Public Works (1898) Department.

RAILWAY BRANCH.

G.O., No. 704-Ry

DATED 9th May 1898

[Despatch Abstract.]

Administration Report

Govt of India letter requesting that a report on each survey which may be completed before the close of 1898-99 may be furnished as soon as completed for the compilation of the annual ——— on Indian Railways. Commd to the Ry Bds concerned

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[P. W. 28. 250—24-3-98.]

Indexed. 11/5/98

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FROM

THE DIRECTOR OF RAILWAY TRAFFIC,

TO

No. 4 Stat.

Dated Calcutta, the 4th January 1898.

Received—

PART I OF THE ANNUAL ADMINISTRATION REPORT ON THE RAILWAYS IN INDIA.
Call for information for the year 1897-98.

G. I. C. P. O.—No. 964 P. W. D.—11-1-98.—25.

No. 4 Stat.

FROM

THE DIRECTOR OF RAILWAY TRAFFIC,

TO

THE SECRETARIES TO THE GOVERNMENTS OF BENGAL, THE NORTH-WESTERN PROVINCES AND OUDH, AND THE PUNJAB, PUBLIC WORKS DEPARTMENT.

THE SECRETARY TO THE GOVERNMENT OF BENGAL, MARINE DEPARTMENT.

THE SECRETARIES TO THE CHIEF COMMISSIONERS OF THE CENTRAL PROVINCES AND ASSAM, PUBLIC WORKS DEPARTMENT.

THE SECRETARIES TO THE RESIDENTS AT HYDERABAD, AND IN MYSORE, PUBLIC WORKS DEPARTMENT.

THE SECRETARY TO THE AGENTS TO THE GOVERNOR GENERAL, RAJPUTANA AND CENTRAL INDIA, PUBLIC WORKS DEPARTMENT.

THE SECRETARY TO THE AGENT TO THE GOVERNOR GENERAL, BALUCHISTAN, PUBLIC WORKS DEPARTMENT.

THE CONSULTING ENGINEERS FOR RAILWAYS, MADRAS, BOMBAY AND BURMA.

THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS, CALCUTTA, LUCKNOW AND ASSAM.

THE MANAGERS, NORTH WESTERN, OUDH AND ROHILKHAND, EASTERN BENGAL AND EAST COAST STATE RAILWAYS.

CALCUTTA, *the 4th January 1898.*

SIR,

With reference to the Government of India Circular No. XVIII Railway, dated the 8th November 1893, regarding the supply of information for the annual Administration reports on Indian railways, I have the honour to forward the accompanying blank forms for Part I of the report for 1897-98, and to request the favour of your having them filled up and returned on the dates specified on each form.

2. The information for the narrative portions of Chapters X.—Rates and fares, XIV.—Flood damages, and XV.—Accidents, of the report, should be supplied by the 31st January 1898 in accordance with the samples circulated with the Director General of Railways' letter No. 351 Stat., dated the 17th September 1897.

As regards the information required for the narrative portions of other chapters of the report, I have the honour to invite attention to Enclosure No. 7 to this letter, and to request that the memoranda for these chapters may be drawn up in accordance with the instructions and samples therein printed.

3. In view to facilitate and expedite the compilation of the report, the

accompanying forms and samples have been printed in as clear and convenient forms as possible, and I shall be extremely obliged if you will kindly take such steps as will ensure the particulars required for the narrative memoranda and the several statements being supplied *in strict conformity with the printed instructions and foot-notes.*

4. I have also to request that, if possible, the narrative memoranda* *now asked for* may be printed on one side of the paper, and six copies supplied to me by the 15th April 1898. If, however, it is not possible to furnish the memoranda in print by the prescribed date, *two copies* should be sent in manuscript, lithographed, or type written *on one side of the paper.*

* *Vide* Enclosure No. 7.

5. For steam tramways working outside Municipal limits it is only necessary to fill in and return a copy of the statement showing details of sanctioned and open mileage, etc.—Enclosure No. 13—which is also intended for all railways.

I have the honour to be,

SIR,

Your most obedient Servant,

G. A. ANDERSON,

Offg. Director.

Documents accompanying.

1.—Traffic return for 1897.
2.—Statement of principal commodities carried on the standard and metre gauge railways during 1897 as compared with the previous year.
3.—Statement showing the number of depositors in the State Railway Provident Institution, and the sums at their credit on the 31st December 1897.
4.—Statement showing the enrolled strength and number of efficients in each Railway Volunteer Corps on the 31st March 1898.
5.—Statement showing the expenditure on block account and capital outlay on collieries, etc., up to end of the calendar year 1897.
6.—Statement showing details of fuel consumption on the standard and metre gauge railways during the year 1897.
7.—Sample showing the information to be given in the narrative memorandum.
8.—Statement showing the number of carriages fitted with retiring accommodation for females on the 31st December 1897 in accordance with Section 64 of the Indian Railways Act, IX of 1890.
9.—Statement showing the number of carriages on the standard and metre gauge railways fitted with hooks or racks for soldiers' rifles up to the 31st December 1897.
10.—Statement showing the capital locked up in stores on the standard and metre gauge railways on the 31st December 1897.
11.—Statement showing the rolling-stock on the standard and metre gauge railways adapted for military purposes, as existing on the 31st December 1897.
12.—Statement showing the locomotives and vehicles fitted with automatic vacuum brakes on the standard and metre gauge railways on the 31st December 1897.
13.—Details of sanctioned and open mileage for the official year 1897-98.

Enclosure No. 1 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

(To reach the Director of Railway Traffic at Simla on the 31st March 1898.)

FORM OF TRAFFIC RETURN.

The following conditions should be carefully complied with:—

1. Figures for the calendar year are to be given.
2. All sums of money are to be stated in Indian currency.
3. Fractions of a rupee are to be disregarded, except for averages, when decimals should be used.
4. Care should be taken to give the explanations specified in the foot-notes.
5. Punctuality of transmission is essential.
6. A separate return should be forwarded for each railway; but in the case of foreign lines worked, the returns for such lines or branches may be compiled separately, or included in those of the main line, *if on the same gauge*, as is found most convenient. It should be stated at the head of the return, what, if any, foreign lines are included.
7. For railways not on the standard (5′ 6″) or the metre (3′ 3⅜″) gauge, excepting the Kauria-Dharlla (2′ 6″) gauge branch, which for statistical purposes is to be treated as part of the metre gauge section of the Eastern Bengal State railway, the information to be furnished should be confined to the items, which are *italicised* in the form of Traffic return.
8. All results for this return should be worked out to two places of decimals.

TRAFFIC RETURN OF THE _____ RAILWAY.

For the year ended the 31st December 1898.

	Laid with two or more tracks. (1)	Laid with single track. (2)	Total. (3)
Open mileage and capital cost—	Miles.	Miles.	Miles.
1. *Miles of railway line open on the 31st December* . . .			Miles.
* 2. *Total length of sidings*			
* 3. *Total length of single track, including sidings*			
* 4. *Mean mileage worked during the year*			
‡ 5. *Capital outlay on open line to the 31st December, including steam-boat and suspense*			R
‡ 6. †*Total capital outlay, including lines under construction to the 31st December* .			R
‡ 7. *Capital outlay on open line to the 31st December, exclusive of steam-boat and suspense*			R
¶ 8. *Average cost per mile of railway, exclusive of steam-boat and suspense (Item 7 ÷ Item 1 (3)*			R
¶ 9. *Average cost per mile of single track, including sidings, exclusive of steam-boat and suspense (Item 7 ÷ Item 3)*			R

* In the case of lines working other railways, and working over foreign lines, details should be given as follows:—

For Item 1—		§*Enter below the name and mileage of each railway worked and foreign lines worked over.*
Home line		
Railways worked§		
TOTAL .		
For Item 2—		
Home line		
Railways worked§		
TOTAL .		
For Item 3—		
Home line		
Railways worked§		
TOTAL .		
For Item 4—		
Home line		
Railways worked		
Foreign lines worked over§		
TOTAL .		
	R	

†The total capital outlay, item 6, is made up as follows:—

Amount charged to final heads of capital account on open lines, excluding steam-boat		
Steam-boat		
Suspense account (open line)		
TOTAL .		} (Item 5).
Add—		
Amount charged to final heads of capital account on lines under construction**		******Name below the lines or sections of lines under construction with their respective mileages.
Construction suspense account		
TOTAL .		} (Item 6)

‡ In the case of lines working other railways, details should be given at foot showing the distribution of expenditure between Home line and each railway worked. Where loss by exchange is charged to capital, it should be included with the outlay to be shown here. The capital outlay to be shown should be *net*, *i.e.*, after deduction of receipts on capital account.

¶ To be given separately for the Home line and for each branch line worked.

Coaching traffic—

		Number.* (1)	Passenger-miles. (2)	Earnings. (3)
10.	Passengers: 1st class			£
11.	Passengers: 2nd class			
12	Passengers: 3rd or intermediate class			
13.	Passengers: 4th or lowest class			
14.	*Total of all classes*			
			Ton-miles	
15.	*Other coaching traffic*			
	TOTAL			
	Less—Outstandings irrecoverable			
16.	*Net total coaching earnings*			

17. Average sum received for carrying a passenger unit one mile [Item 14 (3) ÷ Item 14 (2)]—Pies . . . . . .
18. Average distance travelled by a passenger [Item 14 (2) ÷ Item 14 (1)]—Miles . . .

Goods Traffic—

		Tons. (1)	Ton-miles. (2)	Earnings. (3)
19.	General merchandize			£
20.	Military stores			
21.	Railway materials for construction (Home line only)			
22.	Coal and coke for the public and foreign railways			
23.	Coal and coke for construction (Home line only)			
24.	Coal and coke for revenue only			
25.	Revenue stores other than coal and coke			
26.	Live-stock†			
27.	Rents, miscellaneous, etc.	*Nil*	*Nil*	
	TOTAL			
	Less—Outstandings irrecoverable	*Nil*	*Nil*	
	Net total goods traffic			

29. Average sum received for carrying a ton of goods one mile [Item 28 (3) ÷ Item 28 (2)]—Pies . . . . . .
30. Average distance over which a ton of goods was hauled [Item 28 (2) ÷ Item 28 (1)]—Miles . . . . . .

* To include season tickets—the total number of each class and their equivalents being stated in a foot-note. When the actual number of journeys performed is not known, season tickets should be included with each class converted at 40 journeys a month.

† The number of horses, cattle, sheep, etc., should be shown in a foot-note thus:—

	No.
Horses	
Cattle	
Sheep, etc.	

*Train-mileage—

31. Passenger train-miles . . . . . .
32. Goods train-miles . . . . . .
33. *Total train-mileage* . . . . . .
34. Mixed and light train-mileage included in above . . . . . .
35. Train-miles per mean mile worked [Item 33÷Item 4] . . . . . .
†35(*a*). Total mileage of Home coaching vehicles run on Home and Foreign lines for the year ended the 31st December . . . . . .
†35(*b*). Total mileage of Home goods vehicles run on Home and Foreign lines for the year ended the 31st December . . . . . .
35(*c*). Total mileage of Home coaching and goods vehicles run on Home and Foreign lines for the year ended the 31st December [Item 35(*a*)+Item 35(*b*)] . . . . .
35(*d*). Average mileage per coaching vehicle for the year ended the 31st December [Item 35(*a*)÷Item 51(*a*)] . . . . . .
35(*e*). Average mileage per coaching vehicle per diem for the year ended the 31st December [Item 35(*d*)÷365] . . . . . .
35(*f*). Average mileage per goods vehicle for the year ended the 31st December [Item 35(*b*) ÷Item 52(*a*)] . . . . . .
35(*g*). Average mileage per goods vehicle per diem for the year ended the 31st December [Item 35(*f*)÷365] . . . . . .
36. Average number of passengers in a train [Item 14 (2)÷Item 31] . . . . .
37. Average number of tons in a train [Item 28 (2)÷Item 32] . . . . . .

Engine-mileage—

38. Total engine-mileage for the year ended the 31st December . . . . . .
39. Average mileage per engine for the year ended the 31st December [Item 38÷Item 42]
40. Average mileage per engine per diem for the year ended the 3 365] . . . . . .

Gross ton-mileage—

		Ton-miles.
40(*a*).	Of all coaching trains, freight and dead weight	
40(*b*).	Of all goods trains, freight and dead weight	
40(*c*).	Total gross ton-mileage [Item 40(*a*) + 40(*b*)]	

* Mixed train-miles and light train-miles to be apportioned between passengers and goods as laid down in Government of India Circular No. 4 Railway of 1880. Locomotive and maintenance trains to be included with goods trains.

† For Items 35 (*a*) and 35 (*b*) the total mileages of Home coaching vehicles and of Home goods vehicles loaded and empty, including the mileage of Home vehicles run on Foreign lines, shown in Appendix II of the Analysis of working for the two halves of the year should be given.

*Number of engines and vehicles—

	Number on the 31st December of the previous year.	Added during the year.	Withdrawn during the year.	Total on the 31st December 1897.
41. Total number of engines on the line				
†42. Average number of engines in use during the year ended the 31st December				
43. Number of carriages, 1st class				
44. Number of carriages, 2nd class				
45. Number of carriages, 3rd or intermediate class				
‡46. Number of carriages, 4th or lowest class				
47. Number of carriages, composite, 1st and 2nd class				
48. Other composite carriages				
49. Total number of passenger carriages				
50. Miscellaneous coaching vehicles (excluding brake-vans)§				
51. Total coaching vehicles (excluding brake-vans)				
†51(*a*). Average number of coaching vehicles in use during the year ended the 31st December				
52. Goods vehicles of all descriptions (excluding brake-vans and cranes)				
†52(*a*). Average number of goods vehicles in use during the year ended the 31st December				
53. Number of brake-vans (passengers and goods)‖				
53(*a*). Number of brake-vans with one or more¶ 3rd or 4th class compartments, but which *are primarily* brake-vans				
53(*b*). Total Items 53 and 53(*a*)				
54. Total number of cranes**				
55. Total number of goods vehicles of all descriptions.				

Value ††of rolling-stock—

	At end of previous year.‡‡	At end of 1897.§§
	R	*R*
‖ 56. Total value†† of Locomotive stock		
‖ 57. Total value†† of Coaching stock		
‖ 57(*a*). Total value†† of Goods stock		
TOTAL		

	Vacuum, automatic.		Simple vacuum.		Westinghouse.	
	Number.	Capital expenditure from commencement to the 31st December 1897.	Number.	Capital expenditure from commencement to the 31st December 1897.	Number.	Capital expenditure from commencement to the 31st December 1897.
		R		*R*		*R*
58. Rolling-stock fitted with continuous and continuous automatic brakes (1) Locomotive						
(2) Vehicles						

* On lines comprising more than one gauge, a separate statement should be submitted for the engines and vehicles of each gauge. The engines and vehicles entered in this statement should agree with the total stock on the list at end of the year—Form XII of the Capital and revenue accounts for the second-half of the year, except as regards Items 42, 51(*a*) and 52(*a*), for which see foot-note †.

† The average number of engines, and of coaching and goods vehicles, should be obtained in the manner explained in Appendices I and II of the standard form of Analysis of working—Government of India Circular No. V Railway of 1887.

‡ Should include 4th or lowest class carriages with brake compartments which are *not primarily* brake vans—*vide* item 53 (*a*), but the number of these carriages included should be stated in a foot-note.

§ Should include inspection carriages.

‖ To include brake-vans fitted with postal compartments.

¶ The number of 3rd or 4th class compartments in each of these brake-vans should be stated in a foot-note.

** The cranes to be shown here should be only those charged off to the open line account, as shown in Form No. XII of the half-yearly Capital and revenue accounts.

†† Outlay charged to final heads of the open line Capital account.

‡‡ Any difference in the figures shown here, as compared with those already given in the Traffic return for 1896 and in the Capital and revenue accounts for the second-half of that year, should be explained in a foot-note.

§§ If the figures in this column are less than those shown for the previous year, the reasons for the decrease should be explained in a foot-note.

‖‖ Should *exclude* the cost of machinery, but the distribution of the capital outlay between rolling-stock and machinery should be given in a foot-note. If it is not possible to allocate the charges separately, the fact should be stated in a foot-note. On lines comprising more than one gauge, the value of locomotive, coaching and goods stock of each gauge, should be given separately.

*Average number of vehicles in each train excluding brake-vans—

59. In each passenger train
60. In each goods train
61. In each mixed train — Passenger carriages
62. In each mixed train — Goods vehicles

Gross earnings—

		R
63. *Gross earnings*	(1) *Coaching*	
	(2) *Goods*	
	(3) *Total 63 (1) and 63 (2)*	
	(4) *Sundries, including Electric telegraph.*	
	(5) *Total 63 (3) and 63 (4)*	
	(6) *Steam-boat*	
	(7) *Total 63 (5) and 63 (6)*	

64. Coaching earnings per passenger train-mile [Item 16 (3) ÷ Item 31]
65. Goods earnings per goods train-mile [Item 28 (3) ÷ Item 32]
66. Traffic earnings per train-mile [Item 63 (3) ÷ Item 33]
67. Sundries, including Electric telegraph per train-mile [Item 63 (4) ÷ Item 33]
68. *Gross earnings per train-mile excluding steam-boat earnings* [Item 63 (5) ÷ Item 33]
69. Gross earnings per train-mile, including steam-boat earnings [Item 63 (7) ÷ Item 33]
70. *Gross earnings per mean mile worked per week, excluding steam-boat earnings* [Item 63 (5) ÷ Item 4 and by 52 weeks]
71. Percentage of coaching earnings [Item 63 (1)] on total traffic earnings [Item 63 (3)]
72. Percentage of goods earnings [Item 63 (2)] on total traffic earnings [Item 63 (3)]

Working expenses—

	Amount.	Per train-mile.	Per cent. on gross earnings.
	R	*R*	
73. *Maintenance of way, works and stations*			
74. *Locomotive expenses*			
75. *Carriage and wagon expenses*			
76. *Traffic expenses*			
77. *General charges*			
78. *Steam-boat service*			
79. *Special and Miscellaneous expenditure*			
†80. *Rent of leased lines*			
81. *Contribution to the Provident Fund*			
82. *Total working expenses*			

Profits—

83. *Net earnings*‡	
84. *Percentage of net earnings on total capital outlay on open line*	Per cent.
85. Percentage of net earnings on capital outlay on open line, including steam-boat, but excluding suspense	
86. Percentage of net earnings on paid-up capital §	

* The figures for the purposes of Items 59 to 62 of the Traffic return should be obtained by dividing the registered mileage of vehicles attached to passenger, goods and mixed trains, respectively, by the train-mileage of each description of train.

† A foot-note should be added showing the rent paid for each leased line separately.

‡ In case of branch lines worked, a foot-note should be inserted showing separately the net earnings of the main line and each branch line worked.

§ Paid-up capital is to include all share capital and debentures paid-up, but to exclude capital not bearing interest.

Average cost of hauling one mile—

		Pies.
*	87. One passenger unit	
	88. One ton of goods	

Train staff—

89. Cost of train staff per train-mile—Annas	

Stores balances on open lines of railway†—

	R
‡90. Balance at end of previous year	
91. Balance on the 31st December 1897	

PASSENGER FARES AND GOODS RATES IN FORCE ON THE 31ST DECEMBER 1897.

Passenger fares per mile—

	Pies.
92. Single journey, 1st class passenger	
93. Single journey, 2nd class passenger	
94. Single journey, 3rd or intermediate class passenger	
95. Single journey, 4th or lowest class passenger	

Goods rates—

	Per maund per mile.	§ Per ton per mile.
	Pies.	Pies.
96. Special class { *Food-grains*		
Coal		
97. 1st class		
98. 2nd class		
99. 3rd class		
100. 4th class		
101. 5th class		

Consumption and cost of fuel—

102. Total actual weight of coal consumed	Tons.
102(*a*) Total actual weight of wood consumed	,,
102(*b*) Total Item 102 and 102(*a*)	,,
103. Average cost per ton of the actual weight of fuel used ‖	R
104. Cost per train-mile	As.
105. Consumption stated in terms of Giridih (Kurhurbarree) best steam coal ¶—	
(*a*) Total quantity**	Tons.
(*b*) Per train-mile	lbs.
(*c*) Per engine-mile	,,
(*d*) Per 1,000 gross ton-miles	,,
106. Average cost per ton stated in terms of Giridih (Kurhurbarree) best steam coal‖	R

* To be arrived at in the manner explained for items 79 and 115, respectively, of the Analysis of working—Government of India Circular No. V Railway of 1887.

† The figures for Items 90 and 91 should relate to open lines of railway only. In cases in which no separate stores accounts are maintained, the balances pertaining to unopen sections should be approximately arrived at and deducted from the total balance, the amounts so deducted should, however, be given in foot-notes.

‡ Any difference in the amount shown here, as compared with that given in the annual return of stores transactions furnished to the Director of Railway Traffic, or to the Government of India under Government of India Circular No. VIII Railway, dated the 8th June 1889, and letter No. 373 R. S., dated the 24th August 1896, respectively, should be explained in a foot-note.

§ The equivalent to be used in converting maunds to tons should be 27·22 maunds = 1 ton. The figures in this column should be derived from the *actual* rates in force and not from their decimal equivalents in column "Per maund per mile".

‖ It should be stated whether the cost shown includes loss by exchange, and the amount per ton charged on this account should also be given in a foot-note.

¶ When nearer equivalents have not been determined by experiment, the co-efficients or multipliers given in the enclosure to Government of India Circular No. XVI Railway of 1894 should be used in converting the different descriptions of fuel into terms of Giridih (Kurhurbarree) best steam coal.

** This should be the equivalent in terms of Giridih (Kurhurbarree) best steam coal of the total quantity entered against Item 102(*b*). Any small proportion of coal used on wood-burning lines or of wood on coal-burning lines should be converted at the rate of 1 of coal to 2½ of wood, unless a nearer equivalent is known.

Wheat traffic—

	Quantity. (*a*)		Earnings. (*b*)	
	Previous year.	1897.	Previous year.	1897.
	Tons.	Tons.	R	R
107. Wheat booked from and to stations on the Home line (Local traffic)				
108. Wheat booked through from stations on Home line to Foreign lines				
109. Wheat booked through from Foreign lines to stations on Home line				
110. Wheat carried from one Foreign line to another over Home line				
111. Total*				

* Should correspond with the sum of the wheat traffic shown in the abstract of principal commodities carried attached to the Capital and revenue accounts for the two halves of the year.

Enclosure No. 2 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

(To reach the Director of Railway Traffic at Simla on the 31st March 1898.)

Statement showing the quantities of the principal commodities carried and the earnings therefrom on the railway during the year 1897, as compared with the previous year.

(For standard and metre gauge railways only.)

Description of commodity.	Quantity.		Earnings.		Quantity.		Earnings.	
	Previous year.	1897.	Previous year.	1897.	Increase.	Decrease.	Increase.	Decrease.
	Tons.	Tons.	₹	₹	Tons.	Tons.	₹	₹
I.—Coal and coke carried for the public and foreign railways.								
II.—Cotton, raw								
III.—Cotton, manufactured								
IV.—Drugs and chemicals								
V.—Dyes and tans								
VI.—Grain and pulse								
VII.—Hides and skins								
VIII.—Horns								
IX.—Jute								
X.—Lac								
XI.—Leather, manufactured.								
XII.—Liquors								
XIII.—Metals								
XIV.—Oils								
XV.—Oil-seeds								
XVI.—Opium								
XVII.—Paper and paste-board								
XVIII.—Provisions								
XIX.—Railway plant and rolling-stock carried for the public and foreign railways.								
XX.—Salt								
XXI.—Salpetre, etc.								
XXII.—Silk, raw								
XXIII.—Silk, piece-goods								
XXIV.—Spices								
XXV.—Stone and lime								
XXVI.—Sugar								
XXVII.—Tea								
XXVIII.—Timber								
XXIX.—Tobacco								
XXX.—Wool, raw								
XXXI.—Wool, manufactured								
XXXII.—All other articles of merchandize*								
Total†								

* Should comprise only miscellaneous articles of *public traffic* not detailed in the entries above.

† Should be the sum of items 19, 20, and 22 of the Traffic return.

N.B.—This statement should include items of *public traffic only*, railway materials for construction, coal, stores, etc., carried for the Home line, and live-stock being excluded; but "Military stores" should be classified according to the commodities of which they consist; where the consignments are of a miscellaneous nature, they should be shown under "All other articles of merchandize".

Enclosure No. 3 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

(To reach the Director of Railway Traffic at Simla on the 15th April 1898.)

Statement showing the number of depositors in the State Railway Provident Institution and the sums at their credit on the 31st December 1897.

State Railway.	Number of staff depositing.	Number of depositors.		Amount at credit on the 31st December 1897.				Remarks.
		Voluntary.	Compulsory.	Voluntary.	Compulsory.	Bonus.	Total.	
				R	R	R	R	

N.B.—The figures in this return should contain transactions of the Provident Institution *only*, and should agree with those relating to the Provident Institution *only*, for the month of December, exhibited in the statement printed as an Appendix to the Minutes of Official Meeting.

If there are no particulars to enter, the return should be submitted with the word "*Nil*" across it.

Enclosure No. 4 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

(To reach the Director of Railway Traffic at Simla on the 15th April 1898.)

Statement showing the enrolled strength and the number of efficients in each Railway Volunteer Corps on the 31st March 1898.

Corps.	Enrolled strength.*	Efficients.				Non-efficients.	Sergeant-Instructors, 1st and 2nd class.	Drill Instructors.	Head-quarters.	Remarks.
		Officers.	Non-Commissioned Officers.	Volunteers.	Total.					

* When the "Enrolled strength" includes employés on the unopen line, non-railway employés and Portuguese, Jews, and others who are not showa under the heads "Europeans" and "East Indians" in the annual Numerical return of servants employed on open lines of railway, prescribed in Government of India Circular No. XIX-Ry. of 1884, *the number so enrolled should invariably be given in the column of remarks.*

N.B.—If there are no particulars to enter, the return should be submitted with the word "*Nil*" across it.

Enclosure No. 5 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

(To reach the Director of Railway Traffic at Simla on the 15th April 1898.)

Statement showing expenditure on block account and capital outlay on the _____ { *Colliery* / *Coal exploration* / *Mineral oil works* } *up to the end of the calendar year 1897.*

	Amount.		
	R	*a.*	*p.*
Sanctioned expenditure on block account			
Actual capital outlay to the end of the year 1897 . . .			
Actual capital outlay to the end of the previous year (1896) .			
Capital outlay during the year 1897			

N.B.—Where the works are new, and no capital transactions have yet been recorded, the amount sanctioned on block account should be stated.

Enclosure No. 6 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

DETAILS OF FUEL CONSUMPTION.

(For standard and metre gauge railways only.)

Railway Traffic, No. 4 Stat. of 1898.

Enclosure No. 6 to the letter from the Director of Traffic at Simla on the 15th April 1898.)

(To reach the Director of Railway *Railway during the year 1897.*

Details of fuel consumption on the gauge railways only.)

(For standard and metre

1	2	3	4	5	6	7	8	9			10	11
Description of fuel.*	Place where delivered by Contractor.†	Name of storage or issuing depôt.	Distance of storage or issuing depôt from place of delivery by Contractor.	Actual quantity of fuel of each description taken for consumption in *locomotive engines* from each storage or issuing depôt.	Co-efficient or multiplier used in converting the actual quantity of each description of fuel consumed by *locomotive engines* into terms of Giridih (Kurhurbarree) best steam coal.‡	Quantity consumed stated in terms of Giridih (Kurhurbarree) best steam coal. (Column 5 × 6.)	Ton-mileage from place of delivery to the storage or issuing depôt (Column 4 × 5.)	Purchase rate§ per ton at place of delivery †† by Contractor. [See column (2)].			Average lead of each description of fuel. **	Remarks.
			Miles.	Tons.		Tons.		*R*	*a.*	*p.*	Miles.	
						¶						

* The different descriptions of fuel used should be detailed under this column.
† In cases when fuel is carried by sea, the port of delivery should be entered under this column.
‡ When nearer equivalents have not been determined by experiment, the co-efficients or multipliers given in the enclosure to Government of India, Circular No. XVI Railway of 1894, should be used.

§ It should be stated whether the rates given include loss by exchange, and the amounts charged per ton on this account should also be given separately in the column of remarks.
‖ The total of this column should correspond with Item 102 (*b*) of the Traffic return, Enclosure No 1.
¶ The total of this column should correspond with Item 105 (*a*) of the Traffic return, Enclosure No 1.
** The average lead of each description of fuel should be arrived at by dividing the total ton-mileage of each description of fuel obtained from column 8, by the total actual quantity consumed of each description, column 5.
†† It should be stated in the column of remarks whether delivery of fuel is given by Contractor into wagons or otherwise.

Enclosure No. 7 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

(To reach the Director of Railway Traffic at Simla on the 15th April 1898.)

NARRATIVE MEMORANDUM.

SAMPLE FORM.

CHAPTER I.—GENERAL.

(*For the official year ending 31st March 1898.*)

In this chapter information for the official *year should be furnished regarding* the principal "Important *works completed and in progress," and "Principal events." Details regarding sanctioned and open mileage should be given in Enclosure No. 13. The information under the two heads referred to above should be given separately for lines on different gauges. The general state of work in connection with railways, large bridges or tunnels under construction, should also be briefly remarked on;* the probable dates of opening being given in each case. *In fact this portion of the memorandum should be confined to* the principal important *works which are referred to in more detail in the paragraphs furnished for Chapter II. The particulars, which should not be in great detail, may be stated as follows:*

Important works completed and in progress.

Work was in progress on the.....railway throughout the year. The first section from .....to....., a distance of.....miles, is expected to be opened on the.....and the remaining length of.....miles from.....to.....in 18 .

Of the important bridges mentioned in the last report as under construction, the bridge over the.....was completed and opened for traffic on the.....

Sanction to the construction of a bridge.....spans of.....feet over the.....river near .....was given on the....., the work is in hand and is expected to be completed by the .....18 .

The tunnel through the.....mountain was bored through on the.....

Principal events.

Among the principal events which occurred may be noticed the amalgamation of the.....and.....railways into one system from the.....; the purchase by the State of the.....railway on the.....; the transfer of the working of the.....railway to the.....Railway Company from the....., etc.

CHAPTER II.—WORKS COMPLETED AND IN PROGRESS.

(*For the official year ending 31st March 1898.*)

This chapter should bring the history of the important *works referred to in the previous report up to date,* i.e., *to the 31st March 1898, and include any new* important *work undertaken during the year. Minor works, such as the erection of small goods sheds, staff quarters, culverts, platforms, etc., need not be mentioned. The following two paragraphs taken from Part I of the Administration report for 1892-93 are general samples of what is required for this chapter:*

East Indian Railway (standard gauge).

Azímganj branch.

The Nalhâti State railway, 4′ 0″ gauge, was incorporated into the undertaking with effect from the 1st April 1892, and the name changed to the Azímganj branch of the East Indian railway. Arrangements were at once made for the conversion of the line to the standard gauge. Old 20-foot rails from the main line were used in relaying, and the work was completed on the 1st July.

Jherriah extension.

The extension of the Barakar branch to the Jherriah coal-field, including a short line from Barakar to Chanch, 39 miles, was sanctioned in March 1892. This work, which includes a bridge over the Barakar river, consisting of one span of 200 feet, 5 of 150 feet, and 6 of 100 feet, was in active progress. The branch, mile 1 from Barakar to Chanch 3 miles, was completed

sufficiently to allow of its opening to goods traffic from the 1st February. It is expected that the whole extension will be completed in July 1893.

Toposi colliery extensions. Extensions of the Toposi colliery branch—

	Miles.
From Toposi to Khorabad	11·36
From Nandi to Panuria	13·45
From Salanpur towards Jamgram	4·50

which were sanctioned during the year, were in progress so far as the available funds permitted.

Additional sidings and junction arrangements at Hooghly were completed, and the works for the new scheme of water supply put in hand.

Additional sidings and the arrangement of the yard at Ásansol to facilitate the working of the junction with the Bengal-Nágpur railway were in progress, as also the laying of a third line between Ásansol and Raneegunge.

The relaying of the Gya branch with 12 Denham-Olpherts sleepers to a 30-foot rail was commenced.

The worn iron road in the main line has now been relayed with steel rails, but the Jubbulpore branch and the loop line have still to be relayed. The old iron rails, which are being cut down to secure a fresh joint and fitted into deep fish-plates, make a tolerable road.

Godhra-Rutlam Railway (standard gauge).

It was stated in the last report that the first section out of Godhra, which is under construction by Messrs. Kirby and Co., would be finished by the end of June 1892. There was, however, considerable delay, and the line from Godhra to Limkhérá (25 miles) was only opened for public traffic on the 16th January 1893.

On the remainder of the line work was in progress at the end of the year, the earthwork on the Rutlam division and minor bridging on both the Dohad and the Rutlam divisions were practically finished.

Of the Panchpiplia tunnel, about 500 feet of the heading were through, and the breaking up to floor level was well in hand. Drilling is in progress from both ends; the south face, owing to its distorted strata, has been reported as dangerous and will require lining.

A heavy storm in December 1892, and very unusual and unexpected floods in the river during January 1893, obstructed work on the Mahi bridge by filling in the foundations and washing away the temporary bridges and the tram line across the river, but otherwise work is proceeding satisfactorily. The girders will be erected on a staging of old rails so as to prevent stoppage of the work during the rains.

The masonry work of the 60-foot girder bridges on the Dohad division is well forward.

It is expected that the line from Limkhérá to Rutlam will be completed by October 1894.

Chapter III.—Lines under survey or projected.

(For the official year ending 31st March 1898.)

As in Chapter II, this chapter should bring the history of surveys and projects referred to in the previous report up to date, i.e., to the 31st March 1898, and should include surveys and projects started during the year. The lengths of surveys should invariably be given, *approximate lengths being stated where actuals are not known, and* the mileage and gauge of projected railways. *The following are specimens of the manner in which the information for this chapter is to be prepared:*

Mu Valley survey and Shan Hill reconnaissance (metre gauge).

In November 1887 orders were given for the survey of a line of railway from Sagaing to Mogaung with a branch to Bhamo. Two parties took the field in December 1887. The first party, by remaining out till the end of June 1888, was able to locate the line as far as Kawlin, a small civil and police station 144 miles from Sagaing.

This party also made a traverse of a branch line, 6 miles in length, from Myohaung (a station 3 miles south of Mandalay on the Toungoo-Mandalay railway) to a point on the left bank of the Irrawaddy and opposite Sagaing, by which, together with a steamer service across the river, communication might be established between the two railways.

The second party, during the season of 1888-89, was engaged in reconnoitring the country north of Kawlin. It was found that a branch line to Bhamo would be a costly undertaking and certainly not a remunerative one, and that to run a short line only as far as Katha, on the right bank of the river Irrawaddy, would be sufficient, as there is good water communication between Katha and Bhamo.

By the traverse the distance from Kawlin to Mogaung is 153 miles. The Katha branch will probably take off from near Indaw, about 53½ miles from Kawlin. This branch line will be about 14 miles in length.

During the season 1889-90 the work of the party was confined to locating the line, but the location of the line was found too heavy to carry out in one season. Only that portion of the main line from Kawlin to Indaw and the branch line from Indaw to Katha is therefore now being undertaken. Of this portion a distance of about 20 miles from Kawlin through the important town of Wuntho to Gyotaung will be located this season. From Gyotaung *viâ* Indaw to Katha, 51 miles, it is anticipated that a reconnaissance will have been made of two or more alternative routes, one of which can be decided on for location next season.

It was deemed advisable to make a reconnaissance survey from Shwebo or the neighbourhood *viâ* Yeu and Yamautaung to the Chindwin, opposite the mouth of the Myitha river near Kalewa. The results, so far known, are that up to Yamautaung there will be little or no difficulty in locating a line. Beyond this point several routes were prospected, but the country between Yamautaung and the Chindwin proves to be very difficult, and so far no suitable route for a railway has been found.

The reconnaissance on the Shan country to the Kunlon ferry leaves little doubt that the difficulties to be encountered across the so-called "plateau" have been very considerably underrated, and no feasible route from a point on the Toungoo-Mandalay railway on to the plateau has yet been discovered. There is still much survey work to be done before any decision can be arrived at regarding a railway through the Shan country to the Chinese frontier.

Zhob Valley Railway Survey (standard gauge).

The project for this line, which was noticed in the last report, has been submitted to Government and is under consideration.

The total length of the line from its junction with the Sind-Pishin railway at Khanai to Murtiza, in the Derajat plain at the mouth of the Gomal Pass, is 267 miles. This length may be divided into two well marked sections, *viz.*, from Khanai to mile 188 near Brunj, which may be considered the easy section, and from mile 188 to Murtiza, a distance of 79 miles, the difficult section. The total cost of the main line works out to ₹4,88,95,982, or ₹1,83,206 per mile, and a gradient of 1·25 per cent. compensated for curvature has been obtained. The stiffest curve on this line is 6,° or 955 feet radius.

From Kajuri Kach post to Murtiza is the heaviest portion of the line. About 3½ miles below the Kajuri Kach, where the Zhob and the Gomal rivers meet, the hills on the right bank of the Zhob and those on the left bank of the Gomal meet and form a gorge about 150 feet wide, with almost perpendicular cliffs, through which the combined rivers, force their way under the name of the Gomal river.

The waters in flood are here banked up to height of 80 feet above low-water level. The line is carried in almost continuous tunnel, gallery, or cutting along the cliff which forms the right bank of the river. Some parts of the cliff face are so precipitous, that before construction is attempted a temporary pathway will have to be built out from the face of the cliff on iron supports as a means of communication, as huts and tents can only be located in a few fixed places.

After leaving this gorge the alignment keeps to the right along the slope of the hills, and at mile 266 sweeps gently to the left and debouches into the Derajat plain at Murtiza station. From thence the country to the Indus extends in one continuous plain. About 20 miles of the heaviest portion of the line are estimated to cost ₹3,92,000 per mile.

Chapter IV.—Collieries and oil wells.

(For the calendar year ending 31st December 1897.)

The following is a general sample showing the nature of the information required for this chapter, which should relate to the calendar *year 1897 and contain information regarding collieries, mineral oil wells and the discovery of coal.* The information in the paragraphs printed in italics is specially required for all collieries. *Particulars regarding the capital outlay on collieries, etc., should be supplied in the form given in Enclosure No. 5.*

It should be specially noted that the information for this chapter should be brief, *and contain only general remarks in connection with the working of the collieries, etc., which would be intelligible to a person interested in the progress of the collieries, etc., but not having maps and plans wherewith to follow details. No notice is required of works such as the erection of working plant and staff quarters, the stoppage of faults and minor fires, etc.*

Umaria Colliery.

This colliery is worked by Government.

The colliery consists of pits and inclines. The general depths reached on 31st December 1895 were:

		Feet.
Pit No. 1	*Shaft for water supply to the station (steam power)*	*123*
Pit No. 2	*Up cast, ventilating shaft also pumping shaft*	*131*
Pit No. 3	*Down cast, drawing coal*	*117*
Pit No. 4	*Down cast, pumping shaft*	*236*
Pit No. 5	*Up cast, pumping shaft, in course of sinking*	*133*
Pit No. 6	*Down cast, drawing coal*	*93*
Pit No. 7	*Up cast, in course of sinking*	*58*
Pit No. 8	*Down cast, in course of sinking*	*55*
Incline No. 1	*Travelling road for workmen.*	
Incline No. 2	*Haulage road for coal.*	
Incline No. 3	*Travelling road for workmen and for ventilation.*	

The following table shows the output and number of persons employed during 1895 as compared with the previous year:

Year.	*Average number of persons employed daily.*	*Output.*				*Number of tons raised per person employed.*
		*Large coal.**	*Small coal.*	*Slack.*	*Total.*	
		Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Previous year	*972*	*96,994*	*35,843*	...	*132,837*	*137*
1895	*1,208*	*86,951*	*31,555*	...	*118,506*	*98*

The decrease of 14,331 tons in the total output was chiefly due to the abandonment of broken work in certain parts of the mine, reserved for final operation.

The receipts during the year amounted to R3,97,639 and the expenditure to R3,96,203, thus showing a net gain of R1,436 equivalent to a return of 0·13 per cent. on a capital outlay of R10,78,863.

The sales during the year are briefly detailed below:

	Large coal.	*Screened nut coal.*	*Slack coal.*	*Smithy or screened dust.*	*Unscreened dust.*	*Dust.*	*Total.*
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Indian Midland railway	*39,237*	...	...	...	...	...	*39,237*
Great Indian Peninsula railway	*24,145*	*5,909*	...	...	...	...	*30,054*
Bengal-Nagpur railway	*4,374*	...	...	...	...	...	*4,374*
East Indian railway	*8,535*	...	...	...	...	...	*8,535*
Oudh and Rohilkhand State railway	*536*	*761*	...	...	...	...	*1,297*
Other customers	*9,071*	*11,644*	*674*	*132*	*2,288*	*23*	*23,832*

A very important feature is the sale of unscreened dust coal, which amounted to 2,288 tons, and shows that a large quantity of this, formerly rejected, coal can be disposed of for brick burning purposes.

Unfortunately the development of the colliery has not kept pace with the output, consequently the rise pillars in No. 3 pit have been removed to supply the demand, which is gradually increasing, and cannot otherwise be met in most cases.

Several borings were put down during the year, most of them reaching coal at a small depth.

There was an outbreak of cholera in the month of September 1895, which disorganized the labour to a considerable extent and interfered with the successful raising of coal.

The scheme of water supply from the Umrer river, which was started in the previous year, was completed during 1895.

* *All coal which will not pass through a $\frac{3}{4}$" mesh is classed as large coal.*

The following table shows the total number of accidents that have occurred during the last two years, and the number killed and injured, compared with the output and the average number of men employed daily:

Year.	*Total number of fatal accidents.**	*Total number of other accidents.†*	*Number of persons killed.*	*Number of persons injured.*	*Average number of persons employed daily.*		*Number of tons of coal raised, of all kinds.*		*Number of tons of large coal raised.*	
					Per fatal accident.	*Per death.*	*Per fatal accident.*	*Per death.*	*Per fatal accident.*	*Per death.*
Previous year.	*1*	*16*	*1*	*16*	*972*	*972*	*132,837*	*132,837*	*96,994*	*96,994*
1895.	*3*	*19*	*3*	*19*	*403*	*403*	*39,502*	*39,502*	*28,983*	*28,983*

* *In this column should be included all accidents (occurrences) which resulted in death either at the time of the accident, or subsequently.*

† *In this column should be included all accidents (occurrences) resulting in non-fatal injuries.*

Khattan oil works.

These consist of.....wells taken down to depths detailed below:—

	Feet.
Well No. 1	
Well No. 2, etc.	

The supply was smaller in this than in the previous year, and was due to the heavy rainfall of the year under review, and to the fact that existing wells are located in such a position that access is obtained to them by underground flows of water. To obviate this, a boring was started in January last, 10 miles above Khattan, near a place called Wasi, and was carried down to a depth of 360 feet by the end of December.

No. 7 well was taken down to 1,130 feet, at which point boring had to be suspended owing to heavy flow of water at temperature of 117° F. being met with.

Borings 8, 9 and 10 were put down to depths of over 400 feet, and all three gave good shows of oil.

In order, if possible, to obtain petroleum at a point nearer the railway than Khattan, the Government of India in November last ordered a trial boring to be put down at Spintangi. This was commenced in January, and by the end of December the boring had reached a depth of 233 feet.

The other localities in Baluchistan (*e.g.*, Shoran, Kirta, and Spintangi), in which shows of petroleum have been observed, have not yet been prospected with the same thoroughness as Khattan. A boring was made at Spintangi, but has not yet reached any great depth.

CHAPTER VI.—ROLLING-STOCK.

(*For the calendar year ending 31st December 1897.*)

This chapter should contain brief paragraphs referring to the calendar *year 1897, regarding the fitting of vehicles with automatic vacuum brakes, double couplings, and lamps on Pintsch's gas system, as in the following specimen paragraphs. Any other important changes made to the rolling-stock of the line should also be briefly described.* **In the paragraph under "Brakes", the progress made during the calendar year 1897 should only be reported.** *Particulars regarding rolling stock adapted for military purposes should be given in Enclosures Nos. 9 and 11.*

Brakes.

During the year 1897, sanction was received to the fitting of the automatic vacuum brake to a sufficient amount of the rolling-stock on the North Western State Railway, to

meet a continuous troop traffic over the Lahore-Peshawar, Sibi-Quetta *viâ* Bolan, and Sibi-Kila Abdulla sections, indents were sent to England for the necessary material, and the work is now in hand.

On the Great Indian Peninsula Railway.....additional engines and.....vehicles were completely fitted with the automatic vacuum brake during the calendar year 1897, and .....vehicles were piped only.

Couplings.

The whole of the coaching stock on the North Western State Railway is fitted with couplings at both ends. Of the goods stock.....vehicles have couplings at both ends, of which.....were fitted during the calendar year 1897, leaving.....to be still fitted.

Lighting of railway carriages on Pintsch's gas system.

On the East Indian Railway.....carriages were fitted during the calendar year with gas lamps on Pintsch's system, making a total of.....so fitted up to the 31st December 1897. Under the present sanction.....vehicles remain to be fitted.

CHAPTER IX.—DETAILS OF REVENUE EARNINGS AND EXPENDITURE.

(*For the calendar year ending 31st December 1897.*)

The information for this chapter should be limited to a concise narrative giving the mean mileage worked, gross earnings, working expenses and net earnings during the calendar *year 1897, as compared with the previous year; with very brief explanations of important fluctuations. The narrative should be based on the figures given in the Traffic return (Enclosure No. 1). The following is a specimen of the manner in which the narrative should be drawn up:*

Burma State Railway (metre gauge).

The mean mileage worked during the year 1890 was 554·40 miles against 534·78 miles worked in the previous year. The increase was due to the fact that in 1889 the section from Yaméthin to Mandalay, 112 miles, was open for traffic for ten months only, *viz.*, from the 1st March 1889.

The gross earnings increased from ₹46,90,263 in 1889 to ₹54,71,432, or by ₹7,81,169 and as the working expenses were more by ₹6,530 only, the net earnings showed an improvement of ₹7,74,639, having risen from ₹15,73,552 to ₹23,48,191.

Of the increase in the gross earnings ₹2,43,293 were derived from passenger traffic and ₹4,98,993 from goods traffic.

The increase in the passenger earnings is ascribed to the increase in the mean mileage worked, and to a general development of passenger traffic; while that in the goods earnings is explained to be principally due to large shipments of unhusked rice to Japan, and to a scarcity of husked rice in Upper Burma which created a demand upwards. The increase is also ascribed to an improvement in the timber traffic, due to the erection of a large number of saw mills near the railway, to general activity in the trade, and to the opening out of the country.

The principal fluctuations in the working expenses were a decrease of ₹1,87,770 under "Maintenance of way, works and stations", and increases of ₹87,858, ₹71,074, and ₹36,391 under "Locomotive expenses", "Carriage and wagon expenses", and "General charges", respectively. The decrease under "Maintenance of way, works and stations" was consequent on the reduction of the maintenance gangs, as the line is now consolidated, and to abnormal expenditure on stations and buildings during the previous year. The increase under "Locomotive expenses" was due to the additional train-mileage run; that under "Carriage and wagon expenses" to heavier repairs and renewals of rolling-stock; while that under "General charges" is accounted for by the completion of construction works, to which a portion of the charges were debited in the previous year.

CHAPER XI.—FUEL CONSUMPTION.

(*For the calendar year ending 31st December 1897.*)

The description of fuel used on the different sections of the railway, and the actual quantities of the different descriptions consumed in locomotive engines during 1897 should be clearly stated, with any remarks that may be necessary in regard to the fuel

supply of the year. The actual quantities of the different descriptions of fuel consumed should be taken from column 5 of Enclosure No. 6 and the sum of the different quantities should correspond with item 102(b) of the Traffic Return (Enclosure No. 1). The results of any experiments made to determine the comparative values of the various classes of fuel used should also be given in a brief form. The following may be taken as a general sample to show the nature of the information required for this chapter:

Eastern Bengal State Railway (Standard, metre and special gauges).

The description of fuel used during the year on the different sections of the Eastern Bengal State railway is shown below:

On the Eastern (Calcutta to Goalundo and branches), Southern (Calcutta to Port Canning and branches), Central (Dum Dum to Khoolna and Ranaghat to Bongong) and Dacca (Náráyanganj Ghât to Mymensingh) sections.	Barákar and Sanctoria coal.
On the Northern section (Sára Ghât to Siliguri and branches.)	Seebpur coal.
On the Behar section (Manihári to Dinagepore and branch to the Kosi river.)	Madhupur coal.
On the Dhubri steamer service and for smithy purposes.	Makum coal.

The quantities of the different descriptions of fuel used were:

	Tons.
Bengal coal	76,830
Assam coal	1,673
TOTAL	78,503

The coal supplied under all the contracts was of good quality, and the arrangements for delivery were satisfactory. The substitution of Bengal for Makum coal on the Dacca section was tried with satisfactory results, and the latter will, unless a reduction is made in the price, only be used in future for the Dhubri steamer service and for smithy purposes, possibly only for the latter.

Burma Railway (metre gauge).

Extensive trials of Thingadaw (Burma) coal were carried out in competition with every other fuel in use on this railway. The general result of the trials seems to show that it is a poor locomotive fuel, its efficiency compared with Kurhurbarree coal being about 2·56=1. It burns better with a brick arch in the fire-box, but spark and cinder arrestors are as necessary as in the case of wood fuel.

Enclosure No. 8 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

(To reach the Director of Railway Traffic at Simla on the 15th April 1898.)

Statement showing the number of carriages fitted with retiring accommodation for females on the 31st December 1897, in accordance with section 64 of the Indian Railways Act, IX of 1890.

Railway.	Intermediate class.	Third class.	Total.	Remarks.

Enclosure No. 9 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

(To reach the Director of Railway Traffic at Simla on the 15th April 1898.)

Statement showing the number of carriages on the standard and metre gauge railways in India fitted with hooks or racks for soldiers' rifles up to the 31st December 1897.

Railway.	Number of carriages of each class on the list.*						Number of carriage fitted with												Percentage of number fitted with hook or racks on the total stock of each class on the list.					
							Hooks.						Racks.											
	Composite, 1st and 2nd.	Composite, 1st and 3rd.	2nd.	Intermediate.	Composite, Intermediate and 3rd.	3rd.	Composite, 1st and 2nd.	Composite, 1st and 3rd.	2nd.	Intermediate.	Composite, Intermediate and 3rd.	3rd.	Composite, 1st and 2nd.	Composite, 1st and 3rd.	2nd.	Intermediate.	Composite, Intermediate and 3rd.	3rd.	Composite, 1st and 2nd.	Composite, 1st and 3rd.	2nd.	Intermediate.	Composite, Intermediate and 3rd.	3rd.

* The numbers to be given under this column should correspond with those included under Column 5, Form No. XII of the Capital and revenue accounts for the half-year ended the 31st December 1897.

Enclosure No. 10 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

(To reach the Director of Railway Traffic at Simla on the 15th April 1898.)

Capital locked up in stores on the standard and metre gauge open lines *of railway on the 31st December 1897.*

RAILWAY.	Balance on the 31st December 1896.*	Receipts during 1897.	Total columns (2) and (3).	Issues during 1897.	Balance on the 31st December 1897.	Ratio of balance to the issues of stores during 1897.	Balance per mile of single track, including sidings, on the 31st December 1897.		Percentage of capital outlay locked up in stores on total capital outlay on open line including steam-boat and suspense.		Balance per train-mile.		Value of surplus stores available for sale or transfer on the 31st December 1897.	REMARKS.
							Total length of single track including sidings.	Balance per mile of single track including sidings.	Total capital outlay up to the 31st December 1897 on open line including steam-boat and suspense.	Percentage.	Total train-mileage during 1897.	Balance per train-mile.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	₹	₹	₹	₹	₹		Miles.	₹	₹		Miles.	₹	₹	

* Any difference in the amount shown here, as compared with that given in the annual return of stores transactions furnished to the Director of Railway Traffic or the Government of India under Government of India Circular No. VIII Ry., dated the 8th June 1889, and letter No. 373 R. S., dated the 24th August 1896, respectively, should be explained in a foot-note.

N. B.—The figures in this statement should refer to open lines of railway only on the standard and metre gauges. In cases in which no separate stores accounts are maintained, the balances pertaining to unopen sections should be approximately arrived at and deducted from the total balance, the amounts so deducted should, however, be given in the column of "Remarks".

Enclosure No. 11 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

(To reach the Director of Railway Traffic at Simla on the 15th April 1898.)

Statement showing the rolling-stock on the standard and metre gauge railways in India adapted for military purposes, as existing on the 31st December 1897.

RAILWAY.	Total number of intermediate, third class, and intermediate and third class composite carriages on the list.§	NUMBER OF INTERMEDIATE AND THIRD CLASS CARRIAGES FITTED FOR AMBULANCE PURPOSES.					NUMBER OF HORSE BOXES.§					Total number of wooden and iron covered goods wagons on the list.§	NUMBER OF COVERED GOODS WAGONS ADAPTED FOR THE CARRIAGE OF HORSES COMPLETE WITH FITTINGS.*					Number of covered goods wagons suitable for the carriage of horses but for which no fittings are available. See foot-note.†	Total number of medium or high-sided, and ballast or low-sided wagons on the list.§	NUMBER OF OPEN GOODS WAGONS SUITABLE FOR THE CARRIAGE OF ARTILLERY GUNS.‡					REMARKS.
		Intermediate class.	Third class.	Composite intermediate and third class.	Total.	Percentage of column (6) on entire stock shown in column (2).	Capable of carrying 6 horses.	Capable of carrying 4 horses.	Capable of carrying 3 horses.	Capable of carrying 2 horses.	Total.		Wooden.	Iron.	Total.	Total number of horses capable of being carried in the wagons shown in column (16).	Percentage of column (16) on entire stock shown in column (13).			Medium or high-sided.	Ballast or low-sided.	Total.	Total carrying capacity of the wagons shown in column (23).	Percentage of column (23) on entire stock shown in column (20).	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

* In these columns only those wagons should be included which are actually provided with complete fittings.

† This column should include all covered goods wagons which, although not actually provided with complete fittings, from their dimensions and from having wooden floors, or iron floors covered with battens, as ordered in Government of India Circular letter No. 372 R. S. of 1894, are suitable for the carriage of horses. The total carrying capacity of these wagons for horses should be noted in the column of remarks.

‡ No wagon, the width of whose doors is *less* than 5′ 9″ should be included as suitable for the carriage of artillery guns, and wagons with sides higher than 2′ 4″ from floor-level should not be included if their doors are *less* than 6′ 1″ in width.

§ The numbers to be given under this column should correspond with those included under column 5, of Form No. XII of the Capital and revenue accounts for the half-year ended the 31st December 1897.

Note.—Any special details regarding any of the stock included in the statement should be mentioned in the column of remarks. It should also be stated how many of the vehicles are on bogies.

Enclosure No. 12 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

(To reach the Director of Railway Traffic at Simla on the 31st March 1898.)

Statement showing the locomotives and vehicles fitted with automatic vacuum brakes on the standard and metre gauge railways on the 31st December 1897.

RAILWAY (INCLUDING BRANCH LINES WORKED).	NUMBER OF LOCOMOTIVES AND VEHICLES (COACHING AND GOODS)* FITTED WITH AUTOMATIC VACUUM BRAKES.												REMARKS.
	Locomotives.			Vehicles (Coaching and Goods).*				Number of miles run by trains wholly or partially fitted during the year 1897.	Total train-mileage of all descriptions during the year 1897.	Percentage			
	Fitted.	Not fitted.	Total columns (2) and (3).	Braked.	Piped.	Not fitted.	Total columns (5), (6) and (7).			Of locomotives fitted, column (2), on total, column (4).	Of vehicles braked or piped, columns (5) + (6), on total, column (8).	Of mileage run by trains wholly or partially fitted, column (9), on total train-mileage, column (10).	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

*Excluding cranes.

Enclosure No. 13 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

DETAILS OF SANCTIONED AND OPEN MILEAGE FOR THE OFFICIAL YEAR 1897-98.

Enclosure No. 13 to the letter from the Director of Railway Traffic, No. 4 Stat. of 1898.

(To reach the Director of Railway Traffic at Simla on the 15th April 1898)

Details of sanctioned and open mileage for the official year 1897-98.

Railway, or tramway working outside Municipal limits.	Name of working or constructing agency.	Gauge.	SANCTIONED MILEAGE							OPEN MILEAGE												LENGTH REMAINING TO BE FINISHED.		
			On the 31st March 1897 as shown for the last report.	SANCTIONED DURING 1897-98.					Net difference due to corrections of mileage during 1897-98. (a)	Net total sanctioned length on the 31st March 1898.	On the 31st March 1897 as shown for the last report.	OPENED DURING 1897-98.					Net difference due to corrections of mileage during 1897-98. (a)	NET TOTAL OPEN MILEAGE ON THE 31ST MARCH 1898.							
				Name of sanctioning authority.	Number and date of sanctioning letter or telegram.	Station from	Station to	Miles.				Date of opening for		Station from	Station to	Miles.		Length laid with single track.	Length laid with two or more tracks.				Station from	Station to	Miles.
												Goods traffic.	Passenger traffic.									Total.			
			Miles.						Miles.	Miles.	Miles.						Miles.	Miles.							

NOTE.—All mileages should be given correct to two places of decimals.

(a) The names of the sections on which corrections of mileage are made and details working up to the net figure shown in this column should be given in a foot-note.

Public Works (1898) Department.

Railway

CURRENT No. 562

From

The Govt. of India

Order No. 704 Ry dated 7/5/98

Communicated to the

Railway Administrations

concerned for information.

No. 250 R. Stat

2 Attention is drawn

to paras 2 + 3 of the letter

Dated 23rd April 1898

Received

Registered 4.5.98

Enclosures

Spare copies

SUBJECT.

Administration report

Requesting that a report on each survey which may be completed before the close of 1898-99 may be furnished as soon as completed, and that this procedure may be followed in future years

To

The Agents & Managers State Ry

" " S. I. Ry

" " & Chief Engr. W. I. Ry

" Comptroller Port Trust

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

No. 250 R. Stat.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY STATISTICS.

To

THE JOINT SECRETARY TO THE GOVERNMENT OF MADRAS IN THE PUBLIC WORKS DEPARTMENT (RAILWAY BRANCH).
THE SECRETARY TO THE GOVERNMENT OF BOMBAY IN THE PUBLIC WORKS DEPARTMENT (RAILWAY BRANCH).
THE SECRETARY TO THE GOVERNMENT OF BURMA IN THE PUBLIC WORKS DEPARTMENT (RAILWAY BRANCH).
THE CHIEF COMMISSIONER OF ASSAM, PUBLIC WORKS DEPARTMENT (RAILWAY BRANCH).
THE RESIDENT AT HYDERABAD.
THE AGENTS TO THE GOVERNOR GENERAL FOR RAJPUTANA AND CENTRAL INDIA, PUBLIC WORKS DEPARTMENT.
THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS, CALCUTTA AND LUCKNOW.
THE MANAGER, NORTH-WESTERN STATE RAILWAY.
THE MANAGER, OUDH AND ROHILKHAND STATE RAILWAY.
THE MANAGER, EASTERN BENGAL STATE RAILWAY.
THE MANAGER, EAST COAST STATE RAILWAY.
THE ENGINEER-IN-CHIEF, VIZIANAGRAM-RAIPUR RAILWAY SURVEY.
THE ENGINEER-IN-CHIEF, BOMBAY-SIND CONNECTION SURVEY.
THE ENGINEER-IN-CHIEF, REWARI-KUCHAMAN CHORD SURVEY.

CONSULTING ENGINEERS TO GOVT. OF INDIA RECEIVED 4 MAY 1898 MADRAS.

Case 227
93

Simla, the 23rd April 1898.

SIR,

With reference to Government of India Circular No. XVIII Railway, dated the 8th November 1893, regarding the supply of information for the annual Administration Report on Indian Railways, I am directed to state that in order to facilitate the editing of Chapter III of Part I—lines under survey or projected—it is necessary when a survey is *completed* during the official year that this office should be furnished with a brief report of its operations in the sample form circulated as enclosure No. 7 to letter No. 4 Stat., dated the 4th January 1898, from the Director of Railway Traffic, before the Engineer-in-Chief and his staff are dispersed.

2. I am therefore to request that a report on each survey which may be completed before the close of 1898-99, may be furnished as soon as completed, and that this procedure may be followed in future years.

3. If any surveys are still in hand at the end of the official year, a report showing progress made thereon during the year should be furnished, in compliance with the usual call for information for Part I of the annual Report of the Director of Railway Traffic on Indian Railways.

I have the honour to be,
SIR,
Your most obedient Servant,

W. McClumpha
Captain, R.E.,
Offg. Under Secretary.

Documents accompanying.
Nil.

G. C. Press Simla.—No. 72 P. W. D.—25-4-98—570.

To The Joint Secy: to the Govt of Madras
Public Works Dept
Railway Branch

No. 250 R. Stat.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY STATISTICS.

To

THE JOINT SECRETARY TO THE GOVERNMENT OF MADRAS IN THE PUBLIC WORKS DEPARTMENT (RAILWAY BRANCH).
THE SECRETARY TO THE GOVERNMENT OF BOMBAY IN THE PUBLIC WORKS DEPARTMENT (RAILWAY BRANCH).
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I have the honour to be,

SIR,

Your most obedient Servant,

W. J. MCELHINNY, Captain, R.E.,

Offg. Under Secretary.

Documents accompanying.

Nil.

G. C. Press Simla.—No. 72 P. W. D.—25-4-98—570.