

RAILWAY.

Govt. of {1890} Madras.

PUBLIC WORKS.

Dated June, 3rd.

Recd.

Encl.

G.O., 3rd June 1890, Nos. 767 R.,
768 R.

JUNE.

Nellore Branch of the
Villupuram-Guntakal State
Railway

Analysis of Working.—Forwarding copy
of Proceedings embodying the — for the
second half of 1889.

Govt. of {1890} Madras.

PUBLIC WORKS.

Dated

Recd.

Encl.

G.O., 3rd June 1890 No. 767-76

South Indian Railway

Analysis of working:

The — for the 2nd half
of 1889, ordered to be
forwarded to the Director
General of Railways & to
the Secy of State.

S. S. S. S.

Analysis of working:

Forwarding copy of Proc.
embodying the —
for the 2nd half of '89

S. S. S. S.

Analysis of working:

The — for the 2nd half
of 1889, forwarded
to the Director General
of Rly & the Secy of State

No 769 R 27 3rd June/90

Form No. 3.

HM

Ordered to be forwarded
to the Director General of Railways
and to the Secretary of State.

H.E. No 740 R 27 3rd June 1890

Forwarded.

To

The Comr. Engrs & Rys

For G. R. Reports: D 11/6

H.E. No 769 R 27 3rd June 1890

To

The Secy. of State
for India

My Lord, HM

We have the honour
to forward a copy of our Progs.
No. 769 R, dated 3rd June 1890,
embodying the Analysis of working
of the South Indian Railway
for the second half of 1889.

D 11/6

Press

16.5.90 W
for R

5/11/5 R 19.5.90
H.E. 16/5 R 17.5.90

P.W.C. No. 4480.

From

THE CONSULTING ENGINEER

FOR RAILWAYS,

MADRAS,

No. 324

Dated 12th

Received 13

} May 1890

No. of ENCLOSURES. 1.

vide Cu 4479

Subject.

Submitting for
transmission to Director
General of Railways,
copies of analysis
of working, S. I. Ry.
for 2/89.

PUBLIC WORKS DEPARTMENT.

OFFICE OF CONSULTING ENGINEER FOR RAILWAYS,

Madras, 12th May 1890.

Ten copies of the Analysis of
Working, South Indian Railway,
for the half year ended the 31st December
1889.

X Printed copies
will follow.

No. 334

SUBMITTED

to

Government for

transmission to the Director
General of Railways, with
reference to letter from
the Government of India
N^o 204 R.E., dated 23rd March
1888, embodied in the
Proceedings of Govern-
ment N^o 274 R., dated 6th
April 1888.

with Cn 4279/90

Sidney Smith

Major R.E.

By consg. Engr. for Rys.

R

Pw Incr
4480/90.

RAILWAY.

Govt. of {1890} Madras.

PUBLIC WORKS.

Dated June, 3rd.

Recd.

Encl.

G.O., 3rd June 1890, Nos. 769 R.,
770 R.

JUNE.

South Indian Railway

Analysis of Working.—Forwarding copy
of Proceedings embodying the — for the
second half of 1889.

SOUTH INDIAN RAILWAY:

(INCLUDING PONDICHERRY RAILWAY.)

ANALYSIS OF WORKING

FOR THE

31st December

Half-Year ended 30th June, 1889.

PRINTED AT THE BRANCH "ECLIPSE" PRESS, TRICHINOPOLY.

Net increase ...

10,411

TABLE OF CONTENTS.

HEADINGS.	No. OF TABLE.	PAGE.
Description of Railway Worked	I	5
Financial Results	II	ib
Outlay, Earnings and Expenses	III	ib
Division of Expenditure between Coaching and Goods Traffic...	IV	ib
Coaching Traffic	V	6
Goods Traffic	VI	8
Detailed Percentages of Earnings and Expenditure ...	VII	9
Working Expenses	VIII	10-15
Maintenance of Way, Works and Stations	A	10
Locomotive Expenses... ..	B	11
Carriage and Wagon Expenses	C	12
Traffic Expenses	D	13
General Charges	E	14
Steam-Boat Service	F	15
Special and Miscellaneous Expenditure	G	ib
Appendices to the Analysis of Working—		
Working of Locomotives	I	16
Working of Vehicles	II	18 & 19
Distribution of Mileage	III	20
Maintenance of Way.—Rails	IV	21
Ditto Ditto—Sleepers	V	22

SOUTH INDIAN RAILWAY. (INCLUDING PONDICHERRY RAILWAY.)

ANALYSIS OF WORKING. *31st Decr*

FOR THE HALF-YEAR ENDED *30th June, 1889.*

Progressive Number.	HEADINGS.		REMARKS.
No. I.			
DESCRIPTION OF RAILWAY WORKED.			
		Ft. In.	
1	Gauge of Railway	3 3 $\frac{3}{8}$	
2	Mean mileage worked	662.44	
3	Number of stations	105.104	
4	Total length of the following gradients :	Miles.	
	(a) $\frac{1}{80}$ and less	"	
	(b) $\frac{1}{80}$ to $\frac{1}{60}$	"	10.851
	(c) $\frac{1}{60}$ to $\frac{1}{40}$	"	100.55
	(d) $\frac{1}{40}$ to $\frac{1}{20}$	"	65.582
	(e) $\frac{1}{20}$ to $\frac{1}{10}$	"	
5	Steepest gradient worked—	Miles.	2.537
	(a) Length	"	1 in 100
	(b) Inclination	"	
No. II.			
FINANCIAL RESULTS.			
6	Percentage of net earnings (including steam boat traffic) on Capital outlay	Per cent..	1.93 S. I. Ry. only.
7	Percentage of net earnings on paid up capital...	"	1.94 do.
No. III.			
OUTLAY, EARNINGS AND EXPENSES.			
<i>(Exclusive of Steam Boat Service.)</i>			
8	Capital outlay per mile open	Rs.	70,210 S. I. Ry. only.
9	Total earnings per mile open per week	"	165.17
10	Total working expenses per mile per week	"	109.40
11	Total earnings per train-mile	"	2.73
12	Total working expenses per train-mile	"	1.81
13	Net earnings per train-mile	"	.92
14	Cost per 1,000 gross ton-miles moved (freight and dead weight)	"	11.12
15	Percentage of total working expenses upon total earnings	Per cent.	66.23
16	Percentage of total working expenses upon total earnings, excluding from both sides of the account the charges for carriage of Revenue Stores	"	66.47
<i>(Inclusive of Steam Boat service.)</i>			
17	Percentage of total working expenses on total earnings (for details see table No. VII.)	"	66.23
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.	18,52,690
	Proportions, dividing expenditure in ratio of gross ton mileage (freight and dead load.)	"	7,90,267
19	Coaching	"	10,62,423
20	Goods	"	

6 **SOUTH INDIAN RAILWAY.**

(INCLUDING PONDICHERY RAILWAY.)

ANALYSIS OF WORKING.—(continued.)

HALF-YEAR ENDED 30th June, 1889.

Progressive Number.	HEADINGS.	REMARKS.
No. V.		
COACHING TRAFFIC.		
GROSS RECEIPTS AND TRAIN-MILEAGE—		
21	Receipts from coaching traffic ... Rs.	15,15,859
22	Coaching train miles run ... No.	452,110
23	Average coaching receipts per train-mile... Rs.	3.35
UNITS AND UNIT MILEAGE—		
Number of Units carried one mile.		
24	1st class ... Unit Miles.	423,957
25	2nd " ... "	24,19,822
26	3rd or Intermediate class ... "	130,736,850
27	4th or Lowest class ... "	133,580,629
28	Total Passenger unit mileage ... Ton Miles.	277,939
29	Other coaching traffic ... "	
Average sum received for carrying a unit one mile.		
30	1st class ... Pies.	11.92
31	2nd " ... "	3.94
32	3rd or Intermediate class ... "	
33	4th or Lowest class ... "	2.00
34	Average for all classes ... "	2.07
35	Other coaching traffic per ton mile ... "	54.39
Average number of units in a train.		
36	1st class ... No.	.94
37	2nd " ... "	5.35
38	3rd or Intermediate class ... "	
39	4th or Lowest class ... "	289.17
40	Total passenger units ... Tons.	295.46
41	Other coaching traffic ... "	.61
VEHICLES AND VEHICLE MILEAGE—		
Number of Coaching Vehicles hauled one mile.		
42	1st class ... Vehicle Miles.	561,083
43	2nd " ... "	987,047
44	3rd or Intermediate class ... "	609,3879
45	4th or Lowest class ... "	1398,395
46	Other Vehicles ... "	51,404
47	Brake-vans ... "	9,091,808
48	Total ... "	
Average number of Vehicles in a coaching train.		
49	1st class ... No.	1.24
50	2nd " ... "	2.18
51	3rd or Intermediate class ... "	13.48
52	4th or Lowest class ... "	3.09
53	Other Vehicles ... "	.11
54	Brake-vans ... "	20.10
55	Total ... "	
Average earnings per coaching vehicle per mile.		
56	1st class ... Pies.	9.01
57	2nd " ... "	9.66
58	3rd or Intermediate class ... "	
59	4th or Lowest class ... "	42.88
60	Other vehicles ... "	10.81
Carrying capacity hauled one mile (excluding brakes.)		
61	1st class ... Seats.	7280,379
62	2nd " ... "	26729,613
63	3rd or Intermediate class ... "	
64	4th or Lowest class ... Tons.	216877,840
65	Other vehicles ... "	4457,110
Percentage of freight upon capacity hauled.		
66	1st class ... Per cent.	5.82
67	2nd " ... "	9.05
68	3rd or Intermediate class ... "	
69	4th or Lowest class ... "	60.28
70	Other vehicles ... "	6.24

7 **SOUTH INDIAN RAILWAY.**

(INCLUDING PONDICHERY RAILWAY.)

ANALYSIS OF WORKING.—(continued.)

HALF-YEAR ENDED 30th June, 1889.

Progressive Number.	HEADINGS.	REMARKS.
No. V.		
COACHING TRAFFIC.—(Continued.)		
WEIGHT OF TRAIN AND TON-MILEAGE—		
Gross ton mileage of all coaching trains.		
71	Freight ... Ton Miles.	835,8131
72	Dead-weight ... "	62728,624
73	Total ... "	710,867,65
Average weight of a coaching train.		
74	Freight ... Tons.	18.49
75	Dead-weight ... "	138.74
76	Total ... "	157.23
COST OF WORKING AND PROFITS—		
Average cost of hauling a coaching train one mile		
77	Rs.	1.75
Average cost of hauling a coaching vehicle with its load one mile		
78	Pies.	16.78
Average cost of hauling a coaching unit one mile.		
79	Per passenger unit ... "	.98
80	Other traffic per ton ... "	74.26
Average profit on working a coaching train one mile		
81	Rs.	1.60
Average profit on working a coaching vehicle one mile.		
82	1st Class ... Pies.	7.77
83	2nd " ... "	7.12
84	3rd or Intermediate class ... "	26.10
85	4th or Lowest class ... "	5.97
86	Other vehicles ... "	
Average profit on working a coaching unit one mile.		
87	Per passenger unit ... Pies.	1.09
88	Other traffic per ton ... "	19.87

SOUTH INDIAN RAILWAY.

(INCLUDING PONDICHERY RAILWAY.)

ANALYSIS OF WORKING.—(continued.)

HALF-YEAR ENDED 30th June, 1889.

Progressive Number.	HEADINGS.	REMARKS.
No. VI. GOODS TRAFFIC.		
89	GROSS RECEIPTS AND TRAIN MILEAGE—	
90	Receipts from Goods Traffic ... Rs.	12,77,334
91	Goods Train-miles run ... No.	589,893
	Average goods receipts per train-mile ... Rs.	2.20
UNITS AND UNIT MILEAGE—		
92	Tons of Goods carried one mile ... Ton Miles.	32,823,880
93	Average sum received for carrying a ton one mile ... Pies.	7.59
94	Average number of tons in a train ... Tons.	55.64
VEHICLES AND VEHICLE MILEAGE—		
95	Number of goods vehicles hauled one mile. Loaded ... Vehicle Miles.	8,545,033
96	Empty ... "	3,003,048
97	Brake-vans ... "	425,641
98	Total ... "	11,973,722
99	Average number of vehicles in a goods train. Freight vehicles ... No.	19.58
100	Brake-vans ... "	.72
101	Total ... "	20.30
102	Average earnings per goods vehicle per mile (excluding brakes) ... Pies.	21.57
103	Carrying capacity hauled one mile (excluding brakes) ... Tons.	68,724,715
104	Percentage of freight upon capacity hauled ... Per cent.	47.76
105	Average load of a goods vehicle (including both loaded and empty) ... Tons.	2.84
106	Average load of a loaded goods vehicle ... "	3.84
WEIGHT OF TRAIN AND TON MILEAGE—		
107	Gross ton mileage of all goods trains. Freight ... Ton Miles.	32,823,880
108	Dead-weight ... "	62,744,062
109	Total ... "	95,567,942
110	Average weight of a goods train. Freight ... Tons.	55.64
111	Dead-weight ... "	106.37
112	Total ... "	162.01
COST OF WORKING AND PROFITS—		
113	Average cost of hauling a goods train one mile ... Rs.	1.80
114	Average cost of hauling a goods vehicle with its load one mile ... Pies.	17.66
115	Average cost of hauling a goods unit (viz., one ton) one mile ... "	6.21
115A	Average cost of hauling a goods unit (viz., one ton) one mile including interest on Capital expended at the rate of 5 per cent per annum ... "	10.36
116	Average profit on working a goods train one mile ... Rs.	.40
117	Average profit on working a goods vehicle with its load one mile ... Pies.	3.91
118	Average profit on working a goods unit (viz., one ton) one mile ... "	1.38

SOUTH INDIAN RAILWAY.

(INCLUDING PONDICHERY RAILWAY.)

ANALYSIS OF WORKING.—(continued.)

HALF-YEAR ENDED 30th June, 1889.

Progressive Number.	HEADINGS.	REMARKS.
No. VII. DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE.		
Percentage to Total Earnings—		
119	Coaching Traffic ... Per cent.	53.29
120	Goods Traffic ... "	45.60
121	Sundries, including Telegraph ... "	1.11
122	Steam-boat Earnings ... "	100.00
Percentage of Working Expenses upon Total Earnings—		
123	Maintenance ... Per cent.	22.87
124	Locomotive Expenses ... "	21.96
125	Carriage and Wagon Expenses ... "	5.76
126	Traffic Expenses ... "	8.64
127	General Charges ... "	6.53
128	Miscellaneous Charges ... "	.47
129	Steam-boat Expenses ... "	66.23
130	Total Working Expenses ... "	

SOUTH INDIAN RAILWAY.
(INCLUDING PONDICHERY RAILWAY.) 31st Decr
ANALYSIS OF WORKING.—(contd.)—HALF-YEAR ENDED 30th June, 1889.
No. VIII.—Working Expenses.

TABLE A.

Maintenance of Way, Works and Stations.

Reference to Revenue Account.		Progressive number in Analysis.	DETAILS.	a.	b.	c.	d.
Table and main-head.	Sub-head.			Per mile of line maintained.	Per mile of track including Sidings.	Per total Train-mile.	Per 1,000 gross ton miles.
				662.44	741.21	1042.03	166,654.70
IX(A)	1	1 & 2 3 to 5 6	General Superintendence—				
			Engineers' Salaries and allowances	63.13	56.42	.64	.25
			Subordinate Superintendents' salaries and allowances, including overtime	38.84	34.71	.40	.16
			Office expenses	30.67	27.41	.31	.12
		131	Total...	132.64	118.54	1.35	.53
	2	1 2	Maintenance and Renewal of Permanent Way—				
			Wages	127.89	114.29	1.30	.50
			Materials	407.11	363.85	4.14	1.62
		132	Total...	535.00	478.14	5.44	2.12
	3	1 2	Repairs of Bridges, &c.—				
			Wages and Materials—				
			Bridges and tunnels	83.94	75.02	.85	.33
3(A)	4	1 2	Miscellaneous	19.19	17.15	.20	.08
			Total...	103.13	92.17	1.05	.41
	5	1 2	Conservancy of Rivers—				
			Repairs of Stations and Buildings—				
			Wages and Materials—				
	6	1 2	Repairs of all, except staff quarters	20.00	17.87	.20	.08
			Repairs of staff Quarters	7.87	7.03	.08	.03
		135	Total...	27.87	24.90	.28	.11
	7	1 2	Maintenance by Contract—				
			Amount paid to Contractors...				
			Materials supplied by the Railway				
6	8	1 2	Total...				
	9	1 2	New Minor Works—	7.54	6.75	.08	.03
	10	1 2 3 4 5	Unclassified Expenditure—				
			Plantations	4.44	3.97	.05	.02
			Tools and plant	4.79	4.28	.05	.02
			Loss by exchange	111.25	99.43	1.13	.44
			Loss on stores, &c.	9.04	8.08	.09	.04
			Freight on Stores	59.35	53.04	.60	.23
			Total...	188.87	168.80	1.92	.75
	11	1 2	Total Heads, 5, 6, and 7	196.41	175.58	2.00	.78
			Less Credits	13.01	11.63	.13	.05
			136 Net Total, Other Charges	183.40	163.92	1.87	.73
			137 Total Maintenance	982.04	877.67	9.99	3.96

SOUTH INDIAN RAILWAY.

(INCLUDING PONDICHERY RAILWAY.)

ANALYSIS OF WORKING.—(contd.)—HALF-YEAR ENDED 30th June, 1889.

No. VIII.—Working Expenses.—(contd.)

TABLE B.

Locomotive Expenses.

Reference to Revenue Account.		Progressive number in Analysis.	DETAILS.	a.	b.	c.
Table and main-head.	Sub-head.			Per total Train-mile.	Per Engine mile.	Per 1,000 gross ton-miles.
				104,200.3	123,697.9	166,654.707
IX (B) 1	1 & 2 3 to 5 6	138	General Superintendence—			
			Salaries of Superintendents and Assistants, including allowances	.18	.15	.07
			Ditto of Subordinate ditto, including ditto	.31	.26	.12
			Office expenses	.26	.22	.10
			Total...	.75	.63	.29
	2	1 & 2 3 4	Running Expenses—			
			Wages of Drivers and Firemen, including overtime	1.34	1.13	.52
			Fuelling, cleaning and looking after engines	.18	.15	.07
			Contingent expenses	.01	.01	.01
		139	Total...	1.53	1.29	.60
3	1 to 4	140	Fuel.—(In terms of coal)			
			Average quantity consumed	29.28	24.66	183.05
			Average price per ton Rs. 17.29 16.59			
			Do. cost	3.47	2.92	1.36
	4	141	Water.—(Including wages and Stores)	.14	.12	.06
			Oil, Tallow and other Stores	.27	.23	.11
	5	142	Maintenance and Renewals—			
			Wages including overtime	1.20	1.01	.47
	6	1 & 2 3	Materials	.85	.72	.33
			Total...	2.05	1.73	.80
7	7	143	New Minor Works...			
			Payments to other lines			
	8	144	Unclassified Expenditure—			
			Loss by exchange	1.12	.94	.43
			Loss on Stores, &c.	.02	.02	.01
			Freight on Stores	.31	.26	.12
	9	1 2 3	Total...	1.45	1.22	.56
			Total Heads, 7, 8 and 9	1.45	1.22	.56
	10	145	Less Credits		.06	.03
			Net Total, Other Charges	1.38	1.16	.53
8	11	146	Total, Locomotive Expenses	9.59	8.08	3.75
	12	147				
	13	148				
	14	149				
	15	150				

SOUTH INDIAN RAILWAY.
(INCLUDING PONDICHERRY RAILWAY.) *31st Decr*
ANALYSIS OF WORKING.—(contd.)—HALF-YEAR ENDED *30th June, 1889.*
No. VIII.—Working Expenses.—(contd.)

TABLE C.

Carriage and Wagon Expenses.

Reference to Revenue Account.		Progressive number in Analysis.	DETAILS.	a.	b.
Table and main-head.	Sub-head.			Per total Train-mile.	Per 1000 Vehicle, miles run by home Vehicles.
				1042003	21087602
IX (C) 1	1 & 2 3 to 5 6	146	General Superintendence—		
			Salaries of Superintendents, including allowances ...	.04	.14
			Ditto of Subordinate ditto, including ditto ...	.08	.23
			Office expenses ...	.06	.19
			Total...	.18	.56
	1 to 3 2	147	Repairs and Renewals of Vehicles and Machinery—		
			Coaching Vehicles { Wages including overtime ...	.38	2.69
			Materials ...	.49	3.48
			Total..	.87	6.17
	1 to 3	148	Goods Vehicles { Wages including overtime ...	.49	2.68
			Materials ...	.56	3.03
			Total..	1.05	5.71
			Cleaning and Oiling—		
	3 { 1 2	149	Labour, including wages of Oilers, &c. ...	.13	.41
			Stores ...	.05	.16
			Total..	.18	.57
			New Minor Works—		
	5 { 1 2 3		Unclassified Expenditure—		
			Loss by exchange ...	.22	.68
			Loss on Stores, &c. ...	.01	.02
			Freight on Stores ...	.02	.07
			Total..	.25	.77
			Total Heads, 4 and 5 ...	.25	.77
			Less Credits ...	.01	.04
			Net Total, Other Charges ...	.24	.73
			150		
		151	Total, Carriage and Wagon Expenses ...	2.52	7.77

SOUTH INDIAN RAILWAY.

(INCLUDING PONDICHERRY RAILWAY.) *31st Decr*
ANALYSIS OF WORKING.—(contd.)—HALF-YEAR ENDED *30th June, 1889.*
No. VIII.—Working Expenses.—(contd.)

TABLE D.

Traffic Expenses.

Reference to Revenue Account.		Progressive number in Analysis.	DETAILS.	a.	b.
Table and main-head.	Sub-head.			Per total Train Mile.	Per cent of Traffic earnings Abstracts H. and I.
				1042003	2813192
IX (D) 1	(a) 1 & 3 2 & 4	152	General Superintendence—		
			Traffic Manager, Assistants, &c., including travelling allowances ...	.29	.66
			Office establishment and contingencies ...	.17	.40
			Total...	.46	1.06
	(b)	153	Station Staff ...	1.81	4.20
		154	Train Staff ...	.36	.84
	(c)	155	Fuel, Lighting, Water and General Stores ...	.38	.88
		156	Clothing ...	.14	.31
	2	157	Printing, Stationery and Tickets ...	.36	.82
		158	Charges for delivery and Collection of goods, &c. ...	.0003	.001
	3	159	Miscellaneous Expenses ...	.02	.06
			Payments to other Lines—		
		7	Expenses at joint Stations ...	.02	.05
			Unclassified Expenditure—		
	8 { 1 2 3	1	Loss by exchange ...	.19	.43
		2	Loss on Stores, &c. ...	.002	.01
		3	Freight on Stores ...	.04	.10
			Total Head, 8 ...	.232	.54
			Less Credits ...	.01	.02
		161	Net Total, Other Charges ...	.22	.52
		162	Total Traffic Expenses ...	3.77	8.74

SOUTH INDIAN RAILWAY.

(INCLUDING PONDICHERY RAILWAY.) 31st Dec

ANALYSIS OF WORKING.—(contd.)—HALF-YEAR ENDED 30th June, 1889.

No. VIII.—Working Expenses.—(contd.)

TABLE E.

General Charges.

Reference to Revenue Account.		Progressive number in Analysis.	DETAILS.	a.		b.
Table and Main-head.	Sub-head.			Per total Train-	Per cent on total	
				1042003	2844736	6573
IX (E) 1	1 to 4	163	Home Expenditure	48	1.10	
			Indian Management—			
	1	164	Agent's Office, including travelling allowances and contingencies...	30	.89	
	2		Auditor's office, ditto ditto			
	3		Accounts office, ditto ditto			
	4		Paymaster's office, ditto ditto	72	1.65	
		165	Total 2 to 4	72	1.65	
	5	166	Store Department, ditto ditto	19	.44	
	6	167	Medical Department, ditto ditto	11	.26	
	7		Rents	0005	.001	
	8 to 10		Miscellaneous expenses, including, printing, stationery and medicine	1545	.35	
		168	Total 7 to 10	16	.35	
3	1 to 3	169	Police			
4		170	Advertising	04	.03	
			Electric Telegraph—			
	1 to 4		Salaries, &c.	36	.83	
	5		Maintenance (Wages and Stores)	01	.02	
	6		Government Telegraph Department, for rent, maintenance and inspection	28	.64	
		171	Total	65	1.49	
6			Clearing Accounts, with other lines—			
			Unclassified Expenditure—			
	1		Loss by exchange	23	.52	
	2		Loss on Stores, &c.	001	.002	
	3		Freight on stores	001	.001	
			Total	232	.523	
			Total Heads, 6 and 7	232	.523	
			Less Credits	001	.005	
		172	Net Total, Other Charges	23	.52	
		173	Total General Charges	2085	5.53	

Earnings of the South Indian Railway Company Rs. 2837626-10-5
Less amount received for working Pondicherry Railway Company's Line 13196-3-4

Earnings of the Pondicherry Railway Company 2824330-7-1
20405-7-3
2844735-14-4

SOUTH INDIAN RAILWAY.

(INCLUDING PONDICHERY RAILWAY.) 31st Dec

ANALYSIS OF WORKING.—(contd.)—HALF-YEAR ENDED 30th June, 1889.

No. VIII.—Working Expenses.—(contd.)

TABLE F.

Steam Boat Service.

Reference to Revenue Account.		Progressive Number in Analysis.	DETAILS.	Per cent. on Steam boat earnings.
Table and main-head.	Sub-head.			
IX (F)	...		Working Expenses—	Per cent.
1	1		Salaries and allowances of Officers and crews	
	2		Loading and unloading vessels	
	3		Pilotage fees	
	4		Contingencies	
			Repairs—	
	1		Wages	
	2		Materials	
	1 to 5	173 a	Fuel	
	4		Miscellaneous Stores	
	5		Steam Traffic Agencies	
	6		New Minor Works	
	1 to 6		Miscellaneous Expenditure	
			Total	
			Less Credits	
			Total Steam Boat Expenses	

TABLE G.

Special and Miscellaneous Expenditure.

Reference to Revenue Account.		Progressive Number in Analysis.	DETAILS.	Per cent. on Total earnings.
Table and main-head.	Sub-head.			
IX (G) 1	...	174	Law Charges—	2844736
			Compensation—	Per cent.
	1		For goods lost or damaged	.01
	2		" Personal injury	.09
	3		" Other claims	
			Total	.09
3	...	175	Rates and Taxes	.29
			Payments to other Lines—	
	1		Hire of Locomotives	
	2		" of Vehicles	
	3		Mileage of foreign stock	
	4		Rent of stations, &c., jointly occupied	.04
			Total	.04
5	...	177	Contributions to Special Funds (in detail)	.04
6 to 8	...		Miscellaneous	.04
			Total Heads, 5 to 8	
			Less Credits	
		178	Net Total, Other Charges	.04
		179	Total Special and Miscellaneous Expenses	.47

WILLIAM S. BETTS,
Agent.

16

NORTH INDIAN RAILWAY.
 (INCLUDING PORTLAND CEMENT RAILWAY.)
 APPENDICES TO ANNUAL REPORT FOR THE YEAR 1889.

APPENDIX I.
Working of Locomotives.

Reference to Revenue Account.	Table & main head.	Sub-head.	allowance	Passenger.	Passenger.	Goods.	Tank.	Total.
		LOCOMOTIVES.	1—Wheels coupled 2—Weight on driving axle 3—Weight of Engine in Steam 4—Weight of Tender Loaded	4 Coupled 7 Tons. 20 " 14 "	6 Coupled 6 Tons. 18 " 12 "			
XII	5	1—Number of Locomotives erected and made over to Locomotive Department	ating	30	86	8		124
	11	2—Average number of Locomotives constantly under repairs and renewals	T	2.924	28.342	761		32.027
		3—Number of Locomotives laid by as spare						
		4—Ditto lent or hired out to other lines		30	86	8		124
		5—Average number of Locomotives 1—(3+4)	rent	354.543	810.988	71.448		1236.979
		6—Total Mileage of Locomotives (5)		11818	9430	8931		29976
		7—Average miles run by a Locomotive of each class 6+5		64.23	51.25	48.54		54.22
		Per diem.						
		8—Weight of coal, &c., used per Engine mile	To be separated if possible among the classes of Locomotives	20.82	24.80	20.22		24.66
		9—Weight of wood used per Engine mile						
			Passenger Trains.	Goods Trains.	Mixed Trains.			
			100.68	105.27	161.07			130.30
		10—Average gross weight of trains hauled	Tons...	20	12 1/2	15 1/2		
		11—Average speed between Stations	Miles per hour...	15 1/4	8 3/4	13 3/4		
		12—Average through speed	Miles per hour...	20.56	26.48	26.78		
		13—Average Consumption of coal per Engine mile	lbs...					

SOUTH INDIAN RAILWAY.
 APPENDICES TO ANNUAL REPORT FOR THE YEAR 1889.

APPENDIX II.

SOUTH INDIAN

(INCLUDING

APPENDICES TO ANALYSIS

APPEN

Working of

DESCRIPTION OF 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 a—(t + g)
		Of each description of Vehicle.	Of each group.	Of each description of Vehicle.	Of each group.			
COACHING STOCK—								
Governor's Saloon Carriage ...	a.	b.	c.	d.	e.	f.	g.	h
Inspection Carriage ...	1	10-00	...	22	...	...	...	1
First Class Carriage ...	1	10-00	...	22	...	...	...	1
Do. do. Clemenson's ...	18	5-11	...	12	...	...	...	18
Composite do. ...	1	10-00	...	22	...	...	...	1
Second Class do. ...	26	5-30	...	16	...	...	...	26
Intermediate do. ...	27	5-10	...	16	...	...	...	27
Third Class do. ...	311	...	...	...	...	...	...	311
Do. do. Clemenson's ...	37	4-65	...	32	...	...	...	37
Horse Boxes ...	37	10-26	...	64	...	...	...	37
Carriage Trucks ...	20	4-35	...	88	...	...	...	20
Luggage vans with brake ...	4	2-90	...	34	...	...	...	4
Post Office Vans ...	63	5-20	...	3-00	...	...	...	63
Post Office Vans with luggage compartment and brake ...	12	6-24	...	4-50	...	...	...	12
	6	5-20	...	...	...	...	...	6
Total...	528	5-23	5-23	...	...	...	...	528

GOODS STOCK—

Covered Goods Wagons ...	1,133	3-83	3-69	6-00	5-97	...	1,133
Cattle Trucks ...	6	3-94		2-00		...	6
Open Wagons ...	254	2-98		6-00		...	254
High sided Wagons ...	663	3-57		6-00		...	663
Cotton Trucks...	77	5-02	3-74	5-05	...	...	77
Timber Trucks...	37	3-57		6-78		...	37
Miscellaneous ...	2	6-69		10-00		...	2
Powder Vans ...	3	5-15		4-00		...	3
Brake Vans ...	34	3-74	3-74	...	...	...	34
Total ...	2,209	3-69	3-69	5-97	5-97	...	2,209
GRAND TOTAL...	2,736					...	2,736

RAILWAY.

PONDICHERRY RAILWAY.)

31st Decr

OF WORKING.—(contd.)—HALF-YEAR ENDED 30th June, 1889.

DIX II.

Vehicles.

MILEAGE OF

FOREIGN VEHICLES ON HOME LINE.		HOME VEHICLES ON HOME LINE.		Home Vehicles on Foreign Lines.	Carrying Capacity hauled on Home Line.	Ton-mileage of Vehicle dead weight hauled on Home Line.
Loaded.	Empty.	Loaded.	Empty.			
i.	k.	l.	m.	n.	o.	p.
		3518			77396	35180
		6474			142428	64740
		440135			5281620	2249090
		5180			113960	51800
		279320			4469120	1480396
		603277			9652432	3076713
		5364339			171658848	24944176
		911405			58329920	9351015
		1483822	27121		4795584	8083093
		50958				264982
		9148428	27121			49601185
		8593983	3003048		69015156	43971080
		283893	31129			1178182
		8877876	3034177			45149262
		18026304	3061298			94750447

* Includes 249 miles run by Travelling Crane.

The average mileage per diem run by { Coaching Vehicles
Goods do.49867
64739

SOUTH INDIAN RAILWAY.

(INCLUDING PONDICHERY RAILWAY.)

APPENDICES TO ANALYSIS OF WORKING.—(contd.)

HALF-YEAR ENDED 31st Dec 30th June, 1889.

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.	
Coaching—				
First class ...	561083	7280379	2920641	
Second class ...	987047	26729613	6240837	
Third or Intermediate class ...				
Fourth or Lowest class ...				
Total Passenger vehicles ...	6093879	216877840	32137629	
Other coaching vehicles ...	7642009	250887832	41299107	
Total paying coaching mileage ...	1398395	4457110	7477151	
Passenger brake-vans ...	9040404		48796258	
Total coaching mileage, including brakes ...	51404		266212	
Goods—				
Loaded vehicles ...	9091808		49062470	
Empty do. ...				
Total paying goods mileage ...	8545033	50834275	32685088	
Goods brake-vans ...	3003048	17890440	11091977	
Total goods mileage, including brakes ...	11548081	68724715	43777065	
Miscellaneous—				
Free Mileage for inspection, &c. ...	425641		1754606	
GRAND TOTAL...	11973722	68724715	45531671	
	22072		156306	
	21087602		94750447	

SOUTH INDIAN RAILWAY.

(INCLUDING PONDICHERY RAILWAY.)

APPENDICES TO ANALYSIS OF WORKING.—(continued.)

HALF-YEAR ENDED 31st Dec 30th June, 1889.

APPENDIX IV.

Maintenance of Way.

RAILS.

DETAILS.	IRON.	STEEL.	Total.	Total Iron and Steel.
1 Miles of rail in way, including sidings ...	309520	127658	834209	1463099
2 Average age of rails in way at the middle of the half-year ...	25135	9417	17573	5100
3 Rails renewed ...	6206	600	18379	767
4 Proportion renewed per mile of rail (1) ...	02	005	022	001
5 Average number of tons hauled over each kind of rail in the half-year ...	No reliable data available.			
6 Thousands of tons hauled on an average over each kind of rail during the average age of rail in way (2) ...				

SOUTH INDIAN RAILWAY.

(INCLUDING PONDICHERRY RAILWAY)

APPENDICES TO ANALYSIS OF WORKING.—(continued.)

31st Dec. 1889.

HALF-YEAR ENDED 30th June, 1889.

APPENDIX V.

Maintenance of Way.

SLEEPERS.

DETAILS.																
WOOD.																
TRANSVERSE.																
		Crescoted Pine 9' X 10" X 5"	Crescoted Round 6' X 10" X 5"	Teak of sizes.	Pingadoo 6'-6" X 9" X 4 1/2"	Total.	Longitudinal.					IRON.				STEEL TRANSVERSE SLEEPERS.
							No.	No.	No.	No.	Linl. ft.	Pairs, Weighing 80 lbs.	Pairs, Weighing 70 lbs.	Pairs, Weighing 57 lbs.	Total.	
1	Number of Sleepers in way, including sidings at the commencement of the half-year	53,263	61,673	54,310	35,745	760,006	47,600	22,171	394,507	12,381 1/2	628,683 1/2	14,730				
2	Average age of Sleepers in way at the middle of the half-year	27.1	13.02	17.75	4.6	13,949	15.97	22.25	3.5	5	10.142	8.				
3	Number removed	188	20,397	3,224	964	24,743	24.98	37.2	129 1/2	103 1/2	605	15.3				
4	Number laid	2	11,272	234	4,166	16,674	24.98	36.5	9919 1/2	67 1/2	103,52	65.				
5	Percentage of removals on total of each class (1)	.353	3.307	5.936	2.696	3.259	5.239	.168	.032	.031	.096	1.038				
6	Number of Sleepers in way, including sidings at the end of the half-year	53,107	60,612	51,320	38,947	750,906	47,680	22,170	404,377	12,345 1/2	638,430 1/2	14,642				

Total number of Wooden, Iron and Steel sleepers laid 26,000.

Total number of Wooden, Iron and Steel sleepers laid removed

26,091

25,831

Increase

5.60

Increase is due to extension of sidings.

William B. B. agent