BY COMPANIES (METRE GAUGE)	6,0361	5,132

APPENDIX D. clxvii

D.—continued.

RAILWAYS

on 31st March 1893.

### LINES

# COMPANIES.

Details of construction.	REMARKS.
The line traverses an easy country, the ruling gradient being 1 in 200. It crosses the Cauvery irrigation, and is consequently costly in bridges and culverts. It is proposed to use second class 40lb. flat-footed iron rails, taken out of the South Indian railway, main line, with pynkado transverse sleepers.	tions by the Tanjore District Board from a special cess and by the Madras Government from provincial
	This line was sanctioned for construction on the 22nd March 1892.  The Pálanpur Darbar to provide land free, and to contribute the sum of Rs 1,85,000. The Government of India to provide the money required to construct the line and stores from stock so far as available; also to provide hereafter such capital for improvements and additions to the open line as may from time to time be necessary.  The branch when constructed to be worked and maintained by the Bombay, Baroda and Central India Railway Company as a part of the Rajputana-Malwa railway system for the same percentage of gross earnings in any half-year as may obtain on the entire Rajputana-Malwa railway system in the same period: such payments to include the use of rolling-stock.  The line to be metre-gauge, with substructure suitable for standard gauge, if deemed necessary hereafter.  The period during which the branch will be worked by the Bombay, Baroda and Central India Railway Company will be co-terminus with their contract for working the Rajputana-Malwa railway, unless it be decided to extend the branch, in which case the company may be called upon to cease working it on six months' notice being given to them.
•	•

Constructed and in progress

#### STATE

### WORKED BY

No.	Name of line and mileage sanctioned	Total mileage.	Date of opening for public traffic.
	• Miles.	Miles.	Miles
XLIII	· · · · · · · = = <b>G</b> \-		AV
	NORTHERN SECTION—  Main line—		NORTHERN SECTION— Main line—
	Sára ghất to Párbatipur junc-		Sára to Atrai 19-1-78 38
	tion 1111	İ	Atrai to Jalpaiguri . 28-8-77 134
	Párbatipur junction to Siliguri 84\$		Jalpáiguri to Siliguri—
•	— 19ģ		For goods traffic 10-6-78
			For general traffic . 1-11-78' 23
			196
	Branches-		Rungpore branch—
		'	Parbatipur junction to Sham-
	Párbatipur junction to Kaunia		pur 19-5-78 15
[	on the right bank of the Teesta (Rungpore branch). 34		Shampur to Rungpore
	200500 (2000,870,000,000,000,000,000,000,000,000,		Rungpore to Kaunia . 1-6-79 11
	Parbatipur to Dinagepore		34
	(Dinagepore branch) . 194		Dinagepore branch—
	•		Parbatipur to Chirir bandar . 1-7-83 9
			Chirir bandar to Dinagepore . 16-5-84 10:
			198
i	2' 6" GAUGE.		2' 6" GAUGE
			Kaunia-Dharlla branch-
ł	Kaunia-Dharlla branch—		Teesta junction to Dharlla . 18-7-81 18
	Teesta junction to Jatrapur 231 Teesta junction to Mogalhát 132		Teesta junction to Mogalhat 6-2-82 13 Dharlla to Jatrapur 1-7-84 4
ļ	~ 37		Dharila to Jatrapur 1-7-84 4
J	901		37
ĺ		286 <del>]</del>	Total Northern section . 286
	DACCA SECTION—	2001	DACCA SECTION—
- {	DACCA SECTION—	ĺ	Náráyanganj ghất to Dacca 4-1-85 10
	Náráyanganj ghất to Mymensingh	86	Dacca to Jaydebpúr—
Ì			For goods traffic . 1-8-85
- 1	•		ror passenger traine 12-12-05 j
1.			Jaydebpúr to Gáfargáon— For goods traffic . 1-8-85
- 1	·		For passenger traffic 18-2-86 32
]		••	Gáfargáon to Mymensingh . 29 8-85 23
- 1			
			Total Dacca section . 86
	Behar section—	.	BEHAR SECTION—
- 1			Main line-
{	Main line—	ļ	Manihari to Katihar . 1-4-87 15
	Manihári to Katihár		Katihar to Rayganj . 1-7-89 36
	Katihár to Ráyganj 363 Ráyganj to Dinagepore		Rayganj to Dinagepore 15-2-88 31
ļ	84		84
1	Branches—		Kosi branch—
	Kosi branch—		Katihar to Kasba 1-4-87 22
	Katih <b>á</b> r to Kasba		Kasba to Forbesganj . 1-7-89 36
	Kasba to Arariya	,	Forbesganj to Ancharághát . 1-1-91 14
	Forbesganj to Debiganj . 74		721
-	Debiganj to Ancharaghat 64		Bársoi-Kissengunge branch—
	Pánai Vissangunga hugush		Bársoi to Kissengunge—
	Bársoi-Kissengunge branch— Bársoi to Kissengunge 35½		For goods traffic 15-12-92 35
- 1	Barson to Kissengunge 35½	192	Total Behar section . 192
1		* y **	Total Behar section . 192
- 1	<u>_</u>		TOTAL OPEN MILEAGE (NARROW
ļ	TOTAL	5641	GAUGE SECTIONS) 5641

on 31st March 1893.

#### LINES

#### THE STATE.

Details of construction. · REMARKS. Dates of orders for survey. Rails, 40lbs. to the yard, and sleepers of creosoted pine, Trial survey on 20th January 1870. sal, red gum and wrought and cast-iron, have been Final survey of main line on 7th November 1871. Rungpore branch on 23rd March 1872. used. The bridging and embankments are heavy on Extension to banks of the Teesta and on to Dhubri, 20th the lower section. Iron rails, 40lbs. to the yard, are being replaced by steel rails, 50lbs. per yard, from Sara northwards: 1064 miles November 1875. Extension to Siliguri, 1875-76. of the 50lb rails are now laid. Wooden sleepers are also being renewed with steel transverse sleepers. Date of orders for construction.
Main line, 12th February 1874. The whole of the northern section is fenced. The railway to Darjeeling starts from the Siliguri terminus, which is about seven miles from the foot of the Darjeeling hills. The Kaunia-Dharlla branch has been laid without ballast. The Kaunia-Dharlla branch was constructed by the Ben-The rails are steel, weighing 25lbs. and 30lbs. to the gal Government out of provincial revenues. Steam ferries over the Teesta and Dharlla and between Jatrayard, laid on sal sleepers. pur on the Brahmaputra and Dhubri are worked in connection with the trains. The Dacca section is laid with permanent-way material The construction of the line was sanctioned on the 11th of the ordinary metre-gauge type, the rails being of steel, 41½ lbs to the yard, on sal sleepers. The work on the northern half of the line is heavy, but gradients August 1882. . The original project included a branch from Dacca to Aircha, opposite Goalundo, 43 miles long, which has since been abandoned. are easy. The line is unfenced, except at stations. The Dacca section is connected with the Eastern section by a ferry worked between Goalundo and Náryángani ghāt. The Behar section consists of a single track line laid with 41 lb steel rails on sal and iron-wood sleepers; in a few places Denham-Olphert's sleepers are used. The line from Manihari through Katihar 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 'As a rule, the works are heavy and bridging very conacross the Ganges between Manihari and Sahebgunge. siderable, owing to the flooded country through which the line passes. A branch line runs northwards from Katihar junction through Purneah and Kasba to Ancharághát on the Kosi, opposite Khanwa ghát on the Kosi extension of The line is nearly all fenced. the Tirhoot railway. The Behar section of the Eastern Bengal (state) railway is connected with the terminal station on the Tirhoot railway by a ferry across the Kosi river. Four miles of the Bársoi-Kissengunge branch have been Survey for the extension from Barsoi to Kissengunge laid with second-hand steel rails, 41½ lbs. per yard, and the rest with second-hand iron rails, 40lbs. per yard, obtained from relaying on the northern section. was ordered in October 1890. Trial surveys were made in April 1891, and orders for construction were given in June 1891. Final survey was made in June 1891, and work was started in September 1891. Sleepers used are of sal, excepting a few Burma wood

sleepers. There are no important works on this extension, except a bridge of 5 spans of 40 feet over the

Sodani river in the 8th mile.

Constructed and in progress

# STATE WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XLIV	Burma (state) —  Irrawaddy line—  Rangoon to Prome 161	Miles.	Miles  Irrawaddy line—  Rangoon to Prome 2-5-77 161
	Sittang line— Rangoon to Toungoo 166		Sittang line— Rangoon to Pegu— For goods traffic
	Suburban lines		Suburban lines-
		-	For goods traffic
	Mandalay line—	}	Mandalay line—
	Main line— Toungoo (166 miles from Rangoon on the Sittang line) to Mandalay 220		Main line— Toungoo to Thawutti— For goods traffic . 1-5-88 } For passenger traffic . 11-7-88 } Thawutti to Pyinmana— For goods traffic . 1-5-88 } For passenger traffic . 26-9-88 } Pyinmana to Yamethin— For goods traffic 15-11-88 } For passenger traffic . 1-3-89 } Yamethin to Mandalay . 1-3-89 112
	Branches—  From Meiktila road station to Meiktila (Meiktila branch)  Mandalay to Mandalay shore (Mandalay shore branch)  2½  15½		Branch—  Mandalay shore branch—  Mandalay to Mandalay shore—  For goods traffic April 1889. 2
	Mu Valley line-	<u> </u>  -	Mu Valley line-
	Main line— Sagaing (on the right bank of the Irrawaddy) to Wuntho 153		Main line— Sagaing to Shwebo . 1-7-91 53 Shwebo to Wuntho— For goods traffic . 4 4 92 For passenger traffic . 15-3-93
	Branch— Myohaung [3 miles south of Mandalay station on the Mandalay line of the Burma (state) railway] to the left bank of the Irrawaddy opposite Sagaing. (Myohaung branch).		Branch— Myohaung branch— Myohaung to Amarapura shore— For goods traffic . 22-11-91 For passenger traffic . 22-2-92
		730½	Double—
ı			Irrawaddy line— Rangoon to Kemmendine . 30-10-89 3 Kemmendine to Insein . 10-1-90 5
			TOTAL OPEN MILEAGE . 717

on 31st March 1893.

#### LINES

#### THE STATE.

The Irrawaddy line is laid with steel rails, 50lbs. to the yard, for a double track from Rangoon to Insein (9 miles), and for a single track from Insein to Wanetchaung (201 miles), and for a single track with rails, 40lbs to the yard, from Wanetchaung to Prome. 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. follows: The Sittang line is also laid for a single track with steel Dates for survey. rails, 41 lbs, to the yard, on pynkado sleepers. The country traversed is similar to that through which the Rangoon to Prome 16-10-69 Rangoon to Toungoo 17-8-74 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. The permanent-way on the Mandalay line consists of

shingle or broken stone. Bridges-Spans. Feet. ∫ 3 of 100 Swa river ζı " 40 ∫3 100 ,, 'Nagalike ે 2 40 ., Sinthe . 4 " 100 ,, 100 Pyawbwè 4 150 1 Samôn. **L** 2 40 1) Panloung 5 " 60 150 Myitnge 1 2 ٠, 40

50lb. flat-footed steel rails, with deep web fish-plates of

The ballast on the first 50 miles is chiefly burnt clay or laterite; on the remainder of the line it is either

Details of construction.

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 passes through thick jungle.

The whole line is fenced.

Bessemer steel.

The earthwork on the Meiktila branch is being carried out as a famine relief work, the bridging, which is very light, will be chiefly of timber; the rails to be used are second-hand rails, 40lbs. to the yard, to be selected from the Irrawaddy section. The sleepers to be of pynkado.

On the Mu Valley line, 179 miles of rails are laid and 153 miles of track ballasted. Masonry of bridges is mostly of brickwork. The permanent-way consists of 414lb. flat-footed steel rails, laid on sleepers of teak, pynkado, ingyin and theya. The ballast is all of broken stone or shingle. The ruling gradient is 1 in 200, and the sharpest curve is of 900 feet radius. The line is generally unfenced, except at stations.

The dates of orders for survey and construction are as

REMARKS.

Dates for construction. 25-9-74 23-5-81

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 (from Toungoo) to mile 108 in April 1887; and on the remaining section from mile 108 to mile 180 in June 1887.

Commencement of work on the Meiktila branch was sanctioned on the 1st January 1892 as a famine relief measure. The branch will be ready for opening in May-1893.

An extension of this branch to Myngyan has been surveyed, the total length from Meiktila being 68 miles; this is in substitution of the line previously proposed from Samon to Myngyan. The detailed estimates and plans are under consideration.

The construction of the main line, Sagaing to Kawlin, and the Myohoung branch was sanctioned on 17th October 1889, and work commenced about 1st January 1890.

The construction of the extension from Kawlin to Wuntho was sanctioned on 6th February 1891, but, owing to the Wuntho insurrection, work was not commenced till some months later.

#### • APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

APPENDIX METRE GAUGE

Constructed and in progress

STATE

#### WORKED BY.

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
XLV	Mu Valley*—  Main line— Wuntho to Gyodoung Gyodoung to Mogoung  132½  Branch— Nahakoung on the main line to Katha on the right bank of the Irrawaddy	Miles.	Miles.
	TOTAL  TOTAL  TOTAL STATE LINES WORKED BY THE STATE (METRE GAUGE)	1,451	r,2813

<sup>\*</sup> The open section of this railway forms a part of the Burma (state) railway.

clxxiii

APPRNDIX D.

D-continued. RAILWAYS

on 31st March 1893. LINES

THE STATE.

Details of construction.	Remarks.
The permanent-way will consist of 41½lb. flat-footed steel rails laid on wooden sleepers. The ruling gradient on the Wuntho-Gyodoung section will be 1 in 200, and on the remainder of the main line 1 in 60, the sharpest curve being 573 feet in radius. On the Katha branch, the ruling gradient will be 1 in 50 and the sharpest curve 818 feet in radius.	to Mogoung in March and December 1891, respect-

Constructed and in progress
ASSISTED

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
•		Miles.	
	Miles.	Miles.	Mile
XLVI	Deoghur-		
	Baidyanáth (200] miles from Howrah on the chord line, East Indian railway) to Deoghur.	41	Baidyanath to Deoghur 23-12-82 4
		! .	
	·		
LVII	Rohi!kund and Kumaon (Company's section)—		•
	Bhojeepura junction (113 miles from Bareilly on the main line) to Káthgodám, at the foot of the	:	Bhojeepura to Káthgodám . 12-10-84 5
	Naini Tal hills	. 54	
.•		·	
,			
	·		
LVIII	Bengal Dooars—		
	Main line-	,	Main line-
	East bank of the Teesta opposite Jalpáiguri (305 miles from Calcutta) on the Northern section of the Eastern Bengal (state) railway to	÷	East bank of the Teesta to Mal Bazar— For goods traffic . 15-1-93 27
	Dam Dim	,	
	Branch-		
	Latiguri to Ramshaihát	39	
	·		•
ļ			
ļ-	1	1	

on 31st March 1893.

### COMPANIES.

Details of construction.	REMARKS.
The line passes over an undulating country. The sharpest curve has a radius of 2,640 feet and a length	Messrs. Burn & Co., contractors, undertook the construction of this railway with capital raised locally
of 3,000 feet. The steepest gradient is 1 in 60 for a length of 800 feet. The permanent-way is laid with 36lb. steel rails on wooden sleepers. The line is ballasted throughout, but is unfenced.	without any guarantee, but with a free gift of land. They commenced work in October 1881.  The Rohini branch (1\frac{1}{2}\) 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.
•	
The rails are of the metre-gauge type, laid on sal sleepers.  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.  The line is unfenced, except at stations.	capital of £200,000 during the construction of the line
The line has been laid with 4111b. flat-footed steel rails spiked to sal sleepers and is being provided with stone ballast. The bridges are of girders resting on brickwork piers and abutments. In the spans of 20 ft. and under, an invert flooring has been provided for the bridge.  The piers of the Neora bridge (6×60 ft. girders) are of cast-iron screw piles, 3 ft. diameter, sunk 30 ft. below low-water.	traffic in June 1893. An extension of this branch to Tondoo has been abandoned for the present owing to the changes in the Jaldaka river, and surveys are in progress with a view to obtain a better alignment. The line to Mal Bazar and the branch to Ramshaihat are
•	
·	

# Constructed and in progress

#### ASSISTED

		<del></del>	
No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
XLIX	Dibru-Sadiya—		
	Main line— Dibrugarh (on the bank of the Brahmaputra river) via Makum junction to Dihing bridge . 611		Main line— Lower steamer ghat on the left bank of the Brahmaputra river, near Dibru- garh, eastward as far as the Dinjan stream, for goods traffic only in October 1882 (15 miles).
,	Tálap branch—		Dibrugarh to Makum junction 16-7-83 38½  Makum junction to Dihing
	Makum junction to Tálap . 15	771	bridge
			Tálap branch —  Makum junction to Dum- Duma 21-5-84 8  Dum-Duma to Tálap . 5-2-85 8  TOTAL OPEN MILEAGE
			,
L	Nılgiri—		·
ļ	Méftupálaiyam (327) miles from Madras on the Madras railway, Níl- giri branch) to Coonoor	16 <u>1</u>	
	,		·
-	·		
٠.			
	·		
	TOTAL ASSISTED COMPANIES (METRE GAUGE)	1913	163}

on 31st March 1893.

# COMPANIES.

Details of construction.	REMARKS.
The line throughout was originally laid with steel rails, 41½lbs. to the yard, but these are now gradually being renewed and replaced by 50 lb. steel rails, four miles from Dibrugarh having been so renewed.  The length from steamer ghât to Tálap viá Makum junction is constructed on the existing Government road, except for 2¾ miles from the ghât, 1½ miles from Dibrugarh station east, 2 miles at the 43rd and 44th miles, and ½ mile from Dum-Duma river to Bisakopi.  The culverts which were in existence have been utilised, as far as practicable, with such slight additions and alterations as were necessary, but over the Dinjan, Sessa, Bor Hapjan, Singlijan, Dibru, Bisakopi and Tipúk rivers, timber bridges have been erected. Rolled iron girders are now being substituted for the wooden beams in these bridges.  The extension to Dihing bridge is cut entirely through thick forest.  The line is unlenced and unballasted for one mile from Lower ghât, for five miles between Chábna and Pánitola, and for 16 miles between Makum junction and Tálap. On the rest of the line broken stone ballast has been used.	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.
The ruling gradient is I in 12 in the mountainous portion, and I in 50 in the plains. The minimum curve is of 328 feet radius. The rails will be steel. Vignole's, 40lbs. per yard, on pynkado sleepers, laid on stone ballast between dwarf walls, I' 6" high. The line will be unfenced. The bridges will be of lattice or plate girders resting on masonry piers and abutments.	The Nilgiri Railway Company was registered in February 1886 to acquire the concession granted to the Nilgiri-Rigi Railway Company which had been formed in 1880 to construct a short line of steep gradient on the Rigi system. The line now required by the Government will, however, be of a more costly and elaborate character than that originally contemplated. The capital was raised in London in 1889. A contract has been entered into with Mr. Richard Woolley, a local contractor, to construct and equip the line.  The survey, orders for which were issued by the Government of Madras in July 1890, proved very arduous. It was started in August 1890, and the final location was completed early in 1892. Work was commenced in August 1891 and is now in active progress on the whole length of the line.  The Government of India guarantees 3 per cent. during construction on the capital paid into the Government treasury, with a free grant of all land required for the railway and the works connected therewith.

Constructed and in progress

### LINES OWNED BY NATIVE STATES

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
LI	Miles.  The Gaekwar's Mehsána—  Viramgám (40½ miles from Ahmedabad on the Bombay, Baroda and Central India railway), viá Mehsána, to Kherálu 68  Mehsána to Pátan 24½	Miles.	Viramgám to Mehsána
LII	Kolhápur to Miraj (159½ miles from Poona on the Poona branch of the Southern Mahratta railway)	29	Kolhápur to Miraj 21-4-91 29
	Total lines owned by native states and worked by companies (metre gauge)	1213	1213

on 31st March 1893.

### AND WORKED BY COMPANIES.

Details of construction.	Remarks.
The line is constructed for a single track. The rails are steel, 41\frac{1}{2}lbs. to the yard, laid on transverse steel trough sleepers, except from Mehsána to Viramgám, where deodar sleepers have been used.  The line runs through an easy country, and there have been no engineering difficulties.  The entire length is fenced with cactus.	The survey of the line from Mehsána to Vadnagar was undertaken in May 1884 and construction commenced in August 1886. The line was completed by the Bombay, Baroda and Central India Railway Company in March 1887.  The funds for this branch were supplied by His Highness the Gaekwar of Baroda.  The construction of an extension from Visnagar to Vijápur, which was sanctioned on 18th April 1887, has been deferred for the present.  The survey of the line from Vadnagar to Kherálu was commenced in April 1887 and the construction in June 1887. The extension was completed by the Bombay, Baroda and Central India Railway Company in December 1888.  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 Viramgám and Mehsána and Pátan was commenced in May and in November 1889, respectively.  This line is worked by the Bombay, Baroda and Central India Railway Company.
The line is constructed for a single track. The rails are steel, 41\(\frac{1}{2}\) lbs. to the yard, laid on steel sleepers. The ruling gradient is 1 in 100.  The following important rivers are crossed:  Kistna, 14 spans, 60' girders.  Panchganga, 10 ,, 60' ,,  Udgaum Nulla 10 ,, 60' ,,	The commencement of work was authorised in February 1888.  The necessary funds were provided by the Kolhápur Darbar, and the line is worked by the Southern Mahratta Railway Company under a special agreement, the terms of which will be found in appendix S, Part II of the Railway Administration Report for 1891-92.

# Constructed and in progress

### LINES OWNED AND WORKED

No.	Name of line and mileage sanctioned.	Total mileage	Date of opening for public traffic.
LIII	Miles. Jodhpore-Bickaneer	Miles.	Miles.
	Marwar railway junction (218 miles from Ahmedabad on the Rajputana-Malwa railway) viá Lúni and Merta road junctions to Kucháman road (374 miles from Ahmedabad on the Rajputana-Malwa railway) . 201 Lúni junction to Pachpadra 60 Merta road junction to Bickaneer . 103	364	Marwar railway junction to  Marwar Páli— For goods traffic
			road
			TOTAL OPEN MILEAGE 364
		<u> </u>	TOTAL OPEN MILEAGE . 364
LIV	Bhávnagar-Gondal-Junágarh-Porbandar		
	Main line— Bhávnagar bandar to Wadhwán junction 1043	·	Main line— (a) Bhávnagar to Wadhwán . 20-12-80 . 104}
	Dhola junction (32 miles from Bhávnagar bandar) to Porban- dar bandar	•	Dhola to Dhoráji 19-1-81 . 883 Dhoráji to Porbandar . 17-12-89 . 691 Porbandar to Porbandar bandar - For goods traffic . 15-3-90 . 1
	· Jetalsar junction (112 miles from Blávnagar bandar) to Verával bandar, including 2½ miles of Junágarh quarry line . 69¾	3331	Jetalsar to Junágarh 1-9-88 16 Junágarh to Verával (including Junágarh quacty line) 1-2-89 531
	:		Verával to Verával bandar— For goods traffic . 1-12-90 . 1
		• .	TOTAL OPEN MILEAGE . • 333
LIVA	Jetalsar-Rájkot—	,	
	Jetalsar junction to Rájkot (77 miles from Wadhwan on the Morvi railway)	46 <del>1</del>	
<del></del>	TOTAL LINES OWNED AND WORKED BY NATIVE STATES (METRE GAUGE)	7434	6971

<sup>(</sup>a) Of this, the Bhávnagar dock estate line (o'87 mile) is worked for goods traffic only, (b) Of this, the Junágarh quarry line (2'35 miles) is worked for goods traffic only,

on 31st March 1893.

# BY NATIVE STATES.

Details of construction.	REMARKS.
The works are very light. The permanent-way on the first 19 miles consists of second-hand 36lb. rails obtained from the Rajputana-Malwa railway. On the line from Marwar Páli to Jodhpore similar rails are laid on jungle-wood sleepers. Beyond Jodhpore and on the Lúni-Pachpadra and Merta road-Bickaneer sections, 36lb. steel rails are laid on steel transverse sleepers. There is a telegraph line on the entire length excepting the Lúni-Pachpadra line. The whole line is unfenced.	worked by, the Jodhpore and Bickaneer states. The section up to Lúni was sanctioned in 1883 and the extension to Jodhpore in 1884.  The line from Jodhpore to Bickaneer was sanctioned in 1890.  The Lúni-Pachpadra section was sanctioned in 1885 and that from Merta road to Kucháman road in July 1891.
The lines from Bhávnagar to Wadhwán and Dhola to Dhoráji have been constructed for a single track with 41½lb. flat-footed steel rails, laid on half-round pine sleepers. The ruling gradient is practically 1 in 200, but there is a short length (0·15 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 creosoted pine sleepers.  The permanent-way on the Dhoráji-Porbandar section consists of 41½lb. flat-footed steel rails, laid on steel transverse sleepers. The ruling gradient on this section is 1 in 200  The line is unfenced.	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 Wadhwán 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-Porbandar section was sanctioned by the Government of India on 1st November 1856 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 Porbandar states.
The permanent-way consists of 41½lb. rails, laid partly on steel trough and partly on creosoted pine sleepers. The ballast used is of broken stone. The line is unfenced. The steepest gradient is 1 in 67, about a third of the line being on a grade of 1 in 200.	The construction of this line was sanctioned in February 1892. It will be opened to traffic in April 1893.
	•

### Constructed and in progress FOREIGN

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	Miles.
LV	West of India Portuguese—		
	Mormugao to the Portuguese frontier	. 5t	Mormugao to Sonauli . 17-1-87 41  Sonauli to British frontier . 3-2-88 10
	•		
			TOTAL OPEN MILEAGE . 51
LVÎ	Pondicherry—		· ·
	Gingee river (French frontier) to Pondi- cherry	78	Gingee river to Pondicherry 16-12-79 73
			•
	TOTAL FOREIGN LINES	583	583

on 31st March 1893.

### LINES.

Details of construction.	REMARKS.
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.  The permanent-way throughout is of the 62lb. state railway type, with 10 sleepers to the rail. The sleepers used are creosoted pine, sål and teak.  The locomotives are of one type, weighing 43½ tons when loaded. Two suffice to take a train up the Ghâts. 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 Bhore Ghât on the Great Indian Peninsula railway.	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. The harbour and line to the 41st mile were opened for public traffic on the 17th January 1887.
	•
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 pof sleepers.	This line was undertaken by the Pondicherry Railway Company, Limited, under a concession made by the French Government. It was sanctioned for construction in June 1878.  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.  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 1891-92.
	•

clxxxiv

# APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

APPENDIX . SPECIAL GAUGE

Constructed and in progress

STATE

# WORKED BY

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Miles.	Miles.	. Miles.
LVII	Jorhát—  2' o' GAUGE.  Main line— Gosáigáon to Titábar	281	Main line— Gosáigáon to Jorhát— For goods traffic . 15-12-84 For passenger traffic . 17-10-85  Jorhát to Dhali river— For goods traffic . 15-12-84 For passenger traffic . 26-2-88  Dhali river to Titábar . 16-7-87 Alternative cold weather section to steamer ghât . 25-11-89  Mariani branch— Chenimara junction to Mariani— For goods traffic . 7-1-85 For passenger traffic . 26-2-88  TOTAL OPEN MILEAGE . 28
	TOTAL STATE LINES WORKED BY THE STATE (SPECIAL GAUGE)	281	28.

on 31st March 1893.

LINE

THE STATE.

Details of construction.	REMARKS.
This line, excepting the alternative cold weather section, is laid with steel rails, 18lbs. to the yard, Vignole's pattern, on wooden sleepers. The extension to Titábar and the branch to Mariani are laid on the existing roads. The sharpest curve has a 400-feet radius, and the steepest gradient is 1 in 100.  The alternative cold weather section from Gosáigáon to the steamer ghât is laid with steel rails, 14lbs. to the yard, Fowler's patent.	neighbourhood of Jorhat. The extension to Titabar, with a branch along the Hatigarh Ali to Mariani, was sanctioned on 13th September 1883.  The section from Gosaigaon to Baraghop (river siding, 5½ miles) has been replaced by the alternative cold

APPENDIX D.

#### clxxxvi

# APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

APPENDIX
SPECIAL GAUGE

# Constructed and in progress

# ASSISTED

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
LVIII	2' o" GAUGE.  Siliguri (328 miles from Calcutta) on the northern section of the Eastern	Miles.	Miles.  Siliguri to Kurseong 23-8-80 313 Kurseong to Sonáda 1-2-81 93 Sonáda to Ghúm 5-4-81 53
;	Bengal (state) railway to Darjeeling.	51	Kurseong to Sonáda . 1-2-81 9\$ Sonáda to Ghúm . 5-4-81 5\$ Ghúm to Darjeeling . 4-7-81 3\$ Darjeeling to Darjeeling bazar . 16-6-86  TOTAL OPEN MILEAGE . 51
			•
	TOTAL ASSISTED COMPANIES (SPECIAL GAUGE)	51	51

# APPENDIX D.

D-continued.
RAILWAYS

on 31st March 1893.

### COMPANY.

Details of construction.	REMARKS.
The line is single throughout. 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.  The line which was originally laid with iron rails, 30lbs. to the yard, on the plains portion is now relaid with iron rails 40lbs. to the yard. Steel rails, 40lbs. to the yard, are laid on the hill portion. Sål, oak, and chestnut sleepers are in use, but are being gradually renewed with sål only under the 40lb. rails.  Half the width of the cart-road has been reserved for cart and other traffic.	The line was originally known as the Darjeeling steam tramway and 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.
•	•

• APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

#### clxxxviii

# APPENDIX SPECIAL GAUGE

Constructed and in progress

# LINE OWNED BY NATIVE STATE

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
LIX	Miles.  The Gaekwar's Dabhoi—  2' 6' GAUGE.  Miyágám [228\frac{3}{4} miles from Bombay (Colába), on the Bombay, Baroda and Central India railway] to Dabhoi	Miles.	Miles.  Miyágám to Dabhoi . 8-4-73 . 20 Dabhoi to Chándod . 15-4-79 . 103 Dabhoi to Báhádarpur . 17-9-79 . 91 Dabhoi to Goya Gate . 1-7-80 . 17 Goya Gate to Vishvámitri 24-1-81 . 11 Báhádarpur to Bodeli . 16-6-90 . 13  TOTAL OPEN MILEAGE . 713
•	TOTAL LINES OWNED BY NATIVE STATES AND WORKED BY COMPANY (SPECIAL GAUGE)		713

D-continued.

RAILWAYS

on 31st March 1893.

# AND WORKED BY COMPANY.

Details of construction.	REMARKS.
The rails used are flat-footed, 30lbs. to the yard, laid on 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.	Dabhoi to Chándod and Báhádarpur 6-6-77 27-11-77 Dabhoi to Baroda . July 77 29-1-79  The line is the property of His Highness the Gaekwar of Baroda.  The Dabhoi-Báhádarpur line has been extended to Bodeli. 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.
	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.

APPENDIX SPECIAL GAUGE

Constructed and in progress

# LINE OWNED BY NATIVE STATE AND

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.	
	Miles.	Miles.	• M	iles
LX	Cooch Behar—	.		
•	2' 6" GAUGE.		•	
	Gitaldaha (on the left bank of the Dharlla river opposite Mogalhat) to the right bank of the Torsa river	221		
	TOTAL LINES OWNED BY NATIVE STATES AND WORKED BY STATE RAILWAY AGENCY (SPECIAL GAUGE)	224	•	

on 31st March 1893.

# WORKED BY STATE RAILWAY AGENCY.

Details of construction.	. Remarks.
The line stops short at the Torsá river to avoid the expense of a bridge, and then extends into the town of Cooch Behar, nearly 2 miles. The line runs through easy country on embankment 12' wide. It will be single throughout.  The rails will be flat-footed steel, 25 lbs. to the yard, laid on sâl and iron-wood sleepers with sand ballast.  The bridges will be of brickwork, with metre-gauge girders, except three arched culverts.  The line will be unfenced.	survey in November of that year. Construction was sanctioned in September and work started in December.  Bad weather has hindered brick-making to such an extent that the opening may possibly be delayed.
•	

# APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

# APPENDIX SPECIAL GAUGE

Constructed and in progress

### LINE OWNED AND WORKED

No.	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic	c.
LXI	Miles.  Morvi—  2' 6" GAUGE.  Main line—  Wadhwan (3891 miles from Bombay on the Bombay, Baroda and Central India railway), via Vankaner, to Morvi	Miles.	Main line— Wadhwan to Dolia . 11-3-86 Dolia to Vankaner . 20-11-86 Vankaner to Morvi . 24-3-87  Rajkot branch—	Miles.  • 24 • 27 • 162 683
	Vánkáner to Rájkot (Rájkot branch) . 25t  TOTAL LINES OWNED AND WORKED BY NATIVE STATES (SPECIAL GAUGE)	931	Vánkáner to Rájkot . 1-1-90  TOTAL OPEN MILEAGE	• 25\frac{1}{25\frac{1}{4}} • 93\frac{3}{4}

cxcii

on 31st March 1893.

# BY NATIVE STATE.

Details of construction.	Remarks.
This line is laid on the existing bridged and metalled road for the first 24 miles as far as Dolia and then runs along the line of unbridged and unmetalled road to Vánkáner and Morvi. The permanent-way consists of steel rails, weighing 16lbs. and 29lbs. to the yard, laid partly on patent steel and partly on timber sleepers. The maximum gradient is 1 in 150 and the minimum radius of curves is 250 feet.  The main line was opened through its full length on 24th March 1887, being fully bridged and completed.	wán to Rájkot. The scheme was afterwards modified and the line was carried to Morvi. viá Vánkáner, in-

# APPENDIX STEAM TRAMWAYS OUT

# Constructed and in progress

•••	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
·	Miles.  Cherra-Companyganj—	Miles.	• Miles.
	2' 6" GAUGE.  Companyganj to Thariaghat		Companyganj to Thariaghat . 16-6-86 71
ŀ			
	•		•
į			- •
	Thariaghat to Komora limestone quarry . 1	8	Thariaghat to Komora limesstone quarry 1-1-90 1
-	Dandot Colliery -		·
•	2' o" GAUGE.  Kalapani (terminus of the Khewra branch of the North Western (state) railway) to the north of the main mine 2  Head of middle incline to shaft No. 10 of outcrop mine		Kalapani to the north of the main mine (open for coal traffic only) 5-7-89 2
•	No. 10 south outcrop mine to Ratta  Katha	34	•
	Powayan— 2' 6" GAUGE. Sháhjahánpur (311 miles from Mogal Sarai on the Oudh and Rohilkhand (state) railway) to		Sháhjahánpur to Powayan . 17-6-90 17 Powayan to Khotar 18-5-91 14
	Powayan and thence to Khotar on the borders of the Sitapur forest	31	TOTAL OPEN MILEAGE . 31
	Thatôn-Duyinzáik— 2' 6" GAUGE.  Thatôn to Duyinzáik on the Done- damie river	8	Thatôn to Duyinzáík 11-2-85 8
			•

### FIDE MUNICIPAL LIMITS

on 31st March 1893.

Details of construction.	Remarks.
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.  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. 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.  The line from Thariaghat to Komora is laid with 18lb. steel rails on wooden sleepers.	This line is used exclusively for limestone traffic. There is an extension, about half a mile in length, from Komora limestone quarry to Don Roy's limeston quarry, which is treated as a siding in the mileagner returns. It is laid with 18lb. steel rails on wooder sleepers on a gradient of 1 in 100.
	<u> </u>
•	· .
The line is principally double. The open portion consists chiefly of two inclines worked by a steel wire tail rope by combined gravity and steam power. The grades on the inclines vary from 1 in 2½ to 1 in 17 with minimum curves of 60 feet radius.  The portion under construction contains a third incline with grades of 1 in 3 and 1 in 4, the remainder being a single line tramway along the sides of the mountain, with a maximum grade of 1 in 50 and the sharpest curve of 150 feet in radius.  The permanent-way consists of the old metre-gauge 30lb. and 40lb. rails laid on wooden sleepers of deodar. There is only one large bridge of 60 feet span, which forms part of one of the inclines on a grade of 1 in 2½. The line is unfenced.	This tramway has been constructed by the North West ern (state) railway to develop the Dandot colliery, which is worked primarily for the benefit of the railway.
	•
The rails are flat-bottomed steel, weighing 25lbs. to the yard, laid on wooden sleepers and spiked with two spikes outside and one spike inside. The spikes are 7 square section.	This line was sanctioned in January 1889.  The tramway is under the management of Messrs. Lyall Marshall & Co., of Calcutta, who are now the company's managing agents, with a local manager at Shah jahanpur.
The rails are steel, Vignole section; the sleepers are of steel and wood. There are no large bridges. The line is ballasted, but only partially fenced.	This line is constructed along the public road, which have been specially made in view to tramway communication being established. Its construction and working have been undertaken by Mr. G. E. L. Dawson. Burma ori ginally 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.

# APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

# APPENDIX STEAM TRAMWAYS OUT

Constructed and in progress

,,,	Name of line and mileage sanctioned.	Total mileage.	Date of opening for public traffic.
	Tárakeshwar-Magra—	Miles.	Miles.
	2' 6" GAUGE.  Tárakeshwar (terminus of the Tarkessur railway) to Magragunj (near Magra on the East Indian railway)		
	Bársi—  2' 6" GAUGE.  Bársi road (234 miles from Bombay on the Great Indian Peninsula railway) to the town of Bársi	213	-

D-concluded.

SIDE MUNICIPAL LIMITS

on 31st March 1893.

Details of construction.	Remarks.
The line will be single throughout, but enough land has been provided for a double line.  The permanent-way will consist of flat-bottomed steel rails, weighing 30lbs. to the yard, laid on patent steel sleepers for 10 miles, and pynkado wood sleepers for the remainder, over 6 inches of fine ballast.  The bridges on the line will be of a simple character. Girders, built or rolled, of 40 feet clear span resting on masonry abutments or piers will be provided for the principal waterways and rolled joists for the less important streams.  The line will be partially fenced.	The line is being constructed by the Bengal Provincial Railway Company, Limited, the land being acquired for them by the Government under Act X of 1870. The embankment has been nearly completed, masonry work has been taken in hand, and the permanent-way is expected to be laid soon after the rains.
	This line was sanctioned for construction in December 1892.

#### APPENDIX

## Statement showing the distribution by provinces of the mileage

Progress.	Madras.	Bombay.	Bengal.	North-West- ern Provinces and Oudh.	Punjab.	Central Provinces.	Assam.	Burma.
STANDARD GAUGE. STATE LINES WORKED BY COMPANIES.								
Opened for traffic In progress ·	1121	168 <del>1</del> 35 <u>1</u>	1,042 <del>}</del> 664	1,005	2	755¥	•••	***
Total length sanctioned .	1122	2041	1,109	1,005	2	755 ½	•••	
STATE LINES WORKED BY THE STATE.						;		
Opened for traffic	347		3791 831	799 208	1,541 <del>3</del> 85		***	***
Total length sanctioned .	347		463	1,007	1,6263		•••	
Lines worked by guaran- Teed companies.								
Opened for traffic In progress	76 <b>0</b> 	1,0861	•••		***	391	•••	***
Total length sanctioned	760	1,0861	•••		•••	391	•••	•••
Assisted Companies.		ļ						
Opened for traffic			221		161 <b>}</b>		•••	***
Total length sanctioned .	•••		221	•••	1613	•••		•••
Lines owned by native STATES AND WORKED BY COM- PANIES.		•	1	•				
Opened for traffic ln progress		13 <del>1</del>	•••			•••	•••	•••
Total length sanctioned .	•••	131			•••		•••	•••
Lines owned by native states and worked by state railway agency.		•						
Opened for traffic	***		•••		108	•••		***
Total length sanctioned			<del></del>			•••		<b></b>
					108			
LINES OWNED AND WORKED BY NATIVE STATES.								
Opened for traffic	•••	•••	***				•••	•••
Total length sanctioned .	•••	•••	•••		•••	14		
TOTAL.								•
Opened for traffic	872½ 347	1,2681 351	1,444 <u>1</u> 149 <del>1</del>	1,804 208	1,813 <del>1</del> 85	1,146½ 14	•···	•••
Total length sanctioned .	1,2191	1,304	1,5941	2,012	1,8981	1,1601		•••

of railways and of steam tramways outside municipal limits on the 31st March 1893.

Hydera- bad.	Mysore.	Rajputana.	Central India.	Baluchis- tan,	Sind.	Káthiáwár,	Berars,	Kashmir.	Portuguese territory.	French territory.	Total.
1 <del>3</del>		191	3 <sup>8</sup> 5½ 55	•••	•••			•••			• 3,493 150
13		191	440				·			***	3,650
•••	***		•••	3111 851	526 j	***	•••	*** •	···	•••	3,558 80g
				3974	5261		***	•••		•••	4,367
									•	·	•
1391	57 <sup>3</sup>	•	•••	•••	•••		152		•••	•••	2,586
1391	57₹	•••	•••		•••		152	'			2,580
	-										
•••			•••				•••		•••		18
***			•••	•••			-••				18
•								•			
3324			<b>4</b> 4	 	•••	•••	13			•••	40 I
3321	10		44		•••		. 13	•••			41
;								•			
	•••				•••		•••	16		•••	12
	•••	•••	***				•••	16			12
								}			٠
•••	***	•••	 173	•••	***		***	•••	***		
			173	***	•••				•••	•••	18
					•		•			- ·	<del></del>
473	57 <sup>3</sup>	19 <u>1</u>	429½ 228	3111 851	526⅓ 		165 	 . 16	•••	•••	10,34 1,16
4731	671	191	6571	3971	5261		165	16		•••	11,51

APPENDIX

Statement showing the distribution by provinces of the mileage

Progress.	Madras.	Bombay.	Bengal.	North-West- ern Provinces and Oudh.	Punjab.	Central Provinces.	Assam.	Burma.
METRE GAUGE.						٠		
STATE LINES WORKED BY COMPANIES.						·	<u> </u>	
Opened for traffic In progress	1,456 1 110 1	7671 171	· 441	820 23	<b>3</b> 66}	***	 542‡	• • •
Total length sanctioned .	1,5663	7843	641	8223	366₹		5421	***
STATE LINES WORKED BY THE STATE.	; !							
Opened for traffic In progress			564‡		***	***	•••	7171 1691
Total length sanctioned		•••	5641				•••	8863
Assisted companies.								
Opened for traffic	161	•••	31 <del>1</del> 12	54	•••		771	 
Total length sanctioned .	. 161	•••	433	54	•••	•••	771	•••
Lines owned by native states and worked by companies.		-						
Opened for traffic In progress		1213	•••		***	:	•••	•••
	•••		***		· · · ·	***		•••
Total length sanctioned .		1213	•••	•••	***	***	***	
LINES OWNED AND WORKED BY NATIVE STATES.								
Opened for traffic In progress	կ ***	•••	•••		•••		•••	•••
-		••• 			***	_ <del></del>		
Total length sanctioned .	•		***			•••	···	***
. Foreign lines.			·				ı	
Opened for traffic In progress	•••	***	•••			•••	•••	•••
Total length sanctioned .	•••	•••	•••	•••	***	•••	•••	***
TOTAL.								
Opened for traffic In progress	1,456 \frac{1}{3}	8891 171	1,037 212	874	366 <del>}</del>	***	77 ½ 542 ½	717 <del>1</del> 169 <del>1</del>
Total length sanctioned .	1,5831	9061	1,249	8763	366		6193	8863
SPECIAL GAUGES.								
STATE LINE WORKED BY THE STATE.								
Opened for traffic	•••		•••	***	•••	***	. 281	•••
Total length sanctioned	•	•,,			111	•••	281	***

E-continued.

of railways and of steam railways outside municipal limits on the 31st March 1893—continued.

Total.	French territory.	Portuguese territory.	Kashmir.	Berars.	Káthiáwár,	Sind.	Baluchis- tan.	Central India	Rajputana,	Mysore.	Hydera- bad.
		; ;								_	
5,132 <b>t</b> 904	•••	444	•••	.0.0.4	*	,	*,* * .*,* *	286 •••	629 <del>1</del> 	331	.34
6,0361	***	•	•••	***		•••	•,•	286	629‡	362	.34
1,281 <b>1</b> 169 <b>1</b>	404	.,.	•••	*,e,*		* * * .8,6,8	4.74	***	•	***	•••
1,451		•••	•••	•••	.44.6	,6,8.6		•••			•••
			•	1 •		-					
163 <del>1</del> 281	•••	•••	5,0,0 8 + 7	•••	***	•••		•••			***
1913	***	•••	•••	2,53	•••			•••		•••	•••
1213	•••	•••	•••	•••		•••		•••	•••	•••	•••
1213			•••	•••			***	•••		•••	•••
						,			· · ·		
<b>6</b> 97 <b>1</b> 46 <b>1</b>	•••	•••	•••	•••	3331 461	•••		***	364 	***	•••
743	•••		•••	•••	3794	***		•••	364	•••	***
58}	71	51 		•••		•••	4	: •••			•••
58₹	71	51	•••	•••	•••	•••		•••		•••	•••
7,455‡ 1,148	73	51		••• •••	333½ 46½	•••		28 <b>6</b>	9931	3314	34
8,6031	7 3	51	•••	•••	379		•••	286	9931	3621	34
				:			•				
28 <u>‡</u> 						•••		•••	•••	***	•••
284		•••	•••	•••		***			•••	•••	

APPENDIX

### Statement showing the distribution by provinces of the mileage

Progress.	Madras.	Bombay.	Bengal.	North-West- ern Provinces and Oudh.	Punjab.	Central Provinces.	Assam.	Burma.
SPECIAL GAUGES—concid. Assisted company.								
		1		1 1			İ	}
Opened for traffic In progress	***	•••	•	\ \	•••	•••	***	
Total length sanctioned .	•••		51		•••	•••	•••	<del></del>
LINE OWNED BY NATIVE STATE AND WORKED BY COMPANY,			•			<u> </u>		
Opened for traffic		713	•••		•••	•	•••	
Total length sanctioned .		713						***
LINE OWNED BY NATIVE STATE AND WORKED BY STATE RAILWAY AGENCY.				•	•••	• 		
Opened for traffic In progress	•••	•••	221		•••		•••	•••
Total length sanctioned .		•••	221		•••	•••	•••	
Line owned and worked by native state.				<del></del>				\ <u> </u>
Opened for traffic			***		•••		***	•••
Total length sanctioned .		•••	•••		•••	•••	•••	•••
TOTAL.		•		i			<u> </u>	
Opened for traffic In progress		713	5 I 22 <del>1</del>		***	***	281	•
Total length sanctioned :		713	731	•••	•••	•••	281	
TOTAL ALL RAILWAYS.				<u> </u>		·		
Opened for traffic In progres	2,329 473 <sup>3</sup>	2,2201 521	2,5321 3841	2,678 210%	2,180 85	1,146 ½	1051 5421	7171 1691
Total length sanctioned .	2,8023	2,2821	2,9163	2,8883	2,265	1,160	648	880
STEAM TRAMWAYS OUTSIDE MUNICIPAL LIMITS.								
Opened for traffic In progress		 8 <del>1</del>	30 <del>1</del>	31	2 1 }			8
Total length sanctioned .	•	81	301	31	31		8	8

APPENDIX E.

E-concluded.

of railways and of steam tramways outside municipal limits on the 31st March 1893—concluded.

Hydera- bad.	Mysore.	Rajputana.	Central India.	Baluchis- -tan.	Sind.	Káthiáwár.	Berars.	Kashmir,	Portuguese territory.	French territory.	Total.
	•										-
	114		•••	•••	***		•••		•••		51
	···	···									
	•••		•••		•••	•••	•••				51
•••		•	•••	***	•••		***	•••		•••	<b>7</b> 1
			•••	•••			•••			···	7
·										<del></del>	
•											
***			•••	•••				***	•••		
		•••	•••		· · · ·	•••			•••	•••	2
			·			•					
•••				\	***	931	•••	•••	***		9:
100			•••	•••	 	934		•••		·	9
•					 	933					24
***	***	•••	•••					•••	•••	•••	2
***	•••	•••	•••			933	•••		•••		26
5071	389 411	1,0123	715½ 228	311 <u>1</u> 851	526 <u>1</u>	4271 461	165	· 16	51	78	18,04 2,33
5071	4301	1,0123	9431	3971	526	4731	165	16	51	73	20,38
	•:					:					
131	•••	***				•••	•••	•••	•••		5
13±	•••		·		···			•••	•••		10

APPENDIX F.

Table of railways constructed in or traversing native states.

Scriat No.   Names of states.   Distance from No.   Names of states.   Distance from station.   Names of states.   Names of s			·		NAT	IVE STATES TRAV	ERSED.		· ·
STANDARD GAUGE.   Rewals					Соммі	ENCES AT		E	NDS AT
TEAST INDIAN   Rewal*   49   295   Rittrifigur   34   990   Rewal*   47   371   Bargarh   45   3,012   Dabhaura   51   2,482	Senal No.	RAILWAY.	Names of states.						
Rewah			Rewah* .	1		Shiurájpur .		990	
Potter Kacher*   83 4.131   Koth*   Koth*   84 1.510   Koth*   Koth*   90 866   Majhgawán   91 331   Majhgawán   93 3.090   Majhgawán			Rewah.						Dabhaura.
Maingawin			Putter Kacher*				84	1,510	Majhgawán.
Schawa    55   3.71   Majhgawán   87   3.909   Majhgawán   95   5.156   Majhgawán   95   5.156   Majhgawán   96   8.60   Majhgawán   96   8.60   Majhgawán   96   8.60   Majhgawán   96   8.60   Majhgawán   96   8.60   Majhgawán   96   8.60   Majhgawán   97   8.60   Majhgawán   98   8.60   Majhgawán   98   8.60   Majhgawán   98   8.60   Majhgawán   98   8.60   Majhgawán   98   8.60   Majhgawán   98   8.60   Majhgawán   98   8.60   Majhgawán   Majhgawán   98   8.60   Majhgawán   Majhgawán   Majhgawán   98   8.60   Majhgawán   Majhgawán   98   8.60   Majhgawán   Majhgawán   Majhgawán   99   8.60   Majhgawán   99   8.60   Majhgawán   Majhgawán   99   8.60   Majhgawán   Majhgawán   99   8.60   Majhgawán   Majhgawán   99   8.60   Majhgawán   Majhgawán   99   8.60   Majhgawán   Majhgawán   99   8.60   Majhgawán   Majhgawán   Majhgawán   99   8.60   Majhgawán   Majhgawán   Majhgawán   99   8.60   Majhgawán   Majhgawán   99   8.60   Majhgawán   Majhgawán   99   8.60   Majhgawán   Majhgawán   99   8.60   Majhgawán   Maj				84	1,510 806		_	2,71.1 321	Majhgawán.
Panna*				.   8 <sub>5</sub>	2,711	Majhgawán .		3,990	Jaitwar.
Nagode		•	Panna*	87	3,990	Majhgawán .	90	896	Majhgawán.
Maihar*   138   2,099   Maihar   100   4,525   Jukehi.		. •	Nagode• .			Sutna	128		Maihar.
Bengal-Nágpur   Nágpur Josecion.   Nágpur Josecio			Maihar*	128			160		Jukehi. 
Nándgaon   139   581									
Nandgaon   139   594   Musrif   159   634   Musrif   159   634   Musrif   159   634   Musrif   159   634   159   634   159   636	ĮŢ	Bengal-Nágpur		. 114		Bortaláo	139	581	Musrá.
Raigarh   311   1,901   Sakti   359   3,010   Kanika   369   3,010   Kanika   369   3,010   Kanika   369   3,010   Kanika   369   3,010   Kanika   369   3,010   Kanika   369   3,010   Kanika   369   3,010   Kanika   369   3,010   Kanika   369   3,010   Kanika   403   1,584   Bamra   403   1,584   Bamra   403   1,584   Membarpur, Bamsa   403   1,584   Membarpur, Bamsa   403   1,584   Membarpur, Bamsa   403   1,584   Membarpur, Bamsa   403   1,584   Membarpur, Bamsa   403   1,584   Membarpur, Bamsa   409   4,910   Kahairi   431   1,742   Membarpur, Bamsa   409   4,910   Membarpur, Bamsa   400   4,910   Membarpur, Bamsa   400   4,910   Membarpur, Bamsa   400   4,910   Membarpur, Bamsa   400   4,910   Membarpur, Bamsa   400   4,910   Membarpur, Bamsa   400   4,910   Membarpur, Bamsa					_	Bá-áauá-	211		
Gángpur   379   2,798   Bágdehi   403   1,584   Bámra   421   1,791   Kumarkela   403   1,584   Bámra   421   1,791   Kumarkela   403   1,584   Bámra   421   4,006   Bámra   421   4,006   Bámra   422   4,066   Bámra   422   4,066   Bámra   524   3,696   Sini   531   1,584   Sini   1,584   Sini   1,58		•	Raigarh .	311	1,901	Sakti	359	3,010	Kanika.
Cáng pur   421   1,901   Numarkela   403   4,906   Africa   403   1,584   Banksal   519   4,214   Amda   524   3,606   Amda, Dugni   528   1,584   Sini   531   1,584   Sini								4,858 1,584	
Banksal   519   4,2214   Amda   524   3,566   Amda   511   531   1,584   Sini   1,584   Sini   1,584			Gángpur	421	1,901	Kumarkela	463	4,066	
Marti Branch   Rewah   329   4,910   Kahairi   431   1,742   Chandia			Banksai .	519	4,224	Amda	524	3,696	Amda.
BHOPAL JHÁNSI-ĀGRĀ SEC   Bhopal   56   5,023   Bhopal   87   3,105   Básoda   116   3,166   Básoda   117   1,096   Básoda   120   2,756   Bágru   122   216   Bágru   128   2,206   Kurwai   120   2,756   Bágru   128   2,206   Kurwai   120   2,756   Bágru   128   2,206   Kurwai   129   5,206   Kurwai   129   5,206   Kurwai   129   5,206   Kurwai   129   5,206   Kurwai   129   4,866   Bawara   131   3,186   Kurwai   122   4,866   Bawara   131   3,186   Kurwai   122   4,866   Bawara   131   3,186   Kurwai   123   4,866   Bawara   131   3,186   Kurwai   124   4,866   Bawara   137   4,316   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138   1,517   Kethora.   138		Katni Branch	_			,			1
Indian Midrand				 					
Bhopal		Tunny Mrsv. vo							
Gwalior   87   3.105   Bhiisa   116   3.160   Básoda   117   1.006   Básoda   117   1.006   Básoda   1120   2.756   Bágru   122   2.16   Bágru   122   2.16   Bágru   123   2.006   Básoda   120   2.756   Bágru   122   2.16   Bágru   123   2.006   Kurwai   129   5.206   Kurwai   129   5.206   Kurwai   132   4.866   Orchha   212   129   Bágru   128   2.206   Kalhar   137   4.316   Bawara   131   3.186   Bawara   137   4.316   Bawara	111		_					<del>-</del> ,	1
Kurwai   116   3.166   Básoda   117   1,096   Gwalior   117   1,096   Kurwai   120   2,756   Bágru   122   216   Bágru   128   2,206   Kurwai   128   2,206   Kurwai   128   2,206   Kurwai   128   2,206   Kurwai   129   5,206   Kurwai   129   5,206   Kurwai   129   5,206   Kurwai   129   5,206   Kurwai   129   5,206   Kurwai   129   129   Bawara   131   3,186   Bawara   137   4,316   Ba		•	Bhopal .					3,105	
Kurwai   120   2,756   Bágru   128   2,206   Kalhar, Bhopal   128   2,206   Kalhar   129   5,206   Kurwai   129   5,206   Bawara   131   3,186   Bawara   132   4,866   Gorchha   132   4,866   Gorchha   132   4,866   Gorchha   132   4,866   Gorchha   132   4,866   Gorchha   133   3,134   Kethora   Basai   217   2,539   Basai   217   2,539   Basai   Datia   248   1,901   Datia   266   4,990   Dabra   334   1,591   Hetampur   353   4,745   Datia   244   4,77   Jorchha   244   1,097   Jorchha   244   1,097   Jorchha   244   1,097   Jorchha   245   2,547   Jorchha   246   3,937   Orchha   246   3,937   Orchha   248   4,287   Orchha   248   4,287   Orchha   260   1,067   Alipura   286   2,217   Alipura   292   3,927   Ganouli   300   827   Pahra   391   322   Taraon   391   3,232   Tamlia   390   2,467   Taraon   261   3,322   Tamlia   395   2,467   Taraon   263   4,907   Samther   263   4,907   Samther   263   4,907   Samther   264   4,317   Samther   263   4,907   Samther   263   4,907   Samther   276   4,317   Samther   281   767   Distance from Godhra.   V Godhra-Rutlam (ist section of 25 miles).		_	Kurwai .	116	3.160	Básoda .	117	1,096	Básoda.
Gwalior   122   216   Bágru   128   2,206   Kalhar   129   5,206   Kurwai   129   5,206   Kurwai   132   4,866   Gorchha   212   129   Kaniadhána   213   3,534   Basai   213   3,534   Basai   217   2,539   Basai   Dabra   334   1,591   Dabra   334   1,591   Dabra   334   1,591   Hetampur   353   4,745     JHÁNSI-MÁNIKPUK SECTION   Orchha   242   477   Jhánsi   246   3,597   Gorchha   244   1,097   Jhánsi   246   3,597   Gorchha   244   1,097   Jhánsi   246   3,577   Gorchha   248   4,287   Gorchha   248   4,287   Gorchha   248   4,287   Gorchha   248   4,287   Gorchha   248   4,287   Gorchha   248   4,287   Gorchha   248   4,287   Gorchha   248   4,287   Gorchha   248   4,287   Gorchha   248   4,287   Gorchha   256   2,087   Harpálpur   290   4,107   Harpálpur   4,1097   Harpálpur   290   4,107   Harpálpur   29	:			, .		Básoda	120		
Bandar   128   2,200   Kalhar   139   5,206   Bawara   131   3,186   Bawara   137   4,316   Kethora   132   4,866   Bawara   137   4,316   Kethora   137   4,316   Kethora   137   4,316   Kethora   137   4,316   Kethora   137   4,316   Kethora   137   4,316   Kethora   137   4,316   Kethora   138			Gwalior .	122	216	Bágru	128	2,206	Kalhar.
Kurwai						Kalhar	129		Bawara.
Khaniadhána   213   3.534   Basai   217   2.539   Basai   Datra   246   4.990   Dabra   334   1.591   Hetampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   353   4.745   Saiya   Metampur   364   357   Metampur   367   Metampur   367   Metampur   367   Metampur   368   3.747   Metampur   368	ĺ	<u>.</u>	Kurwai .	132	4,866	Bawara			Kethora.
Datia   248   1,961   Datia   266   4,990   Dabra   334   1,591   Hetampur   353   4,745   Saiya.				·					
JHÁNSI-MÁNIKPUK SECTION   Orchha   242   477   Orchha   244   1,097   Orchha   244   1,097   Orchha   246   3,937   Orchha   246   3,937   Orchha   252   437   Orchha   248   4,287   Orchha   260   1,087   Teharka   267   3,467   Alipura   286   2,217   Alipura   292   3,927   Ganouli   300   827   Pahra   391   322   Taraon   391   2,322   Tamlia   391   2,322   Tamlia   391   2,322   Tamlia   391   2,322   Tamlia   396   2,467   Chitrakot.    JHÁNSI-CAWNPORE SECTION   Samther   263   4,907   Samther   263   4,907   Orchha   266   1,317   Orchha   266   4,317   Orc			Datia .	248		Datia	266		
JHÁNSI-MÁNIKPUR SECTION   Orchha   242   477   Jhánsi   243   2,547   246   357   357   249   2,907   258   647   258   647   258   647   258   647   258   647   258   647   258   647   258   647   258   647   258   647   258   647   258   647   258   647   258   647   258   647   258   647   258   267   3,467   260   1,087   260   1,087   260   290   4,107   290   290   4,107   290   290   4,107   290   290   290   290   290   290   290   290						Dabra	334	• •	
Vichna   244   1,097   Jhánsi   246   357   249   2,007   2,007   252   437   248   4,287   7   258   4,587   7   268   1,517   268   1,517   268   1,517   268   1,517   268   1,517   268   1,517   268   1,517   268   1,517   268   1,517   268   1,517   268   1,517   268   1,517   268   1,517   268   1,517   268   1,517   268   1,517   279   2,877   268   1,517   268   1,517   279   2,877   268   1,517   268   1,517   279   2,877   268   1,517   26	-	Jhánsi-Mánikpur section	Orchha .	242	47 <b>7</b>	Thángi .	242	_	} -
Orchha					1,097	Jhánsi	246	357	Barwa Ságar.
Crchha						Barwa Ságar Barwa Ságar			Barwa Ságar.
Alipura   286   2,217   Harpálpur   290   4,107   Harpálpur   293   1,517   Harpálpur   301   1,327   Jaitpur   391   2,322   Tamlia   396   2,467   Tamlia			1 - ' '	248	4,287	Teharka .	258	4,587	Teharka.
Alipura		•							
Pahra		•			3,927	Harpálpur .	293	1,517	Harpálpur.
Taraon   391   2,322   Tamlia   396   2,467   Chitrakot.     JHÁNSI-CAWNPORE SECTION   Samther   263   4,907   276   4,317   281   767   Púnch   279   2,877   284   3,277     V   Godhra-Rutlam (1st section of 25 miles).   Baria   14   2,006   15   4,224   Sunth road   Sunth road   Ends in 2nd section   Sunth road   Ends in 2nd section   Sunth road   Su						Tamlia	201		Jaitpur.
Samther   Samt		•	Taraon .						Chitrakot.
Samther   Samt		JHÁNSI-CAWNPORE SECTION	Samther .		4,907		268	1.617	Moth.
V GODHRA-RUTLAM (1st section of 25 miles).  Distance from Godhra.  Distance from Godhra.  14 2,006 Sunth road Sunth road Sunth road Sunth road.  Ends in 2nd section	ŀ	·					279	2,877	Púnch.
V GODHRA-RUTLAM (1st section of 25 miles).  Baria  Baria  14 2,006 15 4,224  Sunth road  Ends in 2nd section 2 sunth road.  Sunth road  Ends in 2nd section					ce from		<u> </u>		Lunch.
tion of 25 miles).  Baria  14 2,000 Sunth road  Sunth road  Ends in 2nd section  Sunth road.							Goo	ice from ihra.	
4,224 Sunth road • Ends in 2nd sec-	V	GODHRA-RUTLAM (1st section of 25 miles).			-		15	2,376	Sunth road.
	1 771	]	<u> </u>		•	1	Ends in tion,	and sec-	· .

<sup>†</sup> 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 tive states-continued.

<del></del>		NATIVE STATES TRAVERSED.									
	RAILWAY.		Сом	MENCES AT	E	IDS AT					
Serial No.	RAILWAY.	Names of states:	Distance from Dhond junction,	Nearest railway station,	Distance from Dhond junction.	Nearest railway station.					
	STANDARD GAUGE-		Miles. Feet,		Miles. Feet.						
VII	continued. DHOND-MANMAD	Nizam's domi-	105 3,432	Puntámba.	107 2,145	Samvatsar.					
			Distance from Kurrachee.	·	Distance from Kurrachee.						
ıx	NORTH WESTERN (STATE).	Patiála Patiála Patiála Patiála Nábha Patiála Nábha Patiála Nábha Patiála Kapurthala Kapurthala	951 808 956 3,474 963 375 969 3,817 970 4,023 970 5,037 971 3,126 971 3,500 882 3,803 910 509	Sánahwál Doráha Khanna Khanna Khanna Khanna Khanna Sirhínd Sirhínd East bank, Beas Jullundur tonment. Reti	955 1,668 957 2,550 963 4,029 970 4,023 ,970 5,037 971 3,126 971 3,500 1,002 3,892 893 1,133 921 918	Doráha. Doráha. Khanna. Khanna. Khanna. Sirhínd. Sirhínd. Umballa city. Hamira. Phagwára. Adamwahan bridge.					
	-	Kalát	359 4,100	Jacobabad	Ends beyond li- mit of main line section.	bridge.					
			Distance from Bombay.		Distance from Bombay.						
xvIII	+GREAT INDIAN PENINSULA	Akalkot*	298 4,257	Tilate (crossing station).	315 2,970	Boroti.					
		Kurundvád . Nizam's dominions. Hyderabad as-	315 2,970 324 478	Boroti Dudhni	324 478 442 236	Dudhni. Ráichúr.					
XIX	Bombay, Baroda and Cen-	signed districts.	300 1,402	Khámkhed .	452 825	Pulgaon.					
	TRAL INDIA— BOMBAY TO AHMEDABAD	Jawhar Raja Baroda Baroda Sachin Baroda Sachin Baroda Baroda Baroda Baroda	72 2,587 134 2,290 137 5,157 142 2,230 148 1,942 156 2,134 177 1,994 182 4,237 217 4,285 219 4,898	Vángaon . Bilimora . Amalsád . Amalsád . Navsári . Sachin . Sáyan . Kim . Pálej . Pálej . Nadiád .	74 3,383 137 3,855 138 2,797 143 4,676 156 2,134 160 4,446 177 2,657 190 2,344 218 3,980 258 3,140	Vángaon. Amalsád. Amalsád. Vedcha. Sachin. Sachin. Sáyan. Pánoli. Pálej. Vásad. Mehmadabad.					
	Ahmedabad 10 Wadh- wán.	Baroda Bhojwa Bajána Bajána Lakhtar Lakhtar Wadhwán	286 1,296 351 2,065 357 3,960 360 1,795 366 3,510 369 4,240 378 4,170	Viramgám . Sábli road . Sábli road . Lilápur road . Lilápur road . Lakhtar .	287 3,261  351 3,085 359 1,760 366 3,510 366 3,750 378 4,170 389 3,020	Viramgám. Sábli road. Lilápur road. Lilápur road. Lakhtar. Wadhwán,					
	•		Distance from Viramgám junction.	•	Distance from Viramgam junction.	•					
	Pátri branch	Bhojwa Pátri Bajána Pátri	3,745 6 3,829 9 2,336 11 196	Viramgám Jhund Jhund Jhund	4 2,818 9 2,326 11 196 20 2,340	Jhund. Jhund. Jhund. Pátri.					
	•		Distance from Anand junction.		Distance from Anand junction.						
•	Anand to Godhra .	Pandu Mewas . Baroda .	33 I,100 34 3,540	Sevalia Timba	34 3,540 36 460	Timba. Timba.					

<sup>†</sup> 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.

		NATIVE STATES TRAVERSED.									
erial No.	RAILWÀY.	,	Соммв	NCES AT	End	S AT					
		Names of states.	Distance from Madras.	Nearest railway station.	Distance from Madras.	Nearest railway station.					
xx	STANDARD GAUGE— concluded. Madras—		Miles. Feet.		Miles. Feet.						
	South-west line— Bangalore Branch.	Mysore terri-	163 1,459	Kámasamudram .	219 1,875	Bangalore city.					
	North-west line	Nizam's domi- nions.	333 5,170	Tungabhadra .	350 4,310	Ráichúr.					
			Distance from Jumna bridge, Delhi,		Distance from Jumna bridge, Delhi.						
XXI	DELHI-UMBALLA-KALKA	Patiála Patiála Patialá	130 5,130 137 4.140 154 3,800	Lalru Lalru Chandigarh	136 2,150 138 4,410 160 3,700	Lairu. Lairu. Kalka.					
•		Kalsia Kalsia Kalsia	136 2,150 138 4,410 144 2,600	Lalru Ghaggar Ghaggar	137 4,140 142 3,900 147 2,600	Lalru. Ghagga <b>r</b> . Ghagga <b>r</b> .					
			Distance from Jalamb junction		Distance from Jalamb junction.	1					
XXIII	KHÁMGAON	Hyderabad as- signed districts.	•••	Jalamb	7 2,889	Khámgaon.					
•			Distance from Badnera junction.		Distance from Badnera junction.						
XXIV	Amráoti	Hyderabad assigned districts.	•••	Badnera	5 2,300	Amráoti.					
			Distance from Itársi junction.		Distance from Itársi junction.						
XXV	BHOPAL-ITÁRSI (NATIVE STATE SECTION)	Bhopal	13 660	Hoshangabad .	56 5,023	Bhopal.					
			Distance from Wádi junction.		Distance from .Wadi junction.						
XXVI	THE NIZAM'S GUARANTEED STATE.	Hyderabad Hyderabad Hyderabad	3,120 115 2,865•	Wádi Husain Ságar Trimulgherry	309 4,915 115 · 58 117 3,884	Gangineni. Hyderabad. Trimulgherry troop siding.					
	·	Hyderabad .	254 4,195	Dornakal	271 855	Mineral termin					
XXVII	THE GAEKWAR'S PETLAD-		Distance from Anand junction.		Distance from Anand junction.						
•	ÁNAND TO PETLÁD .	Baroda	Distance from	Agás	13 1,860	Petlád.					
XXIX	Rájpura-Bhátinda	Patiála .	Kurrachee.	7.0	Distance from Kurrachee.	· .					
		Nábha Paliála 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.					
!		Nábha Patiála Nábha Patiála	1,027 2,323 1,028 1,726 1,033 1,199 1,035 1,526	Nábha Chíntanwala Chintanwala Chintanwala	1,028 1,726 1,033 1,199 1,035 1,526 1,073 4,340	Chintanwala. Chintanwala. Chintanwala. Chintanwala. Tappa.					
		Nábha Patiála Patiála	1,075 908 1,080 2,286 1,093 2,117	Tappa Rámpura Phúl Bhuchchu	1,080 2,286 1,081 3,078 1,100 2,941	Rámpura Phúl. Rámpura Phúl. Bhátinda.					
XXX	JAMMU AND KASHMIR (NATIVE STATE SECTION)	Kashmir .	920 2,640	Suchetgarh '.	936 1,320	Tawi river.					

#### APPENDIX F.

# APPENDIX F—continued. Table of railways constructed in or traversing native states—continued.

			NATIVE STATES TRAVERSED.							
•	•	<u> </u>	<del></del>		<del></del>					
Serial No.	RAILWAY.		Сомм	ENCES AT	En	DS AT				
		Names of states.	Distance from Delhi juffction.	Nearest railway station.	Distance from Delhi junction.	Nearest railway station.				
	METRE GAUGE.		Miles. Feet.		Miles. Feet.					
XXXV	Rajputana-Mai.wa— Delhi to Ahbedabad .	Patandi Patandi	35 194 41 218	Játaoli Iátaoli	39 1 <b>7</b> 7 41 255	Játaoli Játaoli				
		Nábha Ulwur	57 180 68 5	Báwal Ajeráka	68 5	Ajeráka. Baswa.				
		Јеуроге	125	Baswa	245 3,100	Sáli. Sáli.				
		Jeypore Jeypore	245 4,460 246 1,025	Sáli	246 570 247 2,645	Tilaunia.				
		Kishengurh Kishengurh	245 3,100 246 570	Sáli	245 4,460 246 1,025	Sáli. Sáli.				
	•	Kishengurh .	247 2,645	Tilaunia	249 1,173	Tilaunia.				
		Kishengurh . Jodhpore	251 1,109 318	Sendra	201 217 431 · 4,070	Mishengurh. Keshavganj.				
ļ		Sirohee	431 4,070 471 2,750	Keshavganj Maval	471 2,750 508 250	Maval Chhápi.				
İ		Baroda	508 250	Chhápi	564 170	Kálol.				
				•						
			Distance from Phulera junction.		Distance from Phulera junction.					
	Sámbhar Branch .	Jeypore and Jodhpore . Jodhpore .	1 48 6 7	Phulera Sámbhar	6 7 21 5,214	Sámbhar. • Kucháman road.				
			·	•						
	•		Distance from Agra junction.		Distance from Agra junction.	•				
	Agra branch	Bhurtpore	21 88	Ikran	58 119	Kherli.				
		Ulwur Ulwur	58 119 68 168	Kherli Ghosráná	67 83 69 150	Ghosráná. Ghosráná.				
i	,	Ulwur Ulwur	76 78 25	Hindaun road . Rámpura .	77 50 83 145	Rámpura. Biwai.				
		Ulwur	85	Biwai .	87 43	Biwai.				
		Jeypore Jeypore	67 83 69 150	Gliosráná Ghosráná	68 168 76	Ghosráná Hindaun road.				
		Jeypore Jeypore	77 50 83 145	Rámpura . Biwai	78 25 85	Rámpura. Biwai.				
		Jeypore	87 43	Biwai	93 2,758	Bándikui.				
:			Distance from	•	Distance from					
			Ajmere junction.		Ajmere junction.					
	Malwa section (Ajmere to Khandwa).	Oodeypur	41 1,950 125 5,090	Barl Shambhúpúra	122 5,030 127 1,250	Shambhúpúra. Shambhúpúra.				
	TO IXERNOUN,	Tonk	122 5,030	Shambhúpúra .	125 5,090	Shambhúpúra.				
		Tonk	127 1,250 143 2,700	Shambhúpúra . Kesarpura .	138 2,200 145 1,200	Kesarpura. Neemuch.				
	•	Sindia	138 2,200 145 1,200	Kesarpura Neemuch	143 2,700 163 2,400	Kesarpura. Malhárgarh.				
		Sindia .	174 2,720 249 3,900	Tharod	205 5,130	Dhodhar. Barnagar.				
		Sindia	259 4,070	Barnagar	258 · 3,160 271 1,700	Chambal.				
	,	Sindia . Holkar and Sindia	278 2,360	Fatehabad.	281 3,600	Fatehabad.				
		combined Sindia Holkar and Sindia	282 2,900 287 2,700	Fatehabad. Ajnod .	285 4,800 287 3,300	Fatehabad. Ajnod.				
	•	combined Holkar and Sindia Holkar and Sindia	288 1,700	Ajnod	289 2,800	Ajnod.				
	·	combined	291 2,900	Ajnod	292 150	Ajnod. Pália.				
		Sindia	292 150 163 2,400	Ajnod Malhárgarh	294 150 170 1,700	Píplia.				
•	ļ	Jaora Jaora	171 4,980 173 1,000	Tharod Tharod	172 4,280	Tharod. Tharod.				
		Jaor <b>a</b>	205 5,130	Dhodhar	219 4,080	Námli.				

## APPENDIX F-continued.

Table of railways constructed in or traversing native states—continued.

				_	NATIV	E STATES TRAVE	RSEL	). 		<u>-</u>
C / No	Railway.				Сомм	ENCES AT			En	DS AT
Serial No.	RAILWAY.	Names of state	·s.	Distance Ajmere ju	e from	Nearest railway station.		Distanc jmere j	e from unction.	Nearest railway station,
	METRE GAUGE—contd.			Miles.	Feet.		M	iles.	Feet.	
XXXV	RAJPUTANA-MALWA-concld. MALWA SECTION (AJMERE	Holkar . Holkar .	•	170 172	1,700 4,280	Píplia . Tharod .		171 173	4,980	Tharod. Tharod.
	TO KHANDWA)—concld.	Holkar .	•	173	1,650	Tharod :	• 3	74 278	2,720 2,360	Tharod. Fatehabad.
		Holkar . Holkar .	•	271 281	1,700 3,600	Fatehabad.		282	2,900	Fatehabad.
		Holkar .	•	285	4,800	Fatehabad.		287	2,700	Ajnod.
		Holkar . Holkar .	•	287 289	3,300 2,800	Ajnod . Ajnod .		88 291	1,700 2,900	Ajnod. Ajnod.
		Holkar •		294	150	Pália .		355	***	Mortakka.
		Holkar .	•	358	1,200	Sanáwad . Nimar Kheri		363	1,800	Nimar Kheri. Nimar Kheri.
	_	Holkar • Rutlam •		366 219	3,300 4,080	NT.414		367 22 <b>2</b>	1,450 3,050	Námli.
	_	Rutlam .		222	5,050	Námli .		26	650	Namli.
		Rutlam	•	229	550	Rutlam . Rutlam .	,	35	400	Rutlam. Naugánwán.
		Rutlam . Rutlam .	:	235 244	1,050 4,880	Naugánwán		242 246	4,830 4,930	Naugánwán.
		Sailána .		222	3,050	Námli .		322	5,050	Námli.
		Sailána	•	226	650	Námli Rutlam		229	550	Rutlam. Rutlam.
		Sailána . Sailána .	•	235 242	400 4,830	Naugánwán		235 244	1,050 4,880	Naugánwán.
		Sailána .	•	246	4,930	Naugánwán		249	600	Runija.
		Dhár . Dhár .	•	249	600 3,160	Runija . Barnagar .		249	3,900	Runija. Barnaga <b>r</b> .
		Dia .	•	258	<del></del>	Darmaga.	\ <u> </u>	259	4,070	<i></i>
•				Distanc Fatch junct	abad	•	_		ce from abad tion,	
	Ujjain branch	Sindia Holkar	,	•••	•••	Fatehabad. Ujjain.	•	10	400	Ujjain. Ujjain.
•		Sindia	•	10	400 2,700	Ujjain .		10 14	2,700 1,500	Ujjain.
				Distano Rewari j				Distand	ce from	
				<del></del>				<del></del>		
	Rewári to Ferozepore.	Dujána .	•	19	1,300	Kosli .		19	3,350	Kosli.
,		Dujána .	•	20	220	Kosli .	• ]	22	430	į Jharii.
	•	Jínd Patiála	•	29 164	2,975 2,100	Jhárlí Kalánwáli		45 190	2,000 2,330	Mánheru. Goniána.
		Patiála .	•	190	4,000	Goniána .		191	300	Goniána,
		Faridkot .	•	190	2,330	Goniána .	- 1	190	4,000	Goniána.
		Faridkot . Faridkot .		191 203	300 2,475	Goniána . Jaitu .		195 231	2,400	Goniána. Golehwála,
		Nábha .	•	195	2,400	Goniána .		203	2,475	Jaitu.
		•	:	Distance Kot Ka	риг <b>а</b>			Kot K		
				junct	ion	I:	-	junc	tion.	
	Fázilka branch	Faridkot .	•		•	Kot Kapúra	•	7	2,350	Bariwála.
				Distance Cawn		·			e from	-
		<b>_</b>		. <u></u>		<b></b>		Cawn		
	CAWNPORE TO ACHNERA.	Bhurtpore	•	221	3,540	Bhainsa .	•  *	225	384	Bhainsa.
				Distanc Portu front	guese			.Portu	e from guese tier.	
	Southern Mahratta — Main Line	Nizam's do	mi-	126	3,813	Harlápur .		161	488	Munirabad.
	MININ DING	Venkatagiri	•	395	4,488	Tarlupádu	.] .	<b>\$</b> 05	3,549	Márkapur road.
		Venkatagiri Venkatagiri	•	408 412	3,436 1,883	Márkápur road Gajjalakonda	•   •	409 429	2,845 3,300	Gajjalakonda. Kurichédu.

#### APPENDIX F.

### APPENDIX F-continued.

### Table of railways constructed in or traversing native states - continued.

====		NATIVE STATES TRAVERSED.									
Serial No.			Comm	ENCES AT	ENDS AT						
Senai No.	Railway.	Names of states.	Distance from Londa junction.	Nearest railway station.	Distance from Londa junction.	Nearest railway station.					
	METRE GAUGE—contd.		Miles. Feet.		Miles. Feet.						
XXXVI	SOUTHERN MAHRATTA-					•					
	concid. POONA BRANCH.	Kurundvád . Sangli	26 1,125 37 4,150	Desur Sulebhávi	28 4,325 38 2,975	Desur. Sulebhávi.					
		Sangli Kurundvád	41 2,625 49 3,375	Sulebhávi Suldhál	38 2,975 47 1,250 50 2,200	Suldhál. Suldhál.					
•		Kolhápur . Kurundvád	79 3,500 80 3,100	Chikodi road .	80 3,100 82 3,350	Chikodi road. Raibag.					
		Koláhpur Koláhpur	82 3,350 91 50	Raibag Raibag	88 4,125 49 4,000	Raibag. Kudchi.					
		Sangli	99 900 108 1,875	Kudchi Shedbal	103 1,825	Shedbal. Shedbal.					
		Sangli	110 4,280	Shedbal Miraj	113 5,125	Miraj. Miraj.					
	<u> </u>	Miraj Sangli	113 5,125 123 1,900	Sangli	119 5,230 123 2,200	Sangli.					
		Miraj Sangli	123 2,000 125 2,480	Sangli	125 2,480 126 2,950	Sangli. Sangli.					
		Sangli	127 1,600 142 1,800	Sangli Kundal road	130 2,120 143 2,590	Ashta road. Kundal road.					
		Sangli Aundh	143 2,575 144 2,825	Kundal road . Kundal road .	143 4,825 145 1,575	Kundal road. Takari.					
		Sangli	145 1,575 14 <b>6 3</b> ,950	Takari Takari	146 1,850	Takari. Takari.					
		Aundh	150 3,420 164 4,225	Takari	151 <b>3</b> ,160 165 1,380	Shenoli. Karad.					
		Jamkhandi . Phaltan	169 3,250 212 2,575	Masur	171 1,675 224 140	Masur. Lonand.					
			Distance from Gadag junction.		Distance from Gadag junction.						
	Bijápur branch	Rámdurg		Mallápur	26 3,380	Álúr.					
	Dijarua Brancia .	Sangli	21 2,030 149 3,980 156 1,320	Lachyán Lachyán	153 5,250 166 2,860	Lachyán. Tadval.					
			Distance from Hubli junction.		Distance from Hubli junction,						
•	HARIHAR BRANCH	Jamkhandi Miraj Mulla Savanúr Savanúr	5 807 18 4,826 30 2,009 37 588	Kundgol Gudgeri	18 4,826 23 4,284 30 2,656 38 4,558	Gudgeri. Yalvigi. Hattimattur. Karajgi.					
(XXVIII	Southern Mahratta (Mysore section).	Mysore	81 1,320 288 2,640	Harihar . Yesvantpur	392 2,956 308 260	Nanjangúd. Dodballapur.					
			Distance from Sára.	·	Distance from Sára,						
XL <b>i</b> II	Eastern Bengal (state) (Northern Section).	. Cooch Behar	157 2,253	Haldibári	163 1,891	Mondalghât,					
T.J	The Gaekwar's Mehsána—		Distance from Mehsána junction.		Distance from Mehsána junction,						
	Mehsána to Virangán .	Baroda	***	Mehsána .	10 313	Jhotana.					
	Mehsána to Pátan .	Mahi Kántha . Baroda .	10 313	Jhotana Mehsána	12 261 25	Jhotana. Pátan.					
	Mehsána to Kherálu .	Baroda	***	Mehsána	27 25	Kherálu.					
			Distance from Miraj junction.		Distance from Miraj junction.						
LII	Kolhápur	Miraj senior state Kolhápur state	5 2,323	Miraj Shirol road	3 2,112 29 1,056	Miraj. Kolhápur.					

#### APPENDIX F-continued.

### Table of railways constructed in or traversing native states-continued.

<del></del>	1 4012 07 74	NATIVE STATES TRAVERSED.										
j		<del></del>		Cour	ENCES AT	•		En	IDS AT			
Serial No.	RAILWAY.	N	<u>.</u>	COMMI	PUCES VI	_						
		Names of states.		nce from	Nearest railwa station.	у		e from	Nearest railway Station.			
			Marwar	r junction.			Warwar	junction.				
LIII	1 3	-	Miles.	Feet.	•		Miles.	Feet.				
	Marwar Railway junc- tion to Kucháman road Merta road to Bicka-	Jodhpore Jodhpore			Marwar . Merta road		201 187	<b>2,</b> 590	Kucháman road. Bhagu.			
	NEER.	Bickaneer . Jodhpore .	187 187	4,326	Bhagu . Bhagu .	•	187 188	4,326 <b>3</b> 40	Bhagu. Bhagu.			
•	•	Bickaneer .	188	340	Bhagu .	•	23 t	. •••	Bickaneer.			
	Lúni to Pachpadra .	Jodhpore	44		Lúni junction	•	104	•••	Pachpadra.			
<b>T</b> 137	Delenes Comes Intel			from Bháv- r bandar.				rom Bháv- bandar.				
LIV	Bhávnagar-Gondal-Juná- garh-Porbandar —	. •										
	Bhávnagar to Wadhwán	Bhávnagar . Bhávnagar .	5	1,500	Bhávnagar Ghadechi	•	3	3,900 2,920	Ghadechi. Vartej.			
		Shampura Girasia	9	2,920	Vartej .	•	10	4,380	Vartej.			
	•	Bhávnagar . Bhojpura Girasia	10	4,380 300	Vartej .	:	11	300 2,500	Vartej. Sihor.			
1		Bhávnagar Songad Girasia	11	2,500 1,900	Sihor . Songad .	•	18	1,900	Songad.			
		Bhávnagar .	19	3,380		•	25	3,380 2,900	Songad.   Sanosra.			
		Vaori Girasia Bhávnagar	25 28	2,900 1,800	Sanosra . Sanosra .	•	28 32	1,800	Sanosra. Dhola.			
		Wangdra Girasia	32	3,360	Dhola .	:	33	3,360 1,850	Dhola.			
		BhojavadarGirasia Chabharia Girasia	33 35	1,850 3,100	l +~ · ·	•	35 38	3,100	Dhola. Ujalváv.			
		Bhávnagar .	38	1,200	Ujalváv .	:	38	2,700	Ujalváv.			
	•	Ramanka Girasia Chitravad Girasia	38 39	2,7CO 2,950	Ujalváv . Ujalváv .	•	39 40	2,950 4,280	Ujalváv. Ujalváv.			
		Ahungpur Girasia	40	4,280	Ujalváv .	:	43	2,700	Ningála.			
•		Vala Ishwaria Girasia	43 44	2,700	Ningála Ningála	•	44	1,550	Ningála.			
		Bhávnagar .	44	1,550 2,400	Ningála .	•	44 60	2,4CO 4,42O	Ningála. Botád.			
		Chuda Karol	75 82	1,360 2,100	Ránpur .	. •	82	2,100	Chuda, .			
		Limbdi	85	2,100	Chuda .	•	85 93	20 1,530	Chuda. Limbdi.			
		Wadhwan	93	1,530		•	104	1,600	Wadhwan city.			
	Dhola to Porbandar .	Bhávnagar Wangdra Girasia	32 32	4,820	Dhola Dhola	:	32 33	4,820 500	Dhola. Dhola.			
	• .	Bhojavadar Gi-	33	500	Dhola .	•	34	880	Dhola.			
•		Bhávnagar Ingorala Girasia	34 34	880 1,100	Dhola . Dhola .	٠	34	1,100	Dhola.			
		Limbda Girasia.	37	850	Jália .	•	37 40	850 2,000	Jália. Jália.			
		Jália Girasia Bhávnagar	40 4 I	2,000 1,000	Jália Jália	٠	41	1,000	Jália.			
		Baroda	47	1,350	Dhasa	•	47 54	1,350 4,900	Dhasa. Láthi			
	[	Láthi	54 58	4,900 2,520		•	58 63	2,520	Láthi.			
*		Baroda	63	480	Chital .	•	65	480 100	Chital. •			
		Jetpur Kotra Pitha	65 70	100 3,620	Chital . Chital .	•	70	3,620	Chital.			
	i	Jetpur	73 78	2,930	Luni-dhár	٠	73 78	2,930 1,700	Luni-dhár. Luni-dhár.			
		Junágarh	78 78	1,700		•	78	3,950	Luni-dhár.			
•	_	Junágarh .	87	3,950 5,110	Kunkáváv	:	87 91	5,110 3,860	Kunkáváv. Khákharya.			
		Jetpur Junágarh	91 94		Khákharya Khákharya	•	94	2,400	Khákharya.			
		Bantwa	96	2,400 800	Vávdi	•	96 96	800 4,500	Vávdi. Vávdi.			
		Junágarh . Bantwa	96 97	4,500	Vávdi Vávdi	•	97	1,420	Vávdi.			
		Junágarh .	98	1,420 1,660	Vávdi Vávdi		101 86	1,660 4, <b>7</b> 00	Vávdi. Vávdi.			
		Jetpur Gondal	101	4,700	Vávdi ,		110	3,100	Jetalsar.			
		Junágarh .	110 112	3,100 4,100	Jetalsar Jetalsar	•	112 117	4,100	Jetalsar.			
		Gondal Navanagar	117	1,200	Dhoraji		151	1,200 2,330	Dhoraji. Jám Jodhpur.			
		Porbandar .	151	2,330 300	Jám Jodhpur Sakhpur	•	173	300	Sakhpur.			
		 <del> </del>	ı '-	→ <u>→</u>			189	5,150	Porbandar.			

### APPENDIX F.

#### APPENDIX F-concluded.

#### Table of railways constructed in or traversing native states—concluded.

<del></del>			NATIVE STATES TRAVERSED.									
o tal No	RAILWAY.	· · · · · · · · · · · · · · · · · · ·	Сомм	ENCRS AT	En	DS AT						
Serial No.		Names of states.	Distance from Jetalsar junction.	Nearest railway station.	Distance from Jetalsar junction.	Nearest railway station.						
LIV	METRE GAUGE—concid. BHÁVNAGAR-GONDAL-JUNÁ- GÁRH-PORBANDAR—concid.		Miles. Feet.		Miles. Feet.							
·	JETALSAR TO VERÁVAL .	Gondal	***	Jetalsar	1 4,670	Jetalsar.						
		Jetpur	1 4,670	Jetalsar	4 2,055 4 3,610	Choki. Choki.						
	i	Junágarh	4 2,055 4 3,610	Choki	4 3,610 40 5,010	Keshod.						
		Mangrol	40 5,010	Keshod	47 1,050	Mália.						
		Junágarh	47 1,050	Mália	67 980	Verával.						
			Distance from Miyagam junction.		Distance from Miyagam junction.							
LIX	SPECIAL GAUGE. THE GAEKWAR'S DABHOI	•										
	(2' 6")— Miyágám to Bodeli	Baroda	•	Miyágám	42 1,051	Bodeli.						
	MITAGAM TO DODELT	Daioda • •	;··	miyagam	42 1,531	Dodon,						
			Distance from Vishvámitri junc- tion.		Distance from Vishvamitri junc- tion.							
•	Vishvámitri to Chándod	Baroda Sankheda Mewas (Rewa Kantha Agency).		Vishvámitri . Ten Taláv .	26 2,010 29 3,000	Ten Taláv. Chándod.						
		,	Distance from Wadhwan junction		Distance from Wadhwan junction.							
LXI	Morvi (2' 6")	Wadhwán .	1	Wadhwan .	2 1,440	Wadhwan.						
		Kherali	2 1,440	Wadhwan	4 1,440							
		Múli Sáyla	1 , , , , ,	Wadhwan Múli	19 192 31 2,280	Múli. Dolia.						
		Chotila	19 192 31 2,280		33 72	Thán.						
		Lakhrar	33 72	Thán	42 408	Thán.						
		Vánkáner	42 408		59 3,420 68 500	Vánkáner.						
		Morvi	59 3,420	Vánkáner	68 500	Mrorvi.						
•	RAJKOT BRANCH	Vánkáner.	51 4,800	Vánkáner .	64 3,000	Sindhavadar.						
	ļ -	Dhrob	64 3,000	Sindhávadar .	65 3,168							
	!	Khoráná .	65 3,168	Sindhávadar .	70 1,248							
		Gavoridar . Rájkot .	70 1,248 73 3,384		73 3,384 77 1,728							
		Kajkot • •	73 3,384	Itajkot •	1 .''							

APPENDIX

Details of capital expenditure and mileage cost of state railways at the

Mais stars and semests				<del></del> _	<del> </del>				TANDARD
PRINCE   P	}			_ <del></del>		<del></del>	STATE	<del></del> _	
Color   Colo	Man haad and bub-head.	(57'00 M Half-year e:	ILES.) NDING SOTH	(145'50 N	lices.) Nding 30TH	(445°50 N Half•year B	B NORTH- (6) liks,) kolko 3018	LATE INDUS (651'00 HALF-YEAR	VALLEY, (b) MILES.) ENDING 30TH
L. PRELIMITANY ENTERSES		each main	per mile	each	per mile	each	per mile	each	Cost per mile open,
I.		R	R	R	R	R	R	R	R
**************************************	I.—Preliminary expenses—	6,719	118		•••		***		
**************************************				22,545	155		748	8,01,429	1,231
III.—FORMATION—	• 2. Plant	t :			708				. 92 676
I. Earthwork	IILAND	56,396	989	30,359	209	8,33,486	1,871	3,17,344	487
1V.—Bridges   95,581   1,767   57,175   393   1,9197,672   43,092   1,33,49,769   20, 20, 20, 20, 20, 20, 20, 20, 20, 20,	III.—FORMATION—		144	•••	***		***	•	•••
I. Large bridges 95,581 1,767 57,175 393 1,9197,672 43,092 1,31,42,769 20, 20, 20,088 4,491 35,065,507 5, 30,065,5								66,23,820	10,175
2. Minor bridges 1.42/413 2.587 14.285 98 20,00,838 4.491 35.05.507 5, V.—Frencino, &c.—  1. Fencing 2. Road crossing 3. Mile and gradient posts 1.1,006 230 1.191 8 2.78.277 625 3.36.679  VI.—Electric tretegraph	IV.—Bridgework—				•••		***	•••	
V.—Fencing, &c.—  I. Fencing 2. Road crossings 3. Mile and gradient posts  I. Jopó 20 1,191 8 2,78,277 625 330,679  VI.—Electric treegraph  VI.—Ballast  VII.—Ballast  25,000 439 2,63,541 1.811 56,55,213 5,666 45,61,653 7, 1.811 26,55,213 5,666 1.149,90,892 33,630 2,1370,838 32, 1.1811 56,55,213 5,666 1.149,90,892 33,630 2,1370,838 32, 1.1811 26,55,213 5,666 1.149,90,892 33,630 2,1370,838 32, 1.1811 26,55,213 5,666 1.149,90,892 33,630 2,1370,838 32, 1.1811 26,55,213 5,666 1.149,90,892 33,630 2,1370,838 32, 1.1811 26,55,213 5,666 1.149,90,892 33,630 2,1370,838 32, 1.1811 26,55,213 5,666 1.149,90,892 33,630 2,1370,838 32, 1.1811 26,55,213 1.1811 2	1. Large bridges	95,581	1,767	57,175	393	1,91,97,672	43,092	1,33,42,769	20,496
V.—Fencing & C.—  1. Fencing 2. Road crossing 3. Mile and gradient posts 3. 1,1996 230 1,191 8 2,78,777 625 3,30,679  VI.—Electric telegraph	2. Minor bridges	I-47,443	2,587	14,285	-	20,00,858	4,491	35,06,507	5,386
2. Road crossings 3. Mile and gradient posts	V.—Fencing, &c.—	***	410				***		<b>***</b>
3. Mile and gradient posts   1,1,006   230   1,191   8   2,78,277   625   3,36,679    VI.—Electric telegraph	T. Fencing	826	14	<b>115</b>	. 1	4,62,226	1,038	1,16,785	179.
VII.—Ballast	3. Mile and gradient posts.	13,096	230	1,191	8	2,78,277	625	3,36,679	517
1. Ballast			***		140	17,190	38	68,011	105
2. Permanent-way		•••			<b></b>		***		***
1. Stations and offices 2. Workshops, store buildings, &c. 3. Staff quarters. 3. Staff quarters. 4. Station machinery. 5. Staff quarters. 4. Station machinery. 5. Staff quarters. 5. Staff quarters. 5. Staff quarters. 6. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. Staff quarters. 7. St									7,007 32,828
2. Workshops, store buildings, &c. 3. Staff quarters. 4. Station machinery. 53.492 63.657 1.116 63.6915 25.512 175 16.05,655 3 604 21,14.409 3,464 15,588,816 22,  IX PLANT—  1. Engineering . 2. Lecomotive . 33.612 2.322 41 31 32.5559 42.5579 3.385 82.2946 42.5579 30.669 31.500,897 693 25.25.391 5.669 15,39,389 24.613 33.85 82.2946 24.613 33.85 82.2946  24.619 24.619 25.6219 25.6219 25.6229 25.6239 25.62	VIII.—STATIONS AND BUILDINGS—		***		,•••		•••	•••	,
3. Staff quarters	2. Workshops, store build-	84,814 2,056				21,94,900 8,24,816			2,212 1,251
IX PLANT—  1. Engineering	3. Staff quarters	35,492 63,657		25,512 36,915					3,248 2,440
1. Engineering	IX PLANT-	<b>,,,</b>	***		***				
2. Locomotive		33,612	590	1,00,897	693	[ [		<b>j</b>	
X.—Ferries	<ol> <li>Carriage and wagon</li> <li>Station and office fur-</li> </ol>	2,322	41		***	4,25,579 3,385	· 955 8	30,669 22,946	2,365 47 35 451
1. Ferries		1							73.
XI.—Rolling stock	•	<b>!</b>	***	***			***		•••
1. Locomotive		}	***	101	***	•••	•••	4,19,789	645
1. Locomotive	XIRolling stock-		•••		*:•		***		
XII.—General Charges—  I. Direction or general 2. Engineering		 28,924			1,130	26,03,7 <b>8</b> 9 46,32,359	5,845	40,44,662	6,213
1. Direction or general 2. Engineering	XII.—General charges-		***					//-4/73	10,329
2. Engineering	1. Direction or general .	47,115							
4. Audit and account . 12,231 215 24,294 167 4.55.550 1,022 4,38,078 (1.452 by Exchange	3. Stores	24,619	432	2,12,084 37,577	1,457	35,39,430	7.945	43,50,510	2,281 6,683
Loss by Exchange	5. Medical and sanitation .			24,294	167	4,55,550	1,022	4,38,078	1,071 673
	Loss by Exchange		•••		.,,			_	366
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	TOTAL .	(a) 24,97,130	(a) 43,809	(a) <b>5</b> 8,60,956		(a) 7,25,48,225	(a) 1,62.847		(a) 1,19,337

(a) Less receipts on capital account.
(b) Now amalgamated with the North Western railway.

end of the half-year in which the last open section of each line was completed.

				<del></del> -						
AUGE.									<u> </u>	•
YTHES	TATE.									
SIND-SAGA	AR (EAST-	SIND-SAGA	AR (WEST-	NORTH W	ESTERN	AMRITSAF	-PATHÁN-	JAMMU AND	KASHMIR	
ERN SECT (52'50 N	11LES.)	(314'50	TION). (by Miles.)	(PISHIN 8) (454'82 Mi	LKS.) (c)	(64'79	Miles.)	(8,40 )	CTION), (d)	MAIN HEAD AND SUB-HEAD.
HALF-YEAR E	887.	HALY-YEAR Decemb	ENDING 316T	HALF-YEAR EN		HALF-YEAR DECEMB	ENDING 318T ER 1884.	HALF-YEAR : JUNE	1890,	
		Total of			<del>`</del>			Total of		
Total of cach main	Cost per mile open,	each main	Cost per mile open.	Total of each main	Cost per mile open.	Total of cach sub-	Cost per . mile open.	cach main	Cost per mile open,	
head.	<u> </u>	head,		head,		head.		head.		
R	R		R	R	R	R	R	R	R	
^	-			•			•	"		
9	144	75,953	242	ó,78,138	1,491		141	4,642	547	I.—Preliminary expenses—
	•••					6,131	95		***	1. Survey expenses.
***	•••		•••						•••	2. Plant.
**1	•••	•••			""	38,238	590	\		3. Establishment.
				1		0.4			964	
31,912	510	2,30,637	733	2,45,157	539	1,78,635	2,757	7,327	863	II.—Land,
					•	·		96.		·
1			1	2,41,38,336	53,072		•••	7,865	926	III FORMATION-
l l		j	( (	<b> </b>	\ <b></b>	4,10,038	6,329			1. Earthwork.
			1		***	•••	•••		•••	2. Tunnels.
ľ l										
				1,65,91,496	36,479	***	***	5,635	664	IV.—Bridgework—
{		·	1	l		Ŋ		l:	i	t. Large bridges.
1,44,122	2,306	40,28,071	12,808	"		4,40,982	6,806	13		
1 1	`		1			}'	Ì	\	***	2. Minor bridges.
l i										
1				3,83,099	842			3,357	395	V.—Fencing, &c.—
1 [			! I		l	1,19,272	1,841	<b> </b>		1. Fencing.
1						22,208	343			(2. Road crossings.
' [	i		Į l				0,0	ļ .		(3. Mile and gradient posts
Ì					İ			ł		
	***	•••	•••	48,688	107	6,694	103		•••	VI.—Electric telegraph.
-			Ì	{			•	Ī		ĺ.
11,16,158	17,858	90,55,497	28,793	2,32,76,018	51,176	1+1	•••	1,54,457	19,371	VII.—BALLAST AND PERMANENT
				j						WAY
	164		<b></b>	}	<b>}</b>	7.53,084	11,623		•••	I. Ballast.
***	***	•••	***		***	21,03,253	32,463		141	2. Permanent-way.
						ļ		_		
1,14,236	1,828	11,26,231	3,581	57,48,91	12,640	***	•••	31,436	3,703	VIIISTATIONS AND BUILD
		<b></b>		l		2,56,155	- 3,954			INGS —  I. Stations and offices.
• •••	•••				ļ	•••	•••		•••	2. Workshops, store build
•••	,					1,10,046	1,698			ings, &c. 3. Staff quarters.
•••	***	4				1,74,868	2,699		•••	4. Station machinery.
			ļ	ŀ	]			İ		
7,389	118	2,65,822	845	18,19,924	4,002		***	1,258	148	IXPlant-
	•••		<b></b>	•		2,435	. 38	[ <sub> </sub>	<b></b>	; I, Engineering.
***		•••	) ::.	:::	:::		3°			2. Locomotive.
***	•••				}	33,985	 525	• •••	٠	3. Carriage and wagon.
. **1	151		<b></b>	•••	144	33,903	3-3		111	4. Station and office furni- ture.
• •		l		١.	Í					
	***	8,628	27		<b> </b>	***	•		***	X,-Ferries, &c
***	***	-,		ł <sup></sup>	{	'''		]		<b>\</b>
***	***		<b></b>							f. Ferries,
	•		]	1						2. Floating bridges.
				<b></b>	16 305					
2,50,408	4,007	15,47,971	4,922	74,15,587	10303	***	***	***	***	XI.—Rolling Stock—
	144	,	•••	***		1,33,402	<b>2,059</b>		***	1. Locomotive.
•••	***	'	'''	<b>\</b> ""		2,94,958	4,553	<b>)</b> ''' '	•••	2. Carriage and wagon.
			1 .	l., ,			• ,		0	
9,977	160	6,16,151	1,959	39,79,814	8,531	•-•	***	15,144	1,784	XII.—GENERAL CHARGES—
	***	•••				1,38,330	2,135		•••	1. Direction or general.
***	•••	,					•••		***	2. Engineering.
•••	***	•••			:::	***			***	3. Stores. 4. Audit and account.
***	***					***	***		•••	5. Medical and sanitation.
01.150	1,459	12,14,660	3,853	27,76,730	6,105	1+1	•	,,,	***	Loss by Exchange.
91,170	*:439	12,21,000	3,033	[ **,,/~,,3				• ""	*	Loss by Exchange.
			I	<u> </u>	<del></del>			- <del></del> -		
17,65,381		1,81,66,621		8, <b>70,01,8</b> 79		(a) 52,19,922	(a) 80,567	2,41,121	28,401	Total.

<sup>(</sup>c) Includes 98'68 miles of the Quetta loop under reconstruction on a new alignment.
(d) Funds were provided by the Government of India, but the line was constructed by the Kashmir Darbar.

APPENDIX

### Details of capital expenditure and mileage cost of state railways at the

<u> </u>		<del></del> _				_			STA	NDARD
		STATE	LINES COL	NSTRUC E—concl	TED BY	•	[		STAT	E LINES
Main Read and Sub-Bead,	WARDH. (46, 20 Wil Hart-Aeve e	A COAL.	DILDARN GHÁZIP (13:00 MI HALF-YEAR BI DBCEMBE	IAGAR- UR. (4) LED.)	HYDE1 UMA (58°91 l	RABAD- RKOT, Miles.) ENDING 318T ER 1892.	PATR (22'13 ! Half-year June	TILES,) ENDING 30TH	BENGAL-NAGPUR, (831'68 Miles,) HALF-YEAR ENDING 30TH JUNE 1891.	
	Total of each sub-head,	Cost per mile open.	Total of each sub- 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 cach main head.	Cost per mile open.
	R	R	R	R	R	R	R	R	R	R
J.—Preliminary expenses—		•••	,	***	36,345	617	9,008	407	14,86,796	1,788
1. Survey expenses	84,737	1,822	2,218	185 	***	***	•••	***	***	***
2. Plant	6,905		111	•••		***		***		
II,—LAND	3,866	83	4,048	337	18,499	314	23,812	1,076	4,63,178	55 <b>7</b>
III-FORMATION-	]		***	***	1,35,845	2,306		***	1,27,63,445	15,347
į	***	6,605		1,851		•••	51,955	2,348		
1. Earthwork	3,07,132	•	22,207	.,.	•••	***	***	111	***	
IV.—Bridgework—	•••	1**		•••	2,74,256	4,656	***	•••	1,73,61,651	20,875
I. Large bridges	10,06,784	21,651	26,674	2,223			1,00,959	4,562 }		
2. Minor bridges		•••	27,399	2,283		•••	) ",00,939	4,504 }		
V. – Fencing, &c. –					18,815	319	ļ		2,42,368	291
·		,,,	•••		' '	-4,				_
1. Fencing 2. Road crossings 3. Mile and gradient posts	1,96,595 28,067	4,228 604	2,992 177	249 15		***	1,936	87		 ·
VI.— Electric telegraph.	1,382	30					17,326	783		•••
VII.—BALLAST AND PERMANENT-	.,,,,,,,			<b></b>	8,41,011	14,276			2, <b>92,70,</b> 079	35,194
1. Ballast	3,05,050 17,30,803	6,560 37,222	46,135 3,01,381	3,845 25,115		***	49,893 4,65,947	2,255 21,055		
VIII.—STATIONS AND BUILDINGS –	***			1-1	1,38,523	2,351			52,32,373	6,291
1. Stations and offices	91,647	1,971	29,965	2,497	<b>!</b>		4,999	226		.,,
2. Workshops, store build- ings, &c.	1,330	29	]	•••			11,568	523	. · ···	
3. Staff quarters 4. Station machinery .	76,166 1,61,954	1,638 3,483	3,343 34,911	2,909 2,909		***	11,192 7,380	506 333		•••
IXPlant-		•••	<b></b>		16,665	283		•••	15,99,249	1,923
r. Engineering	1,50,776	3,242	4,388	365			375	17	•••	
2. Locomotive 3. Carriage and wagon	20,198	434						•••	:::	***
. 4. Station and office fur-	3,708	<b>8</b> o	888	74	<u> </u>					
X.— Ferries, &c.—	3,,00	,			25,334	430		•••		
1. Ferries	}								***	
XI.—Rolling stock—	3,025	65	:		7,056	120		.,,	<b>77,91,8</b> 19	,
1. Locomotive						<u></u> .		***		
2. Carriage and wagon .		,,,,		,	***	•••	••••			•••
XII.—GENERAL CHARGES—	,,,		}		1,05,048	1,783		***	55,32,225	6,652
<ol> <li>Direction or general .</li> <li>Engineering .</li> </ol>	68,296 2,93,96 <b>5</b>	1,469 6,322	13,918 37,992	1,160 3,166		•••	 46,284		•	
3. Stores	23,015	495	1,360	113		***	7,134	2,091 322	•••	
4. Audit and account 5. Medical and sanitation	35,405 4,265	76; 92	3,419	285			***	•••	•••	
Loss by Exchange				<b></b>	***	441	•••		6,53,185	
TOTAL	(a) & (c) 45,99,369	(b) 98,911	5,63,415	46,951	16,17,397	27,455	8,09,768	36,591	8,23,96,368	99,072

<sup>(</sup>a) Includes 13 miles to pit's mouth.

(b) Less receipts on capital account.

(c) Difference due to the credit under the head "Contingencies" not having been deducted from any of the main heads.

(d) Now amalgamated with the East Indian railway.

(e) This now forms a part of the Bombay, Baroda and Central India railway.

end of the half-year in which the last open section of each line was completed—contd.

AUGE—con								
ONSTRUCT	ED BY CO	MPANIES.				_		
INDIAN MID (677'35 N HALF-YEAR E DECEMBE	IILES.) NDING 31ST	BEZVÁDA E (21°47 ? Half-year s June	VIILES.) INDING 30TH	LATE SIND AND DEL (665) 25 HALF-YEAR B DECEMBE	Miles.) Nding gier	OUDH AND KHA (601'07 N HALF-YBAR W DECEMBE	ND. Miles.) Nding <b>Jie</b> t	Main head and gub-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	444	***	6,84,160	990	I.—Preliminary expenses —
	-		***	4,76,295	718			1. Survey expenses.
***			•••	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	/			2. Flant.
•••	•••		***	<b>!</b> "	•••	***	•••	3. Establishment.
4,93,480	728	47,008	2,189	63,133	95	1,47,461	213	IILAND.
i			1	l			<b></b>	III.—FORMATION—
[			·		•	1	- (1	
<b> </b> •		1		56,60,637 	8,535	1		<ol> <li>Earthwork.</li> <li>Tunnels.</li> </ol>
				"	•••			IV.—BRIDGEWORK—
				l?	(	0 82 60 -60		1. Large bridges.
3,01,28,005	44,479	2,76,516	12,879	1,52,21,433	22,950 {	2,87,63,062	41,461	2. Minor bridges.
3,00,00,00	47/4/2	,, .		1	•	]	11	<b>5</b>
,				<b>l</b>	***	1	i I	V.—Fencing, &c.—
1		ĺ		28,84,675	. 4.040		k [	1. Fencing.
				4,04,816	4,349 610	/	- 11	(2. Road crossings.
				4.04,010	<b>01</b> 0		\	3. Mile and gradient posts
	ŀ	•	<u> </u>	<u>.</u>	_	i	_	
			'	7.08,907	1,069	46,128	67	VI.—ELECTRIC TELEGRAPH.
2,74,81,967	40,573	6,04,944	28,176	***	***	2,45,14,855	35,474	VII.—BALLAST AND PERMANENT WAY.—
	٠		***	46,84.475	7,063		·	I. Ballast.
		***	***	2,65,32,834	40,004			2. Permanent-way.
50,61,580	<b>7</b> ,473	2,58,221	12,927	•		91,14,451	13,189	VIII STATIONS AND BUILDINGS-
				69,91,608	10,542			1. Stations and offices.
	•••			_	ı			2. Workshops, store build
***	•••	•••	***	27,27,176 14,58,718	4,112 2,199			ings, &c. 3. Staff quarters.
	***	***	***	49,677	75		***	4. Station machinery.
3,79,558	560	8,990	419	12,61,606	1,902	19,62,808	2,840	IXPLANT-
	-			<b>!</b>	•			
,	***	***	•••	1	•••	***	•••	I. Engineering.
***	•••	***	***		•••			2. Locomotive. 2. Carriage and wagon.
***	***	•••	491		***	114		4. Station and office fur niture.
***		. ***		<b>[</b>	***			X.—Ferries, &c.—
***	•••		141	48,98,454	386		144	(1. Ferries. (2. Floating bridges.
57,65,284	8,511	20,384	<b>9</b> 49		***	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.
(g) 37,85,858	5,589	1,15,977	5,402	81,99,624	12,363	83,26,389	12,049	XIIGENERAL CHARGES-
2/1021020	313 <del>43</del>	-1-01311	3,70=	,,,,,,,,,		-0110-9	,,5	
:		***	, tre	***	***	***	***	<ol> <li>Direction or general.</li> <li>Engineering.</li> </ol>
;	***		***					3. Stores.
***	<b>\$4</b> 9		444		***			<ol> <li>Audit and account.</li> <li>Medical and sanitation</li> </ol>
***	***		14.0	"	•••	"	···	_
2,52,050	37 <sup>2</sup>		440	•••	***	<b>,</b>		Loss by exchange.
7,42,50,955	1,09,620	(h) 13,47,359	62,755	9,87,92,919	1,48,952	( <i>j</i> ) 8,88,68,152	1,28,595	Total.

<sup>(</sup>f) Includes the Sindia rallway, which was constructed by the State.
(g) Includes Government supervision, audit and control, and commission, etc., on loans.
(h) Includes R2,164 on account of receipts on capital account which cannot be deducted from the several main heads.
(i) Now amaignmented with the North Western railway.
(f) Includes R8,57,286 on account of maintenance, commission on debentures, Nalháti railway, and lines abandoned.

#### APPENDIX

### Details of capital expenditure and mileage cost of state railways at the end

					STAN	IDARD GA	UGE – concld	
ļ		N	ATIVE STA	TE LINES	CONSTRUC	TED BY GO	VERNMENT	OF INDIA
Main egad and sub-bead,	KHÁM! (7:50 N Hade-year i June	ITLES.) ENDING SOTH	AMR/ (5150 N Half-year I June	IILES.) INDING <b>30TH</b>	BHOPAL . (57°11 t Half-year e Droemb	Milsa.) Indino 318T	RÅJPURA-F (107 94 M Half-year Decembi	ILER,) (b) Ending list
	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 . 2. Plant 3. Establishment	369 ( 	49 	1,117 	<b>2</b> 03 	***	***	12,112 5,976 41,334	<b>112</b> 55 <b>38</b> 3
II.—LAND	404	***	<b>2</b> ,450	446	13.152	230	(c) 14,758	137
III.—FORMATION—	***	•••		. •••		•••		
1. Earthwork 2. Tunnels	38,542	5,139 	17,926 	<b>3,2</b> 59	14,66,278	25,675 	2,59,841	2,407 • <u>•</u> •
· IV.—BRIDGEWORK—	***	•••				•••		4**
1. Large bridges	} 54,037	7,205	{ 58,880	 10,706	16,81,384 1,67,168	20,441 2,927	} 5,13,915	4,761 {
V.—Fencing, &c.—	***	***	•••	<b>***</b>		•••		•••
<ol> <li>Fencing</li> <li>Road crossings</li> <li>Mile and gradient posts</li> </ol>	7,215	962 1	<b>2,04</b> 2 <b>2</b> 55	. 46	17,713 25,145	310 440	75,674 1,08,689	701 1,007
VI.—Electric telegraph.	1,247	166	1,099	200	3,340	58	***	
VII.—BALLAST AND PERMANENT.		•••	•••	***		•••	. ***	***
1. Ballast 2. Permanent-way	18,403 2,56,936	2,466 <b>34,2</b> 58	14,765 2,58,552	• 2,685 47,009	1,87.035 14,54,617	3.275 25,470	9,65,594 29,28,299	8.946 <b>27,</b> 129
VIII.—STATIONS AND BUILDINGS—				***		***		***
<ol> <li>Stations and offices</li> <li>Workshops, store buildings, &amp;c.</li> </ol>	7,233 3,277	96 <sub>4</sub> 437	15,412 634	2,802 115	1,12,005 	1,961 	3,41,696 7.509	3,166 70
3. Staff quarters	6 057 3,836	808 512	1,171 2,522	213 459	53,322 1,11,687	934 1,956	1,86,936 2,77,204	1,732 2,568
IXPLANT-	***	•••		•••	•••	***		***
1. Engineering 2. Locomotive 3. Carriage and wagon 4. Station and office furniture	3,096 	413 	2,636 	479 	3,752 	66 	47,910  	444
	<i>7</i> 6	10	176	32	2.553	45	35,644	330
XFerries		•••	•••	•••	•	•••		***
· 2. Floating bridges	}	•••	•••	<b></b>		• ,		***
Xi.—ROLLING STOCK—  I. Locomotive	***	•••	44+	***		•••		***
2. Carriage and wagon	316	42	· 6 <sub>0</sub>			•••		- 
XIIGENERAL CHARGES-				***		***	***	100
1. Direction or general 2. Engineering 3. Stores 4. Audit and account 5. Medical and sanitation.	23,283 141 792	3,104 10 106	 <b>33,4</b> 85 96 <b>4,<sup>0</sup>77</b>	 6,088 18 741	1,11,768 1,83,007 4,516 34,231	1,957 3,205 79 599	37,123 1,91,625 31,800 1,383	344 1,775 294 13
Loss by exchange			•••	***	3,189	56	***	
TOTAL	<b>4</b> ,24,954	56,661	4.17,355	75,883	(a) 56,32,823	(a) 98,631	(a) 60,84,715	(a) 56,371

<sup>(</sup>a) Less receipts on capital account.
(b) Of this, 16 miles were constructed by the late Sind, Punjab and Delhi Rallway Company.
(c) Includes a debit of R7,200 against Provincial grant of R10,000.

of the half-year in which the last open section of each line was completed-contd.

		i		METRE	GAUGE.			[		
		<del></del>	STATE L	INES CONSTRU	CTED BY TH	E STATE.		ļ		
JAMMU AND NATIVE STATE: (1980) M Half-year 30th Jun	SECTION). (d) IILES.) E ENDING	BENGAL AN WEST (TIRHOOT) (340-57 I HALF-YEAF JOTH JUN	ERN ection.) Miles.) R Ending	(1,411'00	R ENDING	CAWNPORE-A (260'65) HALF-YEA 318T DECE	R ENDIMO	MAIN HEAD AND SUB-HEAD.		
Potal of each main head,	Cost per mile open,	Total of each male or 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	<b>#</b>	R			
23,937	1,504	1,83,608	539		***	. ,,,	•••	I Preliminary expenses		
•••	•••			5,05,727	358	12,744	49	1. Survey expenses.		
111	•••		•••	83,116 16,11,838	59	2,252 56,582	9 217	2. Plant. 3. Establishment.		
		8,64,045		_	1,142		•	_		
•••	***	0,04,045	2,537	8,36,218	593	<b>2</b> ,37,395	911	II.—LAND.		
33,896	2,129	10,70,740	3,144	•••	•••		***	III.—FORMATION—		
			***	62,20,489	4,409	5,13,612	1,970	1. Earthwork.		
	***	***	•••	4,28,063	303	•••	***	2. Tunnels.		
2,33,246	14,651	49,54,395	11,905		***		***	IV.—Bridgework—		
	***		***	1,56,62,747	11,100	12,11,115	4,647	. Large bridges.		
149	***	***	206	40,92,720	2,901	4,58,833	1,760	2. Minor bridges.		
.1,818	114	8, <sub>9</sub> 8,68 <sub>7</sub>	2,639	]	***		`***	V.—Fencing, &c.—		
			***	9,05,230	642	2,04,379	784	I. Fencing.		
***	•••		***	5,55,095	393	1,04,924	403	2. Road crossings. 3. Mile and gradient po		
•••	***		***	15,972	111	2,469	9	VI.—Electric telegraph.		
5,39,566	33,892	79,17,164	23,248		.• •••			VII.—BALLAST AND PERMANE WAY—		
***	•••		•••	38,68,803	<b>2</b> ,742	6.81,843	<b>2,6</b> 16	1. Ballast.		
***			***	2,78,76,953	19,756	38,90,417	14,926	2. Permanent-way.		
· 1,05,946	6,655	30,55,423	8,971	•••	•••		***	VIII.—STATIONS AND BUILDIN		
• • • • • • • • • • • • • • • • • • • •			***	42,53,692 18,08,935	3,015 1,282	4,33,311 1,17,724	1,662 452	<ol> <li>Stations and offices.</li> <li>Workshops, store b</li> </ol>		
				46,80,834	•		1,256	ings, &c. 3. Staff quarters.		
•••	***		***	33,91,100	3,317 2,403	3,27,500 4,12,999	1,585	4. Station machinery.		
54,461	3,421	5,77,580	1,696				***	IX.—PLANT—		
			***	10,21,797	724	15,085	58	I. Engineering,		
	•••		•••	6,81,691	483	79,760	306	2. Locomotive. 3. Carriage and wagon.		
	•	***		1,96,806 5,84,665	140 414	46,599 <b>63,</b> 781	179 <del>2</del> 44	4. Station and office f		
ĺ								ture. •		
	914	5,53,048	1,624				***	X.—Ferries, &c.—		
•••			*** .	**1	•11 .	***	***	{ 1. Ferries. { 2. Floating bridges.		
								XI.—Rolling stock—		
***	***	6.0				***		_		
***	411	6,18,124 16,49,660	1,815 4,844	64,84,266 1,01,01,934	4,596 7,159	5,94,955 10,65,690	2,282 4,089	<ol> <li>Locomotive.</li> <li>Carriage and wagon.</li> </ol>		
66,598	4,183	13,64,597	4,007	***		444	•••	XII.—General charges—		
	•••		***	14,56,740	1,032	1,62,443	622	1. Direction or general.		
114	***		***	45,88,107 7,04,911	3,252 499	3,79,333 38,160	1,455 147	2. Engineering. 3. Stores.		
	***		***	5,62,788	499 399	39,234	151	4. Audit and account.		
	•••	}	***	2,56,498	182	166	ī	5. Medical and sanitati		
***		7,04,770	2,069		٠	3,65,480	1,402	Loss by exchange.		
	<del></del>			(a)	(a)			•		
10,59,468	66,549	2,35,12,141	69,038	10,33,31,793	73,234	1,15,18,785	44,192	TOTAL.		

<sup>(</sup>d) Funds were provided and the line constructed by the Kashmir Darbar.
(e) This now forms a part of the Rajputana-Malwa railway.

#### - APPENDIX

### Details of capital expenditure and mileage cost of state railways at the end of

•								METRI
Main HEAD AND BUB-READ.	SOUTHERN (Mysore sec (3cr'25 M	CTION). (4) diles.) R Ending	ROHILKUND A (Lucknow- Bection (19838 Half-Yea	BARBILLY ), (b) Miles.) R Ending	NORTHERN (249'00 N Half-year 30th Jun	N BENGAL HILES.) R ENDING	TATE LINES C  DAC  (86'00 N  Half-Year 301H Jus	CA files.) R EMDINO
	Total of each	Cost per :	Total of each main or	Cost per mile open,	Total of each main head,	Cost per mile open.	Total of each main head.	Cost per mile open.
	eub-head.		sub-head.	R	₽.			
'			^					,
I.—Preliminary expenses —	3,10,806	<b>9</b> 99	1,63,458	824	96,768	389	1,27,838	1,487
1. Survey expenses		•••		***		***		•••
3. Establishment		•••		***	•••	***	•	***
II.—LAND	68,779	221	1,69,729	856	8,15.722	3,276	4,46,381	190
III.—FORMATION—	24,63,701	7,916	3,88,907	1,960	,			Í
r. Earthwork	•	•••		•••				İ
2. Tunnels • • ·	***	***		•••	ļ			
IV.—BRIDGEWORK—	19,66,251	6,317	6,29,686	3,174				
1. Large bridges		***		***	57,17,876	22,963	13,68,484	15.913
V.—Fencing, &c.—	1,49,541	480	1,00,260	505				
1. Fencing			•••	***				
<ol> <li>Read crossings</li> <li>Mile and gradient posts</li> </ol>	}	***		•••				
VI.—ELECTRIC TELEGRAPH	***	***		***	J			,
VII.—BALLAST AND PERMANENT- WAY—	52,06,975	16,729	31,64,971	15.954	54,77,900	22,000	17,22,430	20,028
1. Ballast		. ***		•••			•••	•••
2. Permanent-way	***	***	•••	***		***	***	•••
VIII.—STATIONS AND BUILDINGS—	10,36,192	3,329	7,11,247	3,585	26,29,765	10,561	10,44,473	12,145
<ol> <li>Stations and offices</li> <li>Workshops, store build-</li> </ol>		***	:::	***				***
ings, &c.		441					1	-
4. Station machinery	*:*	***	***	•••	•••	***	***	***
IX,-PLANT-	2,96,983	954	2,09,267	1,055	8,66,514	3,480	2,56,056	2,977
1. Engineering		•••				100	***	***
3. Carriage and wagon 4. Station and office furni-		•••		•••	***	***	•••	•••
ture.		574		144	•	***	•••	***
XFERRIES, &C		•••		•••	4,47,048	1,795		. •14
1. Ferries 2. Floating bridges	}	•••		•••	***	***	331	141
XI.—ROLLING STOCK—  1. Locomotive	7,87,039			***	24,46,682	9,826	7,04,760	8,195
2. Carriage and wagon	14,11,372	2,529 4,534	4.38,645 6,95,911	2,211 3,508	***	117	***	***
XII.—GENERAL CHARGES—	9,33,317	2,999	3,97,663	2,005	21,94,569	8,814	3,47,809	4,044
1. Direction or general .		:		•••				*,- **
2. Engineering 3. Stores	***	***		•••	***	•••	***	•••
4. Audit and account	•••	•••		***	***			•••
5. Medical and sanitation .	] "	•••		•••		•••		
Loss by exchange	] "		42.150	212	***	***		***
• Тотац .	1.45.00.00		(c)	(0)	<u> </u>			
TOTAL .	1,46,30,956	47,007	71,11,894	35.849	2,06,92,844	83,104	60,18,231	69,997

(a) Gubbi-Harihar section was constructed by the Southern Mahratta Railway Company.

(b) Of this length, 58 miles, Gola Gokaran Náth to Pilibhit, were constructed by the Robilkund and Kumaon Railway Company.

### the half-year in which the last open section of each line was completed-contd.

AUGE-con	n!d.		=	<del></del>				
Y THE STATE	E-concld.			···—		STATE LINES ED BY COM		
EASTERN I	BENGAL- BECHON.) MILES.) NOING 318T	BUR * (327°CO I HALF-YEAR 1 DECEMBI	Milse.) Inding 3187	TOUNGOO-M (230'00 P HALF-YEAR S JUNE	MILES.) ENDING SOTH	SOUTHERN I (1,043'70 HALF-YEAR E DECEMBE	MAHRATTA, Miles,)	MAIN HEAD AND SUB-HEAD.
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,	Total of each main head.	Cost per mile open,	
R	R	R	R	R	R	R	R	
	•••	<b>2</b> ,87,279	878	1,71,251	<b>7</b> 78	10,90,911	1,045	I PRELIMINARY EXPENSES -
88,703	567		***	.,,	•••			I. Survey expenses.
***	•••		***			•••	***	2. Plant. 3. Establishment.
3,18.580	2,036	2,71,658	1ز8	3,16,081	1,437	10,25,442	982	II.— LAND.
***			•••	<b>!</b>	1	1,88,17,573	18,030	III.—Formation—
13,63,596	8,713	32,40,803	9,911	<b> </b>			***	1. Earthwork,
417	***		<b></b> ·				***	2. Tunnels.
	***					1,83,66,507	17.597	IV.—Bridgework→
31,07.753 4,35,158	19,858 2,780	13.89,139 31,21,404	4,248 9,545	65,78,182	29,900	· •••	***	<ol> <li>Large bridges.</li> <li>Minor bridges.</li> </ol>
			•••			13,47,110	1,291	VFencing, &c
2,70,012	1,725	10,87,600	3,326					I. Fencing.
1,48,637	950	3,00,316	918		(		***	( 2. Road crossings. ( 3. Mile and gradient post
18,903	121	655	2	,	`	· •	***	VI.—ELECTRIC TELEGRAPH.
•	***		***	57,83,275	26,288	2,15,49,213	20,647	VII.—BALLAST AND PERMANENT WAY—
10,37,935	6,632 15,619	22,77,119 52,55,352	6,964 16,071	l ::: [	***	<u></u>	***	1. Ballast. 2. Permanent-way.
				20 22 262	8,284	04.00.005	•	VIII,—STATIONS AND BUILDINGS—
3,24, <u>5</u> 69	 2,074	12,96,933	 3,966	18,22,563	•	94,23,387	9,029	1. Stations and offices.
18,829	120	5,07,975	1,554	:::	***		***	2. Workshops, store buildings, &c.
3,32,151 2,22,167	2,122 1,420	5,03,899 6,79,480	1,541 2,078		***		***	3. Staff quarters. 4. Station machinery.
		<b></b> [	•••	4,16,257	1,892	25,76,012	2,468	IXPlant-
1,82,770	1,168	4,44.418	1,359		***	<b> </b>	***	I. Engineering.
45,466	291 2	1,89,895	581	<b> </b> }	***		***	2. Locomotive
287 26,348	168	85,699	262		***	:::	***	<ol> <li>Carriage and wagon.</li> <li>Station and office furn ture.</li> </ol>
					***	] ]	***	X.—Ferries, &c.—
10,417	67	<b></b>	***		141		•••	{ 1. Ferries. { 2. Floating bridges.
·	***	35,62,697	10,895	33,94,051	15,429	99,03,576	9,489	XI.—ROLLING STOCK—
1,75,721 7,88,873	1,123 5,041		***		144	***	***	1. Locomotive. 2. Carriage and wagon.
					6,671	63,63,170		_
 1,82,507	,,166·	2 07 025	 697	14,67,669	•		6,097 	XII.—GENERAL CHARGES—
4,51,599	2,886	2,27,935 15,00,406	4,588	***	•••		***	r. Direction or general. 2. Engineering.
45,062 48,281	288 308	1,34 322	411	<b>!</b>	***		***	3. Stores.
18,953	121	1,44,758	443 68	***	• • • •		***	<ol> <li>Audit and account.</li> <li>Medical and sanitation</li> </ol>
1,35,841	868		***	***	•••	4,91,090	471	Loss by exchange.
		<u> </u>				<u> </u>	<u> </u>	•
(d) 1,22,28,381	(d) 78,137	2,65,32,093	81,137	1,99,49,332	90,679	9,09,53,991	87,146	Total.

<sup>(</sup>c) Excludes R41,039 on account of interest on capital during construction, (d) Less receipts on capital account.

#### APPENDIX

### Details of capital expenditure and mileage cost of state railways at the

·	<del></del>	· · · · · · · · · · · · · · · · · · ·		METRE GA	UGE—concld	•		·
	STATE LINES ED BY COMPA		N/	ATIVE STATE	LINES CONST	RUCTED BY	GOVT. OF IND	Α.
. MAIN HEAD AND SUB-HEAD.	SOUTH IN (1,105'19 HALF-YEAR E	IDIAN (a), Miles,) nding 30th	BĤÁVNAGA JUNÁGARH-P (329°16 M Hauf-year 1 Decembi	ORBANDAR, ILES,) (c) INDING 3151	(JODHPORE 8 (247 50	BICKANEER (SECTION), (4) MILES,) ENDING 31ST ER 1891,	JODHPORE-1 (BICRANEE (43°50 HALF-YEAR: DECEMB	R BECTION) Miles :
	Total of each main or sub-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
I.—Preliminary expenses—.	10,53,350	953	1,19,442	363	36,159	146	7,826	180
1. Survey expenses 2. Plant 3. Establishment .	 	***	 	*** ***	 	•••	 	· •••
II.—LAND	3,68,516	333	•••	•••	1,007	4		***
III —FORMATION—	58,05, <u>5</u> 85	5,253	16,74,017	5,086	1,46,446	592	60,535	1,392
2. Tunnels	•••	•••	***	•••		•••	···	***
IV BRIDGEWORK	1,61,76,094	14,636	41,19,819	12,516	1,14,589	463	2,500	57
1. Large bridges	•••	•	•••	***	 	•••	•••	***
V.—Fencing, &c.—	15,56,642	1,408	71,451	217	1,363	, <b>5</b>	105	2
2. Road crossings	}	•	•••	•••	 	••• •••	•••	***
VIELECTRIC TELEGRAPH	79,156	72	10,425	32	<b>22,45</b> 5	. 91		•••
VIIBALLAST AND PERMANENT- WAY-	1,98,48,558	17,959	49,16,242	14,935	31,92,247	12,898	13,42 378	30,859
r. Ballast	·		•••	•••	···	***	***	***
VIII.—STATIONS AND BUILDINGS—	68,68,593	6,215	21,49,764	· 6,531	2,13,987	865	14,075	324
<ol> <li>Stations and offices</li> <li>Workshops, store build- ings, &amp;c.</li> </ol>	•••		1	***	 	***	***	•••
3. Staff quarters 4. Station machinery	***	***	 	***	•••	***	 .,,	
IX.—PLANT—	17,09,224	1,547	3,52,828	1,072	44,952	182	1,033	24
1. Engineering 2. Locomotive	•••	***		,,		***	• .,,	*
<ol> <li>3. Carriage and wagon</li> <li>4. Station and office furni-</li> </ol>	•••	•••	•••		 		•••	***
ture. X.—Ferries, &c.—			···	•	•••	•••	•••	***
1. Ferries	}		***	•••	•••	***	····	•••
XI.—Rolling stock—		•••	21,57,548	 6,555	***	***	***	. ***
1. Locomotive . 2. Carriage and wagon	37,90,132 68,29,732	3,429 6,180	***	***	69.636	281	111	•••
XIIGENERAL CHARGES	85,85,916	7,769	8,73,566	2664	2,51,663	1,017	184	514
1. Direction or general 2. Engineering			6,73,500	2,65,4 ···	67,587	273	4,254	98
3. Stores		****	•••			•••	•••	***
<ol> <li>Audit and account .</li> <li>Medical and sanitation .</li> </ol>		***	***	***		***		r**
o some one samuelle	***	•••	148	***	***		***	•••
Loss by exchange	2,42,360	219	***	•••	•••	***		•••
(a) Includes the Villapuram	(b) 7,40,32,138	(b) 66,986	1,64,45,102	49,961	41,62,091	16,817	14,32,706	32,936

<sup>(</sup>a) Includes the Villupuram-Guntakal section, which was constructed by the State.
(b) Includes R11,18,380 on account of maintenance charged to capital account, not included in any of the minor sub-heads.
(c) Excludes 4'so miles of state mileage in dock estates and quarry lines constructed and maintained by the states themselves.
(d) The section from Kharchi to Pall was constructed by the Jodhpore Darbar.

end of the half-year in which the last open section of each line was completed—concluded.

<del></del>		] .			SPECIAL	GAUGES	 5.		<u></u>	1 .
NATIVE LINE CONS	STRUCTED					RUCTED BY	<del></del>			
BY COMPANY, GAEKWAR'S MEHSA NA. (02'03 MILES.) HALF-YEAR ENDING JIST DECEMBER 1801.		(37°03 M° OAL HALF-YEAR	DHARLLA, ilea, x' 6" ior.) ending 31at ber 1894,	NALHATI. (27-25 Miles, 4'0" Gauge ) Half-year ending jist December 1880,		CHERRA-COM-		JORHÁT. (30'60 MILES 2'0" GAUGE.) HALF-YEIR BNDING JIST DECEMBER 1887.		Main héad 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 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	P.	R	P	R	
10,385	112	910	25					388	13	1.—Preliminary expenses—
 	 	 	 	 	•••		•••	····	••• ••• •••	<ol> <li>Survey expenses.</li> <li>Plant.</li> <li>Establishment.</li> </ol>
	•••	14,432	390		•••		•••	4.728	155	IILAND.
2,65,898	2,871	\				•••	***	\	1	III.—FORMATION—
						53,025 	7,070 			<ol> <li>Earthwork.</li> <li>Tunnels.</li> </ol>
4,61,777	4,985						•••		-	IVBRIDGEWORK-
***	***	88,841	2,401	(e) 21, <b>6</b> 90	796	12,745 2,058	1,6ç9 275	) 1,18,590	3,875	1. Large bridges. 2. Minor bridges.
50,501	<b>5</b> 45					***	1115			V-Fencing, &c
•••	•••	٠				***	***			<ol> <li>Fencing.</li> <li>Road crossings.</li> <li>Mile and gradient posts.</li> </ol>
***	***	) <u></u>	***	•	l	***	***		//	VI.—ELECTRIC TELEGRAPH.
16,43,851	17,746	4,98,68 <b>o</b>	13,478	(e) 1,90,420	6,988		***	3,09,34 <b>6</b>	10,109	VII.—BALLAST AND PERMA- NENT WAY—
***	•••	•••	***			78,933	 10,524	 	•	t. Ballast. 2. Permanent-way.
3,47,640	3,753	21,470	580	(e) 25,600	939	. ***	•••	62,578	2,045	VIII.—STATIONS AND BUILD-
***	•••	•••	***	***	***	2,012 5,444	268 726		•••	<ol> <li>Stations and offices.</li> <li>Workshops, store buildings, &amp;c.</li> </ol>
•••	•••	100	***	 (e)	•••	672 8,502	89 1,134	•••	***	3. Staff quarters. 4. Station machinery.
29,870	323	8,444	228	7,500	275		***	20,606	673	IX.—PLANT—
	***	***	•••	111 ·	•••	944 1,175	126 157			<ol> <li>Engineering.</li> <li>Locomotive.</li> </ol>
161	•••		•••	•••	•••	1,000	_133	 	***	<ol> <li>Carriage and wagon.</li> <li>Station and office furniture.</li> </ol>
***	***	1,20,677	3,261		•••	•••	104	110	••••	X.—Ferries, &c.—
	•••	•••	• •••	 (e)	<b></b> .				***	{ 1. Ferries. { 2. Floating bridges,
16,026	173	1,60,637	4,342	50,000	1,835			1,18,901	3,886 ·	XI.—ROLLING STOCK—
***	•••	***	•••	••• 211	•••	17 672 <b>2</b> 0,611	2,356 2,748	•••		<ol> <li>Locomotive,</li> <li>Carriage and wagon.</li> </ol>
78,102	843	8,291	224	(a) 30,00 <b>0</b>	1,101	23,253	3,101	36,622	1,197	XII.—GENERAL CHARGES—
,000 .00			•••					***		<ol> <li>Direction or general.</li> <li>Engineering.</li> </ol>
١	•••	***	•••	***		***			•••	3. Stores,
•••	144		***	***	***	•••	***	***	****	4. Audit and account. 5. Medical and sanita- tion.
	***	•••	•••	<b>ø</b>	***				•••	Loss by exchange.
29,04,050	31,351	9,22,382	24,929	3,25,210	11,934	(f) 2,30,408	30,721	6.71,759	21,953	Total.

APPENDIX
Statement showing the actual capital expenditure on open lines of railway which

	1884-85.		1885-86.		1886-87.		1887-88.	
RAILWAYS.	Mileage.	• R	Mileage.	R	Mileage.	R	Mileage.	R
East Indian (a)	2,605}	27,45,025	1,611	25,51,427	1,615	16,36,685°	b)1,609}	6,06,640
Rajputana-Malwa-(c) Holkar	<u> </u>  }							Į.
Cawnpore-Achnera (d)	1,663	18,72,973	1,6674	21,36,762	1,6673	2,60,459	1,667₹	0,32,413
Rewari-Ferozepore						***	***	•••
Sindia (e)	742	9,463	74\$	48,187	* 74\$	6,365	743	1,895
Warora colliery including Wardha Coal railway to end of 1890-91	461	2,10,524	46)	2,00,554	461	2,73,320	46≩	-1,41,792
Wardha Coal		44+		4-1	•••	•	***	
Umaria colliery	•••	93,827	•••	1,62,159 ·	•••	3,32,636	, <b></b>	1,53,534
Burma (state)	260	6,47,647	333	10,87,567	333	1,50,534	<b>3</b> 33	2,27,796
Eastern Bengal (state) (h)	5292	22,67,008	6064	26,74,701	606}	17,74,189	676)	20,68,575
Bengal-Nágpur-			•		·			
Katni-Umaria (i)	***	***	***	***	. <b></b>	<b></b>	37	1,10,938
Nágpur-Chhattisgarh (f)	149	6,99,911	149	4,53,490	149	6,76,393	(k)	.,,
Tirhoot	227	4.79,247	2257	<b>4,90,35</b> 6	245₹	2,70,398	<b>2</b> 594	3,45,774
Oudh and Rohilkhand (state)		•••		•••		•••	•••	•••
North Western (state) (m)	947	<b>23,39,</b> 991	, 7,791 <del>1</del>	37,71,499	2,058	11,43,159	2,3842	45,00,567
South Indian		•••	•••	***	***	***	•••	***
Berwada extension			-		***	•••	•••	***
Dhond-Manmád • • • • • • •	1452	1,10,291	1457	1,956	145 <b>1</b>	20,777	1451	12,170
•			ļ			<del></del>		
Total	5,648	1,14,75,907	6,6502	1,25,97,946	6,943	65,44,915	7,235	89,18,519

DIX H.

are the property of the State, and the mileages during the nine years 1884-85 to 1892-93.

1888-89.		188	89 <b>-9</b> 0.	1890-91,		, 1891-92,		1892-93.			
Milcage.	R	Mileage.	R	Mileage.	R	Mileage.	R	Mileage.	R	Remarks.	
•1,610	36,156	1,610	6,70,785	1,610	—1,27,178	1,610	-7,31,147	7,613 <del>1</del>	13,25,919	(a) Treated specially in 1884-85 Includes expenditure on the Dildarnagar-Gházipur, Patna Gya and Nalhati railways. (b) Benares branch transferred to the Oudh and Rohilkhand railway	
1,665	5,11,381	. 1,672}	1,89,927	1,672 <del>}</del>	35,419	1,674	—3,31,136	1,674	6,01,212	(c) There may be some outlay in the earlier years which could properly be dealt with as construction outlay, but it is difficult to make a separation.  (d) Includes the Cawnnore-Farukh abad and Hathras-Mutra Achnera sections. Excludes expenditure on the Farukhabad Hathras section and Jumna bridge during 1884-85.	
	•••	•••	•	13	1,69,118	13	1,96,542	13	2,69,8:4		
•	•••		•••	149	<b></b>			 		(e) Excludes credit realized from the Indian Midland railway in 1888-89 on account of total outlay transferred to that line.	
461	- 28,954	461	-31,227	. 46}	-2,50,955		12,667		9,918	transitive to that fine.	
	<b></b> .	· <b></b>		<b>**</b> 1	•••	( <i>f</i> )45	-2,78,105	45	6 <b>,4</b> 93	(f) Excludes 11 miles at Warora retained by the colliery as a siding on the transfer of this railway to	
•••	87,231		44,470	, ,	54,458		<b>7</b> 1,788	<b></b>	37,608	the Great Indian Peninsula Rail way Company.	
(g)55 <b>5</b>	8,46,796	555 <b>1</b>	4,24,086	_538 <u>1</u>	1,48,664	558)	4,58,825	558}	2,32,568	(g) Includes the Toungoo-Manda- lay railway.	
676	12,21,223	750 <b>1</b>	16,30,513	7781	14,33,124	777	12,91,146	777	8,94,965 •	(h) Treated specially in 1884-85. Includes outlay on sidings and extensions which cannot be separated.	
·									•		
	<b></b>	•••		<b>-</b>					***	(i) Transferred to the Bengal- Nagpur callway in 1888-89.	
	<b></b>	***		•••		 	•••• ••••		••• •••	(j) Includes outlay on the Kanhan bridge from 1884-85 to 1886-87. (k) Taken over by the Bengal Nágpur railway on the 9th May	
273t	1,83,271	2731	1, 36, 568	(l)329 <del>1</del>	1,75,175	3417	-59,374	3112	12,48,004	1887. (i) Working made over to the Bengal and North-Western railway on the 1st July 1890.	
6921	-3,60,823	6 <u>9</u> 2}	3,84 <b>4</b> 10	692}	2,33,375	6,2}	21,189	692}	-1,97,052		
2,381	<del>-7,72,</del> 976	2,368}	7,86,924	2,3684	22,96,061	2,358 <del>}</del>	8,50,046	2,4271	18,30,0.16	(m) Excludes expenditure on troop traffic works and gradient im- provements from 1885-87 and or the Sukkur bridge from 1881-83	
***		•••	•••	900}	12,55,115	1,1054	-17,45,079	1,0421	7,74,4 <sup>8</sup> 9	to 1892-93.	
***	•••	21}	39,154	21 }	34,662	21]	19,133	21}	4,809		
1451	24,679	145}	10,855	145	4,470	145	61,912	145}	30,684		
			٠	,	.						
				_ <del></del>	-	 					

#### APPENDIX I.

An Agreement, made the 8th day of March 1892, BETWEEN THE SECRETARY OF STATE IN COUNCIL OF INDIA of the one part, and the EAST INDIAN RAILWAY COMPANY, incorporated by an Act of Parliament passed in the thirteenth year of Her present Majesty, and intituled "An Act for incorporating the East Indian Railway Company and for other purposes," of the other part.

WHEREAS these presents are intended to be supplemental to an Indenture dated the 22nd day of December 1879, and made between the said Secretary of State in Council of India of the one part, and the said East Indian Railway Company of the other part, being a Contract entered into under the powers of the East Indian Railway Company Purchase Act, 1879, with reference to the maintenance, management, use, and working by the Company of so much of the East Indian Railway as defined by the said last-mentioned Act as should on the 1st day of January 1880 be handed over to the Company, and for other purposes therein mentioned (which said Indenture is herein-after referred to as the "First Principal Contract"), and are also intended to be supplemental to an Agreement dated the 27th day of July 1882, and made between the said Secretary of State in Council of India of the one part and the said Company of the other part, being a Contract also entered into under the powers of the said East Indian Railway Company Purchase Act, 1879, with reference to the working of the Kurhurbaree and Serampore Coal-fields as part of the undertaking in the First Principal Contract referred to (which said Agreement is herein-after referred to as the Second Principal Contract").

AND WHEREAS in accordance with the provisions of the Principal Contracts certain sums of money have been charged to the Capital Account of the undertaking, provision for writing off which as the value of the collieries is diminished from time to time by the exhaustion of the coal, has not been made.

AND WHEREAS the Company, at the request of the Secretary of State, in order that the Capital outlay so charged as aforesaid, and future similar Capital outlay, may be eventually written off in proportion to the diminished value of the collieries, have agreed that the terms and provisions of the Second Principal Contract shall be modified in manner herein-after appearing.

- NOW THESE PRESENTS WITNESS, and it is hereby agreed and declared as follows, that is to say:
- r. In this agreement the words and expressions to which meanings are assigned by the First Principal Contract shall (unless there shall be something in the context repugnant to such construction) respectively have the same meanings as are by the First Principal Contract assigned to them.
- 2. As from the 31st day of December 1890 in every half-year a sum calculated at the rate of six pies per ton on the gross output of the collieries shall be added to the cost of raising the coal, and shall be credited to the Capital Account of the undertaking, and from time to time, as the coal is consumed or sold, shall be paid to the Secretary of State.
- 3. At the expiration of five years from the said 31st day of December 1890, and at the end of every subsequent fifth year during the continuance of the Principal Contracts, if the Secretary of State shall so require, the aforesaid rate of six pies per ton shall be revised and shall be increased or reduced if, on a review of the general position of the collieries at such periods respectively, it shall appear, on the one hand, that the said rate of six pies per ton is not sufficient to reduce the capital sum standing at the debit of the Colliery accounts in fair proportion to the diminished value of the said collieries, or on the other hand, that the said rate is more than sufficient for the said purpose.
- 4. Provided always, that in determining the incidence between Capital and Revenue of any future expenditure on the said collieries the principles laid down in Clause 8 of the Second Principal Contract shall be maintained and be applicable.
- Is witness whereof SIR ALFRED COMYNS LYALL, K.C.B., and SIR JOHN STRACHEY, G.C.S.I., being two members of the Council of India, have hereunto set their hands and seals, and the EAST INDIAN RAILWAY COMPANY have hereunto caused their common seal to be affixed, the day and year first above written.

# APPENDIX J.

#### APPENDIX J.

This Endeniuse, made the 26th day of April 1892, BETWEEN THE SECRETARY OF STATE IN COUNCIL OF INDIA of the one part, and THE ASSAM-BENGAL 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 Assam-Bengal Railway Company, Limited.
  - (c) "The projected railway" means and includes the line of railway and the several branch lines of railway and works of whatever description mentioned in Clause 4 of this Contract, together with the land, rolling-stock, steam vessels, barges and boats, plant, and machinery pertaining thereto or used in connection therewith.
  - (d) "The undertaking" means and includes the projected railway and connected ferries and steamer services for the time being sanctioned by the Secretary of State, 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.

(e) "The open system" means and includes so much of the undertaking as shall for the time being have been opened, with the sanction of the Secretary of State, for the public carriage of passengers or of animals and goods.

- (f) "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 from the use of the telegraphs in connection therewith, and all other sums received in respect thereof as rents, tolls on bridges, and from connected ferries and steamer services, and all other sources the receipts from which are treated as revenue on Indian railways generally.
- (g) "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 or arising out of the management, maintenance and working of the open system.
- (h) "Net earnings" and "surplus profits" have the meanings attributed to those expressions respectively in Clauses 64 and 65 of this Contract.
- (j) "Local authority" means a municipal committee, district board, body of port commissioners, or other authority legally entitled to, or entrusted by the Secretary of State with, the control or management of a municipal or local fund.
- (k) "Month" means a calendar month, but in respect of the interest for a month or part of a month mentioned in Clause 45 of this Contract a "month" shall be deemed to be one equal twelfth part of a year.

#### Duration of Contract.

2. This Contract shall continue in force until it shall be determined under any provision in that behalf herein-after contained.

#### As to existing Surveys, Works, etc., for the undertaking.

3. All surveys, plans, designs, estimates, and works which the Secretary of State has caused to be made and executed with the view of facilitating and expediting the construction of the undertaking 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 undertaking, or any part or parts thereof, shall be made over to the Company, and the

cost, as certified by the Secretary of State, of the aforesaid works, rolling-stock, plant, and machinery, as well as of such of the said surveys, plans, designs, and estimates as shall be used for the laying out and construction of the undertaking or any part or parts thereof shall be paid by the Company to the Secretary of State and entered in Part II of the Capital Account of the undertaking as herein-after provided. Provided that the cost, as certified by the Secretary of State, of any such surveys, plans, designs, and estimates which shall not be so used shall be entered in Part I of the said Capital Account.

#### As to the construction of the Projected Railway.

4. Subject to the requisite funds and land being provided according to the stipulations in that behalf herein-after contained, the Company shall with due diligence and . expedition, and in accordance in all respects with the directions of the Secretary of State, construct to the satisfaction of the Secretary of State, and make ready and fit for being opened by the 1st day of July 1898 for the public carriage of passengers throughout on routes to be determined by him, and on land to be provided by him as herein-after stipulated, a line of railway from Chittagong, vid Badarpur to a terminus at or near Makum Junction, or such other place on or near the western boundary of the Lakhimpur District as the Secretary of State shall select, with branch lines of railway to Chandpur, Silchar and Gauhati, together with all such stations, station-yards, offices, warehouses, houses for employés, conveniences, and works, as in the opinion of the Secretary of State shall be necessary or proper for the purposes of the said railway and branches, 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. The said railway and branches shall be of the metre gauge, and shall in general structural character conform with the standard of State railways on the same gauge in Bengal. Surveys, plans, designs, and estimates in relation to the construction of the said railway and branches and the stations and other works to be constructed under this Clause 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 at his option furnish surveys, designs, estimates, and plans to the Company, and the Company shall in that case be bound to follow them. All the provisions of this Clause shall apply, mutatis mutandis, in respect of any line or lines of railway which under Clauses 5 and 7 of this Contract shall be required to be constructed.

# As to the acquisition, construction, and working of Branch and Extension Railways as additions to the undertaking and otherwise.

5. The Secretary of State may require the Company to construct as part of the undertaking, or to acquire either absolutely or on lease for a term of years or otherwise on behalf of the undertaking, any such branch or extension railway on the metre 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 in no case shall any such requisition be made in respect of any such branch or extension the estimated cost of which shall exceed an average rate of 65,000 rupees per mile, excluding rolling-stock, or which shall exceed in length 50 miles, measured from the junction with the undertaking; nor shall the aggregate length of branches or extensions to be constructed or acquired under this Clause exceed a total length of 250 miles. Provided also, that if during the first three years of the working of any such branch or extension railway by the Company for the public carriage of passengers the average gross earnings from all sources per week per mile of such branch or extension in any half-yearly period for which the Revenue Account shall be made up pursuant to Clause 63 of this Contract do not amount to 75 rupees, the Secretary of State will make good the deficiency. Provided further, that the moneys and land required for any such construction, and the moneys for any such absolute acquisition as aforesaid of any such branch or extension railway shall be contributed and 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 Part II of the Capital Account of the undertaking as therein-after

6. The Company may, upon such terms and conditions as shall in each case be agreed upon between the Secretary of State and the Company, construct or acquire either

absolutely or on leave for a term of years or otherwise any branch or extension railway on the metre gauge convenient to be worked as auxiliary to or in connection with the undertaking or any part of it, and may work on such terms and conditions as may in each case be agreed upon between the Secretary of State and the Company any railway so constructed or acquired as mentioned in this Clause, or any other railway on the metre gauge convenient to be worked as auxiliary to or in connection with the undertaking or any part of it.

7. The Secretary of State may require the Company to construct on behalf of any Local Authority any such branch or extension railway of the metre gauge in connection either with the undertaking, or with any other railway in connection with the undertaking and worked by the Company, as such Authority 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 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, unless so specially agreed, 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 concerned through the Secretary of State.

#### As to Land.

8. The Secretary of State shall from time to time provide, free of cost to the Company, 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 employes, conveniences, and works necessary or proper for the purposes of the same railways, and (at his discretion as to what is really requisite) for the purposes and conveniences of the undertaking in respect to the provision of foreshores, wharves, jetties, or quays, and shall allow the Company during the continuance of this Contract to have possession of the land so provided. 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 for the time being it shall be unnecessary that the Company should retain in its possession for any of the purposes of the undertaking. 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. The value, to be determined by the Secretary of State, of all land which he shall have provided free of cost to the Company and of which he shall allow the Company to have possession pursuant to this Clause shall be debited in Part I of the Capital Account of the undertaking as herein-after provided, and the value, also to be determined by the Secretary of State, of all land so provided which the Company shall relinquish to him pursuant to this Clause shall be credited in Part I of the said Capital Account. Provided that, if the Secretary of State and the Company shall so agree, the value, to be determined by him, of any land that he shall allow the Company to have possession of, for the purposes and conveniences of the undertaking, in respect to the provision of foreshores, wharves, jetties, or quays, as aforesaid, shall be treated as is herein-after provided as capital contributed by the Secretary of State and debited in Part 11 of the said Capital Account, and the value, also to be determined by the Secretary of State, of all such land as last aforesaid which the Company shall relinquish to him pursuant to this Clause shall be credited in Part II of the said Capital Account.

#### As to notification to Company of Route of Railways.

g. 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.

ro. 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 employes, 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.

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 Clause, 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 Clause.

#### As to Telegraphs.

- 12. 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 inspect, maintain, and work the electric telegraphs 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 entering by his agents 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 Clause on the undertaking, or any land or on 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.
- 13. 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.
- 14. 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 Maiesty'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 Clause 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.
- 15. The Company, if so directed by the Secretary of State, shall in relation to any electric telegraphs or telegraphic appliances of which under Clause 13 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.

- 16. 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 on the open system, 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 of so much of the undertaking as shall have been opened for the public carriage of passengers 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.
- 17. 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 open for the public carriage of passengers.
- 18. 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 Clauses 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.

19. 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. Nothing in this Clause 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.

- 20. 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 Clause 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 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.
- 21. 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 provided for in the foregoing part of this Clause he may himself remedy the defect and charge the cost of the same as if done by the Company.
- 22. 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, employ on such staff in India, for the purposes of construction and working, such competent and otherwise suitable members of the Government service as may be available, and fill up from the Government service vacancies

occurring from time to time in the said staff in India, and for filling which there shall be no suitable persons or person available among those for the time being employed by the Company; and no member of the Government service so engaged, unless a person who if holding any such or similar office on any State Railway could 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. Any contributions on account of pensions and furlough allowances which the Secretary of State may require to be paid to him on behalf of members of the Government service employed by the Company shall be paid by the Company and charged in like manner as the salaries of such members. The Company shall not be required to pay rates of remuneration to members of the Government service employed on the undertaking in excess of the rates at which the Company can obtain similarly qualified servants.

23. 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 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 undertaking. Such notice shall specify the alteration, improvement, or addition required, and shall. also in general terms describe the works to be excecuted 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, subject to the provisions of Clause 8 hereof, provide any land that may be required for the purposes aforesaid, and shall supply the funds necessary 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 Part II of the Capital Account as herein-after 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, Rates, &c.

- 24. The Company shall, until this Contract shall be determined 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.
- 25. The Company shall cause to be run on the open system so many trains, at such times, at such reasonable rates of speed, between such places, and with such conveniences and accommodations as the Secretary of State shall from time to time require.
- 26. 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.
- 27. 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 and in respect to goods for terminals by way of services rendered at forwarding and receiving stations 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 classes and descriptions of 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. Provided always, that as often as the Secretary of State shall require the Company to make any such modification as last aforesaid, he shall give the Company not less than six months' previous notice of his intention in that behalf in order to give the Company time to submit its views with reference to such modifica-

tion, unless in his notice he shall declare that the case is one of public emergency, in which case it shall be sufficient for him to give such shorter notice as under the circumstances he shall consider reasonable. The Company shall not, in making charges to the public for services mentioned in this Clause, 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 Clause 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 Clause include everything conveyed on the undertaking, passengers only excepted.

28. 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.

29. 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.

# As to Ferries, &c.

- 30. The Company may, with the approval of the Secretary of State, and subject to the provisions of the Indian Guaranteed Railways Act, 1879 (42 and 43 Vict. c. 41), from time to time during the continuance of this Contract, establish, maintain, and work ferries and services of steam and other vessels for the accommodation of the traffic of the undertaking. Every such ferry or service shall be equipped with boats and fixed and moveable machinery and plant of good quality and adequate in quantity to work the said ferry or service. 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 such ferry or service which shall have been established by it.
- 31. The 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 or service which shall be established under the last preceding section.
- 32. The Company may, with the approval of the Secretary of State, enter into agreements with any person or Company carrying on the business of carriers by water for the provision of such means of transport as may be required for the reasonable convenience of the Company's traffic.

#### Undue Preference.

33. 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 Clause to decide whether any preference, advantage, prejudice, or disadvantage is undue or unreasonable.

### As to Services rendered to the Secretary of State on the undertaking.

34. All services which the Secretary of State shall require the Company to perform on the oven 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, of stores for State railways, and of any public stores whatever), shall be performed by the Company on the same general conditions as may for the time being be in force on 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 Clause 12 of this Contract.

- 35. 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.
- 36. 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.
- 37. 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.

### The Company to comply with the 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 the stations, station-yards, offices, werehouses house 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 (with the exception of moneys paid by the Secretary of State to the Company pursuant to Clauses 41 and 65 of this Contract), and things, and whether in England, India, or elsewhere, which have been or shall be transferred to the Company by the Secretary of State pursuant to these presents, or have been or shall be acquired, paid for or constructed by the Company with money supplied to the Company by the Secretary of State under Clause 50 of this Contract, are hereby declared to be respectively the property of the Secretary of State, but subject to the use and enjoyment thereof by the Company during the continuance of this Contract.

## As to Capital 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 in London to the credit of the Secretary of State an aggregate sum of 1,500,000%. to be raised in shares or stock as the original capital of the Company.
- 41. The Secretary of State will, from the date of payment to his credit at the Bank of England, either in respect of such instalments as aforesaid or of any payments made in anticipation of such instalments (which payments the Company shall be at liberty to make), 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 first day of July and the first day of January interest, to be distributed as and by way of minimum dividend on the original capital of the Company, at the rate of three per cent. per annum, calculated to the last preceding 30th day of June and 31st day of December respectively, on the amount which shall for the time being have been paid as aforesaid by the Company in

respect of the sum of 1,500,000/. mentioned in the last preceding Clause of this Contract, and also half-yearly on the first day of July and the first day of January, up to and inclusive of the first day of July 1898 (if this Contract shall so long continue), further interest calculated as aforesaid at the rate of one-half per cent. per annum on the amount previously mentioned in this Clause.

42. The aggregate of the amounts payable respectively on application and allotment of the aforesaid sum of 1,500,000/.. as share capital, shall be 300,000/. and shall constitute the first of the aforesaid instalments. Such calls in fespect of the balance of the said share capital shall be made as may from time to time be prescribed by the Secretary of State. Any sums received by the Company from any shareholder in respect of the moneys due upon the shares held by him beyond the sums actually called for shall without delay, and in anticipation of subsequent instalments, be paid into the Bank of England to the credit of the Secretary of State. Of the moneys paid by the Company into the Bank of England to the credit of the Secretary of State under this Clause or Clause 40 of this Contract, the equivalent in rupees of the sum of 300,000l. shall be regarded and is hereinafter referred to as working capital, and the Secretary of State will allow interest half-yearly on the equivalent in rupees of all moneys paid to his credit in excess of the . said sum of 300,0001. (herein-after referred to as excess capital), at the rate of 2 per cent. per annum from the date of the payment thereof to his credit, and the amount of such interest shall be credited in Part II of the Capital Account of the undertaking herein-after mentioned. Provided that from time to time as moneys shall be supplied by the Secretary of State to the Company in London and in India for the purposes of this Contract, the amount so supplied shall be considered and treated as deducted from the amount of working capital; and from time to time when working capital shall be reduced in manner aforesaid to the equivalent in rupees of 50,000l. or less, transfers (for the purpose of calculation of interest) shall be made or be deemed to be made from excess capital to working capital of such amounts as shall be required to raise working capital again to the equivalent in rupees of 300,000l.; and the Secretary of State shall from time to time allow interest as aforesaid only on the amount (if any) of excess capital, less the sums so transferred or deemed to be transferred as aforesaid.

Provided also, that the Secretary of State's liability for interest under this Clause shall be wholly determined so soon as the moneys supplied by him in London and in India to the Company as aforesaid shall have amounted to the equivalent in rupees of 1,200,000l., or the projected railway shall have been opened for the public carriage of passengers throughout, or on the 30th day of June 1898, whichever may be the earliest date.

43. Whenever the moneys supplied to the Company in London and in India for expenditure on the projected railway, irrespective of the amounts from time to time debited in Part II of the Capital Account on account of interest on capital pursuant to Clause 45 of this Contract, or of value of land pursuant to Clause 8 of this Contract, shall exceed the equivalent in rupees of the aforesaid sum of 1,500,000/., and further moneys shall be required for expenditure in London in sterling, or in India in rupees, for completing and equipping the projected railway or for any other purposes sanctioned by the Secretary of State under this Contract, and chargeable to account of capital, the Secretary of State shall at his option either contribute them, supplying them in India or in London, as the case may require, or enable the Company to raise them by the issue, at his option, of shares or of debentures in such manner, with such guarantee by the Secretary of State, and generally on such terms as shall be agreed upon between the Secretary of State and the Company, and all moneys so raised by the Company shall be forthwith paid into the Bank of England to the credit of the Secretary of State.

44. The equivalent in rupees of the aforesaid sum of 1,500,000%, and of any further share capital raised by the Company with the sanction of the Secretary of State and paid to his credit at the Bank of England, shall be deemed to be capital contributed by the Company. The equivalent in rupees of all moneys raised by the Company by the issue of debentures, guaranteed by the Secretary of State and paid to his credit at the Bank of England, and of all other moneys contributed by the Secretary of State and supplied by him to the Company under Clause 43 of this Contract for the purposes of capital expenditure of the undertaking, also of all interest on capital debitable under Clause 45 of this Contract to account of capital, and of the value of any land debitable under Clause 8 of this Contract to account of capital, shall be deemed to be capital contributed by the Secretary of State. Provided that for the purposes of

Clause 65 of this Contract all moneys pursuant to this Clause contributed or deemed to be contributed by the Secretary of State shall carry the same rate of interest as is for the time being paid on the Company's share capital of 1,500,000l. as aforesaid; but after the whole of the Company's share capital of 1,500,000l. shall have been called up and supplied by the Secretary of State to the Company for the purposes of this Contract, the rate of interest to be allowed to the Secretary of State of any excess of the aggregate of all such moneys over \$\frac{8}{17}\$ ths of the total capital expenditure for the time being of the undertaking shall from time to time be agreed upon between the Secretary of State and the Company.

- 45. From the date of this Contract and until the last day of that one of the halfyearly periods prescribed under Clause 63 of this Contract for the making up of the Revenue Account in which the projected railway shall have been opened for the public carriage of passengers throughout but not in respect of any period subsequent to the 30th day of June 1898, there shall from time to time be debited in Part II of the Capital Account of the undertaking herein-after mentioned—(1) all interest paid by the Secretary of State to the Company or accruing in respect of the Company's share capital of 1,500,000/. from time to time paid in as aforesaid, all such interest being calculated at the rate of 31 per cent. per annum; and (2) all interest paid by the Secretary of State to the Company, or accruing on any additional share capital raised pursuant to Clause 43 of this Contract, and from time to time paid in as aforesaid, such interest being calculated at the rate agreed upon between the Secretary of State and the Company; and (3) all interest accruing in respect of the moneys (other than such as may be raised by the issue of debentures pursuant to this Contract) from time to time either contributed by the Secretary of State on account of capital pursuant to Clause 43 of this Contract, and supplied in London or in India by him to the Company, or deemed to be so contributed by him, and debitable in Part II of the Capital Account, such interest being calculated at the rate of 31 per cent. per annum; and (4) all interest paid by the Secretary of State to the Company or accruing in respect of the debenture capital, also from time to time paid in as aforesaid. Provided that all such interest in respect of the moneys contributed by the Secretary of State as mentioned in Sub-division 3 of this Clause shall be calculated month by month and in respect of each month shall be one month's interest on the amount of the moneys so contributed or deemed to be contributed as last aforesaid on the last day of the last preceding month, increased or decreased by half a month's interest on the difference between that amount and the amount of the like moneys on the Jast day of the month for which interest is to be calculated, according as the last-named amount is greater or less than the first-named amount, such amounts to be from time to time ascertained as prescribed in Clause 60 of this Contract.
- 46. 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, 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 amount of such borrowed capital, provided the n oney 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 34 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 bonâ fide temporary purposes.
- 47. Subject to the provisions of this Contract, all moneys paid by the Company under Clauses 40 and 43 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.
- 48. 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

respect of the sum of 1,500,000/, mentioned in the last preceding Clause of this Contract, and also half-yearly on the first day of July and the first day of January, up to and inclusive of the first day of July 1898 (if this Contract shall so long continue), further interest calculated as aforesaid at the rate of one-half per cent. per annum on the amount previously mentioned in this Clause.

42. The aggregate of the amounts payable respectively on application and allotment of the aforesaid sum of 1,500,000/... as share capital, shall be 300,000/. and shall constitute the first of the aforesaid instalments. Such calls in fespect of the balance of the said share capital shall be made as may from time to time be prescribed by the Secretary of State. Any sums received by the Company from any shareholder in respect of the moneys due upon the shares held by him beyond the sums actually called for shall without delay, and in anticipation of subsequent instalments, be paid into the Bank of England to the credit of the Secretary of State. Of the moneys paid by the Company into the Bank of England to the credit of the Secretary of State under this Clause or Clause 40 of this Contract, the equivalent in rupees of the sum of 300,000l. shall be regarded and is hereinafter referred to as working capital, and the Secretary of State will allow interest half-yearly on the equivalent in rupees of all moneys paid to his credit in excess of the said sum of 300,000% (herein-after referred to as excess capital), at the rate of 2 per cent. per annum from the date of the payment thereof to his credit, and the amount of such interest shall be credited in Part II of the Capital Account of the undertaking herein-after mentioned. Provided that from time to time as moneys shall be supplied by the Secretary of State to the Company in London and in India for the purposes of this Contract, the amount so supplied shall be considered and treated as deducted from the amount of working capital; and from time to time when working capital shall be reduced in manner aforesaid to the equivalent in rupees of 50,000l. or less, transfers (for the purpose of calculation of interest) shall be made or be deemed to be made from excess capital to working capital of such amounts as shall be required to raise working capital again to the equivalent in rupees of 300,000l.; and the Secretary of State shall from time to time allow interest as aforesaid only on the amount (if any) of excess capital, less the sums so transferred or deemed to be transferred as aforesaid.

Provided also, that the Secretary of State's liability for interest under this Clause shall be wholly determined so soon as the moneys supplied by him in London and in India to the Company as aforesaid shall have amounted to the equivalent in rupees of 1,200,000., or the projected railway shall have been opened for the public carriage of passengers throughout, or on the 30th day of June 1898, whichever may be the earliest date.

- 43. Whenever the moneys supplied to the Company in London and in India for expenditure on the projected railway, irrespective of the amounts from time to time debited in Part II of the Capital Account on account of interest on capital pursuant to Clause 45 of this Contract, or of value of land pursuant to Clause 8 of this Contract, shall exceed the equivalent in rupees of the aforesaid sum of 1,500,000., and further moneys shall be required for expenditure in London in sterling, or in India in rupees, for completing and equipping the projected railway or for any other purposes sanctioned by the Secretary of State under this Contract, and chargeable to account of capital, the Secretary of State shall at his option either contribute them, supplying them in India or in London, as the case may require, or enable the Company to raise them by the issue, at his option, of shares or of debentures in such manner, with such guarantee by the Secretary of State, and generally on such terms as shall be agreed upon between the Secretary of State and the Company, and all moneys so raised by the Company shall be forthwith paid into the Bank of England to the credit of the Secretary of State.
- 44. The equivalent in rupees of the aforesaid sum of 1,500,000/, and of any further share capital raised by the Company with the sanction of the Secretary of State and paid to his credit at the Bank of England, shall be deemed to be capital contributed by the Company. The equivalent in rupees of all moneys raised by the Company by the issue of debentures, guaranteed by the Secretary of State and paid to his credit at the Bank of England, and of all other moneys contributed by the Secretary of State and supplied by him to the Company under Clause 43 of this Contract for the purposes of capital expenditure of the undertaking, also of all interest on capital debitable under Clause 45 of this Contract to account of capital, and of the value of any land debitable under Clause 8 of this Contract to account of capital, shall be deemed to be capital contributed by the Secretary of State. Provided that for the purposes of

Clause 65 of this Contract all moneys pursuant to this Clause contributed or deemed to be contributed by the Secretary of State shall carry the same rate of interest as is for the time being paid on the Company's share capital of 1,500,000l. as aforesaid; but after the whole of the Company's share capital of 1,500,000l. shall have been called up and supplied by the Secretary of State to the Company for the purposes of this Contract, the rate of interest to be allowed to the Secretary of State of any excess of the aggregate of all such moneys over  $\frac{8}{11}$ ths of the total capital expenditure for the time being of the undertaking shall from time to time be agreed upon between the Secretary of State and the Company.

- 45. From the date of this Contract and until the last day of that one of the halfyearly periods prescribed under Clause 63 of this Contract for the making up of the Revenue Account in which the projected railway shall have been opened for the public carriage of passengers throughout but not in respect of any period subsequent to the 30th day of June 1898, there shall from time to time be debited in Part II of the Capital Account of the undertaking herein after mentioned—(1) all interest paid by the Secretary of State to the Company or accruing in respect of the Company's share capital of 1,500,000/. from time to time paid in as aforesaid, all such interest being calculated at the rate of 31 per cent, per annum; and (2) all interest paid by the Secretary of State to the Company, or accruing on any additional share capital raised pursuant to Clause 43 of this Contract, and from time to time paid in as aforesaid, such interest being calculated at the rate agreed upon between the Secretary of State and the Company; and (3) all interest accruing in respect of the moneys (other than such as may be raised by the issue of debentures pursuant to this Contract) from time to time either contributed by the Secretary of State on account of capital pursuant to Clause 43 of this Contract, and supplied in London or in India by him to the Company, or deemed to be so contributed by him, and debitable in Part II of the Capital Account, such interest being calculated at the rate of 31 per cent. per annum; and (4) all interest paid by the Secretary of State to the Company or accruing in respect of the debenture capital, also from time to time paid in as aforesaid. Provided that all such interest in respect of the moneys contributed by the Secretary of State as mentioned in Sub-division 3 of this Clause shall be calculated month by month and in respect of each month shall be one month's interest on the amount of the moneys so contributed or deemed to be contributed as last aforesaid on the last day of the last preceding month, increased or decreased by half a month's interest on the difference between that amount and the amount of the like moneys on the last day of the month for which interest is to be calculated, according as the last-named amount is greater or less than the first-named amount, such amounts to be from time to time ascertained as prescribed in Clause 60 of this Contract.
- 46. 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, 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 amount of such borrowed capital, provided the n oney 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 34 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 boná fide temporary purposes.
- 47. Subject to the provisions of this Contract, all moneys paid by the Company under Clauses 40 and 43 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.
- 48. 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 Clauses 40 and 43 of this Contract, and of moneys paid by the Secretary of State to the Company or provided by him under Clauses 41, 43, and 50 of this Contract, or which it shall receive by virtue of the 6th Sub-section of Clause 05 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 Clause 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 herein-after contained as to the application thereof.

- 49. 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.
- 50. 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, as the case may require, 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.

- 51. 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 accounts shall be kept in England in sterling money of the receipts and expenditure 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.
- 52. For the purposes of the incorporation provided for in the last preceding Clause of this Contract, and for all the purposes of this Contract requiring the conversion of sterling money into rupees, the conversion shall be made 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 conversion is required to be made, and so that if the conversion is to be made in the first six months of the then current calendar year the half-year shall end on the 31st day of December, and if it is to be made in the last six 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 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 Clause, but for this provision, be made at the average rate obtained by the Secretary of State for bills payable on demand drawn on India during that halfyear shall be made 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.
- 53. Separate accounts shall, if required by the Secretary of State, be kept by the Company in respect to separate portions 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 or to the Government of India at such times as the Secretary of State shall from time to time prescribe.

54. 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.

- 55. 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 or of parts of the undertaking or its equipment, 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.
- 56. The Company 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 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 date of this Contract, 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.
- 57. The valuation, 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 projected 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.

58. The Capital Account shall be in two parts.

In Part I shall be entered the cost, as certified by the Secretary of State, of any of the surveys, plans, designs, or estimates mentioned in Clause 3 of this Contract which shall not be used, as therein provided, and the value of the land provided free of cost to the Company pursuant to Clauses 8 and 23 hereof, as well as the value of any such land so provided as shall for the time being have been relinquished by the Company to the Secretary of State under the provisions in that behalf herein contained.

In Part II 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), mentioned in the proviso of Clause 8 hereof, as shall for the time being have been relinquished by the Company to the Secretary of State under the previous provisions hereof, also the amount of interests to be allowed by the Secretary of State and credited to account of capital pursuant to Clause 42 hereof, also any net earnings and surplus profits which under the provisions contained in Clause 65 hereof should be credited to account of capital, and all such expenditure of the Company under this Contract as pursuant to this Contract shall be chargeable to account of capital, including—

(a) All payments and charges on account of interest under the provisions of Clause 45 of this Contract, but not in respect of any period subsequent to the 30th day of June 1898.

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 Clauses 40 and 43 of this Contract, and of moneys paid by the Secretary of State to the Company or provided by him under Clauses 41, 43, and 50 of this Contract, or which it shall receive by virtue of the 6th Sub-section of Clause 05 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 Clause 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 herein-after contained as to the application thereof.

- 49. 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.
- 50. 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, as the case may require, 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.

- 51. 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 accounts shall be kept in England in sterling money of the receipts and expenditure 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.
- 52. For the purposes of the incorporation provided for in the last preceding Clause of this Contract, and for all the purposes of this Contract requiring the conversion of sterling money into rupees, the conversion shall be made 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 conversion is required to be made, and so that if the conversion is to be made in the first six months of the then current calendar year the half-year shall end on the 31st day of December, and if it is to be made in the last six 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 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 Clause, but for this provision, be made at the average rate obtained by the Secretary of State for bills payable on demand drawn on India during that halfyear shall be made 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.
- 53. Separate accounts shall, if required by the Secretary of State, be kept by the Company in respect to separate portions 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 or to the Government of India at such times as the Secretary of State shall from time to time prescribe.

54. 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.

55. 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 or of parts of the undertaking or its equipment, 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.

56. The Company 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 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 date of this Contract, 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.

57. The valuation, 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 projected 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.

58. The Capital Account shall be in two parts.

In Part I shall be entered the cost, as certified by the Secretary of State, of any of the surveys, plans, designs, or estimates mentioned in Clause 3 of this Contract which shall not be used, as therein provided, and the value of the land provided free of cost to the Company pursuant to Clauses 8 and 23 hereof, as well as the value of any such land so provided as shall for the time being have been relinquished by the Company to the Secretary of State under the provisions in that behalf herein contained.

In Part II 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), mentioned in the proviso of Clause 8 hereof, as shall for the time being have been relinquished by the Company to the Secretary of State under the previous provisions hereof, also the amount of interests to be allowed by the Secretary of State and credited to account of capital pursuant to Clause 42 hereof, also any net earnings and surplus profits which under the provisions contained in Clause 65 hereof should be credited to account of capital, and all such expenditure of the Company under this Contract as pursuant to this Contract shall be chargeable to account of capital, including—

(a) All payments and charges on account of interest under the provisions of Clause 45 of this Contract, but not in respect of any period subsequent to the 30th day of June 1898.

(b) Such sum as the Secretary of State may allow to be charged in respect of the expenses of and incidental to the formation and incorporation of the Company and in connection therewith and such amount 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 direction and supervision, whether in London or in India or elsewhere, of its affairs prior to the time when the projected railway shall have been opened for the public carriage of passengers throughout.

(c) The cost to the Secretary of State as certified by him of the works, rollingstock, plant, and machinery mentioned in Clause 3 of this Contract, of such of the several surveys, plans, designs, and estimates also mentioned in the same Clause as shall be used for the laying out and construction of the undertaking or any part or parts thereof, and of all surveys, designs, estimates, and plans which the Secretary of State may furnish to the Company pursuant to Clause 4 of this Contract, including all costs incurred by the

Secretary of State with a view to procuring the same to be made.

(d) The value as certified by the Secretary of State of all land of which he shall allow the Company to have possession for the purposes mentioned in the proviso of Clause 8 of this Contract, and the value of which the Secretary of State and the Company shall agree to be so entered.

- (e) All moneys which shall be actually expended by the Company, with the sanction of the Secretary of State, out of funds supplied by him to the Company upon works, rolling-stock, plant, and machinery pursuant to Clauses 4 and 11 of this Contract, or upon any branch or extension railway under Clause 5 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 con-. struction or shall not have been opened for the public carriage of passengers.
- (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 Clauses 22, 23, and 70 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 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.
- (1) The sums debitable to account of capital in respect of stores pursuant to Clauses 56 and 57 of this Contract.
- 59. The Capital Account shall from time to time, as the Secretary of State shall require, be made up and submitted to him.
- 60. For the purposes of Sub-section 4 of Clause 65 of this Contract, the moneys from time to time contributed or deemed to be contributed by the Secretary of State on account of capital shall be taken to be the excess (if any) of the aggregate sum of the amounts of the balances at debit of the Capital Advance Account, the Stores Account, and Part II of the Capital Account, respectively, on the last day of each month, over the aggregate sum of the respective equivalents in rupees of the Company's share capital and of the debenture capital for the time being paid in as aforesaid.
- 61. For the purposes of Sub-section 6 of Clause 65 of this Contract the amount of capital expended on the undertaking at the close of any half-year for which the Revenue Account shall be made up pursuant to Clause 63 hereof shall be taken to be, in respect of the Secretary of State, the aggregate sum in rupees of (1) the excess ascertained as in the last preceding Clause, and (2) the equivalent of the debenture capital for the time being

paid in as aforesaid; and, in respect of the Company, the equivalent in rupees of the Company's share capital for the time being paid in as aforesaid.

62. In the Revenue Account shall be entered 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, and also 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, including, in so far as they are attributable to the period covered by the account,—

- (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 projected railway in the management of the Company and the direction and supervision, whether in London or in India, or elsewhere, of its affairs.
- (2) Such proportion of the like expenditure incurred prior to the time when the whole of the projected railway shall have been so opened as the mileage of the undertaking for the time being so opened shall bear to the aggregate mileage thereof under construction and so opened.
- (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, machinery, steamers, barges, and boats, 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, machinery, steamers, barges, and boats belonging to the open system in good repair and in good working condition.
- (5) All expenditure incurred by the Company with the sanotion 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 nave been expenditure chargeable to account of revenue.
- (7) The cost, 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 on the open system as provided by Clause 16 of this Contract.
- (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 hereinafter mentioned respectively to or for the purposes of those Institutions without being dependent on the amount of either the net earnings or surplus profits of the undertaking.
- (9) The charges of the Telegraph Department of Her Majesty's Indian Government 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 cost 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 Clauses 22, 23, and 70 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.
- (13) The sums debitable to account of revenue in respect of stores pursuant to Clauses 56 and 57 of this Contract.
- (14) All such other expenses as the Secretary of State and the Company shall agree to treat as working expenses;

and including also all undischarged working expenses, so far as they are attributable to any previous period or periods or are exceptional.

63. 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

- .(b) Such sum as the Secretary of State may allow to be charged in respect of the expenses of and incidental to the formation and incorporation of the Company and in connection therewith, and such amount 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 direction and supervision, whether in London or in India or elsewhere, of its affairs prior to the time when the projected railway shall have been opened for the public carriage of passengers throughout.
- (c) The cost to the Secretary of State as certified by him of the works, rollingstock, plant, and machinery mentioned in Clause 3 of this Contract, of such of the several surveys, plans, designs, and estimates also mentioned in the same Clause as shall be used for the laying out and construction of the undertaking or any part or parts thereof, and of all surveys, designs, estimates, and plans which the Secretary of State may furnish to the Company pursuant to Clause 4 of this Contract, including all costs incurred by the Secretary of State with a view to procuring the same to be made.
- (d) The value as certified by the Secretary of State of all land of which he shall allow the Company to have possession for the purposes mentioned in the proviso of Clause 8 of this Contract, and the value of which the Secretary of State and the Company shall agree to be so entered.
- (e) All moneys which shall be actually expended by the Company, with the sanction of the Secretary of State, out of funds supplied by him to the Company upon works, rolling-stock, plant, and machinery pursuant to Clauses 4 and 11 of this Contract, or upon any branch or extension railway under Clause 5 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 con-. struction or shall not have been opened for the public carriage of passengers.
- (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 Clauses 22, 23, and 70 of this Contract from time to time to be charged to account of capital.
- (j) 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 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.
- (1) The sums debitable to account of capital in respect of stores pursuant to Clauses 56 and 57 of this Contract.
- 59. The Capital Account shall from time to time, as the Secretary of State shall require, be made up and submitted to him.
- 60. For the purposes of Sub-section 4 of Clause 65 of this Contract, the moneys from time to time contributed or deemed to be contributed by the Secretary of State on account of capital shall be taken to be the excess (if any) of the aggregate sum of the amounts of the balances at debit of the Capital Advance Account, the Stores Account, and Part II of the Capital Account, respectively, on the last day of each month, over the aggregate. sum of the respective equivalents in rupees of the Company's share capital and of the debenture capital for the time being paid in as aforesaid.
- 61. For the purposes of Sub-section 6 of Clause 65 of this Contract the amount of capital expended on the undertaking at the close of any half-year for which the Revenue Account shall be made up pursuant to Clause 63 hereof shall be taken to be, in respect of the Secretary of State, the aggregate sum in rupees of (1) the excess ascertained as in the last preceding Clause, and (2) the equivalent of the debenture capital for the time being

paid in as aforesaid; and, in respect of the Company, the equivalent in rupees of the Company's share capital for the time being paid in as aforesaid.

- 62. In the Revenue Account shall be entered 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, and also 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, including, in so far as they are attributable to the period covered by the account,—
  - (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 projected railway in the management of the Company and the direction and supervision, whether in London or in India, or elsewhere, of its affairs.
  - (2) Such proportion of the like expenditure incurred prior to the time when the whole of the projected railway shall have been so opened as the mileage of the undertaking for the time being so opened shall bear to the aggregate mileage thereof under construction and so opened.
  - (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, machinery, steamers, barges, and boats, 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, machinery, steamers, barges, and boats belonging to the open system in good repair and in good working condition.
  - (5) All expenditure incurred by the Company with the sanotion 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 nave been expenditure chargeable to account of revenue.
  - (7) The cost, 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 on the open system as provided by Clause 16 of this Contract.
  - (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 hereinafter mentioned respectively to or for the purposes of those Institutions without being dependent on the amount of either the net earnings or surplus profits of the undertaking.
  - (9) The charges of the Telegraph Department of Her Majesty's Indian Government 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 cost 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 Clauses 22, 23, and 70 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.
  - (13) The sums debitable to account of revenue in respect of stores pursuant to Clauses 56 and 57 of this Contract.
  - (14) All such other expenses as the Secretary of State and the Company shall agree to treat as working expenses;

and including also all undischarged working expenses, so far as they are attributable to any previous period or periods or are exceptional.

63. 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 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 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.

64. The sum remaining in each half-year for which the Revenue Account shall under the last preceding Clause be made up, 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."

### As to application of net Earnings.

65. The "net earnings" of each half-year as aforesaid 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 and 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 those Institutions, or either of them, and are contingent on the amount of the net earnings of the undertaking.
- (2) In payment to the Secretary of State of the equivalent in rupees of the interest for the half-year paid by him to the Company in respect of the debenture capital for the time being paid in as aforesaid pursuant to Clause 43 of this Contract.
- (3) In payment to the Secretary of State of the equivalent in rupees of the interest for the half-year paid by him to the Company in respect of the capital (not exceeding 1,500,000).) raised in shares or stock and paid into the Bank of England to the credit of the Secretary of State in pursuance of Clause 40 of this Contract at the rate of 31 per cent. per annum up to the 30th day of June 1898, and thereafter at the rate of 3 per cent. per annum, and in respect of any additional share capital raised pursuant to Clause 43 of this Contract at the rate which may be agreed upon between the Secretary of State and the Company.
- (4) In payment to the Secretary of State in rupees of interest for the half-year at the rate of 3½ per cent. per annum up to the 30th day of June 1898, and thereafter at the rate of 3 per cent. per annum, on the moneys (other than debenture capital) contributed or deemed to be contributed by him pursuant to Clause 43 of this Contract, the amount of such moneys to be ascertained in accordance with Clause 60 of this Contract, and the interest to be calculated in accordance with Clause 45 of this Contract.

Provided that the payment to the Secretary of State on account of interest under Sub-section (2) of this Clause shall not, so long as the equivalent of the share capital provided by the Company shall be not less than \$\frac{3}{17}\$ths of the total capital expenditure for the time being of the undertaking, be calculated on the said debenture capital raised previous to the 30th day of June 1898 at a rate in excess of \$\frac{1}{2}\$ per cent. per annum up to the 30th day of June 1898, or thereafter of 3 per cent. per annum. Provided also, that all payments to the Secretary of State under Sub-sections (2), (3), and (4) of this Clause in respect of any half-year during which interest shall, pursuant to Clause 45 of this Contract, be debited in Part II of the Capital Account of the undertaking shall be credited in the same part of the said account.

The residue (if any) shall for the purposes of this Contract be "surplus profits" and shall be applied in the following manner and in the following order:—

- (5) In payment of such sums (if any) as according to the rules for the time being in force of the State Railway Provident Institution and 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 those Institutions, or either of them, and are contingent on the amount of the "surplus profits" of the undertaking.
- (6) And any remaining surplus profits shall be divided between the Company and the Secretary of State in the ratio of the amounts of capital expended on

APPENDIX J. ccxli

the undertaking by the Company and the Secretary of State respectively at the close of each half-year such respective amounts to be ascertained in accordance with Clause 61 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 that, in respect of any half-year during which the projected railway shall not have been opened for the public carriage of passengers throughout, the said remaining surplus profits shall, if the Secretary of State so direct, be credited in Part II of the Capital Account.

## As to Audit and settlement of certain possible questions.

66. 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. Among 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.

67. 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 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 the referees. The costs of any reference under this Clause shall be included under the same head of account as that to which the expenditure is decided to be chargeable.

68. Of the moneys to be paid to the credit of the Secretary of State as provided by Clause 48 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 paid as provided by the same Clause, 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.

69. 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 work, 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 aggregate amount in each half year of Rupees 15 per mile of the open system. Provided also, that after the projected railway shall have been opened for the public carriage of passengers throughout 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, or 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 exclusively upon such work.

# As to the Supervision, Audit, and Control of the Secretary of State and the appointment of a Government Director, etc.

- 70. 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 Clause 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 the public carriage of passengers, 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 the public carriage of passengers 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 ofor the time being shall have been opened for the public carriage of passengers the half-yearly charge to be made by the Secretary of State under this Clause shall be charged to account of revenue exclusively.
- 71. 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.
- 72. 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 apportion between revenue and capital as the Secretary of State shall direct.
- 73. The Secretary of State may from time to time appoint any one person to be a Director of the Company. Such Government Director shall be ex-officio a member

of all 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 removeable except by the Secretary of State, and may act by a deputy appointed by the Secretary of State.

# As to Junctions, Running Powers over or for, and other facilities for traffic to or from other Railways.

- 74. 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 any 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 torms 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, except that no junction shall be deemed to be part of the undertaking so as to give rise at any time to any question whether the whole of the undertaking shall or shall not have been opened for the public carriage of passengers.
- 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 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.
- 77. 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.
- 78. 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.
- 79. 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.
- 80. 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.

- 81. 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.
- 82. 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.

- 83. 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, or any extension or variation thereof.
- 84. 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.
  - 85. 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 forms 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.
- 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 deteriorations 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.
  - 87. 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.
  - 88. The Company shall, if required by the Secretary of State, maintain and manage a 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.
  - 89. 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 Clause.
  - 90. 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 dúties 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.
  - 91. 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 Determination of the Contract and provisions to come into effect thereon.

- 92. The Secretary of State may, if this Contract shall not have been previously determined, determine the same either on the 31st day of December 1921 or on the 31st day of December of any succeeding tenth year by giving to the Company in England not less than twelve months' previous notice in writing of his intention in that behalf. 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 Clauses 40 or 43 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 determination under this present power, determine this Contract by giving to the Company in England six months' previous notice in writing of his intention in that behalf.
- 93. Upon the day on which this Contract shall be determined 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 stations, station-yards, offices, warehouses, houses for employés, conveniences, rails, machinery, fixtures, and plant, then erected or being on the land to be relinquished under this Clause or in anywise 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 anywise 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 (other than and except the register of members of the Company, and all such other similar books and documents of the Company as may be required for the winding up of the Company). The Company shall also on the day on which this Contract shall be determined refund to the Secretary of . State all such of the moneys previously supplied by him to the Company under Clause 50 of this Contract as shall then remain unexpended, 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 Clause 86 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 Clause.
- 94. 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 determination of this Contract.
- 95. The determination 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 determination hereof or which may continue or be in force after determination.

## ccxlvi APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

- 96. Upon the relinquishment, delivery of possession, delivery payment, or making over to the Secretary of State by the Company in conformity with Clause 93 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.
- 97. Upon the 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 1,500,000/., 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 1,500,000/.) 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 Clause to receive any money unless or until it shall in substance have performed and discharged its duties and obligations under Clause 93 of this Contract.

#### Arbitration.

- 98. 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 Clause 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 Sir James Braithwaite Pelle, K.C.S.I., 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 Assam-Bengal Railway Company, Limited, have hereunto caused their common seal to be affixed, the day and year first above written.

## APPENDIX K.

Agreement between the OUDH and ROHILKHAND RAILWAY and the ROHILKHAND AND KUMAON RAILWAY COMPANY for the interchange of traffic via Lucknow and Bareilly Junctions and for the joint working of those stations.

MEMORANDUM of Agreement made between the Oudh and Rohilkhand Railway (hereinafter called the O. and R. R.) and the Rohilkhand and Kumaon Railway (hereinafter called the R. and K. R.) for the interchange of traffic, and for the use in common by both Railways of the O. and R. R. existing stations at Bareilly and Lucknow; 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 these joint stations and the working of the traffic of the two Railways at these stations.

#### Clause 1.

This agreement shall come into force from the 1st January 1891, and shall continue until the expiration of not less than six months' notice, which may be given by either Railway at any time, but which is to expire only on the 30th of June or the 31st December in any year.

#### Clause 2.

Unless there is something contrary or repugnant in the context, the following terms are throughout this agreement to bear the meaning and interpretation named below, namely:—

I.—Stations, Traffic, Vehicles, Rates, Fares, &c., of the O. and R. R. and R. and K. R., respectively, mean and include the Stations, Traffic, Vehicles, Rates, Fares, &c., of other Railways with which the O. and R. R. and R. and K. R. may, respectively, have through Traffic arrangements from time to time.

II.—O. and R. R. Local Traffic means all traffic booked or invoiced between Bareilly Junction or Lucknow Junction Stations and any station of the O. and R. R.

III.—R. and K. R. Local Traffic means all traffic booked or invoiced between Bareilly Junction or Lucknow Junction Stations and any station of the R. and K. R.

IV.—Through Traffic means all traffic booked or invoiced vid Bareilly Junction or Lucknow Junction Stations in accordance with the terms of this agreement, through from any station on one of the two contracting lines or any line beyond to any station on the other or any line beyond.

V.—O. and R. R. Through Traffic means all traffic of the O. and R. R. between places on the O. and R. R. on either side of Bareilly Junction and Lucknow Junction Stations and which, therefore, only passes through those stations and is not interchanged with the R. and K. R. at either junction.

VI.—The Joint Station Staff means staff of all kinds employed in loading or unloading and transhipping goods, and working traffic through and in and out of the joint stations, and includes Goods and Coaching Clerks, Telegraph Signallers, Police, Pointsmen, Shunters, Menials, and all other staff employed in receiving and despatching and dealing with trains and traffic of all kinds.

VII.—Running Staff means and includes Drivers, Firemen, Guards, Brakesmen, and all other staff that may be employed from time to time in the actual working of trains.

VIII.—Trains mean and include engines, whether with or without brakes, or other vehicles.

IX.—Traffic Receipts mean and include the receipts for all Coaching and Goods Traffic, and for telegrams and all other earnings at the joint stations.

X.—The Joint Station Expenses mean all the expenses which the O. and R. R. may incur in working the joint stations at Bareilly and Lucknow, including the provision of Stationery, Forms, &c., required for joint purposes, the cost of lighting the stations and lighting the signals, the cost of cleaning and conservancy, and all other expenses of all

sorts incidental to, or connected with the proper working of the station and also interest on the capital cost of the joint station premises.

XI.—The maund is considered, for all the purposes of this agreement, as consisting of 82 29 pounds divided into 40 seers, and the ton as consisting of twenty-seven maunds.

### Clause 3.

I.—The O. and R. R. existing works and premises including furniture and working Joint Station construction, Maintenance, Rent, Provision of Permanent-way, &c., &c.

Station those which are mentioned in Appendix A, Schedules Nos. I and 3 attached to this Agreement, and as regards the Bareilly Junction Station those which are mentioned in Appendix B, Schedules Nos. I and 3 attached to this Agreement, and the total of the amounts set opposite to those several items, respectively, in those Schedules shall be that on which the six and half per cent. per annum for rent and maintenance and nine per cent. on the cost of permanent-way is to be charged

as provided in para III of this clause.

II.—The O. and R. R. 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 they are defined in the Schedules referred to in para. I of this clause, and upon new premises, or works, which may have to be provided for joint use, within the limits of the joint stations.

All such new works, and additions, and alterations, shall be executed by the O. and R. R. upon plans and estimates, which shall be agreed to by both Railways, before the work is commenced.

Such buildings and conveniences shall be under the absolute control of the O. and R. R., but each Railway shall be entitled to work their trains into and out of the junction stations, and to have equal use for traffic purposes under the terms of this agreement of all the various buildings and conveniences embodied in the aforesaid Schedules.

III.—An annual charge for rent and maintenance at the rate of six and half per cent. shall be charged by the O. and B. R. to the Joint Station Expenses Account upon the expenditure for works and premises including furniture and working plant and nine per cent. on the cost of permanent-way shown in the Schedules referred to in para. I of this clause and upon the cost of alterations, and additions, and of new works to be provided under the provisions of para. II of this clause.

IV.—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 parts of the joint stations premises which are used in common by both Railways, shall be debited to the Joint Station Expenses Account. A separate account of such expenditure being kept for the purpose of Clause 4.

The O. and R. R. 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 stations.

V. – Each Railway shall provide and maintain, at its own cost, all such accommodation as may be required for its own exclusive use, and each Railway shall provide and maintain its own Permanent-way and Signals.

VI.—The monthly cost of the joint staff, stationery, stores, &c., shall be subject to a maximum outlay of R6,300-0-0 per mensem in regard to Lucknow Junction Station, and of R3,100-0-0 per mensem in regard to Bareilly Junction Station, the staff to be employed being restricted to the number and cost shown in Appendix A, Schedule No. 2, as regards. Lucknow Junction Station and Appendix B, Schedule No. 2, as regards Bareilly Junction Station; within these limits the O. and R. R. shall have full powers to re-arrange or modify the numbers of the staff and their rates of pay, but no permanent increase shall be made to the numbers or salaries of the staff which involves any outlay in excess of the aforesaid maxima, viz., R6,300-0-0 in the case of Lucknow Junction Station, and R3,100-0-0 in the case of Bareilly Junction Station.

VII.—In the event of stress of traffic necessitating immediate increase to the staff, the Manager of the O. and R. R. may make the necessary arrangements, subject to the subsequent approval of the Agent of the R. and K. R.

VIII.—No charge shall be made to the "Expenses at joint station account" in respect of renewal of furniture or working plant included in the Schedule of joint station requirements attached to this Agreement.

#### Clause 4.

Upon the termination of this Agreement, the amount of compensation to be paid by Compensation for Capital expend. either Railway to the other, for Capital expenditure in curred, shall be determined by mutual agreement, or, if necessary, by arbitration as ravided for herein.

#### Clause 5.

The Distant Signals on the O. and R. R., and the Distant Signals on the R. and

| Joint Station Limits. | K. R. on each side of the joint stations, shall be considered and accepted as the limits of the joint stations, and all signals within the joint stations, as well as the Distant Signals, shall be worked by the O. and R. R. for both Railways.

In the case of Lucknow Junction Station, the Distant Signals on the R. and K. R. of the Charbagh Transhipment Platform shall be considered and accepted as the limits of the joint station.

#### Clause 6.

Joint Station Staff.

I.—The staff for working the Joint Stations shall be appointed and controlled by the O. and R. R., and charged to the Joint Station Expenses Account.

- II.—The whole of the staff of the R. and K. R., while within the limits of the Joint Station premises and sidings used for traffic purposes, shall obey and be bound by all the Rules and Regulations, and also all instructions which may be, from time to time, in force, or which may be issued by the authorities of the O. and R. R., who shall have the same rights and control over the staff of the R. and K. R., while within the limits of the joint stations, as if they were the staff of the O. and R. R. itself.
- III.—The Joint Station Staff will deal with all Through Traffic, and also all Local Traffic of both Railways if conducted within the limits of the joint stations, and the traffic of the two Railways shall be dealt with in the same manner as if it belonged to one only, no undue preference being given to that of either Railway.
- IV.—Debits laid against the Joint Station Staff by the R. and K. R. for errors in accounts, defalcations, &c., shall, if necessary, be deducted from the salary of the Station Staff, or otherwise recovered upon proper representation by the Auditor of that Railway.

#### Clause 7.

I.—All damages or accidents which may be caused by the Joint Station Staff to the public, to the stock of the two Railways, or to the trains and traffic within the limits of the joint stations, and all damages or losses, however they may arise, which either Railway may sustain or be put to, in consequence of the acts of the Station Staff, within the limits of the joint stations, shall be charged to the Joint Station Expenses Account.

- II.—Each Railway shall be responsible for damages or accidents caused by its own running staff within the limits of the joint stations.
- III.—Notice of all accidents, damages, losses, &c., which may occur within the limits of the joint stations shall be sent, in accordance with the rules in force for reporting accidents on the O. and R. R. from time to time, to the officers of both Railways immediately such accidents, losses, &c., occur.

### Clause 8.

Coaching and Goods Traffic of every kind shall be freely interchanged between the two Railways with such special restrictions as may be, from time to time, agreed to by the Traffic Superintendents of both Railways, and subject to the following conditions, namely:—

(a) All packages of less than fourteen seers in weight shall be booked through as Parcels.

- (b) The minimum charge for Goods Traffic booked through shall be as for half a maund, and no less charge shall be made than eight annas.
- (c) No less charge than four annas shall be made upon Parcels Traffic booked through.
- (d) The minimum charge for Goods and Parcels shall be divided in mileage proportion.
- (e) Packages weighing more than 2 tons or exceeding 12 ft. in length by 5 ft. 6 in. in breadth by 6 feet high, outside measurement, shall not be booked through except by special arrangement.
- (f) All traffic for or from Bareilly and Lucknow from and for stations on the O. and R. R. and connected lines shall be booked to and from the Bareilly Junction and Lucknow Junction Stations.

#### Clause 9.

Through Rates and Fares.

I.—Each Railway shall supply the other, from time to time, with the rates and fares for Through Traffic between the joint stations and their respective stations.

II.—No alteration of rates or fares, or classification affecting the Through Traffic, shall be made by either Railway without one month's previous notice in writing to the other, and such notices shall be given so as to come into force only on the first of a month, and only by the Traffic Superintendent of either Railway to the Traffic Superintendent of the other, respectively.

III.—Each Railway shall supply its rates and fares and charges for Local Traffic to and from the joint stations to the Joint Station Staff from time to time. The rules and conditions applicable to the Local Traffic of the two Railways shall also apply in Through Traffic, unless otherwise specially notified.

IV.—The distances between the joint stations and stations of each Railway respectively shall be supplied by each Railway to the other from time to time.

The actual amount to be charged by each Railway on Through Traffic shall be furnished by the other Railway in the form of station to station rates in lump sums, in order to avoid any calculation of charges according to distance by stations.

### Clause 10.

Collection of Through and Local Charges.

I.—Each Railway shall be responsible for collecting and paying over to the other all the charges which may be payable upon Through Traffic.

II.—The Receiving Station shall check the Invoices, and be responsible for collecting any amounts that may be undercharged, whether booked "Paid" or "To Pay," with the following exceptions, which must be collected, in full, by the sending Railway, namely:—

- (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, Medical, or other Government Stores which are booked on Credit Note, or which may be prepaid.
- (d) Passenger fares, charges on passengers' luggage, and on carriages, and charges for Insurance.
- (e) Charges on all articles booked and carried in charge of the owner.
- (f) Charges on all articles, either as goods or parcels, which according to the rule of the Forwarding Railway are required to be prepaid. The rules of the Forwarding Railway in this respect shall be duly notified to the Receiving Railway.
- (g) Undercharges on specie, palanquins, and carriages booked by passenger train.

III.—The Receiving Station shall not reduce the weight of articles, or the charge below what is mentioned on the Invoice or Way Bill, without the consent of the Forwarding Railway, except in the case of Overcharges, the evident result of errors in classification or computation of freight.

IV.—The Joint Station Staff shall collect all the fares, rates, and charges of both Railways due on Local Traffic to and from the joint stations, and these charges, &c., shall

be paid to each Railway when, and in such manner as may be arranged, from time to time, between the authorities of the two Railways.

#### Clause 11.

I.—Claims for compensation, not arising from any act or negligence of the Joint

Claims.

Station Staff, shall be settled and paid by the Railway in whose custody the loss or damage occurred.

II.—When the responsibility for loss or damage cannot be satisfactorly determined, the claim may be debited to the Joint Station Expenses Account by mutual consent of the Traffic Superintendents of the two Railways.

III.—All damages or deficiencies in Parcels or Goods traffic shall be brought to the notice of the authorities of the two Railways, as soon as they are discovered, in such manner as may be agreed upon by the Traffic Superintendents from time to time.

IV.—All claims for compensation on Local Traffic due to the misconduct or carelessness of the joint staff shall be charged to the Railway concerned.

#### Clause 12.

Telegrams relating to the joint business of the two Railways shall be interchanged free between the two Railways.

#### Clause 13.

I.—The division of the Receipts on Through Traffic shall be carried out weekly, by the

Division of Receipts.

Audit Offices of the two Railways, without reference to the
end of a month, except that returns will be required for any
odd days in a week which may complete the months of June and December in each year,
and the receipts for Through Traffic will be accordingly divided up to the end of those
months respectively.

II.—The weekly accounts shall be made up to, and shall include the Saturday in each week, and settlements shall be made monthly on accounts which shall be closed on the last Saturday of each month, except as provided for in paragraph I of this clause, and each Railway shall have, in division, its own rates and fares, except in the case of minimum charges, which shall be divided by mileage as provided in paragraph (d) of clause 8 of this agreement, on the understanding that all accounts shall be accepted as rendered, and that errors, which may afterwards be brought to notice, shall be adjusted without delay in subsequent accounts by the responsible Railway.

### Clause 14.

Tickets, Returns, Inspection of Accounts, etc.

I.—Each Railway shall provide the Tickets, Forms, etc. required for its own traffic at the joint stations.

II.—The Joint Station Staff shall keep all such books, statements and returns, as may be required by either Railway, and shall render such statements and returns as either Railway may require, in reference to its own traffic, direct to the authorities of that Railway, from time to time.

III.—All traffic books and statements at the joint stations, and all Through Goods Parcels, and other traffic of either Railway shall be at all times open to inspection by any authorized officer of either Railway.

#### Clause 15.

I.—Fach Railway shall make its own arrangements for watering its own engines,

Watering and greasing and oiling Rolling Stock.

and also for greasing and oiling and examining and repair
ing its own engines and other rolling stock at the joint
stations.

II.—Each Railway shall also supply lamps, oil, wicks, etc., and shall also do the work of lighting its own trains.

### Clause 16.

All sums which may be realized by the sale of lost and unclaimed and damaged pro-Lost and Unclaimed Property, for rent of Refreshment Rooms, for licenses for the sale of fruits, sweetmeats, etc., for the sale of manure, and all other incidental receipts at the joint stations, shall be credited to the Joint Station Expenses Account.

#### Clause 17.

Division of Joint Station Expenses.

The Joint Station Expenses Account shall be subdivided so as to show the expenses at each of the two junction stations separately.

II.—In the case of the Bareilly Joint Station, in consideration of the O. and R. R. Through Traffic (as defined in para. V, clause 2, of this Agreement), with which the R. and K. R. is not concerned, one-fourth of the Joint Station Expenses Account, as defined in para. X of clause 2 of this Agreement, shall be paid by the O. and R. R., and the remaining three-fourths of that account shall be paid by the two Railways in proportion to the weight of traffic, Through and Local (as defined in paragraphs II, III and IV of clause 2 of this Agreement), of each Railway using the joint station.

III.—In the case of the Lucknow Joint Station, in consideration of the O. and R. R. through traffic (as defined in paragraph V, clause 2, of this Agreement) with which the R. and K. R. is not concerned, one-half of the Joint Station Expenses Account (as defined in para. X of clause 2 of this Agreement) shall be paid by the O. and R. R., and the remaining half of that account shall be paid by the two Railways in proportion to the weight of traffic, Through and Local (as defined in paras. II, III and IV of clause 2 of this Agreement), of each Railway using the joint station.

IV.—For the purposes of this division of Joint Station Expenses, the weight of Goods and Parcels Traffic shall be reckoned upon the actual weight, according to the Invoices and way-bill, and each passenger shall be taken as equal to 10 th of a ton, no account being taken of Coaching Traffic other than passenger.

(N. B.—Paras. II and III of clause 17 to be subject to reconsideration at the end of 1893, vide Government of India letter No. 939 R. T. of 19th December 1891, to the address of the Director General of Railways,—See annexure No. 1—and are not subject to the limits of notice required by clause I.)

#### Clause 18.

I.—The rules for the interchange of traffic between Railways, as adopted at the Adoption of Rules of Railway

Railway Conference of 1888, shall be adhered to, as far as they are applicable to the traffic and working between.

Railways of different gauges referred to in this agreement.

II.—In the event of vehicles of either of the two Railways being delayed under load with through goods at the joint stations for want of vehicles of the other Railway into which the through loads can be transhipped, the rules and rates of demurrage, adopted at the Railway Conference of 1888, are to apply.

#### Clause 19.

The day shall, in all cases, be reckoned as 24 hours commencing at 12 o'clock at night, part of a day to be reckoned as a day. Madras time shall be adopted in all cases. Sundays shall be treated as holidays, and with this exception no dies non shall be allowed.

#### Clause 20.

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, either Railway shall be entitled to call for an arbitration to be conducted in the usual 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 upon both Railways, in regard to the matter or matters which may be referred to them or him. But if either of the two Railways shall fail to nominate an arbitrator within eight weeks after notice to call for an arbitrator 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.

#### ANNEXURE No. I.

Copy of a letter No. 939 R.T, dated 19th December 1891 from the Secretary to the Government of India, Public Works Department, to the Director-General of Railways.

I am directed to acknowledge the receipt of your letter No. 392T., dated 17th November 1891, forwarding a report from the Manager, Oudh and Rohilkhand Railway, regarding the proposed Working Agreement between that line and the Rohilkhand and Kumaon Railway Company for the joint use of the Lucknow and Bareilly stations.

2. In reply I am to say that the proposals of the Board of Directors of the Rohil-khand and Kumaon Railway Company in respect to the deduction to be made on account of through traffic at these stations may be accepted for two years, subject to re-consideration at the end of 1893, and I am to request that an agreement on this basis may now be drawn up and 40 copies forwarded to the Government of India in print.

## Appendix A.

## Schedule No. 1.

## LUCKNOW STATION.

List of Buildings and Works constructed by the Oudh and Rohilkhand Railway, but in joint use of the Oudh and Rohilkhand Railway and the Rohilkhand and Kumaon Railway on which interest at 61 per cent. per annum is charged to joint expenses.

No. of House.	No. of Rooms.	How utilised.	Designation.	Expenditure up to 30th June 1890.	No. of House.	No. of Rooms.	How utilised.	Designation.	Expenditure up to 30th June 1890.
				Ru.p.					R a. p.
•••	1	Lamp Shed	Pucca building	98000	3	18	Native Menial Staff,	Brought forward .	40.743 o o
	1	Oil Godown	Ditto	300 0 0		,	2 blocks	Pucca building	2,700 0 0
	,	Cook-house to Refresh-				2	Lost Property Offices .	Ditto	1,400 0 0
***	-	ment Rooms	Ditto	75000		]	Booking Office	Ditto	2,800 0 0
•••	լ	First Class Refreshment				•	Well	Ditto	1,400 0 0
•••		Room	Ditto	4,536 0 0		•	Island Platform	Ditto	600 0 0
	1	Second Class do	Ditto	1,027 0 0		,	Transhipment Platform	Ditto	8,460 0 0 7,180 0 0
	1	Pantry to Refreshment Rooms	Ditto	700 0 0		1	Main Passenger Plat- form and Verandah .	960	27,100 0 0
***	1	Refreshment Room— Contractors' Retiring				1	Waiting Shed with Teakwood Seats and		
İ		Room	Ditto	700 0 0		1	Boarding  Transhipment of Passengers and Luggage	100 H 001 O	12,583 0 0
	r	Godown-Refreshment Room Store	Ditto	700 o o		1	Overfoot Bridge with	420 × 381 Open Platform	4,500 0 0
•••	1	Gentlemen's 2nd Class Waiting Room	Ditto	1,600 0 0		1	Platform Wall at the back of the Cawn- pore Branch Plat-		11,122 0 0
	1	Ladies' 2nd Class Waiting Room	· Ditto	1,600 0 0	<b></b>	1	form	• • • •	3,552 0 0 5,408 0 0
	1	Lamp Room	Ditto	300 0 0			Level-crossing and Gate lodge with Sema-		
	2	Gentlemen's 1st Class Waiting Rooms	Ditto	3,200 0 0		1	phore Signal Storage of Goods and Offices	120 × 50	8,058 o o
	2	Ladies' 1st Class do	Ditto	3,600 o o		2	Do. do. , .	1-112×50, 1-137×50 pucca Shed	0,030 0 0
	1	Way-out for 1st Class Passengers	Ditto	2,000 0 0		I	Transhipment of Goods	and Verandah 107 × 47 Covered Shed	28,941 0 o
	ı	Station Master's Office	Ditto	800 0 0		1	Telegraph Office on Transhipment Plat-		3,000 0 0
	1	Ticket Collector's do.	Ditto	800 0 0			form	• • • •	224 8 g
	1	Luggage Office and Weigh-Machine .	Ditto	2,750 0 0		1	Do. do Do. do	1,034 × 50 Platform . 650 × 20 do. and Weighing Scales	15,520 0 0 6,200 0 0
	2	Parcel Godowns .	Ditto	80000	∥	I	Shed for coolies .		100 0 0
	1	Parcel Office and Weigh- Machine	Ditto	400 -	6	4	Station Masters .	Pucca Bungalow.	8,6 <sub>5</sub> 8 o o
	1	Ditto	Ditto	400 0 0	6	2	Assistant Station Mas- ters	Pucca Traffic Barrack,	2,014 0 0
	1	Way-out for 3rd Class Passengers	Ditto	800 0 0	2	2	Do. do.	Ditto .	2,500 0 0
	1	Assistant Station Mas- ter's Office	Ditto	1,500 0 0	1	2	Sub-Assistant Station Masters	Ditto	2,500 0 0
	1	Telegraph Office .	Ditto	2,300 0 0		2	Telegraph Signallers .	Ditto	2,500 0 0
	1	Native Ladies' Waiting Room	Ditto	1,000 0 0	1	•••	Boundary Wall between Menials' Quarters, R. K. Station lines,		•
•••	1	Waiting Shed for Native Passengers	Ditto with tile roof			1	parallel to platform . Dock for metre-gauge line		3,286 o o
			and corrugat- ed verandah	6,400 0 0		1	Gate lodge at Goods		1,027 0 0
	1	Latrine – European and Native	Diseas 1144			1	Approach Road to Stations		300 0 0 1,200 0 0
		74471AC *	Ditto ditto .  Carried over .	800 0 0	•••		Wire Fencing		1,000 0 0
			1	40,743 <b>o</b> o.				TOTAL R .	2,20,009 8 3

### APPENDIX K.

## Appendix A.

## Schedule No. 2.

Schedule of joint expenses at Lucknow Station between Oudh and Rohilkhand Railway and Rohilkhand and Kumaon Railway.

٠				Pap	RTICU	LARS	op S1	AFF.								1	Amount.	Amo	מם<
-ŀ				<del>-</del> -													R a. p.		
	Station Master										_						350 0 0		
-	Assistant Station Masters .		•	•				•		-	•	•			:		325 O O		
	Sub-Assistant Station Masters	•	,	•	•						,		•				100 0 0		
	Platform Inspector	•		•	•	•		•	-	٠	•			•			100 0 0	!	
	Gunners		•	•	•	•							•				200 0 0		
	Ticket Collectors	•		•	÷						,	•			•		170 0 0		
	Chief Goods Clerk	•	•	,	•						٠	•		· .		!	170 0 0		
	Invoice Clerk					•						•					40 0 0		
	Delivery Clerk			•			•	•				•				•	40 0 0		
	Accounts Clerk		•	•	•	•	•			-				•	-		135 O O		
Н	Shed Clerk			•	•	+	:		•		,	•				- 1	35 0 0		
l	Unloading Clerk		•	•		•				•						-	25 0 0		
- 1	Loading Člerk		•	•	•	•			•						•		20 0 0	ļ	
	Gate Clerks			•	•	•			٠	•	,					•	20 n o	ł	
	Tally man		•	•	•	•		•				•			•		10 0 0	1	
1	Marker							•		•					•		_6 0 0		
	Booking Clerks		•	•	•	•	•	•		٠.	•	•					180 o o		
	Luggage Clerks	•	•		•	•	•	•					•		•	- 1	115 0 0		
1	Assistant Luggage Clerk .	٠		•	٠	•		•			•	•	•	•	•	•	25 0 0		
-1	Parcel Clerk			•		•	•	-	•				•	•	•	- 1	40 0 0		
	Assistant Parcel Clerks .	•	•		•	•	•		•	•	•	•			•		150 0 0		
-1	Luggage Examiner	•	•	•	•	•	•	•	•	•		•	•		•	• ]	30 0 0		
-1	Trains Clerks		•	•	•	•			•			•	•		•	•	45 0 o		
ı	Transhipment Clerks				•			•				-			•	•	80 o o	i	
1	General Clerks		•		•	•		·•	-	•				•	•	-	7º 0 0		
1	Number Taker		•	•	•	•	•	•	•	•	•	•	•		•		15 o o	l	
1	Probationers			•	•				•		•	-		• .	:		30 0 0		
	Signaller in charge	٠.	•					•	•		•		•	•			120 0 0	]	_
1	Signallers		•	•	•	•		•	•			•			•	•	470 o o		-
1	Telegraph Peons	•	•	•					•			•	•	•	•		45 O O	1	
1	Native Gunners and Tindals	•	•		•		•	•			-	•	•	•			ç8 a o		
	Line  emadars							•				•	•	•			72 0 0	1	
П	Lampmen		•		•		•		•	-			•	•	•	•	43 0 0	!	
-1	Points and Signalmen .		•		•	•		•	•	•	•		•	•			310 0 0		
	Luggage and Goods Mates				•				•	•		•	•	•		•	48 o o	I	
- }	Porters	•	•	•	•		•				•	•	•		•	•	352 0 0	ł	
	Shunting Porters		•	•	•	•	•				•	-	•	•	•	•	78 o o	l	
	Goods Coolies	•	•	•	•	•			•	•	•	•	•	•	•		190 0 0	l	
- 1	Cranemen	•		•	•		•	•	•	•	•	•	•	•		•	31 0.0	İ	
- [	Female Ticket Collectors .			•	•		•		•	•				•	•		10 0 0	1	
	Traffic Peons	•	•		•				•	•		•.	•	•			10 0 0	1	
	Rhisties	•	•	•	•		•				•		•	•			IO O O	ł	
1	Hindu Watermen		•			•		•	•	•		•	•	-	•		800	ļ	
	Sweepers							. •				•		•	•		15 0 0	ļ	
	Ayahs	•		•	•	•	•	•		•	•		•				15 o o	ł	
	Waiting Room Bearers .		•	•					•			•			٠		I2 0 0	1	
-	Running Room Bearer .	•	•	•	•												700	ļ	
	Do. do. Cooks								•								10 0 0	ľ	
ĺ																	<del></del>	4,380	
-	Contingencies		•					•				•			•		50 0 0		
1	Relieving Staff	•						•				•		•			50 0 0	1	
П	Hot weather Establishment			•	•							•		•			48 0 0	1	
ł	Government Telegraph Mainte	nance		•		•	•	-		•		•	•	•	•	•	154 o o		
- 1	Jamadars and Chowkidars .			•			•	-	•			•	•		•	•	288 o o		
П	Clothing Allowance and Charge	es for	Unifo	cms f	to Sta	aff.	•	-	•	-		•		•			128 o o		
- 1	Conservancy Establishment							-				•		•	•	• [	180 0 0		
1	Pay to Staff doing duty for per	mane:	nt Sta	ıff				-		-		•	•		•	. ]	9000		
1	Goods Handling Charges .									•		•		٠			200 0 0		
-	Stores			•				-	•		•	•	•		•	. !	625 o o		
1	Cantingary Rorms, etc.					•	•	• .		•				•		. )	20 0 0		
- 1	Consider to Points, etc. Staff at	id Che	owkid	ars				-					٠			. 1	28 o o		
1	Allowance to Guards doing dut	y for A	Assist	ant S	tation	ı Mas	ters	-						•		٠.١	59 O O		
-	Mines and an arrange of the state of the sta															- 1		1,920	c
1																l			-
										•						l			
																- 1			
- [														Tor					

## Appendix A.

Schedule No. 3.

## LUCKNOW STATION.

Schedule of Furniture and Working Plant in joint use by Oudh and Rohilkhand Railway and Rohilkhand and Kumaon Railway at Lucknow.

_			Tumaon Ru		<u>-</u>	<u> </u>	=
No.	Name of Articles.	Approximate value.	Remarks.	No.	Name of Articles.	Approximate value.	Remarks.
	Station Master's Office.	R a. p.				R a. p.	· <del></del>
1	Book Shelf	30 0 0			Brought forward .	328 8 7	
2	Boxes, Stationery, with 2 Chubb's	_		2	Commodes	400	
	padlocks	21 0 0		2	Chamber Utensils	16 0 0	r
1	Clock, Office, round	38 0 0		4	Chicks	6 0 0	II
3	Chairs	6 12 0		2	Mirrors	10 0 0	
₹	Press, copying	40 0 0		2	Mats, floor		T.
2	Chicks	300		4	Do., door		
1	Date Indicator	100	•		Iron Padlock for locking door	400	
1	Damping Brush	140		Į]	·	060	
1	Gum pot	0 11 7		2	Tables, dressing	10 0 0	
1	Hat Peg	0 4 0		2	Do., oval	20 0 0	
3	Inkstands, Metal	480		3	Towel-stands	300	
5	Do., Tin	0 10 0		1	Tub, bathing	7 0 0	
	Mat, floor	200		3	Wash-hand stands with Crockery	<u> </u>	
1	Do., door	100			Ladies' First Class Waiting Room.		
2	Iron Padlocks to Lock Office and			5	Chairs	11 4 0	
1	Store Rooms	0 12 0		3	Do., Easy	15 0 0	
•	Pordah	500		3	Chamber Utensils	600	
2 :		-				24 0 0	
- i	Rulers, Office	0 12 0		4	Chicks	600	
_	_			3		15 0 0	
3	Do., lamp	2 4 0	·	2	Mats, floor	400	
1	Spanner	24 0 0		5	Do., door	5 0 0	•
3				2	Iron Padlocks for locking doors		
1	Board, Sign	100		2	Dressing Tables		
1	Clock, Office, round	38 0 0		2	Tables, oval	2000  	
3	Chairs	· 6 12 0		2	Towel-stands	200	
7	Date Indicator	100		1	Tub, Bathing	7 0 0	
2	Inkstands, Metal	3 0 0	) 	3	Wash-hand stands with Crockery	l J	
1	Key, wagon top	060			Ladies' Third Class Waiting Room.		
1	Do., Powder Van	060		5	Chairs	11 4 0	
1	Step, wooden	3 0 0		2	Do., Easy	10 0 0	
1	Oil-feeder	080		2	Commodes	. 4 0 0	
1	Purdah			2	Chamber Utensils	16 o o	
1	Guard's store box with 1 Chubb's			4	Chicks	600	
	Padlock	15 0 0		1	Mirror	5 0 0	•
2	Ruler, Office	080		1	Mat, floor	200	
2	Stools, wooden	400		2	Do., door	200	
3	Tables, square, with drawers .	24 0 0		1	Iron Padlock for locking door	060	
	Letter case with I Chubb's padlock	13 8 0		1	Table, Dressing	500	
2	Lamps, glass shade	3 0 0		1	Do., oval	10 0 0	
	First Class Gentlemen's Waiting Room.			1	Towel-stand	100	
6	Chairs	13 8 0	_	1	Tub, Bathing	700	
2	Do., Easy	10 0 0	•	1	Wash-hand stand with Crockery.	2 0 0	
	. Carried over .	328 8 7			Carried over .	632 14 7	•
		·	<u> </u>	<u>  </u>	<u> </u>		

\*Second.

## APPENDIX K. -

No.	Name of Articles.	Approximate value.	REMARKS.	No.	Name of Articles,	Approximate value.	
		R a. p.				R a. p.	
i	Brought forward	632 14 7			Brought forward	992 0 7	
	Gentlemen's Third* Class Wait- ing, Room.				Telegraph Office—(concluded).		
5	Chairs	11 4 0	{	1	Ruler, Office	· o 8 o	
2	Commodes	4 0 0	•	11	Stools, Wooden	22 0 0	
2	Chamber Utensils	16 0 0	ļ	] 1	Scissors, pair	0 12 0	
2	Chicks	300		1	Seal, Office	100	
-	Mirror	500	ļ	6	Zinc Plates	180	•
1	Mat, floor	200		1	Screw Driver	0 12 0	
2			İ	4	Tables, with Drawers	32 0 0	
•	Do., door Iron Padlock for locking door	060		6	Letter Clips, vertical	286	
• ;	Table, Dressing			1	Eyelet Presser	1 8 0	
•	]	ľ	} -			· (	
•	Do., oval	10 0 0	)		Parcel Office.	1	
-	Towel-stand	100		3	Book Shelves	9000	
-	Tub, Bathing	700	<b>(</b>	1	Box, Stationery, with 1 Hobb's	600	
1	Washhand-stand with Crockery	200	l .	2	Boards, Notice	8 0 0	
٠.	Native Ladies' Waiting Room.		∤ .	2	Chairs	480	
5	Takhats, wooden	2500	,	ı	Counter, Wooden	4.00	
				8	Shelves, wall	600	
_	Native Latrines.		1	1	Gum Pot	0 11 7	
. 2	Commodes	• 4 0 0	1	2	Inkstands, metal	300	
	Telegraph Office.			1	Square Lamp	200	
. t	Chair	240			Measuring Tape	5 4 0	
4	Chicks	600	,	2	Chubb's Padlocks for locking		
1	Book Sheft	30 0 0	}		doors	17 0 0	
2	Boxes for Stationery with 1 Chubb's and 1 common lock	12 14 0	[·	∦ *	Ruler, Office	. 080	
1	Box for messages with a com-			2	Rat Traps	1 4 0	
	mon iron lock	200		I I	Stool, Wooden	200	
1	Box, common, for keeping oil, with I Chubb's lock	10 8 0	ł	2	Scales, Parcels	10 0 0	
1	Boasd, Notice	400	Į.	4	Tables, square	32 0 0	
1	Do., Sign	1 0 .0	]	1	Parcel Truck with 2 Chubb's Pad- locks	47 0 0	
2	Buckets, Iron	600		1	Weighing Machine with weights.	150 0 0	
5	Bags for Peons	500	· ·	1	First and Second Class Booking	}	
10	Badges for Peons	23 12 0	1	<b>∦</b>	Offices.	<b>.</b> • }	
1	Clock, round	38 0 0		3	Book Shelves	90 0 0	
3	Counters, Wooden	12 0 0	<b>.</b>	T	Box for Luggage Label	200	
. 2	Date Indicators	200	,	1	Board, Sign	400	
. 2	Funnels	. 040		6.	Bags for Cash	600	
ı	Iron Safe.	40 0 0	· .	3	Chairs	6 12 0	
13	Inkstands, metal	1989		1	Testor, Coin	0.20	
4.	Lamps, square	8 o o	ł ·	1	Dating Machine with type box .	43 0 0	
2	Do., Kerosine-oil, wall	950		4	Chests, Treasure	160 0 0.	
2	Do., Billiard	23 8 0	].	2	Inkstands, metal	3 0 0	
3	Oil Cans	3 12 0		. 2	Lamps, Hand	10 0 0	
	Do, Feeder	080	. i	1	Scissors, pair	0 12 0	
	Paper Weights, metal	0 15 0		2	Stamps, Office	2 0 0	
1	Iron Padlock for locking door	. 0 6 0		1	Large Ticket Case with 1 Chubb's Lock	48 8 0	
	Carried over .	992 0 7	•		Carried over		
					Cathed 6701	1,816 14 8	

## Appendix A.

## Schedule No. 3.

## LUCKNOW STATION.

Schedule of Furniture and Working Plant in joint use by Oudh and Rohilkhand Railway and Rohilkhand and Kumaon Railway at Lucknow.

	<del></del>	}		)		<del></del>	<del> </del>
No.	Name of Articles.	Approximate value.	Remarks.	No.	Name of Articles.	Approximate value.	Ramarks.
	Station Master's Office.	R a. p.			•	R a. p.	<del></del>
1	Book Shelf	30 0 0			Brought forward .	328 8 7	
2	Boxes, Stationery, with 2 Chubb's			2	Commodes	400	}
	padlocks	21 0 0		2	Chamber Utensils	16 0 0	ļ
1	Clock, Office, round	<b>38 0 0</b>		4	Chicks	600	J
3	Chairs	6120		2	Mirrors	10 0 0	
i	Press, copying	40 0 0		2	Mats, floor	. 4 0 0	
2	Chicks	3 0 0		4	Do., door	400	
1	Date Indicator	100		ı	Iron Padlock for locking door .	060	
1	Damping Brush	140		2	Tables, dressing	10 0 0	]
1	Gum pot	0 11 7		2	Do aval	20 0 0	
1	Hat Peg	040		3	Towel-stands	300	
3	Inkstands, Metal	480	l		Tub, bathing	700	
5	Do., Tin	0 10 0		3		600	
1	Mat, floor	200		∥ ັ	Ladies' First Class Waiting Room.		
3	Do., door	100		5	Chaire	11 4 0	
2	Iron Padlocks to Lock Office and Store Rooms	0 12 0		3	Do., Easy	15 0 0	
1	Paper Weight	030	-	3	Commodes	600	
1	Purdah	500		3	Chamber Utensils	24 0 o	
2	Rulers, Office	150		4	Chicks	6 o o	
1	Scissors, pair	0 12 0		3	Mirrors	15 o o	
3	Do., lamp	240		2	Mats, floor	4 0 0	
1	Spanner	200		5	Do., door	5 0 0	
3	Tables, square, with drawers .	<b>24 0</b> 0		2	Iron Padlocks for locking doors .	0 12 0	<b> -</b>
3	Board, Sign	1 0 0		2	Dressing Tables	10 6 o	
	Assistant Station Master's Office.  Clock, Office, round	38 o o	ı	2	Tables, oval	20 C o	
3	Chairs	6 12 0		2	Towel-stands	200	
1	Date Indicator	100	l	1	Tub, Bathing	7 ° 0	
2	Inkstands, Metal	300	•	3	Wash-hand stands with Crockery	600	
1	Key, wagon top	060			Ladies' Third Class Waiting Room.		
ī	Do., Powder Van	060		5	Chairs	11 4 0	
,	Step, wooden	300	_	2	Do., Easy	10 0 o	
1	Oil-feeder	080		2	Commodes	. 4 0 0	
1	Purdah			2	Chamber Utensils	16 o o	
1	Guard's store box with 1 Chubb's padlock	15 0 0		4	Chicks	600	
,	Ruler, Office	080		1		5 0 0	
2	Stools, wooden	400	į	ı	Mat, floor	200	
3	Tables, square, with drawers	24 0 0		2	Do., door	200	
_	Letter case with 1 Chubb's padlock	· 1		1	Iron Padlock for locking door	060	
2	·	300	ł	I	Table, Dressing	5 0 0	
Ĩ.	First Class Gentlemen's Waiting	3 0 0		I	Do., oval	10 0 0	
6	Room. Chairs	13 8 0		1	Towel-stand	100	
2	Do., Easy	10 0 0		1 1	Tub, Bathing	7 0 0	
-	. Carried over	323 8 7		1	Wash-hand stand with Crockery.	2 0 0	
		J20 0 /			Carried over	632 14 7	•

\*Second.

## APPENDIX K. -

No.	Name of Articles.	Approximate value.	Remarks.	No.	Name of Articles.	Approximate value	REMARKS
		R a. p.				R a. p.	<del></del>
	Brought forward .	632 14 7		\	Brought forward	992 0 7	
	Gentlemen's Third Class Wait-	•		ľ	Telegraph Office-(concluded).		
5	Chairs .			1	Ruler, Office	080	
2	Commodes	11 4 0	•	11	Stools, Wooden	22 0 0	
2	Chamber Utensils	1600		1	Scissors, pair	0 12 0	
2	Chicks	3 0 0		r	Seal, Office	100	
1	Mirror	500	}	6	Zinc Plates	180	
	Mat, floor	200		] 1	Screw Driver	0 12 0	
2	Do., door	200		4	Tables, with Drawers	32 o o	
Ī	Iron Padlock for locking door	060	•	6	Letter Clips, vertical	286	
• .	Table, Dressing	500		1	Eyelet Presser	18.0	
1	Do., oval	10 0 0	•		Passal Office	• (	
	Towel-stand	100		,	Parcel Office. Book Shelves	<b>a</b>	
	Tub, Bathing	7 0 0	•	3	Box, Stationery, with 1 Hobb's	90 0 0	
	Washhand-stand with Crockery	200	)	1	Padlock Padlock	600	
•	· •			2	Boards, Notice.	8 0 0	
٠.	Native Ladies' Waiting Room.	} .	{	2	Chairs	480	
5	Takhats, wooden	2500	J	1	Counter, Wooden	400	
	Native Latrines.		٠.	8	Shelves, wall	600	
2	Commodes	400	}	1	Gum Pot.	0 11 7	
• –	Telegraph Office.	• • • •		2	Inkstands, metal	3 0 0	
ı	Chair	2 4 0	•	1	Square Lamp	200	
	Chicks	600		1	Measuring Tape	5 4 0	
	Book Shelf	30 0 0	ļ -	2	Chubb's Padlocks for locking		
2					Ruler, Office	17 0 0	
	Boxes for Stationery with 1 Chubb's and 1 common lock	12 14 0		2	Rat Traps		
1	Box for messages with 1 com- mon iron lock	200		1	Stool, Wooden	1 4 0	
1	Box, common, for keeping oil,	İ	j	2	Scales, Parcels	10 0 0	
	with 1 Chubb's lock	10 8 0		4	Tables, square		
. 1	Board, Notice	400		] ]	Parcei Truck with 2 Chubb's Pad-		
1	Do., Sign	1 0 .0		-	locks	47 0 0	
2	Buckets, Iron	600	·	1	Weighing Machine with weights.	150 0 0	
5	Bags for Peons	500			Rirst and Second Class Booking Offices.		
10	Badges for Peons	23 12 0		. 3	Book Shelves	9000	
1	Clock, round	38 0 0		1	Box for Luggage Label	م 2 0 م	
3	Counters, Wooden	12 0 0		1	Board, Sign	100	
. 3	Date Indicators	200		6.	Bags for Cash	600	
. 2	Funnels	. 040		3	Chairs	6 12 0	
I	Iron Safe.	40 0 0	•	1	Testor, Coin	0.20	
13	•	1980		1	Dating Machine with type box	43 0 0	
4-	Lamps, square	800	,	4	Chests, Treasure	160 o o.	
2	Do., Kerosine-oil, wall	950		2	Inkstands, metal	3 0 0	
2	Do., Billiard	23 8 0		2	Lamps, Hand	10 0 0	
3	Oil Cans	. 3 12 .0	. •	,	Scissors, pair	0 12 0	
I	Do. Feeder	080	·	2	Stamps, Office	200	
4	Paper Weights, metal	0 15 0.			Large Ticket Case with 1 Chubb's	-	
1	Iron Padlock for locking door .	6 0		#	Lock	48 8 0	
•	Carried over .	992 0 7		∥ •	Carried over .	1,816 14 8	

		<u></u>	<del></del> =		•	<del></del>	
No.	Name of Articles.	Approximate value.	Remarks.	No.	Name of Articles.	Approximate value.	REMARKS.
	<del></del>	R a, p.				R a. p.	
	Brought forward	1,816 14 8			Brought forward .	3,830 7 3	
•			•-		Platform No. I.—(concluded).		
	First and Second Class Booking Office - (concluded).	6		2	Tables, square	16 0 0	
. 2	Small Ticket Cases with 2 Chubb's Locks	60 0 0		14	Lamps, Kerosine oil, Wall	1:2 0 0	
1	Table, square	8 0 0	} }.	'	Train Time Indicator	42 0 0	
τ	Box for Ticket with 2 Chubb's	19 0 0			Bell, Iron Rail		•
•	Chubb's Padlock for Office door	880		1:	Inkstand, tin	3.00	
	Third Class Booking Office.			15	Lamps, Platform Wall	150.0 C	
3	Almirahs for Tickets with 3 Chubb's and 2 Hobb's Padlocks	183 8 o	Į Į	.,	Stamp, Office	130.00	
1	Book Shelf	30 0 0			Rohilihand and Kumaon Roil-	• • • • • • • • • • • • • • • • • • •	
1	Box, common	200		i	way Booking Offices. Almirah, Ticket, with a Chubb's		
3	Boards, Sign	3 0 0		-	Locks	. 67 0 0	
1	Tester, Coin	030		2	Book Shelves	6200	
. 3	Dating Muchines with type boxes	129 0 0	•	4	Boards, Notice	1000	
. 3	lekstands	4 8 0		1	Clock, Office, round	38 o o	
4	Stools, wooden	8 0 0	,	1	Chair	2 4 0	
2	Scissors, pairs	1 8 o			Dating Machine with type box .	43 0 0	
3	Ticket Cases, large, with 3	115 8 0		2	Inkstands	3 0 0	
•	Chubb's Locks	145 8 0		1	Keys, Carriage Lamp, Hand Signal	0 13 4	
3	Tables, square  Iron Padlocks for locking doors	1		I	1	5 0 0	
•	Luggage Office.			12		96 0 0	
1	Board, Notice	4 0 0		,	Step, Wooden	300	
- 1	Gum Pot	0 11 7	   • •	2		4 0 0	
1	Chest, Treasure	40 0 9		,	Scissors, pair	0 12 0	
2	Inkstands, metal	300		2	Tables, square, with drawers	16 0 0	
2 4	Lamp, Glass, shade	180		2	Ticket Nippers	. 480	
2	Stools, wooden	400		1	Weighing Machine with Weights	<i>†</i> 1	
1	Ruler, Office	0 8 0		1	Ticket Case, large, with	·	
3	Tables, square Weighing Machines with weights		·		Chubb's Lock	48 8 0	
3	Platform No. I.	130 0 0	,	1	Ticket Collector's Room. Book Shelf	30 0 0	
2	Bamboos	080		2	Boards, Notice.	8 0 0	
1	Bell, Iron Rail	3 0 0	•	2	Chicks	3 0 .0	
1	Do., Brass	7 4 0		2	Chairs	4 8 o	
2	Boards, Loading	18 10 0	Ì	1	Dating Machine with type box	43 o o	
2 .	Do., Treasure	200		1	Hat Peg	. 0.4 0	
2	Do., Notice	800		"	Chest, Treasure	40 O O	
2	Barrows, Hand, Four-wheeled	42 0 0		1	Ruler, Office	080	
17	Do., do., Two-wheeled .	170 0 0		1	Stool, Wooden	200	
1	Clock, Station Platform	120 0 0		1	Table, square, with drawer	800	
2	Stands for Filter Gharrahs, Iron	600	•	1	Ticket Nipper	2 4 0	
2	Gharrahs, Iron  Bracket Lamps with Burners e.ch	j -		} 1	Box for collected tickets	200	
20	Lamps, Platform Wall, with	1			Station Yard. Chains, Safety	·	
î 4	Burners each	140 0 0		121	Iron Padlocks	42 0 0	
. 26	Lamps, Hanging Platform, do	299 0 0			Store Room.	45 6 o	
4	Iron Padlocks	180	•	3	Book Shelves	90 0 a	
1	Stand, Soorai	080		1	Board, Tail	2 0 0	
	Carried over	3,830 7 3			Carried over	4,931 4 7	

			<del></del>				
No.	Name of Articles.	Approximate	Remarks.	No.	Name of Articles.	Approximate value.	Remarks.
	Brought forward .	R a. p 4.934 4 7			Brought forward Goods Shed	* # a. p. 6,316 10 7	
	Store Room—(concluded).	-	•	ī	Almirak, Office, with 1 Chubb's Lock	<sub>5</sub> 8 8 o	
	Boards, servants' compartment .			6	Book Sheives	280 p p	
24	,	. 24 0 0		2	Blocks, Iron	600	
4	Brushes	3 0 0		3	Boxes, Stationery, with a Chubb's		
5	Chains, Safety	15 0 0	,		Locks and z Hobb's Lock	27 0 0	
3	Do., Door	100		15	Boards for loading horses .	139 11 9	
•	Lamp, Argand	400		9	Do., Notice	35 o o	
1	Chubh's Padlock	880		25	Buckets, Iron	. 75 0 0	
1	Washhand-stand, with Crockery	300		*	Bench, Wooden	10 0 0	
i	Refreshment Room,			3	Batrows, Hand, Four-wheeled	6000	
	Clock, round	3800	••	13	Do, do., Two do	130,00	
	Counters, Wooden, large	20 0 0	. <del></del>	2	Clocks, Office, round	. 76 0 0	
	Do., do., small	400		1	Clip, Stationery	069	
•	Chicks	1		4	Chairs	90.0	•
3	•	4 8 0		24	Crow-bars	<u>3</u> 600	
3	Frames for Railway Act	15 0 0		111	Chains, Salety	33 0 0	
3	Stand for Soorai	080		1	Do., Leading	140	1
8.	Train Time Indicator	43 0 0			. Do., Crane	3000	
3	Purdahs	15 0 0	•	2	Chests, Treasure	80 o 0	
			li	,	Counter, wooden	800	
į	Oil Rooms.		1		Crane, Platform	650 0 0	
4	Buckets, Iron	i2 0 0			Press, Copying	40.00	!
1	Funnel, Tin	0 0	•		Tester, Coin	030	
8	Trays for Lamps	6400			Date Indicator	100	
2	Tables, Zinc top	40 0 0	٠.	3	Damping brushes	140	
72	Lamps, Hand Signal	<b>ე</b> 60 0 0	•		Gum Pots		
	Do., square	200		;	Hogsbead for water	171	
1	Do., Billiard	11 12 0	,	1	Hammers	.10 0	
7	Do., Semaphore	280 0 0		2	1	090	
10	Do., Kerosine-oil, Wall .	8000		8	lokstanda, Motal	-24 0 0	
2	Lanterns; square	400		3	Do., Tin	060	
	Oil Drum, 5 gallons	280		2	Do., Glass	0 8 0	
3	Do., 10 do	500		4	Keys, Wagon top	т 8 о	
3	Do., 30 do.	15 0 0		3	Do., Powder Van	1 2 0	
	Do., 1 do	109	•	2	Khurpia	Q 18 0	i i
	Do. 2 do	100	•	8	Lamps, Hand Signal	40 0 0	
	Oil Tanks, So do.	1 1	•	7	Do., Square	14 0 0	
1	Do., Feeder	100		z i	Do., Reading	900	
ا ً.	Do., Cans, round	! I	-	2	Do., Kerosiae-oil, Wall .	16 0 0	
֡֡֞֞֞֞֞֩֞֞֩֓֞֞֩֓֡֓֓֓֡֞֜֜֡֓֓֡֓֡֡֡֡֡֡		l	. •	1	Don Hanging	11 8 0	
9	•	1	•	4	Do., Goods Shed	24 0 0	
١	Padlock, Chubb's	! - 1		4	Do., Semaphore	160 0 0	
2	Do., common, from	1 : •1		5	Levers	11 14 0	•
1	Pan, Iron	0, 8 0		1	Tape, Measuring	500	
12	Ramps, Irou	] •	•	14	Padlocks, Hobb's	. 56 0 0	
•	Stools; Wooden	4 0 8		10	Do., common, iron .	3 12 0	
J	•	[ . ]		4	Pigeon-holes	20 0 0	
		<u> </u>		9	Phowrahs	6 12 0	
I	Carried over .	6,316 io 7	•		Carried ever	8,323 10 6	
		,	•	1 (			

## ccix.

# APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

No.	Name of Articles.	Approximate - value, -	REMARKS. N	o. Name of Articles.	Approximate value.	REMARKS.
	. •	R ' a, p,			R a. p.	
	Brought forward	8,323 1 6		Brought forward .	8,550 5 6	
•	Goods Shed -(continued).			· Goods Shed-(concluded)		
2	Rail Slings	100		Shovels	12 0 0	
3	Rulers, Office	. 1,80	<b>i</b> • .	2 Samplers, Iron ,	080	
10	Rollers, loading	. 30 0 0		2 Spanners	400	
19	Stools, Wooden	. 38 0 0		Tables, square, with Drawers .	72 0 0	
5	Scales, Beam, with Weights	. 150 0 0	]	2 Do., do., without Drawers	10 0 0	
1	Scissors, pair	. 0 12. 0		Tripods for Beam Scales	150 0 0.	
3	Seals, Traffic	. 300		2 Train Time Indicators	63 0 0	
3	Stamps, Office	. 300		3 Platform Boards	38 6 o	
	Carried over	8,550 5 6	•	Total .	8,900 0 6	

## Appendix B.

## Schedule No. 1.

## BAREILLY STATION.

List of Bu'ldings and works constructed by the Oudh and Rohilkhand Railway, but in joint use of the Ou Rohilkhand Railway and Rohilkhand and Kumaon Railway on which interest at 6½ per cent. per annis is charged to joint expenses.

ج ان	ايو ي	<u> </u>				<u> </u>	<u> </u>	· · ·	]	ig the second	<u> </u>
House.	Room	How utilised.	Designation.	Expenditure up to 30th June 1890.	Remarks.*	1	No. of Rooms.	How utilised.	Designation.	Expenditure up to 30th June 1890.	Rı
						•					ĺ
		30° cr. 10 1337 (cr. 1			•		<b> -</b> .	Brought forward .	<b>'</b>	1,10,595	! 
	1	Native Ladies' Waiting Room	***	4,900		l		Transfer Goods Plat- form		11,916	
T	3	Station Master's Office	· •	2,450				Approach Road and Garden	I -	2,500	•
	1	Telegraph Office .	•	2,450				Well		800	
ŀ	1	Way out (Hali) .	•••	4,900		1		Wire Fencing		1,400	
.	2	Luggage and Parcel Office and Weighing Machine		2,500	One being			Dismantling Coal Bins, etc., to accommodate	· ·		
	1	Entrance Hall and	•	4.450	enclosed verandah,			Rohilkhand and Ku- maon Railway .		.108	
		Booking Office	***	2,500	•			Sub-way Bridge .	***	3,000	
	•	Entrance Hall for 3rd	•••	2,300				JOINT STAPP QUARTERS		]	
		class passengers .	***	4,900				EUROPEAN.			
		Waiting Hall for all classes of passengers	•	9,800		2		Station Master	***	9,000	
1		Ladies' Waiting Room	•••	4,900				NI a co	1		
	1	Gentlemen's Waiting	•	4,900				NATIVE. Old Blocks, Units, jointly			
	. ,	Officers' Room		4,900		,	6	used. Ditto . 4 .	Traffic menial	•	
	,	Second Class Refresh-	•••	. 4,,900		^		- · · · · · · · · · · · · · · · · · · ·	staff	650	As numb by Sta
		ment Room with	•••	3,000		2	6	Ditto . 6 .	***	950	Master Clerk.
	2	First Class Refreshment	•			3	6	Ditto 6		.950	•
	٠. ا	'Rooms	***	4,500		4	6	Ditto . 4	***	650	
	1	Cook House	•••	410	With small	5	6	Ditto 4	"	650	
	1	Store Room		'	court-yard.		3	77 to 701 1		500	
	1	Lamp Room building (one small room in this is used as a				7	6	Old Blocks . 2	· "	350	_
	-	Godown for the Re- freshment Rooms) .		1,334		٠,	6	Ditto 6		950	
1.	- 1	Portice	•••	2,500		10	2	Ditto . 2 .		350	-
†	.	The wholesof the plat-	•••	_,,				New Blocks.			•
		form of the main station building .	p+1	5,300		,	6	Ditto . 5 .		800	-
	1	Platform between Euro-			-	2	6	Ditto . 6 .	•••	950	
	•	pean Latrine and station building, in-	1		•	3	6	Ditto 6		950	
		cluding narrow gauge line platform (Re- freshment Room end)		9,574	· •	4	. 6	Ditto . 6 .		950	
		Passenger shelter shed	***			5	6	Ditto 6		950	
1		and office	•••	7 984		6	6	Ditto 6		950	
1		Covered passage .	***	10,070		7	6	Ditto 6	****	950	
		Barrier across the transfer passenger	•			8	. 6	Ditto . 6 .	***	950	
	İ	platform	**1	232		9	6	Ditto 6	*	950	
	I	New Latrine for Natives	133	300		10	6	Ditto 2 . Native Staff Latrines	, ***	350	
	2	Latrines for Europeans	***	1,632			3	attached to the new		1,000	
	•	Old transhipment plat- form, detrick, truck and rails	•••	3,200	•			•	-		
	1	New extension of tran- shipment platform	18*	11.							]. I
		Transfer Goods Shed .	154 1	7,000	,				Total R .	1,56,020	
		Carried over .		1,10,596			.			1,30,020	

:

## Appendix B.—contd.

Schedule No. 2.

Schodule of joint expenses at Bareilly Station between Outh and Rohilkhand Railway and Rohilkhand and Kumaon Railway.

tion Master																	J
		-				,	•									R a. p.	R a.
istant Station Master	: :	•	•	:	• :	:	•	:	•	•	•	:	: .	:	:	250 0 0 100 0 0	
ket Collectors . ods Clerk .	: :	•		:	<b>:</b> .	•		•	•	•	•	:	•	:	:	125 0 0 90 0 0	
isfant Goods Clerk very Clerk	: :		. :	•	•	• :	•	:	•	:	:	:	:.	:		30 0 0 40 0 0	
ding Clerk e Clerks	: :	•	•	:	:	:	:	•	:	:	••	:	:	:	:	30.00 30.00	
rker		: :	•	•	:	: .		:	:	:		:	•	:	·	8 o o 45 o o	
istant Booking Clerks gage Cierks	: :	•	<b>.</b> :	•	:	• :	:	:	•		:	•	:	:	:	55 ° ° ° 85 ° °	
ins Clerks .	: :	•	:	:	:	:	:	:		•	•	• .	:	•	• .	105 0 <b>0</b>	
istant Transhipment ( bationer	lerks		:	:	:	:	:	:				:		•		85 0 0 10 0 0	
naller in charge .	·: :				. •	•	:	÷.	:	:	- "	•	•			80 0 0 140 0 0	
egraph peons ners and Tindals			:	:	•	:	:			•	•		•	:	:	20 '0 0 68 0 0	
e Jemadars			•		:		:	•.		:	:		•	٠.		27 0 0 13 0 0	
nts and Signalmen ters		•			•		•		:	<u>.</u> .	•		: .	• : •		92 0 0 225 0 0	
nting Porters . ds Coolies	•	•	•	:	:	:	:	:			•		:	:	. :	12 0 0 100 0 0	
nale Ticket Collector		•		. :	:	:	:	:	•	:		:				5 o o	
sties . du Waterman .					. :		•	•	•		•	•	•			10 0 0	
eepers			•	•	:		•	•	:		:		• .	•	• .	10 0 0	
iting Room Bearer	•		. •		•		•	•	•	•	•	•	•	•		600	
tingencies		•	:	•	•	•	•	٠.	•		•	•	•	•		20 0 0	1,973 0
ernment Telegraph N	Iaintena	nce -	•	•	•		•	:	• •	•	:	:	:	:		50 0 0 28 0 0	
adars and Chowkidar thing Allowance and (	5.	•	iform	to Sta	#	:	:	•	. <b>:</b>	:	:	:	•	:		66 0 0	
servancy Establishme	nt .	·. •	•	Utd	•	:	:	•	•	:	:	•	•	:	`	f00 0 0 32 0 0	
velling allowance to T	raffic In	spector	comi	ng to	joint s	station	for d	uly	•	•:	:-	•	:	:		75 0 0 15 0 0	
ods Handling Charges res tionery, Forms, etc.	•	: :	•	•	•	:	:	:	:	•:		:	•	•			
atuities to Points, etc., owance to Guards doi	Staff an	d Chov	vkida: istant	rs Statio	n Ma	ster	•	•	:	:			•	:		12 0 0	
•		-	÷	•					-	-	•	•	Тоз	ΓAI			3,100 0
to ve ods res tio	o Staff doing duty folling allowance to T Handling Charges nery, Forms, etc. ities to Points, etc.,	o Staff doing duty for permalling allowance to Traffic In Handling Charges nery, Forms, etc. ities to Points, etc., Staff an	o Staff doing duty for permanent S lling allowance to Traffic Inspector Handling Charges onery, Forms, etc.	o Staff doing duty for permanent Staff .  lling allowance to Traffic Inspector comi  Handling Charges	Staff doing duty for permanent Staff .  lling allowance to Traffic Inspector coming to  Handling Charges	Staff doing duty for permanent Staff lling allowance to Traffic Inspector coming to joint s Handling Charges nery, Forms, etc.	o Staff doing duty for permanent Staff lling allowance to Traffic Inspector coming to joint station Handling Charges Sonery, Forms, etc.	Staff doing duty for permanent Staff lling allowance to Traffic Inspector coming to joint station for d Handling Charges nery, Forms, etc.	Staff doing duty for permanent Staff lling allowance to Traffic Inspector coming to joint station for duty Handling Charges Sonery, Forms, etc.	Staff doing duty for permanent Staff lling allowance to Traffic Inspector coming to joint station for duty Handling Charges nery, Forms, etc.	Staff doing duty for permanent Staff lling allowance to Traffic Inspector coming to joint station for duty Handling Charges Inery, Forms, etc.	Staff doing duty for permanent Staff lling allowance to Traffic Inspector coming to joint station for duty Handling Charges Inery, Forms, etc.	Staff doing duty for permanent Staff lling allowance to Traffic Inspector coming to joint station for duty Handling Charges Inery, Forms, etc.	Staff doing duty for permanent Staff lling allowance to Traffic Inspector coming to joint station for duty Handling Charges Inspector coming to joint station for duty Handling Charges Inspector coming to joint station for duty Handling Charges Inspector coming to joint station for duty Handling Charges Inspector coming to joint station for duty Handling Charges Inspector coming to joint station for duty	Staff doing duty for permanent Staff lling allowance to Traffic Inspector coming to joint station for duty Handling Charges Inery, Forms, etc.	Staff doing duty for permanent Staff lling allowance to Traffic Inspector coming to joint station for duty Handling Charges Inspector coming to joint station for duty Handling Charges Inspector coming to joint station for duty Handling Charges Inspector coming to joint station for duty Handling Charges Inspector coming to joint station for duty Handling Charges Inspector coming to joint station for duty	Staff doing duty for permanent Staff  lling allowance to Traffic Inspector coming to joint station for duty  Handling Charges  nery, Forms, etc.  ities to Points, etc., Staff and Chowkidars ance to Guards doing duty for Assistant Station Master

## Appendix B.—contd.

Schedule No. 3.

## BAREILLY STATION.

Schedule of Furniture and Working Plant in joint use by Oudh and Rohilkhand Railway and Rohilkhand and Kumoon Railway.

I Iron Iron Iron Iron Iron Iron Iron Iro	Particulars.  Station Master's Office.  Imirah  On Padlock  able, square  Orai stand  Oock, round  Anairs, Arm  Anairs, Arm  Ooden Screens  Tess, copying  Tesl, Book  Anation Stamp  Oxes for Stationery  On Padlocks  Ditto (for Godowns)  Oxekets, Iron, galvanized  Amp, hand, Square  Oxed Painte Kon	Approximate value.  R a. p.  50 0 0  0 6 0  8 0 0  2 0 0  38 6 0  6 12 0  40 0 0  40 0 0  30 0 0  3 0 0  4 0 0  0 12 0  0 6 0  15 0 0  2 0 0  0 12 0	Brought forward  Gentlemen's Water Closet—(concluded).  Commodes  Bucket, Iron  Ladies' Waiting Room.  Table, round  Chairs, Arm  Bed, Cane  Rack, Towel  Table, Dressing  Mirror  Commodes  Tunbler, Glass  Chamber Utensils  I washnand-stand	Approximate value.  # a. p. 651 I 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
I Iron Iron Iron Iron Iron Iron Iron Iro	Imirah  on Padlock  able, square  oorai-stand  lock, round  hairs, Arm  at Peg  ooden Screens  ress, copying  helf, Book  ation Stamp  oxes for Stationery  on Padlocks  Ditto (for Godowns)  uckets, Iron, galvanized  amp, hand, Square  aper Weights, Stone	50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Gentlemen's Water Closet - (concluded). Commodes  Bucket, Iron	654 I 6 6 0 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
I Irra Ta Ta Ta Ta Ta Ta Ta Ta Ta Ta Ta Ta Ta	on Padlock	0 6 0  8 0 0  2 0 0  38 6 0  6 12 0  40 0 0  30 0 0  3 0 0  4 0 0  0 12 0  0 6 0  15 0 0  2 0 0	Gommodes  I Bucket, Iron .  Ladies' Waiting Room.  Table, round  Chairs, Arm .  Bed, Cane .  Rack, Towel .  Table, Dressing .  Mirror .  Commodes .  Tumbler, Glass .  I Iron Padlock .	* 3 ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °
I Ta So Cl Cl Cl Cl Cl Cl Cl Cl Cl Cl Cl Cl Cl	able, square  porai stand  lock, round  hairs, Arm  at Peg  ooden Screens  ess, copying  helf, Book  sation Stamp  oxes for Stationery  on Padlocks  Ditto (for Godowns)  uckets, Iron, galvanized  amp, hand, Square  aper Weights, Stone	8 0 0 2 0 0 38 6 0 6 12 0 0 4 0 0 0 30 0 0 3 0 0 0 0 12 0 0 0 15 0 0 0 15 0 0 0 15 0 0 0 0	Ladies' Waiting Room.  Table, round  Chairs, Arm  Bed, Cane  Rack, Cane  Table, Dressing  Mirror  Commodes  Tumbler, Glass  Chamber Utensils  Iron Padlock	10 0 0 0 9 0 0 0 8 0 0 0 5 0 0 0 6 0 0 0 0 6 0 0 0 0 6 0
1 So 1 Cl 3 Cl 1 H 2 W 1 Pr 1 St 2 Bo 2 Iro 1 L 2 Bo 1 T 2 Bo 1 T 2 Bo 1 T 3 W 1 B 1 Iro 1 T 3 Cl	oorai stand lock, round hairs, Arm lock at Peg looden Screens looses, copying lelf, Book lation Stamp loxes for Stationery lon Padlocks  Ditto (for Godowns) lockets, Iron, galvanized lamp, hand, Square laper Weights, Stone	2 0 0 0 38 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Table, round  Chairs, Arm	9 0 0 4 0 0 8 0 0 5 0 0 5 0 0 4 0 0 0 6 0
1 Cl 3 Cl 1 H. 2 W 1 Pr 1 St 2 Bo 2 Iro 5 Bu 1 La 4 Pa 1 Bo 1 Ta 2 Bo 1 Ta 2 Bo 1 Ta 3 W 1 Ba 1 Iro 3 Cl	lock, round hairs, Arm  at Peg  ooden Screens  ess, copying helf, Book tation Stamp  oxes for Stationery  on Padlocks  Ditto (for Godowns)  uckets, Iron, galvanized amp, hand, Square aper Weights, Stone	38 6 0 6 12 0 0 4 0 40 0 0 30 0 0 3 0 0 4 0 0 0 12 0 0 6 0	4 Chairs, Arm	9 0 0 4 0 0 8 0 0 5 0 0 5 0 0 4 0 0 0 6 0
3 CH 1 H 2 W 1 Pr 1 St 2 Bc 2 Irc 1 L 2 Irc 1 T 2 Bc 1 T 2 Bc 1 T 2 Bc 1 T 2 Bc 1 T 3 W 1 Bc 1 Irc 2 Irc 3 CH 3 CH	hairs, Arm  at Peg.  ooden Screens  ress, copying  helf, Book  ation Stamp  oxes for Stationery  on Padlocks  Ditto (for Godowns)  uckets, Iron, galvanized  amp, hand, Square  aper Weights, Stone	6 12 0 0 4 0 40 0 0 30 0 0 3 0 0 4 0 0 0 12 0 0 6 0 15 0 0 2 0 0	Bed, Cane  Bench, Cane  Rack, Towel  Table, Dressing  Mirror  Commodes  Tumbler, Glass  Chamber Utensils  Iron Padlock	4 0 0 8 0 0 5 0 5 0 0 4 0 0 0 6 0
1 H. 2 W 1 Pr 1 St 2 Bo 2 Iro 5 Bo 4 Pa 1 Bo 1 Ta 2 Bo 1 Ta 2 Bo 1 Ta 3 W 1 Ba 1 Iro 1 Ti 3 Cl	ooden Screens  ess, copying  nelf, Book  action Stamp  oxes for Stationery  on Fadlocks  Ditto (for Godowns)  uckets, Iron, galvanized  amp, hand, Square  aper Weights, Stone	0 4 0 0 40 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Bench, Cane	8 0 0 0 5 0 0 5 0 0 0 6 0 0 6 0 0 6 0
2 W 1 Pr 1 St 2 Bc 2 Irc 5 Bc 4 Pa 1 Bc 1 Ta 2 Bc 1 Ta 1 Ta 1 Ta 3 W 1 Ba 1 Irc 1 Ti 3 Cl	cooden Screens  ress, copying  nelf, Book  ration Stamp  oxes for Stationery  on Padlocks  Ditto (for Godowns)  uckets, Iron, galvanized  amp, hand, Square  aper Weights, Stone	40 0 0 40 0 0 30 0 0 12 0 0 0 15 0 0 15 0 0	Rack, Towel  Table, Dressing  Mirror  Commodes  Tumbler, Glass  Chamber Utensils  Iron Padlock	0 5 0 0 5 0 0 4 0 0 0 6 0 0 6 0
1 Pr 1 St 2 Bo 2 Iro 5 Bu 4 Pa 1 Bo 1 Ta 2 Bo 1 Ta 2 Bo 1 Ta 3 W 1 Ba 1 Iro 1 Ti 3 Cl	ress, copying  melf, Book  nation Stamp  oxes for Stationery  on Fadlocks  Ditto (for Godowns)  ouckets, Iron, galvanized  amp, hand, Square  aper Weights, Stone	40 0 0 0 30 0 0 0 12 0 0 0 15 0 0 0 12 0 0 0 15 0 0 0 15 0 0 0 15 0 0 0 0 15 0 0 0 0	I Table, Dressing	5 0 0 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 Sh 1 St 2 Bo 2 Iro 5 Bo 4 I La 4 Pa 1 Bo 3 In 1 So 1 Ta 2 Bo 1 Ta 2 Bo 1 Ta 3 W 1 Ba 1 Iro 1 Ti 3 Cl	nelf, Book  nation Stamp  oxes for Stationery  on Padlocks  Ditto (for Godowns)  uckets, Iron, galvanized  amp, hand, Square  aper Weights, Stone	30 0 0 0 3 0 0 0 4 0 0 0 12 0 0 0 15 0 0 0 15 0 0 0 15 0 0 0 15 0 0 0 0	Mirror	5 0 0 4 0 0 0 6 0 16 0 0
1 St Bo Bo 2 Iro 5 Bu La 4 Pa 1 Bo 1 Ta 2 Bo 1 Ta 2 Bo 1 Ta 2 Bo 1 Ta 3 W I Ba 1 Iro 3 Cl	action Stamp  oxes for Stationery  on Fadlocks  Ditto (for Godowns)  uckets, Iron, galvanized  amp, hand, Square  aper Weights, Stone	3 0 0 4 0 0 0 12 0 0 6 0	2 Commodes	4 0 0 0 6 0 16 0 0
2 Bo 2 Ire 5 Bo 1 La 4 Pa 1 Bo 2 In 1 So 1 Ta 2 Bo 1 Ta 2 Bo 1 Ta 3 W 1 Ba 1 Ire 1 Ti 3 Cl	oxes for Stationery  on Fadlocks  Ditto (for Godowns)  uckets, Iron, galvanized  amp, hand, Square  aper Weights, Stone	4 0 0 0 12 0 0 6 0 15 0 0	Tumbler, Glass  Chamber Utensils	0 6 0 16 0 0
2 Ire 5 Be 1 La 4 Pa 1 Be 2 Ire 1 Ta 2 Be 1 Ta 2 Be 1 Ta 3 W 1 Ba 1 Ire 1 Ti 3 Cl	Ditto (for Godowns)  uckets, Iron, galvanized  amp, hand, Square	0 i2 0 0 6 0 15 0 0	Chamber Utensils	16 o o
5 Bu 1 La 4 Pa 1 Bu 3 In 1 Se 1 Ta 2 Bu 1 Ta 1 M 3 W 1 Ba 1 Iro 1 Ti 3 Cl	Ditto (for Godowns)	0 6 0 15 0 0 2 0 0	r Iron Padiock	060
4 I La 4 Pa 1 Bc 1 Ta 2 Bc 1 Ta 2 Bc 1 Ta 3 W 1 Ba 1 Iro 1 Ti 3 Cl	amp, hand, Square	15 0 0	• ] .	
4 I La 4 Pa 1 Bc 1 Ta 2 Bc 1 Ta 2 Bc 1 Ta 1 Ta 2 I M 3 W 1 Ba 1 Iro 1 Ti 3 Cl	amp, hand, Square	200	1 Washnand-stand	<b>2 0</b> 0
4 Pa 1 Bo 1 Ta 2 Bo 1 Ta 2 Bo 1 Ta 2 Bo 1 Ta 3 W 1 Ba 1 Iro 1 Ti 3 Cl	aper Weights, Stone	l - 4		
1 Bo 1 In 2 Bo 1 T2 2 Bo 1 T3 2 M 3 W 1 B2 1 Iro 1 Ti 3 Cl	·	0 12 0	Mug, Tin	0 2 0
1 Bo 3 In 1 So 1 T2 2 Bo 1 T2 -1 M 3 W 1 B2 1 Iro 1 Ti 3 Cl	·	1 11	2 Wall Lamps	9 4 0
3 In I So I Ta 2 Bo I Ta M M I Ba I Iron I Ti 3 Cl	oard, Points Key	100	2 Moonj Mats	4 0 0
1 Se 1 T2 2 Be 1 T2 4 M M 3° W 1 B2 1 Iro 1 Ti 3 Cl	kstands, Pewter	480	I Notice Board	4 0 0
1 T2 2 B6 1 T2 1 M 3° W 1 B2 1 Iro	eal, Traffic	3 0 0	1 Wooden Screen	20 0 0
2 Be 1 Ta 1 Ta 1 M M 3 W H Ba 1 Iron 1 Ti 3 Cl	Gentlemen's Waiting Room.		Zinc Tub	7 o o
1 Ta  1 M  3 W  1 Ba  1 Ire  1 Ti  3 Cl	able, round	10 0 0	· Native Ladies' Waiting Room.	. •
3° W 1 B2 1 Iro	enches · · · · · ·	16 0 0	Iron Padlock	. 060
3° W  1 Ba  1 Iro  1 Ti  3 Cl	able, Dressing	5 0 0	•2 Iron Pans	2 14 0
I Ba	irror	5 0 0	Number Taker's Office. 2 Square Tables	16 <b>o</b> o
I Ba	ashhand-stands	600		8 0 0
1 Ti	ath Tub	700	r Stool	2 0 0
ı Ti	on Padlock	0.6 0		
3 C	in Pot	0 2 0		500
- 1	hairs, Arm	6 12 0	Do., do., Square	2.0 0
	umbler, Glass	060	2 Shelves, Book	бо о о
	hamber Utensils	16 0 0	Lamp, Hexagonal	600
	'all Lamps	940	Burner, Kerosine-oil	2 3 0
j	ack, Towel	0 5 6	Key, wagon top	0 6 0
		20 0 0	Parcel Office. 2 Tables, square	16 o d
ı W	Vooden Screen	-	2 Stools	400
14 C	Native Lutrine.		L Bench, wooden	8 o o
6 B	uckets, Iron	18 0 0		200
ı La	amp for Latrine	800	.	140
	on Tank	20 0 0	3 Padlocks, iron	
ı D	ust_Cart	120 0 0	3 Book Shelves	90 0 0
i .		112 0 0	I Board, Notice	400
į.	onservancy Cart	0 12 0	Weighing Machines	- 300 o
- 1	onservancy Cart	0.60	Parcel Scale	. 10 0 0
ıĸ	nowrah		1 Measuring Tape	600
ı R	hurpee	·	I ·· · •	4 10 0
\	nowrah	20 0 0	Wall Lamp	

## Schedule No. 3-contd.

Laing, hexagonal	Approxit value	Particulars.	No.	Approximate value.		erticulars.	P	No.
Lamp, hexagonal	R a.			R a, p.	-			
Limp, hexagonal	3,683 <b>6</b>	Brought forward	∥ .	1,318 15 0	•	Brought forward		
Wooden Rolers	•	Through Goods Office-(concluded).		·		ce-(concluded.)	. Parcel O	
Inistand-, Peeter	3 0	owrahs	4	600	•		Lamp, hexagonal	1.
Pasilock, Chobb's   Resking Office.   2 0 0   1   Wooden Ruler   Stamps, Office   Stamps, Office   Stamps, Office   Stamps, Office   Stamps, Office   Stamps, Office   Stamps, Office   Stamps, Office   Stamps, Office   Stamps, Office   Stamps, Office   Wooden Rulers   Stamps, Office   Wooden Rulers   Stamps, Office   Wooden Rulers   Crow-bars   Resking Office   Stamps, Vall   A chain of the Action of the	20 0	rrows, Hand	2	100	٠.		Wooden Rulers	. 3
Lamp, Square   2 0 0   1	. 0 8	sters, Bag	2	300			Inkstands, Pewter	2
Booking Office.   120 0 0 0   5   Wooden Rulers   1   1   1   1   1   1   1   1   1	4 8	kstands	3	880	•		Padlock, Chubb's	I
3   Ticket Cases   120   0   5   Wooden Rulers   1	0 8	ooden Ruler	.	200	•		Lamp, Square .	1
Chubb's Padlocke	6 0	amps, Office	2	•		ing Office.	Boo	
Chubb's Padlocks	15 0	ooden Rulers	5	120 0 0			Ticket Cases .	3
2 Stools,	12 0	row-bars	8	25 8 0			Chubb's Padlocks	3
Boards, Notice		opes, loading	4			•.	Stools	2
Lamp, Roal		hains, do.	4	90 0 0	•	• • • •	Dating Machines	3
Lamps, Wall	120 0		ii T	1			Boards, Notice	2
Almirahs	21 6		il I	13 14 0			Lamps, Wall	3
Hobb's Padlocks	<b>41</b> 0			٠.			Almirahs	3
Wooden Soxes		- {	<u> </u>  -			• • • •	Hobb's Padlocks	2
Padlocks, Iron	1 10	arriage Keys	8	400			Wooden Boxes	2
Safes, Iron	22 8		10	1			Padiocks, Iron	2
Tables, Square	2 0	oxes for Collected Tickets	2	_			Safes, Iron	2
Inkstands	* 2 0	tool, Wooden	1				Tables, Square .	3
Date Indicator   1	16 0	ables, Square	2				, i	2
Ruler, Wooden	2 3	urner, Kerosine-oil	1	1			Date Indicator .	1
2. Testers, t oin  2. Scissors, 1 pair  Third Class Waiting Hall.  13. Lamps, P. W.  14. Lamp, Roof  Through Goods Office.  2. Cranes, Complete  Tabl s, Round  15. Chair, Arm  26. Chair, Arm  27. Weighing Machines  18. Wagon Seal  19. Wagon Seal  10. Chair, Arm  20. Chair, Arm  21. Chair, Arm  22. Chair, Arm  23. Chair, Arm  24. Chair, Arm  25. Chair, Arm  26. Chair, Arm  27. Chair, Arm  28. Chair, Arm  29. Chair, Arm  20. Chair,	1 8	kstand, Pewter	1.1				Ruler, Wooden	1
Scissors, 1 pair	3 0	ags for Ticket Collectors	3				•	2.
Third Class Waiting Hall.	. 20 0	amps, Hand, Signat	4				Scissors, I pair .	,
13 Lamps, P. W.  1 Lamp, Roof  Through Goods Office.  2 Cranes, Complete  1,300 0 0  Thair, Arm  10 0 0  11 Lamp, Engine Head  Station Yard.  Safety Chains  Iron Padlocks  Platform.  Badges, Brass  Barrows, 2-wheeled  Mcaeuring Tape  10 0 0 0  Wagon Seal  10 0 0 0  Bell, Brass  Lamp, Hand Signal  10 0 0  Bell, Brass  Lamp, Hand Signal  10 0 0  Bell, Brass  Lamp, Hand Signal  10 0 0  Bell, Brass  Do. Iron  Banches  Burners, Kerosine-oil  Chair, Kerosine-oil  Chair, Arm  10 0 0  11 Case, Wooden, for Letters  Dole, Iron  10 0 0  11 Case, Wooden, for Letters  Chain, odd  Chest, Iron  10 0 0  11 Case, Wooden, for Letters  Chain, odd  Chicks, Iron  10 0 0  11 Case, Station Platform  10 0 1 Coke, Station Platform  10 0 1 Clock, Station Platform  10 0 1 Clock, Station Platform  10 0 1 Clock, Station Platform  10 0 1 Clock, Station Platform  10 0 1 Clock, Station Platform  10 0 1 Clock, Station Platform  10 0 1 Clock, Station Platform  10 0 1 Clock, Station Platform  10 0 1 Clock, Station Platform  10 0 1 Clocks, Adoor		Ganaral .		. •		s Waiting Hall.	1	
Lamp, Rosf	•		┨│	104 0 0				13
Through Goods Office.   Station Yard.	55 0	• •	∥ . L	• `			Lamp, Roof .	1
Cranes, Complete	10 6	• • • • • • • • • • • • • • • • • • • •	┨	" ,	•	Goods Office.	- Throug	
4 Tabl s, Round       32 0 0       6 Iron Padlocks         1 Chair, Arm       2 4 0       Platform.         5 Stoo's       10 0 0       41 Badges, Brass       9         2 Weighing Machines       300 0 0       2 Barrows, 2-wheeled       2         1 Mcasuring Tape       6 0 0       5 Do. 3 do.       7         1 Wagon Seal       3 0 0 5 Do. 4 do.       10         1 Padlock, Iron       0 6 0 r       Bell, Brass         1 Lamp, Hanging       11 8 0 r       Do. Iron         3 Lamps, Hand Signal       15 0 0 r       7 Benches         3 Burners, Kerosine-oil       6 0 0 0 r       6 0 0 0 r         2 Book Shelves       60 0 0 r       6 Do. Notice       2         1 Pen Knife       0 4 0 r       1 Brush, Damping       1 Case, Wooden, for Letters         1 Dole, Iron       0 12 0 r       1 Chain, odd       1 Chain, odd         1 Lota, Brass       1 0 0 r       1 Clock, Station Platform       10 Great-coats         8 Tusias, Iron       4 8 0 20 Chicks, door       4 Chicks, door	_ •	• '. '	6	1.300 0 0				2.
Chair, Arm	18.0		1 1				Tables, Round	4
Stoo's	2 4	' ' '					Chair, Arm	ı
Weighing Machines	•		4,		•		1	5
1       Mcasuring Tape       6 0 0 5       Do. 3 do.       7         1       Wagon Seal       3 0 0 5       Do. 4 do.       10         1       Padlock, Iron       0 6 0 1       Bell, Brass       10         1       Lamp, Hanging       11 8 0 1       Do. Iron       10         2       Lamps, Hand Signal       15 0 0 7       Benches       5         3       Burners, Kerosine-oil       6 9 0 2       Boards, loading, horse       5         2       Book Shelves       60 0 0 6       Do. Notice       2         1       Pen Knife       0 4 0 1       Brush, Damping       2         2       Gha-rah, Iron       1 0 0 1       Case, Wooden, for Letters       1         3       Dole, Iron       1 0 0 1       Chain, odd       1         4       Buckets, Iron       12 0 0       Great-coats       4         8       Tusias, Iron       4 8 0       20 Chicks, door       Chicks, door	97 6			*			Weighing Machines	2
Wagon Seal	20 0	• •	-	,	-			į
Padlock, Iron	75 0		<u> </u>		•			i
1       Lamp, Hanging       11       8 0       1       Do. Iron         3       Lamps, Hand Signal       15       0 e0       7       Benches         3       Burners, Kerosine-oil       6eg o 2       Boards, loading, horse       1         2       Book Shelves       6o o o 6       Do. Notice       2         1       Pen Knife       0 4 0       1       Brush, Damping       2         2       Gha-rah, Iron       1 0 0       1       Case, Wooden, for Letters       1         3       Dole, Iron       1 0 0       1       Chain, odd       1         4       Buckets, Iron       12 0 0       20       Great-coats       4         8       Tuslas, Iron       4 8 0       20       Chicks, door	100 0		-					I
3       Lamps, Hand Signal       15 0 0 7       Benches         3       Burners, Kerosine-oil       6 0 0 0       2 Boards, loading, horse         2       Book Shelves       60 0 0 6       Do. Notice         1       Pen Knife       0 4 0 1       Brush, Damping         1       Gharah, Iron       1 0 0 1       Case, Wooden, for Letters         1       Dole, Iron       1 0 0 1       Chain, odd         1       Lota, Brass       1 0 0 1       Clock, Station Platform         4       Buckets, Iron       12 0 0 20       Great-coats         4       8 0 20       Chicks, door	7 4	• • • • • • • • • • • • • • • • • • • •	li I				•	1
Burners, Kerosine-oil   6 o 9 0 2 Boards, loading, horse   1	3 0		11 l		•		· ·	3
2 Book Shelves	56 o	• • • • • • • • • • • • • • • • • • • •	11		•			
Pen Knife	18 10		1 I	,	•		,	- }
Gha-rah, Iron	24 0		$\  \cdot \ $		•		•	1
1 Dole, Iran	0 12				•		1	1
Lota, Brass  I o o I Clock, Station Platform  Buckets, Iron  Tusias, Iron  10 o Chicks, door	1 0	• •	11		:		· ·	
4 Buckets, Iron	0 12	· · · · · · · · · · · · · · · · · · ·	]	j	•		<b>}</b>	{
8 Tusias, Iron	100 0		1 1		•	•		•
	40 0		1 1		•		1	8
Carried over 3.683 6 0	45 0		11	<del></del>	•	Carried over		1

## · Schedule No. 3-concld.

No.	Particulars.	Approximate value.	No.	Particulars.	Approxin value.	mate
	Brought forward	4.641 7 0	1		R a.	p.
	•	4.041 7 0	-	Brought forward .	6,100 11	0
3	Platform—concluded Doles, Iron	. 240.	2	Officers' Room - (concluded). Chairs, Easy	10 0	^
5	Flag Cases, Leather	. 500	2	Whatnots, Wooden		
1	Fire Grate	. 180	J)	Chairs, Arm	1.	
2	Gharrahs, Iron	. 200	3	Beds .	6 12	
2	Hogsheads	. 10 0 0	1		] .	
1	Key, Powder Van	. 060	3	Purdahs	15 0	
6	Lamps, Hand Signal	. 30 0 0	I	Commode	• - •	
1		. 200	1	Towel Rack	0 5	б
	Lamp , , Square	. 10 0 0	1	Chamber Utensil	8 0	0
5		18 6 0	1	Iron Padlock	0 6	0
2	, Reading	1	I	Zinc Tub	.7 0	0
2	" Office Wall	9 4 0	4	Hat Pegs	4 0	0
20	" Hanging	. 230 0 0	I	Wash-hand-stand	2 0	0
20	" . Large P. W., with cast-iron brackets .	. 220 0 0	1	Wooden screen	20 0	0
3	" P.W	. 24 0 0	4	Telegraph Office. Badges, Brass		o
8	,, Street	. 56 o o	2	Bags, Leather		
2	Mugs, Pewter	. 380	16		i	-
<u> </u>	Oil Drum, r gallon	100	]]	Battery Cells	1 -	0
1	n 3 gallons	280	2	" Stands	2 0	_
2	Oil Tanks, 50 ,,	. 20 0 0	2	Benches	16 0	0
5	Oil Feeders	. 280	6	Books	6 0	0
4	Oil Measures	. 500	1	Box for Stationery	2 0	0
ı	Padlock, Iron	. 060	1	Box, Message	1 0	0
1	Rack, Office	20 0 0	ı	Brush	0 12	0
2	Stands for Utensils	. 400	1	Chair	. 2 4	0
	Stand, Filter	. 300	1	Clock, Office	38 o	0
4	Signal Flags		4	Great Coats	8 0	٥
2	Stands, wooden, for Notices . *	. 10 0 0	2	Counters, Wooden	8 0	0
2	Tanks, Iron	40 0 0	2	Chicks	3 0	0
	Trap, Rat	140	4	Conductors, Lightning	52 12	0
,	Trolly	64 0 0	1	Date Indicator	1 0	0
	Bag, Delivery Peon		2	Inkstands, Glass	0 8	0
1	•	11 12 0	4	Inkstands, Pewter	6 0	o
2	Wrenches, Monkey	. 090	5	Instruments, Morse	125 0	0
1	Hammer		1	Pen-knife	0 4	٥
3	Chisels	0.80	2	÷.	4 0	
•	Pin Punch	i		" Office	· •	0
I	Hook for Weight	. 200		Lamp, Hanging		
1	Canvas Bag · · · · ·	. 280		Magnet		٥
I	Filth Cart, 2-wheeled	. 550 0 0		Water Feeder		0
4	Lamp Room.	. 180	11 -	Radlock, Chubb's	1	0
4	Burners, Kerosine Oil	. 8 12 0	1	" Iron	1	٥
1.	Funnel, Tin	. 0 2 0	I	Ruler, Office		0
_	Officers' Room.	. 10 0 0	3	Stools	i	0
1	Table, round	8 0 0	N -	Shelf, Book		0
3	Durries · · · · ·	45 0 0	И	Table, Square	1 .	o
4	Moonj Matting	. 800	1		8 0	_
1	Table, Dressing	500	Ш	Train Time Indicators	63 0	-
1	Carried over	6,100 11 0	- [[		6,646 0	
			<u> </u>		,,,,,,	

### APPENDIX L.

Agreement Between the Bengal and North-Western Railway and the Government, North-Western Provinces and Oudh, for the working of the Ferries known as the Ajodhya and Byramghat Ferries.

This Indenture made the twenty-first day of December One thousand eight hundred and ninety-one between the Joint Secretary to Government in the Public Works Department, North-Western Provinces of India (hereafter called the lessor) of the one part and the Bengal and North-Western Railway Company Limited of the other part (hereinaster called the lessee):

Witnesseth that in consideration of the profit hereinafter reserved and of the convenants and agreements by the lessee hereinaster contained he the lessor doth hereby promise to continue to suspend the ferry hereto kept up and maintained for the convenience of the public at Ajodhya and also to suspend the bridges-of-boats similarly kept up and maintained for the convenience of the public at Miranghât and at Byramghât and doth hereby grant unto the lessee the sole and complete right of plying for hire and collecting toll from all persons goods merchandise, etc., crossing the river Gogra at the ferry crossing of Ajodhya or any and all points within a limit of two miles up and down stream the said two miles being calculated from Lakarmandighat on the north bank and a point known as the landing stage at Ajodhya on the south bank of the same river Gogra and also at the ferry crossing at Byramghat or any and all points within a limit of two miles up and down stream the said two miles being calculated from a point on the northern bank opposite the dak bungalow of Byrampur and a point on the south bank of the same river Gogra directly opposite to the point fixed on the northern bank and doth similarly grant unto the lessee the sole and complete right of plying for hire and collecting toll from all persons goods merchandise, etc., crossing the river Chauka at the ferry crossing of Byramghat or any and all points within a limit of two miles up and down stream the said two miles being calculated from a point opposite the dak bungalow on the southern side of the river Chauka and a point on the northern side of the same river directly opposite that fixed on the southern side.

To have and to hold the same from the first day of March in the year of our Lord one thousand eight hundred and ninety-one for and during the term of twenty-one years and nine months thence next ensuing or unto the thirty-first day of December in the year of our Lord one thousand nine hundred and twelve. Yielding and paying therefore the yearly net rent of eight thousand eight hundred and thirteen rupees (to wit a rent of eleven thousand five hundred rupees as heretofore paid by the lessee for the right of collecting tolls at the Ajodhya Ferry) and a further rent of four thousand rupees after deducting from the same the sum of six thousand six hundred and eighty-seven rupees payable by the lessor in lieu of interest upon the sum of one hundred and sixty seven thousand one hundred and eighty-seven rupees hereinafter recited by equal half-yearly payments on or before the thirtieth day of June and on or before the thirty-first day of December in each year.

It being understood that the lease to be granted will be subject to the general rules prescribed for leases under Act seventeen of eighteen hundred and seventy-eight of the Government of India.

It being further understood that the lessor expressly reserves the right of re-opening the bridge-of-boats at Miranghat at any time should any grave emergency or exigencies of the public service call for such re-opening.

And it is hereby agreed and declared that in consideration of the rights hereinbefore leased the lessee covenants with the lessor:—

- 1. That he will purchase from the lessor at a valuation of one hundred and sixty-seven thousand one hundred and eighty-seven rupees all and several the boats tools stores and materials of every description as per schedule hereinafter subjoined as Appendix A with and appertaining to the ferries at Byramghat over the rivers Gogra and Chauka.
- 2. The lessee will enter into an agreement with the lessor to keep up and maintain in good repair and in good working condition three bridges-of-boats together with approaches to the same to wit one bridge-of-boats together with approaches to the same

cclxvii

from the railway station on the north bank and from the end of the metalled public road on the south bank of the river Gogra at Ajodhya and two bridges-of-boats one over the river Gogra and the second over the river Chauka together with approaches to the same from the end of the public road on the north bank to the end of the metalled public road on the south bank of the river Chauka and with properly completed planked roadway between the said bridges from the fifteenth day of October to the fifteenth day of June in each year or from such date and to such date as near to the dates above specified as the state of the river will permit.

- 3. The lessee will further enter into an agreement with the lessor or his duly authorised agent for such purpose to provide and maintain in good repair and in proper working order for each and every day during which the bridges-of-boats aforesaid are not open to the public steam or other suitable ferry boat or boats of not less than two hundred and fifty maunds burthen for the safe conveyance of passengers with fixed and moveable machinery and plant of good quality and adequate in quantity to work the same and with an efficient boat service suitable for passengers goods cattle and conveyances of every description: Provided always and it is hereby agreed and declared that for each and every day in which no ferry service is provided or any one or more of the ferry boats provided fails or fail to run the eight trips hereinafter required at the Ajodhya Ferry and the four trips hereinafter required at the Byramghat Ferry unless when such default is due to accident or other cause not within the lessee's control the lessee is bound to pay to the lessor a sum of fifty rupees per diem by way of liquidated damage over and above the rents hereinafter expressly stipulated and agreed upon.
- 4. The lessee shall keep the said ferries working and plying from sunrise to sunset for the convenience of the public and shall unless hindered or prevented from so doing by accident or any other matter not within his own control ply daily from each extremity of the said ferries not less than eight times at the Ajodhya Ferry and four times at the Byramghat Ferry in each and every day for the service of passengers additional trips for goods service being made daily as the exigencies of goods traffic shall require.
- 5. The lessee shall charge such rates and tolls for carriage of goods and passengers on the aforesaid bridges and boats as are at the time of the execution of these presents levied and charged upon passengers and goods at the said ferries of Ajodhya and Byramghât and such rate and toll shall be changed only with the consent of the Government previously obtained.

Provided always and it is hereby expressly agreed and declared that the lessee shall at times during the continuance of this lease be found to observe and conform to the rules for collection of tolls hereinafter subjoined as Appendix B.

APPENDIX A.

List of Plant, Stores, etc.

Item.	ARTIC	LES.			No.	Weight.	Rate.	Amount.
3456078 90 111 12 13 144 156 178 199 200	Iron sheets, † inch Square bar, iron, 3† in. Round bar iron, 1† '' Ditto 2 '' Flat iron Angle iron Rivets, iron, 1† by † in. Iron wire Iron nails Copper nails Iron screws, 4 in Ditto 3 '' Iron sheets, † '' Iron sheets, † '' Iron rivets, † '' Square bar, iron, 1† in. Steel bar Round bar, iron, † in. Ditto † ''		 		      	Mds. sr. ch. 4 22 0 5 0 0 0 37 0 1 7 0 3 10 0 1 10 0 1 18 0 2 30 0 0 6 0 0 1 2 5 11 0 1 16 0 2 4 0 4 12 0 0 17 0 0 32 0 0 11 0	R a, p. 5 0 0 5 0 0 5 0 0 5 0 0 5 0 0 10 0 0 12 0 0 8 0 0	2 a. p. 22 12 0 25 0 0 4 10 0 5 14 0 6 4 0 14 8 0 33 0 0 1 3 2 2 4 c 2 9 3 0 11 10 52 12 0 7 0 0 10 8 0 43 0 0 2 2 0 8 0 0 2 10 0 1 6 0

## cclaviii appendices to the administration report for 1892-93.

## APPENDIX A. - contd.

## List of Plant, Stores, etc.-contd.

let III.	ARTICLES.	No.	Weight.	Rate.	Amount.
	Brought forward .	•••	Mds, sr, ch.	R a. p.	· P a. 4
1	Screws, iron, 1 in	80		***	0 5
2	Sheet iron 18 19	8	1 27 0	5 0 0	8 6
3	Roorkee made buoys		•••	250 0 0	2,000 0 200 <b>0</b>
5	Haif buoys	3		150 0 0	450 O
j.	Row boats	1		200 0 0	200 0
7 8	Standards for railing	251 28	••• }	480	1,129 8 56 o
9	Bolts for railing standards		6 7 0	2 0 0	56 o 61 12
c	Hook bolts		25 0 0	10 0 0	250 O
1	Washers, large Bands for wooden trusses	•••	6 29 0	10 0 0 8 0 0	67 4
3	Iron wire		2 0 0 4 37 0	8 0 0 8 0 0	16 o 39 <b>6</b>
1	Bolts, stone blocks		3 27 0	10 0 0	36 12
5	Iron knees	•••	1 35 0	800	15 0
6 7	Ditto		3 19 0	8 0 0 8 0 0	• <sup>27</sup> 12
8	Flat iron		1 38 0	500	9 12 9 12
9	Washers		1 28 o	10 0 0	17 0
0	Shackles (large)		0 18 0	10 0 0	4 8
2	Bar iron (old)		7 10 0 2 5 0	10 0 0	72 8 5 5
3	iron anchors		8 30 0	10 0 0	5 5 87 8
4	Angle iron brackets		21 19 0	2 8 o	53 11
5	Iron chain, I in., 1,017 ft		Cwt. gr. 18	10 0 0	977 8
Š	Ditto 🖁 ,, 161 ,,	<b></b>	11 2 0	10 0 0	97 <b>7</b> 8
7	Ditto 1 , 385 ,		30 0 0	10 0 0	300 o
S 9	Ditto \$ ,, 723 ,,		27 3 10 35 3 0	10 0 0	288 6
0	Planks, sál, 17' x 5\frac{1}{2}" x 3\frac{1}{2}" 579'48 c. ft	***	33.30	12 0 0	429 <b>o</b>
1	Ditto different sizes 3 in. 137.50 ,	···		•••	•••
3	Ditto ditto 2 , 1,719 25 , Ditto ditto 1 , 5-7 25 ,	<b>-</b>	•••	•••	•••
٠,		•••	"	•••	•••
	2,983 48 c. ft.	***	•	18 o	4,475 3
5	Pontoons	63 244	***	700 0 0	44,100 u
6	Wooden boats	8		500 0 0	19,520 <b>0</b> 4,000 <b>0</b>
7	Trussed beams.	,10	· ·	25 0 0	250 o
•	Planks with railing standards Roadway planks 4,655 c. ft.	140		0 0 0 1 8 0	840 0
,	Beams 33 "	•••		180	0,982 8 49 8
ı	Planking 103 ,			180	244 8
3	Ditto of sandy road 8,000 ,	•••	•••	I 0 0	8,000 0
,	Ditto 14' × 10 1" × 3" 253 ,	•••		1 0 0	308 o 253 o
5	Pontoons	6		700 0 0	4,200 0
5	Roadway girders	35	•••	80 0 0	2,800 0
7	Double boats	23 3	•••	500 0 0 400 0 0	11,500 0
9	Ferry do	8	•••	400 0 o	3,200 0
)	Row boats, hollowed from trunk	I		50 0 o	50 <b>o</b>
! 2	Service boats	I	741	100 0 0	100 0
3	Dirto 🛊 " 83 "	•••	5 1 0	12 0 0	63 o
4	Ditto ‡ ,, 417 ,,		110	15 0 o	45 0
5	Trussed beams  Beams, sal 31. 53 c. ft.	82	3 0 0	25 0 0 3 <b>0</b> 0	2,050 0
7	Ditto 329 ,,			300	94 9 987 0
3	Ditto 120 ,,	•••		3 0 o	360 <b>o</b>
9	Planks, 14 ft. by 11 in. by 3 in. 129½ ,			3 0 0	388 8
ı	Ditto 164 ,	•••		100	33 12 16 4
2	Ditto 15 ,, .			T 0 0	15 0
3 4	Ditto 0 ,, .		•	100	6 o
4 5	Watering cart			0 0 0 1	2 0 10 <sub>0 0</sub>
6	Hurricane lamp	1		2 0 0	2 0
7 8	Anvils	7		<i>:</i>	100 0
o o	Basula	9		•	4 8 1 8
0	Bellows	2		***	1 8 25 0
I	Borchet braces	1			4 0
3	Raichet braces	4 2		***	12 0
4	Die stock, 1 inch	2	:::	•••	30 0
	Files, old	1	Mds. sr, ch.		_
5	riles, old	""	0 25 0		5 0
	Carried over .				

## APPENDIX L.

## APPENDIX A.—concld.

## List of Plant, Stores, etc.—concld.

I'em.	Articles.	No.	Weight.	Rate.	Amount.
	Brought forward		Mds. sr. ch.	R a, p.	
96	Portable forge	- 1	•••	•••	25 o o
97	Hammers, 5 seers ,	2 8	***	***	280
98 99	Rivetting hammers	26	•	•••	60 o
00	Pick-axes	6	***	•••	12 0 0
01	Iron rammers	14 8	***	***	14 0 0 100 0 0
03	Pipe tongs	3	•••	***	300
04	Three sheaved blocks	3	•••	•••	90 0 0
o5 o6	Double ditto	2	***	•••	15 °0 0 20 0 0
07	Weighing machine	I	•••	***	50 0 a
80 00	Crab winches	2	***	•••	200 0 0 10 0 0
10	Drilling Machine	1		•••	60 0 0
11	Measuring tape  Box of tays and dies	1 2	***	•••	4 0 0
12 13	Planks, sal, different width, 3 in. 250 cubic feet in parts	*	•••	3 0 0	1,509 0 0
14	Planks, dhau 11, 5'25,		•••	180	9 0.0
15 16	Beams, sål 50 ,, Planking, sål, 2nd class 500 ,,	***	***	3 0 0 1 8 0	750 0 0
17	Black paint		73 18 O	IO O O	734 8 o
18	White ,, tins	***	4 5 0 7 10 0	10 0 0 15 0 0	41 4 0 108 12 0
19 20	Putty, 80 ,		12 22 0	12 O O	150 9 7
21	Red ,,	•••	0 22 0 0 20 0	12 0 0	697
22 23	Kerosine oil Oil of turpentine, bottle	٠ :		•••	2 IO 0 I O 0
24	Manj	•••	200	. ;:.	200
25	Hemp	***	0 7 0 8 29 0	6 a a	1 0 9 8 11 7
26 27	Plank, sal, 1st 14 ft. × 12 in. × 3 in. 7 c. ft	.,.	<u></u> -	300	21 0 0
28	Angleiron		8 14 0 0 29 0	5 0 0	41 12 0 3 10 0
29 30	Round from, † in		0 13 0	10 0 0	3 10 0 3 4 0
31	Flat iron, 2 in. by 1 in	•••	180	5 0 0	600
32	Ditto, ‡ in.	27	0 20 o	5 0 0 700 D 0	280 18,90000
33 34	Iron girders	65	***	80 0 0	5,200 0 0
35	Girders for khulfi with plate	12 8	.14 **1	 . 150 O O	2,000 0 0 1,200 0 0
36 37	Large girders Railing standards with bolts	223	•••	5 0 0	1,115 0 0
	Iron chain, # in., 1,736 feet		Cwt.qr.115 26 1 9	12 0 0	316 o o
38 39	Ditto I in., 126 ,		12 0 0	10 0 0	120 0 0
40	Ditto 1,, for stone 52,,	***	4 3 24 12 2 0	10 0 0	49 10 3 125 0 0
41 42	Ditto 1	***	68 2 0	10 0 0	685 0 0
43	Ditto 🛊 , 128 ,,	***	6 3 0	10 0 0	67 8 o
44	Ditto \$ 145	***	7 2 0	10 0 0	75 ° ° 45 ° °
45 46	Ditto 1 ,	•••	4 1 7	10 0 0	43 2 0
47	Winches, Crab	7		250 0 0	150 0 0 1,750 0 0
48 49	Kalpi buoys	8		200 0 0	1,600 o o
50	Half buoys (Kalpi)	4		150 O O	600 0 0 19 8 0
51 52	Large shackles	13	•••	•••	450 0 0
53	Sål wood planks for the bridge 2,143 c. feet	•••	•••	180 180	3,214 8 0
54	Sal wood for joists			180 180	679 8 o 39 o o
55   56	Trussed beams with round bar iron	_ 3	•••	25 O O	75 0 0
57	Curb blocks . 127t c. feet		•••	180	191 4 0 157 8 0
58	Stone for anchors, new, 6 ft. × 5 ft. × 2½ in.	10	<b>§</b> ]	2 at 187 8 0	} 1,575 o o
59 ]	Stone (or anchors, new, other & 3 th & 21 m. )	.5	Mds. sr. ch.	8 at 150 0 0	) -,5/3
60	8 in. Manilla ropes 340 feet .		10 30 0	15 0 0	161 4 0
51	Rivets 3 in. x in.	139	1 0 0	IO O O	10 0 0 • 20 0 0
52	Rivers, 21 in. × 1 in	400   94	2 0 0	10 0 0 5 0 0	470 0 0
3	Iron square, 1 in.		0 24 0	5 O O	3 0 0
55	Ditto 11 n		3 34 0 5 5 0	500	19 4 0 25 10 0
66 52	Ditto 2 3 · · · · · · Ditto		1 18 0	5 0 0	7 4 0
7	· · · · · · · · · · · · · · · · · · ·	1	ļ	. :	1,69,060 14 3
		ļ		·	-,09,000 14 3
	Deduct difference between Locomotive Superintend-				1,873 14 3
	ent's valuation and that of the Superintendent, Roorkee Canal Foun iry and Workshops, accepted	I	_	TOTAL .	1,67,187 0 0
	TOURSE Called Fortility with the treatmobal accelered		<b>–</b> 1		_

## Appendix B.

#### Rules specified in paragraph 5.

1. The person in charge of the ferry is authorised to prevent any person not herein. after exempted from crossing by the bridge and boat or boats connected with the ferry until the toll is paid.

2. He is not empowered to prevent from fording the river or crossing the same in a private boat, provided the same do not ply for hire and do not start from or use any ap-

proach or approaches maintained by the lessee.

3. Every toll gatherer shall keep a supply of proper tickets to be given to passengers crossing by boat or bridge; and in no case, except with the full consent of the passenger, must any coloring matter be put on the person of passengers in lieu of supplying them with tickets.

4. The following shall be held to be exempted from payment of tolls:

(1) All persons, animals, vehicles, and other things crossing any river by a public ferry when employed or transmitted on the public service.

(a) Foreign rulers and their followers or retainers or other natives of distinction, when specially exempted by order of Government, the Commissioner or the Magistrate.

(3) Grass-cutters, attached to Cavalry or Artillery Regiments stationed in Can-

tonments including ponies and loads of fodder.

(4) Cultivators, with their cattle implements, etc., wood-cutters, grass-cutters, and such like, whose work requires daily crossing, on such conditions as may be determined by the Magistrate in each case.

(5) Animals drawing any vehicle, for which toll can be demanded, are not to be also charged with toll.

#### APPENDIX M.

Agricment between the Oudh and Rohilkhand Railway and the Bengal and North-Western Railway for the interchange of traffic at Bahramghat.

#### Clause 1.

Memorandum of Agreement, dated 1st February 1892, made between the Oudh and Rohilkhand Railway (hereafter called the Oudh and Rohilkhand Railway) and the Bengal and North-Western Railway Company (hereafter called the Bengal and North-Western Railway) for interchange of goods and parcel traffic.

#### Clause 2.

This Agreement will come into force on the 1st February 1892 and continue until further notice.

#### Clause 3.

Goods and parcels traffic of every kind shall be freely interchanged between the two Railways with such special restrictions as may be, from time to time, agreed to by the managements of the two Railways, and subject to the conditions laid down below:—

- (a) All packages of less than 14 seers in weight are to be booked through as parcels.
- (b) The minimum charge upon goods traffic booked through is to be as for 20 seers, and no less charge is to be made than 8 annas.
- (c) No less charge than 4 annas is to be made upon parcels traffic booked through.
- (d) The minimum charge for goods and parcels is to be divided in mileage proportion.

#### Clause 4.

Passengers and live stock shall not be booked through.

#### Clause 5.

Packages weighing more than 2 tons or exceeding 12 feet in length by 5 feet 6 inches in breadth by 6 feet high outside measurement, shall not be booked through except by special arrangement.

#### Clause 6.

If at any time either line should find itself unable to receive and forward all the traffic tendered or likely to be tendered to it by the other line, it shall be competent for the Receiving line to give notice of not less than 14 days to the said other line of the maximum quantity it will be prepared to receive and forward, and of 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.

But, with reference to through traffic for the East Indian and connected Railways, the notice to be given by the Oudh and Rohilkhand Railway to the Bengal and North-Western Railway, shall, as regards the period of such notice and the amount of traffic which the Oudh and Rohilkhand Railway may agree to receive, be regulated by the notice which the former line may receive from the East Indian Railway, and by any limitation on the amount of traffic with the East Indian Railway will take over at its several junctions with the Oudh and Rohilkhand Railway.

#### Clause 7.

Each Railway is to supply the other, from time to time, with the rates and fares between Bahramghât and their respective stations. The through rates and fares are to be in all cases the sum of the rates and fares of each Railway to Bahramghât plus ferry charges between the two lines.

## cclxxii APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

#### Clause 8.

Each Railway shall be responsible for collecting all charges due to the other on all received traffic, with the exceptions noted, for which the Forwarding Railway shall be responsible.

1st-Charges on all perishable articles booked as either goods or parcels.

2nd—Charges on Commissariat Medical and Ordnance Stores booked as pre-paid.

3rd-Charges for Insurance.

#### Clause 9.

The Receiving Railway shall not reduce the stated weight or alter the description of articles, or the charges below what is mentioned in Through Way Bill without the consent of the Forwarding Railway, but cases of error in rate or calculation may be corrected.

#### Clause 10.

Before any alteration of rate or fare, or classification affecting through traffic can be made by either Railway, advice of the proposed change shall be sent to the other Railway on or before the 20th of any month, and of alterations consequent thereon by the Receiving Railway, not later than the end of that month. Advices so sent to operate one month after the 1st of the month following the date of advice.

#### Clause 11.

Claims for Compensation are to be settled and paid by the Railway in whose custody the loss or damage occurred.

#### Clause 12.

When the responsibility for loss or damage to goods or parcels cannot be satisfactorily determined, the claim to be paid by both Railways by mutual consent of the managements in proportion to the length the goods or parcels may have been carried by each Railway.

#### Clause 13.

To afford the earliest opportunity of check, all damages or deficiencies must be at once brought to the notice of the officials of the two Railways in such manner as may be agreed upon by the managements.

#### Clause 14.

An official of the Bengal and North-Western Railway will be stationed at Bahram-ghât to receive and hand over goods and their invoices to the Oudh and Rohilkhand Railway. This official will be communicated with in cases coming under the operations of clauses 12 and 13.

#### Clause 15.

Telegrams relating to joint business may be interchanged free between the two Railways.

#### Clause 16.

The division of the receipts on through traffic is to be carried out weekly by the Audit Offices of the two Railways without reference to the end of a month.

#### Clause 17.

The weekly accounts are to be made up to Saturdays inclusive and settlements are to be made monthly in accounts which are to be closed on the last Saturday of each month, and each Railway is to have in such division its own rates and fares, except in the case of minimum charges, which are to be divided as provided in para. (d), clause 3, on the understanding that all accounts be accepted as rendered and errors brought to notice adjusted in subsequent accounts.

#### Clause 18.

Each Railway shall maintain transhipment books at Bahramghat, showing all goods and parcels booked through, and these books shall be open to the inspection of the officials of either Railway.

#### cclxxiii

#### APPENDIX M.

#### Clause 19.

The principles of this Agreement may be extended by each Railway to any other Railway which may be, from time to time, working in connection with it, the two Railway parties to this Agreement being responsible to each other for all through traffic so forwarded as if it were traffic from their own lines respectively.

#### Clause 20.

All questions which may arise in carrying out these arrangements, upon which the Traffic Superintendents of the two Railways cannot agree, shall be referred to the Manager, Oudh and Rohilkhand Railway, and the Agent, Bengal and North-Western Railway, and 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 an arbitration to be conducted in the usual way.

## APPENDIX N.

- Agreement BETWEEN the EAST INDIAN RAILWAY COMPANY and the COMMISSIONERS FOR THE PORT OF CALCUTTA, for the performance by the latter of terminal services on traffic despatched from and to Stations on the East Indian Railway and connected lines, to and from the KIDDER-PORE DOCKS, dated the 16th February 1892.
- I. This Agreement shall come into force on and from the date of the opening of the

  Duration of Agreement.

  Kidderpore Docks for public traffic, or from such subsequent date as the necessary conveniences for dealing with traffic are provided to the satisfaction of the East Indian Railway Company, and shall be subject to revision from time to time, but shall remain in force until the expiration of six months' notice from either side desiring to revise or cancel it.
- 2. The Agreement shall apply to all descriptions of merchandise including minerals and live-stock.
  - 3. The services to be performed by the Commissioners are as follows:-
    - (a) The provision of the necessary accommodation for receiving, standing, and forwarding East Indian Railway trains and accommodating the staff required in the working of the same, namely, all conveniences, buildings, machinery, sidings, locomotive requirements, running rooms, offices, furniture, fittings, and other necessaries required by the East Indian Railway Company. The East Indian Railway Company shall give notice from time to time of its requirements, which shall be regulated by the demands of traffic.
    - (b) The supply of shunting power, staff including labour, stores, stationery and printed forms for receiving, unloading, and delivering to consignees, inwards merchandise from the East Indian Railway and connected lines and receiving from consignors, loading and forwarding outwards goods for the East Indian Railway and connected lines.
    - (c) The keeping of accounts in connection with receiving and forwarding traffic,

\* At a meeting held on 16th February 1892 it was decided that the fixing of this charge should be deferred until the extent of the work likely to arise is seen, the Port Commissioners, meanwhile, paying such charges as may arise, the East Indian Railway undertaking to keep them as low as practicable.

including invoicing and collection of freight charges. The freight charges realised shall be paid daily into the Bank of Bengal to the credit of the East Indian Railway, and the East Indian Railway at a charge of R \* per mensem to be

paid by the Port Commissioners, shall audit accounts and pay to the Commissioners the charge hereafter agreed upon as remuneration for the services rendered by the Commissioners. A weekly verified statement of the amounts paid daily into the Bank of Bengal to the credit of the East Indian Railway shall be furnished by the Commissioners. The forms to be used by the Commissioners, and accounts kept, are those in use at the East Indian Railway Company's Howrah Station, and no other forms shall be used without the consent previously obtained of the East Indian Railway. The forms

- shall be supplied and paid for by the Commissioners.

  (d) The submission of returns and statistics of traffic in the forms current on the East Indian Railway, compiled in accordance with the procedure and rules in force from time to time on the East Indian Railway.
- (e) The marshalling of outwards wagons for the East Indian Railway and connected lines in the manner indicated from time to time by the East Indian Railway.

## Inwards goods to Docks.

4. Inwards wagons shall be considered as made over to the Commissioners one-half hour after passing over the points connecting thet branch of the Eastern Bengal State Railway with the Commissioners' Dock lines, the numbers and description of all wagons being immediately recorded in books to be kept for that purpose. Card seals on the doors on each side of the wagon must be examined by the dock staff immediately after

cclxxv

arrival of the train on the reception sidings, and any defect pointed out to the Guard of the train and acknowledged by him in writing at the time of his signing the guard's inward register and making over the train Through Report.

In the absence of any report, the train shall be considered as having been made over with card seals intact.

- 5. In the event of inwards trains being detained at Sealdah or other station through the inability of the Commissioners to receive such trains on the Dock lines, the wagons on such trains shall be considered as having been made over immediately on expiry of the running time allowed between arrival time of such train at Sealdah or other station, and at the Dock Junction, with the addition of the half hour referred to in clause 4. The Commissioners are not to be held responsible for any delay in sending down wagons after they have notified that they are prepared to accept them.
- 6. In the event of the Eastern Bengal Railway route to the docks being blocked and the route viá the Port Commissioners' line being open the Port Commissioners to pass the East Indian Railway traffic viá the Port Commissioners' line, the Eastern Bengal Railway and Port Commissioners' line sharing the running charge leviable under the Agreement from the East Indian Railway in mileage proportion. In such cases an additional six hours to the demurrage times stated in para. 9\* of this Agreement will be allowed.

The total payment to be made by the East Indian Railway to be the same as if the traffic had passed vid the Eastern Bengal State Railway route.

- 7. On the arrival of the trains in the dock sidings, all wagons and brake-vans shall be forthwith examined by a trained Examiner to be appointed by the Commissioners, and if the wagons are in a damaged state, the nature of the damage shall be recorded. Lists of damaged stock with particulars shall be sent daily by the Examiner to the District Traffic Superintendent, Howrah, and to the Carriage and Wagon Superintendent, East Indian Railway. In the absence of any such notice despatched within 24 hours of receipt of the wagons, such wagons shall be held to have been made over undamaged.
- 8. The contents of all wagons shall on unloading be checked with the card labels, invoices and guidance and any shortage or damage shall be forthwith reported by a joint telegram to the Goods Superintendent, Howrah, and sending station to be followed by a report in detail as per Form T. No. 425B. In the absence of any report despatched within twenty-four hours after arrival, all goods shall be considered as having been made over in full and undamaged, and the East Indian Railway shall be freed from further responsibility in regard to them.
- 9. The East Indian Railway shall in the first instance accept the statements of the Commissioners' staff, sent as provided in para. 8, of shortages and damages; but in the event of such serious or frequent discrepancies between the statements of despatching stations and of the Commissioners' staff, as shall in the opinion of the East Indian Railway require special investigation, all possible facilities shall be afforded to the East Indian Railway for such investigation, and the East Indian Railway shall be further empowered to appoint, at the expense of the Commissioners, such adequate permanent staff of tally clerks to exercise a check on wagons while being unloaded as shall be reasonable. In the event of the result of the investigation pointing to errors or irregularities on the part of the Commissioners' staff, the Commissioners shall make good to the East Indian Railway the payments previously made on account of missing or damaged goods. It shall be open to the East Indian Railway to appoint a traffic officer or officers to inspect the receipt and despatch of goods in the docks, and the Commissioners shall give the said officer every facility for so doing.
- 10. Wagons returned to the East Indian Railway without loads shall be placed in the sidings set apart for outward trains to the East Indian Railway within thirty-six hours from the time of their receipt, as provided in clauses 4 and 5, and wagons returned with loads, within sixty hours. In times of pressure, subject to four days' previous notice from the East Indian Railway, the time for empty wagons shall be reduced to an average time of twenty-four hours. Any time exceeding thirty-six hours, sixty hours, and in times of pressure an average of twenty-four hours, as the case may be, during which wagons remain in the dock premises, other than on the lines referred to in the commencement of this clause, shall be charged for under the demurrage rules for interchanged stock between broad-gauge railways.
  - stock occurring after wagons and rolling-stock have been made over without remark as specified in clause 7. The

wagons and other rolling-stock shall be examined by the Examiner appointed by the Commissioners when they have been placed in the outwards lines for the East Indian Railway, and the statement of the Examiner shall be accepted by the East Indian Railway. In the event, however, of such serious and frequent discrepancies between the statements of the Commissioners' Examiner, and of the Examiner at the first station for examining after return to the East Indian Railway, as, in the opinion of the East Indian Railway shall render it desirable to station a servant of the East Indian Railway to work at the dock premises in co-operation with the Commissioners' Examiner, the necessary house accommodation and the wages of such servant shall be provided and paid by the Commissioners.

12. The East Indian Railway shall pay claims for shortages and deficiencies duly reported by the Commissioners as provided for in clause 8, other claims shall be paid by the Commissioners.

- 13. The Commissioners shall be responsible for collecting all charges due on inwards traffic, with the following exceptions:—
  - I.—Charges on live-stock of every description.
  - II.—Charges on all articles, which, according to the rules of the East Indian or other forwarding railway, are required to be prepaid. The rules of the forwarding railway in this respect shall be duly notified.
  - III.- Charges on Commissariat and Ordnance stores booked under credit note.
  - IV.-Undercharges under RI in freight paid by credit note.

#### Outwards goods to East Indian Railway.

- 14. The East Indian Railway shall accept the statement of the Commissioners as to number, weight and condition loaded, the dock station being in this respect treated as a station of the East Indian Railway. But in every case of shortage or damage to goods reported by receiving station, by wire or by letter, the Dock Station Master must report fully as per East Indian Railway Form T. No. 425 A., to Goods Superintendent, Howrah. The appointment of tally clerks, the investigation of discrepancies, and indemnification for payments made by the East Indian Railway, shall be as provided for in clause 9 for inwards goods.
- 15. The Commissioners, so far as possible, shall utilize the wagon stock of the East Indian Railway to its maximum carrying capacity. Wagons shall not be forwarded with smaller loads than 81 maunds, except in the case of District Road vans.
- 16. The rules shall be generally those in force from time to time on the East Indian

  Railway. Each bale or box of piece-goods must be weighed separately and the weight recorded on back of forwarding note for reference in case of claim.

Each package shall be marked in terms of section No. 147, page 54, of East Indian Railway Tariff for January 1892, and the consignment number must be entered on receipt and invoice.

Separate weight shall be entered on invoice for each class of goods, and separate invoices shall be made out for the different descriptions of goods specified in Traffic Audit Order 130 (4) of the East Indian Railway.

Card seals on all outward wagons shall be examined by the Guard when taking over the train on the Commissioners' lines, and any defects reported to the Commissioners' staff. In the case of defective seals, the contents of the wagon shall be checked, but no demurrage is to be levied on the free time exceeded owing to the delay in checking, which is to be carried out at once.

All packages loaded in brake-vans and District Road vans shall be carefully examined by the Guard, and all defects entered in Guard's register.

The Commissioners shall be responsible for the accuracy of the charges invoiced in the following cases:—

- I.—Charges on live-stock of every description.
- II.—Charges on all articles which, according to the rules of the East Indian or other receiving railway, are required to be prepaid. The rules of the receiving railway in this respect shall be duly notified.
- III.—Charges on Commissariat and Ordnance stores booked under credit note.
- IV .- Undercharges under R1 in freight paid by credit note.

#### APPENDIX N.

#### Outwards and inwards goods.

17. In delivering and receiving goods, the Commissioners in their dealings with consignees and consignors shall in all respects secure the compliance with the conditions in force from time to time on the East Indian Railway for the carriage of traffic.

18. For all the services mentioned in the preceding clauses, the Commissioners shall be paid on merchandise traffic received at and forwarded from the docks, excluding coal and other mineral traffic, at the rate of one pie per maund.

Indian Railway as to the construction of any part of this Agreement, or as to its application to any particular case, either party shall be entitled to call for an arbitration to be conducted in the usual way, each party 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 upon both parties, in regard to the matter, or matters, which may be referred to them or him. But, if either of the two parties shall fail to nominate an arbitrator within eight weeks after notice to call for an arbitration has been given to it by the other party, such other party may nominate its own arbitrator, and, in such case, the decision of the one arbitrator, so appointed, shall be binding upon both parties.

#### APPENDIX O.

- Agreement Between the Eastern Bengal State Railway and the Commissioners for the Port of Calcutta, for the performance by the latter of terminal services on traffic despatched from and to Stations of the Eastern Bengal State Railway and connected lines, to and from the Kidderpore Docks.
- 1. This Agreement shall come into force on and from the date of the opening of the

  Duration of Agreement.

  Kidderpore Docks for public traffic, or from such subsequent date as the necessary conveniences for dealing with traffic are provided to the satisfaction of the Eastern Bengal State Railway and shall be subject to revision from time to time, but shall remain in force until the expiration of six months' notice from either side desiring to revise or cancel it.
- 2. The Agreement shall apply to all descriptions of merchandise, including minerals and live-stock.
  - 3. The services to be performed by the Commissioners are as follows:-
    - (a) The provision of the necessary accommodation for receiving, standing, and forwarding Eastern Bengal State Railway trains and of accommodating the staff required in the working of the same, namely, all conveniences, buildings, machinery, sidings, locomotive requirements, running rooms, offices, furniture, fittings, and other necessaries required by the Eastern Bengal State Railway. The Eastern Bengal State Railway shall give notice from time to time of its requirements, which shall be regulated by the demands of traffic.
    - (b) The supply of shunting power, staff, including labour, stores, stationery and printed forms for receiving, unloading and delivering to consignees inwards merchandise from the Eastern Bengal State Railway and connected lines and receiving from consignors, loading and orwarding outwards goods for the Eastern Bengal State Railway and connected lines.
    - traffic, including invoicing and collection of freight charges. The freight charges realized shall be paid daily into the Bank of Bengal to the credit of the Eastern Bengal State Railway, and the Eastern Bengal State Railway, at a charge of R \* per mensem to be paid by the Port Commissioners, shall audit accounts and pay to the Commissioners the charge hereafter agreed upon as remuneration for the services rendered by the Commissioners. A weekly verified statement of the amounts paid daily into the Bank of Bengal to the credit of the Eastern Bengal State Railway shall be furnished by the Commissioners. The forms to be used by the Commissioners, and accounts kept are those in use at the Eastern Bengal State Railway's Sealdah Station, and no other forms shall be used without the consent previously obtained of the Eastern Bengal State Railway. The forms shall be supplied and paid for by the Commissioners.
    - (d) The submission of returns and statistics of traffic in the forms current on the Eastern Bengal State Railway, compiled in accordance with the procedure and rules in force from time to time on the Eastern Bengal State Railway.
    - (e) The marshalling of outwards wagons for the Eastern Bengal State Railway and connected lines in the manner indicated from time to time by the Eastern Bengal State Railway.

## INWARDS GOODS TO DOCKS.

4. Inwards wagons shall be considered as made over to the Commissioners one half hour after passing over the points connecting the main line of the Eastern Bengal State

<sup>•</sup> The fixing of this charge should be deferred until the extent of the work likely to arise is seen. The Port Commissioners, meanwhile, paying such charges as may arise, the Eastern Bengal State Railway undertaking to keep them as low as practicable.

Railway with the Commissioners' Dock lines, the numbers and description of all wagons being immediately recorded in books to be kept for that purpose. Card seals on the doors on each side of the wagon must be examined by the Dock staff immediately after arrival of the train on the reception sidings, and any defects pointed out to the guard of the train and acknowledged by him in writing at the time of his signing the guard's inward register and making over the Train Through Report.

In the absence of any report, the train shall be considered as having been made over with card seals intact.

- 5. In the event of inwards trains being detained at Sealdah or other station through the inability of the Commissioners to receive such trains on the Dock lines, the wagons on such trains shall be considered as having been made over immediately on expiry of the running time allowed between Sealdah or other station, and the Dock Junction, with the addition of the half hour referred to in clause 4. The Commissioners are not to be held responsible for any delay in sending down wagons after they have notified that they are prepared to accept them.
- 6. In the event of the Eastern Bengal State Railway route to the Docks being blocked, by an accident on the Eastern Bengal State Railway, and the route vid the Port Commissioners' line being open, the Port Commissioners to pass the Eastern Bengal State Railway traffic vid the Port Commissioners' line, the Eastern Bengal State Railway paying the Port Commissioners four annas per vehicle for haulage, subject to a maximum charge of four rupees eight annas per train of not exceeding fifty vehicles. In such cases an additional six hours to the demurrage times stated in para, 10 of this Agreement will be allowed. Should, however, the route be blocked by an accident on the Port Commissioners' line, the additional six hours to the demurrage time will be made, but no extra charge will be paid.
- 7. On the arrival of the trains in the Dock sidings, all wagons and brake-vans shall be forthwith examined by a trained Examiner to be appointed by the Commissioners, and if the wagons are in a damaged state, the nature of the damage shall be recorded. Lists of damaged stock with particulars shall be sent daily by the Examiner to the District Traffic Superintendent, Calcutta, and to the Locomotive Superintendent, Eastern Bengal State Railway. In the absence of any such notice despatched within twenty-four hours of receipt of the wagons, such wagons shall be held to have been made over undamaged.
- 8. The contents of all wagons shall on unloading be checked with the card labels, invoices and guidance, and any shortage or damage shall be forthwith reported by a joint telegram to the District Traffic Superintendent, Calcutta, and sending or transhipment station, to be followed by a report in detail as per form T 12. In the absence of any report despatched within twenty-four hours after arrival, all goods shall be considered as having been made over in full and undamaged, and the Eastern Bengal State Railway shall be freed from further responsibility in regard to them.
- g. The Eastern Bengal State Railway shall in the first instance accept the statements of the Commissioners' staff, sent as provided in paragraph 8, of shortages and damages; but in the event of such serious or frequent discrepancies between the statements of despatching stations, and of the Commissioners' staff, as shall in the opinion of the Eastern Bengal State Railway Administration require special investigation, all possible facilities shall be afforded to the Eastern Bengal State Railway for such investigation, and the Fastern Bengal State Railway shall be further empowered to appoint, at the expense of the Commissioners, such adequate permanent staff of tally clerks to exercise a check on wagons while being unloaded as shall be reasonable. It shall be open to the Eastern Bengal State Railway to appoint a traffic officer or officers to inspect the receipt and despatch of goods in the Docks, and the Commissioners shall give the said officer every facility for so doing.
- 10. Wagons returned to the Eastern Bengal State Railway without loads shall be placed in the sidings set apart for outward trains to the Eastern Bengal State Railway, within thirty-six hours from the time of their receipt, as provided in clauses 4 and 5, and wagons returned with loads, within sixty hours. In times of pressure, subject to four days' previous notice from the Eastern Bengal State Railway, the time for empty wagons shall be reduced to an average time of twenty-four hours. Any time exceeding thirty-six hours, sixty hours, and in times of pressure an average of twenty-four hours, as the case may be, during which wagons remain in the Dock premises, other than on the lines referred to in the commencement of this clause, shall be charged for under the demurrage rules for interchanged stock between broad-gauge railways.

- Damage to wagons.

  Stock occurring after wagons and rolling-stock have been made over without remark as specified in clause 7. The wagons and other rolling-stock shall be examined by the Examiner appointed by the Commissioners when they have been placed in the outwards lines for the Eastern Bengal State Railway, and the statement of the Examiner shall be accepted by the Eastern Bengal State Railway. In the event, however, of such serious and frequent discrepancies between the statements of the Commissioners' Examiner, and of the Examiner at the first tation for examining after return to the Eastern Bengal State Railway, as, in the opinion of the Eastern Bengal State Railway, shall render it desirable to station a servant of the Eastern Bengal State Railway to work at the Dock premises in co-operation with the Commissioners' Examiner, the necessary house accommodation and the wages of such servant shall be provided and paid by the Commissioners.
  - 12. The Eastern Bengal State Railway shall pay claims for shortages and deficiencies duly reported by the Commissioners as provided for in clause 8; other claims shall be paid by the Commissioners.
- 13. The Commissioners shall be responsible for collecting all charges due on inwards traffic, with the following exceptions:—
  - I.-Charges on live-stock of every description.
- II Charges on all articles, which, according to the rules of the Eastern Bengal State or other forwarding railway, are required to be prepaid. The rules of the forwarding railway in this respect shall be duly notified.
  - III. Charges on Commissariat and Ordnance stores booked under credit note.
- IV.-Undercharges under R1 in freight paid by credit note.

#### Outwards Goods to Eastern Bengal State Railway.

- 14. The Eastern Bengal State Railway shall accept the statement of the Commissioners as to number, weight and condition loaded, the Dock station being in this respect treated as a station of the Eastern Bengal State Railway. But in every case of shortage or damage to goods reported by receiving station, by wire or by letter, the Dock Station Master must report fully, as per Eastern Bengal State Railway Form T. No. T 12 (a), to the District Traffic Superintendent, Calcutta. The appointment of tally clerks, the investigation of discrepancies, and indemnification for payments made by the Eastern Bengal State Railway, shall be as provided for in clause 9 for inwards goods.
- 15. The Commissioners so far as possible shall utilize the wagon stock of the Eastern Bengal State Railway to its maximum carrying capacity. Wagons shall not be forwarded with smaller loads than 81 maunds, except in the case of District Road vans.
- 16. The rules shall be generally those in force from time to time on the Eastern

  Bengal State Railway. Each bale or box of piece-goods

  must be weighed separately and the weight recorded on
  back of forwarding note for reference in case of claim.

Each package shall be marked in terms of section No. 45, page 17 et seq. of Eastern

Bengal State Railway tariff for quarter ending June 1892,
and the consignment number must be entered on receipt
and invoice.

Separate weight shall be entered on invoice for each class of goods.

Card seals on all outward wagons shall be examined by the guard when taking over the train on the Commissioners' lines and any defects reported to the Commissioners' staff. In the case of defect ve seals, the contents of the wagon shall be checked, but no demurrage is to be levied on the free time exceeded owing to the delay in rechecking.

All packages loaded in brake-vans and District Road vans shall be carefully examined by the guard, and all defects entered in guard's register.

The Commissioners shall be responsible for the accuracy of the charges invoiced in the following cases:—

- 1.—Charges on live-stock of every description.
- II.—Charges on all articles which according to the rules of the Eastern Bengal State Railway or other receiving railway are required to be prepaid. The rules of the receiving railway in this respect shall be duly notified.
- III.—Charges on Commissariat and Ordnance stores booked under credit note,
- IV.-Undercharges under R1 in freight paid by credit note.

#### APPENDIX O.

#### cclxxxi

#### OUTWARDS AND INWARDS GOODS.

- 17. In delivering and receiving goods, the Commissioners in their dealings with consignees and consignors shall in all respects secure the compliance with the conditions in force from time to time on the Eastern Bengal State Railway for the carriage of traffic.
- 18. For all the services mentioned in the preceding clauses, the Commissioners shall be paid on merchandise traffic received at and forwarded from the Docks, excluding coal and other mineral traffic, at the rate of one pie per maund.
- Arbitration.

  Bengal State Railway as to the construction of any part of this agreement, or as to its application to any particular case, either party shall be entitled to call for an arbitration to be conducted in the usual way, each party 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 upon both parties in regard to the matter or matters which may be referred to them or him. But, if either of the two parties shall fail to nominate an arbitrator within eight weeks after notice to call for an arbitration has been given to it by the other party, such other party may nominate its own arbitrator, and, in such case, the decision of the one arbitrator, so appointed, shall be binding upon both parties.

#### APPENDIX P.

Agreement between the Madras Railway Company and the South Indian Railway Company:

MEMORANDUM OF AGREEMENT made on the 22nd March 1892, between the Madras
Railway Company and the South Indian Railway Company
for the interchange of Traffic, and for the use in common
by both Railways of the Madras Railway Company's station at Katpadi 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.

- This agreement shall be considered as having effect from the 1st April 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,

  Notice of revision or termination. 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.

Station limits.

3. The limits of Katpadi 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.

The 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.

- 6. The Joint Staff for working Katpadi Junction Station shall be appointed and con-Appointment of Joint Staff.

  trolled by the Madras Railway Company, the cost to be charged to Joint Station Expenses Account.
- 7. Each Railway working into Katpadi Junction shall provide its own telegraph staff

  Telegraph Staff.

  and its own staff of goods clerks and porters, etc., for the
  conduct of its local goods traffic, and the South Indian
  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 South Indian Railway has the
  right of building its own local Goods Shed at Katpadi Junction, and of appointing its own
  staff for the conduct of its local goods traffic.
- 8. The business of each Railway shall have equal attention at the hands of the Joint Duties of Joint Staff.

  Staff who must carry out the instructions of properly authorized Officers of each Railway with reference to traffic for the respective lines.
  - g. 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

Capital expenditure.

Capital expenditure.

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 com-

- Rent.

  Rent.

  Rent.

  Rent.

  Railways, an annual rent of 7½ per cent. shall be charged to a Joint Station expenses account, to cover interest and maintenance.
- Expenditure on joint works.

  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 Joint Station Expenses Account.

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.

- Termination of Agreement.

  Termination of Agreement.

  by either Railway for Capital expenditure incurred shall be determined by mutual agreement, or if necessary by arbitration as provided for in clause 39.
- Maintenance.

  Maintenance.

  Maintenance.

  Maintenance.

  Maintenance.

  Maintenance.

  Maintenance.

  Maintenance.

  Maintenance.

  Maintenance.

  May be required for its own exclusive use, and each Railway shall provide and maintain its own permanent-way and signals.
  - Stores, cleaning and greasing.

    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.
- 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, 56 lbs.
  - 2. ,, horse or each head of horned cattle, ½ a ton. .
  - 3. , sheep, calf, goat, pig, dog, or other small animal, 56 lbs.
  - 4. " Parcels at actual weight.
  - 5. .. Carriages each, a ton.

Credit to Joint Station Expenses Account

17. All sums realized by the sale of lost property, unclaimed goods, licenses, etc., collected at Katpadi Junction Station, are to be credited to Joint Station Expenses

Account.

- Rules and Regulations.

  Company within Katpadi 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.

#### APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93. cclxxxiv

Damages or Accidents. limits.

Do.

both Railways immediately.

Letters and Telegrams. tween the two Railways.

- Local Traffic.
- Station Books. Instructions.
- upon. 26. No transhipping charge on account of Katpadi Junction shall be made on through
- Transhipping charge and Rate
- Station to Station rates. ing to distance.
  - Division of minimum charges.

Responsibility of each Railway for collecting charges.

shall be responsible, vis :-

20. Each Railway shall be responsible for damages or accidents caused by its own Running Staff within station

\*21. Notice of all accidents, damages, and losses which occur within station limits shall be sent to the Officers of

- 22. Letters and telegrams relating to joint business and through traffic shall be interchanged free of charge be-
- 23. Traffic booked to or invoiced from Katpadi Junction station by either Railway shall be considered 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.
- 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
- traffic by either Company. Each Company shall furnish the other from time to time with lists of the rates and fares between Katpadi Junction and its respective stations. 27. The distance between Katpadi 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 accord-

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.

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

- (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, etc., and charges for insurance.
- (e) Charges on all articles booked and carried with owners.
- 30. The receiving Railway shall not reduce below the charge mentioned on the invoice or through way-bill, without consent of the forward-Altering Invoices. ing Railway, except in case of overcharges, the evident result of errors in rates, classification or calculation.
  - 31. Under-charges on consignments, whether "Paid" or "To Pay," unless booked under Credit Note, shall be debited to the receiving Under-charges. station with the exception of items included in Clause 29. 32. All overcharges not claimed shall belong to the Overcharges, Railway Company by which the charges are collected.
- 33. Goods claims not arising from any act or negligence of the Joint Station staff shall be berne by the Railway in whose custody the loss or Adjustment of claims. damage occurred, and when this cannot be ascertained with certainty, the claim shall be divided in proportion to mileage.
- 34. The Junction record as to number of articles received and transhipped as well as to the exterior condition of goods when unloaded from Determination of liability. either Company's wagons shall be held to determine liability, unless error can be demonstrated. When goods are re-weighed at the Junction, record of re weighment 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.

- 35. The transhipment of all goods interchanged shall be performed by the Madras

  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.
- 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 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.

- 38. 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 Katpadi 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.
- 39. 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 Between the East Indian Railway Company, the Oudh and Rohilkhand and Indian Midland Railways, dated the 29th April 1892.

MEMORANDUM OF AGREEMENT between the East Indian Railway Company (hereinafter called the East Indian Railway) and the Indian Midland Railway. Company (hereinafter called the Indian Midland Railway) and the Manager, Oudh and Rohilkhand Railway (hereinafter called the Oudh and Rohilkhand Railway) for the interchange of traffic at Cawnpore, and for the use in common by the three Railways of the East Indian Railway Company's existing station at Cawnpore; also for additions and alterations which may be required thereat, from time to time, for the traffic of the three Railways, as well as for the maintenance and renewal of the joint station and the working of the traffic of the three Railways at that station.

#### Clause 1.

I.—Unless where otherwise specially provided, this Agreement shall come into force from the 1st July 1890, and shall continue until the expiration of not less than six months' notice, which may be given by any one Railway at any time, but which is to expire only on the thirtieth of June or the thirty-first of December in any year.

II.—Notice of termination of an Agreement to be valid must, in addition to being given in accordance with clause I, section I, be accompanied by a revised draft Agreement covering the modifications proposed, together with a statement giving the grounds for demanding the revision.

NOTE.—This section is only accepted by the Indian Midland Railway and East Indian Railway. It applies to notice given by either the East Indian Railway to Indian Midland Railway, or Indian Midland Railway to East Indian Railway.

#### Clause 2.

Unless there is something contrary or repugnant in the context, the following terms are throughout this Agreement to bear the meaning and interpretation named below, namely:—

I.—Stations, traffic, vehicles, rates, fares, etc., of the East Indian, Oudh and Rohil-khand and Indian Midland Railways, respectively, mean and include the stations, traffic, vehicles, rates, fares, etc., of other Railways with which the East Indian, the Oudh and Rohilkhand and Indian Midland Railways may respectively have through traffic arrangements from time to time.

II.—East Indian Railway local traffic means all traffic booked or invoiced between Cawnpore Junction station and any station, and vid any station on the East Indian Railway.

III.—Oudh and Rohilkhand Railway local traffic means all traffic booked or invoiced between Cawnpore Junction station and any station, and vid any station of the Oudh and Rohilkhand Railway.

IV.—Indian Midland Railway local traffic means all traffic booked or invoiced between Cawnpore Junction station and any station, and viá any station of the Indian Midland Railway.

#### V .- Through traffic means-

- (a) All traffic booked or invoiced through, between or via any station of the East Indian Railway other than Cawnpore, and any station or via any station other than Cawnpore of the Oudh and Rohilkhand Railway.
  - (b). All traffic booked or invoiced through, between or vid any station of the Indian Midland Railway other than Cawnpore Junction, and any station or vid any station of the Oudh and Rohilkhand Railway other than Cawnpore Junction.
  - (c). All traffic booked or invoiced through, between or vid any station other than Cawnpore of the East Indian Railway, and any station or vid any station other than Cawnpore of the Indian Midland Railway.

VI.—East Indian Railway through traffic means all traffic of the East Indian Railway between places on the East Indian Railway on either side of Cawnpore Junction station and includes traffic to and from Cawnpore City station, which, therefore, only passes through the Junction station.

VII.—The joint station staff means all staff of all kinds employed in working traffic through and in and out of the joint station, and includes Goods and Coaching Clerks, Telegraph Signallers, Police, Pointsmen, Shunters, menials, and all other staff employed in receiving and despatching and dealing with trains and traffic of all kinds.

VIII.—Running staff means and includes Drivers, Firemen, Guards, Brakesmen, and all other staff that may be employed, from time to time, in the actual working of trains.

IX.—Trains mean and include engines, whether with or without brakes or other vehicles.

X.—Traffic receipts mean and include the receipts from all Coaching and Goods traffic, and for telegrams and all other earnings at the joint station.

XI.—The joint station expenses mean all the expenses which the East Indian Railway Company may incur in working the station, including the provision of stationery, forms, etc., required for joint purposes, the cost of lighting the station and lighting the signals, the cost of cleaning and conservancy, rent and maintenance of telegraph instruments and batteries, and other charges of the Government Telegraph Department in connection with the telegraphs within joint station limits, and all other expenses of all sorts incidental to, or connected with, the proper working of the station, and also interest on the Capital cost of the joint station premises, as well as the cost of their maintenance and renewal as provided in clause 3 (III). But the cost of loading, unloading, transhipping, and otherwise handling goods by a staff specially employed and paid for this work is to be excluded from the joint account and be divided between the three Railways according to the actual work done for each Railway. Each line must perform its own shunting.

Should, however, assistance be required by any of the Railways, it shall be given on the terms laid down in clause 25.

XII.—The maund is considered, for all the purposes of this Agreement, as consisting of 82.29 pounds, and the ton as consisting of 27.22 maunds.

#### Clause 3.

I.—The East Indian Railway Company's existing works and premises to be used in Joint station construction, mainten.

ance, rent, provision of permanentway, etc., etc.

to those several items respectively in that schedule, shall be that on which rent is to be charged as provided in paragraph III of this clause. No addition shall be made to this schedule without the previous consent of the three Railways.

II.—The East Indian Railway Company shall, from time to time, provide the amount chargeable to Capital, which is required to be expended, for joint use of the three Railways, upon additions and alterations of the existing premises as they are defined in the Schedule referred to in paragraph I of this clause, 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 East Indian Railway Company, upon plans and estimates which shall be agreed to by the three Railways before the work is commenced.

III.—An annual rent at the rate of 6½ per cent. for joint structures, machinery and plant, including furniture, and 9 per cent. for ballast and permanent-way, points and crossings, to include maintenance and renewal, shall be charged by the East Indian Railway Company to the joint station expenses account, upon the expenditure shown in schedule I, referred to in paragraph I of this clause, and upon the cost of alterations, and additions, and of new works to be provided under the provisions of paragraph II of this clause. No charge shall be made to the joint account in respect of renewals of furniture or working plant included in schedule I other than the above percentage:

IV.—Any expenditure which may be required, from time to time, for joint use of the three 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 East Indian Railway, shall be debited to the joint station expenses account, a separate account of such expenditure being kept for the purposes of clause 4, and on which no interest shall be charged.

The East Indian 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 the three 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 the three Railways, within the limits of the joint station.

- V.—(a). Within its own boundary, each Railway will provide and maintain, at its own cost, all such accommodation as may be required for its own exclusive use, and each Railway will provide and maintain its own permanent-way and signals. Within the boundary of the East Indian Railway, the East Indian Railway Company shall provide all accommodation and structures of all descriptions.
- (b).—The Indian Midland Railway shall solely pay the rent as specified in clause 3, paragraph III, on the accommodation and structures exclusively used by it, as mentioned in schedule 2, attached to this Agreement, and on any such accommodation and structures as may hereafter be provided.
- (c).—The Oudh and Rohilkhand Railway shall solely pay the rent as specified in clause 3, paragraph III, on the accommodation and structures exclusively used by it, as mentioned in schedule 3, attached to this Agreement, and on any such accommodation and structures as may hereafter be provided.

#### Clause 4.

Upon the termination of this Agreement, or in the event of works provided under it

Compensation for Capital expended being no longer required by any of the three Railways, on Joint station works. being no longer required by any of the three Railways, the amount of the compensation to be paid by each of the three Railways for Capital and other expenditure incurred in the provision of joint works, shall be determined by mutual agreement, or, if necessary, by arbitration, as provided for herein.

#### Clause 5.

For the purposes of working, the distant signals on the East Indian Railway and the distant signals on the Indian Midland Railway and the Oudh and Rohilkhand Railway on each side of the station shall be considered and accepted as the limits of the joint station, and all signals within the joint station, as well as the distant signals, shall be worked by the East Indian Railway.

#### Clause 6.

- I.—(a). The staff for working the joint station shall be appointed and controlled by
  the East Indian Railway, and charged to the joint station
  expenses account.
- (b).—The monthly cost of the permanent-staff shall be from time to time agreed on between the three Railways and embodied in a schedule called "joint staff," and signed by the heads of the Traffic Departments of the three Railways, within which limits the East Indian Railway has power to adjust the expenditure, as necessary.
- (c).—In the event of the traffic necessitating immediate increase of the staff above the expenditure of the fixed schedule, the Traffic Manager of the East Indian Railway may make provisional arrangements subject to the subsequent approval of the Oudh and Rohilkhand and Indian Midlaud Railways.
- II.—The whole of the staff of the Oudh and Rohilkhand Railway and of the Indian Midland Railway, while within the limits of the joint station premises and sidings used for traffic purposes, shall obey and be bound by all the Rules and Regulations, and also all instructions which may be, from time to time, in force, or which may be issued by the authorities of the East Indian Railway, who shall have the same rights and control over the staff of the Oudh and Rohilkhand Railway and of the Indian Midland Railway while within the limits of the Cawnpore station as if they were the staff of the East Indian Railway.
- III.—The joint station staff will deal with all through traffic, and also all local traffic of the three Railways if conducted within the limits of the joint station, and the traffic of the three Railways shall be dealt with in the same manner as if it belonged to one only, no undue preference being given to that of any one Railway.

#### Clause 7.

I.—Each Railway shall be responsible for all damages occurring to its own engines and vehicles and traffic therein, and to engines and vehicles and traffic therein belonging to any Railway a party to this Agreement, or to those of any other Foreign Railway when such engines and vehicles and traffic therein are attached to its own trains.

II.—Each Railway shall be responsible for damages or accidents caused by its own running staff within the limits of the joint station.

III.—Except as provided in I and II, all damages or accidents which may be caused in the Cawnpore Junction yard to the public, to the stock and traffic therein of the three Railways that are parties to this Agreement, or to the stock and traffic therein of Foreign Railways that are not parties to this Agreement, and all damages or losses however and from whatever cause they may arise within the limit of the joint station shall be charged to the Joint Station Expenses Account.

IV.—Notice of all accidents, damages, losses, etc., connected with joint working, which may occur within the limits of the joint station, shall be sent, in accordance with the rules in force for reporting accidents on the East Indian Railway from time to time, to the officers of the three Railways immediately such accidents, loss, etc., occur.

#### Clause 8.

Coaching and goods traffic of every kind shall be freely interchanged between the East
Indian Railway and the Oudh and Rohilkhaud and Indian
Midland Railways, with such special restrictions as may
be, from time to time, agreed to by the Traffic Managers of the several Railways, and subject to the following conditions, namely:—

- (a) All packages of less than fourteen seers in weight shall be booked through as parcels.
- (b) The minimum charge upon goods traffic booked through shall be eight annas.
- (c) No less charge than four annas shall be made upon parcels traffic booked through.
- (d) The minimum charge for goods, parcels, dogs, etc., shall be divided in mileage proportion.
- (e) In the case of parcels traffic, when the sum of the charges at the local rates over each line separately is more than the through charge at the higher rate, the latter shall be adopted and apportionment made in Audit in the ratio of distance the parcel is carried over each line.

#### Clause 9.

I.—Each Railway shall-supply the other Railways, from time to time, with the rates and fares for through traffic between Cawnpore and their respective stations. Unless where otherwise specially provided, the through rates and fares shall be, in all cases, the sum of the rates and fares of each Railway to and from Cawnpore as may be so advised, and shall include terminals and cartage (if and when that is performed).

II.—No alteration of rate or fare or classification affecting the through traffic shall be made by any one Railway without notice in writing to the other Railways in accordance with the ruling contained in Regulation 33 of the Proceedings of the Conference of 1888, subject to modification of the ruling by a subsequent Conference; and such notices shall be given so as to come into force only on the first of a month, and only by the Traffic Manager of the Railways to the Traffic Managers of the other Railways.

III.—Each Railway shall supply its rates and fares and charges for local traffic to and from the joint station to the joint station staff from time to time.

#### Clause 10.

I.—Each Railway shall be responsible for collecting and paying over to the Collection of through and local charges. others all the charges which may be payable upon through traffic.

II.—The receiving station shall check the Invoices and be responsible for collecting any amounts that may be undercharged, whether booked "Paid" or "To pay", with the following exceptions, which must be collected in full by the sending Railway, namely:—

(a) Charges on live-stock of every description-

(b) Charges on all articles, goods or parcels, which, according to the rules of the forwarding Railway, are required to be prepaid.

#### APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93. CCXC

(c) Charges on Commissariat, Ordnance, Medical or other Government stores, which are booked on credit note, or which may be prepaid.

(d) Passenger fares, charges on passengers' luggage, specie and palanquins, and on carriages and charges for insurance.

(e) Charges on all articles booked and carried in charge of the owner.

(f) All errors under one rupee in freight paid by credit notes other than those referred to in exception (c), and all under-charges in freight paid by ledger account-

III.-The receiving station shall not reduce the weight of articles or the charges below what is mentioned on the invoice or way-bills, without the consent of the forwarding Railway, but errors in classification, or rate, or calculation, may be corrected.

IV .- The joint station staff shall collect all the fares, rates, and charges of the three Railways due on local traffic to and from the joint station, and these charges, etc., shall he paid to each Railway when, and in such manner, as may be arranged, from time to time.

I .- Claims for compensation not arising from any act or negligence of the joint station staff shall be settled and paid by the Railway, in Compensation. whose custody the loss or damage occurred.

II.-When the responsibility for loss or damage cannot be satisfactorily determined, the claim may be debited to the joint station expense account by mutual consent of the Traffic Managers of the three Railways.

III,-All damages or deficiencies in parcels or goods traffic shall be brought to the notice of the authorities of the Railway or Railways concerned, as soon as they are discovered, in such manner as may be agreed upon by the Traffic Managers from time to

#### Clause 12.

Telegrams.

Telegrams relating to joint business shall be interchanged free between the three Railways.

#### Clause 13.

I.—The division of the receipts from through traffic as defined in clause 2, paragraph V (a), (b), (c), shall be carried out weekly by the Division of receipts. Audit officers of the Railways exchanging such traffic, without reference to the end of a month, except that when the 30th June and 31st December do not fall on a Saturday, two returns shall be rendered—one for the period commencing from the first day of the last week to the end of the month, and another from the first day of the next month up to and including the second Saturday of that month.

II.—The weekly accounts shall be made up to, and shall include, the Saturday in each week, and settlement shall be made monthly on accounts which shall be closed on the last Saturday of each month, except as provided for in para. I of this clause, and each Railway shall have, in division, its own rates and fares, except in the case of minimum charges, which shall be divided as provided in para. (d) of clause 8 of this Agreement, on the understanding that all accounts shall be accepted as rendered, and that errors, which may be afterwards brought to notice, shall be adjusted in subsequent accounts.

#### Clause 14.

I.-Each Railway shall provide the tickets, forms, etc., Tickets, returns, inspection of required for its own traffic at the joint station.

II .- The joint station staff shall keep all such books, statements and returns as may be required by each Railway, and shall render such statements and returns as each Railway may require, in reference to its own traffic, direct to the authorities of that Railway, from time to time.

IH .- All joint traffic books and statements at the joint station, and local traffic books and statements for the purposes of clause 17 of this Agreement; and all through goods, parcels and other traffic books so far as the inspection relates to the through or local traffic of the Railway or Railways desiring such inspection, shall be, at all times, open to inspection by any authorized officer or officers of the East Indian, Oudh and Rohilkhand and Indian Midland Railways.

#### Clause 15.

I.—Each Railway shall make its own arrangements for watering its own engines, and Watering and greasing and oiling also for greasing and oiling and examining and repairing its own engines and other rolling-stock at the joint station.

II.—Each Railway shall also supply lamps, oil, wicks, etc., for lighting its own trains, the work of lighting the vehicles being done, however, by the joint staff.

#### Clause 16.

All sums which may be realized by the sale of lost and unclaimed and damaged pro-Lost and unclaimed property, perty; for rent of refreshment rooms; for licenses for the sale of fruit, sweetmeats, receipts for left luggage, etc.; for the sale of manure; and all other incidental receipts at the joint station, shall be credited to the joint station expenses account.

#### Clause 17.

I.—In consideration of the East Indian Railway through traffic (as defined in para.

Division of joint station expenses.

VI of clause 2 of this Agreement) with which the Oudh and Rohilkhand and Indian Midland Railways are not concerned one-third of the joint station expenses account as defined in para. XI of clause 2 of this Agreement shall be paid by the East Indian Railway Company. The remaining two-thirds shall be apportioned between the East Indian, Indian Midland and the Oudh and Rohilkhand Railways in proportion to the weight of traffic through and local of the three Railways, vis., in the following manner:—

#### East Indian Railway.

Local coaching traffic.-Total in and out.

Goods booked or invoiced and received at the joint station.—Total in and out.

Half the through coaching and goods traffic between the East Indian and Oudh and Rohilkhand Railways.

Half the through coaching and goods traffic between the East Indian and Indian Midland Railways.

#### Oudh and Rohilkhand Railway.

Local coaching traffic.-Total in and out,

Half the through coaching and goods traffic between the East Indian and Oudh and Rohilkhand Railways.

Half the through coaching traffic between the Oudh and Rohilkhand and Indian Midland Railways.

#### Indian Midland Railway.

Local coaching traffic .- Total in and out.

Half the through coaching and goods traffic between the East Indian and Indian Midland Railways.

Half the through coaching traffic between the Oudh and Rohilkhand and Indian Midland Railways.

II.—For the purposes of this division of joint station expenses, the weight of goods and parcels traffic shall be reckoned upon the actual weight according to the invoices and way-bills; and each passenger shall be taken as equivalent to one-tenth of a ton, no account being taken of coaching traffic other than passenger and parcels. Fractions of a maund shall be dealt with in accordance with tariff rules,

#### Clause 18.

I.—The rules for the interchange of traffic and rolling-stock between Railways, as

Adoption of rules of Railway Conference of 1888. adopted at the Railway Conference of 1888, shall be
adhered to, subject to any modifications which may be
agreed to at any subsequent Conference, or which may be adopted on a reference through
the Director General of Railways in accordance with the rules of procedure, or by mutual consent.

II.—No rolling-stock shall be tendered for interchange which does not conform to the standard dimensions prescribed by the Government of India.

## CEXCII APPENDICES TO THE ADMINISTRATION REPORT FOR 1392-93.

#### Clause 19.

Goods loaded in open trucks.—No goods damageable by fire or water shall be allowed to leave the line of the owning Railway in open wagons, except under special arrrangement, subject to the provisions of Conference Rule XXI B. of 1888.

II.—When open trucks laden with damageable goods are accepted, the receiving Railway shall become liable for subsequent damage, provided the goods are handed over under a written description implying that they are damageable by fire, water, or atmospheric causes.

#### Clause 20.

Branches, diversion of vehicles to.—A vehicle of any one of the three Railways running on any other of the three Railways may be diverted from the exact route to its own line, to any short branches of the Railway on which it is running (e.g., the Singharon, Barakar, or Kurhurbaree branches on the East Indian Railway), for a return load to the line of the owning Railway, but not beyond, except with the consent of the owning Railway.

#### Clause 21.

Number-takers.—A number-taker shall note the arrival and departure of every train passing the Junction, and enter in writing in his books the number and description of every vehicle arriving at and leaving the station, giving trains and dates, and distinguishing in goods traffic empty from loaded and covered from open vehicles, and furnishing the necessary returns for the three Railways, such number-taker or takers to be joint servants of the three Railways, and to work under instructions approved by the Traffic Managers of the three Railways.

#### Clause 22.

I.—Each Railway shall accept the statements of the other Railways with respect to the loads of wagons, unless the number-takers at the junction notice and record that the loads have been interfered with, when the actual contents and their condition must be ascertained and recorded by a responsible officer of the joint staff, failing which, the sending Railway's statement shall be accepted.

### Clause 23.

On and from the 1st April 1889, the trains of the Indian Midland Railway shall, subject to the provisions of clause 6, para. II, of this Agreement, cross to and from the Oudh and Rohilkhand Railway by means of the crossing laid down for the purpose (in pursuance of Minute No. 1 of the Meeting held at Allahabad on 29th March 1887), payment being made by the Indian Midland Railway at the following rate, vis:—

The Indian Midland Railway to pay to the East Indian Railway a sum of three-quarters of an anna per vehicle, loaded or unloaded, each time such vehicle crosses the East Indian Railway; each engine with tender and each brake-van being reckoned as a vehicle.

#### Clause 24.

In respect of coaching vehicles transferred between the Indian Midland and Oudh and Rohilkhand Railways, the same payment as provided in clause 23 shall be made per vehicle, with effect from the 1st April 1889.

#### Clause 25.

Each Railway shall do its own shunting, but should either of the three Railways

Shunting charges.

Shunting charges.

of the other Railways, payment shall be made to the own-

ing Railway at the following rates:-

Each passenger and mail train one-third of an hour. Each mixed and goods train three-quarters of an hour. For general shunting, a charge will be made at the rate of 5 miles per hour at an average cost per train mile for Locomotive expenses, calculated on the actual expenses shown in the East Indian Mailway Revenue Account for the previous half-year, plus 5 per cert, thereon to cover interest, on the cost of Locomotive Stock used.

This rule as to charge will apply also in calculating the charges for shunting passenger, mixed or goods trains.

#### Clause 26.

Arbitration. tion of any part of this Agreement, or as to its application to any particular case, any one Railway shall be entitled to call for an arbitration to be conducted in the usual 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 upon the three Railways, in regard to the matter or matters, which may be referred to them or him. But, if any one or two of the three Railways shall fail to nominate an arbitrator within eight weeks after notice to call for an arbitration has been given to such Railway or Railways by any one Railway, the Railway or Railways giving such notice may nominate an arbitrator or arbitrators, and in such case the decision of the arbitrator or arbitrators, so appointed, shall be binding and conclusive upon the three Railways.

#### Clause 27.

This Agreement is to be subject to the sanction\* of the Boards of Directors and the Government of India, as regards the East Indian and Indian Midland Railways, and to the sanction of the Government of India as regards the Oudh and Rohilkhand Railway.

Sanctioned by the Government of India in their letters Nos. 21-22 R. T., dated the 17th January 1893.

Sanctioned by the Board of Directors, Indian Midland Railway, in their letter No. 20, dated the 1st July 1892.
 Sanctioned by the Board of Directors, East Indian Railway, in their letter No. 169, dated the 25th November 1802.

Schedule A.

Schedule of furniture and working plant in joint use by the E. I., O. & R. and I. M.

Railywas at Cawhpore.

<del></del>		<del></del>			<del></del>
No.	Description.	Amount.	No.	Description.	Amount.
	Chiling Handands office	R a. p.	}	Brought forward	R 4. p. 587 10 0
2	Station Master's office.  Almirahs with padlocks	40 0 0		First class Gentlemen's waiting room—contd.	•
3	Tables, with drawers	25 0 0 0 8 0	1	Wall lantern Towel rack	2 p o 3 o o
1	Looking g ass Washhand stand	500	2	Canvas stretchers	12 0 0
1	Seroy stand	. 1 0 0		•	
1	Date rack	30 0 0		Native Latrines.	
4	Clock, round, No. 336 Chairs	8 0 0	32	Pans	16 0 0
3	Hat-racks	3 0 0	6	Buckets	600 1200
3	Letter scale, with weights	3 0 0 I 0 0	4	Padlocks, iron	2 0 0
2	Paper cases, tin Measuring tape	5 0 0	٠,	ringshead for water	700
ĭ 3	Copying press Book-shelves	10 0 0   8 0 0		Telegraph office.	•
,	Durrie	2 0 0		C 11.	
1	Station stamp, I. R. Box, round, iron, for lost property,	li	4	Counters . Utto at the door	35 0 0
	with padlock Box, wooden	20 0 0	1	Wooden box, with padlock Clock, standard, No. 345	4 0 0 80 0 0
2	Padlocks, I for office door and I for	. 1	I	Tin mug	040
2	godown Small ladders	5 0 0	3	lar, stone	45 0 0 0 8 0
6	Buckets, G. I. •	12 0 0	2		too
4	Hand-signal lamps, reserve	12 0	1	Table with drawers	300
1	Hand lamp, square faced	2 0 E	2 8	Chairs Stools	800
	Assistant Ctation Mandagle offer		1	Wrench	. 0 8 0
	Assistant Station Master's office.	•	2 !	Eyelet pressure	400
3	Tables with drawers	35 0 0 15 0 0	1	Silber burner, with bracket	3 0 0
1	Book-shelf	4 0 0		<b>.</b>	
1 4	Rain gauge	2 0 0 8 0 0		Gentlemen's water closet.	
1	Hat-rack	080	2		5 0 0
3	Seroy stand Chairs	6 0 0	1 5	Commodes, complete	080 2500
6	Stools Hand-bells, brass	6 o o	7		080.
2	Carriage keys	100	ĭ	Padlock, iron	7 0 0
I	Station stamp	100	•	.      .	
3	Cr. wbars Mugs, enamelled	600		First class Ladies' waiting room.	_
2	Iron padlocks	1 0 0 . I 0 0	3	Tables	20 0 a
.1	Paper case, tin Date rack	080	7	Chairs, armed	4 0 0
I	Clock, standard, No. 190	80 0 0	2	Ditto easy	15 0 0 10 0 0
1	Dating machine Type box	10 0 0 1	2	Couches Towel racks	30 0 0 6 0 0
6 8	Carriage keys	3 0 0	3	Washhand stands, marble top, com-	•
1	Label rack	100	.2	plete Toilet tables, with mirrors	30 0 0 50 0 0
3	Seal, brass Table lanterns, with 2 silber and 1	080	1 2	Seroy stand Screens, wooden	080
3	tin burners	24 0 0	2	Commodes	10 0 0
	Hand-signal lamps with Assistant Station Master	600	2 I	Purdahs	400
6	Ditto with ticket collectors	18 0 0	3	Chamber utensils	3 0 0
	Breat along County-room?	. 1	2	Washhand stands, fixed	0 8 o 20 0 o
	First class Gentlemen's waiting room.	∥.	. 1		30 0 0
	Cable otois	, I	1	Mug, tin	0 4 0
3	Benches	15 0 0 25 0 0	1		2 0 0 4 0 0
. 3	Toilet table with mirror	10 0 0 30 0 0	2		,13 0 0
I I	Chillumchee, zinc, with stand	2 0 0	ŀ		
1	Bath tub	2 0 0 S		Second class Ladies' maiting room.	
ĭ 2	Seroy stand Purdahs	080	1	Table	15 o o
I	Tin pot	4 0 0	3	Chairs Bench	600
. 5	Armed obairs Armless do	10 0 0	1	Pot, tin	040
1	Tumbler Chamber utensils	080	2	Towel-rack Commodes	3 0 0 10 0 0
1	Padlock on door	200	1	I oilet table, with mirror Washhand stand	8 0 0
•	Table lantern	8 0 0	1	Bath tub.	*6 0 0 2 0 0
		`	1	Chillumchee, zinc, with stand Chamber utensil	2 0 0 1 0 0
ĺ	Carried oves	587 10 0	1	•	
	• I	J-7 U	1	Carried over	1,248 14 0

## Schedule A-continued.

## Schedule of furniture and working plant in joint use by the E. I., O. & R. and I. M. Railways at Campore—continued.

٥.	Description.	Amo	unt.	'	No.	Description.	Amou	pţ,	,
	Brought forward	₽ 1,248		þ.	'	Brought forward	₽ 2,011	<b>a.</b>	
	Second class Ladies' maiting	1,240	-4	Ĭ		3rd class Booking office-contd.	2,011	٠.	•
	room—contd,	_			_				
1	Purdah	2 15		0	1	Hand singal lamp Cash bay seal	3	8	
ij	Padlock, iron	ō	8	0		Bracket lamp, W. I.	′ <u>1</u>	0	
1	Durrie Lantern, wall	5 2		0	1 :	Notice board Almirah with Chubbs' padlock	20	0	
	Lamp, wall, duplex	4	0	0			_	-	
	Seroy stand	0	8	۰		3rd class waiting hall and station			
	Notice Fedical maiding com					hail.			
	Native Ladies' maiting reom. Padlock, iron	0	8		6	burners	36	0	
			•	Ĭ	3	Notice boards	67	0	
1	Second class Gentlemen's waiting				3	Lamps, hanging, Ditmar's	07	8	
	TOOM.			- 1		77		į,	
	Table	- 5		0		Through Goods office. Crane, 3 ton	1,000	0	
í	Shower bath tub	6		0	3	Tables	25	ō	
1	Ladder Washhand stand, with enamelled	2	0	•	4 5	Chairs Stools	- 8 5	0	
	bowlandiug	5	٥	0	3	Counters	30-	0	
	Toilet talle, with mirror	5	0	0.0	1	Clock, round, No. 503 Weighing machine, Avery's	Go Qo	0	
	Towel rack	1		0	':	Measuring tape	o	8	
	Garden bench Purdah	7	0	0	1	Wagon seal Padlocks, iron	0 2	8	
	Chamber utensils	2		0	4	Counter, with drawers	10	o	
	Padlock, iron		8	0	1 1	Copying press	10	8	
1	Lanterns, wall Wooden bench	7	7	0	1 4	Platform lamps, with Silber burners.	28.	_	
ı		•	•	•	3	Ladders, 2 wooden and 1 bamboo	8	0	
ļ	Junction Number-taker's office.				1	Almirah	15	0	
1	Counter	10	0	0	] []	Table lantern, with Silber burner	8	0	
	Stool Clock, round, No. 268		0	0	<b>!</b>	Hand signal lamps	· 12	8	
1	Ladder wooden	-	0		•	topour stamp * 1		٠	
	Hand signal lamps with E. I., O. and	_	_	,		Luggage Office.			
ı	R, and I. M. Number-takers	9	0	o.	1 1	Counter with drawer	25	0	
Į	Ry. wagons	0	8	0	I I	Ditto fixed	10		
I					1 1	Weighing machine, Avery's Notice board	90	0	
1	Parcel office.				1	Label rack		0	
١	Tables, flat	25	0	0	1 · 1	Stool Reading lamp	3	0.	
١	Stool	3 1		ŏ	•				
	Almirah with padlock  Book shelves	30 8	0	0	'	General.	•		
	Iron padiocks	3	o	ŏ	21	Punkahs with frills	84	0	
,	Notice board	2	0	0	27	Hand rignal lamps with points staff.  Ditto with station jemadar.	81	0	
	Label racks, teak	10 50	0	0	;	Ditto with head porter	3		
	Iron afe, large Iron chest, with Chubbs' padlock	80	0	0	15	Ditto with gunners Hand lamps with chowkidars	45 • 18	0	
	Parcel weighing machine, Davidson's.	25 40	0	0	9	Plattorm lamp, small, with Silber	"	•	
	Letter tray	O	4	0	١.	burner in passage Power wall lamp ditto	6	0	
	Hat-rack Measuring stick	0	8	٥	1	Touch man many diffe	t	٠	
	Deal wood box, without cover, for					Station ward	•		
	sorting letters	0 22	8	0	43	Station yard. Iron padlocks on E. I. Ry. points	21	8	
1	Lamp, West Derby, with Silber burner	6	0	0	2	Di to on O. & R. Ry. barriers	1 1	0	
	Ditto hand	. 2	0	٥	2	Ditto on crossing gates	1	0	
	salama on a stara Basti . M			- 1	1	Ditto on goods shed gate	0	8	
,	1st and 2nd class Booking office. Ticket cases, with two Chubbs'	•			11	Ditto on scotches Ditto with traverser	5	8	
	padlocks	<b>.</b> 60		0	4	Iron padlicks on canal gates	2	0	
1	Counters, with drawers Stool	20 I	0	0	13	Ditto on G. & R. Ry. points Ditto on I. M. Ry. ditto	6	8	
	Dating machines, with types complete	• 20		0	10	Salety chains with padlocks	40	0	
	Iron padlock on door Lamps, West Derby, with Silber	0	8	Đ	I R	Hand signal lamp with jemadar Bamboo sprags	3	0	
	burners	12	0	0			l .		
I						Platforms.	[		
-	3rd class Booking office.				64	Platform lamps, large with Silber	l _	•	
1	Wall lantern	. 5	7	0		burners, vis., 25 on E. l. Ry., 18	· •		
,	Table lantern with Silber burner Counters	20	0	0	Γ '	on I, M. Ry, and 15 on O. & R. Ry, platforms and 6 on over	]		
:	Ticket cases	- 6o	0	۰		bridge	1,280	. 0	
	Chubbs' padlocks Brass ditto	10	0	0	10,	Platform lamps, large, in station com-	160	o	
	Round clock, No. 639	4 47	0	0	21	Iron brackets for platform lamps	210		
١	Dating machines, with types complete	30	0	٥	8	Ditto spare	80	0	_
- 1	Carried over .		2	_	I I	Carried over	5,678	100	

## . Schedule A,—concluded.

## Schedule of furniture and working plant in joint use by the E. I., O. & R. and I. M. Railways at Campore—concluded.

No.	Description.	Amount.	No.	Description.	Λnoι	nt.	
2° 2 11 1 2 1 3 3 3	Brought forward Iron lamp posts with brackets, on E. 1. Railway platform and compound. Ditto on O. & R. Railway platforms Ditto on I. M. Railway ditto Notice boards Clork, standard, No. 8 Luggage trucks, 4-wheeled Ditto ditto 3 ditto Iron hand trucks, 2 ditto Iron hand trucks with cage, 2-wheeled	R a. p 5,678 to 0 8 0 0 8 0 0 22 0 0 110 0 0 42 0 0 150 0 0 165 0 0	I	Brought forward  Lamp, West Derby, with Silber burner under over bridge  Lamp Room.	R 6	7. 5 0	ρ. α
3 3 3 3 3 1 1 1 2	Letter case Ladder, wooden Filter stands Water barrels Indicating boards Roof lamp, treliies Rail helis Tin mugs Engine bell Anitary filter Weighing machine on I. M. Railway platform Table on I. M. Railway platform Stools on I. M. Railway platform. Stools on I. M. Railway and O. & R. Railway platforms Pieces luggage tence Nocice boards on I. M. Railway plat	5 0 u 6 15 0 u 6 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 2 7 4 2 3 3 14 2 2 2 1 1 2 2	Roof lamp, stands Stands, Silber burner Tables lamp, triuming Oil measures Oil cans Oil feeders Ladders Air protectors, for signal lamps Main and distant signal lamps Scrapers Hand signal lamps Lamp trays Counter for Silber burner Kerosine oil saver Funnels, tin Total value of furniture and working	6,936	0 0 0 0 8 2	0.0000000000000000000000000000000000000
•	form	6,664 5 0	•	Total value of joint accommodation .  GRAND TOTAL .	3,77,499		_

## Schedule B.

# Schedule of joint expenses at Campore station between E. I., O. & R. and I. M. Railways.

Particulars.	Present expenditure	Sanctioned amount.	Particulars.	Pie ent expenditure.	Sanctioned amount.
Station Master	R n. p. 400 0 0 220 0 0 200 0 0 150 0 0	R a. p. 400 0 0 220 0 0 200 0 0 150 0 0	Brought forward	R a. p. 577 0 0 35 0 0 35 0 0	R. a. p.
TICKET COLLECTORS AS UNITER.  Ticket Collector	100 0 0 50 0 0 35 0 0		2 ,, at R20 each 2 ,, ,, 15 each 3 Number-takers ,, 15 each Total	<del></del> -	819 0 0
Total	25 0 0 20 0 0 15 0 0	334 0 0	MENIALS.  3 Native gunners at R12 cach I Native do	36 00 0	•
Yard Foreman Gunner	139 0 0 60 0 0	200 0 0 80 0 0	1 Tindal . 7 Shunting porters at R8 each . 2 Shunting porters at R7	9 0 0 9 0 0	
Booking clerk  Assistant do  Do. do  Station Master's clerk .	90 0 0 40 0 0 35 0 0 25 0 0 45 0 0	•	each 5 Shunting porters at R6 each 2 Peons at R7 edch 3 , , , 6 1 Head porter	14 0 0 30 0 0 14 0 0 18 0 0 8 0 0	•
I Parcels' clerk I Passistant do. Do. do. I Do. do. I Luggage clerk I Grinner	45 0 0 35 0 0 25 0 0 25 0 0 25 0 0 40 0 0		28 Porters at R5 each. 2 Ayahs , 6 ,, 1 Waiting-room bearer 1 Lamp-man 2 ,, at R6 each	140 0 0 12 0 U 7 0 0 8 0 0 7 0 0	
n Native gunner . Tranship clerk . "," clerks at R20 each	20 0 0 17 0 0 40 0 0		4 Bhisties at R5 each 1 Hindu waterman 1 Sweepers at R5 each 1 Mehrani	12 0 0 20 0 0 5 0 0 4 0 0 30 0 0 4 0 0	
Carried over .	577 0 0		TOTAL .	444 0 0	•474 o

<sup>•</sup> This includes the wages of guards' running room cooks and bearers, R29, exclusively borne by the E. I. Railway Company.

# APPENDIX Q.

# Schedule B.—concluded. Schedule of joint expenses at Cawnpore station, etc.—concluded.

PARTICULARS.	Present expenditure.	Sanctioned amount.	PAR	riculars.	Present expenditure.	Sanctioned amount.
Points, etc., staff.	R a. p.	R a. p.	Page	ght forward •	R a. p.	R a. p.
7 Jemadars at R12 each  1	84 0 0 11 0 0 50 0 0 8 12 0		5 Peons at		585 0 0 30 0 0	
1	8 8 0 8 4 0 16 0 0 116 4 0			TOTAL .	616 4 0	<b>6</b> 26 4 o
15 ;; ;; 7·12 ;; 8 ;; 7·8 ;;	60 0 0 98 0 0 6 12 0			lowance to clerks, nd points staff .		49 4 0
TOTAL .	467 8 o	490 0 0	G, R. P	OLICE STAFF.		
GATE-REAPER'S STAFF.  1 Gateman.  4 ,, at R5 each .	6 0 0 20 0 0		1 Sergeant 1 ,, 1 Head con		100 0 0 80 0 0 25 0 0	
TOTAL . CHOWKIDAR'S STAFF.	26 o o	26 0 0	2 Head con each	sat Rioeach .	24 0 0 40 0 0	
t Chowkidar	8 0 0 78 0 0 5 0 0		8 ,,	,, 8 ,, . Total .	333 0 0	411 <b>6</b> 6
TOTAL ,	91 0 0	9000	Pay to Reli duty for po Sunday allo	eving staff doing ermanent staff wance	98 0 0 Nil	. / The debits are only
TRI EGRAPH STAFF.  1. Head signaller 1 Signaller 2 ,, at R45 each 3 ,, 40 ,, 1	90 0 0 80 0 0 55 0 0 90 0 0 120 0 0 35 0 0 25 0 0		Travelling Traffic Ins join statin join statin Wages of and water Goods hand Ditto trans Contingenci Stores. Stationery a	allowance to pector coming to n on duty	15 0 0 44 0 0  17 0 0 2,098 0 0 459 0 0	intended to be rais- ed when East Indian Railway Inspectors are employed at the station on joint duty in connection with the discipline or control of the joint staff.
Carried over .	585 o o		Gratuities staff and c	to points, etc.,	708 o o	
Particui	LARS.		Sanctioned amount.		Remarks	s
Charges for waterproof clott Ticket collectors, Trains cle say, at Rio each	ning for Staterks and gunn	ion Masters, ers, 39 suits,	R a. p.	service on 1st paying one-ha other half bein issue of the wa the following good order. to pay full of refunded to the	June in each y  If the cost in  ng deducted for  sterproof suits  year if they  Men of less th  ost in the first  hem the next	men of over one year's year, the Undertaking the first instance, the rom the men's pay on and returned to them present their suits in in one year's service year, a moiety being year on production of
Charges for uniform clothing Masters, Assistant Station Station Masters	Masters and S	ບb-Assistant	120 12 0 160 8 0	their suits in s Yearly.	erviceable con	dition.
charges for uniform over-co-				Yearly.  Every three year	·s.	-
Charges for uniform over-coats for trains clerks at R12 each  Charges for caps for native gunners			144 0 0	Every three years. A moiety of the cost recoverable from Trains clerks supplied with over-coats. Yearly.		

Schedule I.

Schedule of joint accommodation and of furniture and working plant in joint use by E. I., O. and R. and I. M. Railways at Campore.

	· <u>· · · · · · · · · · · · · · · · · · </u>	#43	e by E. I., O. and R. and I. M.	Russauys at Odampore.	
No. In original draft schedules.	No. as agreed to at Cawnpore Meeting.	New No.	Description of Work.	Amount. Remark	<b>3</b> .
				R a. p.	
2	I	1	Rooms A, B, C and D in house No. 1, occupied by Assistant Station Master	8,417 2 8	
3	2	2	Rooms C and D in barrack No. 3, occu-	1 ! !	
4	3	3	pied by Sergt., G. R. Police Rooms A and C in barrack No. 6, occu-	6,683 9 7	
5	4	4	pied by Dy. Sub-Assistant Station Master	2,243 0 0	
6	5	5	occupied by Sub-Assistant Station Master Rooms G, H, K and L in barrack No. 7,	4,486 0 0	
7	6	6	M and N in barrack No. 8, all occupied by ticket collectors. Rooms A, B, C, D and E in bungalow	5,081 4 0	
8	7	7	No. 33, occupied by Station Master . 10 rooms in house No. 5, occupied by	23,541 11 5	
9	8	8	Traffic	1,300 0 0	
10	9	9	Traffic	650 0 0	
11	10	10	Traffic	1,300 0 0	
			Traffic	650 <b>o</b> o	
12	11	11	Traffic	1,300 0 0	
. 13	12	12	Traffic	Used jointly 1,300 0 0   Ry., O. an	by E. I. d R. Ry.
14	13	13	To rooms in house No. 12, occupied by	1,300 0 0 and I, M.	
15	14	14	10 rooms in house No. 13, occupied by Traffic	1,300 0 0	
16	15	15	10 rooms in house No. 14, occupied by Traffic	l	
17	16	16	10 rooms in house No. 15, occupied by Traffic	1,300 0 0	
20 2 I	17	17 18	One native latrine Ladies' waiting room for Purdah wo- men	1,822 10 8	
22	19	19	2nd class ladies' waiting room	6,398 0 0	
23	20	20 21	Passage Telegraph office	3,199 0 0	
25	22	22	Station Master's office	6,054 0 0   6,054 0 0	
2 Š	23	23	Assistant Station Master's office	6,054 0 0	
27	24	24	Station Master's clerk's room ( Parcel office	2,678 0 0	
28	25	25	Left luggage room Parcel godown	6,054 0 0	
29 30	26 27	26 27	1st and 2nd class Booking office. 1st class ladies' waiting room	4,268 O O	
31	28	28	1st class factes waiting foom	6,891 0 0   { 6,812 0 0	
32	29	29	2nd ditto ditto	6 054 0 0	
33	3° 31	30	1st class refreshment room 2nd ditto ditto	10,397 0 0 7,161 0 0	
			. [		
			Carried over .	1,42,321 6 4	

### Schedule I-concluded.

Schedule of joint accommodation and of furniture and working plant in joint use by E. I., O. and R., and I. M. Railways at Campore—continued.

No. to original draft schedules.	No. as agreed to at Cawnpore Meeting.	New No.	Description of work.	Amount.	Remarks.
				R a. 1	p.
			Brought forward .	1,42,321 6	4
35	32	32	Water closet	.,,,	٥
36   37	33 34	33	Junction number taker's office Station platform, E. I. Railway		8
38	35	35	3rd class waiting hall on station building	A	0
39	36	36	3rd class waiting hall outside station	6 000 - =	
	37	37	building Portion of through goods platform 400'	6,989 15	8
40	37	3,	× 20' and lean-to verandah	16,000 o	0 1
4 I	38	38	Through goods office 50' x 20'	4,000 0	0
42	39	39	O. and R. Railway covered way and plat-	19,878 12	
43	40	40	Over-foot bridge	6,888 5	9
44	41	41	I. M. Railway covered way and platform	27,762 15	2   Used jointly by E. J
45	42	42	Crow's nest	250 0	o Ry., O. & R. Ry.
75	43	43	Extension of O. & R. Railway passenger shed up to the foot overbridge, Reso.		Januar. 11, 10,
		1	465, Meeting No. 21 of 1891	776 o	o   ļ
63	60	44	235 ft. line from point No. 4 to point		
			No. 10, including 1 set of points and crossings	1,467 8	0
65	61	45	655 ft. line from point No. 32 to west	2,407	
•	ĺ	,	end of pucca goods shed, including I		[1]
	69	46	set of points and crossings Interlocking (which forms part of sanc-	3,777 8	In abeyance until the
76	1 09	**	tion, recorded in Reso. 1298, Meeting		completion of the appa ratus, when its incidence
	ĺ		45 of 1888, Junction arrangement, I.	_	in respect to the thre
	ł		M. Railway) estimated cost	*59,917 5	7   railways will be sepa
				3,64,815 14	5 to, to have back effect
	1	l	Schedule of furniture and working plant,		to the date on which the
		1	vide statement A	6,936 7	O curred.
	1		Total for E. I., O. & R., and I. M. Rys.	3,71,752 5	5
	1		Town tot 21 11, Or a 10, and 1, 11, 11, 11,		<del>-</del>
•	\	١	Platform orin size-1	250	3
48	45	47	Platform or main signal	250 0 350 0	Used jointly by I. M.
49 50	47	49	Distant signal, wooden	250 0	$ \begin{array}{c c} 0 & \text{Ry, and } \hat{\mathbf{E}}, \hat{\mathbf{I}}, \hat{\mathbf{Ry}}. \end{array} $
•					<del></del> -
	1	1	Total for I. M. and E. I. Rys.	850 O	0
				] .	
51	48	50	Old approach distant signal	250 0	Used jointly by
52	49	51	New ditto Old approach main signal	250 O 280 O	& R. Ry. and I. N
53 54	50	53	New ditto	250 0	o Ry.
,,	-	~	m . 14 . 0 . n		<del></del>   •
			Total for O. & R. and I. M. Rys	1,030 0	0
		j			•
16	58	54	1,725 ft. siding from point No. 52 to		
66			dead buffer 232 ft. line from point No. 51 to point	9,527 8	Used jointly by O.
UÜ	59	55	No. 52	1,276 0	o R. Ry, and E. I. Ry
				',	
			Total for O & P 3 F T P	70.000	
			Total for O. & R. and E. I. Rys.	10,803 8	<u> </u>
	1		GRAND TOTAL	3,84,435 13	i

Schedule II.

Schedule of accommodation used solely by I. M. Ry.

No, in original draft	No, as agreed to at Cawnpore Meeting.	New No.	Description of work.	Amou	nt.		Remarks,
47	44	56	Distant singal for transfer siding, Reso.	R	a.	p.	
-	•	, ,	706 of 1889	532	CI	3	])
67	62	57	7.040 ft. Main line from point No. 10 to E. I. Ry. boundary, including 1 set of points and crossings	38,895	0	0	
68	63	58	1,275 ft. siding from point No. 14 to point No. 26 including 2 sets of points and crossings	7,362	8	0	
69	64	59	1,863 ft. siding from dead buffer to point No. 41, including 1 set of points and crossings and 1 dead buffer	10,461		•	
70	65	60	2,246 ft. siding from dead buffer to point No. 47, including r set of points and				Used exclusively by I. M. Ry.
71	66	61	crossings and 1 dead buffer 430 ft. crossover road from point No. 21 to point No. 30, including 4 sets of points	12,568			
73	67	62	and crossings and 2 diamond crossings 208 ft. crossover road from point No. 42 to point No. 46, including 2 sets of points	3,452	0	0	•
73	68	63	and crossings 172 ft. transfer siding from point No. 1—I. M. R. to E. I. R. boundary, in-	1,494	0	0	
			cluding 1 set of points and crossings.	1,121	0	0	1
•				75.886	10	3	

Schedule III.

Schedule of accommodation used solely by O. & R. Ry.

Old No.	New No.	Description of work,	Amount.	Remarks.	
55	52	1,440 ft. platform line from dead buffer to E. I. Railway boundary, including one dead	R a. p.		
56	53	buffer  904 ft. siding or 2nd line from dead buffer to point No. 35, including 1 dead buffer and	7,960 o o		
57	54	1 set of points and crossings 200 ft, crossover from points No. 23 to points No. 16, including 2 sets of points and cross-	5,187 0 0	į.	
58	55	ings 390 ft crossover from points No. 35 to points No. 28, including 2 sets of points and cross-	1,450 0 0	Used exclusively by O. & R. Ry.	
59	56	ings	<b>2,</b> 495 <b>0</b> 0		
62	57	ings 865 ft. additional siding for O. & R. Railway trains, Reso. 160 of 1890	4,245 0 0 2,756 7 3		
		-			
			24,093 7 3		

#### APPENDIX R.

Antement between the Commissioner in Sind and the North Western Railway for the working of a Ferry at Kotri in connection with the Hyderabad-Umarkot Railway, dated the 10th May 1892.

Agreed-

Clause 1.—That the North Western Railway shall take over the entire working and management of the ferry at Kotri when the railway is opened from Hyderabad to a point near Umarkot.

Clause 2.—That the North Western Railway shall take over from the Local Boards existing plant for working the ferry, provided it is suitable and necessary for such working, and shall provide any additional equipment that in the opinion of the North Western Railway is required.

Clause 3.—When necessary for working the traffic, the North Western Railway shall have power to place extra steamers or extra flats in the service, and for the time being these shall be considered as forming part of the plant for working the ferry, and shall come under the conditions specified in clause 6 of this working Agreement. But the ferry plant of the Local Boards taken over by the North Western Railway shall not be unnecessarily set aside in part or entirely, and, except for repairs, no vessel or stage shall be withdrawn for more than a month, without the prior consent of the Local Boards concerned or the Commissioner in Sind.

Clause 4.—For the present no plant required for the transport of loaded wagons is to be used, and when such plant is deemed necessary its introduction will require the sanction of the Bombay Government.

Clause 5.—That a valuation statement be prepared jointly by the Railway and the Local authorities, showing the present estimated value of all ferry plant whether provided by the Local Boards or the Railway, in accordance with clause 2 above; any additions to the plant that may hereafter be found necessary shall be similarly added to the valuation statement of the cost of the plant.

Clause 6.—That the North Western Railway shall maintain a separate half-yearly account of the gross earnings and working expenses of the ferry. A sum of 10 per centper annum on the estimated value of the plant, as above provided, shall be charged on account of interest on capital and depreciation as a part of the working expenses, and shall be paid half-yearly to the owner of such plant. After deducting working expenses, including interest and depreciation as above provided, the balance shall be equally divided between the Local Boards and the North Western Railway. The adjustment of these transactions will be made half-yearly. In the event of a loss occurring on the ferry working, that loss will be divided in the same proportion as the gain between the Local Boards and the North Western Railway.

Clause 7.—That the ferry accounts are to be open to the inspection of the Government of Bombay when desired.

Ciause 8.—That all ordinary repairs to the vessels and plant shall be charged to the working expenses; all risks of navigation, and all losses and damages due to this cause, shall be separately borne by the owner of the vessel or plant, and shall not be debited to working expenses as above described.

Clause 9.—The repairs of the vessels and plant belonging to the Local Board will be carried out by the North Western Railway, and such repairs shall be done to the satisfaction of an officer deputed to represent the Local Poards.

Clause 10.—That the Railway shall give at least the same facilities for local passenger traffic from shore to shore as are now provided. On the Kotri side, the Railway landing stage and the Local Boards' landing stage near the city shall both be maintained; on the Hyderabad side the existing landing stage of the Local Boards shall be maintained. The vessels shall ply to the Railway passenger landing stages only when required to do so in connection with trains; on all other trips the vessels shall ply to the existing landing stages for local passengers.

Clause 11.—That the local rates for passengers and animals from shore to shore shall be the same as at present charged; that the through rates for passengers and goods

### cccii APPENDICES TO THE ADMINISTRATION REPORT FOR 1892-93.

shall be fixed by the Railway Administration from time to time; and that the Railway may give and receive goods on either side of the river at such points as may be convenient.

Clause 12.—The local passenger traffic from shore to shore shall be worked by the Railway, in accordance with the provisions of the Bombay Ferries Act. The Commissioner in Sind will publish a notification defining the exemption from tolls under that Act.

Clause 13.—This Agreement shall come into force on the opening of the Hyderabad-Umarkot Railway, and shall remain in force for a year, and thereafter be subject to termination at six months' notice on either side; such termination to take effect on 30th June or 31st December of any year.

Vuluation Statement of Ferry Plant.

No.	Name of vessel.	Estimate ed value	Equip- ment.	Repairs.	Total valuation.	REMARKS.
1 2 3	North Western Railway Plant.  Steam Tug "C"  Corrugated Iron Barge No. 8  Hulk " Maddock"	33,000 10,000 10,000	830 166 271		33,830 10,166 10,271	Only nominal cost is
4	Total N. W. Ry. Plant .	56,000	s ti	shown. Equipment to the value of R2,104-5-4 is also excluded.		
3 4 5 6 7	Local Boards Plant.  Steamer "Kathleen" Steam Launch "Ethel" Corrugated Iron Barge, 43 tons, iron deck. " 43 " wood " Landing stage at Gidu Bandar "Alabama," goods landing stage  Total Local Boards Plant	60,000 5,000 700 700 800 3,000 2,800	1,176 15 . 30 . 69 . 12 446 424 2,172	1,500   1,500 1,200	62,676 5,015 730 769 812 4,946 4 424 79,372	To be kept in reserve. Ditto ditto; Ditto ditto.

#### APPENDIX S.

Agreement between the MADRAS RAILWAY and the Nilgiri Railway

for the joint use of the METTUPALAIYAM STATION.

MINUTES of meeting at Mettupálaiyam on 15th June 1892.

At a meeting held at Mettupálaiyam on Wednesday, the 15th June 1892, it was agreed that the Engineer-in-Chief of the Nílgiri Railway should obtain the sanction of his Board to cancel the proceedings of the meeting held at Mettupálaiyam on the 3rd April 1891.

- 2. Four plans submitted to the meeting were considered, and it was decided that, with certain modifications, plan D should be followed.
- 3. It was proposed that the Nilgiri Railway pay in cash half the total cost of the passenger platform, including existing platform and buildings, or that the Nilgiri Railway pay rent on the whole of the Madras Railway passenger buildings, old and new, at 7½ per cent. in proportion to the weight of the traffic exchanged, the Madras Railway in this case finding capital for all alterations and additions; the Nilgiri Railway to have the option of accepting one or other of these proposals.
- 4. The Nilgiri Railway agrees at this meeting to pay half the cost in cash of the expense incurred in altering and shifting existing standard gauge lines from west to east of the station building excluding any new or additional permanent-way or material required.
- 5. Madras Railway agrees to pay in cash half the cost incurred in erecting the goods transhipping platform and shed; Madras Railway to furnish plan and the works to be carried out by the Nilgiri Railway.
- 6. Extra standard gauge line to the transhipping shed to be paid for by the Madras Railway.
- 7. The proposed engine-shed line to be altered on the plan so as to allow an engine to make a back shunt, thus preventing the transhipping line from being fouled by an engine going to or returning from shed.
- 8. Arrangements for supplying water to the station from Bhaváni river be left in abeyance for the present; but, in erecting the kitchen above the refreshment rooms, the walls are to be sufficiently strong to bear the weight of a cast-iron water tank 15 feet by 4; tank to be not lower than 20 feet from ground level.
- 9. It was agreed that the kitchen and godown should be built on the top of the refreshment room.
- 10. It was considered that a foot overbridge for local passengers from the Madras Railway platform was not necessary at present, but that, should an overbridge afterwards be necessary, it be provided at the cost of the joint station.
- 11. Plans and estimates embodying the foregoing it was agreed should be submitted by the Madras Railway to the Nílgiri Railway through the Agent and Manager of the former railway.
- 12. All buildings belonging to the Madras Railway Locomotive Department on the Nilgiri side of the station, vis., the engine-shed, the turn-table and drivers' running bungalow and out-houses, etc., it was decided should be retained by the Madras Railway.
- 13. It was agreed that all land at Mettupálaiyam station now in the possession of the Madras Railway should be retained by that Company as its own property.
- 14. Minute referring exclusively to engineering details taken by Messrs. Weightman and West.
- 15. It was agreed that the profits of the refreshment room at the Mettupálaiyam station should be credited to the joint station accounts half-yearly.

#### APPENDIX T.

Agreement, with respect to Madras, Arkonam and Erode Stations between the Madras Railway Company and the South Indian Railway Company (Limited).

• This Agreement shall be considered as having effect from the first of July 1892 and Commencement and expiration of 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 to cancel it, such notice to expire only on the 30th June or 31st December in any year.

2. Wherever in this Agreement the words "Sending Railway" are used, they are to be understood as referring only to one or other of the Railways, parties to this Agreement.

3. The principle of this Agreement shall be considered as extended, by each of the Agreement to be extended to other Railways.

Railways working in connection with it, the two Companies, parties to this Agreement, being responsible in all respects to each other for all traffic sent through as if it were respectively traffic to or from their own lines.

4. All rates, fares, classification, rules, conditions and general arrangements relating
All previous rates, etc., to remain in force.

to through traffic between the Madras and the South Indian Railways, in force on the first of July 1892, shall remain in force until cancelled or modified upon such notice as is required under Conference rules.

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.

The 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.

6. Coaching and Goods traffic of all kinds shall be booked through between all stations of both Railways, at which those respective descriptions of traffic are booked from time to time, subject to arrangements made between the Traffic Managers of the two Railways.

7. Through traffic shall be understood in all cases to mean Coaching and Goods

Definition of through traffic.

Definition of through traffic.

Through traffic which may be booked or invoiced in accordance with the terms of this Agreement through from any station on one of the two Railways or any Railway beyond to any station on the other or any line beyond.

8. The through rates and fares shall be the sum of the rates and fares of each
Railway respectively, between Madras, Arkonam and
Erode and the stations concerned. The rates and fares
shall be supplied by each Railway to the other from time to time.

9. In the case of minimum charges on goods and insurance, the two Railways interested in the traffic shall be treated as one, and the amount actually paid shall be divided by mileage.

Notice to be given of alterations or addition to, rates, fares, classification, rules, or conditions relating to through traffic shall be made by either Company without one month's previous notice to the other. Such alteration to take effect in all cases from the first of a month.

Receiving Railway responsible for all received traffic, with the exceptions noted below, for which the forwarding Railway shall be responsible, namely:—

Exceptions to above. (a) Charges on live-stock of every description.

- (b) Charges on all perishable articles booked either as goods or parcels.
- (c) Charges on Commissariat and Ordnance Stores booked on Credit Note or prepaid.

- (d) Passenger fares, freight on passengers' luggage, carriages, etc., an l charges for insurance.
- (e) Charges on all articles booked and carried with owner.
- Altering Invoices at destination.

  Altering Invoices at destination.

  Or through way-bill without consent of the forwarding Company, except in the case of over charges, the evident result of errors in classification, or computation of freight.
- 13. The distances between Madras, Arkonam and Erode and the Stations of each
  Station to station rates.

  Railway respectively, shall be supplied by each Railway to the other from time to time, but the actual amounts to be charged by each Company upon through traffic shall be furnished by the other Company in the form of station to station rates in lump sums, in order to avoid any calculation of charges according to distance by stations.
  - 14. The rules of the Government Telegraph Department shall be adopted in the Paid Telegrams. interchange of telegrams between the two Companies.
  - 15. Letters and telegrams relating to joint business and through traffic shall be Letters and Telegrams. interchanged free of charge between the two Railways.
- Termination of half years.

  Termination of half years.

  Termination of half years.

  Termination of half years.

  Termination of half years.

  To turns shall be rendered, one for the period commencing from the first day of the last week to the end of the month, and another from the first day of the next month up to and including the first Saturday of that month.
- works jointly used by both Companies, the Company at whose cost the works jointly used by both Companies.

  works have been constructed and are maintained is to receive from the other Company an annual rent equal to 7½ per cent. upon half the amount of capital expended upon such works.
- 18. Goods claims shall be borne by the Company in whose custody the loss or damage occurred, and when this cannot be ascertained with certainty, the claim shall be paid in mileage proportion; but in such cases the consent of both Companies shall be obtained before settlement is made.
  - (a) In every case of loss or damage of Goods which has not been reported by the Receiving Company within 48 hours after it has been ascertained, the liability rests exclusively with the Company failing to report.
  - (b) All admitted claims for loss or damage of Goods are borne by the Company in whose charge the Goods were when the loss or damage occurred. But in all cases where the question of liability is doubtful, the compensation paid is divided between the Companies.
  - (c) Sums paid in compensation for losses, damages or delays are divided between the Companies interested in the traffic according to the share of the proceeds which they have received, but should the amount of compensation exceed the gross receipts, the excess is divided according to mileage.
  - (d) In the division of sums paid in compensation for loss or damage, under rule C, when the amount paid is divided within limits less than those between which the Goods were invoiced, the mileage charges received for the distance over which the lost Goods could not have been conveyed are to be deducted from the amount of the claim.
  - (e) In the case of transhipped goods, the compensation for loss or damage is borne by the Company whose line intervenes between the point at which Goods were last seen uninjured in the wagons, and the point at which the loss or damage happened, or was first discovered and reported.
  - (f) In cases of loss or damage to Goods, it is the duty of the Receiving station to advise the station at which such Goods were invoiced, and in case of "transhipped" or "road goods" it will be the duty of the Receiving station to advise the transhipping station as wells
  - (g) In the case of Goods being missing, it is the duty of the original forwarding station to issue Circulars to all stations up to the point at which the loss was discovered.

- Waiting for trains at Junctions. When the incoming train is known to be running so late—that the whole of the agreed time of detention of the corresponding train is insufficient—the earliest possible intimation of the fact shall be wired to the Station Master at the Junction in view to prevent any unavailing delay in starting trains from his station.
- 20. The transhipment of all Goods interchanged between the Campanies at Arkonam Transhipment at Arkonam and and Erode shall be performed by the Madras Railway Company either by a Contractor or by day labour, and the cost of same shall be divided equally between the two Companies. The Station Master of one Company shall give notice to the Station Master of the other Company on arrival at Arkonam or Erode of wagons containing Goods for transhipment. The Station Master receiving such notice will determine and notify to the other Station Master whether the Goods are to be transhipped into wagons direct or placed on the tranship platform at the risk of the receiving Company. If kept in the wagons more than 36 hours from time of advice, demurrage shall be charged at nine pies per ton of carrying capacity per hour. The original invoice shall be handed over to the receiving Company together with the Goods, but, in the event of the original invoice not being forthcoming when the consignment arrives at the Junction, a "Tranship invoice" showing the station of destination, the sending station, the number and description of the articles, and the name of the consignee will be furnished with the Goods to the receiving Company who will then take over charge.
- Transfer of Goods interchanged by the Companies from their respective stations at Madras shall be performed by and at the cost of the Company sending the Goods. In the case of "paid" consignments the sending Company will collect and retain the transfer charges, and in the case of "to pay" consignments, the receiving Company will collect the transfer charges and refund them to the sending Company through the weekly through traffic statement.

#### Transfer Charges at Madras (to be collected from the public).

22. All Goods booked between stations on Madras Railway and stations on South Indian Railway viá Madras are subject to the following additional charges for cartage between the Salt Cotaurs and Egmore Stations:—

```
For each consignment under in maund in anna.

Do. exceeding in the maund in anna.

Do. in in the maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in anna.

The maund in
```

For every additional maund or fraction thereof above 2 maunds 2 annas per maund.

```
Weights.

2lbs. is equivalent to 1 seer.
82lbs. ,, to 1 maund.
27'22 maunds ,, to 1 ton.
```

23. The additional charge to be made for transferring Parcels at Madras from one Transfer of parcels at Madras. Railway to the other will be:—

```
For each parcel under 1 maund . H o 4

Do. exceeding 1 mund . H o 4

Do. 1 but not

Do. 1 but not

2 maund . H o 4

n o 6
```

For every additional maund or fraction thereof above 2 maunds As. 2 per maund, and these additional charges must be entered on the Parcel's Way-Bill as "transfer charges."

The transfer charges on Parcels will be a distributed by the parcels will be a distributed by the distributed by the distributed by the parcels will be a distributed by the distrib

The transfer charges on Parcels will be retained by the forwarding Company, and the work will be performed by the Receiving Company.

24. The Audit Offices of the two Companies shall exchange weekly division sheets,

Settlement of Accounts.

each Railway to have in division its own rates and fares,
as quoted for through traffic in accordance with para. 8,
mileage between the Railways concerned, and shall account for all inwards through traffic

cccvii

within six weeks from the date the invoices pass Arkonam, Erode or Madras Junctions. A monthly settlement of accounts, based on division sheets, bills and statements as rendered and declared shall be made by transfer certificate on the understanding that all errors which may be in them will be adjusted without delay in subsequent accounts by the responsible Railway.

25. The receiving station shall be debited with the amount actually invoiced "to pay," and the overcharge shall be recoverable only through Overcharges. the Traffic Manager's Office, after communication between the two companies.

Undercharges.

26. Undercharges shall be shown in the undercharge column, or at foot in the weekly abstracts as well as in the Invoices.

- (a) Undercharges on consignments "paid" to be debited to the forwarding Station. Undercharges on consignments "to pay" to be debited to the Receiving Station.
- . 27. The accounts between the two Companies shall not be re-opened after a lapse of nine months. Advices shall be exchanged between the Accounts not to be re-opened after two Companies of every account as soon as audited. This rule does not apply to refunds of overcharges or to claims.
- 28. The weekly Traffic Statements shall contain divisions of receipts realized in the respective periods only, all adjustments of incor-.Weekly traffic statements, rect divisions or charges, and of refunds being made through weekly error statements; such error statements to be accepted by the two Companies before being incorporated into the Accounts Current.

29. Horse traffic shall be considered as Coaching traffic, Horse traffic. and all live-stock traffic shall be shown on separate Abstracts.

30. The charges on parcels, carriages, horses and dogs Prepaid. and live-stock are to be prepaid in all cases.

31. In all refunds the proportion to be borne by each Refunds. Company shall be noted by the Traffic Department.

32. When tickets issued from stations on the South Indian Railway to Madras are used in a wrong direction, the former Company shall retain its local fare, and the balance shall be credited Wrong route.

to the Madras Railway. 33. No Pamphlets issued by either Company as to the rates and fares of the other Company shall be accepted as authority for charges Publication. by the Station Staff, but all rates and fares shall be supplied by each Company to the other in sufficient number to send a copy to each station.

34. All overcharges arising in coaching and goods from apparent error in classification or computation of freight shall be credited to the Railway which collects the freight. Overcharges.

35. Each forwarding Company to render to the other Weekly returns showing the other Company's proportion of its passenger, troops, luggage, horses, carriages and dogs, special train, extra Weekly Statements. troop train and live-stock receipts.

36. Goods and Parcels traffic shall also be divided weekly, each Company taking its proportion.

37. Each Railway as soon as it is in possession of the invoices will divide all the received traffic, parcels and goods, in order to save time; the invoices will then be sent to the forwarding Company Invoices. by whom the accounts will be examined, after which the invoices will be returned.

38. Any dispute with regard to errors in accounts to be referred to the Examiner of Railway Accounts, whose decision in writing shall be final.

39. In case of any difference of opinion other than with reference to accounts between the two Companies as to the construction of any Arbitration on disagreement. part of this Agreement, or as to its application to any particular case, it shall be open to either Company to call for arbitration, to be conducted in the ordinary way.

Goods and Parcels.

3 R 2

# APPENDIX U.

and the BENGAL AND NORTH-WESTERN RAILWAY for the lease of the FERRY ACROSS THE RIVER GOGRA, and situated on the road from Revelganj to Ballia District, dated the 16th September 1892.

THE Secretary of State for India in Council doth hereby lease to the Bengal and North Western Railway Company hereinafter called the lessee, and the said lessee does hereby take the lease of the public ferry across the River Gogra, and situated on the road from Revelganj to Ballia District at the rent of R4,000 per annum upon and under the following terms and conditions, vis:—

- (1) The lessee does hereby acknowledge to have received a copy of the Rules under section 15 of the Bengal Ferries Act, I (B C.) of 1885, and to be aware of the provisions of section 10 of the Act under which the lessee is legally bound to conform to them. The lessee also acknowledges to have received a list of the tolls to be levied at the ferry.
- (2) The lease is to be for three years, namely, from the 1st April 1890 to the 31st
  March 1893, and during this period the lessee shall be bound to ply the ferry
  from the Revelganj Ghat to the Sitab Diara side every year.
  - (3) The lessee hereby agrees -
    - (a) To provide eight boats for the ferry, and to keep the boats in proper repair.
    - (b) To employ a crew of two men on each boat.
    - (c) To make at least eight crossings every day, except during the rains, when as many as possible will be made.
    - (d) To provide and keep in order the landing stages at either or both banks of the river.
  - (4) The lessee shall not charge or demand tolls for ferrying over-
    - (a) Mails, mail carts, dak runners and Government telegraph messengers on duty.
    - (b) Commissariat stores, animals and vehicles, when accompanied by a challan from the Commissariat Officer.
    - (c) Military Officers, soldiers and their followers when travelling on duty with
    - (d) Police and other public Officers and processserving peons

      their bond fide baggage, horses
      palkees, or other conveyance.
    - (e) Executive Officers of the District Local Board Department when travelling on duty.
    - (f) Coolies engaged in repairing roads, with their tools and instruments.
    - (g) Persons carrying dead bodies or property sent in by the Police.
  - (5) The lessee shall not charge or demand tolls from persons who wade or swim across or take cattle or other animals or property across at their own cost and risk or from persons who cross themselves, or take other persons across without charge, in their own boats.
  - (6) The lessee hereby agrees to pay the rent in the following instalments:-

But if at any time before the expiry of the period for which the ferry has been leased the lessee be removed therefrom for any breach of the terms and conditions of the lease, or for any wilful breach of any of the rules under section 15 of the Act, the lessee shall be liable to pay rent up to and including the instalments due next after the lessee's removal.

(7) If the rates of toll are reduced during the currency of the lessee's lease or the exemptions from payment of it are extended, this Agreement is to be modified accordingly. The lessee shall be given a fair opportunity of satisfying the Magistrate as to the effect of the change, and if the terms proposed by him thereafter are not such as the lessee can reasonably accept, the lessee will, according to the law, immediately carry into effect the order reducing

#### APPENDIX U.

the rates of toll, or extending the exemption from payment of it, but will at the same time state the amount of rent the lessee may be willing to pay under the altered circumstances of the case. Should the lessee's offer appear to the Magistrate to be inadequate, it shall be competent to him to remove the lessee and place another person in charge of the ferry, and for such time as the lessee remains in charge of the ferry after the issue of the order reducing the rates of the tolls or extending the exemption from payment of it, the lessee shall pay rent only at the rate tendered.

(8) If the lessee make default in the payment of the rent for the ferry, or of any penalty which may be lawfully imposed, or if the lessee do not observe or perform the covenants herein contained, it shall be lawful for the Magistrate to remove the lessee from the charge of the ferry, and to settle the same with some other person. After such removal, the lessee shall not be entitled to any part of the proceeds of the ferry, or to levy any toll therefor.

(9) The lessee will not assign, sublet or part with the possession of the ferry

without the previous consent in writing of the Magistrate.

(10) The lessee shall not claim any compensation on account of roads being closed for repairs, or on account of inundations or the breaking down of bridges.

#### APPENDIX V.

Agreement for the working of the Rajpura-Bhatinda Railway by the North Western-Railway on Behalf of the Patiala Darbar.

THIS INDENTURE made the 30th day of January 1893 between the SECRETARY OF STATE FOR INDIA IN COUNCIL (hereinafter called the Secretary of State) of the one part and the PATIALA DARBAR of the other part:—

WHEREAS a line of railway has been constructed in the territory of His Highness the Maharajah of Patiala between Rajpura on the North Western railway and Bhatinda on the Rewari-Ferozepore railway.

AND WHEREAS the said line of railway from Rajpura to Bhatinda with all its plant and machinery serviceable working stores has been and now is in the hands of the North Western railway and is now being worked by them.

AND WHEREAS the Secretary of State and the Patiala Darbar have agreed that the North Western railway shall maintain and work the said line of railway from Rajpura to Bhatinda upon the terms and conditions hereinafter contained.

NOW THIS INDENTURE WITNESSETH and it is hereby agreed and declared as follow:

- 1. "The North Western railway" means the railway worked by the Secretary of State and now under the control of the Manager North Western railway and any alterations and additions that may from time to time during the continuance of this contract be made in or to the said railway by or with the sanction of the Secretary of State but not so as to include any railways or works comprised in "The Rajpura-Bhatinda railway" as hereinafter defined.
- 2. "The Rajpura-Bhatinda railway" means the line of railway extending from Rajpura on the North Western railway to Bhatinda on the Rewari-Ferozepore railway with any improvements alterations and additions of whatever description that may from time to time be made in or to the said railway by or with the sanction of the Patiala Darbar but with the exception of the telegraphs and telegraphic appliances used or to be used thereon.
- 3. "The Amalgamated undertaking" means "the North Western railway" and "the Rajpura-Bhatinda railway" (as defined above in sections 1 and 2 respectively) taken as a whole the intention being that these two railways under the terms hereinafter contained in this contract should be worked together as if the two constituted but a single railway.
- 4. "Gross receipts" mean and include when not otherwise stated all receipts from coaching and goods traffic and from telegraphs all sums received as rents and all other receipts usually treated as railway revenue.
- 5. This agreement shall be taken to have commenced and as having come into force upon the thirteenth day of October 1889 and shall be subject to revision from time to time and shall be and remain in force until the 31st day of December 1892 and shall be terminable then or on the 1st January or the 1st July in any year thereafter on six months' previous notice in writing being given by either party to this agreement to the other 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.
- 6. An inventory of the plant and machinery of the Rajpura-Bhatinda railway handed over as aforesaid as on the thirteenth day of October 1889 shall be made and signed by or on behalf of the Patiala Darbar and the North Western railway.
- 7. The North Western railway shall make up and deliver to the Patiala Darbar an account of all such stores delivered to the North Western railway on the thirteenth day of October 1889 and of the value of such stores the value thereof (except in those cases if any in which a different value is agreed upon by the Patiala Darbar and the North Western railway) shall be taken as entered in the accounts of the Rajpura-Bhatinda railway.
- 8. During the continuance of this contract the North Western railway shall maintain the Rajpura-Bhatinda railway and keep the same supplied with rolling-stock plant and machinery as if it were part of the North Western railway and shall do all in their power to develop the traffic on the Rajpura-Bhatinda railway and shall manage use and work he Rajpura-Bhatinda railway and shall convey traffic thereon.

- 9. The Secretary of State shall be the sole judge as to the standard of maintenance to be required and the Revenue accounts provided for in section 26 following shall not be considered as finally closed and made up until such time as the maintenance is certified to by the Inspecting Officer appointed under the Indian Railways Act of 1890 or any subsisting statutory modification thereof as having been brought up to the standard required and the whole cost of the same debitable to Revenue has been duly charged off.
- damage of every kind (including claims for lost or damaged goods) that shall occur upon the Rajpura-Bhatinda railway except accidents loss or damage caused by the failure of the permanent way or works arising from defective original construction or caused by any extraordinary casualty not due to defects in the maintenance or working of the said Rajpura-Bhatinda railway by the North Western railway. The Patiala Darbar shall be responsible for any accident or damage that the North Western railway could not have prevented which may result from any such failure of the permanent-way or works arising from defective original construction. Should any of the permanent works such as bridges stations buildings or other works upon the Rajpura-Bhatinda railway fail from causes beyond the control of the North Western railway or should any extraordinary casualty occur the case must be regarded as exceptional and the cost of construction or replacement must be charged to Capital or Revenue or divided between them as may be deemed by the Secretary of State proper according to the circumstances of the case.
- 11. All subsequent works and alterations chargeable to Capital and which may from time to time be agreed upon between the North Western railway and the Patiala Darbar as necessary for the efficient working of the Rajpura-Bhatinda railway shall be carried out by the North Western railway at the expense of the Patiala Darbar.
- 12. The Secretary of State may from time to time by notice in writing require the carrying out of any alteration or improvement in the Rajpura-Bhatinda railway 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 Rajpura-Bhatinda railway. 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.
- 13. Any moneys required by the North Western railway for any purpose properly chargeable to the Patiala Darbar in connection with the Rajpura-Bhatinda railway and sanctioned under section 10 or 11 or required by the Secretary of State under section 12 by the Patiala Darbar according to such arrangements as shall from time to time be made between the Patiala Darbar and the Secretary of State. The Patiala Darbar will also provide for the North Western railway any land that may at any time be required for the Rajpura-Bhatinda railway. The incidence of the cost of all works to be constructed shall be agreed upon before the work is commenced.
- 14. For purposes in connection with the Rajpura-Bhatinda railway the North Western railway shall not acquire either absolutely or for any limited estate any land situate in Patiala territory 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 clause 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 North Western railway by the Patiala Darbar.
- 15. During the continuance of this contract the North Western railway shall have entire control of the traffic working of the Rajpura-Bhatinda railway shall supply all staff required for the supervision and working including that for audit and accounts and shall supply all locomotives and other rolling-stock fuel and working stores required for the efficient working of the Rajpura-Bhatinda railway.
- 16. The North Western railway shall keep the Rajpura-Bhatinda railway together with the plant and machinery in good repair and good working condition to the satisfaction of the Secretary of State.
- 17. The North Western railway shall cause to be run on the Rajpura-Bhatinda railway so many trains at such times at such rates of speed between such places and with such conveniences and accommodations as the traffic shall from time to time require after duly considering any recommendations or suggestions from the Patiala Darbar.
- 18. The North Western railway shall book goods and passengers from all stations upon the line of the Rajpura-Bhatinda railway to all such stations upon other lines of railway as the North-Western railway now or shall from time to time interchange traffic

with and shall otherwise extend to the traffic on the Rajpura-Bhatinda railway all privileges facilities and booking arrangements now or hereafter used or enjoyed by the North Western railway in connection with other lines of railway.

- 19. The North Western railway shall charge such rates fares and tolls and shall make such rules conditions and arrangements in respect of the traffic on the said Rajpura-Bhatinda railway as are now in force or shall be from time to time within the powers of the Manager North Western railway to introduce on the North Western railway. Construction and Revenue stores required either for the North Western railway or for the Rajpura-Bhatinda railway shall be carried over the lines of the amalgamated undertaking at the rates and under the conditions in force for the time being on the North Western railway.
- 20. All services which on the Rajpura-Bhatinda railway the Secretary of State or the Patiala Darbar shall require the North Western railway to perform 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 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 inclusive of stores for any other State railway shall be performed by the North Western railway on the same general conditions and at the same rates and under the same conditions as may for the time being be generally in force on the North Western railway.
- 21. The North Western railway shall record and keep in proper books full and particular accounts of all its transactions and correspondence in any way relating to or affecting the Rajpura-Bhatinda railway or the business thereof or any of the matters or things included or referred to in this contract so at all times to exhibit fully and truly the state of its affairs in relation thereto and the Patiala Darbar or any person or persons appointed by it in that behalf shall at all reasonable times have free access to all the books accounts papers and documents of the North Western railway relating to the Rajpura-Bhatinda railway with power to call for or make copies of or extracts from the same,
- 22. The North Western railway shall keep the following accounts in regard to the Rajpura-Bhatinda railway:—
  - A Capital account including the stores accounts.
  - A Revenue account.

23. In the Capital account of the Rajpura-Bhatinda railway the following particulars shall be entered to debit and credit respectively (that is to say)—•

#### To debit.

- (a) The value at cost price as shown in the accounts of Rajpura-Bhatinda railway as and in manner aforesaid inclusive of the railway plant and machinery handed over to the North Western railway as aforesaid
- (b) The value as certified by the Patiala Darbar of all land provided by it after the thirteenth day of October 1889 for the purposes of the Rajpura-Bhatinda railway.
- (c) All moneys which shall be actually expended by the North Western railway with the sanction of the Patiala Darbar out of funds provided by it in respect of the Rajpura-Bhatinda railway upon works plant or machinery the cost of which is chargeable to Capital.
- (d) All such other sums (if any) as ought to be entered to debit in the Capital account.

#### And to credit.

- (e) All such of the moneys to be received by or on behalf of the North Western railway in respect of the Rajpura-Bhatinda railway as ought under the provisions of this contract to be treated as received on account of Capita!.
- (f) The value of any land originally debited to the Capital account of which the North Western railway shall have been allowed to take possession for the purposes of the Rajpura-Bhatinda railway and which shall have been subsequently relinquished.

APPENDIX V.

- 24. All moneys expended by the North Western railway on the Capital account of the Rajpura-Bhatinda railway and all other expenses of the North-Western railway in connection therewith shall from time to time be stated and submitted to the Patiala Darbar. The Capital account shall from time to time be made up and the balance thereon ascertained and stated therein.
- 25. The gross receipts of the Rajpura-Bhatinda railway are to be collected and treated as receipts of the North Western railway. Moneys such as shall arise from the sale of any property on any occasion 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 other than stores belonging to the Darbar on any occasion other than such replacement as aforesaid shall be made without the sanction of the Patiala Darbar.
- 26. A Revenue account for the Rajpura-Bhatinda railway showing the earnings of the line under the heads prescribed for State railways and in total the percentage deduction therefrom for working expenses as per para. 27 following shall be prepared by the North Western railway half-yearly to the 30th day of June and the 31st day of December in each year or to such other days as may at any time be prescribed for Indian State railways and shall be regularly submitted by the North Western railway to the Patiala Darbar. Every Revenue account shall be considered as settled at the expiration of three calendar months after the same shall have been submitted to the Patiala Darbar 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.
- 27. All costs charges and expenses incurred by the North Western railway in connection with the maintenance management use and working of the Rajpura-Bhatinda railway and the conveyance of traffic thereon properly chargeable to Revenue account shall be paid out of the gross receipts of the amalgamated undertaking and so far as possible out of the gross receipts of the half-year to which they are properly attributable and in each half-year there shall be deducted from the gross receipts of the Rajpura-Bhatinda railway fifty-five per cent. of such gross receipts and the balance after making the said deduction shall be paid over to the Patiala Darbar.
- 28. In case any question shall arise whether any expenditure incurred for the purposes of the amalgamated 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 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 subject to the provisions of para. 10 the cost of repairs restorations renewals replacements and substitution is to be borne by Revenue. If any difference shall arise between the Patiala Darbar and the North Western railway as to whether any expenditure of the North Western railway is properly chargeable to Capital or Revenue the matter in difference shall be referred to the decision of the Secretary of State.
- 29. In addition to the electric telegraphs already established along or upon the Rajpura-Bhatinda railway the Secretary of State may from time to time establish such electric telegraphs as he shall think fit along or upon the Rajpura-Bhatinda railway 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 the Secretary of State shall think fit and it shall be lawful for the Secretary of State for such purposes or any of them to enter at all times by his agents workmen or others on any part or parts of the Rajpura-Bhatinda railway 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 Rajpura-Bhatinda railway or on any land or works belonging thereto. The North Western railway shall in accordance with the rules in force for the time being on State railways at all times furnish the Secretary of State with such free passes over the Rajpura-Bhatinda railway 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 building machinery works or appliances appertaining thereto.

- 30. The Secretary of State will from time to time allow the North Western railway 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 North Western railway for the purpose of safely or efficiently working the Rajpura-Bhatinda railway or any part or parts thereof. The Secretary of State will maintain and keep in good repair and in good working condition the electric telegraphs and telegraphic appliances of which the North Western railway shall for the time being be allowed to have the use.
- 31. The North Western railway shall from time to time upon demand by the Telegraph Department of the Secretary of State transfer to the credit of that Department the amount which shall from time to time be due 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 North Western railway the exclusive use such charges being calculated according to the rules for the time being in force for State railway telegraphs.
- 32. The North Western railway shall in relation to any electric telegraphs or telegraphic appliances which under the 31st 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 be in force in the case of State railway telegraphs.
- 33. All correspondence connected with the working of the Rajpura-Bhatinda railway under any of the clauses of this agreement shall so far as the questions affecting principles and important matters are concerned be conducted between the Manager North Western railway for the time being and the Patiala Darbar through the medium of the Secretary to the Government of the Punjab in the Public Works Department but in ordinary matters the Patiala Darbar shall if it desires to do so correspond with the Manager North Western railway direct through its own officials.
- 34. The Patiala Darbar 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.
- · 35. If there shall be any breach (whether by act or omission or default) on the part of the North Western railway or of the Patiala Darbar of any of the stipulations or provisions of this contract performed or observed and the North Western railway or the Patiala Darbar respectively 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 Patiala Darbar or the North Western railway respectively by the Sectetary of State the Secretary of State may on or at any time after the expiration of the six calendar months aforesaid determine this contract by giving to the North Western railway or the Patiala Darbar as the case may be notice in writing of such determination.
- 36. Upon the determination of this contract under either of the two sections 5 or 35 or by effluxion of time the North Western railway shall give to the Patiala Darbar possession of the Rajpura-Bhatinda railway together with the 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 Rajpura-Bhatinda railway and all other property (if any) belonging or appertaining thereto and shall pay to the Patiala Darbar all moneys in the possession of the North Western railway on account of the Rajpura-Bhatinda railway. And after such possession shall have been given and after all moneys which under this contract shall have become payable to the Patiala Darbar shall have been duly paid the Patiala Darbar shall be bound to indemnify the North Western railway its property and effects against all such debts and liabilities (if any) as it may have incurred on behalf of the Rajpura-Bhatinda railway and which shall be then subsisting.
- 37. Upon the termination of this contract the working stores appertaining to the Rajpura-Bhatinda railway which may have been provided by the North Western railway shall if the North Western railway so desire be taken over by the Patiala Darbar at a valuation to be determined by mutual agreement or if necessary by arbitration.
- 38. In the event of any difference of opinion arising upon any of the terms of this agreement between the Patiala Darbar and the North Western railway the matter shall be referred through the Punjab Government to the Government of India whose decision shall be final and binding on all parties.

In witness whereof the said parties have hereunto set their respective hands and seals the day and year herein below entered opposite their names respectively.

## APPENDIX W.

MODIFICATION of Clause 17-ii of the AGREEMENT\* between the EAST INDIAN and the BENGAL-NAGPUR RAILWAYS for the interchange of traffic at and joint use of KATNI JUNCTION STATION executed on the 31st July 1891.

"For the purposes of this division of joint station expenses, the weight of goods traffic shall be reckoned upon the actual weight, according to the invoices and way bills; and each passenger shall be taken as equivalent to one-tenth of a ton, no account being taken of coaching traffic other than passengers. Fractions of a maund shall be dealt with in accordance with tariff rules."

<sup>•</sup> Printed as Appendix T., Part II of the Administration Report for 1891-92.