

Public Works (1893) Department.

RAILWAY BRANCH.

G.O., No. 1314-5-R

DATED 31st October

[Despatch Abstract.]

Madras Railway

The analysis of working the — for the first half of 1893 ordered to be forwarded to the Director Genl of Railways and to the Secy of State.

Fdg copy of Prob: embodying the analysis of working of the — for the first half of 1893.

Fdg copy of Prob: embodying the analysis of working of the Madras Railway for the first half of 1893.

BACK PAPERS.

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

FURTHER PAPERS.

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

31st OCTOBER 1893, No. 1314 R., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following paper:—

Endorsement from the Consulting Engineer for Railways, dated 16th October 1893, No. 289.

ABSTRACT.—Transferring letter from the Agent and Manager, Madras Railway Company, submitting copies of the analysis of working of the Madras Railway for the half-year ended the 30th June 1893.

ORDER—dated 31st October 1893, No. 1314 R., Public Works.

Ordered to be forwarded to the Director-General of Railways in continuation of Public Works Department letter No. 1078 D., dated 20th October 1893, and to the Secretary of State.

[Here enter No. 1315 R., dated 31st October 1893.]

(True Extract.)

Joint Secy. to Govt., P.W.D.,
Railway Branch.

To the Agent and Manager, Madras Railway,
through the Consulting Engineer for Railways,
Examiner, Guaranteed Railway Accounts.

Ed. S. J. Pereira.
Spate Copies

RAILWAY.

Govt. of {1893} Madras.

PUBLIC WORKS.

Dated October, 31st.

Recd.

Encl.

G.O., 31st Oct. 1893, No. 1314 R.

OCTOBER.

Madras Railway

The analysis of working the — for the first half of 1893, ordered to be forwarded to the Director-General of Railways.

31st OCTOBER 1893, No. 1314 R., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

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(True Extract.)

(Signed) F. R. UPCOTT,
Joint Secy. to Govt., P.W.D.,
Railway Branch.

To the Agent and Manager, Madras Railway,
through the Consulting Engineer for Railways.
Examiner, Guaranteed Railway Accounts.

ENDORSEMENT—dated 31st October 1893, No. 1315 R., Public Works.

Forwarded.

(By Order.)

Joint Secy. to Govt., P.W.D.,
Railway Branch.

Ed. S. J. Perera.
Spare Copies

RAILWAY.

Govt. of {1893} Madras.
PUBLIC WORKS.

Dated October, 31st.

Recd.

Encl.

G.O., 31st Oct. 1893, Nos. 1314,
1315 R.

OCTOBER.

Madras Railway

Forwarding copy of Proceedings embody-
ing the analysis of working of the — for
the first half of 1893.

31st OCTOBER 1893, No. $\frac{15}{1314}$ R., PUBLIC WORKS.

PUBLIC WORKS DEPARTMENT.

LETTER—to

THE RIGHT HONORABLE THE SECRETARY OF STATE FOR INDIA.

MR LORD,

We have the honour to forward a copy of our Proceedings, No. 1314 R., dated
31st October 1893, embodying the analysis of working of the Madras Railway for the
first half of 1893.

We have the honour to be,
My Lord,
Your Lordship's most obedient, humble servants,

(Signed) H. E. STOKES.
(") J. H. GARSTIN.

FORT ST. GEORGE,
31st October 1893.

Ed. S. J. Percin.

GOVT. OF MADRAS.

PUBLIC WORKS DEPARTMENT.

(Copy.)

LETTER to the Right Honorable
the Secretary of State for
India.

No. $\frac{15}{1314 R.}$ dated 31st Oct. 1893.

FORWARDING copy of Proceedings embodying
the analysis of working of the Madras Railway
for the first half of 1893.

No.426 Staj.

DIRECTOR GENERAL OF RAILWAYS.

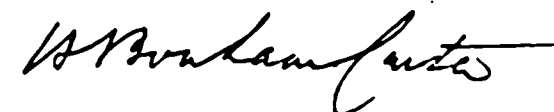
To

THE Consulting Engineer for

Railways, Madras.

SIMLA, the 6th October 1893.

The undersigned has the honour to request the
early transmission of the return noted below.



Capt. R.E.,

for Director General.

Analyses of working of the Madras and
South Indian railways for the 1st-
half of 1893.

rd
1893

9/10/93

S.N.S.

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OW $\frac{5.1}{8742/53}$

REGISTERED
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FILE

(C. 3.)

100-20-1-93.

Madras Railway Company,
AGENT & MANAGER'S OFFICE,
Madras,

From

1000
14/10

THE AGENT AND MANAGER,
M. R. Co.

To

The Consulting Engineer
for Railways.
Madras.

Dated 14th } October 1893.
Received

No. $\frac{7735}{915}$

N^o 2892 16/10/93

Transferred to Joint Secretary

RECEIVED

CMH
for E. R.
16.10.93

The undersigned has the honor to forward
herewith 30 Copies of the Analysis
of Working of the Madras
Railway for the half year
ended the 30th June 1893.

[Signature]
Agent and Manager.

60/10/93

P. W. CURRENT No. 8742

Enab
Recd: 16.10.93

Madras Railway Company.

ANALYSIS OF WORKING
FOR THE
Half-Year ending 30th June, 1893.

VEST AND COMPANY, PRINTERS, MADRAS.

Per $\frac{52}{87.12/93}$

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MADRAS RAILWAY COMPANY.

Analysis of Working for the Half-year ended 30th June, 1893.

Progressive Number.	HEADINGS.		REMARKS.
No. I.			
DESCRIPTION OF RAILWAY WORKED.			
1	Gauge of Railway	Ft. In.	
2	Mean mileage worked Miles	5 6	
3	Number of Stations No.	141	
4	Total length of the following gradients:—		
	(a) $\frac{1}{4}$ and less Miles	Nil.	
	(b) $\frac{1}{4}$ to $\frac{1}{2}$ "	17 99	
	(c) $\frac{1}{2}$ to $\frac{3}{4}$ "	43 09	
	(d) $\frac{3}{4}$ to 1 "	197 14	
	(e) 1 to $\frac{3}{2}$ "	123 86	
5	Steepest gradient worked—		
	(a) Length Miles	0 80	
	(b) Inclination "	1 in 60	
No. II.			
FINANCIAL RESULTS.			
6	Percentage of net earnings (including Steam-boat traffic) on Capital outlay Per cent.	2 36	
7	Percentage of net earnings on paid up capital "	2 36	Excluding £12,014-1-4 Capital not bearing interest.
No. III.			
OUTLAY, EARNINGS AND EXPENSES.			
<i>(Exclusive of Steam-boat Service.)</i>			
8	Capital outlay per mile open Rs.	1,39,563	
9	Total earnings per mile open per week "	242 29	
10	Total working expenses per mile per week "	112 09	
11	Total earnings per train-mile "	4 064	
12	Total working expenses per train-mile "	1 830	
13	Net earnings per train-mile "	2 184	
14	Cost per 1,000 gross ton-miles moved (freight and dead weight) "	6 42	
15	Percentage of total working expenses upon total earnings Per cent.	46 26	
16	Percentage of total working expenses upon total earnings, excluding from both sides of the account the charges for carriage of revenue stores... .. "	45 63	
<i>(Inclusive of Steam-boat Service.)</i>			
17	Percentage of total working expenses on total earnings (for details, see Table No. VII) "	46 26	
No. IV.			
DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC.			
18	Total Working Expenses for both coaching and goods traffic, excluding Steam-boat expenses, and after deducting telegraph and sundry receipts and leaving only the balance of payments to other lines for mileage, &c. Rs.	23,54,226	
	Proportions, dividing expenditure in ratio of gross ton-mileage (freight and dead load).		
19	Coaching "	8,94,360	
20	Goods "	14,59,866	

ANALYSIS OF WORKING
For the Half-year ended 30th June, 1893.

Progressive Number.	HEADINGS.	REMARKS.
No. V. COACHING TRAFFIC.		
GROSS RECEIPTS AND TRAIN-MILEAGE—		
21	Receipts from coaching traffic <i>Rs.</i>	20,32,392
22	Coaching train-miles run <i>No.</i>	620,577
23	Average coaching receipts per train-mile <i>Rs.</i>	3-28
UNITS AND UNIT MILEAGE—		
Number of units carried one mile—		
24	1st Class <i>Unit miles</i>	1,612,188
25	2nd " "	3,998,766
26	3rd or Intermediate class "	
27	4th or Lowest " "	185,256,159
28	Total passenger unit mileage "	190,867,113
29	Other coaching traffic <i>Ton-miles</i>	1,230,292
Average sum received for carrying a unit one mile—		
30	1st Class <i>Pies.</i>	10-13
31	2nd " "	5-13
32	3rd or Intermediate class "	
33	4th or Lowest " "	1-64
34	Average for all classes "	1-73
35	Other coaching traffic per ton-mile "	39-07
Average number of units in a train—		
36	1st Class <i>No.</i>	2-60
37	2nd " "	6-44
38	3rd or Intermediate class "	
39	4th or Lowest " "	293-52
40	Total passenger units "	307-56
41	Other coaching traffic <i>Tons</i>	2-06
VEHICLES AND VEHICLE MILEAGE—		
Number of coaching vehicles hauled one mile—		
42	1st Class <i>Vehicle miles</i>	920,307
43	2nd " "	934,929
44	3rd or Intermediate class "	
45	4th or Lowest " "	6,441,995
46	Other vehicles "	753,204
47	Brake Vans "	1,337,240
48	Total "	10,387,673
Average number of vehicles in a coaching train—		
49	1st Class <i>No.</i>	1-48
50	2nd " "	1-51
51	3rd or Intermediate class "	
52	4th or Lowest " "	10-38
53	Other vehicles "	1-21
54	Brake Vans "	2-16
55	Total "	16-74
Average earnings per coaching vehicle per mile—		
56	1st Class <i>Pies.</i>	17-83
57	2nd " "	22-17
58	3rd or Intermediate class "	
59	4th or Lowest " "	47-05
60	Other vehicles "	66-40
Carrying capacity hauled one mile (excluding brakes)—		
61	1st Class <i>Seats</i>	9,667,453
62	2nd " "	18,459,651
63	3rd or Intermediate class "	
64	4th or Lowest " "	337,947,058
65	Other vehicles <i>Tons</i>	2,930,474
Percentage of freight upon capacity hauled—		
66	1st Class <i>Per cent.</i>	16-68
67	2nd " "	21-66
68	3rd or Intermediate class "	
69	4th or Lowest " "	54-82
70	Other vehicles "	43-69

ANALYSIS OF WORKING
For the Half-year ended 30th June, 1893.

Progressive Number.	HEADINGS.	REMARKS.
WEIGHT OF TRAIN AND TON-MILEAGE—		
Gross ton-mileage of all coaching trains—		
71	Freight <i>Ton-miles</i>	12,876,722
72	Dead weight "	126,520,375
73	Total "	139,397,097
Average weight of a coaching train—		
74	Freight <i>Tons.</i>	20-75
75	Dead weight "	203-87
76	Total "	224-62
COST OF WORKING AND PROFITS—		
77	Average cost of hauling a coaching train one mile <i>Rs.</i>	1-44
78	Average cost of hauling a coaching vehicle with its load one mile <i>Pies.</i>	18-97
Average cost of hauling a coaching unit one mile—		
79	Per passenger unit <i>Pies.</i>	82
80	Other traffic per ton "	11-16
81	Average profit on working a coaching train one mile... .. <i>Rs.</i>	1-84
Average profit on working a coaching vehicle one mile—		
82	1st Class <i>Pies.</i>	Minus 1-14
83	2nd " "	3-20
84	3rd or Intermediate class "	
85	4th or Lowest " "	23-08
86	Other vehicles "	47-43
Average profit on working a coaching unit one mile—		
87	Per passenger unit <i>Pies.</i>	96
88	Other traffic per ton "	27-91
No. VI. GOODS TRAFFIC.		
GROSS RECEIPTS AND TRAIN-MILEAGE—		
89	Receipts from goods traffic <i>Rs.</i>	31,59,365
90	Goods train-miles run <i>No.</i>	680,261
91	Average goods receipts per train-mile <i>Rs.</i>	4-64
UNITS AND UNIT MILEAGE—		
92	Tons of goods carried one mile <i>Ton-miles.</i>	74,641,166
93	Average sum received for carrying a ton one mile <i>Pies.</i>	8-12
94	Average number of tons in a train <i>Tons.</i>	109-72

ANALYSIS OF WORKING
For the Half-year ended 30th June, 1893.

Progressive Number.	HEADINGS.					REMARKS.
	VEHICLES AND VEHICLE MILEAGE—					
	Number of goods vehicles hauled one mile—					
95	Loaded	...	...	...	Vehicle miles	12,079,193
96	Empty	...	...	...	"	3,525,093
97	Brake Vans	...	...	...	"	1,265,957
98	Total	...	...	...	"	16,870,243
	Average number of vehicles on a goods train—					
99	Freight vehicles	...	...	...	No.	22.04
100	Brake Vans	...	...	...	"	1.86
101	Total	...	...	...	"	24.80
102	Average earnings per goods vehicle per mile (excluding brakes)				Pies.	38.86
103	Carrying capacity hauled one mile (excluding brakes)				Tons.	170,484,917
104	Percentage of freight upon capacity hauled.				Per cent.	43.78
105	Average load of a goods vehicle (including both loaded and empty)				Tons.	4.78
106	Average load of a loaded goods vehicle				"	6.18
	WEIGHT OF TRAIN AND TON-MILEAGE—					
	Gross ton-mileage of all goods trains—					
107	Freight	...	...	...	Tons.	74,641,166
108	Dead weight	...	...	...	"	152,897,110
109	Total	...	...	...	"	227,538,276
	Average weight of a goods train—					
110	Freight	...	...	...	Tons.	109.72
111	Dead weight	...	...	...	"	224.76
112	Total	...	...	...	"	334.48
	COST OF WORKING AND PROFIT—					
113	Average cost of hauling a goods train one mile				Rs.	2.15
114	Average cost of hauling a goods vehicle with its load one mile				Pies.	17.96
115	Average cost of hauling a goods unit (viz., one ton) one mile				"	3.76
115A	Do. do. do. do. including interest on capital expended on open line, &c.				"	8.55
116	Average profit on working a goods train one mile				Rs.	2.49
117	Average profit on working a goods vehicle with its load one mile				Pies.	20.90
118	Average profit on working a goods unit (viz., one ton) one mile				"	4.36

ANALYSIS OF WORKING
For the Half-year ended 30th June, 1893.

Progressive Number.	HEADINGS.				REMARKS.
	No. VII.				
	DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE.				
	<i>Percentage to Total Earnings—</i>				
119	Coaching Traffic	...	...	Per cent.	38.44
120	Goods Traffic	...	...	"	59.74
121	Sundries, including telegraph	...	...	"	1.82
122	Steam-boat Earnings	...	...	"	...
	Total Earnings	...	...	"	100.00
	<i>Percentage of Working Expenses upon Total Earnings—</i>				
123	Maintenance	...	...	Per cent.	7.72
124	Locomotive Expenses	...	...	"	19.29
125	Carriage and Wagon Expenses	...	...	"	4.62
126	Traffic Expenses	...	...	"	8.36
127	General Charges	...	...	"	5.42
128	Miscellaneous Charges	...	...	"	.85
129	Steam-boat Expenses	...	...	"	...
130	Total Working Expenses	...	...	"	46.26

ANALYSIS OF WORKING

For the Half-year ended 30th June, 1893.

No. VIII.—WORKING EXPENSES.

TABLE A.

Maintenance of Way, Works and Stations.

REFERENCE TO REVENUE ACCOUNT.		Progressive number in analysis.	DETAILS.	Per mile of line maintained.	Per mile of track, including sidings.	Per total train-mile.	Per 1,000 gross ton-miles.
Table and main head.	Sub-head.			(839-22)	(1,011-93)	(1,300,838)	(366,935,373)
IX (A)	1	1 & 2 3 to 5 6	General Superintendence—	Ra.	Ra.	As.	Ra.
			Engineers' salaries and allowances ...	66-74	55-35	69	15
			Subordinate Superintendents' salaries and allowances, including overtime ...	47-63	39-50	49	11
			Office expenses ...	50-61	41-97	52	12
	2	1 2	131 Total...	164-98	136-82	1-70	38
			Maintenance and Renewal of Permanent-way—				
			Wages ...	165-39	137-16	1-71	38
			Materials ... Minus ...	89-61	74-31	93	21
	3	1 2	132 Total...	75-78	62-85	78	17
			Repairs of Bridges, &c.—				
			Wages and Materials—				
			Bridges and tunnels ...	27-74	22-99	29	06
3(A)	4	1 2	Miscellaneous ...	35-36	29-33	36	08
			133 Total...	63-10	52-32	65	14
			134 Conservancy of Rivers ...				
			Repairs of Stations and Buildings—Wages and Materials—				
	5	1 2	Repairs of all, except staff quarters ...	73-66	61-09	76	17
			Repairs of staff quarters ...	22-90	18-93	24	05
			135 Total...	96-56	80-07	1-00	22
			Maintenance by Contract—				
	6	1 2	Amount paid to contractors ...				
			Materials supplied by the Railway ...				
			136 Total...				
			New Minor Works ...	9-40	7-80	10	02
7	7	1 2 3 4 5	Unclassified Expenditure—				
			Plantations ...	1-52	1-26	02	
			Tools and Plant ...	4-01	3-33	04	01
			Loss by exchange ...	42-84	35-53	44	10
	8	1 2 3	Loss on stores, &c. ...	27-95	23-17	29	07
			Freight on stores ...				
			137 Total...	76-32	63-29	79	18
			Total, Heads 5, 6 and 7	85-72	71-09	89	20
	9	1 2 3	Less Credits ...				
			138 Net Total, other charges ...	85-72	71-09	89	20
			139 Total Maintenance...	486-14	403-15	5-02	1-11

IF DONE DEPARTMENTALLY.

ANALYSIS OF WORKING

For the Half-year ended 30th June, 1893.

No. VIII.—WORKING EXPENSES.

TABLE B.

Locomotive Expenses.

REFERENCE TO REVENUE ACCOUNT.		Progressive number in analysis.	DETAILS.	Per Total train-mile.	Per engine mile.	Per 1,000 gross ton-miles.
Table and main head.	Sub-head.			(1,300,838)	(1,527,934)	(366,935,373)
IX (B) 1	1 & 2 3 to 5 6	139	General Superintendence—	As.	As.	Ra.
			Salaries of superintendents and assistants, including allowances ...	17	15	04
			Do. of subordinate do. including do. ...	29	24	06
			Office expenses ...	24	20	05
	2	139	Total...	70	59	15
			Running Expenses—			
			Wages of drivers and firemen, including overtime...	1-94	1-65	43
			Fuelling, cleaning and looking after engines ...	33	23	07
	3	1 to 4	Contingent expenses ...			
			139 Total...	2-27	1-93	50
4	1 & 2 3 4	140	Fuel—(In terms of Kurhurbaree Coal).	lbs.	lbs.	lbs.
			Average quantity consumed ...	48-57	41-35	172-18
			Average price per ton Rs. 12-35.	As.	As.	Ra.
			Do. cost ...	4-28	3-65	95
	5	141	Water—(including wages and stores.) ...	16	14	04
			Oil, Tallow and other Stores ...	26	23	06
			Maintenance and Renewals of Engines—			
			Wages, including overtime ...	1-52	1-30	34
	6	1 & 2 3	Materials ...	1-52	1-29	34
			143 Total...	3-04	2-59	68
6a	1 & 2 3	143a	Maintenance and Renewals of Machinery—			
			Wages, including overtime ...	55	47	12
			Materials ...	08	06	02
			143a Total...	63	53	14
	7	...	New Minor Works—	02	02	
			Payments to other Lines—			
			Unclassified Expenditure—			
			Loss by exchange ...	79	67	17
	8	1 2 3	Loss on stores, &c. ...	39	33	09
			Freight on stores ...			
			144 Total...	1-18	1-00	26
			Total, Heads 7, 8 and 9	1-20	1-02	26
9	1 & 2 3	144	Less Credits ...			
			Net Total, other charges ...	1-20	1-02	26
			145 Total Locomotive Expenses ...	12-54	10-68	2-78

For the Half-year ended 30th June, 1893.

No. VIII—WORKING EXPENSES.

TABLE C.

Carriage and Wagon Expenses.

REFERENCE TO REVENUE ACCOUNT.		Progressive number in analysis.	DETAILS.	Per total train-mile.		Per 1,000 vehicle miles run by home vehicles.
Table and main-head.	Sub-head.			(1,300,838)	(26,609,438)	
IX (C) 1	1 & 2	146	General Superintendence—	As.	Rs.	
	3 to 5		Salaries of superintendents, including allowances ...	·05	·13	
	6		Do. of subordinate do. including do. ...	·07	·21	
		147	Office expenses ...	·06	·20	
			Total...	·18	·54	
			Repairs and Renewals of Vehicles—			
	1 to 3	148	Coaching vehicles ... { Wages, including overtime ...	·42	3·25	
			Materials ...	·42	3·27	
			Total...	·84	(a) 6·52	
	1 to 3	149	Goods vehicles ... { Wages, including overtime ...	·38	1·89	
			Materials ...	·64	3·21	
			Total...	1·02	(b) 5·10	
2a	1 & 2	148a	Repairs and Renewals of Machinery—			
	3		Wages including overtime ...	·28	·86	
			Materials ...	·05	·16	
		149	Total...	·33	1·02	
			Cleaning and oiling—			
	1		Labour, including wages of oilers, &c. ...	·22	·69	
	2		Stores ...	·17	·52	
		150	Total...	·39	1·20	
			New Minor Works ...			
			Unclassified Expenditure—			
5	1	151	Loss by exchange ...	·25	·77	
	2		Loss on stores, &c. ...			
	3		Freight on stores ...			
		152	Total...	·25	·77	
			Total, Heads 4 and 5 ...	·25	·77	
			Less Credits ...			
		153	Net Total, other charges ...	·25	·77	
			Total Carriage and Wagon Expenses ...	3·01	9·19	

(a.) Per 1,000 Coaching Vehicle Miles.
(b.) Per 1,000 Goods Vehicle Miles.

ANALYSIS OF WORKING
For the Half-year ended 30th June, 1893.

No. VIII—WORKING EXPENSES.

TABLE D.

Traffic Expenses.

REFERENCE TO REVENUE ACCOUNT.		Progressive number in analysis.	DETAILS.	Per total train-mile.		Per cent. of traffic earnings. Abstracts H and I.
Table and main-head.	Sub-head.			(1,300,838)	(51,90,756)	
IX (D) 1	(a) 1 & 3	152	General Superintendence—	As.	Per cent.	
	(a) 2 & 4		Traffic Manager, Assistants, &c., including travelling allowances ...	·47	·73	
			Office establishment and contingencies ...	·37	·58	
		153	Total ...	·84	1·31	
	(b)		Station Staff ...	2·30	3·74	
	(c)		Train Staff ...	·58	·92	
	2 1 to 3	154	Fuel, Lighting, Water and General Stores ...	·64	1·00	
	3		Clothing ...	·07	·11	
	4		Printing, Stationery and Tickets ...	·51	·81	
	5	155	Charges for Delivery and Collection of Goods, &c. ...	·02	·02	
	6		Miscellaneous Expenses ...	·05	·08	
7	1	160	Payments to other Lines—			
			Expenses at joint stations ...	·08	·12	
			Unclassified Expenditure—			
	1	161	Loss by exchange ...	·24	·38	
	2		Loss on stores, &c. ...			
	3		Freight on stores ...	·02	·03	
		162	Total, Head 8 ...	·26	·41	
			Less Credits ...			
			Net Total, other charges ...	·26	·41	
		163	Total Traffic Expenses ...	5·44	8·52	

ANALYSIS OF WORKING
For the Half-year ended 30th June, 1893.
No. VIII.—WORKING EXPENSES.

TABLE E.
General Charges.

REFERENCE TO REVENUE ACCOUNT.		Progressive num- ber in analysis.	DETAILS.	Per total train- mile. (1,300,438)	Per cent. on total earnings. (52,86,714)
Table and main-head.	Sub- head.				
IX (E) 1	1 to 4	163	Home Expenditure	As. 40	Per cent. 62
			<i>Indian Management—</i>		
	1	164	Agent's Office, including travelling allowances and contingencies	26	41
	2		Auditor's Office ditto ditto	1 00	1 53
	3		Account's Office ditto ditto		
	4		Paymaster's Office ditto ditto		
		165	Total 2 to 4 ...	1 00	1 53
	5	166	Store Department, ditto ditto	13	20
	6	167	Medical Department, ditto ditto	21	33
	7		Rents ...		
	8 to 10		Miscellaneous expenses, including printing, stationery, medicine and contributions to Hospitals ...	12	19
		169	Total 7 to 10 ...	12	19
3	1 to 3	169	Police ...	23	35
4		170	Advertising ...	04	06
			<i>Electric Telegraph—</i>		
	1 to 4		Salaries, &c. ...	59	91
	5		Maintenance (wages and stores) ...	24	36
	6		Government Telegraph Department for rent, maintenance and inspection ...		
		171	Total ...	83	1 27
6			Clearing accounts with other Lines ...		
			<i>Unclassified Expenditure—</i>		
	1		Loss on stores, &c. ...		
	2		Expenses connected with Fire-engines ...		
	3		Loss by exchange ...	03	05
	4		Freight on stores ...	30	45
			Total ...	33	50
			Total, Heads 6 and 7 ...	33	50
			Less Credits ...	03	04
		172	Net Total, other charges ...	30	46
		178	Total General Charges ...	3 52	5 42

ANALYSIS OF WORKING
For the Half-year ended 30th June, 1893.
No. VIII.—WORKING EXPENSES.

TABLE F.
Steam Boat Service.

NIL.

TABLE G.
Special and Miscellaneous Expenditure.

REFERENCE TO REVENUE ACCOUNT.		Progressive num- ber in analysis.	DETAILS.	Per cent. on total earnings. (52,86,714)
Table and main-head.	Sub- head.			
IX (G) 1		174	Loss Charges ...	Per cent.
			<i>Compensation—</i>	
	1		For goods lost or damaged ...	03
	2		" personal injury ...	
	3		" other claims ...	
		175	Total ...	06
3		176	Rates and Taxes ...	10
			<i>Payments to other Lines—</i>	
	1		Hire of locomotives ...	
	2		" of vehicles ...	
	3		Mileage of foreign stock ...	11
	4		Rent of stations, &c., jointly occupied ...	
		177	Total ...	11
6			<i>Contributions to—</i>	
			Railway Provident Institution ...	39
5 & 7			Miscellaneous ...	20
			Total, Heads 5 to 7 ...	59
			Less Credits ...	04
		179	Net Total, other charges ...	55
		179	Total Special and Miscellaneous Expenses ...	84

MADRAS RAILWAY,
CHIEF AUDITOR'S OFFICE,
25th September, 1893.

FRED. DUNSTERVILLE,
Chief Auditor.

A. EDWARDS,
for Agent and Manager.

APPENDICES.

APPENDICES TO ANALYSIS OF WORKING

For the Half-year ended 30th June, 1893.

APPENDIX I.

Working of Locomotives.

REFERENCE TO REVENUE ACCOUNT.		Passenger.	Goods.	Tank.	Total.
Table and main-head.	Sub- head.				
	Locomotives	Single driving wheels Tons.	4 and 6 wheels coupled. Tons.	Single driving wheels & wheels coupled. Tons.	
	1.—Wheels coupled				
	2.—Weight on driving axle	13.25	12.16	14.00	
	3.—Weight of engine in steam	32.30	32.33	33.45	
	4.—Weight of tender loaded	25.15	26.09	...	
XII	5				
	1.—Number of locomotives erected and made over to Locomotive Department	2	138	13	153
	11				
	2.—Average number of locomotives constantly under repairs and renewals	...	40	2	42
	3.—Number of locomotives laid by as spare	...	...	...	...
	4.—Ditto lent or hired out to other lines	...	...	...	...
	5.—Average number of locomotives 1—(3+4)...	2	138	13	153
	6.—Total milenge of locomotives (5)	30,614	1,396,138	101,182	1,527,934
	7.—Average miles run by a locomotive of each class 6+5	15,307	10,117	7,783	9,986
	Per diem...	84.57	55.90	43.00	55.17
	8.—Weight of Coal, &c., used per engine-mile	lbs.	lbs.	lbs.	lbs.
	9.—Weight of wood used per engine-mile	38.67	41.96	33.66	41.35
	To be separated, if possible, among the classes of locomotives.				
		Passenger trains.	Goods trains.	Mixed trains.	
	10.—Average gross weight of trains hauled. Tons.	131.27	329.00	257.35	227.90
	11.—Average speed between stations... Miles per hour.	24.89	15.88	17.67	...
	12.—Average through speed... Miles per hour.	19.67	10.99	12.56	...
	13.—Average consumption of fuel per engine mile, lbs.	...	...	...	41.35

NOTE.—The fuel consumed by the different classes of locomotives on this line is expressed in terms of Kurburbaroo Coal as per Government of India Circular 7 of 19th June, 1891, the ratio of conversion being:—

Patent Fuel	0.81	} to 1.00 of Kurburbaroo Coal.
Singareni coal	1.02	
Borekar	0.92	
Wood	2.33	

APPENDICES TO For the Half-year APPEN Working of

ANALYSIS OF WORKING ended 30th June, 1893 DIX II. Vehicles.

DESCRIPTION OF VEHICLES.	Total number on the list at end of the half-year.	AVERAGE WEIGHT IN TONS.		AVERAGE CARRYING CAPACITY.		Average number laid by as spare.	Average number lent or hired out.	Average number working.
		Of each description of vehicles.	Of each group.	Of each description of vehicles.	Of each group.			
Couching Stock.								
State Saloon Carriages ... 6 wheeled.	2	10-72	...	4-00	...	...	...	2
Family ...	3	9-35	...	4-00	...	...	...	3
Reserved Saloons ... 6 wheeled.	1	11-10	11-16	4-00	2-66	...	...	1
Do ... 4 do.	2	11-19		2-00		...	...	2
Double Saloon 1st Class Night Carriages.	26	9-55	...	8-00	...	...	...	26
Second Class Carriages ...	70	10-25	...	22-00	...	...	...	70
Post Office Vans ...	9	10-55	...	3-25	...	...	...	9
Third Class Carriages	366	8-50	8-52	53-00	52-46	7	...	359
Do do do with Post Office	...	...		...		...	...	...
Compartments ...	7	10-23	10-04	30-00	16-07	...	...	7
Do do do with Brakes	4	7-15		42-00		...	...	4
Composite Carriages Sleeping ...	37	10-03	10-04	15-00	16-07	...	...	37
Do do do Day	4	10-10		26-00		...	...	4
Engineers' Inspection do	1	9-50	...	4-00	...	...	...	1
Consulting Engineers' do 6 wheeled.	1	11-50	...	3-00	...	...	...	1
Telegraph do do	1	7-50	...	3-00	...	...	...	1
Invalid do do	2	8-40	...	10-00	...	...	...	2
Carriage Trucks ...	21	5-15	...	6-00	...	3	...	18
Brake Vans ... 6 wheeled.	17	11-43	8-86	8-00	4-93	...	...	17
Do ... 4 do.	153	8-57		4-59		...	...	153
Baggage Vans ...	24	6-55	...	6-50	...	...	...	24
Horse Boxes ...	46	8-35	...	3-00	...	2	...	44
Total...	797	8-74	8-74	Nil.	Nil.	12	...	785
Goods Stock.								
Stone Wagons Iron 16 Tons. 6 wheeled.	50	8-00	6-01	18-50	11-55	...	...	50
Open Goods Wagons, 15 Tons. 6 do	50	7-45		18-00		...	...	50
Do do do 10 Tons. 4 do	805	6-15	6-01	11-50	11-55	...	...	805
Do do do 8 Tons (In terms of 10 ton vehicles)... 4 wheeled.	402½	5-32		10-00		...	...	402½
Ballast Wagons ...	213	4-95	...	12-00	6-42	14	...	199
Fuel do ...	130	5-80	...	8-00	...	13	...	117
Cattle do ...	50	6-40	...	5-00	...	...	...	50
Covered Goods Wagons, Wooden	593	7-05	7-25	11-00	10-63	...	...	593
Do do Iron	401	7-55		6-00		...	...	401
Timber Trucks ...	150	5-20	...	9-00	...	...	...	150
Water do ...	4	5-40	...	4-50	...	...	...	4
Platform do ... 8 wheeled.	1	10-17	7-22	20-00	13-33	...	...	1
Do do ... 4 do.	2	5-70		10-00		...	...	2
Powder Vans ...	4	8-50	...	9-00	...	...	...	4
Travelling Cranes ... 6 wheeled.	2	23-58	15-25	10-30	5-33	...	...	2
Do do ... 4 do.	4	11-08		3-00		...	...	4
Oil Tank Wagons ...	4	9-43	...	12-00	...	...	...	4
Tool or Accident Vans ...	10	10-57	...	6-00	...	...	...	10
Brake Vans ...	...	...	...	...	...	...	...	...
Total...	2,875½	6-35	6-35	10-40	10-40	27	...	2,848½
Grand Total...	3,672½	Nil.	Nil.	Nil.	Nil.	39	...	3,633½

Column f.—We have no Vehicles laid by as spare, but in this column Average Mileage per diem run on Do. do.

MILEAGE OF						Ton-mileage of vehicle dead weight hauled on Home Line.
Foreign vehicles on Home Line.		Home vehicles on Home Line.		Home vehicles on foreign lines.	Carrying capa- city hauled on Home Line.	
Loaded.	Empty.	Loaded.	Empty.			
...	...	2,324	739	...	12,252	32,835
83,274	2,372	29,112	6,194	...	483,808	1,130,901
702	...	1,447	671	...	7,501	31,471
...	...	425,470	19,040	...	3,556,080	4,245,071
70,952	492	435,836	75,400	...	12,818,960	5,972,470
62,058	282	214,958	...	...	901,219	2,925,494
12,530	4,612	6,196,743	223,306	...	337,695,040	54,944,867
1,895	300	675,094	20,634	...	11,215,623	7,007,147
...	...	14,665	725	...	61,560	146,205
...	...	...	...	...	...	...
...	...	...	...	...	...	...
...	...	2,396	892	...	32,860	28,934
2,438	2,438	45,940	37,656	...	532,032	456,461
...	2,590	...	1,331,650	...	...	11,847,946
...	...	61,047	33,397	...	613,886	599,719
15,571	15,571	165,843	95,154	...	876,417	2,439,361
249,420	23,657	8,270,875	1,848,658	331,115	Nil.	91,709,082
484,996	434,996	4,973,568	1,645,079	...	87,202,534	46,141,216
...	...	21,873	54,644	...	510,499	393,609
...	...	30,565	42,691	...	586,043	424,885
...	...	56,735	70,063	...	634,005	811,526
...	...	6,282,323	1,031,670	...	77,747,746	53,026,449
...	...	139,343	160,835	...	2,701,602	1,560,926
...	...	4,205	3,280	...	33,683	40,419
...	...	2,722	2,339	...	67,463	36,540
...	...	77,533	23,883	...	912,744	862,036
...	...	1,988	165	...	11,475	32,833
...	...	5,794	8,448	...	131,904	106,012
...	...	...	...	...	...	...
...	...	...	1,265,957	...	...	11,216,379
484,996	484,996	11,599,652	4,306,054	253,084	Nil.	114,652,839
734,416	513,653	19,670,527	6,154,712	584,199	Nil.	206,361,912

has been entered the number of Vehicles broken up and awaiting renewal.
Home line by Couching Vehicles (including brakes) 57,445-31.
Goods do. (do.) 13,235-00.

APPENDICES TO ANALYSIS OF WORKING

For the Half-year ended 30th June, 1893.

APPENDIX III.

Distribution of Mileage according to the traffic carried, giving total mileage of home and foreign stock on home line.

DESCRIPTION OF VEHICLES.	MILEAGE OF			REMARKS.
	Vehicles.	Carrying capacity.	Dead weight.	
<i>Coaching—</i>				
First Class	920,307	9,667,453	8,943,852	
Second „	934,929	18,459,651	9,504,977	
Third „	6,441,995	337,947,058	54,879,669	
Total passenger vehicles	8,297,231	366,074,162	73,328,498	
Other coaching vehicles	753,204	2,930,474	6,425,955	
Total paying coaching mileage	9,050,435	Nil.	79,754,453	
Passenger brake-vans	1,337,240	Nil.	11,847,946	
Total coaching mileage including brakes	10,387,675	Nil.	91,602,399	
<i>Goods—</i>				
Loaded vehicles	12,079,193	132,321,714	80,754,487	
Empty vehicles	3,525,093	38,163,233	22,642,442	
Total paying goods mileage	15,604,286	170,484,947	103,396,929	
Goods brake-vans	1,265,957	...	11,216,379	
Total goods mileage, including brakes	16,870,243	170,484,947	114,613,308	
<i>Miscellaneous—</i>				
Free mileage for inspections, &c.	15,390	61,560	146,205	
Grand Total	27,273,308	Nil.	206,361,912	

APPENDICES TO ANALYSIS OF WORKING

For the Half-year ended 30th June, 1893.

APPENDIX IV.—Maintenance of Way-Rails.

DETAILS.	IRON.				STEEL.			Total.	Total Iron and Steel.
	Double head- ed weighing 65 lbs. per yard.	Double head- ed weighing 75 lbs. per yard.	Double head- ed weighing 84 lbs. per yard.	Others.	Total.	Steel weigh- ing 75 lbs. per yard.	Steel flat foot- ed on Bridges weighing 75 lbs. per yd.		
1 Miles of rail in way, including sidings	429-3214	795-4316	100-4796	...	1,325-2326	687-7841	10-9418	698-7262	2,023-9588
2 Rails removed, Miles	1-3825	8-3760	4197	...	10-1782	17-2146	...	17-2146	* 27-3623
3 New rails laid	3-1477	3-3684	2491	...	6-7652	24-6240	...	24-6240	* 31-3692

Increased mileage of sidings —			
North-West Line	..	1 1951	Miles.
North-West Line	..	8091	
		1 7282	
		3	
		3 9964	Miles..

The difference between Removed and Laid is owing to increased savings.

APPENDIX V.—Maintenance of Way-Sleepers.

DETAILS.	WOOD.										IRON BOLTS.
	TRANSECTIONS.										
	Teak.				Jungle.		Total.	Crostoned Pine. 10' x 10' x 5'	Sleepers.		
16' x 12' x 6'	14' x 12' x 6'	12' x 12' x 6'	10' x 12' x 6'	10' x 10' x 6'	10' x 12' x 6'	10' x 10' x 5'					
1 Number of sleepers in way, including sidings, at the commencement of the half-year ...	2,416	116	5,439	1,582	7,515	3,018	17,560	37,726	149	3,180,971	
2 Average age of sleepers in way at the end of the half-year. Years...	15-4170	20-3942	20-1140	12-2798	12-2199	4-0737	7-4261	10-0460	7-1020	22-4520	
3 Number removed ...	39	...	124	1	51	365	656	* 1,246	* 4	* 3,074	
4 Number laid ...	41	7	75	3	22	603	928	* 1,679	...	* 13,069	
5 Percentage of removals on total of each class ...	0.161	...	0.227	0.006	0.0068	0.1209	0.0379	0.0330	0.068	0.010	
6 Number of sleepers in way, including sidings, at the end of the half-year ...	2,418	153	5,410	1,584	7,516	3,256	17,822	38,159	145	3,190,966	

Amount removed and laid is owing to increased sidings

Between Removed and Aid is owing to increased aidings

PROCEEDINGS OF THE MADRAS GOVERNMENT.

No. 13/4 C. 9 31st October 1893.

Read the following

Inconsistency from the } H.B. No. 289 of 16 Oct 93
 Consistency for Ryo. } the Agent and Manager, H.B.
 Abstract Transferring letter from the Qualifying
 Co. submitting copies of the 1st & 2nd
 working file/enclosures of the 1st & 2nd
 years ended the 30 June 93.

Ordered to be for-
 warded to the Director General

of Railways in continuation
of P. W. D. letter No 10782 dated
20th October 1893, and to the Secy:
of State.

Ms. A. 9. 2. 13/15 R 27 31st Oct 1893

Forwarded

2. Philosophy of Language - Barry last GR
Ex to the class -
2/11

Ms. no. 1314 R 7 9th Oct 1892
To Mr. R. H. Storr: the Secy. of the
for India

My Lord,
We have the honor
to forward a copy of our
Proceedings No 1314 R 27
31st October 1893, embodying

the Analysis of working
of the Midland Railway
for the first half of 1873

From R
18
73

2/4/73