Public Works (1895) Department.

RAILWAY BRANCH.

G.O., No. 688 Ry.

DATED 18th October

[Despatch Abstract.]

Feb. — Letter to the Govt of India forwarding Copy of Letter from the Locomotive superintendent explaining the reason for comparatively greater Consumption of — on the Madras Railway, in Connection with the receipts of the Capital and Revenue accounts of that Railway for the second half of 1894.

[P. W. Dy. 100—8-1-00.]

Indexed.

BACK PAPERS.

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

FURTHER PAPERS.

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

REVIEW OF THE CAPITAL AND REVENUE ACCOUNTS

OF THE

MADRAS RAILWAY

for the half-year ended the 31st December 1894.

Mean mileage worked and capital outlay.

The mean length of railway worked was 839·22 miles, the same as in the previous corresponding half-year. The total capital outlay, including suspense, on the mileage open to 31st December 1894, was Rs. 12,05,23,868, against Rs. 12,03,61,825 on the 31st December 1893.

Gross earnings.

2. The gross earnings from all sources showed a decrease of 1·37 per cent. The earnings under coaching rose from Rs. 19,52,189 to Rs. 20,99,202; but under goods they fell from Rs. 31,45,103 to Rs. 29,75,904, and under miscellaneous sources from Rs. 1,21,031 to Rs. 71,974.

The gross earnings per mean mile worked were Rs. 6,133, against Rs. 6,218 in the second-half of 1893.

Coaching traffic.

3. The total number of passengers booked rose from 4,752,907 to 5,127,561, showing an increase of 7·88 per cent. The passenger unit-mileage increased by 7·39 per cent., and the earnings from coaching traffic by 7·53 per cent. The number of passengers carried one mile per mean mile worked was 231,234, as compared with 215,325 in the corresponding period of 1893.

The increase in the earnings from coaching traffic was mainly due to an improvement in the 3rd class passenger traffic. The average distance travelled by a passenger was 37·85 miles, against 38·02 miles in the previous corresponding half-year. The earnings from passenger traffic were 6·92 per cent. higher than in the second-half of 1893.

Goods traffic.

4. The total tonnage of goods lifted showed a decrease of 2·14 per cent. as compared with the second-half of 1893, having been 541,721 tons against 553,577 tons. The total ton-mileage decreased by 8·30 per cent. and the total earnings by 5·38 per cent. The number of tons of goods carried one mile per mean mile worked was 79,836 tons, as compared with 87,066 tons in the previous corresponding half-year.

The decrease in the earnings from goods traffic was mainly under "Grain and pulse," due—it is explained—chiefly to a falling off in traffic received from foreign lines *viâ* Bangalore city and despatched to Southern India *viâ* Erode, and also to that in traffic received from the Southern Mahratta railway and beyond *viâ* Guntakal.

The average distance over which a ton of goods was hauled was 123·68 miles, as compared with 131·99 miles in the second-half of 1893.

Working expenses.

5. The total working expenses amounted to Rs. 26,91,555 against Rs. 26,37,589 in the previous corresponding period.

The increase was mainly under "Carriage and wagon," Rs. 82,811, due chiefly to increased outlay under "Repairs and renewals of goods vehicles."

Net earnings and return on capital.

6. The net earnings amounted to Rs. 24,55,525 against Rs. 25,80,734, giving a percentage for the half-year on the total capital outlay on open line of 2·04 as compared with 2·14 in the previous corresponding half-year.

7. The statements which will be found appended to this review show:

(i) the results of working the Madras railway during the second-half of each of the years 1889 to 1894, as compared with the results of working the Great Indian Peninsula railway system and the Oudh and Rohilkhand (state) railway during the second-half of 1894;

(ii) the cost of the several departments on the Madras railway during the second-half of 1894 as compared with the Great Indian Penin-

sula railway system and the Oudh and Rohilkhand (state) railway during the same half-year.

Results of working.

8. From the first statement it will be observed that the percentage of working expenses on gross earnings, 52·29, was higher than in the previous corresponding half-year, and higher also than on the Oudh and Rohilkhand (state) railway, where it was 48·49

The percentage of net earnings on capital outlay 2·04 was higher than in any previous corresponding half-year for which the figures are shown in the statement—the second-half of 1893 alone excepted.

The average profits, pies 0·75 derived from carrying a passenger unit one mile, lowest class, were higher than in any of the five previous corresponding periods, except the second-half of 1890.

The percentage of freight upon capacity hauled, lowest class, 58·13, was the highest recorded in the statement.

The average cost of hauling a goods unit one mile, pies 4·67, was higher than in any previous corresponding half-year, except the second-half of 1889. It was also higher than on the Oudh and Rohilkhand (state) railway, on which it amounted to pies 2·67.

The percentage of freight upon capacity hauled for goods traffic, 45·74, was the lowest recorded in the statement, except the second-halves of 1892 and 1893.

The percentage of general charges on gross earnings, although lower than in any of the five previous corresponding half-years except the second-half of 1893, is still high as compared with the Great Indian Peninsula railway system and the Oudh and Rohilkhand (state) railway, the figures being 5·43 against 5·34 and 4·02, respectively.

The cost of station staff per total train-mile, annas 2·43 * was higher than in the two previous corresponding periods. The cost of train staff per total train-mile, annas 0·61,* is the highest recorded in the statement for this line.

The total general charges per total train-mile were higher than in the four previous corresponding half-years, and amounted to annas 3·62.*

9. From the second statement it would appear that the expenses under locomotive, carriage and wagon, and traffic were much higher than on the Oudh and Rohilkhand (state) railway.

It is further observed that the consumption of fuel was comparatively high. This matter should receive attention.

Errors and omissions.

10. The following points are noticed in the accounts and the Auditor's note thereon:—

Accounts, Statement XII.—All the entries in column (3) should have been explained as has been done in the case of "Covered goods wagons, ordinary wooden," and also the entry in column (4) against "High-sided wagons, ordinary wooden 10 tons" as required by the standard form.

Accounts, Statement XIII.—Against "Total mean mileage worked, including mileage worked over during the half-year" column "Sidings" the figures 138 miles, 16 chains 28 feet have been omitted.

Accounts, Statement XIV.—At foot of this statement a note should have been given showing separately the number of coaching and goods train-mileages run on the Kolar Gold-fields railway.

Chief Auditor's note, paragraph 5.—Against "Average number of trains over the whole line daily in both directions" column "Difference, per cent." no entry is required.

Chief Auditor's note, paragraph 6-A.—The percentages of net earnings on capital outlay for the years under comparison should have been given.

* Including the Kolar Gold-fields railway.

G. C. Press Simla.—No. 1603—P. W. D.—27-7-95.—60.

Statement No. I.

Statement showing the results of working the Madras railway during the second-half of each of the years 1889 to 1894 also comparing the results with the Great Indian Peninsula railway system and the Oudh and Rohilkhand (state) railway during the second-half of 1894.

Item number of analysis.	Particulars.		Madras Railway.						Great Indian Peninsula railway system.	Oudh and Rohilkhand (state) railway.
			2nd-half, 1889.	2nd-half, 1890.	2nd-half, 1891.	2nd-half, 1892.	2nd-half, 1893.	2nd-half, 1894.	2nd-half, 1894.	2nd-half, 1894.
2	Mean mileage worked ...	Miles	839·30	839·30	839·30	839·22	839·22	839·22	1,400·23	796·64
...	Capital outlay	Rs.	11,63,84,603	11,79,84,234	11,89,52,099	11,97,57,405	12,03,61,825	12,05,29,868	97,91,09,112	10,28,79,319
	Results.									
...	Gross earnings	Rs.	46,04,547	47,83,297	46,63,523	48,79,568	52,18,323	51,47,080	1,31,98,703	49,37,425
...	Working expenses ...	Rs.	28,33,742	24,79,702	26,98,424	26,59,485	26,37,589	26,91,555	†93,94,921	23,93,987
...	Net earnings	Rs.	17,70,805	23,03,588	19,65,099	22,20,083	25,80,734	24,55,525	38,03,782	25,43,438
6	Percentage of net earnings (including steam-boat traffic) on capital outlay ...	Per cent.	1·52	1·95	1·64	1·85	2·14	2·04	*1·29	2·47
...	Percentage of working expenses on gross earnings ...	Per cent.	61·54	51·84	57·99	54·50	50·54	52·29	71·18	48·49
	General.									
9	Gross earnings per mile open per week	Rs.	211	219	213	224	239	236	341	238
...	Total train-mileage per mean mile worked. { Coaching		620	685	716	702	788	775	1,275	769
	{ Goods ...		774	832	819	757	811	696	1,338	1,200
	Coaching.									
23	Average sum received for carrying a unit one mile—lowest class	Pies	1·68	1·72	1·65	1·64	1·64	1·64	2·40	2·50
79	Average cost of hauling a coaching unit one mile, per passenger unit ...	Pies.	1·07	0·91	1·03	1·03	0·90	0·89	2·29	1·08
23	Coaching earnings per train-mile	Rs	3·46	3·30	2·90	2·93	2·95	3·23	2·37	2·89
77	Average cost of hauling a coaching train one mile ...	Rs.	1·96	1·54	1·55	1·62	1·40	1·52	1·92	1·15
69	Percentage of freight upon capacity hauled—lowest class.	Per cent	49·74	48·77	45·10	52·79	49·61	58·13	38·00	34·55
	Goods.									
93	Average sum received for carrying a ton one mile ...	Pies.	7·60	7·49	7·16	8·27	8·25	8·52	8·36	5·13
115	Average cost of hauling a goods unit (*viz.*, one ton) one mile ...	Pies.	4·88	4·05	4·25	4·41	4·30	4·67	5·47	2·67
91	Goods earnings per train-mile	Rs.	4·10	4·00	4·09	4·53	4·62	5·10	4·27	3·23
113	Average cost of hauling a goods train one mile ...	Rs.	2·63	2·16	2·43	2·42	2·41	2·80	2·80	1·68
104	Percentage of freight upon capacity hauled ...	Per cent.	52·19	51·92	46·97	44·19	45·11	45·74	42·33	42·11
	Miscellaneous.									
119	Percentage of coaching traffic on gross earnings ...	Per cent.	39·68	39·70	37·45	39·23	37·41	40·78	34·18	35·89
126	Percentage of traffic expenses on gross earnings ...	Per cent.	8·73	8·71	9·36	8·51	8·77	8·22	11·41	7·89
127	Percentage of general charges on gross earnings ...	Per cent.	5·80	5·61	5·97	5·53	5·28	5·43	5·34	4·02
153-a	Cost of station staff per total train-mile	Annas.	2·57	2·45	2·53	2·37	2·24	‡2·43	2·69	1·91
154-a	Cost of train staff per total train-mile	Annas.	0·63	0·61	0·60	0·58	0·59	‡0·64	1·55	0·65
173-a	Total general charges per total train-mile	Annas.	3·63	3·37	3·45	3·38	3·28	‡3·62	2·89	2·03
181	Average miles run per locomotive *per diem*	Miles.	49·92	54·22	54·94	53·38	52·04	49·22	39·84	64·93
...	Percentage of locomotives constantly under repairs on total stock on the list ...	Per cent.	26·49	27·81	22·52	26·40	25·00	24·55	27·44	18·10
...	Percentage of 3rd or lowest class coaching vehicles constantly under repairs on total stock on the list ...	Per cent.	6·12	6·13	7·45	6·37	6·91	6·19	10·47	18·60
...	Percentage of goods stock constantly under repairs on total stock on the list ...	Per cent.	4·83	5·24	8·07	2·47	3·30	4·76	6·54	8·09

* Great Indian Peninsula railway only.
† Excluding charges incurred direct by the State.
‡ Including the Kolar Gold-fields railway.

Statement No. II.

Statement showing the cost of several departments on the Madras railway for the half-year ended the 31st December 1894, in comparison with the cost on the Great Indian Peninsula railway system and the Oudh and Rohilkhand (state) railway for the same half-year.

Principal headings.		Madras railway, including the Kolar Gold-fields railway.	Great Indian Peninsula railway system.	Oudh and Rohilkhand (state) railway.
MAINTENANCE OF WAY, WORKS AND STATIONS.				
Maintenance and renewal of permanent-way.				
Per mile of track, including sidings	Rs.	216·32	553·33	467·15
Total maintenance expenses.				
Per mean mile of line maintained	Rs.	702·88	1,754·21	883·50
Per mile of track, including sidings	Rs.	579·60	1,177·12	772·77
Per 1,000 gross ton-miles	Rs	1·72	2·56	1·44
Per cent. on gross earnings	Per cent.	11·46	19·81	14·26
Mean mileage maintained	Miles.	849·23	1,490·23	798·64
Total miles of track, including sidings	Miles.	1,029·84	2,220·83	910·79
Total gross ton-mileage	Ton-miles.	346,943,507	1,020,831,157	487,787,044
LOCOMOTIVE EXPENSES.				
Fuel, average cost.				
Per ton	Rs.	14·78	12·55	9·32
Fuel, average quantity consumed (in terms of Kurhurbaree coal).				
Per train-mile	lbs.	45·77	42·83	42·20
Per 1,000 gross ton-miles	lbs.	165·16	163·39	135·69
Total locomotive expenses.				
Per train-mile	Annas	12·54	14·50	6·87
Per 1,000 gross ton-miles	Rs.	2·83	3·46	1·38
Per cent. on gross earnings	Per cent.	18·85	26·73	13·63
Total locomotive expenses, excluding cost of fuel.				
Per 1,000 gross ton-miles	Rs.	1·74	2·54	0·82
CARRIAGE AND WAGON EXPENSES.				
Total carriage and wagon expenses.				
Per 1,000 vehicle-miles run by home vehicles	Rs.	14·23	13·24	8·84
Per cent. on gross earnings	Per cent.	6·84	6·54	5·43
Total vehicle-miles run by home vehicles	Vehicle-miles.	24,276,410	65,250,588	30,316,256
TRAFFIC EXPENSES.				
Per total train-mile	Annas.	5·48	6·19	3·94
Per 1,000 gross ton-miles	Rs.	1·24	1·48	0·79
GROSS EARNINGS.				
Gross earnings, excluding steam-boat	Rs.	52,06,505	1,31,98,703	49,37,425
APPENDIX II OF ANALYSIS.				
Percentage of empty home vehicle-mileage on total home vehicle-mileage on home line	Per cent	21·08	16·48	21·27

Pol. I 6003/95

All communications should be addressed to the Secretary.

No. 314 R. Stat.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY STATISTICS.

To

The Joint Secretary to the Government of Madras,

Public Works Department, Railway Branch.

Simla, the 29th July 1895.

Sir,

With reference to the correspondence ending with your endorsement No. 200 R., dated 23rd March 1895, I am directed to forward herewith 12 copies of a Review of the Capital and Revenue Accounts of the Madras railway for the half-year ended the 31st December 1894, and to invite attention to paragraphs 8, 9 and 10 thereof.

I have the honour to be,

Sir,

Your most obedient servant,

F. H. Trevor

Under-Secretary.

Documents accompanying:-

12 copies of review referred to.

No 2588 dy 10·8·95

with S.C. of the Review

Copy to Superintendent Ry. Branch

A. L. M.

6003.

Encl 1
Rec: 6.8.95

(A. & M. I.)

No R29.
725

MADRAS RAILWAY.

AGENT AND MANAGER'S OFFICE,

Madras, 15th August 1895.

From

The Agent and Manager,
S.M.R. Coy.

To

The Consulting Engineer for Railways,
Madras.

SIR,

Adverting to your endorsement No 2586, of the 10th instant on copy of a communication from the Government of India regarding the Review of the Capital and Revenue Accounts of the Madras Railway for the half year ended the 31st December 1894: I have the honour to quote for your information the following extract from a letter from the acting Chief Auditor having reference to the points raised in the 10th paragraph of the above Review:

"Accounts Statement XII.—The Locomotive Superintendent shall be asked to furnish the desired particulars in future."

"Accounts.

Accounts, Statement XIII. - The omission of the length of sidings from the item "Total mean mileage worked, including mileage worked over during the half year" was intentional and in accordance with Foot note 2 of the standard form. The figures shall however be included in future as desired.

Chief Auditor's note, paragraph 6A. - The percentages of net earnings on Capital outlay for the whole year shall as desired be given in future reports for December half years. The enclosure to P. W. D. Circular No. XXIV - Railway of 1890 does not provide for this entry or it would have been given before.

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

Agent & Manager.

3544
16-8-95

MADRAS RAILWAY.

From The Agent and Manager.

To The Consulting Engineer for Railways.

Dated

Recd.

No.

Form No. 21.
800—11-94.

389
22 AUG. 95
Enclosure
RAILWAY ACCOUNTS

OFFICE OF THE CONSULTING ENGINEER FOR RAILWAYS,

Madras, 21st August 1895.

No. 2668

OFFICE NOTE.

Letter from the Agent and Manager Madras Railway, No. R29/725 dated 15th August 1895, forwarded to the Examiner of Railway Accounts for info.

21/8

for E.R.

EXAMINER'S REPLY.

Seen and returned.

24/8

26/8

C.R. 23/8.

Madras Railway Company,
Locomotive Superintendent's Office,
Perambur Works, 28th September 1895.

No. B 6117/1160

The Agent and Manager.

My dear Sir,

With reference to your endorsement No. R 29/7616, of the 12th August last on forwarding Engineer's No. 2586 of the 10th idem, I beg to submit the following figures:—

	G. I. P. Railway.	Madras Railway.	Madras Railway as compared with G. I. P. Railway.	
			Increase	Decrease
Average number of vehicles on a goods train:—				
Freight vehicles—	21·03	22·82	8·51%	-
Total vehicles—	27·95	27·08	18·00%	-
Average weight of a Goods train:—				
Freight ———	95·12	114·85	17·05%	-
Total weight—	309·59	366·90	18·51%	-
Consumption of fuel per train mile.	42·83	45·77	6·86%	-

2. From the above it will be apparent that, although the consumption of fuel on

the

3. the Madras Railway is 6·56% greater than on the Great Indian Peninsula line, the average load hauled by our engines is over 18·00% in excess of the loads hauled by the Great Indian Peninsula engines. This will probably sufficiently account for the slightly heavier consumption on this line as compared with that on the Great Indian Peninsula Railway.

Yours faithfully
(sd) C. E. Phipps,
Loco Superintendent

/ True Copy /

Agent & Manager.

1 TO E... 4303
LETTER No. 895 L. 4.10.95
A

5. 1 Encls.

(No. 11.)
No. R29/895

5,000—11-11-86.

MADRAS RAILWAY.

AGENT AND MANAGER'S OFFICE,
MADRAS, 4th October 1895.

From

To

The Agent and Manager,
M.R. Ry.

The Consulting Engineer for Railways,
Madras.

SIR,

In continuation of my letter No. R29/725 of the 15th August last, I have the
x No. B647/1168 of 28.9.95. honour to forward herewith, for your information, copy of a letter from the Locomotive Superintendent explaining the reason for the comparatively greater consumption of fuel on the Madras Railway to which allusion is made in paragraph 9 of the Review forwarded with your endorsement No. 2586 dated 10th August 1895.

CMM 5/10.

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

Copy to Madras ?
HWT 7/10
HWT 15/10

Agent & Manager.

4303
5.7.95

MADRAS RAILWAY.

From

The Agent and Manager.

To

The Consulting Engineer
for Railways.

No.

Dated 188

Recd.

B/-

No. 688. A

Government of Madras.

PUBLIC WORKS DEPARTMENT,

RAILWAY BRANCH.

To

The Secy: to the Govt: of India

P. W. Dept

Madras, 18th October 1895.

Sir,

With reference to para 9 of the Revised Capital & Revenue Accounts of the Madras Railway, for the half year ended 31st Dec 1894 received with your letter No: 314 R Stat 29 July 1895, I am directed to forward herewith, for the information of the Govt of India, copy of a letter from

From the Locomotive
Superintendent &c.
explaining the reason
for the comparatively
greater consumption
of fuel on the Bhadra
Railway -

DRM
16/10/95

Bf.

Documents acca?
Copy of letter from Loco: Supt.

W°. 688. R dated 18.10.95

Fair copied in R. Office on
18.10.95

21/10