



Report to Secretary of State
for India in Council on Railways in
India for the Year
1875-76
(1876)



Juland Danvers ESQ

REPORT
TO
THE SECRETARY OF STATE FOR INDIA IN COUNCIL
ON
RAILWAYS IN INDIA,
FOR THE YEAR
1875-76.

BY JULAND DANVERS, ESQ.,
GOVERNMENT DIRECTOR OF THE INDIAN RAILWAY COMPANIES.

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



LONDON:
PRINTED BY GEORGE EDWARD EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

1876.

[C.—1584.] Price 1s. 9d.

CONTENTS.

Subject.	Paragraph.	Page.
General progress - - - - -	1-7	3
Extensions sanctioned - - - - -	8-9	3, 4
List of undertakings, length, &c. (table) - - - - -	10	4
Annual progress in construction - - - - -	11	5
Communication with Assam and Cachar - - - - -	12	5
Prince of Wales' visit to India and railway travelling - - - - -	13-15	5, 6
Flood damages in 1875 - - - - -	16-18	6, 7
Shipping operations in 1875 - - - - -	19	7, 8
Proprietors of Indian railway securities - - - - -	20	8
Locomotives and vehicles belonging to railways - - - - -	—	8
Personal inspection during December, January, and February - - - - -	21-49	9-16
Accidents during 1875 (tables) - - - - -	50-53	17-21
Capital (tables, &c.) - - - - -	54	22-27
Guaranteed interest (tables) - - - - -	55	27-28
Revenue (tables) - - - - -	56-58	28-31
Traffic and working (tables) - - - - -	59-70	32, 33
Tables and observations by A. M. Rendel - - - - -	—	34, 35
Table of fares and rates - - - - -	—	35
Statement regarding fuel - - - - -	—	36
Statement of articles of merchandize carried by railways - - - - -	—	37
Statements as to traffic, receipts, expenditure, &c. - - - - -	—	38-45
Summary - - - - -	71-81	46, 47
Appendix: List of Railways—List of Stations - - - - -	—	48-58

REPORT.

To the Most Honourable the MARQUIS of SALISBURY, Secretary of State for India.

MY LORD MARQUIS,

India Office, June 1876.

I HAVE the honour to lay before your Lordship my Sixteenth Annual Report on Railways in India.

2. During the year 1875 a length of $261\frac{1}{2}$ miles was added to the system which was open at the beginning of the year, making the whole extent now completed $6,497\frac{1}{2}$ miles. Of these, 768 are constructed with a double, and $5,729\frac{1}{2}$ with a single line: 5,676 are on the 5' 6" gauge, 794 on the metre, and $27\frac{1}{2}$ on a four feet gauge. General progress.

3. The section of the Punjab Northern metre gauge Railway, which has been opened, can only be regarded as a temporary line, as it will be given up when the one parallel to it on the 5' 6" gauge has been constructed. The works towards Peshawur at present terminate at Jhelum. Beyond that place the course of the line has not been determined.

4. The works on the Indus Valley Railway have been progressing, and it is expected that all the wells for the large bridge over the Sutlej between Moulton and Bahawalpur will be fixed in their places before the end of this year. The line to that river is well advanced, and will soon be completed on the 5' 6" gauge. The works on the southern section from Kotri upwards have also been pushed on, and it is expected that the line will be opened as far as the San River by the rains of this year.

5. Fair progress has been made on the Northern Bengal Railway towards Darjeeling. It is stated that the rails will be laid over one half of the length by the rains of this year, and that by June next year the line will be ready for opening.

6. With the exception of the South Indian Railway, the extent of the guaranteed undertakings has not been materially added to during the year. That railway has been prolonged to a length of 283 miles by the opening of a portion of its southern section from Trichinopoly to Tuticorin. The lower part of this division, vizt., that reaching from Madura to Tuticorin, was formally opened by His Royal Highness the Prince of Wales in December last; but public traffic did not commence over it until the 1st January.

7. The addition made to the Oudh and Rohilkund Railway, though short, is important, embracing as it does the bridge over the Ganges at Cawnpore, which connects the Oudh and Rohilkund system with the East Indian Railway. Before it was opened a complete battery of artillery, two squadrons of cavalry, together with camels and elephants, crossed and recrossed it, to test its strength.

8. With regard to the future, the extension of the Rajputana lines southward from Ajmere has been sanctioned so as to form junctions with the Indore line on the east, and the Bombay, Baroda, and Central India Railway at Ahmedabad on the west. A glance at the map will show the course of these projects. The latter, to which preference in point of time has been given, will be about 300 miles in length, and will proceed, in continuation of the Bombay and Baroda line, but on the metre gauge, from some point near Ahmedabad through Pahlampore, east of Mount Aboo, and along the west side of the Aravalli range. The opening of the Suez Canal has produced a revolution in the trade between England and India, and this line has become of infinitely more importance than when Lord Dalhousie in 1853 described it as one of "the greatest political and commercial value, and calculated to afford the greatest amount of general advantage." It is estimated to cost Rs. 1,84,06,261, or about Rs. 61,300 per mile. The other line, 133 miles long, will be in continuation of the present metre gauge railway from Khundwa to Indore and will pass through Neemuch. Its cost is put down at Rs. 82,48,660, or Rs. 62,000 per mile. Extensions sanctioned.

9. Sanction has also been given to a railway from Nagpore, the present terminus of that branch of the Great Indian Peninsula Railway to Dongaghur, in the province of Chutteesgurh. The estimated cost is Rs. 83,74,598 and the length is 123 miles. The line will pass through a country rich in agricultural produce. With the increased facilities for transit which a railway affords, it is expected that a much larger traffic than now exists will soon follow the opening of the line. It will no doubt confer very great benefits on the central provinces.

10. The following table gives the length of each separate undertaking, and the extent opened :—

Railway.	Gauge.	Length of Line sanctioned.	Length opened during 1875.	Total Length opened.	Portion laid with Double Line.	Length remaining to be finished.
Guaranteed.	East Indian - { Main line - Jabalpur line- }	5' 6" { 1,280 223½ }	—	1,280 223½	414½	—
	Great Indian Peninsula - -	5' 6" 1,278½	—	1,278½	327	—
	Madras - - - -	5' 6" 856½	—	856½	—	—
	Bombay, Baroda, and Central India -	5' 6" 408	—	408	21½	—
	Scind, Punjab, and Delhi - -	5' 6" 663½	—	663½	4½	—
	South Indian - - -	8' 3½" 617½	97½	283½	—	334½
	Eastern Bengal - - -	5' 6" 159½	—	157½	—	—
	Ondh and Rohilkund - -	5' 6" 711	8	542½	—	168½
	Nalhati - - - -	4' 0" 27½	—	27½	—	—
	Calcutta and South-eastern - -	5' 8" 28	—	28	—	—
	Northern Bengal - - -	5' 3½" 358½	—	—	—	358½
	Punjab Northern - - -	5' 6" 267½	62 (Temporary Line.)	62	—	267½
	Indus Valley - - - -	5' 6" 508	—	—	—	508
	Rajputana (Agra and Delhi to Nasirabad) - - -	3' 3½" 402	48½	379½	—	22½
	Neemuch (Indore to Neemuch) -	3' 3½" 302½	—	—	—	302½
	Indore to Khandwa (Holkar's) -	3' 3½" 85½	20½	87	—	28½
State.	Patri branch of Bombay, Baroda, and Central India Railway -	5' 6" 22½	—	22½	—	—
	Wurdha Valley - - - -	5' 6" 76	—	18	—	58
	Tirhut - - - - -	8' 3½" 93	—	44	—	49
	Rangoon and Irrawaddy Valley -	3' 3½" 371	—	—	—	371
	Sindia (Agra to Gwalior) - -	5' 6" 72	—	—	—	72
	West Rajputana - - - -	3' 3½" 314½	—	—	—	314½
	Nagpur and Chattisgarh - - -	3' 3½" 123½	—	—	—	123½
	BERAR.					
	Khamgaon - - - - -	5' 6" 7½	—	7½	—	—
	Amraoti - - - - -	5' 6" 5½	—	5½	—	—
	NIZAM'S GOVERNMENT.					
	Wadi to Hyderabad and Secunderabad	5' 6" 121	—	121	—	—
	PROVINCIAL.					
	Muttra and Hathras - - - -	3' 3½" 30	30	30	—	—
Total - - - - -		9,415½	261½	6,497½	768	2,978½

11. The following statement exhibits the annual progress made in the construction of railways since their commencement:—

Railways.	Length of Line open at the end of each Year.																											
	1853.	1854.	1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.					
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	
East Indian Rail- way (including Jabalpur).	—	37½	120½	120½	120½	141	234½	367½	509½	833½	937	1,105½	1,129½	1,129½	1,358	1,332	1,333	1,333	1,509½	1,509½	1,509½	1,509½	1,509½	1,509½	1,509½	1,509½		
Great Indian Peninsula.	81½	84½	86½	88½	88½	104½	245½	297½	437½	404½	553	583½	701½	810½	862	875½	873½	1,287½	1,271½	1,277½	1,278½	1,278½	1,278½	1,278½	1,278½	1,278½		
Madras.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Bombay, Baroda, & Central India.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Scind.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Punjab.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Delhi.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Great Southern of India, now South Indian.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Carnatic, now South Indian.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Eastern Bengal.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Oudh and Rohil- kund.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Calcutta & South- eastern.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Punjab Northern.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Nalhati.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Khamgaon.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Amraoti.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Rajputana.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Holkar.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Patri.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Wardha Valley.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Tirhut.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Nizam's.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Muttra & Hathras.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Total.	21½	72	171	274½	289½	430½	624½	830½	1,581½	2,351½	2,613½	2,903½	3,368½	3,568½	3,866½	4,016½	4,261	4,766½	5,072	5,365½	5,671½	5,671½	5,671½	5,671½	5,671½	5,671½		

* The Great Southern of India Railway has, on re-measurement, been found to be 167 miles only.

† Temporary Line.

12. There are two provinces in British territory which are still beyond the reach of railway influence, but which might with the help of the navigable river running through them, be brought, without much expense, into regular communication by steam with the rest of India. I mean Assam and Cachar. The Brahmaputra passes the terminus of the Eastern Bengal Railway in its course from Delirugan, the capital of Assam, which, nevertheless, is as distant, in point of time, from Calcutta as Bombay is from London. What is wanted is a regular and expeditious line of steamers, to work in communication with the railway. The service is now tedious and unreliable; and this discourages the outlay of capital in a fertile province where tea can be successfully grown, and where there is room for great agricultural and mineral development.

Communication with Assam and Cachar.

13. The principal event of the year requires a passing notice in connection with its effect upon the railways. The greater part of the travels in India of His Royal Highness the Prince of Wales was necessarily performed on the railways, and we may rejoice that they contributed to the success of this brilliant and beneficial Royal progress. When at Bombay in November, His Royal Highness went by the Great Indian Peninsula Railway to Poona and back, and to Baroda and Mehmabad on the Bombay, Baroda, and Central India Railway. In December, after visiting Ceylon, he landed at Tuticorin, travelled from thence to Madura and Trichinopoli and formally opened that portion of the South Indian line. From Trichinopoli he proceeded by Erode to Madras on the Madras Railway. In January His Royal Highness travelled from Calcutta to the station on the East Indian Railway opposite Benares, crossed the River Ganges at that place, and went by the Oudh and Rohilkund Railway to Lucknow and Cawnpore. From thence he proceeded to Delhi by the East Indian Railway, and on to Lahore by the Scind, Punjab, and Delhi Railway. When there he went by the Punjab Northern State Railway to Wazirabad and back, performing the ceremony of driving the last rivet for the completion of the bridge over the Chenab River. Returning to Agra His Royal Highness went to Bhurtpore and back, and to Jeypore and back, in February, by the Rajpootana State Railway. Proceeding from Agra

Prince of Wales' visit.

to Alligurrh, he again travelled on the Oudh and Rohilkund Railway to Moradabad, on his way to the Terai and Nepal, and came back by Bareilly to Cawnpore in March. From thence he returned by the East Indian and Great Indian Peninsula Railways to Bombay, via Allahabad and Jabbalpore, stopping on his way at Khundwah, and travelling over the open line of the Holkar State Railway, on his way to Indore.

14. His Royal Highness on several occasions personally expressed his satisfaction with the arrangements. After his departure, the Government of India reviewed the railway service thus performed, and concluded their observations with the following resolution :—

“Taking into consideration the length of the journeys, aggregating in all 4,829 miles, performed by His Royal Highness the Prince of Wales on Indian Railways, and the difficulties with which the railway authorities had to contend, consequent on an augmented traffic at a time when efforts were needed to ensure the safety of the Royal train, and the personal convenience and comfort of His Royal Highness the Prince of Wales, the Governor-General in Council is pleased to record his high appreciation of the services rendered by the railway officials of all ranks.

“This good result has been attained both by the well considered arrangements and comprehensive directions of those in chief authority and by the loyal exertions of all the members of the different railway departments.”

15. Among the benefits arising from the visit to India of His Royal Highness the stimulus which was given to travelling on the railways to all classes of natives, and the direct pecuniary return derived from the movement of large bodies of people from one place to another to greet His Royal Highness, must not be overlooked.

Flood
damages.

16. The rainy season of 1875 did not pass without damage being inflicted on railway works by the floods. The large bridges on the Northern lines remained unaffected, showing, it is hoped, that the protective works had rendered them safe; but both on the Great Indian Peninsula Railway, near Jabalpur (between Chhindwara and Narsinghpur), and on the Punjab and Delhi line (between Amritsir and Jullunder), portions of the line, including culverts and small bridges, were washed away, causing interruptions to the traffic and considerable expense in making the necessary repairs and alterations.

17. The most formidable injury was sustained by the Eastern Bengal Railway, at its northern terminus. It will be recollected that fears were entertained for the safety of Goalundo, in consequence of the threatened encroachments of the River Ganges, and that measures had been taken at a large cost to protect the station by means of a spur which had been thrown out into the river 500 feet. The effects of this work upon the floods of 1874 were considered satisfactory, and it was expected that, by making certain alterations in its shape, and by giving it greater strength, the eroding action of the two great rivers which meet at this point would be overcome or diverted. Early in August last, however, all these hopes were destroyed. “Owing to heavy and prolonged rains throughout the “upper sources of the Ganges and its tributaries, that river rose to an unprecedented height, and began rapidly to cut into the right bank above Goalundo, “and to cause grave apprehension of the early destruction of the works there.”* On the 17th August the demolition of the station was ordered in anticipation of the early collapse of the protective works. The buildings were accordingly removed, and the inhabitants sent further away from the river. This was done just in time, for on the 23rd the protective works were cut through by the water; and five days after the spur had disappeared, the land on which the station stood being completely washed away. When I was there in January, the rivers were, of course, almost at their lowest. About half a mile from the bank, what appeared a small rock rising out of the water could be seen, and this was the remains of the spur. Between it and the shore, the space on which the station stood last year, the depth of the river was about 30 feet, and steamers were loading and unloading within a couple of yards of the newly formed river bank.

18. On the Bombay, Baroda, and Central India Railway, the large bridge over the Sabarmuttee River, near Ahmedabad, 1,125 feet long, and consisting of 18 spans, was washed away by the floods of last season. It has already been replaced by one on a higher level, which was commenced in December, and opened for traffic on the 19th May. This expeditious completion of so important a work reflects great credit upon the engineering department of the railway.

* Despatch from Government of India, 2nd September 1875.

PROCEEDINGS IN THIS COUNTRY.

19. The proceedings in this country connected with the railways have been of the usual kind. The following tables exhibit the shipping operations. It will be seen that 288,186 tons of materials were despatched during the year, of which 124,192 consisted of fuel. During the 25 years since the railways were commenced, 5,181,721 tons of goods, of the value of 34,660,460*l.* have been shipped in 8,495 ships, 75 of which have been wrecked on the voyage. Last year there was no casualty.

SHIPPING OPERATIONS, exclusive of Fuel, during 1875 on Account of Guaranteed and State Railways.

Railway.	Number of Ships employed in 1875.	Number of Tons of Goods shipped in 1875.	Value of Goods shipped in 1875.	Amount paid for Freight and Insurance in 1875.	Average Rate of Freight and Insurance per Ton.
		Tons.	£	£	£ s. d.
East Indian - - -	45	9,745	104,267	10,532	1 1 7
Great Indian Peninsula - - -	43	7,103	85,192	13,558	1 18 2
Madras - - -	37	12,905	71,392	18,610	1 8 10
Bombay, Baroda, and Central India - - -	31	1,168	17,002	2,523	2 3 2
Scinde, Punjab, and Delhi - - -	10	1,796	26,561	4,212	2 6 10
South Indian - - -	42	46,359	436,412	63,003	1 7 2
Eastern Bengal - - -	13	4,821	21,119	7,078	1 9 4
Oude and Rohilkund - - -	27	1,320	32,040	2,272	1 14 5
State Railways - - -	173	78,980	608,453	97,841	1 4 9
Total - - -	421	163,997	1,402,438	219,629	1 6 9

AMOUNT and COST of COAL and other FUEL sent out from this Country in 1875.

Railway Company.	Number of Tons supplied from England.			Total original Cost.			Sum paid for Freight and Insurance.	Average Cost of each Ton when bought in England.			Average Cost of each Ton delivered in India.		
	Of Coal.	Of Coke.	Of Patent Fuel, &c.	Of Coal.	Of Coke.	Of Patent Fuel, &c.		Of Coal.	Of Coke.	Of Patent Fuel, &c.	Of Coal.	Of Coke.	Of Patent Fuel, &c.
East Indian - - -	—	601	—	£ 1,723	£ —	£ —	£ —	s. d. —	s. d. —	s. d. —	s. d. —	s. d. 57 4	s. d. —
Great Indian Peninsula - - -	82,582	—	—	57,711	—	—	94,835	14 0	—	—	36 11½	—	—
Madras - - -	4,799	3,014	2,907	8,432	2,568	2,125	13,989	14 3	17 0	14 7	37 6	47 0	41 5
Bombay, Baroda, & Central India - - -	17,233	—	3,068	29,996	—	6,132	Included in price.	34 10	—	40 0	—	—	—
Scinde, Punjab, and Delhi - - -	4,080	173	—	8,044	790	—	—	89 5	—	—	39 2	91 4	—
South Indian - - -	5,192	394	—	3,452	384	—	5,822	13 3	20 0	—	35 8	48 7	—
Eastern Bengal - - -	201	—	—	201	—	—	126	20 0	—	—	32 6	—	—
Totals - - -	114,037	4,182	5,978	104,569	3,737	8,257	—	—	—	—	—	—	—

SHIPMENTS FROM THE COMMENCEMENT.

Period.	Number of Ships employed.	Number of Ships lost.	Number of Tons of Goods shipped.	Amount paid in England for Goods shipped.
Up to end of 1860	2,605	39	2,094,686	£ 10,431,976
In 1861	407	—	181,621	1,669,443
" 1862	280	1	138,013	1,487,582
" 1863	279	2	166,840	1,285,464
" 1864	233	—	102,318	1,018,164
" 1865	442	2	199,167	1,729,543
" 1866	581	7	312,227	2,527,757
" 1867	512	5	333,329	3,052,652
" 1868	364	3	188,858	1,849,554
" 1869	455	1	211,750	1,432,784
" 1870	461	1	263,449	1,688,209
" 1871	307	6	163,049	707,765
" 1872	318	1	66,534	655,822
" 1873	404	2	201,590	1,561,602
" 1874	426	5	255,114	2,042,136
" 1875	421	—	288,186	1,518,991
Total	8,495	75	5,181,724	34,659,444

20. The proprietors have increased in number from 62,300 to 62,608. The insignificant number of those who held stock or shares in India has become still less: the Europeans being reduced from 448 to 407, and the natives from 416 to 390. The proportion of stock held in India is 1·56 per cent. of the whole.

Railway.	Number of Shareholders on 31st December 1875.						Number of Debenture Holders.		Total Number of Proprietors on the 31st December 1875.
	Registered in England.			In India.			Bonds.	Stock.	
	With Stock or Shares to the Amount of 1,000 <i>l.</i> and upwards.	With Stock or Shares of less Amount than 1,000 <i>l.</i>	Total in England.	Europeans.	Natives.	Total in India.			
East Indian - - -	7,235	8,516	15,751	123	155	278	625	865	17,519
Great Indian Peninsula -	5,553	7,574	13,127	112	134	246	534	1,462	15,369
Madras - - -	2,991	4,262	7,253	—	—	—	181	—	7,434
Bombay, Baroda, and Central India - - -	2,460	3,801	6,261	10	40	50	*52	—	6,363
Scinde, Punjab, and Delhi - - -	3,410	5,340	8,750	71	13	84	—	—	8,834
South Indian - - -	921	1,449	2,370	—	—	—	—	132	2,502
Eastern Bengal - - -	615	1,023	1,638	22	24	46	26	199	1,909
Oude and Rohilkund - -	1,069	1,377	2,446	69	24	93	—	139	2,678
Total - - -	24,354	33,342	57,596	407	390	707	1,418	2,797	62,608

* An allotment of 200,000*l.* is represented by one of this number.

NUMBER OF LOCOMOTIVES and VEHICLES owned by the GUARANTEED RAILWAY COMPANIES.

Railway Company.	Locomotives.			Passenger Carriages.		Goods Trucks and Waggon.		Total Number of Vehicles on 31st December 1875.
	Former Number.	Added or With-drawn in 1875.	Total Number, 31st Dec. 1875.	Former Number.	Added in 1875.	Former Number.	Added or Deducted in 1875.	
East Indian - - -	518	3	515	924	30	6,664	—	7,618
Great Indian Peninsula -	345	—	345	1,309	3	6,684	3	7,998
Madras - - -	126	2	128	383	—	3,200	5	3,588
Bombay, Baroda, and Central India - - -	85	—	85	233	62	2,808	69	3,034
Scinde, Punjab, and Delhi -	156	—	156	509	—	2,959	36	3,504
South Indian - - -	26	35	60	91	135	373	563	1,162
Eastern Bengal - - -	43	—	43	158	9	705	2	874
Oude and Rohilkund - -	62	—	62	243	79	631	456	1,409

PERSONAL INSPECTION.

21. Since my last Report was written I have, with your Lordship's permission, personally visited all the railways in India, and have thus had the opportunity of witnessing the work they are doing and of judging, better than I could before, of the work which they may be expected to perform. I had the advantage of travelling, during the greater part of my tour, with Mr. Rendel, the consulting engineer to this Office and to the East Indian Railway Company, who had been twice before to India and who, on this occasion, had been deputed by his Board to inspect that line and to report on several matters connected with its condition and working. Personal visit to India.

22. Wherever we went we received every possible assistance and the greatest courtesy, both from the officers of Government and of the Companies, whether while pursuing our journey or in prosecuting our enquiries.

23. One change which has been produced in India by steam power cannot perhaps be better illustrated than by the fact that within the time which forty years ago it would have taken to communicate by letter between London and Calcutta we were enabled to go to India and back and to traverse the length and breadth of the land, from Tuticorin and Beypore in the south to Multan and Jhelum in the north; visiting, on our way, most of the important cities, including Madura, Trichinopoly, Bangalore, Hyderabad, Poonah, Ahmedabad, Baroda, Jabalpur, Benares, Allahabad, Cawnpur, Lucknow, Agra, Delhi, Ajmere, and Lahore; remaining several days at Calcutta, Madras, and Bombay; stopping to view the new and rising industries of the country, such as the coal mines of Wurrora, Mopani, and Kurhumballi, the iron works of Raneegunge, and the factories at Bombay, Surat, Broach, and Calcutta; and mounting several hill stations and sanatoriums.

24. Speedy communication is, however, a small part of the work which is being accomplished by railways. They are producing a most important and beneficial influence over the moral and material interests of the people: and they are furnishing those who are responsible for the government of the country, with the most effectual means of establishing peace and security. On political and strategic as well as on social and commercial grounds their extension therefore is greatly to be desired. But no extensive ramification of the railway system can be successfully carried out without the exercise of the utmost economy and circumspection. The lines must be constructed at the lowest possible cost and selected and laid out with the greatest judgment. Value of railways.

25. With regard to the existing lines, we found, generally, that they were in good condition. Here and there portions had been allowed to fall below a high standard of efficiency, but the permanent way was, as a rule, in proper order and the work of maintenance well attended to. Some lines looked better kept and neater than others, and this was, to a certain extent, due to the materials most suitable for ballast being ready at hand. The Madras Railway especially, with its light sand roadway and iron sleepers, was as trim as the drive in a gentleman's park in England. In carrying out so extensive a system as that which now exists, it could hardly have been expected that mistakes would not have been made, and failures would not have taken place, but those which have occurred are, for the most part, the mistakes and failures naturally arising from inexperience and imperfect data. Alignments, in some cases, might have been better, and the works are in some places unnecessarily massive and expensive. In others sufficient water way was not provided; bridges have been insecurely built and their foundations have not only been shaken but undermined by the tremendous force of the floods. These, however, are mostly errors inseparable from vast operations of a novel character in an unknown country. Taking the railway system of India as a whole it cannot but be regarded as a triumph of human industry and skill. Condition of existing lines.

26. And this leads me to dwell for a moment on the character of the work which has been done in India by the Civil Engineer. He had to contend against the forces of nature to a far greater extent than is the case in this island. He had to overcome the difficulties which the gigantic features of the country placed in his way: he had often only poor materials and inferior labour at his command, and he had to meet the dangers of exposure to a burning sun by day and malarious vapours by night. To his skill and professional knowledge he accordingly had to bring more than ordinary courage and endurance. Many have broken down in the attempt, but their places have been immediately filled by others, and the result is exhibited in the thousands of miles of railway which Work done by the civil engineer in India.

thread their way over mountain passes, cut through thick jungle and span huge and uncertain rivers. Nor is this energy confined to Engineers; in all departments, and in every branch of the service, one cannot but observe a zeal and activity among the officials, which betokens a deep interest in their work.

Stations.

27. The station accommodation is generally good, sometimes perhaps too good, but never unnecessarily spacious. In saying this, I am obliged to except the terminal arrangements of the East Indian Railway at Calcutta, and of the Great Indian Peninsula Railway at Bombay, at both of which stations the accommodation is inadequate and the buildings unworthy of those large concerns. The former is now being put in better order; and the latter is about to be improved by the erection, for the first time, of suitable covered ways and offices. On the lines in Upper India the stations are so constructed that they may be easily fortified in case of need. They are built of brick or stone, and are covered with iron, stone, or tiles, according as materials are available in the districts where they are situated. The stations of the Great Indian Peninsula Railway are especially noted for the tasty manner in which they are laid out. The servants of the company are encouraged to cultivate flower gardens, and they have succeeded admirably. The luxuriant vegetation of the country is also turned to practical account by training creepers, so as to form the sides of sheds many feet high, which are thus left airy, and at the same time protected from the sun and rain.

Locomotive stock.

28. The locomotive stock provided is, in most cases, excessive; while the power of the engines is in many cases below that which present experience would recommend. The adhesion in India is usually good, and it seems to be generally held that a larger cylinder than we are accustomed to use in this country may be utilized there: also that good types for India would be for passenger and mixed trains four-wheel coupled engines with 5' 6" wheels and cylinders 17" diameter and 24" stroke, and for goods six-wheel coupled with cylinders 17" x 24", the wheels being 4' 6" in diameter for goods trains, each pair of wheels having about 11 tons weight upon them.

Metre gauge lines.

29. We travelled over the whole open length of the Rajpootana, and of the South Indian, metre gauge lines, and found them as smooth and as steady as the broad gauge. The carriage accommodation, though necessarily less spacious, was sufficiently commodious, and there was no perceptible difference in the comfort and ease of travelling. This description of railway has not yet been long enough open to enable a reliable conclusion to be arrived at with regard to the cost of working it as compared with the broader gauge lines. The expense of transferring goods from one line to another at the points of junction may be calculated at from 1½d. to 2d. per ton. The contract rate for performing this work at Delhi, where the Rajputana line meets the East Indian and Punjab and Delhi railways, has been Rs. 2 8a. per 1,000 maunds. Inconvenience, to a certain extent, and diminished facilities of transport must of course occur where there is a break of gauge, and it becomes a matter of judgment where, or where not, a break shall be permitted. There are many districts calling out for the means of communication, where even common metalled roads do not now exist, and where a very light and cheap railway would, for generations, be sufficient for the traffic which is likely to come upon it. "If," as Sir John Strachey says, "we can make railways which are self supporting, it is from every point of view advantageous to substitute them for metalled roads. We get far better means of communication: we provide admirable feeders to the great trunk lines of railway, and thereby not only benefit the country, but the financial interests of the Imperial Government, and we at the same time relieve the provincial revenues from a serious burden." The kind of line thus indicated has been laid down between Hathras, a station on the East Indian Railway, and Muttra, on the river Jumna, mainly on the metalled road. It is about 30 miles in length, and has cost Rs. 9,00,000, including rolling stock and stations. Of this Rs. 6,00,000 was provided from provincial revenues, and Rs. 3,00,000 by local subscriptions, chiefly from natives, under a guarantee of 4 per cent. from the local government, and upon the understanding that any excess of receipts beyond this rate shall be divided between the Government and the subscribers.

Management.

30. I need hardly remark that the railways command an enormous power over the interests of the districts through which they pass. It is a power which should be used in a very judicious, enlightened, and I would add enterprising, spirit, not calculating only on the existing condition of things, but taking into account the capabilities of the country, the prospects of future development, and the growing wants and improving habits of the people. To obtain the highest return from the

transport of a limited amount of goods should not be so much the object of railway managers as the conveyance of a large quantity with a comparatively small profit upon each unit. In some of the fertile valleys through which we passed, the surface of the ground, unbroken by hedge, wall, or fence of any kind, presented, as far as the eye could reach, from the railway embankment, one large sea of rice or corn. In other parts the railway traverses tracts of country where the cultivable area might be increased, and where an external trade might be established, if only a market were accessible for the produce of the land. Opportunities, therefore, in one shape or another, are not wanting of obtaining traffic; but to make railways as serviceable and as profitable as they should be, they must be brought within reach of the people, who, though poor, tenacious, and prejudiced soon become alive to their value, and are quite ready to use them in every possible way, whether for carrying themselves or their goods. The passenger rates have, on some lines, been already reduced, for the lowest class, as far as can be expected. The charges are from a farthing to a third of a penny per mile. The value attached by natives to cheap travelling may be gathered from the fact that they prefer giving up their caste to parting with their pence. The high caste will travel with his lower caste brother rather than pay a higher fare. As regards goods, the natives who engage in trade are keen observers and accurate calculators in matters of business, and command, by some means or other, very accurate information as to prices which prevail in the various markets of the world. The trade up country would seem, at present, to be in the hands of a few. One effect of administering the railways in a broad and liberal spirit would probably be to introduce a wider competition, and to encourage a more general employment of capital. The policy, therefore, to be followed, both in the interests of railway proprietors and of the public, is low rates and simplicity of management; avoiding as much as possible special charges and exceptional arrangements (which only confuse and discourage the uninitiated and the small dealer), and showing a readiness to consider the means, the wants, and usages of the people. It is hardly necessary to add that economy is at the bottom of all reforms and improvements in the direction above indicated. For the rates paid by the customer must always in some degree correspond with the cost of transportation. The more saving there is in managing the traffic, the greater margin will there be for reduction of charges, and thus will a greater stimulus be given to business, and a greater chance of increased profits.

31. It may be said that high and low rates are simply comparative terms which convey no definite meaning. As applied to the circumstances of India, I would describe rates as "high" when they fail to secure the conveyance of the produce of the districts through which they pass or of the goods imported into those districts; when they prohibit or unduly check traffic, and thus restrict trade; when they discourage extended production; and when they raise the cost of conveyance by diminishing the use of the carrying stock. This has been too much the case hitherto; and therefore railways have not yet conferred upon the country the full benefits, nor yielded the profits, which they might have done. The smallest addition to the cost of an article will very often turn the scale as to whether it shall find a favourable market or not. The expense of carriage has necessarily a very important influence on the price at which it can be delivered. The lower the cost of production, the greater is the effect of that influence. This applies especially to corn and other grain, salt, coal, cotton, and almost all the staple commodities of the country. It is very desirable, therefore, to be able to charge such moderate rates as will conduce to the conveyance of large quantities with a small profit on each unit, and thus promote the movement of goods from one part of the country to the other as well as their exportation to foreign lands. As an illustration, I would mention that, at the present moment, in consequence of the low price of wheat* in the provinces of Oude and Rohilkund, and the facilities which the railway gives for conveying it to the port of Calcutta, a larger quantity is being sent to this country and other parts of Europe than has, I believe, ever before been known. In round numbers its cost, including expenses of conveyance, both by land and sea, would on arrival in London be from 38 to 40 shillings per quarter. The price here is about 43s. or 44s. Another advantage arising from low rates is worth adverting to at the present moment. By helping to increase the export of Indian products, they would proportionately promote the demand for silver in India and assist to raise the rate of exchange.

Rates and fares.

* 16s. per quarter.

32. The Oudh and Rohilkund Company when they commenced their traffic arrangements introduced the cheap and simple system; and on other lines improvements have lately been made; both as regards charges and general management, the results of which will, I trust, encourage a further advance in the same direction.

33. As regards the charges in force on the railway just mentioned, they represent, the Company's Agent says, "the freight which the traffic offered can bear." Reduced rates came into operation on the 1st January, and Colonel Jenkins goes on to observe, "it may be confidently asserted that a large increase of traffic was coeval with their introduction and has continued up to the present time." On the Eastern Bengal Railway lower rates for salt were introduced early in the year. An immediate increase of traffic took place, and has been fully sustained ever since: the result being an additional quantity of 66,840 maunds compared with the previous year, equivalent to 101 per cent., the reduction in the charge for carriage having been only 33 per cent.

34. The East Indian Railway Board have not been backward in adopting a liberal scale of charges,* and in a recent letter to their agent, the directors expressed their opinion that "it is now clear that the rates charged for the great staples of produce must be fixed at the lowest possible point," to secure the proper development of the traffic of the country. The Great Indian Peninsula Railway Board have also given practical effect to this doctrine by diminishing rates on grain, and by sanctioning other reductions which, besides simplifying the system of charge, will produce a relief to their customers of about 80,000*l.*, calculated on the revenue returns of the previous year. The Bombay, Baroda, and Central India, and the South Indian Railway Companies have also adopted lower scales of rates for passengers and certain goods. It would thus appear that the conviction is gaining ground that a liberal policy, as regards rates, is the best.

Treatment
of Native
passengers.

35. Everywhere we found the railway authorities very desirous of securing the comfort and proper treatment of the native travellers. Strict orders are issued for the purpose, as well as for supplying their necessary wants during the journey. Notwithstanding which, crowding and rough handling may sometimes be witnessed. The former is often unavoidable, and is frequently aggravated by the quantity of bundles, to say nothing of children, which the women carry about with them, and which they have to squeeze hurriedly through the small opening of a third-class carriage door. The latter appears to be worse than it really is through the excited and violent gesticulations of the native police and porters. In every train there are separate compartments for females; but men and women frequently travel together. The station arrangements were generally suitable and a good supply of filtered water was always ready. Tables of rates are published in various languages and put up at the booking offices.

European
passengers.

36. The accommodation for European travellers is as good as can be expected, and greatly superior to that provided on continental lines. The carriages are commodious and comfortable, and every effort is used to make travelling endurable in the hot season by means of punkahs and other cooling apparatus. But it is difficult to succeed. The heat and dust are very oppressive. The substitution of railway for road travelling must, however, have been a prodigious boon to the European: and those who now reside near the railway must, compared with those who live at a distance from it, experience a feeling of security from the knowledge that in case of illness a change may be at once obtained by stepping into the next train. In former days many an invalid ordered to England who had to proceed several hundred miles from the interior to the port of embarkation must have sunk under the fatigue and exposure to which he was subjected. Frequently were graves pointed out to us on the wayside, where the stricken traveller, overcome by sickness and exhaustion, had found his last resting place. Sometimes it was in consecrated ground, but oftener not. It is difficult to understand Indian distances until they are felt. In those days, weeks were occupied in traversing the plains between the military cantonment or civil station in Central or Upper India and the seaport or the nearest hill sanatorium. Even now, when we see on a map two places on opposite sides of the continent linked together by the railroad, we are apt to forget that two or three nights as well as days are spent on the journey. And when we heard of

Distances in
India.

* Colonel Hancock, R.E., the Consulting Engineer and Under-Secretary to the Bombay Government, in his minute on the relative working of the East Indian Railway and Great Indian Peninsula Railway, points out as an advantage enjoyed by the former over the latter "that low goods rates have been forced on the East Indian Railway by water competition and that its traffic has prospered in consequence."

grain being carried across the river Ganges at Patna to the opposite side by ferry boats, few of us knew that these boats had to go round a distance of thirty miles.

37. The rules in force for securing regularity and safety generally embrace the "line clear" system, by which no train is allowed to leave one station until a message has been received from the next that the train telegraphed as having been last despatched from the former has passed through. The block system is being introduced on the lines where the traffic is large, and this will gradually be extended as necessity arises. The speed of a mail train averages about 30, of an ordinary train 18 to 20 miles an hour. The signalling is much the same as in this country. Fencing, as a rule, is required and is undoubtedly necessary in the neighbourhood of towns and villages; but it is difficult to construct a fence which will effectually keep out animals. In districts with long lengths of straight level line, and where trains pass at a moderate speed, many experienced persons think fencing to be unnecessary. During my journeyings, which extended over 13,000 miles, and took place, sometimes without much notice, at all times of the night and day, we only once came in contact with any obstruction, if a snake which was cut in half and a monkey's tail which suffered the same fate may be excepted. A native Inspector was using a trolley for repairing the line, and while on a curve, had failed to give the proper signals. The trolley was run over and smashed to pieces by our train, which was a special one, but the man had thrown himself off, and suffered no personal injury.

Arrange-
ments for
punctuality
and safety.

38. At certain places on most of the railways, where more Europeans than usual of the mechanical class are brought together, consisting principally of drivers, and those who belong to the locomotive workshops, dwellings are provided which collectively form a kind of railway town. On approaching these places they present quite an imposing appearance. Large square brick houses are seen placed in compounds or gardens bearing a resemblance to the villas and mansions occupied by the wealthy citizens of a London suburb. A closer inspection, however, shows that this impression is deceptive. The grand appearance is produced by the broad verandah, so necessary to an Indian dwelling, and by the double story which was, until lately, rarely seen in India. Each house contains perhaps eight rooms, and these are occupied by several men, some with families, who pay at the rate of from Rs. 9 to Rs. 10 per mensem for each room. In connection with this colony there are generally institutes, libraries, swimming baths, billiard rooms, churches, schools, co-operative stores, hospitals, recreation grounds,—everything in fact that can be thought of to afford occupation for the mind and body. It is very desirable to attend to the health, comfort, and amusement of European mechanics in India as well as to the education of their children. There are great temptations to indulgence and excess, and it is obviously expedient to secure well behaved, steady, and intelligent European communities of this class in the heart of India. This is now the case, and at several stations well disciplined and efficient corps of volunteers have been formed by the railway servants.

European
mechanics.

39. But while Europeans are employed as superintendents, locomotive foremen, drivers, and so forth, the work in the shops is principally performed by natives, whose wages are in about the proportion of annas to rupees compared with Europeans. The management and economy observable in these large workshops reflects great credit on the officers of the locomotive department of the railways, who have established them and who have trained the natives to their present state of efficiency. The swarthy arms of stalwart natives may be seen dealing blows worthy of English strikers at the forge, and the nimble fingers of mere children, directed by sharp eyes, may be seen manipulating minute parts of machinery. Natives are also being gradually trained to manage the locomotive. Many of them fill the position of station-masters, clerks, and assistants to traffic managers, as well as accountants and guards. In order to ensure the efficient discharge of their duties by the railway employes, whether European or native, it is necessary that they should be able to understand each other clearly. The European officers and servants should accordingly enable themselves to communicate with the natives under them in their own language, the acquisition of which colloquially should be a requisite qualification for promotion. Encouragement is now given by the grant of bonuses to those who pass an examination in a native language.

Native ser-
vants.

40. Advantage would, I think, be gained by more frequent intercourse between the chief officers of the various undertakings. Different circumstances bring out different methods, and while a certain uniformity of management is applied to

Intercourse
between
officers in
different
parts of
India.

the railways, it is easy to conceive that, in a country like India, when working out details, the practices in the south may vary from those in the north. Useful hints might be gained from either, but there has hitherto been no systematic attempt to exchange ideas or to communicate information. In my rapid tour I had the opportunity of observing that, on some lines, a better plan was followed than on others with regard to matters applicable to all. Much more would Agents, Traffic Managers, Locomotive Superintendents, and Engineers of long standing in their several departments detect improvements or defects and be able to interchange useful experience and arrive at satisfactory conclusions.

41. As an illustration of the useful effects of this kind of intercourse, I may mention that the Bombay Government was good enough to comply with my suggestion that Colonel White, R.E., the Deputy Consulting Engineer at that Presidency, should accompany me over the Oude and Rohilkund system. Colonel White had been many years in the Railway Department at Bombay, but he had never been further north by railway than Jabbalpur, where the Great Indian Peninsula joins the East Indian Railway. He was now able to compare notes between the lines he was familiar with in the Bombay Presidency and those in Oude and Rohilkund. The results of his observations have been given in an interesting report, which describes the mode in which the railway is managed, and directs attention to various points which he considered worthy of imitation on other lines. Referring to the traffic department of that railway, he says:—

“There are only two classes of carriages, upper and lower. In the upper, or first class, the fare is only nine pies per mile against 15 to 18 pies on other lines; and a reserved compartment, with washing arrangements complete, can be procured for three annas a mile; the charge for this on the Great Indian Peninsula is six annas.

“In the lower class the fare is two pies, and for those who wish to be exclusive, reserved accommodation is procurable for three pies, or a whole bench can be reserved for nine pies: and there are in every train two compartments reserved for poor Europeans or Eurasians who choose to pay the higher three pie fare. On the Bombay lines there is no reserved accommodation in the third-class for Europeans only, and to give such accommodation would entail half a third-class carriage being given up for that purpose; but the Oude and Rohilkund carriages being all built in compartments, the matter is very easily arranged.

“A lower class carriage of six compartments is also reserved for females, but it is optional with them to use this carriage or not; on the Bombay lines the women are forced to travel separately.

“The lower class carriages give almost the same sitting accommodation as the second class on other lines, and in exterior appearance are quite equal to them, the seats are 16 inches wide, with a space between them of 19 inches.

“Speeds, are low, 15 miles an hour, including stoppages, but excepting this there can be no doubt that the Oude and Rohilkund treat their passengers more liberally than any other Indian line; fares are very low and accommodation is good; as far as I could learn, their system meets the wants of the travelling community very well.”

“All the passenger service is given in mixed trains: and passengers travelling by these trains can book their goods at luggage rates, 27 pica a ton, and carry them off with them when they reach their destination. This suits the native mind, which is naturally suspicious, and for the mere advantage of travelling with their own goods, and taking them away with them, thus insuring a little more despatch, many merchants readily pay a rate double as high as that by the ordinary goods train.

“The classification of goods is extremely simple and the rates are low. The classes are special, low, middle, and high, and any trader by an inspection of the rates board, hung up at every station, can tell at once what it will cost him to carry a maund of goods in any one of these classes to any station on the line. The terminal charge, which is one pie per maund, is included in the rate, but no terminal is charged for distances over 60 miles.

“So far, therefore, as the Oude and Rohilkund Railway is concerned, it is an easy matter for any man of ordinary intelligence to find out what it will cost to carry goods throughout any portion of the system: his difficulties, and those of the station clerk too, commence when the goods pass over on to foreign lines, and until the tariffs of all Indian lines are far more simple than they are at present, these difficulties will always act in a certain measure as a bar to through traffic. A uniform tariff throughout all Indian railways would be an immense boon.”

42. Thus has this railway been adapted more than any other in India to the wants and usages of the people: and it is very desirable that the success of its arrangements should be known to others. They were started by the late Agent, Major-General Beadle, R.E., and have been improved, as experience was gained, by his successor, Colonel Jenkins, of the Staff Corps.

43. The coal fields at Kariballi, Mopani, and Wurrora, which we visited, presented scenes of great activity and furnished proofs of the progress which the country is making in material wealth. The Bengal coal fields at present yield the greatest quantity and the best quality. It remains to be seen what the mines of Mopani and Wurrora will produce when their operations are more advanced. With good management there would seem to be very fair promise of success. It is very important for the interests of the railways in Central, and I might add Western India, that a supply of good coal at a moderate cost should be obtained from these sources. Coal fields.

44. There are large accumulations of railway stores in possession of all the railway companies, stores which are, to a great extent, not wanted by the particular companies holding them and some of which are unserviceable. At Multan acres of ground were covered with iron bowl sleepers, belonging to the Scinde, Punjab, and Delhi Railway Company. They had been there for years, and a State railway close by had just been constructed with wooden sleepers. The time has arrived when the question, how such surplus stores should be dealt with, may properly be decided. Some systematic plan should be agreed upon for reducing the present stocks and relieving the capital invested in them. It is estimated that the value of stocks now in excess of that which will be required as a standard amount is about 3,000,000*l*. Surplus stores.

45. The State lines are likely to multiply in the future. We went over those which were open for traffic. The most important are the Rajpootana metre gauge lines before mentioned. They are ably managed by Captain Kellow Pye, R.E. With regard to the general administration of the State railways, whether open or in course of construction, the tendency would seem, from what I was able to gather, to be too much in the direction of centralization. This is, perhaps, the natural consequence of direct Government superintendence; but it is one which, besides having a depressing and disheartening effect upon the local officers and their staffs, will interfere with individual responsibility and unduly restrict free and decided action. Another important matter to bear in mind, in connection with these State lines, especially after they have once been commenced, is the necessity for supplying funds to the local officers so as to enable them to carry out their engagements, and to avoid those delays and stoppages which are not only detrimental to the works in hand, but which lead to extravagance and waste in the end. State lines.

46. The construction of feeder roads to stations on the railways is a matter of great importance. The Government regard it as such, and in a minute dated the 21st October 1873, lays down the principle that "The Supreme Government now retains the responsibility for the provision and maintenance of the railway system throughout India, and leaves to the Provincial Governments and Administrations that of the provision of roads." The advantage of constructing roads in the neighbourhood of railways as feeders to them is pointed out and the belief is expressed that "expenditure on such roads will afford a more effective and economical result than outlay in any other direction." The native princes through whose territories railways have been constructed, with the help of Government, are also encouraged to adopt the same course. It is to be hoped that this policy will be effectual, but there are still complaints of the want of good roads to stations. The Lieutenant-Governor of the North-West Provinces has taken up the question, and has decided to commence, during the present year, "certain changes which, followed up, will tend year by year towards a systematic plan of roads, feeding directly the railway, or subserving the commerce" of those provinces. Feeder roads.

47. The extension of the railway system has naturally attracted attention to the importance of obtaining, if possible, a supply of iron from native sources. While iron ore exists in several districts in India, its quality or the situation of the beds in which it was found has not favoured its manufacture. Hitherto the cost of conveying the iron to the nearest market would have been greater than the article could bear. But as railways approach the localities and the means of transport is thus provided, one obstacle is removed. The supply of fuel and of proper fluxes has also been a difficulty which further research and the connection Manufacture of iron in India.

of various districts containing the necessary materials may remove. In 1872, Mr. Bauerman, an experienced mineralogist, visited the various places in India where iron ore was known to exist as well as the localities where coal is found, with the view of ascertaining the prospect of successfully producing iron. Previously to leaving India he made a brief report on the result of his examinations, in which he remarked, "The problem to be solved is not a simple one, as there appears to be no single locality in which all the requisites for the production of iron can be obtained to advantage on the spot. The Kumaon Works seem to be the most favourably situated in this respect, but Mr. Ramsay, the late manager, has left on record his opinion that cupra ores are necessary to make iron profitable, and that information is required as to the capacity of the forests for yielding wood and charcoal for carrying on the works on a large scale without being destroyed." Mr. Bauerman also alluded to the question of conveyance, and stated that in his opinion "very much lower rates would be necessary than those now charged by the Railway Companies for the carriage of minerals." The only iron works now in operation are at Raneegunge. They are in the hands of a company which has the command of a good supply of lime. Smelting was commenced in the spring of this year, but sufficient time has not yet elapsed to enable a report to be made of the result. It is to be hoped also that the old Kumaon Works will soon be again revived, when railway communication advances nearer to them.

Military use
of railways.

48. Towards the end of the year, a committee was appointed by the Commander-in-Chief, Lord Napier of Magdala, of which Lieutenant-General Sir Charles Reed, K.C.B., was the president, to consider how railways can be made most available for military use in India. As a preliminary step experiments were made at Delhi under Sir Charles Reed's directions with the vehicles of the Sindh, Punjab, and Delhi line. "A squadron of the 10th Hussars, and 123 horses, including officers' chargers, 68 grass-cutters ponies, with baggage, camp equipage, ammunition, doolies, &c., fully equipped for field service, were embarked in high-sided waggons, and the train ready to start in 39 minutes. The unloading and fixing of horse ramps took $2\frac{1}{2}$ minutes and dismantling and re-loading ramps $1\frac{1}{2}$ minutes. . . . The baggage was brought alongside covered goods waggons on 80 camels, the weight being 674 maunds. By heaping up the baggage from the line of rail to the side doors of the waggons, a ramp was thus formed, and the whole, including camp equipage, &c., was loaded in 27 minutes, with the aid of a working party of 25 infantry." Orders were then given to move the train across the Jumna. When the train was pulled up, the waggons were disconnected, ramps fixed at either end, and the horses and men were out and ranged along the railway bank in 28 minutes. Re-embarking was accomplished in 32 minutes and the dis-embarkation, on the return of the train to Delhi, in 27 minutes.

49. Another experiment was made with an Armstrong battery. "The whole battery, consisting of three 40-pounder Armstrong guns, two 8-inch and two $5\frac{1}{2}$ -inch mortars, with seven waggons, two store carts, 134 bullocks, including camp equipage, baggage, &c., fully equipped for active service, were embarked and ready to move in 40 minutes. . . . The train reached Ghazecabad (about ten miles distant) safely without a single mishap, and proving satisfactorily that the floors, springs, and bolts of the Sindh, Punjab, and Delhi Railway trucks were fully equal to this severe test. The guns and bullocks were disembarked, the first gun being brought into action by the side of the line in eight minutes, the second in 13 minutes, and the third in 24. These three guns were reloaded in $12\frac{1}{2}$ minutes, showing thereby what could be done with a little practice." The ramps and girders designed by Sir Charles Reed for the end-loading system were generally approved of. This system is strongly advocated by Sir Charles Reed, and there appears to have been a general concurrence of opinion that it is very well adapted for military purposes. The only doubt was whether waggons so constructed would be equally suitable for their ordinary commercial purposes, and the railway members of the Committee, with the exception of Mr. Henry P. Le Mesurier, C.S.I., the Agent of the Great Indian Peninsula Railway, made objections to the proposed alteration in the rolling stock, on the ground that the vehicle would be weakened and rendered less serviceable. This difficulty, however, will probably be got over; but as the cost would be considerable, the change, if applied generally, should be gradually proceeded with. The experiments above described were confined to the 5' 6" gauge, as no vehicles of the metre gauge were available.

ACCIDENTS.

50. During the year 1875 one very serious accident happened, by which nine passengers were killed and 13 were injured. Other passengers have lost their lives while travelling, but this was the only case which occurred from causes beyond the control of the sufferers. It took place on the 14th August, on the Jubbulpore branch of the East India Railway, and is thus officially reported: "The engine of a down mail from Jabbalpoore left the rails when going at high speed about three miles from Katnee, and the carriages over-rode each other and became a complete wreck except from in the rear, the line for a distance of 50 or 60 yards being completely broken up. The accident is supposed to have been caused by the engine running over the cow-catcher which had worked loose and dropped on the rails."

51. It will be seen by the following Tables, which were prepared in India, that the number of passengers who, during the year, were killed through their own misconduct or want of caution was nine, and that 28 were injured from similar causes. One was a prisoner who attempted to escape by jumping out of the train. The most fertile cause of accidents is the attempt on the part of passengers to get out of the trains while they are in motion.

52. Of railway servants, eight were killed and 25 injured from causes beyond their control: and 93 were killed and 173 injured by preventible causes. Seventy-two persons were run over and killed while trespassing, and eight were injured in the same way. The large number of accidents from this cause would seem to indicate that the danger incurred by trespassers is hardly understood, and suggests whether greater precautions might not be taken to warn people against walking within the boundaries of the railway.

53. It will be seen that the total number of accidents to trains was 868 compared with 767 of the previous year: that 405 of them were cases of running over cattle which had trespassed: 59 were collisions: 151 were from getting off the proper line, and 148 from a variety of other causes.

TABLE No. 1.

ABSTRACT of the NUMBER and NATURE of the ACCIDENTS and of the INJURIES to LIFE and LIMB which have occurred on all Railways open for Traffic in India during the Year 1875.

Under the Control of the Government of	Mean Mileage open.	Railways.	Classification of Accidents to Trains, &c.					Passengers.				Servants of Companies or of Contractors.				Others.				Total Persons of all Classes.						
			Main Heads.					From Causes beyond their own Control.		From their own Misconduct or want of Caution.		From Causes beyond their own Control.		From their own Misconduct or want of Caution.		Whist crossing at Level Crossings.		Whist trespassing (including Suicide).					Killed.	Injured.	Killed and Injured.	
			I. Collision.	II. Getting off proper line.	III. Fire.	IV. Running over Cattle.	V. Other Causes.	Total.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.							Injured.
India	1,508½	East Indian - { 1875 1874	4	1	8	181	13	157	9	16	6	13	3	25	46	2	1	36	4	6	1	87	82	169		
	1,503½	Eastern Bengal { 1875 1874	36	21	20	184	6	267	1	18	8	17	1	27	70	3	8	51	10	7	3	108	132	235		
	158½	Oudh and Rohilkhand { 1875 1874	1	2	—	7	—	9	—	—	—	—	—	6	13	—	—	4	—	—	—	9	17	26		
	542	Punjab { 1875 1874	17	32	8	51	15	123	—	—	—	2	—	9	19	—	—	4	—	—	—	21	25	46		
	524	S. P. & D. { 1875 1874	5	7	12	18	9	55	—	—	—	3	—	7	6	—	—	5	—	—	—	14	18	32		
	553½	Section. { 1875 1874	7	14	19	4	14	57	—	—	—	5	—	5	4	—	—	6	—	—	—	11	13	24		
	566	Sind { 1875 1874	6	1	10	22	23	63	—	—	—	1	—	4	2	—	—	—	—	—	—	11	7	18		
	109½	Section. { 1875 1874	—	—	10	15	18	44	—	—	—	—	—	—	—	—	—	—	—	—	—	1	3	4		
	109½	Calcutta and South-eastern (State). { 1875 1874	—	—	—	17	—	17	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1		
	28	Nahadi { 1875 1874	2	4	—	31	—	37	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1		
Madras	27½	{ 1875 1874	—	—	1	4	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	27½	{ 1875 1874	—	—	1	3	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	344½	Rajputana { 1875 1874	4	20	3	31	37	94	—	—	—	2	—	3	4	—	—	—	—	—	—	—	—	—		
	178	Holkar { 1875 1874	3	19	15	12	10	43	—	—	—	1	—	3	2	—	—	—	—	—	—	—	—	—		
	36	Punjab Northern { 1875 1874	1	1	—	9	—	2	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—		
	62	Tirhut { 1875 1874	—	—	—	6	—	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	44	Madras { 1875 1874	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	858½	South India { 1875 1874	6	7	34	41	6	94	—	—	—	—	—	5	13	—	—	—	—	—	—	—	—	—		
	856½	Great Indian Penin- { 1875 1874	1	18	19	48	6	92	—	—	—	1	—	6	7	—	—	—	—	—	—	—	—	—		
	218½	sula (a). { 1875 1874	—	—	—	1	—	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Bombay	1,420	Bombay, Baroda, and Central India (b). { 1875 1874	12	31	17	36	29	125	—	—	—	2	—	35	61	—	—	—	—	—	—	—	—	—		
	1,420	{ 1875 1874	13	16	11	45	23	106	—	—	—	1	—	22	29	—	—	—	—	—	—	—	—	—		
	450	{ 1875 1874	5	5	—	32	1	42	—	—	—	—	—	5	10	—	—	—	—	—	—	—	—	—		
	444	{ 1875 1874	2	—	—	25	5	32	—	—	—	—	—	10	11	—	—	—	—	—	—	—	—	—		
Total Indian Railways	6,373½	{ 1875 1874	59	151	105	405	148	868	9	28	9	28	6	98	175	7	2	72	8	10	6	208	267	475		
	6,022½	{ 1875 1874	68	103	92	407	97	767	1	43	12	27	16	98	140	11	2	77	16	14	9	231	278	499		

(a) Includes Wardha Valley, Nizam's, and Berar State Railways.

(b) Includes Dubhoo Branch Railway.

TABLE No. III.—CLASSIFIED ABSTRACT OF ACCIDENTS TO SERVANTS OF COMPANIES OF RAILWAYS OPEN FOR TRAFFIC IN INDIA DURING THE YEAR 1875.

CLASSIFICATION.	UNDER THE CONTROL OF THE GOVERNMENT OF INDIA.												UNDER THE CONTROL OF THE GOVERNMENT OF MADRAS.				UNDER THE CONTROL OF THE GOVERNMENT OF BOMBAY.				Total.										
	East Indian.		Eastern Bengal.		Oudh and Rohilkund.		Punjab and Delhi.		Sind.		Calcutta and South-eastern.		Nalhati.		Rajputana.		Holkar.		Punjab North-western.			Tirhut.		Madras.		South Indian.		Great Indian Peninsula.		Bombay, Baroda & Central India.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
I.—FROM CAUSES BEYOND THEIR OWN CONTROL—																															
(a.) Servants employed on trains in motion—																															
1. Collisions	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
2. Trains running into sidings or off their proper line, through points being wrong	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14
3. Trains or engines getting off rails	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
4. Accidents from defects in rolling stock	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
5. Miscellaneous	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
Total	5	3	..	..	1	4	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27
(b.) Servants employed in stations or on lines—																															
1. Run over or crushed between buffers while coupling or uncoupling carriages and wagons	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2. Run over while shunting trains	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3. Run over or struck while performing their duties	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4. Miscellaneous	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
II.—FROM NEGLIGENCE OR MISCONDUCT—																															
(a.) Servants employed on trains in motion—																															
1. Collisions	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2. Attempting to get upon, or off, or falling from engines or carriages in motion	1	5	1	3	1	2	1	3	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3. Miscellaneous	3	12	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	4	11	1	3	1	4	1	4	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(b.) Servants employed in stations or on lines—																															
1. Run over or crushed between buffers while coupling or uncoupling carriages or wagons	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2. Run over or struck while shunting trains	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3. Run over or struck while in- cautiously standing or walking upon the line	13	13	3	4	4	2	13	..	4	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4. Miscellaneous	4	14	1	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	21	35	4	10	8	15	4	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grand Total	28	49	5	14	13	23	5	6	..	3	..	..	..	..	3	4	1	..	..	..	..	..	5	14	..	..	..	..	13	101	200
Train mileage	5,950,269	618,090	1,005,413	1,113,545	874,838	58,750	80,400	50,400	80,400	50,400	80,400	50,400	80,400	50,400	80,400	50,400	80,400	50,400	80,400	50,400	80,400	50,400	80,400	50,400	80,400	50,400	80,400	50,400	80,400	50,400	80,400
Number of servants employed	10,323	4,145	2,334	7,455	5,363	204	6	141	6	141	204	6	141	6	141	204	6	141	6	141	204	6	141	6	141	6	141	6	141	6	141

* In one of these cases the under guard, who was pushed out of his van by the door closing upon his back, did not, it is said, receive any injury, but yet he is classed with the injured. † The accident in which these five men were injured occurred to a lorry.

TABLE No. IV.
Showing the TOTAL NUMBER OF ACCIDENTS TO PERSONS OF ALL KINDS, AND TO TRAINS, &c., ON ALL RAILWAYS OPEN FOR TRAFFIC DURING THE YEAR 1875.

Under the Control of the Government of	Mean Length of Railway open.	Total Number of Train Miles.	Train Miles per Mile open.	Passenger Mileage.	Passenger Miles per Mile open.	Total Number of Accidents to Trains, &c. of all kinds.	Total Number of Passengers carried.	Average Number of Passengers per Mile open.	Passengers.		Servants.				Trespassers, &c.		Total.	
									Killed.	Injured.	Beyond their own Control.		Within their own Control.		Killed.	Injured.	Killed.	Injured.
											Killed.	Injured.	Killed.	Injured.				
India - { 1875 { 1874	3,428½ 3,115½	9,490,987 10,808,722	2,750 3,470	— —	— —	586 518	14,367,165 13,094,692	4,190 4,206	18 10	43 42	7 2	8 21	48 55	91 98	63 82	9 17	186 149	151 178
Madras { 1875 { 1874	1,075 1,042½	2,451,153 2,236,847	2,280 2,144	182,350,714 188,890,849	169,610 176,943	115 116	4,277,904 4,305,938	3,979 4,128	— 1	1 3	— 3	2 6	5 6	13 7	6 8	1 —	10 18	17 16
*Bombay { 1875 { 1874	1,870 1,864	5,506,837 4,942,384	2,945 2,651	— —	— —	167 188	7,513,143 7,158,695	4,018 3,838	— 2	7 25	1 8	15 14	40 32	71 40	21 12	6 10	62 54	99 89
Total - { 1875 { 1874	6,373½ 6,022½	17,388,977 17,982,408	2,728 2,987	— —	— —	868 767	26,157,612 24,553,630	4,104 4,079	18 13	51 70	8 13	25 41	98 93	175 140	89 102	16 27	208 221	267 278
																		475 499

* Includes the Wardha Valley, the Nizam's, and the Berars State Railways, which are worked by the Great Indian Peninsula Railway Company, and the Dubhee Branch which is worked by the Bombay, Baroda, and Central India Railway Company.

CAPITAL.

54. The total amount of capital expended on railways in India to the 31st December last as regards State lines, and to the 31st March last as regards guaranteed lines, was 105,790,929 $\frac{1}{2}$ l. Of this, 93,720,794 $\frac{1}{2}$ l. was defrayed from guaranteed Share Capital, Debentures, or Debenture Stock issued by the companies, and 12,070,135 $\frac{1}{2}$ l. was expended direct by the Government. During the year to the 31st December last, the expenditure on State lines was 2,760,940 $\frac{1}{2}$ l., of which 2,084,297 $\frac{1}{2}$ l. was expended in India, and 676,643 $\frac{1}{2}$ l. in England; and in the year to the 31st March last guaranteed capital is estimated to have been spent to the extent of 1,279,000 $\frac{1}{2}$ l. The capital which has been raised by the companies under the guarantee amounts to 95,072,441 $\frac{1}{2}$ l., of which 83,697,322 $\frac{1}{2}$ l. is Share Capital, 5,691,570 $\frac{1}{2}$ l. Debentures (299,520 $\frac{1}{2}$ l. being convertible into shares), 5,129,878 $\frac{1}{2}$ l. Debenture Stock, and 553,671 $\frac{1}{2}$ l. capital not bearing interest. Full particulars are given in the tables at pp. 23 to 27 prepared in the office of the Accountant. The following list shows the different rates of guaranteed interest paid by Government :—

	£
Share Capital at 5 per cent.	81,923,520
Do. do. 4 $\frac{3}{4}$ „	1,273,802
Do. do. 4 $\frac{1}{2}$ „	500,000
Debentures 5 „	1,380,370
Do. do. 4 $\frac{1}{2}$ „	183,450
Do. do. 4 $\frac{1}{4}$ „	2,096,400
Do. do. 4 „	2,031,350
Debenture Stock 4 $\frac{1}{2}$ „	1,925,000
Do. do. 4 „	3,204,878
Capital not bearing interest	553,671
	<u>£95,072,441</u>

The manner in which this money has been approximately expended may be seen by the subjoined statement :—

Railway.	Works and Bridges.	Permanent Way, Stations, &c.	Freight and Insurance.	Rolling Stock and Engines.	Establishments.	Miscellaneous, Electric Telegraph, Stores, &c.
	£	£	£	£	£	£
East Indian - - - -	9,615,000	7,145,000	3,000,000	3,655,000	3,735,000	3,350,000
Great Indian Peninsula - -	9,450,000	7,574,000	—	2,875,000	1,626,000	1,310,000
Madras - - - -	3,455,000	3,845,000	—	1,108,000	888,000	455,000
Bombay, Baroda, and Central India -	3,265,000	2,168,000	—	1,105,336	780,000	459,000
Scinde, Punjab, and Delhi - -	2,342,000	3,409,000	Flotilla. 376,160	1,958,000	1,090,000	796,000
South Indian - - - -	775,000	916,000	—	296,000	385,000	260,000
Eastern Bengal - - - -	2,248,000		Flotilla. 75,000	318,070	837,000	99,000
Oude and Rohilkund - - - -	1,230,000	2,302,000	—	588,000	552,000	617,000

STATEMENT No. 1.

STATEMENT OF EXPENDITURE IN ENGLAND AND INDIA ON INDIAN STATE RAILWAYS, appropriated to the various Undertakings as shown in Statements to 31st December 1875, received from India.

State Railway.	Expenditure appropriated.			Classification of Expenditure.											Receipts on Capital Account.	
	England.	India.	TOTAL.	Pre-liminary Expenses.	Land.	Construction of Line.	Ballast and Permanent Way.	Stations and Buildings.	Electric Telegraph.	Plant.	Rolling Stock.	Maintenance.	Establishment.	Contingencies.		Surplus Accounts.
Punjab, Northern	463,749	1,421,608	1,885,352	25,511	22,384	967,740	215,844	46,373	108	107,390	49,518	2,536	327,794	12,503	114,578	3,576
Indus Valley	484,610	1,706,276	2,140,886	61,207	9,637	646,406	475,456	90,938	655	72,961	23,129	1,172	836,492	28,509	403,380	—
Hubb and Carwar	2,502	52,792	55,294	4	—	—	—	—	—	—	—	—	53,649	1,641	—	—
Wardha Valley, Coal	36,075	287,921	325,996	8,487	78	74,384	125,281	19,261	—	8,613	241	—	27,858	1,107	62,031	265
Holkar	260,551	707,723	968,273	3,252	4,453	344,716	158,239	45,857	—	29,052	85,914	35	102,917	7,782	234,102	2,263
Neemuch	286,751	273,904	510,255	20,617	87	77,414	76,216	19,329	—	11,761	2,594	57	69,097	4,267	228,318	442
Rajpootana	718,983	1,612,935	2,331,918	25,692	38,481	537,560	874,316	177,791	—	29,855	230,610	62	183,764	10,402	225,88	2,023
Western Rajpootana	—	43,936	43,936	3,378	—	—	—	—	—	2,006	—	—	36,251	1,906	216	20
Nulhaes	30,000	—	30,000	—	—	30,000	—	—	—	—	—	—	—	—	—	—
Calcutta and South-eastern	268,388	422,418	690,801	6,769	108,507	104,596	155,774	57,164	3,698	8,270	122,458	124	86,773	18,766	18,031	—
Northern Bengal	317,763	449,652	667,615	7,356	28,398	108,243	18,538	15,122	3,236	14,096	169	134	97,509	3,710	372,514	1,390
Scindia	1,148	32,066	33,214	1,841	—	2,193	—	1,919	—	4,801	41	—	20,499	679	1,863	—
Nasrur and Chuteeghur	—	8,778	8,778	1,117	—	—	—	—	—	470	—	—	6,978	231	—	16
Tirhoot	89,891	230,493	320,384	1,415	381	66,318	134,807	13,254	—	10,948	84,926	115,510	26,921	1,659	19,596	4,551
Bangood and Irrawaddy Valley	66,888	178,011	244,849	1,818	8,537	39,646	58,582	6,102	—	8,434	7,127	—	30,835	781	93,639	143
Bangoon and Sittang Valley	—	3,864	3,864	547	—	—	—	—	—	—	—	—	2,891	170	256	—
Moradabad, Deobund, and Roorkee	—	2,852	2,852	52	—	—	—	—	—	84	—	—	2,616	150	—	—
Hathras and Mathra Section, Light Provincial Railway.	—	92,551	92,551	92	990	—	52,489	10,121	—	173	15,760	—	6,465	165	3,265	—
NATIVE STATES.																
Nizam's	143,975	987,926	1,131,901	1,037	—	396,628	467,990	91,920	—	16,055	9,163	—	110,279	4,724	87,101	3,011
Khamgaun Branch	—	48,530	48,530	87	—	10,921	22,328	4,638	125	348	32	—	2,886	234	—	—
Oomroote Branch	13,316	80,418	93,734	112	245	9,418	25,259	4,344	110	302	15	—	3,808	123	—	—
Mysore	—	11,624	11,624	550	—	—	—	—	—	831	—	—	9,994	249	—	—
Total	2,986,535	8,606,067	11,592,602	171,111	322,156	3,419,183	2,867,054	603,533	7,927	325,825	581,692	19,496	1,525,651	94,707	1,819,617	25,350

* This amount was paid to the Oude and Rohilkund Railway Company for purchase of the Line.

† Described in statement received from India as traffic charges.
Note.—The total expenditure in England on State Railways to 31st December 1875 amounted to 3,464,068*l*. The above figures represent only that portion of such expenditure as had been appropriated in India to the several undertakings to the date of the last advices received.

T. W. KERR,
Accountant.

India Office, 23rd May 1876.

STATEMENT No. 2.

Showing the AMOUNT of CAPITAL estimated to be required for each Undertaking as now sanctioned, the Amount authorised to be raised, the Amount raised, and the Amount withdrawn, to 31st March 1876.

Railway.	Estimated Cost of Lines.	Amount authorised to be raised on 31st March 1876.						Amount raised in England to 31st March 1876.						Amount raised in India to Date of last Advice.		Total Amount raised to 31st March 1876.	Total Amount withdrawn to 31st March 1876 (partly estimated).
		Share Capital.	Debentures.		Debt Stock.	Capital not bearing Interest.	Total.	Share Capital.	Debentures.		Debt Stock.	Capital not bearing Interest.	Share Capital.	Capital bearing Interest.			
			Con-vertible into Shares.	Incon-vertible.					Con-vertible into Shares.	Incon-vertible.					Stock represented.			Cash received.
East Indian—Main Line	£ 27,750,000	22,835,380	164,620	2,719,850	1,500,000	168,428	27,883,278	22,458,149	164,620	2,719,850	1,500,000	162,090	826,325	1,838	27,332,372	27,156,272	
" Jubbulpore Line	3,250,000	3,200,000	—	—	—	43,249	3,243,249	3,189,350	—	—	—	43,249	7,665	—	3,240,264	3,413,898	
Great Indian Peninsula	24,500,000	20,000,000	—	1,304,250	3,065,300	239,802	24,589,152	19,064,125	—	1,304,250	2,475,559	228,860	405,047	742	23,478,583	22,854,608	
Madras	10,500,000	10,212,800	89,600	—	—	9,898	10,312,298	10,193,201	89,600	—	—	9,898	—	—	10,292,899	10,090,144	
Bombay, Baroda, and Central India	8,000,000	7,550,300	45,300	200,000	—	35,387	7,830,987	7,528,688	45,300	200,000	—	35,387	21,572	—	7,830,967	7,776,338	
Scinde, Punjab, and Delhi	11,000,000	11,418,900	—	—	—	4,403	11,423,303	10,988,984	—	—	—	4,336	86,253	67	11,079,640	10,643,041	
Eastern Bengal	3,200,000	3,355,520	—	462,850	411,308	2,288	3,131,466	2,238,996	—	52,650	374,730	2,288	16,436	—	2,685,150	2,082,136	
Oude and Rohilkund	6,000,000	4,000,000	—	1,115,300	384,700	3,352	5,509,352	3,575,581	—	1,115,300	834,700	3,352	424,419	—	5,473,241	5,818,789	
South Indian	4,000,000	3,215,091	—	—	425,000	63,064	3,702,155	3,171,220	—	—	425,000	62,009	1,221	56	3,659,506	3,385,523	
Total.	98,900,000	84,637,991	299,520	5,801,750	5,786,308	553,871	97,129,240	82,408,234	299,520	5,392,050	5,422,453	551,469	1,289,088	2,302	95,072,441	93,720,794	

India Office, 12th April 1876.

T. W. KEITH,
Accountant.

STATEMENT No. 3.

SHOWING the AMOUNT received from and withdrawn by each Company during the Year ended 31st March 1876.

Railway.	Sums standing to the Credit of the Companies on the 31st March 1875.	Sums advanced to the Companies on the 31st March 1875.	Amount received						Amount withdrawn				Total received during the Year ended 31st March 1876.	Total withdrawn during the Year ended 31st March 1876.	
			In England, between 1st April 1875 and 31st March 1876.			In India, between 1st April 1875 and the Date to which Accounts have been received.			In England, between 1st April 1875 and 31st March 1876.	In India.	Estimated Withdrawals between Dates specified and 31st March 1876.				
			Share Capital.	Deben- tures.	Deben- ture Stock.	Capital not bearing Interest.	Share Capital.	Capital not bearing Interest.							
East Indian, Main Line.	£ 480,779	£ —	£ 99	£ 1,000,000	£ —	£ 3,263	£ —	£ —	£ 212,794	£ 1,220,150	31st December 1875	£ 52,903*	£ 72,000†	£ 1,009,862	£ 1,309,041
East Indian, Jubbulpore Line.	—	237,022	37,870	—	—	5,658	—	—	—	—	"	5,860*	14,000†	43,528	19,860
Great Indian Peninsula.	570,147	—	—	—	—	—	—	—	242,916	—	"	96,744*	200,000†	—	53,528
Madras.	104,645	—	626,035	—	—	—	—	—	84,550	500,000	"	18,575	75,000†	636,085	526,125
Bombay, Baroda, and Central India.	38,871	—	510	—	—	—	—	—	38,531	—	"	18,754*	45,000†	510	50,223
Scinde, Punjab, and Delhi.	799,631	—	—	—	—	—	—	—	55,081	—	"	307,951	—	—	363,082
Eastern Bengal.	—	388,274	—	—	—	—	—	—	30,353	—	"	8,859	30,000†	—	8,712
Oude and Rohilkund.	321,430	—	37	—	—	—	—	—	38,844	—	"	86,171	40,000	37	167,015
South Indian.	992,118	—	—	—	—	—	—	—	460,429	—	"	205,707	52,000	—	718,186
Total.	3,302,621	625,306	664,551	1,000,000	—	8,921	—	—	1,163,498	1,720,150	—	459,502	344,000†	1,673,472	2,999,150

* Transfers of expenditure to Revenue Account, Sale proceeds of Stores, Refunds, &c. exceed by these sums the amounts withdrawn in India on Capital Account during the year.

† It is estimated that, on receipt of advices from India regarding transfers, which are several months in arrear of advices of cash transactions, transfers of expenditure to Revenue Account, &c. will have exceeded the withdrawals to this extent.

India Office, 12th April 1876.

T. W. KERR,
Accountant.

STATE of DEBENTURE LOANS on the 31st March 1876.

Railway.	Amount.			Rate of Interest	Date at which Loan expires.
	Convertible.	Inconvertible.	Total.		
East Indian	£ 164,620	—	—	5	9th August 1876.
"	—	98,400	—	4½	10th August 1877.
"	—	183,450	—	4½	" "
"	—	1,000,000	—	4½	22d August 1877.
"	—	440,000	—	4	19th March 1878.
"	—	1,000,000	—	4½	1st January 1881.
	164,620	2,719,850	2,884,470		
Great Indian Peninsula	—	1,035,450	—	5	31st Dec. 1876.
"	—	368,800	—	4	30th June 1878.
	—	1,304,250	1,304,250		
Madras	89,600	—	89,600	5	1st January 1877.
Bombay, Baroda, and Central India	45,300	—	—	5	1st July 1876.
"	—	200,000	—	4	1st January 1882.
	45,300	200,000	245,300		
Eastern Bengal	—	45,400	—	5	1st November 1876.
"	—	7,250	—	4	1st November 1884.
	—	52,650	52,650		
Oude and Rohilkund	—	613,300	—	4	4th June 1880.
"	—	500,000	—	4	1st August 1881.
	—	1,113,300	1,113,300		
			5,691,570		

India Office,
12th April 1876.

T. W. KEITH,
Accountant.

It will be seen by the above statement that the whole of the Convertible Debentures will be paid off this year. The total amount of Debentures of all kinds now outstanding is 932,570*l.* less than it was last year.

STATEMENT of WITHDRAWALS out of CAPITAL for EXPENDITURE; showing the Amount withdrawn in England and in India by all the Guaranteed Indian Railway Companies during each Financial Year from the commencement to 31st March 1876.

Year.	England.	India.	Total.
	£	£	£
1849-50	69,211	6,682	75,893
1850-51	61,164	38,099	99,263
1851-52	154,212	197,111	351,323
1852-53	174,920	252,640	427,560
1853-54	252,484	418,165	670,649
1854-55	960,878	769,278	1,730,156
1855-56	1,935,074	1,431,337	3,366,411
1856-57	1,752,813	1,762,287	3,515,100
1857-58	1,328,243	2,094,825	3,423,068
1858-59	1,941,033	3,551,075	5,492,108
1859-60	2,508,668	4,662,796	7,171,464
1860-61	2,388,315	5,190,400	7,578,715
1861-62	1,597,430	5,004,782	6,602,212
1862-63	1,852,393	4,010,951	5,863,344
1863-64	1,415,146	3,340,507	4,755,653
1864-65	1,396,821	2,725,419	4,122,240
1865-66	2,222,679	3,414,187	5,636,866
1866-67	3,958,357	3,889,346	7,297,703
1867-68	3,924,490	3,195,591	7,120,081
1868-69	1,969,814	2,512,084	4,481,898
1869-70	2,298,680	2,444,171	4,742,851
1870-71	1,899,054	1,877,216	3,776,270
1871-72	886,996	1,609,782	2,496,728
1872-73	822,995	345,750†	477,245
1873-74	1,028,032	334,979†	693,053
1874-75	1,174,893	86,982†	1,087,911
1875-76	1,163,498	115,602*	1,279,000*
	41,138,293	53,196,472	94,334,765
Deduct amount withdrawn by the Calcutta and South-eastern Railway Company, this Railway having subsequently become the property of the State	267,362	346,609	613,971
	40,870,931	52,849,863	93,720,794

* These amounts are partly estimated.

† Transfers of expenditure to Revenue Account, Sale proceeds of Stores, Refunds, &c., exceed by these sums the amount withdrawn in India on Capital Account.

Note.—The total expenditure in India in each year as shown in the above Statement will not be found to coincide with that shown in the Indian Finance and Revenue Accounts, owing to the fact that the transfers of expenditure to Revenue Account can only be made in the books in this country on receipt of advices from India, and are consequently brought to account some months later than in the Indian books.

India Office,
12th April 1876.

T. W. KEITH,
Accountant.

GUARANTEED INTEREST.

55. It will be seen by the following tables that the sums advanced by Government to the different companies amounted during the year to 4,650,346*l.*, compared with 4,641,705*l.* of the previous year, and that the whole amount advanced on this account since the commencement of operations is 56,924,522*l.* Of this large sum 31,230,932*l.* had been paid back by the companies, leaving a net amount of 25,693,590*l.*, which the Government had advanced up to the 30th June 1875. During the past year the excess of interest paid by Government over railway receipts was 1,073,832*l.* compared with 1,061,988*l.* of the previous year, and 1,428,442*l.* of the year before.

GUARANTEED INTEREST.—INDIAN RAILWAYS.

STATEMENT of the Total Amount of INTEREST advanced to each of the under-mentioned Railway Companies to the 31st December 1875.

Railway Company.	Interest advanced to 31st December 1874.	Interest advanced during 1875.						Total.
		England.		India.		Total.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
East Indian, Main Line	18,507,137 1 0	1,331,132 3 4	10,417 3 1	1,341,549 6 5	19,848,686 7 5			
" Jabbalpoore Line - - -	1,718,716 1 7	155,995 9 2	383 5 0	156,378 14 2	1,875,094 15 9			
Great Indian Peninsula	12,436,452 3 4	1,130,431 16 0	13,609 6 0	1,144,041 2 0	13,580,493 5 4			
Madras - - -	6,379,240 9 11	500,335 8 3	—	500,335 8 3	6,879,575 18 2			
Bombay, Baroda, and Central India - -	4,307,818 11 0	387,023 1 10	244 16 3	387,267 18 1	4,694,686 9 1			
Scinde, Punjab, & Delhi	5,269,191 4 7	551,119 7 6	2,560 7 11	553,679 15 5	5,822,871 0 0			
Eastern Bengal - -	1,476,985 18 1	130,561 2 6	997 7 10	131,558 10 4	1,608,544 8 5			
Oude and Rohilkund -	996,614 14 8	254,030 4 10	4,443 1 3	258,473 6 1	1,255,088 0 9			
South Indian - -	1,182,419 13 8	177,062 9 7	—	177,062 9 7	1,359,482 3 3			
Total - - -	£ 52,274,175 17 10	4,617,691 3 0	32,655 7 4	4,650,346 10 4	56,924,522 8 2			

India Office, 12th April 1876.

T. W. KEITH,
Accountant.

A STATEMENT showing approximately the AMOUNTS advanced on account of GUARANTEED INTEREST to the several under-mentioned Railway Companies to the 30th June 1875, beyond the amount of Net Revenue applied thereto.

Railway Company.	Total Amount advanced to 31st December 1875.*	Aggregate of Net Revenue Balances for the several half-years to 30th June 1875, inclusive.	Net Amount advanced.
	£	£	£
East Indian, Main Line	19,848,686	15,856,758	3,991,928
" Jabbalpoore Line	1,875,095	444,184	1,430,911
Great Indian Peninsula	13,580,493	7,284,611	6,295,882
Madras	6,879,576	3,034,271	3,845,305
Bombay, Baroda, and Central India	4,694,687	2,007,681	2,687,056
Scinde, Punjab, and Delhi	5,822,871	935,953	4,886,918
Eastern Bengal	1,608,544	1,085,984	522,560
Oude and Rohilkund	1,255,088	178,792	1,076,296
South Indian	1,359,482	402,748	956,734
Total	£ 56,924,522	31,230,932	25,693,590

* The Interest for the half-year to 30th June 1875 not being paid until the succeeding half-year.

India Office, 12th April 1876.

T. W. KEITH, Accountant.

REVENUE.

56. The net revenue derived from the railways was less than that of the previous year by 320,594*l*. This at first sight does not appear to be satisfactory, but independently of the depression of trade, the falling off is explained by the exceptionally large traffic in grain during 1874, in consequence of the scarcity in Bengal. Last year only 302,719 tons were carried by the East Indian, the Eastern Bengal, and the Punjab and Delhi Railways, instead of 1,217,338 tons in 1874. The gross receipts last year were 7,412,179*l*., compared with 7,809,984*l*. of 1874, and 6,738,945*l*. of 1873. The receipts from passengers were more by 270,504*l*., and

from goods they were 586,102*l.* less : from miscellaneous sources they were also 82,307*l.* less. The expenditure was 77,211*l.* less, amounting to 3,764,311*l.*, compared with 3,841,522*l.* of the previous year. The net receipts amounted to 3,647,868*l.*, of which 3,576,514*l.* were from guaranteed and 71,354*l.* from the State lines. Taking the capital of the two to be 97,000,000*l.*, the average earnings, from good and bad together, would be 3*l.* 15*s.* per cent. for the year.

57. The following statement shows the amount of surplus profits earned by guaranteed railways from 1870 to 1875 :—

Railway Company.	Half year to 30th June 1870.	Half year to 30th June 1871.	Half year to 30th June 1872.	Half year to 30th June 1873.	Half year to 31st Dec. 1873.	Half year to 30th June 1874.	Half year to 31st Dec. 1874.	Half year to 30th June 1875.	Half year to 31st Dec. 1875.	Total.
	£	£	£	£	£	£	£	£	£	£
East Indian, Main Line	130,095	109,255	150,695	167,753	104,688	641,832	77,951	158,539	38,702	1,579,570
„ Jabalpure Line	—	—	—	—	—	11,238	—	—	—	11,238
Great Indian Peninsula Railway	—	—	—	—	—	—	—	143,838	—	143,838
Bombay, Baroda, and Central India	—	—	5,864	—	—	4,723	—	5,912	—	16,499
Eastern Bengal	—	—	—	—	8,511	7,810	9,151	—	—	25,372
Total	130,095	109,255	156,559	167,753	113,099	665,603	87,102	308,289	38,702	1,776,457

T. W. KEITH,
Accountant.

17th July 1876.

58. The annual payments on account of guaranteed interest, and the amount paid by the companies in reduction of the same during the last seven official years, have been as follows. These figures vary slightly from those in the preceding page, which apply to the natural, while these apply to the official year.

Financial Year.	Guaranteed Interest.	Net Traffic Receipts less half surplus profits.	Net Charge.
	£	£	£
1869-70	4,176,008	2,628,944	1,547,064
1870-71	4,391,592	2,556,781	1,834,811
1871-72	4,592,166	2,868,948	1,723,218
1872-73	4,658,401	2,547,900	2,110,501
1873-74	4,667,906	3,230,554	1,437,352
1874-75	4,693,884	3,449,322	1,244,562
1875-76 } partly estimated.	4,686,996	3,685,000	1,001,996

STATEMENT showing the REVENUE from the INDIAN RAILWAYS in

Railway.	Receipts.			
	Passengers.	Goods.	Miscellaneous.	Total.
	£	£	£	£
East Indian, Main Line - 1875	801,311	1,622,681	85,671	2,509,663
" " - 1874	742,416	2,350,949	94,280	3,187,645
" Jabalpur Line - 1875	77,300	92,198	15,550	185,048
" " - 1874	68,696	131,146	35,195	235,037
Great Indian Peninsula - 1875	478,530	1,457,666	36,888	1,973,084
" " - 1874	438,544	1,369,990	40,013	1,848,547
Madras - 1875	226,049	344,623	18,820	589,392
" " - 1874	226,369	293,011	20,049	541,429
Bombay, Baroda, and Central India - 1875	228,348	343,382	13,724	585,454
" " - 1874	203,382	304,580	29,068	537,030
Sind, Punjab, and Delhi - 1875	221,458	269,824	20,653	511,935
" " " - 1874	199,274	375,638	44,276	619,188
" Indus Steam Flotilla - 1875	5,817	78,525	617	85,029
" " - 1874	5,259	71,163	552	76,974
South Indian (amalgamation of Great Southern of India and Carnatic Railway Companies) - 1875	54,228	44,893	4,732	103,853
Great Southern and Carnatic for 1st half of - 1874	23,586	18,001	1,184	42,771
South Indian for 2nd half of - 1874	27,192	19,939	1,262	48,413
Eastern Bengal - 1875	110,298	146,472	39,048	295,818
" " - 1874	99,033	211,519	55,379	365,931
Oude and Rohilkhand - 1875	137,585	130,602	6,985	275,172
" " - 1874	109,283	87,933	3,186	200,402
Totals for Guaranteed Railways - 1875	2,340,994	4,530,266	242,638	7,113,898
" - 1874	2,143,034	5,245,569	324,454	7,703,357
STATE.				
Calcutta and South-eastern - 1875	6,354	2,854	1,157	10,365
" " - 1874	5,309	2,481	1,330	9,120
Nalhati - 1875	5,324	2,566	52	7,942
" " - 1874	4,830	2,836	137	7,803
Rajputana - 1875	61,730	108,378	4,620	174,728
" " - 1874	22,847	83,746	5,104	61,697
Wardha Valley - 1875	895	2,240	39	2,674
" " - 1874	316	1,576	35	1,927
Holkar's - 1875	7,829	23,513	603	31,945
" (11 months) - 1874	4,368	5,261	690	10,319
Nizam's - 1875	25,136	20,204	174	45,514
" " - 1874	6,977	3,480	51	10,508
Punjab, Northern - 1875	9,704	4,364	208	14,276
Tirhut - 1875	686	783	9	1,478
BERAR.				
Amraoti - 1875	740	4,670	16	5,426
" " - 1874	702	2,063	21	2,786
Khamgaon - 1875	151	3,671	11	3,833
" " - 1874	156	2,299	12	2,467
Totals for State Railways - 1875	118,049	173,243	6,889	298,181
" - 1874	45,505	53,742	7,380	106,627
Grand Total for all Railways - 1875	2,459,043	4,703,509	249,527	7,412,079
" - 1874	2,188,539	5,289,611	331,834	7,809,984

1874 and 1875, as given in the Accounts passed by Government.

Expenditure.			Per-centage of Expenditure to Gross Receipts.	Net Receipts.
Maintenance.	Working, &c.	Total.		
£	£	£		£
226,435	736,619	963,054	38	1,546,609
203,420	922,303	1,125,723	35	2,061,922
33,654	68,672	107,326	58	77,722
16,889	83,192	100,081	43	134,956
158,742	774,044	932,786	47	1,040,298
193,996	899,823	1,093,819	59	754,728
152,016	262,188	414,204	70	175,188
112,126	237,998	350,124	64	191,305
81,378	237,165	318,543	54	266,911
49,340	230,538	279,878	52	257,142
79,060	248,996	328,056	64	183,979
77,509	271,162	348,671	56	270,517
13,399	55,988	69,387	81	15,642
18,467	53,660	72,127	93	4,847
7,698	42,076	49,774	48	53,579
5,568	21,304	26,872	62	15,899
5,849	22,648	28,497	58	19,916
54,657	135,424	190,081	64	105,737
39,303	158,907	198,210	54	167,721
33,015	131,258	164,273	59	110,849
30,407	98,675	129,082	64	71,320
845,054	2,692,430	3,537,484	49	3,576,514
752,874	3,000,210	3,753,084	48	3,950,273
2,014	6,329	8,343	80	2,022
1,645	5,500	7,145	78	1,975
1,811	4,327	6,138	77	1,804
1,135	4,110	5,245	67	2,558
33,180	78,066	111,246	63	63,482
15,028	34,670	49,698	80	11,999
697	2,170	2,867	107	Loss 193
512	1,510	2,022	105	Loss 95
8,234	27,352	30,586	95	1,359
1,704	6,984	8,688	84	1,631
16,182	35,709	51,841	113	Loss 6,327
2,197	7,688	9,885	94	629
1,992	6,066	8,058	56	6,218
506	581	1,087	73	391
320	3,808	4,128	76	1,298
361	3,392	3,753	134	Loss 967
280	2,253	2,533	66	1,300
278	1,724	2,002	81	465
60,166	166,661	226,827	76	71,354
22,860	65,578	88,438	82	18,189
905,220	2,859,091	3,764,311	50	3,647,868
775,734	3,065,788	3,841,522	49	3,968,462

TRAFFIC AND WORKING.

59. In considering the traffic returns for the past year and, more especially, while comparing the results with those of the previous year, certain exceptional circumstances should be borne in mind. The passenger traffic was, in the latter end of the year under review, augmented by the concourse of people which assembled at various places to greet His Royal Highness the Prince of Wales: the railways in Bengal and the North-West Provinces will suffer in comparison with the year 1874, in consequence of the unusual accession of traffic in that year through the transport of grain both from up and down country to the famine-stricken districts: and the depressed state of trade has had an injurious effect generally upon the traffic of all the lines. It must also be remarked, in reference to the net returns, that a large item of expenditure during the past year was for repairs, restorations, and increased protective works in consequence of the damage done by floods, and that doubts may be entertained as to whether the whole of the sum expended during the year on such operations was strictly a proper charge against revenue. At any rate, the effect has been to enlarge considerably the expenditure on revenue account.

60. The passenger traffic, it will be seen, increased 10·28 per cent. in numbers, and 12·30 per cent. in receipts, compared with the previous year. The proportion per cent. of first class was 78, of second class 2·30, and of the lower classes 96·92.

61. The actual increase in the number of passengers was 2,498,978. In 1873 they reached 23,557,605; in 1874, 24,280,459; and in 1875, 26,779,437. The open mileage over which the passengers were carried in 1873 averaged 5,711; in 1874, 5,597; and 6,298 in 1875. The increase last year was distributed over the different lines, the chief share falling to the Oudh and Rohilkund (388,000), the Bombay, Baroda, and Central India (347,000), the East Indian (279,000), and Great Indian Peninsula (210,000). About 580,000 were carried over the newly opened State lines in the Punjab and Rajpootana.

62. The receipts from passengers, including 235,680*l.* from excess luggage, parcels, horses, &c.; 81,270 from troop-trains, and 7,846*l.* for mail service; were 2,459,618*l.*, compared with 2,183,015*l.* of the previous year, and 2,194,607*l.* of 1873. The first class brought in 127,044*l.*, the second class, 114,507*l.*, and the lower classes, 1,832,882*l.* The first class increased 20,846*l.*, the second 11,517*l.*, and the third and fourth 182,772*l.* There was also an increase of 35,722*l.* in parcels, luggage, horses, &c. Some portion of this increase, as before hinted, must be laid down to the visit of His Royal Highness the Prince of Wales.

63. The goods traffic shows a falling off of 307,974 tons. This, as before mentioned, is in great measure due to the large quantities of grain, amounting to about 840,000 tons, which were taken to the districts where scarcity prevailed in 1874. The number of tons carried this year was 4,388,649, compared with 4,696,624 of the previous year. These figures include 579,974 and 687,450 tons of minerals respectively.

64. The receipts from goods amounted to 4,698,506*l.*, compared with 5,273,600*l.* of the previous year. The East Indian went back 337,639 tons in weight and 515,168*l.* in receipts, owing to the famine traffic of 1874. From the same cause the Sind, Punjab, and Delhi shows a falling off of 92,369*l.* The Great Indian Peninsula and the Bombay, Baroda, and Central India on the other hand show an improvement of 87,675*l.* and 55,075*l.* respectively.

65. The proportion per cent. of the gross revenue from goods was 65·67, and from passengers 34·33.

66. The number of miles travelled by trains during the year was, in consequence of the reduced traffic, necessarily less, being 17,950,312, compared with 18,475,322 of 1874; and the ton mileage, on the number of tons carried one mile, was 905,697,217, against 1,102,956,185.

67. The articles in which the greatest decrease took place were grain, seeds, rice and jute; while coal, sugar, salt, firewood, and wool showed an increase.

68. The most satisfactory feature on the side of improvement was salt. The opening of railway communication with the Patri and Sambhur Lakes, and the imposition of moderate rates have stimulated the traffic and brought a better and cheaper article to the consumer. A still further increase may be expected

if the supposed rival interests of different districts are not allowed to influence railway managers, and if low rates are uniformly levied. A very proper arrangement has recently been made on the Great Indian Peninsula Railway by which salt is registered and weighed at the stations instead of being sent to a central depôt, often distant from the line.

69. The expenses of maintaining and working the railways was 3,672,053*l.*, compared with 3,682,601*l.* The steam flotilla on the Indus in 1874, cost 73,646*l.*; in 1875, 67,870*l.* The outlay for maintenance is in several cases swelled by the heavy cost of repairs in consequence of the damage done by the floods during the second half of the year, and also by reserves from the revenue receipts for the same object. One great source of expense is the excessive amount of tare arising partly from the construction of the vehicles, and partly from the large number of "return empties." It is very desirable to meet this evil as far as possible, and to improve the carrying capacity of the waggon, by reducing its dead weight in proportion thereto. This has been done on the East Indian by increasing the strength of the axles, and a similar process is going on with the rolling stock of other lines. Economy may also be observed in other ways. The railways in Central and Western India will be aided in this direction by the supplies of native coal now about to be provided; but more may be done by internal management, whether it be by a proper system of effective maintenance, by the careful packing and loading of trains, by keeping down establishments at head quarters or at stations, or by general thrift and avoidance of waste. The prosperity of a railway commences with economical management; for the smaller the expenses the lower can be the rates, and the greater will be the traffic and general success.

70. This is clearly exemplified in the subjoined tables which Mr. Rendel has again prepared on the same basis as those furnished in former reports. It will be seen that the line which is most successful is that which charges less, which does its work for less than the others. The average sums received by the East Indian for carrying one passenger and one ton per mile were last year, on the main line, .378*d.* and 1.013*d.* respectively. On the Great Indian Peninsula these sums were .414*d.* and 1.498*d.*; on the Madras, .374*d.* and 1.194*d.*; on the Bombay and Baroda, .378*d.* and 1.38*d.*; on the Punjab and Delhi, .355*d.* and 1.22*d.*; and on the Eastern Bengal, .378*d.* and 1.236*d.* The average cost of carrying a passenger and a ton of goods one mile on the main line of the East Indian Railway, was .17*d.* and .324*d.* respectively. On the Great Indian Peninsula these figures were .298*d.* and .662*d.*; on the Madras, .216*d.* and .904*d.*; on the Bombay and Baroda, .255*d.* and .606*d.*; on the Punjab and Delhi, .234*d.* and .611*d.*; and on the Eastern Bengal, .242*d.* and .702*d.* The average net earnings from each passenger per mile carried were, on the East Indian, .208*d.*; on the Great Indian Peninsula, .116*d.*; on the Madras, .158*d.*; on the Bombay and Baroda, .123*d.*; on the Eastern Bengal, .136*d.*; and on the Punjab, .121*d.* The average net earnings from each ton per mile carried were, on the East Indian, .689*d.*; on the Great Indian Peninsula, .836*d.*; on the Madras, .29*d.*; on the Bombay and Baroda, .732*d.*; on the Eastern Bengal, .534*d.*; and on the Punjab, .609*d.* The unsatisfactory results on the Madras Railway are explained by the facts that the lowest average goods train load (49 tons compared with 117 on the East Indian Railway), and the highest cost of carrying a ton of goods one mile (.904*d.* compared with .344*d.*) are found on that line.

RETURNS PREPARED BY MR. RENDEL.

" The returns given below are drawn up on the same principles as those given in the Report for 1874, and need not be repeated; but the figures relating to vehicle mileage are omitted in the present instance, nor are any returns given for the Scinde section of the Scinde, Punjab, and Delhi Railway, that section being small, and being entirely detached from the main portion of the line, and not affecting, or being affected by, the general system of trunk lines."

(a) PASSENGER TRAFFIC.

	East Indian Railway.		Great Indian Peninsula.	Madras.	Bombay, Baroda, and Central India.	Punjab and Delhi.	Eastern Bengal.
	Main.	Jubbulpore.					
Average length open, miles	No. 1,280	No. 223½	No. 1,396½	No. 861½	No. 430½	No. 563½	No. 158
(1.) Receipts from passenger traffic.	£ 801,307	£ 77,307	£ 478,531	£ 233,040	£ 223,349	£ 210,031	£ 110,299
(2.) Passenger train miles run	No. 2,244,749	No. 232,957	No. 1,539,189	No. 711,711	No. 563,845	No. 630,142	No. 245,233
(3.) Average passenger train mile receipts.	s. d. 7 1½	s. d. 6 7½	s. d. 6 3½	s. d. 6 4½	s. d. 5 1½	s. d. 6 8	s. d. 9 0
(4.) Number of passengers carried one mile.	No. 808,760,000	No. 93,430,000	No. 277,408,698	No. 160,465,775	No. 144,834,000	No. 143,610,256	No. 79,031,120
(5.) Average sum received for carrying a passenger one mile.	d. 378	d. 399	d. 414	d. 374	d. 378	d. 351	d. 378
(6.) Average number of passengers in a train at any one time.	No. 226	No. 199½	No. 181½	No. 211½	No. 267	No. 228	No. 235
(7.) Average number of passenger trains per diem each way, supposing each train to traverse the whole line open.	No. 2½	No. 1½	No. 1½	No. 1½	No. 1½	No. 1½	No. 2½
(8.) Average number of passengers passing over each mile of line daily (both ways).	No. 1,089	No. 508	No. 600	No. 478	No. 924	No. 710	No. 1,314
(9.) Total working expenses for both goods and passengers, deducting telegraph special and miscellaneous and demurrage receipts from them.	£ 874,796	£ 91,714	£ 987,511	£ 394,917	£ 304,294	£ 230,025	£ 154,401
(10.) Average cost of running a train mile, passenger and goods miles assumed to cost the same.	s. d. 3 2½	s. d. 4 1½	s. d. 4 6½	s. d. 3 8½	s. d. 5 5½	s. d. 4 5½	s. d. 5 9
(11.) Average cost of carrying a passenger one mile.	d. 37	d. 249	d. 208	d. 216	d. 255	d. 234	d. 242

(b.) GOODS TRAFFIC.

Average length open, miles	No. 1,280	No. 223½	No. 1,396½	No. 861½	No. 430½	No. 563½	No. 158
(1.) Receipts from goods traffic	£ 1,620,098	£ 92,136	£ 1,451,584	£ 844,057	£ 342,356	£ 173,963	£ 143,860
(2.) Goods train miles run	No. 3,250,825	No. 213,757	No. 2,353,009	No. 1,410,043	No. 651,322	No. 401,883	No. 288,390
(3.) Average goods train mile receipts.	s. d. 9 11½	s. d. 8 8	s. d. 10 2½	s. d. 4 10½	s. d. 13 5½	s. d. 8 10½	s. d. 10 1½
(4.) Tons of goods carried one mile.	No. 233,693,600	No. 19,347,400	No. 233,024,150	Tons. 69,157,136	No. 58,627,120	Tons. 35,153,680	No. 28,828,160
(5.) Average sum received for carrying one ton one mile.	d. 1013	d. 1142	d. 1498	d. 1194	d. 158	d. 123	d. 1236
(6.) Average number of tons in a goods train at one time.	No. 117½	No. 90½	No. 81½	No. 49	No. 106	Tons. 87½	No. 98½
(7.) Average number of goods trains per diem each way, supposing each train to run over the whole line open.	No. 3½	No. 1½	No. 3½	No. 2½	No. 1½	No. 1½	No. 2½
(8.) Average number of tons of goods passing over each mile of line daily (both ways).	No. 831	No. 237	No. 504	No. 220	No. 380	No. 174	No. 491
(9.) Total working expenses for both goods and passengers, deducting from them telegraph, special and miscellaneous and demurrage receipts.	£ 874,796	£ 91,714	£ 987,511	£ 394,917	£ 304,294	£ 230,025	£ 154,401
(10.) Average cost per train mile, goods and passenger miles assumed to cost the same.	s. d. 3 2½	s. d. 4 1½	s. d. 4 6½	s. d. 3 8½	s. d. 5 5½	s. d. 4 5½	s. d. 5 9
(11.) Average cost of carrying a ton of goods one mile.	d. 324	d. 543	d. 563	d. 904	d. 606	d. 611	d. 702

" From the foregoing the following may be gathered, namely, that the highest average passenger train load (285 persons), was obtained on the Eastern Bengal; the lowest (181·5 persons), occurred on the Great Indian Peninsula Railway. The highest average goods train load (117·7 tons), was obtained on the East Indian Railway; the lowest (49 tons), is found on the Madras line.

" The lowest cost per train mile (3s. 2·14d.) is found on the East Indian, Main Line; the highest (5s. 9d.) on the Eastern Bengal.

" The lowest cost of carrying a passenger one mile (·17d.) is found on the East Indian, Main Line; the highest (·298d.) on the Great Indian Peninsula Railway.

" The lowest cost of carrying a ton of goods one mile (·344d.) is found on the East Indian, Main Line; the highest (·904d.) on the Madras line.

" The lowest average charge for carrying a passenger one mile (·351d.) is found on the Punjab line; the highest (·414d.) on the Great Indian Peninsula.

" The lowest average charge for carrying a ton of goods one mile (1·013d.) is found on the East Indian, Main Line; the highest (1·498d.) on the Great Indian Peninsula.

" The largest passenger traffic (1,214 persons passing over each mile per diem on the average) is found on the Eastern Bengal; the lowest (478) on the Madras.

" The largest goods traffic (821 tons passing over each mile per diem on the average) is found on the East Indian, Main Line; the lowest (174 tons) on the Punjab line."

FARES and RATES in use on the INDIAN RAILWAYS.

Railway.	Passengers.					Goods.					
	Fare for travelling One Mile.					Rate for conveying One Ton One Mile.					
	First Class.	Second Class.	Intermediate Class.	Third Class.	Fourth or Coolie Class.	Of First or Lowest Class.	Of Second Class.	Of Third Class.	Of Fourth Class.	Of Fifth or Highest Class.	Special.
GUARANTEED.	pies.*	pies.	pies.	pies.	pies.	pies.	pies.	pies.	pies.	pies.	pies.
East Indian, Main Line.	18	9	4½	3	—	9·073	13·61	18·146	22·685	27·221	From 4·54 to 9·073.
East Indian, Jubbulpore Line.	18	9	4½	3	—	9·073	13·61	18·146	22·685	27·221	From 5·44 to 9·073.
Great Indian Peninsula.	18	9	—	4	2½	10	14	24	34	48	From 5·5 to 8.
Madras	15	6½	—	3½	2	12	14	18	24	36	From 4 to 10.
			Third Class Mail	Ordinary	—	10	15	21	30	42	Up to 8.
Bombay, Baroda, and Central India.	15	7	4	3	—	10	15	21	30	42	Up to 8.
Sind, Punjab, and Delhi.	18	9	4½	3	—	9·07	13·61	18·14	22·66	27·22	6·80.
South Indian	8	3	—	2	—	12	14†	18†	24	36 to 34	6 to 10.
Eastern Bengal	12	6	—	4½	3	9·88	14	18·66	28	56	9·45 to 10·28.
	Upper	Upper Reserved	Lower	L. Reserved.	Lower Reserved						
Oude and Rohilkund	9	Comptment. 36	3	16 & 24	3	9·08	13·62	18·16	22·70	27·25	5·40 to 6·80.
STATES.	Upper	Lower	Special	—	—	—	—	—	—	—	—
Calcutta and South-Eastern.	9	3	2	—	—	—	—	—	—	—	—
Nalhati	28·13	14·07	—	7·06	4·62	12·71	21·72	30·3	52·79	84·5	8·16.
Anraoti	16	9	—	4	2½	10	14	24	34	48	5·5 to 8.
Khamgaon	18	9	—	4	2½	10	14	24	34	48	8 to 12. "
Rajputana	10·38	4·61	—	2·03	—	13·14	17·83	25·85	—	—	8 to 12.
Wardha Valley	18	9	—	4	2½	10	14	24	34	48	5·5 to 8.
Holkar's	11·8	4·42	—	2·21	—	13·26	19·90	26·53	—	—	8·29.
Punjab, Northern	9·29	4·64	—	1·74	—	10·53	15·80	21·06	—	—	5·26 to 5·45.
Tirhut	13	4·8	—	2·1	—	9·9	14·8	19·8	—	—	5 to 6.
Nizam's	18	9	—	4	2½	10	14	24	34	48	5·5 to 8.

* 8 pies = 1d.

† Rates only in force during the early months of the year.

STATEMENT showing the Cost and Consumption of Fuel at the Point of Delivery on the respective Lines during the Year 1875.

Railway.	Coal.				Coke.				Patent Fuel.				Wood.					
	Quantity in Tons.	Total Cost.	Cost per Ton.	Consumption.		Quantity in Tons.	Total Cost.	Cost per Ton.	Quantity in Tons.	Total Cost.	Cost per Ton.	Consumption.		Quantity in Tons.	Total Cost.	Cost per Ton.	Consumption.	
				Per Train Mile in lbs.	Per Vehicle per Mile.							Per Train Mile in lbs.	Per Vehicle per Mile.				Per Train Mile in lbs.	Per Vehicle per Mile.
East Indian, Main Line	118,531	40,521 0 0	0 6 10	48.23										11	2 6 1 8	2 s. d. 0 11 0.64	lbs.	lbs.
" Jabalpur	8,928	11,617 1 5	1 6 4	44.86														
Great Indian Peninsula	86,596	168,419 17 8	1 18 11	44.96	2.12	1,487	8,881 7 5	2 12 2	.76	.04				2,172	1,068 7 6	0 9 10	1.11	.05
Madras	12,718	35,819 0 0	2 16 4			409	1,240 0 0	3 0 7	.51	.2				68,418	28,097 0 0	0 8 2		
Bombay, Baroda, and	20,290	43,759 0 0	2 3 1	39.24	1.59	263	595 0 0	2 5 3						466	242 0 0	10 10 4	.90	.08
Central India.																		
Sind, Punjab, and	16,506	36,751 2 5	2 4 6	37.46	1.033				8	.01	.0005			16,735	7,426 17 10	0 8 10	27.85	1.047
Delhi.																		
South Indian	4,534	8,757 4 2	1 18 8	28.5	1.57	4	15 1 1	3 15 3	.08	.001				5,170	2,742 18 6	0 10 7	32.5	1.81
Eastern Bengal	12,374	9,632 7 7	0 15 8	51.52		50	27 3 0	0 10 9	.21					40,470	18,744 0 0	0 9 3	90.16	10.20
Oudh and Rohilkund	1,464	2,304 0 0	1 11 0	3.30	.04													
Totals for guaranteed Railways.	281,761	357,600 13 3				2,218	5,758 11 6		4,542	10,202 2 9				138,442	58,327 5 6			
STATE.																		
Calcutta and South-	1,183	1,076 13 0	0 19 2	66.71	3.54									7	3 14 0	0 10 7	0.39	.21
Eastern.																		
Nalhati	516	514 6 0	0 19 11	37.91	3.51									78	124 0 3	1 11 7	.32	.015
Raipurana	8,556	21,263 13 11	2 9 8	34.55	1.64	39	87 13 9	2 14 7	.12	.006				5	9 10 0	0 10 0	2.00	.11
Wardha Valley	196	372 0 0	1 18 0	78.6	4.38									4,194	1,862 10 0	0 8 11	95.86	3.8
Holkars	8	36 12 0	4 11 6											1,127	642 15 8	0 11 6	54	2.84
Punjab, Northern																		
Tirhut	88	62 0 0	0 14 0	1.4	2.5									61	27 10 0	0 9 0	.37	.04
Nizam's	2,608	5,924 16 0	2 5 6	41.51	1.85													
BEHAR.																		
Aurangzi	149	350 0 0	2 7 0	68.6	4.29									11	5 0 0	0 9 1	4.70	.32
Khangraon	100	237 5 0	2 7 5	57.5	3.17									11	5 0 0	0 9 1	6.32	.35
Total for all Railways -	296,160	387,438 3 2				2,245	5,846 4 3							138,936	61,000 5 5			
Indus Steam Flotilla														43,718	18,632 7 11	0 8 6		
Totals for Railways and Flotilla.	296,160	387,438 3 2				2,245	5,846 4 3							182,654	79,638 8 4			

STATEMENT showing the QUANTITIES of the principal Articles of MERCHANDISE, &c., carried on the INDIAN RAILWAYS in 1874 and 1875.

Articles.	East Indian, Main Line.		East Indian, Jabalpur Line.		Great Indian Peninsula.		Madras.		Bombay, Baroda, and Central India.		Sind, Punjab, and Delhi.		Eastern Bengal.		Oude and Rohilkund.		South Indian.	
	1875.	1874.	1875.	1874.	1875.	1874.	1875.	1874.	1875.	1874.	1875.	1874.	1875.	1874.	1875.	1874.	1875.	1874.
Cloth	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	See piece goods.	515,904	505,519	9	2,506	—	—	—	—	—	—	—	—	—	—	—	—	—
Cocoa-nuts	See dried fruits.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Coffee	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cotton	32,867	21,847	1,676	1,491	101,280	110,700	5,799	5,783	See piece goods.	2,742	434	—	—	—	—	—	—	—
Dried Fruits	5,430	5,081	2,911	2,797	18,667	12,444	494	324	1,576	3,768	730	507	4,443	8,643	1,986	1,402	—	—
Firewood	18,552	12,346	11,530	8,817	34,977	25,741	11,529	9,588	5,374	8,025	14,121	14,848	—	—	—	—	—	—
Grain	69,686	340,248	18,114	63,639	215,784	232,086	24,117	38,888	44,384	32,188	65,700	244,988	14,271	15,241	75,301	39,439	41,940	36,940
Green Fruits and Vegetables	—	—	—	—	14,029	12,336	5,187	5,537	8,968	12,988	9,145	2,209	—	—	1,668	1,450	2,498	3,513
Hides	19,170	22,913	1,462	885	5,573	2,693	9,118	6,152	701	688	2,784	2,734	6,184	5,835	2,118	2,179	1,213	807
Iron	39,875	60,720	3,769	4,348	—	—	8,992	6,817	See metal.	22,223	36,906	29,778	7,389	9,058	40,712	17,548	—	—
Jaggery and Sugar	65,496	50,686	22,203	20,146	25,686	20,956	14,159	13,427	27,909	—	—	—	94,694	113,407	819	570	—	—
Jute	620	1,016	331	265	—	—	—	—	—	—	—	—	667	620	8,618	4,763	—	—
Metal and Hardware	—	—	—	—	18,465	39,176	—	—	7,800	5,809	1,870	1,829	212	684	7,032	8,271	—	—
Military Stores	21,157	14,488	1,343	886	7,591	7,366	3,556	4,197	1,665	1,677	11,068	10,553	—	—	648	630	2,123	1,385
Oil	3,517	3,088	86	66	10,115	9,259	6,758	5,970	1,422	1,842	Included in glue and oil in drugs and medicines.	—	16	21	523	332	—	—
Opium	6,531	7,648	—	—	3,426	4,311	—	—	1,354	902	—	—	—	—	—	—	—	—
Piece Goods	47,149	44,872	5,080	4,755	12,595	16,278	—	—	7,589	7,280	9,903	9,827	10,263	10,239	8,691	4,930	—	—
Rice	110,057	449,978	2,051	1,792	See grain.	65,802	75,118	63,742	See grain.	32,117	Included in edible grain.	—	22,840	101,452	—	—	—	—
Salt	148,919	128,182	6,609	5,214	70,572	65,802	47,996	48,051	38,246	—	11,055	11,346	3,776	3,117	26,603	24,734	11,401	11,401
Seeds	159,714	129,586	11,396	9,570	112,785	63,801	16,921	15,029	28,528	8,969	60,184	26,453	22,081	35,623	10,805	7,158	7,508	6,251
Silk	718	664	118	71	897	452	—	—	See piece goods.	—	122	138	117	222	—	—	—	—
Timber	19,917	19,154	6,401	1,088	22,406	15,569	17,327	14,797	9,981	7,691	3,719	6,217	—	—	18,838	17,022	—	—
Tobacco	8,930	9,808	1,064	1,354	3,677	3,313	6,127	6,352	8,100	7,537	947	935	9,017	14,532	357	352	892	944
Twist	2,729	1,869	393	264	5,708	4,928	4,389	4,095	9,183	1,573	1,280	743	—	—	625	693	—	—
Wines, Spirits, &c.	8,979	7,135	398	439	4,001	4,254	2,980	1,923	619	630	2,717	2,645	381	189	2,455	2,704	—	—
Wool	—	—	—	—	211	162	—	—	2,185	1,950	5,798	3,963	—	—	—	—	—	—

STATEMENTS relating to the PASSENGER and GOODS TRAFFIC and the GROSS

TABLE NO. 1.—STATEMENT of TRAFFIC on the INDIAN

Railway.	Actual Number of Miles open on 31st December, and Average Number of Miles of Open Line during 1875.						Number of Miles of Sidings on 31st December 1875.	Passenger Traffic.						
								Number of Passengers (exclusive of Holders of Season and Periodical Tickets).						Number of Holders of Season and Periodical Tickets.
	Double.		Single.		Total.			By First Class.	By Second Class.	By Intermediate Class.	By Third Class.	By Fourth or Coolie Class.	Total by all the Classes.	
	Actual.	Average.	Actual.	Average.	Actual.	Average.								
GUARANTEED.														
East Indian, Main Line	410½	410½	889½	889½	1,370½	1,370½	281	44,911	110,620½	420,571½	5,486,935½	—	6,062,028½	8,676½
East Indian, Jabalpur Line	—	—	223½	223½	223½	223½	21½	4,484½	16,512	5,956½	227,142½	—	264,096½	—
Great Indian Peninsula	327½	327½	989	939	1,266½	1,366½	203½	27,437	100,321	—	903,228	2,209,563	3,340,238	890
Madras	3½	3½	853	853	861½	861½	90½	13,344	51,974	—	1,832,393½	837,966	2,735,377½	98
Bombay, Baroda, and Central India	29½	29½	407	407	430½	430½	73	20,909	174,348	—	Third Class Mail 854,217	3,534,860	4,064,339	5,270
Sind, Punjab, and Delhi	4½	4½	659	659	663½	663½	103½	17,503	42,443	20,336½	2,173,067	—	2,353,247½	—
South Indian	—	—	283	217	283	217	23	3,270½	24,061½	—	1,020,100	—	1,556,733	4
Eastern Bengal	—	—	167½	158½	167½	158½	39½	32,185½	56,568	—	367,625	1,256,832½	1,710,286	2,533
Ordn and Bobilkhand	—	—	544½	544	544½	544	49½	Upper 15,508	—	—	Lower 2,463,839½	—	2,362,237½	—
STATE.														
Calcutta and South-eastern	—	—	23	23	23	23	6½	Upper 2,157	—	—	Lower 490,100½	—	492,257½	—
Nalhati	—	—	27½	27½	27½	27½	1½	577	2,253½	—	22,405	55,889½	61,065	—
Amraoti	—	—	6	6	6	6	2	609	1,093	—	33,034	64	55,890	—
Khamgaon	—	—	8	8	8	8	4	176	389½	—	4,178	3,751	8,463½	—
Nizam's	—	—	131	131	131	131	7	3,616	8,333	—	33,998	219,979½	265,226½	13
Wardha Valley	—	—	19	19	19	19	—	300	291½	—	1,430½	11,467	13,389	—
Tirhut	—	—	44	—	44	—	4½	197	466	—	12,740	—	14,403	—
Punjab, Northern	—	—	63	44½	63	44½	4	1,500	4,225	—	250,390	—	265,175	—
Rajputana	—	—	378½	344½	378½	344½	29½	3,789	10,401	—	985,653	—	998,853	10
Holkar's	—	—	57	55½	57	55½	3	986	6,003	—	175,340	—	182,328	—
Totals for Railways	769	769	5,092½	5,529½	6,461½	6,298½	946½	195,448½	617,580½	452,764½	17,283,523	3,320,261½	26,769,578	17,489½
Indus Steam Flotilla	—	—	—	—	575	575	—	244	219	—	2,390½	—	2,609½	—
Totals for Railways and Flotilla					7,036½			195,692½	617,799½		17,292,913½		26,779,437½	

RECEIPTS and EXPENSES for the Year ended 31st December 1875.

RAILWAYS during the Year ended 31st December 1875.

Goods Traffic.											
Number of Live Stock.	Number of Tons of Minerals.			Number of Tons of General Merchandise.							
	Number of Tons of Coal and Coke.	Number of Tons of all other Minerals.	Total Number of Tons of Minerals.	Of First or Lowest Class.	Of Second Class.	Of Third Class.	Of Fourth Class.	Of Fifth or Highest Class.	Special and Sundry.	Total of all Classes.	
5,388	515,904	—	515,904	750,412	123,461	47,747	23,387	3,613	75,409	1,034,040	
71	9	—	9	102,520	13,590	6,629	1,640	217	4,066	123,662	
274,300	577	—	577	440,408	169,050	30,875	33,400	4,690	256,832	944,835	
15,373	—	—	—	156,815	50,773	24,755	8,448	4,720	100,011	414,527	
200,651	1,576 27,169*	18,376*	47,121	93,484	49,637	47,311	1,134	1,223	201,303	394,495	
455	1,055	—	1,055	151,940	54,316	25,037	15,974	2,653	132,969	382,094	
3,707	—	—	—	74,689	64	16	1,373	77	46,020	121,245	
2,047	4,442	3,902	8,344	31,657	37,464	3,295	1,676	202	102,779	237,075	
32	1,986	—	1,986	84,194	12,315	11,893	4,222	527	194,220	297,475	
111	42	—	42	—	—	—	—	—	22,095	22,095	
—	4,797	—	4,797	2,417	1,082	1,113	431	23	1,839	6,905	
—	—	—	—	2,346	10,385	1,034	145	70	—	26,981	
—	—	—	—	4,893	19,460	150	42	4	—	24,279	
512	—	—	—	22,926	5,309	2,707	227	173	—	37,464	
—	—	—	—	6,892	7,479	141	23	2	—	14,228	
—	—	—	—	3,103	369	64	—	—	24	3,560	
—	—	—	—	7,116†	1,269†	232†	—	—	8,014†	16,013†	
11	139	—	139	123,079	4,411	1,322	—	—	23,313	162,170	
—	—	—	—	46,560	3,755	2,911	—	—	14,566	68,112	
505,621	557,696	22,378	579,974	2,136,751†	580,694†	207,227†	92,293	18,705	1,211,401†	4,347,157†	
—	—	—	—	—	—	—	—	—	—	41,400	
—	—	—	—	—	—	—	—	—	—	4,388,549†	

* On Company's account.

STATEMENT of TRAFFIC on the INDIAN RAILWAYS

	Number of Engines and Vehicles used in conveying Traffic.												Number of Miles in shunting			
	Engines.	Carriages.						Trucks.	Average Number of Vehicles in each Train.				By Passenger (including Special and Troop) Trains.	By Goods (including Construction Materials for other Railways) Trains.	By Mineral Trains.	
		First Class.	Second Class.	Intermediate Class.	Third Class.	Fourth Class.	Total Number.		Carriages in each Passenger Train.	Trucks in each Goods Train.	In each Mixed Passenger and Goods Train.					
											Carriages.	Trucks.				
GUARANTEED.																
East Indian, Main Line, 1st half	414	73	66	81	324	—	564	6,340	10½	23½	16½	8½	1,207,048	2,653,782	210,888	
2nd "	393	73	46	103	324	—	598	5,385	16½	28½	17½	7½				
" Jabalpur Line—	36	1st half 8	14	4	30	—	56	881	14½	25½	7½	10	178,238	108,870	110½	
	36	2nd " 8	14	4	30	—	56	881	14½	23½	7½	19½				
Great Indian Peninsula	331	79	146	composite 87	380	67	748	6,760	14½	26½	10½	15	1,301,185	2,489,594	—	
Madras	96	36	68	composite 33	260	38	358	2,972	9	19	6	10	28,204	522,138	—	
Bombay, Baroda, and Central India	62	13	25	composite 16	144	—	198	2,516	9½	43	9½	14	453,190	306,428	—	
Sind, Punjab, and Delhi	39	36	51	20 Royal saloon carriages	205	—	314	2,865	13½	34	11½	13½	479,010	457,989	—	
South Indian	60	33	13	3	139	—	248	964	—	—	23		—	—	—	
Eastern Bengal	43	31	16	—	37	56	249	762	14	40	4	31	192,435	145,304	—	
Oudh and Rohilkhand	60	Upper 19	—	composite 21	Lower 209	—	249	820	11	19	10	11	11,240	128,898	—	
STATE.																
Calcutta and South-eastern	6	Upper 9	—	—	Lower 32	—	61	281	—	—	8	16	—	—	—	
Nelbati	5	2	—	1	—	5	8	17	—	—	6	7	—	—	—	
Amraoti	2	—	—	composite 1	2	1	5	33	—	23	5	10	18	144	—	
Khamgaon	2	—	—	composite 1	2	2	5	33	—	23	3	14	—	648	—	
Nizam's	5	4	6	composite 1	10	10	31	70	11	22	12	16	10,630	41,132	—	
Wardha Valley	1	—	—	composite 1	2	3	5	23	13	14	4	15	—	1,204	—	
Tirhut	6	2	1	—	7	—	11	91	—	23	8	3	44	1,432	—	
Punjab, Northern	9	8	4	—	31	—	43	104	—	—	13	6	—	—	—	
Rajpootana	51	23	11	—	63	—	116	806	15	25	11	9	4,205	125,698	—	
Holkar's	17	6	5	—	30	break vans 3	44	255	12	19	5	21	43,492	37,183	—	
Totals													3,908,030	7,161,250	210,974	

during the Year ended 31st December 1875—continued.

travelled by Trains (except piloting, and assisting).					Number of Ton Miles (expressed in the Number of Tons moved One Mile).												
By Mixed Passenger and Goods Trains.		By Trains conveying Materials for Revenue Purposes.	Total Number of Train Miles.	Number of Train Miles per open Mile.	Excess Luggage, Parcels, Carriages, Horses, Dogs, &c. conveyed in Passenger Trains.	Goods Traffic.											
(P.)	(G.)					Minerals.	General Merchandise.							Total Mineral and General Merchandise.	Proportion of Up and Down Traffic.		
							First or Lowest Class.	Second Class.	Third Class.	Fourth Class.	Fifth Class.	Special and Sundry.	Total of all Classes.		Up.	Down.	
1,037,703	385,173	100,260	5,613,340	4,386'67	Lug. and parcels. 2,572,288 carga., &c. 1,383,035	62,815,040	181,300,108	55,001,328	16,908,960	8,240,044	1,334,022	62,303,421	206,274,550	338,480,566	48'48	50'57	
60,689	102,709	8,457	446,181	2,008'08	Lug. and parcels. 420,005 carga., &c. 103,470	2,068	14,130,362	2,782,571	1,201,579	352,842	40,723	803,338	19,348,930	19,348,930	48'17	51'53	
226,084	363,505	—	4,382,198	3,461	—	84,583	119,928,335	52,201,704	9,371,288	7,346,433	1,468,120	41,178,623	231,790,501	231,864,140	68	31	
663,507	893,915	—	2,187,759	2,430	1,141,078	—	26,324,179	8,773,782	4,140,754	1,706,587	533,628	27,452,187	63,489,907	68,400,907	60'37	39'53	
105,635	183,892	43,059	1,138,235	2,602	Luggage only. 293,134	5,705,728	15,817,468	10,286,842	11,760,491	215,612	470,008	18,661,058	57,401,404	68,107,222	55'59	44'41	
226,413	100,609	62,237	1,346,232	3,029	Luggage, &c. 683,611 No. of horses, &c. 11,406 carga., &c. 103,067	230,433	18,295,768	9,792,192	3,695,776	2,145,771	411,625	17,367,467	51,308,507	51,529,040	54	36	
345,054		11,541	356,585	1,043	—	—	4,785,040	1,223	810	127,745	2,008	3,340,107	3,767,189	3,767,189	34	66	
52,782	146,094	—	533,681	2,372	263,637	308,651	2,283,982	4,770,068	379,251	106,937	24,628	20,172,400	27,928,366	28,326,007	17'75	69'22	
400,024	400,024	27,237	1,005,423	1,946	337,784	69,568	5,343,950	1,380,766	1,339,886	524,570	38,561	20,335,068	26,923,148	26,923,148	—	—	
21,665	13,055	98	39,818	1,429	3,151	788	—	—	—	—	—	747,334	747,334	748,117	99'08	0'02	
12,361	28,129	436	30,925	1,135	7,783	130,051	53,204	32,275	29,989	11,591	632	50,114	179,886	310,536	78'52	21'48	
2,235	2,855	—	5,244	874	—	—	50,207	90,033	6,283	879	421	—	162,863	162,863	—	—	
823	2,435	—	3,806	487	—	—	37,809	100,637	1,212	340	28	—	195,724	195,724	—	—	
49,262	39,481	—	140,455	1,161	—	—	2,469,206	547,312	260,697	29,384	18,171	—	3,304,670	3,304,670	—	—	
888	2,500	—	5,886	204	—	—	131,818	148,000	2,711	433	58	—	277,784	277,784	—	—	
3,067	2,301	—	6,364	156	1,232	—	110,102	16,538	2,709	—	—	1,050	128,797	128,797	30'9	69'3	
35,146	24,836	—	46,982	757	Luggage, &c. 21,353 Carriages, horses, &c. 50,433 192,506	—	276,479	67,635	120,146	—	—	64,133	532,801	526,391	68'18	31'82	
216,428	177,508	51,090	554,737	1,622	—	20,428	11,848,930	445,523	167,554	—	—	418,408	12,878,524	12,898,977	46'06	53'04	
2,155	2,683	8,289	143,722	2,581	36,581	—	2,381,373	182,580	137,383	—	—	469,016	3,136,581	3,136,581	0'27	99'73	
3,143,751	2,344,654	336,589	17,950,413	—	7,228,461	94,806,963	408,768,511	145,776,311	40,683,895	21,149,877	4,309,310	164,648,521	810,790,235	905,697,217			
345,054		—	—	—	—	—	—	—	—	—	—	—	—	—			
6,388,465		—	—	—	—	—	—	—	—	—	—	—	—	—			

Railway.	Passenger Traffic.													Receipts from Live Stock.
	Receipts from Passengers.							Total Receipts from Excess Luggage, Parcels, Carriages, Horses, Buses, &c. conveyed in Passenger Trains.	Receipts for Mail Service.	Receipts from Special Trains.	Receipts from Troop Trains.	Total Receipts from Passenger Traffic—(1.)	Passenger Receipts per Train Mile.	
	First Class.	Second Class.	Intermediate Class.	Third Class.	Fourth or Coolie Class.	Holders of Season or Periodical Tickets.	Total Receipts from Passengers.							
GUARANTEED.	£	£	£	£	£	£	£	£	£	£	£	£	£	£
East Indian, Main Line	42,363	33,806	22,326	574,997	—	2,516	692,950	69,177	3,937	17,626	18,563	401,537	7'139	800
„ Jabalpur Line	5,702	4,400	2,350	45,068	—	—	57,520	7,444	985	5,505	5,573	77,997	0'086	28
Great Indian Peninsula	31,097	27,112	—	144,058	154,245	1,046	357,061	60,063	2,241	2,967	47,278	475,530	0'26	6,570
Madras	12,964	14,812	—	126,565	51,500	113	195,853	24,524	—	5,678	—	226,050	0'352	2,651
Bombay, Baroda, and Central India	6,055	11,725	Third class. Mail 40,870	Ordinary 123,124	—	2,583	194,157	18,245	165	6,447	7,325	228,349	0'10	11,489
Sind, Panjab, and Delhi	12,875	15,263	2,816	165,688	—	—	195,612	28,512	1,022	1,313	—	221,450	0'28	110
South Indian	327	1,819	—	48,025	—	10	50,581	3,019	6	569	55	54,220	0'14	32
Eastern Bengal	4,014	3,134	—	22,559	67,944	1,297	90,068	10,635	70	510	—	110,279	7'59	27
Oudh and Rohilkhand	Upper 6,093	—	—	Lower 122,845	—	—	128,937	2,434	—	215	—	127,598	0'54	11
STATE.														
Calcutta and South-eastern	Upper 187	—	—	Lower 5,266	—	—	5,453	211	—	—	—	6,364	0'27	11
Nalhati	179	243	—	1,104	3,043	—	4,530	605	30	10	—	5,524	0'31	—
Amraoti	20	42	—	610	—	—	631	40	—	—	—	740	0'50	—
Khamgaon	11	12	—	67	38	—	122	23	—	—	—	151	0'07	—
Nizam's	1,202	1,316	—	2,314	15,115	6	19,656	2,572	—	222	2,093	25,158	0'30	18
Wardha Valley	22	21	—	57	256	—	366	20	—	—	—	396	0'26	—
Tirhut	80	37	—	555	—	—	622	15	—	19	—	666	4'41	—
Punjab, Northern	894	469	—	5,000	—	—	5,923	466	—	246	—	6,704	6'04	—
Rajputana	1,145	1,727	—	54,206	—	26	57,122	4,142	—	465	—	61,730	5'03	17
Holkar's	225	483	—	6,451	—	—	7,159	602	—	94	18	7,859	5'43	—
Totals for Railways	125,978	114,173	94,481	1,463,738	270,551	9,409	2,078,045	225,085	7,246	50,890	51,270	2,463,125	—	21,845
Indus Steam Flotilla	1,471	334	—	4,083	—	—	5,887	595	—	—	—	6,482	—	—
Totals for Railways and Flotilla	127,449	114,507	94,481	1,467,821	270,551	9,409	2,083,932	225,680	7,246	50,890	51,270	2,469,607	—	21,845

during Year ended 31st December 1875.

Goods Traffic.																	
Receipts from Minerals.			Receipts from General Merchandise (exclusive of Live Stock and Minerals).							Total Receipts from Goods Traffic—(G.)	Goods Receipts per Train Mile.	Total Receipts from Passenger and Goods Traffic—(P.) + (G.)	Passenger and Goods Receipts per Train Mile.	Total Miscellaneous Receipts—(M.)	Miscellaneous Receipts per Train Mile.	Total Receipts from Passengers, Goods, and Miscellaneous—(P.) + (G.) + (M.)	Total Receipts per Train Mile.
From Coal and Coke.	From other Minerals.	Total Receipts from Minerals.	From First or Lowest Class.	From Second Class.	From Third Class.	From Fourth Class.	From Fifth or Highest Class.	From Special and Sunday.	Total.								
£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
234,110	—	234,110	619,540	351,133	146,743	80,639	17,183	172,499	1,337,761	1,022,679	9'356	2,463,966	8'807	85,671	311	2,569,637	9'118
5	—	5	54,747	17,705	11,313	3,600	616	4,388	92,168	92,168	8'687	169,493	7'606	15,550	996	185,042	8'304
478	—	478	559,321	468,733	118,564	106,325	38,456	164,220	1,460,600	1,467,660	10'22	1,936,196	8'84	36,890	17	1,973,086	9'01
—	—	—	126,389	56,402	33,316	18,028	8,838	98,928	240,906	343,647	4'853	569,687	5'364	19,797	136	589,484	5'540
807	805	1,112	81,430	63,626	94,439	8,234	10,079	77,437	350,254	342,865	13'44	571,204	10'24	14,351	26	585,455	10'50
735	—	735	83,143	60,403	33,478	26,529	5,503	60,115	208,970	209,324	9'66	461,283	7'77	20,654	33	511,937	8'10
—	—	—	27,842	11	3	1,515	73	12,169	41,643	41,735	9'42	95,985	5'66	6,704	4	102,689	5'96
1,365	197	1,562	10,623	31,887	3,380	3,619	459	95,133	144,301	145,600	13'76	256,169	9'87	12,811	48	268,980	10'08
211	—	211	27,517	10,131	13,038	6,559	580	71,830	130,002	130,234	4'84	267,310	5'59	6,936	14	274,246	5'73
4	—	4	—	—	—	—	—	3,839	2,839	3,834	3'16	9,208	4'64	1,167	59	10,365	5'22
733	—	733	384	332	473	303	27	264	1,783	2,566	2'33	7,890	5'18	62	03	7,952	5'21
—	—	—	1,286	3,075	242	40	98	—	4,670	4,670	31'14	5,416	20'63	10	00	5,426	20'6
—	—	—	539	3,075	40	16	1	—	3,671	3,671	23'89	3,822	19'62	11	00	3,833	19'68
—	—	—	12,003	4,338	2,994	465	386	—	20,186	20,204	6'02	45,340	6'46	174	02	45,514	6'48
—	—	—	1,013	1,152	66	12	2	—	2,240	2,240	9'52	2,638	9'43	39	14	2,677	9'37
—	—	—	634	117	28	—	—	4	783	783	4'22	1,469	4'28	9	03	1,478	4'31
—	—	—	2,234	592	1,251	—	—	287	4,364	4,364	5'89	14,068	5'99	208	09	14,276	6'06
273	—	273	79,519	5,338	3,347	—	—	20,081	108,083	108,378	7'150	170,106	6'503	4,020	177	174,126	6'086
—	—	—	17,266	1,660	2,016	—	—	2,571	23,513	23,513	5'24	31,343	4'65	608	09	31,951	4'79
238,785	503	239,287	1,705,463	1,078,598	468,608	250,484	82,028	783,595	4,358,826	4,319,068	—	7,073,094	—	226,153	—	7,299,247	—
—	—	—	—	—	—	—	—	—	—	78,546	—	—	—	—	—	85,487	—
238,785	502	239,287	1,705,463	1,078,598	468,608	250,484	82,028	783,595	4,358,826	4,008,506	—	7,073,094	—	226,153	—	7,364,277	—

TABLE No. 4.—EXPENDITURE ON REVENUE ACCOUNT

[illegible]

during Year ended 31st December 1875.

Rates and Taxes.			Compensation for Personal Injury, &c., Damage and Loss of Goods.				Legal and Parliamentary Expenses.			Miscellaneous Working Expenditure, not included in the foregoing.			Total Working Expenditure.		
Gross.	Per Train Mile.	Per cent. of Gross Receipts.	Gross.		Per Train Mile.	Per cent. of Gross Receipts.	Gross.	Per Train Mile.	Per cent. of Gross Receipts.	Gross.	Per Train Mile.	Per cent. of Gross Receipts.	Gross.	Per Train Mile.	Per cent. of Gross Receipts.
			Personal.	Goods.											
£	d.		£	£	d.		£	d.		£	d.		£	d.	
4,815	21	19	—	1,449	06	06	737	03	03	148,570	6 40	5 93	903,055	8 43	35 37
—	—	—	—	110	06	06	1	—	—	14,481	7 60	7 83	107,330	5 82	35 00
3,636	17	13	746	Or. 653	—	—	733	04	04	80,889	4 59	4 53	532,787*	4 36	47 23
377	09	15	—	389	06	09	617	07	11	39,684	4 56	6 77	414,805	3 89	70 23
685	14	12	35	102	03	03	2,396	40	41	47,029	9 87	8 13	318,544	5 00	34 41
193	03	04	1,120	4,343	97	1 06	560	10	11	40,178	8 77	9 6	328,097	4 87	64 06
336	12	8	—	13	—	—	2	—	—	6,831	4 0	6 7	49,776	2 8	43 5
675	8	25	—	531	94	19	190	09	07	25,708	11 55	9 56	167,101	6 27	62 15
—	—	—	5	768	13	28	—	—	—	29,093	6 84	10 58	164,276	3 36	29 70
75	46	73	—	—	—	—	—	—	—	1,156	7 17	11 44	5,343	4 10	80 49
4	53	05	24	3	21	34	—	—	—	875	6 79	11 03	6,138	8 9	77 26
—	—	—	—	—	—	—	—	—	—	—	—	—	4,139	16 74	76 04
—	—	—	—	—	—	—	—	—	—	—	—	—	2,533	13 02	66 03
—	—	—	—	—	—	—	—	—	—	423	73	94	51,341	7 38	113 90
—	—	—	—	—	—	—	—	—	—	159	6 83	5 95	2,367	10 26	107 22
—	—	—	—	—	—	—	—	—	—	—	—	—	1,067	3 16	73 6
—	—	—	—	3	03	03	—	—	—	1,316	6 72	9 22	2,058	3 48	56 45
—	—	—	5	153	06	09	—	—	—	18,230	7 88	10 43	111,246	4 01	63 07
—	—	—	3	4,248	7 10	13 51	3	01	03	4,071	6 89	12 75	30,546	4 26	95 75
10,697	—	—	1,933	11,633	—	—	5,136	—	—	477,275	—	—	3,072,063	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	67,870	—	79 82
—	—	—	—	—	—	—	—	—	—	—	—	—	3,739,933	—	—

*Exclusive of 97,342l. 10s. 8d. charged to special funds.

SUMMARY.

71. The principal facts noted in the foregoing pages may be briefly summed up as follows: During the year 1875, 261 miles were added to the open system of Indian railways, bringing the whole extent now completed up to 6,497 miles, of which 768 are constructed with a double, and 5,729 with a single line: 5,676 are on the 5' 6" gauge, and 821 on the narrow gauge. The section of the South Indian Railway between Madura and Tuticorin was opened in December last by His Royal Highness the Prince of Wales. Fair progress has been made on the works of the Indus Valley and Punjab Northern Railways. The line towards Darjeeling has also been getting on fairly. Sanction has been given to the completion of railway communication between Bombay and the North-West Provinces, via Ajmere, to which place lines have lately been constructed, both from Agra and Delhi. In other parts of India works are going on. Authority has been given to take in hand railways which, in addition to the lines already-executed, will bring the whole length of railway up to 9,415 miles.

72. His Royal Highness the Prince of Wales during his visit to India travelled over 4,829 miles of railway, and expressed his satisfaction with the arrangements which had been made for his comfort and convenience.

73. During the year, 288,186 tons of railway materials were despatched to India from this country, of which 124,192 consisted of fuel. Since the commencement of railway operations there, 5,181,724 tons of goods, of the value of 34,659,444*l.* have been shipped in 8,495 ships.

74. The proprietors of stock and debentures of the guaranteed lines number 62,608, of whom only 390 are natives residing in India. The proportion of stock held in India is 1.56 per cent. of the whole.

75. The total amount expended on the railways to the 31st March last was 105,790,929*l.*, of which 93,720,794*l.* consisted of guaranteed capital, and 12,070,135*l.* of funds raised direct by the Government. Last year 2,760,940*l.* was expended on State lines, and 1,279,000*l.* on guaranteed lines.

76. The revenue derived last year from the open lines was 3,647,868*l.* The gross receipts were 7,412,179*l.*, and the expenditure 3,764,311*l.* The passengers earned 2,459,043*l.*, goods 4,703,509*l.*, and miscellaneous receipts amounted to 249,527*l.* The sums advanced to the different companies for guaranteed interest amounted to 4,650,346*l.*, which was 1,073,832*l.* more than they yielded.

77. The number of passengers carried was 26,779,437, being 2,498,978 more than the previous year. The proportion per cent. of the first class was 0.78, of the second 2.30, and of the lower classes 96.92. The number of tons carried was 4,388,649. The proportion per cent. of the gross revenue from goods was 65.67, and from passengers 34.33. The number of miles travelled by trains was 17,950,312, compared with 18,475,322 of 1874.

78. One very serious accident happened during the year, which caused the death of nine passengers, and injury to 13 more. The engine of a mail train ran off the rails on the Jubbulpore branch of the East Indian Railway. It is supposed that the cow-catcher attached to the locomotive dropped off and got under the engine when going at full speed.

79. Other accidents occurred to passengers, but they were occasioned by the imprudence or misconduct of the sufferers. Of railway servants, eight were killed and 25 injured from causes beyond their control, and 93 were killed and 173 injured by preventible causes. The total number of accidents to trains was 868, compared with 767 of the previous year. They are principally caused by cattle trespassing.

80. The expenses of maintaining and working the railways amounted to 3,764,311*l.* compared with 3,841,522*l.* of the previous year. This outlay is, in several cases, augmented by the heavy cost of repairs in consequence of the damage done by floods. But one great source of ordinary expenditure is the large amount of tare, arising partly from the construction of the vehicles, and partly from the unequal stream of traffic up and down the lines.

81. The impressions left after a personal inspection of the railways are briefly these:—That they are conferring immense benefits on the country: that they are

upon the whole in good condition, and carefully managed: that they may do more than has hitherto been done for the development of traffic, and for the increase of profits: that a decrease in the rates of some of the present charges for conveyance, and an increase of facilities would assist to accomplish these objects: that measures of this description have been and are still being taken: that close attention is required to the expenses of working and maintenance in order to secure economy: that the extension of the present system, and the construction of light feeders is much to be desired, whenever the state of the finances of the country admits of the necessary expenditure.

I have the honour to be,
 My Lord Marquis,
 Your lordship's very obedient humble servant,
 JULAND DANVERS.

APPENDIX.

THE INDIAN RAILWAYS, 1876.

GUARANTEED LINES.

1. East Indian. 1,503 $\frac{3}{4}$ miles.
Calcutta to Allahabad, 629 miles; thence north-west to Delhi, 389 miles, and south-west to Jabalpur, 228 miles; also the chord line between Bardwan and Lakhmisarai, with a mineral branch to Karharbali.
2. Great Indian Peninsula. 1,286 $\frac{3}{4}$ miles.
1. The north-eastern line from Bombay to Bhusawal and Jabalpur, and from Bhusawal to Nagpur. 2. The south-eastern line from Bombay to Raichur, which is the junction with the Madras line.
3. Madras. 857 $\frac{3}{4}$ miles.
1. South-western line to Beypur, with a branch to Bangalor, 492 miles; and another sanctioned to the foot of the Nilgiri mountains, 25 miles; also an extension from Bangalor to Mysore, 88 miles, surveying. 2. North-western line to Raichur, the junction with the Great Indian Peninsula, with a branch to Belari, 340 miles.
4. Bombay, Baroda, and Central India.
Bombay to Ahmedabad, and thence to Wadwan, 389 $\frac{1}{2}$ miles, with a branch from Anand to Dakor and Pali, 31 miles.
5. Sind, Punjab, and Delhi. 674 miles.
Delhi to Lahore and Mooltan in the Punjab, and Kotri to Karachi in Sind.
6. South Indian (late Great Southern of India and Carnatic, now amalgamated).
Nagapatam to Erod junction, 168 miles; and from Trichinopoli to Tuticorin, 215 $\frac{1}{2}$ miles, completed. Extensions in progress from Madras to Tanjor, 216 miles.
7. Eastern Bengal. 156 $\frac{1}{2}$ miles. Calcutta to Goalandu.
8. Oudh and Rohilkhand.
Benares to Moradabad, 414 miles; Cawnpore to Lucknow, 45 miles; Nawabganj to Bahram Ghat, 22 miles; Chanausi to Aligarh, 61 miles; being 542 miles open.

STATE LINES.

9. Calcutta and South-eastern. 28 miles.
Calcutta to Canning, on the Mutla River.
10. Nalhati. 27 $\frac{1}{2}$ miles. A branch from the East Indian Railway at Nalhat to Morshedabad.
11. Khamgaon. 7 $\frac{1}{2}$ miles. A branch from the Great Indian Peninsula Railway to Khamgaon.
12. Amraoti. 5 $\frac{1}{2}$ miles. A branch from the Great Indian Peninsula Railway to Amraoti.
13. Patri. 22 miles.
A branch from the Bombay, Baroda, and Central India Railway to the salt works on the Runn of Cutch.
14. Tirhut. 53 miles. Chumpta Ghat to Darbhanga.
15. Hyderabad. (*Nizam's Line*).
Wadi on the Great Indian Peninsula Railway to Hyderabad and Secunderabad, 121 miles.

STATE LINES NOT COMPLETED.

16. Punjab, Northern.
Lahore to Peshawar, 329 miles. Completed as far as Jhelum, 103 miles.

17. Rajputana.

1. Agra to Jeypur and Ajmere, with a branch to Sambhar Lake, 201.

2. Delhi to Bandikui, and branch to Farruckhnagar, 142 miles; open from Ajmere to Nasirabad. 3. Indore to Neemuch and Ajmere, 450 miles.

18. Indus Valley.

Mooltan to Kotri, 493 miles. In progress.

19. Indore and Khundwa. (*Holkar's Line.*) 86 miles.

From Khundwa completed to the Nerbudda River.

20. Wardha Valley. 45 miles. Sanctioned from Wardha to Warora. Opened from Wardha, 18 miles.

21. Nagpur and Chattisgarh. 131 miles. In progress.

22. Carwar to Gadak. 252 miles. Surveyed, but in abeyance.

23. Rangoon and Irrawaddy Valley.

Rangoon to Prome, 160 miles. Works commenced.

24. Northern Bengal. From the Ganges near Kooshtea on the Eastern Bengal Railway, to Jolpigori and Darjeeling Road. Surveyed. Works commenced.

1. INDIA.—GUARANTEED RAILWAYS.

LIST OF STATIONS.

Names.	Miles.	Names.	Miles.
EAST INDIAN RAILWAY.		EAST INDIAN RAILWAY—cont.	
MAIN LINE.		MAIN LINE—cont.	
HOWRAH	0	Patna (City)	332
Bali	6	Bankipur (Patna Civil Station)	338
Connagar	9	DINAPUR	344
Serampur	12	Bihta	355
Baidyabati	15	Koilwar	360
Chandernagore	21	Arrah	368
Hugli	24	Bihia	382
Magra	29	Raghunathpur	391
Khanyan	35	Dumraon	401
Pandua	38	BAXAR	411
Bainchi	44	Guhmar	424
Memari	51	Dildarnagar	433
Saktigar	59	Zamania	442
BARDWAN	67	Sakaldiha	459
Kanu Junction for loop line	75	MOGHAL SARAI (JUNCTION)	469
Mancur	90	Benares (Branch)	475
Panigar	97	Ahaura Road	478
Rajband	101	Chunar	489
Durgapur	106	Puhari	499
Andal	116	MIRZAPUR	509
RANIGANJ	121	Gaipura	521
Sarsol	122	Nahwai	530
Nimcha	124	Sirsa Road	541
Asensol	132	Karchana	553
Sitarampur (Junction)	138	Naini (Junction with the Jabalpur	
Barakar (Branch)	143	Line, though the fares are charged	
Maizam	148	from Allahabad)	560
Jamtara	157	ALLAHABAD	564
Kharimatar	168	Manauri	575
MADHUPUR (JUNCTION)	183	Bharwari	588
Jagadispur	191	Sirathu	600
Mahesmanda	200	Khaga	616
Giridi (Karharbau)	206	BAHRAMPUR	624
Baidyanath	201	Fatehpur	637
Simultala	217	Malwa	647
Nawadi	228	Mohar	656
Ghidhar	235	Sirsol	671
Janoi	241	CAWNPORE	684
Mananpur	254	Bhaupur	698
LAKHMISARAI (JUNCTION WITH		Rura	711
Loop Line)	262	Jhinjhak	723
Barbia	271	Paphund	735
Mokma	282	Achalda	746
Barh	299	Bartna	758
Rukhtiarpur	310	ETAWAH	770
Fathwa	324	Jaswantnagar	780

[illegible]

1. INDIA.—GUARANTEED RAILWAYS—continued.

LIST OF STATIONS—continued.

Names.	Miles.	Names.	Miles.
OUDH AND ROHILKHAND RAILWAY—continued.	Distance from Lucknow.	OUDH AND ROHILKHAND RAILWAY—continued.	Distance from Lucknow.
HARDOI	63	Jelalganj	174
Chandpur	74	Phulpur	181
Auji	83	Babatpur	187
Kahelia	92	Shinpur	195
Rosa (Junction)	98	Benares (Cantonment)	199
SHAHJAHANPUR	102		
Tilhar	114	SIND, PUNJAB, AND DELHI RAILWAY.	
Miranpur Katra	120	PUNJAB AND DELHI SECTION.	Distance from Delhi.
Fatehganj	124		
Faridpur	134	DELHI	0
BARELI	146	GHAZIABAD (JUNCTION WITH THE E.I. RAILWAY)	13
Lucknow	0	Begamabad	28
Harauni	14	Meerut City	40
Kusumbhi	21	MEERUT CANTONMENT	43
Ajgain	24	Khatauli	61
Unao	34	MUZAFFARNAGAR	75
Cawnpore	46	Deoband	90
Bisaratganj	156	SAHARANPUR	111
Aonla	163	Sarsawa	119
Mahmudpur	171	Jagadhri	130
Dabbara	174	Barara	146
Asafpur	181	UMBALLA CANTONMENT	161
CHANDAUZI (JUNCTION WITH THE ALIGARH BRANCH)	190	Umballa City	166
Bilari	202	Rajpura	179
Kandarki	206	Sarhind	194
MORADABAD	217	Khanna	205
Chandausi Junction	190	Sanahwal	222
Bijhot	200	LUDHLANA	232
Banhari	209	Phillur	240
Babrala	217	Phagwara	254
Rajghat	220	JULLUNDUR CANTONMENT	264
Dubhai	224	Jullundur City	267
Atrauli Road	233	Kartarpur	276
Hardwaganj	242	East Bank (Beas)	287
Aligarh	250	Beas	289
Lucknow (towards Benares)	0	Jandela	303
Malhaur	7	AMRITSAR	316
Jagor	10	Khasa	324
NAWABGANJ (JUNCTION WITH THE BAHRAMGHAT BRANCH)	17	Atari	332
Dumudapur	22	Jallo	338
Bindaura	28	Meean Meer, East	345
Ramnagar	34	LAHORE	348
Mahadeo	37	Meean Meer, West	352
Bahramghat	39	Khana	361
Rasauli	23	Raewind	374
Safidarganj	29	Changa Manga	392
Darabad	41	Wan Radharam	408
Makdumpur	46	Okara	428
Radauli	55	MONTGOMERY	451
Baragaon (Mastafabad)	61	Harappa	464
Sohawal	70	Chichawatni	477
FYZABAD	79	Channu	498
Ajodhya	83	Kacha Khuh	512
Darsinnagar	84	Khanewal	525
Belar Ghat	91	Tatipur	543
Tandauli	98	MOOLTAN	556
Gosainganj	101	Sher Shah	567
Camirpur	105		
Akbarpur	115		
Malipur	127		
Bilwai	136		
Shahganj	143		
Khota Karai	149		
Marai	156		
Jaunpur (City)	163		
Jaunpur (Civil)	167		
		SIND SECTION.	Distance from Kiamari.
		Kiamari	0
		KARACHI (McLEOD STATION)	4
		Karachi (Frere Station)	6 1/2

(12508.)

H

1. INDIA.—GUARANTEED RAILWAYS—continued.

LIST OF STATIONS—continued.

Names.	Miles.	Names.	Miles.
SIND, PUNJAB, AND DELHI RAILWAY—cont.		GREAT INDIAN PENINSULA RAILWAY—cont.	
SIND SECTION—cont.		NORTH-EASTERN DIVISION—cont.	
Landi	18½	Timarni	424½
Dorbaji	38	Pagdiál	433½
JUNGSHIE	57	Seoni	442½
Junpir	76	Dharam Kandi	447½
Maiting	89½	Dularia	455½
Bolari	101	Itársi (Hoshangábád)	463½
KOTRI	109½	Rámpur	469½
GREAT INDIAN PENINSULA RAILWAY.		Bagra	479½
NORTH-EASTERN DIVISION.		Semri	487½
BOMBAY	0	SOHAGPUR	493½
Bicala	2½	Piparia	505½
Chinchpokli	3½	Bankheri	517½
Parel Station	4½	Bábsai	527½
Dádar	5½	Gádarwára (Junction of the Mopani Branch)	536½
Sion	8	Boháni	544½
Karla	9½	Kareli	554½
Bhándup	16½	Narsinghpur	564
Thána	20½	Karsk Bel	573½
Diwa	26½	Chhindwára	583½
KALIAN JUNCTION (JUNCTION OF THE NORTH-EAST LINE WITH THE SOUTH-EAST LINE)	33½	Shahpura	598
Titwála	40	Mirganj	606½
Wásind	49½	JABALPUR (JUNCTION WITH THE E.I. RAILWAY)	616
Sháhapur	53½	NAGPUR BRANCH.	
Atgáon	59	BHUSA WAL JUNCTION	276
Khardi	66½	Warangáon	284
KASARA	75	Nárgáon	295
IGATPUR	85	Khámkhed	301½
Ghoti	90½	Malkápur	307½
Bailgáon	100½	Biswa Bridge	315½
Deoláli Barrack siding	112½	Nándura	324½
NASIK ROAD	116½	Jalamb (Junction)	332
Kherwádi	128	Khámgaon { Khámgaon State Railway }	340
Niphád	136	SHEOGAON	339½
Lásalgaon	146½	Páras	350½
Manmár	161½	Ákola	362½
NANDGAON	177½	Borgáon	374½
Naydongri	190½	Martizápur	386
CHALISGAON	203½	Máuná	393½
Kajgáon	215½	Karam	401½
Páchora	231½	BADNERA (JUNCTION)	412
Máheji	240½	Amráoti { Amráoti State Railway }	418
Mhasáwad	248	Chándar	430
Shirsoli	254	Dhámangáon	440½
Jalgáon	261	Palgaon	452½
Nasirábád	268½	Degáon	462½
BHUSA WAL JUNCTION (JUNCTION WITH THE NAGPUR BRANCH)	276	Wardha (Junction of the Wardha Valley State Railway)	471
Sáuda	285½	Páunar	479½
Nimbora	291½	Sindi	490½
Ráwer	297½	Bori	503
Burhanpore	310	NAGPUR	519½
Chándni	322	SOUTH-EASTERN DIVISION.	
Máundwa	330	KALIAN (JUNCTION)	33
Dongargáon	338½	Badlápur	42
KHANDWA	352½	Neral	53½
Jawar	362½		
Bir	374		
Harsad	385½		
Kirkián	396½		
Bhiringi	404½		
HARDA	416½		

1. INDIA.—GUARANTEED RAILWAYS—continued.

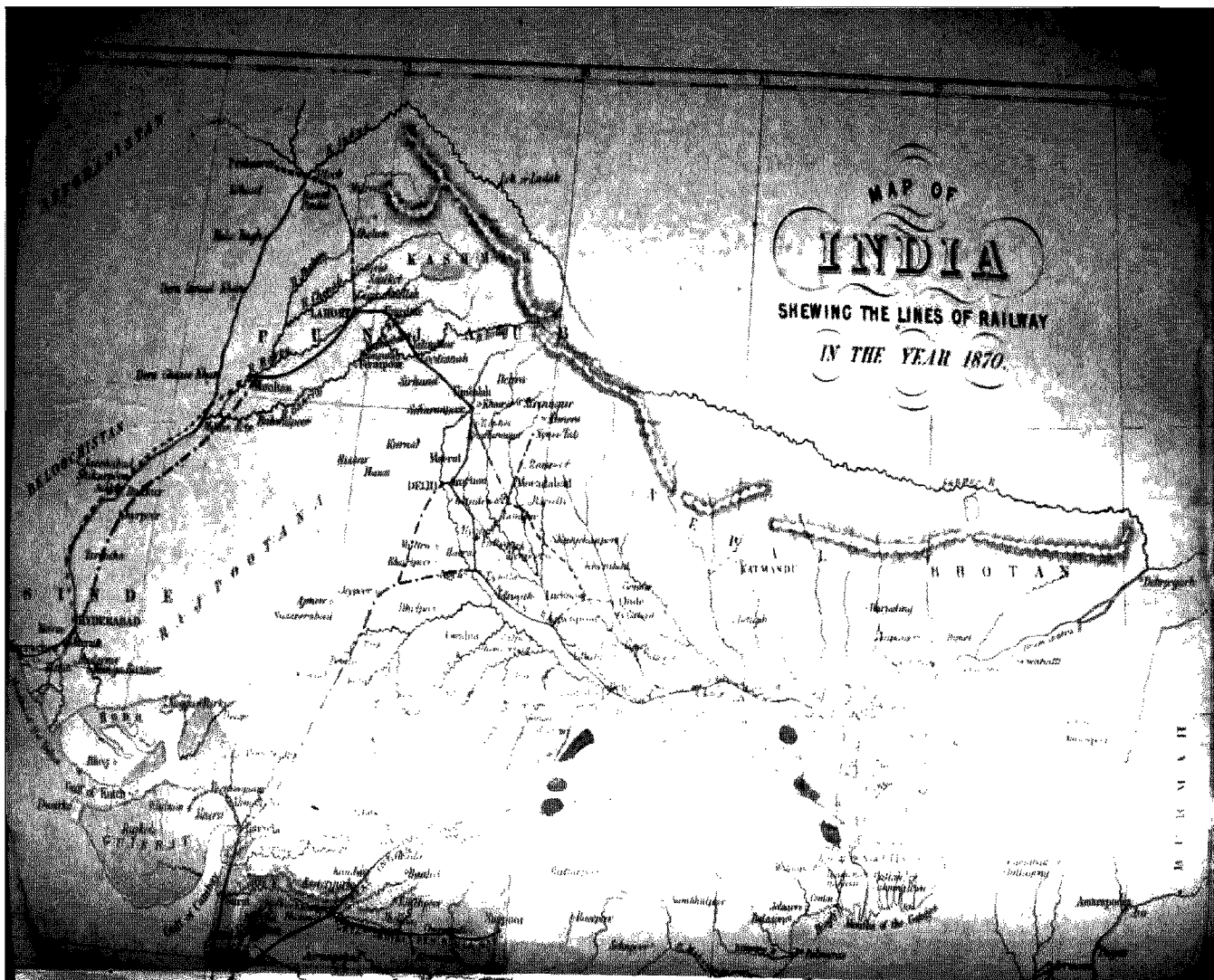
LIST OF STATIONS—continued.

[illegible]

INDIA.—GUARANTEED RAILWAYS—continued.

LIST OF STATIONS—continued.

Names.	Miles.	Names.	Miles.
SOUTH INDIAN RAILWAY—cont.		MADRAS RAILWAY—cont.	
NAGAPATAM TO TUTICORIN—cont.		SOUTH-WEST LINE—cont.	
	Distance from Nagapatam.		Distance from Madras.
Budalor	59	Cupam	154
Tiruvembor	73	Colar Road	175
TRICHINOPOLI	79	Malur	192
Trichinopoli Fort	81	Cadjudi	204
Colatur	90	Bangalor	216
Manaparai	101	Tripator	136
Vaiyampatti	110	Sanalpatti	151
Aiyalur	121	Morapur	166
Vadamadura	126	Mallapuram	180
DINDIGAL	136	Shervaroy Hills	192
Amayanaikanur	150	SALEM (Suramangalam)	206
Sholavandan	162	McD.'s Choultry	219
MADURA	175	Sankhagiri Drug	230
Teruparanganram	179	EROD (JUNCTION)	243
Terumangalam	185	Peranduray	252
Virdapatti	202	Watkali	266
Satur	218	Avinashi Road	275
Kovilpatti	231	Somanur	286
Kadambur	245	Pothanur Junction	301
MANIACHI (JUNCTION)	255	Coimbatore	305
TUTICORIN	273	Tudialor	311
		Karamaday	323
		Metapoliem	327
		Madikari	308
		Waliar	316
		Conjeced	323
		PALGHAT	332
		Parley	337
		Lackadi	347
		Wutapoliam	351
		Shoranur	359
		Pattambi	366
		Cutipuram	378
		TIRUR	387
		Tanur	392
		Perpengadi	397
		BEYPUR	406
		NORTH-WEST LINE.	
		ARCONAN	42
		Tirutani	50
		Nageri	59
		Patur	69
		Pudi	78
		TIRUPETI	83
		CODUR	109
		Redipalli	121
		Rajampet	129
		Nandalor	136
		Woutimeta	147
		KALAPA	161
		Camalapur	176
		Yeraguntla	185
		Mudanur	195
		Kondipuram	210
		Tadputri	227
		Royalcheru	242
		GUTY	257
		Gundakal	273
		Virapur	291
		Belari	305
		Nancherla	281
		Auspri	295
		Adoni	307
		Kosgi	325
		Tungabhadra River (South Bank)	333
		Matmari	339
		RAICHUR	350
TRICHINOPOLI TO EROD.			
Trichinopoli Fort	81		
Elamanor	91		
Kalitalay	102		
Lalapeta	108		
Catalai	115		
CARUR	126		
Pugalor	135		
Cadamudi	143		
Pasur	155		
EROD	168		
ARCONAM TO CONJEVERAM.			
ARCONAM	0		
Palur	9		
Chengleroyen's Choultry	11		
CONJEVERAM	19		
MADRAS RAILWAY.			
SOUTH-WEST LINE.			
MADRAS	0		
Perambor	31		
Avadi	13		
Tinanor	18		
Trivallor	26		
Cadambatur	29		
Chinamapet	36		
NEROONAM (JUNCTION)	42		
Rawogivar	55		
Burh	65		
Chándur	73		
Mandava	80		
Dongargoon	88		
KHAND	95		
Jawar	105		
Bir	112		
Harasadi	122		
KirkianPET (JUNCTION)	132		
Bhiringi			
HARDA			



2. INDIA.—STATE RAILWAYS.

PROVISIONAL LIST OF STATIONS.

Corrected to 1st February 1876.

Names.	Distance from Termini.	Names.	Distance from Termini.
	Miles.		Miles.
CALCUTTA AND SOUTH-EASTERN STATE RAILWAY.		INDUS VALLEY STATE RAILWAY—cont.	
Calcutta	—	Bágarji	—
Baliganj	3	Ruk	—
Jadupur	5	Madeji Road	—
Garia	8	Naundero	—
Sonapur	10	Lárkána	—
Chapabati	15	Bákráni Road	320½
Basra	20	Bádeh	332
Canning	28	Radhan	343½
		Sita Road	335
		Phulji „	367½
		Dádú	377
		Bhán	389½
		Sehwan	402
		Laki	414
		Amri	422½
		Sann	435½
		Májhand	—
		Gopang	—
		Unarpur	472
		Petaro	484
		Kotri	498
PUNJAB NORTHERN STATE RAILWAY.		DELHI DISTRICT, RAJPUTANA STATE RAILWAY.	
Lahore	—	Delhi	—
Shahdara	5	Pálam	11
Muridki	17	Keri (for Gurgaon)	19
Kámoke	29	Garhi Harsaru	25
Gujránwála	41½	Sultanpur	29½
Ghakkhar	51½	Farrukhnagar	32½
Wazirabad	62	Játaoli	37½
Gujrat	71	Khalilpur	44
Lála Musa	81	Rewari	51
Khárian	91	Báwal	60
Jhelum	103	Ajeráka	68
Dina	115	Harsanli	76
Sohawa	128½	Khirtal	80
Gujar Khan	140½	Barwára	88½
Mandra	149	Ulwar	97
Rowat	159	Málakberi	109
Rawul Pindee	171	Ráigarh	119
		Baswa	127
		Bandikui Junction	134½
INDUS VALLEY STATE RAILWAY.		AGRA DISTRICT, RAJPUTANA STATE RAILWAY.	
Mooltan	—	Agra (Fort)	—
Sher-Shah	6½	Agra (Cantonment)	1½
Buch	12	Bichpuri	6½
Shujabad	24½	Achnera	16½
Gilawála	39	Ikran	25½
Lodhrán	53½	Bhartpur	33½
Baháwalpur	63½	Helak	40½
Samasata	70½	Nadbai	51
Mubárákpur	83½	Kherli	61½
Ahmadpur	93	Mandawar	73½
Chani di Goth	107	Biwai	84
Chaudri	119½	Bandikui Junction	93½
Firoza	132½		
Khanpur	146		
Katsamba	160		
Naushahra	173		
Sádikabad	186		
Walhar	—		
Reti	210		
Khairpur	219		
Mirpur	228		
Sarhad	235		
Ghotki	242		
Mahesar	253		
Panoákil	259		
Sangi	268		
Sukkur	276		

N.B.—Changing stations are shown in antique type, and branch stations in italics.

2. INDIA.—STATE RAILWAYS—continued.

PROVISIONAL LIST OF STATIONS—continued.

Names.	Distance from Termini.	Names.	Distance from Termini.
AGRA DISTRICT, RAJPUTANA RAILWAY—cont.		HOLKAR STATE RAILWAY.	
	Miles.		Miles.
Arnu	100½	Khundwa	—
Dosa	111	Ajanti	7
Jatwara	118½	Atur	18
Basi	129	Kheri	26
Kanota	135	Sanawad	33
Sanganer	143	Mortakka*	36½
Jeypur	149½	Barwai	39
Dhankia	161	Bulwara	49½
Asalpur	172½	Choral Chanki	57
Phalera Junction	183½	Kala Khand	63½
Sambhar	188	Mhow	72
Naraina	190	Rao	79
Sali	201½	Indore	85½
Tilonia	208½		
Kishengarh	215	NEEMUCH STATE RAILWAY.	
Ladpura	223½	Indore	—
Ajmere	232½	Biloda	12½
Nasirabad	246½	Fatehabad Junction	23½
		Ujain	35½
SINDIA STATE RAILWAY.		Chambal River	32½
Agra	—	Barnagar	43½
Kothnoli	9½	Runija	53
Syeau	19	Bhilpalk	62
Mania	28	Batiyam	71
Dholpur	36	Namli	80
Garuna	48	Jaura	92½
Nurnbad	59	Dodar	102½
Gwalior	69	Dalaoda	114½
		Mandesar	122½
WEST RAJPUTANA STATE RAILWAY.		Piplia	135½
Ajmere Junction	—	Chaldu	142½
Saradna	8½	Neemuch	154½
Mangalyawas	14½	Nowagan	164½
Kharwa Road	21½	Nimbhera	171½
Byawar or Nyanagar	28½	Satkanda	179½
Sendra	39	Chitor	190½
Raypur	51½	Gangrar	200½
Chandawal	59	Hamirgarh	211½
Sujat Road	69	Bhilwara	222½
Somrar	78	Azimpura	232½
	85½	Bura Raira	242½
		Rupaili	253
		Sakrui	264½
		Bhandarwara	276½
		Nasirabad	288½
		KHAMGAON STATE RAILWAY.	
		Jalamb	—
		Khamgaon	7½
		AMRAOTI STATE RAILWAY.	
		Badnera	—
		Amraoti	5½
		NIZAM'S STATE RAILWAY.	
		Wadi Junction	—
		Chitapur	9
		Sheydumb or Seram	23
		Ullapur	33
		Tandur	43
		Dharur	57
		Ilampalli	70
		Pattapur	87
		Lingampalli	100
		Hyderabad	115
		Secunderabad	121

* Closed as a station for the present.

N.B.—Changing stations are shown in a bique type, and branch stations in italics.

2. INDIA.—STATE RAILWAYS—*continued.*PROVISIONAL LIST OF STATIONS—*continued.*

Names.	Distance from Termini.	Names.	Distance from Termini.
PATRI STATE RAILWAY.		RANGOON AND IRRAWADDY VALLEY RAILWAY.	
	Miles.		Miles.
Viramgaum	—	Pungundong	—
Jhund Road	7 $\frac{1}{2}$	Rangoon	2
Patri	17	Kemmendine	5
Kara Gora	22 $\frac{1}{2}$	Tifamine	9 $\frac{1}{2}$
NALHATI STATE RAILWAY.		Hlaugau	19 $\frac{1}{2}$
Nalhati	—	Engdun	29 $\frac{1}{2}$
Takipur	4	Gyobyo	44
Nowada	8	Ok-kan	56 $\frac{1}{2}$
Bokhara	12 $\frac{1}{2}$	Thongzai	66
Sagordighi	17 $\frac{1}{2}$	Lappadan	77
Sahapur	21	Menghla	92
Azimganj	27 $\frac{1}{2}$	Opho	102
WARDHA VALLEY STATE RAILWAY.		Zigoug	116
Wardha	—	Poungday	129 $\frac{1}{2}$
Sonagaon	11	Pouktan	140 $\frac{1}{2}$
Hinganghat	19	Sinmesway	149 $\frac{1}{2}$
Nagri	31 $\frac{1}{2}$	Frome	161
Warora (Passenger)	45	* NORTHERN BENGAL STATE RAILWAY.	
Ditto (Coal)	46	Sara	—
KARWAR STATE RAILWAY.		Gopalpur	—
Karwar	—	Malanchi	—
Kulgad	17 $\frac{1}{2}$	Nator	24
Hebul	32	Mahdnagar	33 $\frac{1}{2}$
Itawanguti	43 $\frac{1}{2}$	Atrai	39 $\frac{1}{2}$
Shimuni	55	Raninagar	48
Iddagongi	62	Sitapur	—
Yellapur	68	Chutiagram	55 $\frac{1}{2}$
Kirwhatti	80 $\frac{1}{2}$	Nawabganj	64 $\frac{1}{2}$
Khulghatgi	94	Jaipur Road	73 $\frac{1}{2}$
Mieracota	101	Pauchbibi	79 $\frac{1}{2}$
Hubli	109 $\frac{1}{2}$	Hili	85 $\frac{1}{2}$
Sirgampi	120	Dehpur	95
Anigheri	130	Phulbari	—
Gadak	144 $\frac{1}{2}$	Parbatipur	121
NAGPUR AND CHATTISGARH STATE RAILWAY.		Rangpur	135 $\frac{1}{2}$
Nagpur Cantonment	—	Dinajpur	132 $\frac{1}{2}$
" City	31	Sidpur	121
Kampti	81	Darwani	129
Babdeo	191	Chaura	139
Bhandara Road	42 $\frac{1}{2}$	Bagdogra	146 $\frac{1}{2}$
Paruswara	49	Chilahati	156
Firora	63 $\frac{1}{2}$	Haldibari	—
Dandaigaon	71 $\frac{1}{2}$	Jalpigori	173
Kurwa	81 $\frac{1}{2}$	Shikarpur	184
Komptha	90	Shampur	—
Karanja	101 $\frac{1}{2}$	Bidarganj	—
Borcetola	121 $\frac{1}{2}$	MYSORE STATE RAILWAY.	
Dongargarh	131 $\frac{1}{2}$	Bangalor	—
NAGPUR AND CHATTISGARH STATE RAILWAY.		Bangalor Pété	21
		Kengéri	71
		Kambligod	14
		Bidadi	23 $\frac{1}{2}$
		Clospété	29 $\frac{1}{2}$
		Chinnapatam	36 $\frac{1}{2}$
		Madnra	48 $\frac{1}{2}$
		Mandya	58
		Yellur	65 $\frac{1}{2}$
		French Rocks	74 $\frac{1}{2}$
		Seringapatam	79 $\frac{1}{2}$
		Mysore	88

* Sites for the stations on the branches have not yet been suggested.
N.B.—Changing stations are shown in antique type, and branch stations in italics.

2. INDIA.—STATE RAILWAYS—*continued.*PROVISIONAL LIST OF STATIONS—*continued.*

Names.	Distance from Termini.	Names.	Distance from Termini.
TIRHUT STATE RAILWAY.		TIRHUT STATE RAILWAY—<i>cont.</i>	
	Miles.		Miles.
Semuria - - - - -	—	<i>Not yet fixed</i> } Darbhanga • {	44
Tegra - - - - -	8	<i>Haya</i> } Branch. {	51
Begam Saria - - - - -	14	<i>Darbhanga</i> }	58
Dalsing " - - - - -	22	Wini (for Pusa and Tajpur) - - -	48
Ujiapar - - - - -	29	Duli - - - - -	52
Somastipur - - - - -	36	Rehna - - - - -	60
		Muzaffarpur - - - - -	68

N.B.—Changing stations are shown in antique type, and branch stations in italics.

LONDON:

Printed by GEORGE E. EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty.
For Her Majesty's Stationery Office.