Public Works (1898) Department.

RAILWAY BRANCH.

G.O., No. 1431-32. Dy

DATED 21st Nov. 1898

[Despatch Abstract.]

Reports by the Headed Depts.
Madras Railway.

Ordered that Six Copies of the ——
for the half-year ended the 30th June 1898
be forwarded to the Govt. of India.

Forwarded

Indexed. 23 Feb

BACK PAPERS.

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

FURTHER PAPERS.

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

Original Apeecopy.

MADRAS RAILWAY.

REPORTS BY HEADS OF DEPARTMENTS FOR THE HALF-YEAR ENDING 30TH JUNE 1898.

(1)

MADRAS RAILWAY COMPANY,

MADRAS, *3rd November* 1898.

No. 2387.

To

JULIAN BYRNE, ESQ.,

Secretary,

Madras Railway Company,

LONDON.

SIR,

I have the honor to submit, for the information of the Directors, the following summary of the operations of the Company for the half-year ended 30th June 1898. The detailed reports by the undermentioned Heads of Departments were sent to you on the undermentioned dates :—

The Chief Engineer	... 14th Sept. 1898.	The Medical Officer	... 20th Oct. 1898.
„ Loco. Superintendent...	22nd „ „	„ Chief Auditor	... 27th „ „
„ Ag. Telegraph Engineer.	13th Oct. 1898.	„ Traffic Manager	... 3rd Novr. 1898.

2. The **Financial** results of the last four half-years are shown in the annexed table :—

Half-year ended	Gross earnings.	Total expenditure.	Net revenue.	Working expenses per cent.	Receipts per mile per week.	Half-yearly dividend.
	Rs.	Rs.	Rs.			
1896, December ...	54,11,851	27,50,916	26,60,935	50·83	248·15	2·20
1897, June ...	57,89,562	26,99,926	30,89,636	46·63	265·61	2·56
„ December ...	56,75,752	27,63,201	29,12,551	48·68	260·77	2·41
1898, June ...	56,34,736	24,77,847	31,56,889	43·97	258·61	2·62

The decrease in gross earnings, as compared with the earnings for the corresponding half-year of 1897, amounts to Rs. 1,54,826 and the decrease in working expenses to Rs. 2,22,079. The net revenue shows an increase of Rs. 67,253, equivalent to 2·18 per cent.

3. The result of the half-year's working is a dividend at the rate of £5-3-2 per annum, and from Statement XVI of the Revenue accounts, it will be observed that, after allowing for the additional contribution to the Provident Institution and making the necessary adjustments on account of outstandings, we have earned surplus profits amounting to Rs. 2,18,184-4-6, of

which one-half or Rs. 1,09,092-2-3 is the Company's proportion. The Company's share of the surplus profits will not be paid until the question of the increased Provident Fund subscriptions for the last half-year has been settled by the Government of India.

4. The number of **passengers** (excluding troops and police) carried in each class and the gross receipts therefrom, during the first halves of the last four years, are shown in the following table :—

Half-year ended	First Class.		Second Class		Third Class.		Total.	
	No. carried.	Money earned.	No. carried.	Money earned.	No. carried.	Money earned.	No. carried.	Money earned.
		Rs.		Rs.		Rs.		Rs.
June 1895	10,078	95,371	39,057	1,01,003	4,471,310	18,29,510	4,520,445	20,25,884
Do. 1896	10,903	97,384	48,101	1,09,790	4,814,350	17,86,841	4,873,354	19,94,015
Do. 1897	12,870	1,03,125	45,484	1,06 638	5,057,896	17,18,522	5,116,250	19,28,335
Do. 1898	10,497	98,440	46,723	1,08,078	4,600,357	16,32,616	4,657,577	18,39,134

There is a decrease in the number of first class passengers carried, as compared with the corresponding half-year of 2,373, or 18·43 per cent., and in the money earned of Rs. 4,685, or 4·54 per cent.

There is an increase in the number of second class passengers carried of 1,239, or 2·72 per cent., and in the money earned of Rs. 1,390, or 1·3 per cent.

In the number of third class passengers carried, there is the large decrease of 457,539, or 9·05 per cent., while in the earnings there is a decrease of Rs. 85,906, or 5 per cent.

The falling off in the third class passenger traffic is due entirely to plague and plague restrictions and still later experience has shown that until these restrictions are relaxed, the passenger traffic will not recover. The scare amongst native travellers is so great that I am afraid the effect of the restrictions now imposed will be far-reaching and that the passenger traffic will not return to its normal conditions for many half-years.

5. The progress of the **goods traffic** during the same four half-years was—

Half-year ended	Goods traffic exclusive of Madras Railway material and revenue stores.	Government stores and Foreign Railway material.	For the public.		Average receipt per ton lifted.
			Weight.	Receipts.	
	Rs.	Rs.	Tons.	Rs.	Rs.
June 1895	31,18,135	38,099	430,754	30,80,036	7·22
Do. 1896	29,34,790	37,600	423,809	28,97,190	6·84
Do. 1897	32,96,519	47,163	498,408	32,49,356	6·52
Do. 1898	31,73,829	41,554	479,778	31,32,275	6·62

The total tonnage carried over the Railway during the past half-year, exclusive of Railway materials for construction and revenue stores, was 481,350 against 499,818 in the corresponding half-year, or a decrease of 3·70 per cent., while the receipts were Rs. 31,73,829, against Rs. 32,96,519, or a decrease of 3·72 per cent.

The principal commodities in which there are increases are coal, oil seeds, provisions, salt, spices, sugar, piece-goods, and kerosine oil. Decreased receipts have been obtained from grain foods, dyes and tans, hides and skins, metals and tobacco.

The chief decreases are noticed in the figures recorded on page 7 of the Traffic Manager's Report. We are comparing in 1898 against the famine year of 1897, when large supplies were forwarded to the North of India and the loss in food grains was therefore expected. Restrictions, it is known, have in some instances been placed upon the free movement of wet skins owing to plague, but how far these restrictions are responsible for the loss of receipts in the carriage of skins and hides is not known.

The receipts from the carriage of timber depend entirely upon the demand for timber from the Gold mines. In 1898 we carried some 652 tons less than during the corresponding period of 1897.

6. The **maintenance charge** per mile, compared with the three previous half-years, is as follows :—

Half-year.	Ordinary.	Extra.	Total.
	Rs.	Rs.	Rs.
1896, December... ...	556	79	635
1897, June	562	48	610
„ December... ...	587	33	620
1898, June	484	49	533

The decreased expenditure in maintenance charges is due in a great measure to the difficulty in determining how the new bull-headed rails could best be disposed of. The Chief Engineer reviews the subject in para. 6 of his Report.

7. The total cost of the **Locomotive Department** during the last four half-years has been as under :—

Half-year.	Total mileage.	Total cost including all charges.	Total cost per mile run.		
		Rs.	Rs.	A.	P.
1896, December	1,519,722	13,56,991	0	14	3·44
1897, June	1,535,936	13,28,234	0	13	10·04
„ December	1,616,892	13,90,471	0	13	9·11
1898, June	1,551,560	11,87,290	0	12	2·92

Compared with the corresponding period of 1897, the expenses of the Locomotive Department may be stated as follows :—

Locomotive	Running	increase	Rs. 7,706.
„	Repairs and renewals	decrease	„ 50,318.
Carriage and Wagon	Running	increase	„ 4,716.
„	Repairs and renewals	decrease	„ 58,544.

Nearly Rs. 76,000 of the sum saved in the Locomotive Department is due to the fact that the usual debit for new engines was not included in the accounts for last half-year. Eight new engines were ordered in May 1897, but owing to the Engineering strike, the engines ordered have not been supplied. The remainder of the saving is accounted for by less money having been spent owing to the strike of native workmen at the Perambur Works and to a reduction in labour charges.

8. The **Electric telegraph** wires, block, needle and Morse instruments, electric starting semaphores and intercommunication in trains were maintained satisfactorily during the half-year. One engine and 110 vehicles were fitted with electrical intercommunication appliances during the half-year.

9. The **Medical Officer** reports that there was a decrease of 1,279 in the number of employés, to whom it was found necessary to grant sick certificates. There were in all during the half-year 4,107 cases of sickness dealt with, against a total of 5,386 cases for the corresponding half-year. There were 3 cases of cholera and 54 of small-pox, and 21 deaths were reported during the half-year.

10. **Railway schools** are now maintained at eight of the important stations on the line, the school at Renigunta having been closed in May 1898. The total number of children on the register at 30th June was 399 and the average attendance 336. The cost to the Company of maintaining these schools during the period under review was Rs. 3,692.

11. The amount of the Company's contribution to the **Provident Institution** amounted for the half-year to Rs. 20,163-10-5, and this sum will be found entered in Abstract G of the Capital and Revenue Accounts. The total amount at credit of the Institution on the 30th June was Rs. 8,78,563-4-3. An additional bonus of Rs. 11,675-10-0 will be paid to the credit of the Institution when the accounts have been accepted by Government and possibly a further concession under the new rules.

12. **Line worked by the Company.**

Net earnings of

1. The Mysore State Kolar Gold Fields Railway are for the half-year Rs. 53,919-13-10 equal to a return of 13·32 per cent. upon the Capital outlay.

Net earnings of

2. The Madras-Ennur Section of the Bezwada-Madras Railway for the half-year are Rs. 1,298-14-3 equal to a return of 4·33 per cent. per annum on the total Capital outlay. This result is, however, earned at the expense of the Madras Railway owing to the favourable terms for the State under which the Railway is worked.

NEW PROJECTS.

13. The Chief Engineer explains on page 7 of his Report the progress that has been made in the construction of the Calicut-Cannanore Railway and in the survey of the proposed Shoranur-Cochin Railway, &c., and on page 8 of his Report particulars are given of the work done on the Arcot-Ranipet Branch.

14. The following movements in the **Company's Staff in India** are recorded :—

Mr. G. K. Winter, Telegraph Engineer, died on the 17th January 1898.

Mr J. B. Duncan, Acting Assistant Telegraph Engineer, was appointed to act as Telegraph Engineer on the death of Mr. Winter.

Mr. H. H. L. Prendergast, the newly appointed Assistant Telegraph Engineer, assumed charge of his duties on the 9th April 1898.

Mr. G. T. Bridges was appointed temporary Assistant Engineer on the 5th February 1898, in the place of Mr. Duncan acting as Telegraph Engineer.

Mr. F. A. Pawley, Assistant Engineer, returned from furlough leave and resumed charge of his duties on the 27th February 1898.

Mr. A. M. Stevenson was appointed temporary Assistant Engineer on the 21st March 1898.

Mr. A. B. Strange, Assistant Engineer, proceeded to England on 18 months' furlough leave on the 1st May 1898.

Messieurs J. M. Bourne and J. G. R. Marsh, the newly appointed temporary Assistant Engineers, assumed charge of their duties on the 21st April 1898.

Mr. G. W. Giles, the newly appointed Sub-Assistant Traffic Manager, assumed charge of his duties on the 31st January 1898.

Mr. W. A. Wilkinson, Assistant Traffic Manager, proceeded to England on 18 months' furlough leave on the 21st April 1898.

Mr. W. T. Thynge, the newly appointed Boiler-maker, assumed charge of his duties on the 8th February 1898.

Mr. E. Outon, Locomotive Foreman, was granted leave for 6 months with effect from the 22nd April 1898.

Mr. J. W. Austin, the newly appointed Springsmith, assumed charge of his duties on the 6th April 1898.

I have the honour to be,

Sir,

Your most obedient servant,

LOUIS S. MOSS,

Agent and Manager.

4 Copies will follow: (2)

MADRAS RAILWAY COMPANY,
CHIEF ENGINEER'S OFFICE,
MADRAS, *3rd September* 1898.

To

THE AGENT AND MANAGER,
Madras Railway Company.

SIR,

I have the honor to submit my report for the half year ended 30th June 1898.

The inspection of the South West Line was made between the 16th and 23rd July, of the Terminal Works at Madras and the Eunur Branch on 1st August, and of the North West Line between the 2nd and 5th August, the Arcot-Ranipet Branch, now under construction was inspected on 30th July. On all the above occasions I was accompanied by the Government Inspector.

1. **Earthwork.**—At Rayapuram the erosion by the sea of the foreshore opposite the General Offices, the safety of which was at one time seriously threatened, is being arrested by special protective measures adopted by the Harbour Trust authorities, and this work is expected to be completed before the arrival of the North East Monsoon.

Owing to the very local and abnormal rainfall on the 6th June 1898 the line was inundated at $\frac{240}{13}$ miles North West Line, and the embankment was washed away for a length of 300 feet, causing temporary interruption to the train service, but the breach was promptly restored the following day and through traffic resumed.

The protective bank constructed at the stream at $\frac{76}{14}$ miles North West Line for restricting floods to their legitimate channel and waterway has been completed.

At the Koduru River ($\frac{107}{10}$ miles) North West Line the extensive training works, sanctioned in accordance with the revised plan, have been carried out, and a material improvement in the course of the river above the bridge has been secured.

In other respects the banks and cuttings are in good order and well maintained.

2. **Fencing.**—The vegetable fence is being renewed and repaired in places where the aloe is found to thrive, but between Arkonam and Jalarpet there are many miles on which very old plants have died out and caused serious gaps ; hence it will be more economical to substitute wire fencing. On the North West Line, owing to the constant destruction of long sections of aloe fence by fire from engine sparks, its replacement by wire is imperative. In both cases provision has been made to execute this work gradually.

On the Kolar Gold Fields Railway the wire fencing has been erected for the whole 10 miles.

3. **Stations.**—The station yards, platforms, buldings and staff quarters were found to be neatly kept and maintained in efficient repair.

At the large Stations such as Arkonam, Jalarpet, Bangalore Cantonment, Salem, Gooty, Adoni and Raichur, where remodelling of the yards appears desirable to obviate shunting on the main line, and efficient "trapping" is pronounced necessary, as advocated by the Special Siding Committe, the proposals are still under consideration with a view to reduce the heavy outlay which these proposed alterations involve.

At Bangalore City good progress has been made with the roof of the verandahs on both M. R. and S. M. R. platforms, and this work should be completed by the end of August.

At Bowringpett Junction, which it is now proposed to work on Joint Station terms, a plan and estimate (Rs. 39,000) have been prepared for carrying out the remodelling of the sidings with a view to marshalling the trains for the several Gold Fields Stations by means of gravitation, and for additional quarters for the staff.

4. **Bridges.**—During the half year the strengthening of weak girders has been carried out at the following bridges :—

Bridge No.	Mileage.	Description.	Remarks.
82	$\frac{175}{16}$ Ms. B. Branch.	2-50 ft.	Completed—New steel girders substituted.
28	$\frac{307}{17}$ „ N. „	2-64 ft.	In progress—Inserting central masonry piers.
29	$\frac{308}{7}$ „ „ „	4-64 ft.	Do. do.
49	$\frac{312}{13}$ „ „ „	2-64 ft.	Do. do.
60	$\frac{314}{10}$ „ „ „	2-64 ft.	Do. do.
426	$\frac{142}{10}$ „ N. W. L.	2-64 ft.	Do. do.
743	$\frac{232}{3}$ „ „	4-64 ft.	Do. do.
744	$\frac{232}{10}$ „ „	2-64 ft.	Do. do.
794	$\frac{248}{9}$ „ „	4-64 ft.	Do. do.
795	$\frac{248}{15}$ „ „	2-64 ft.	Do. do.
835	$\frac{263}{3}$ „ „	4-64 ft.	Do. do.

The Indents for the new girders (64 ft.) span required for the Tungabhadra Bridge ($\frac{333}{2}$ to $\frac{334}{0}$ miles North-West Line) were delayed as the estimate submitted for the treatment of this bridge in accordance with the method approved by the Board had to be carefully scrutinized and the current prices in the Home market for steel work duly provided for. The indents were completed and forwarded on the 6th July 1898.

Attention was first directed to the necessity for strengthening the girder bridges on this Railway so far back as in 1880, when the work was initiated by this Department, and it has been in progress during the past 18 years. In some cases the weak girders have been either duplicated, or replaced by new girders, whilst in others entire bridges have been reconstructed by the adoption of an improved type specially designed to efficiently carry the heavier loads imposed on them in recent years. The subjoined statement shows approximately the very large outlay incurred up to date by the Company on this work, the expenditure being given, for the sake of brevity, for quinquennial periods, and aggregating a total of Rs. 43,78,153 which sum has been debited in the proportion of Rs. 31,20,340 to Capital and Rs. 12,57,813 to Revenue :—

Period.	District.	Debited to Capital.	Debited to Revenue.	Total.
		Rs.	Rs.	Rs.
1880 to 1885	1st District.	60,121	10,828	70,949
	2nd do.	64,105	81,113	1,45,218
	3rd do.	14,096	413	14,509
1885 to 1890	1st do.	...	3,584	3,584
	2nd do.	598	2,428	3,027
	3rd do.	19,40,316	7,05,670	26,45,986
1890 to 1895	1st do.	...	1,994	1,994
	2nd do.	41,067	72,489	1,13,556
	3rd do.	9,78,539	306,967	1,285,506
1895 to 1898	1st do.	5,684	35,271	40,955
	2nd do.	7,513	9,793	17,306
	3rd do.	8,301	27,263	35,563
		31,20,340	12,57,813	43,78,153

Note :—This total includes the cost of the New Papaghni, Chittravali, a d Pennér Bridges.

The provision of more liberal expansion on the large bridges so as to allow of the free movement of the rails, as advocated by the Government Inspector, has been carried out at the Rallavonka, Papaghni, Penneru and Chittravatti Bridges on the North West Line and the Cauvery Bridge on the South West Line. At the Ferok and Kallayi Br dges the work is in abeyance pending the dec'sion as to the conversion of this portion of the line to metre gauge, in which case the expansion can be introduced simultaneously with the change of gauge.

The foot over-bridge at Elephant Gate level crossing, to the cost of which the Madras Municipality have contributed a moiety, is nearly completed and will be opened to the public next month.

All the major and minor bridges are in other respects in good order and well maintained.

5. **Water Supply.**—The partial failure of the south west monsoon at a season it was most required affected our wells at Arkonam, Katpadi, Jalarpet, Bangalore Cantonment, Renigunta and Kondapuram somewhat seriously; but the special scheme sanctioned for Whitefield will, it is hoped, be soon completed and relieve Bangalore. At the other Stations named the matter is receiving attention, and auxiliary wells are being resorted to as a temporary measure.

At Bangalore City hopes are still entertained of obtaining the requisite supply for both Companies from the New Waterworks, and a renewed application has been made to the Municipality. The large iron tank fixed on the station roof wi l be ready for use in a month's time.

With the above exceptions the wells throughout the line appear to be able to meet all present demands.

6. **Permanent Way.**—Throughout the main line and several branches the road was well maintained and in good order, but the standard of uniform smoothness—a marked feature before the stone covering was introduced—is found to be wanting on many sections, especially when running at high speeds. With the exception, however, of those sections where the old iron rails still remain, and where the joints are so noticeable, the running was very satisfactory. This is due to the considerable lengths now renewed with 20 ft. steel rails of the double-headed section, and this improvement will be still more perceptible in the next two or three years.

The violent oscillation of vehicles when running at high speed over the new 30 ft. steel rails of bull-headed section laid between Katpadi and Jalarpet was again investigated in the course of the inspection. It has been decided to remove them from the present length on which our mail and passenger trains pass at high speed, and utilize them elsewhere, subtituting for them rails of the latest approved section, in which the contour of the top table is identical with that of the old iron rails on which the running has hitherto given such excellent results.

At the end of the half year uuder review the following is the number of miles laid with the different descriptions of rails :—

	S. W. Line.	N. W. Line.	Total.
84 lbs. iron rails	26·04	·56	26·60
75 „ do.	108·75	199·94	308 69
65 „ do.	122·19	...	122·19
75 „ double-headed steel rails 30 ft.	32·38	...	32·38
75 „ do. do. and other rails 20 ft. ...	207·76	103 54	311·30
75 „ flat footed steel rails on bridges 20 ft. ...	1·46	4·24	5·70
76 „ bull-headed steel rails 30 ft.	74·77	...	74·77
	573 35	308·28	881·63

KOLAR GOLD FIELDS RAILWAY.

75 lbs. iron rails 20 ft.	7·31
84 „ do.	·61
75 „ double headed steel rails 20 ft. and others	2·08
	10·00

ENNUR SECTION OF B. M. RAILWAY.

75 lbs. flat-footed 30 ft. steel rails	8·37
75 „ double-headed steel rails 30 ft.	·08
	8·45

During the half year 17·38 miles of rails were replaced by:—

1,766 bull-headed 30 ft. steel rails	=5·01 miles.
2,994 new and second hand 20 and 17 ft. double-headed 75 lbs steel rails	=5·66 „
8 do. do. flat-bottom 20 and 17 ft. steel rails ...	=0·01 „
3,552 second hand double-headed 20 and 17 ft. iron rails ...	=6·70 „
8,320	=17·38 miles.

as compared with 25·15 miles in the previous half-year.

The prescribed rate of renewals has hitherto been 25 miles per half year, but the decrease during the half year under review is partly due to the unavoidable delay in releasing the required number of 20 ft. double-headed steel rails by the insertion of new 30 ft. steel rails of the bull-headed section.

... number now laid is estimated at 3,280,935 of which 6,081 were found broken, and these were renewed during the half-year. This is equivalent to 1·92 miles out of a total mileage of 900 miles or ·185 per cent. as against 1·77 miles or ·171 per cent. in the previous half-year.

8. **New Type Fish Plates.**—The following table shows the total numbers of, and miles of rails fitted with, these to the end of the half-year, as well as those inserted during the half year and to the end of the preceding one :—

	New type fish plates used with bull-headed steel rails.		New type fish plates used to replace old patterns on double-headed steel rails.		Total.	
	Miles.	Number.	Miles.	Number.	Miles.	Number.
Done up to 31st December 1897	69·75	46,496	319·27	309,942	389·02	356,438
Done during the half-year ending 30th June 1898.	5·01	4,060	11·31	12,627	16·32	16 687
Total done up to 30th June 1898	74·76	50,556	330·58	322,569	405·34	373,125

47·46 miles of double-headed steel rails remain still fished with old type fish plates.

9. **Maintenance.**—The cost of Maintenance per mile for the entire Railway compared with that of the two previous half-years is as follows :—

Half-year ending 30th June 1897.

	Rs. A. P.
Total cost of Maintenance including Sidings	610 14 10
Extra Expenditure	43 8 8
Ordinary Expenditure...	562 6 2

Half-year ending 31st December 1897.

Total cost of Maintenance including Sidings	619 10 10
Extra Expenditure	32 13 5
Ordinary Expenditure...	586 13 5

Half-year ending 30th June 1898. Rs. A. P.

Total cost of Maintenance including Sidings	532 10 10
Extra Expenditure	48 11 1
Ordinary Expenditure...	483 15 9

	Rs. A. P.	Rs. A. P.
Total cost of Maintenance during the half-year ending 30th June 1897 ...	...7,88,525 6 4	
Less Value of old rails and other items taken into stock, Rs. 1,55,067 1 5		
Less Cost of working Kolar Gold Fields Railway ... Rs. 13,352 1 5		
	1,68,419 2 10	
		6,20,106 3 6
Cost of Ordinary Expenditure per mile including Kolar Gold Fields Railway ...	Rs. $\frac{5,83,125\ 7\ 0}{1,036\frac{7}{8}}$ =	562 6 2

The details of Extraordinary Expenditure for the half year ending 30th June 1897, are as follows.—

		Rs. A. P.	Rs. A. P.
South West Line.	Covering dusty portion of the line with broken stone	Rs. 1,018 14 2	
	Revenue portion of sanctioned Schedule works...	„ 18,840 1 7	
	Repairing damages done to station buildings by strong gale in May 1897	„ 327 14 2	
	Strengthening girders by timber struts for bridge over Cochrane's Canal &c., at $\frac{1}{14}$ Miles R. B.	„ 805 15 10	
	30 feet opening in lieu of 30 feet arch at $\frac{168}{10}$ Miles, Bangalore Branch	„ 195 6 11	
			21,188 4 8
North West Line.	Covering dusty portion of the line with broken stone	„ 15,446 14 10	
	Revenue portion of sanctioned Schedule Works	„ 590 10 10	
	Restoration of Bridge at 95/2-3 Miles	„ 5,590 6 5	
	Restoration of Bridge at 107/10-11 Miles	„ 7,516 9 2	
			29,144 9 3
			50,332 13 11
Cost of Extra Expenditure per Mile...		$\frac{50,332\ 13\ 11}{1,036\frac{7}{8}}$ =	48 8 8

Total cost of Maintenance during the half year ending 30th June 1898					Rs. 6,93,136	A. 2	P. 4
Less value of old Rails and other items taken into stock	Rs.	1,41,392	3	6			
Less cost of working Kolar Gold Fields Railway	„	10,203	2	7			
Less amonnt chargeable to Fire Insurance Fund...	„	26	1	3			
					1,51,621	7	4
						5,41,514	11 0

Cost of Ordinary Expenditure per Mile including Kolar Gold Fields Railway... ... ... Rs. $\frac{5,01,287\ 2\ 2}{1,035\frac{3}{4}}$ = 483 15 9

The details of Extraordinary Expenditure for the half year ending 30th June 1898, are as follows:

					Rs.	A.	P.	Rs.	A.	P.
S. W. Line.	Covering dusty portion of the line with broken stone	Rs.	2,787	3	0					
	Revenue portion of sanctioned Schedule Works	„	18,110	15	0					
	Strengthening Girder Bridges at $\frac{307}{17}$, $\frac{308}{17}$ $\frac{312}{13}$ & $\frac{314}{10}$ Miles. N. *B.*	„	1,223	2	1	22,121	4	1
N. W. Line.	Covering dusty portion of the line with broken stone	„	12,673	14	9			
	Revenue portion of sanctioned Schedule Works...	„	15,338	6	1			
	Strengthening Girder Bridges at $\frac{142}{10}$ Miles...	„	297	2	6	2,8309	7	4	50,430	11 5
Cost of Extra Expenditure per Mile, Rs. $\frac{50,430\ 11\ 5}{1035\frac{3}{4}}$									48	11 1

10. **Covering of Sand Ballast with broken Stone.**—2·52 miles on the Bangalore Branch and 40·67 miles on the North West Line have been covered during the half year and subjoined is a statement of the portions completed and remaining to be covered up to date :—

Section.	Covered Miles.	Remaining to be covered. Miles.
Madras to Mettupaliyam	327 33	Nil.
Podanur to Calicut including Palghat Branch ...	8·50	105·12
Jalarpet to Bangalore	45·27	42·15
Arkonam to Raichur	176·60	131·68
Total ...	557·70	278·95

11. **Signals and Interlocking.**—Throughout the system all the Distant Signals have been altered so that the arms shall fly to danger in the event of any connection breaking. In regard to Home Signals there still remain 19 to undergo a similar alteration.

The following is the cost of the several experimental installations of interlocking apparatus introduced on the North-West Line, and the dates on which they were brought into use. It now remains to be decided which is the most suitable for permanent adoption throughout the line.

Stations.	Descriptions.	Date of Opening.	Cost. Rs.
Tiruttani ...	Saxby and Farmers' Ordinary system	March 1895	8,886.
Nagari ...	Saxby and Farmers' Hydraulic system	...	9,702. (not in use)
Puttur ...	Dutton's system	June 1896	4,286.
Pudi ...	Stoney's do	„ 1894	6,093.
Mamanduru ...	Do do	April 1896	5,695.
Peddapadu ...	Phipps' arrangement	Decr. 1896	1,171.

12. **Sale of Old Rails.**—The value realized from the sale of old rails is as under :—

Half Year Ending.	Value of old Iron Rails sold.	Value of unserviceable Iron or Steel Rails used for works.	Total value.
	Rs.	Rs.	Rs.
31st December 1897 ...	27,417	3,664	31,081
30th June 1898	30,172	3,673	33,845

13. **Engineering Staff.**—Mr. E. W. Stoney was still on furlough. Mr. H. J. Thompson proceeded on 3 months' privilege leave on 10th March and Mr. A. B. Strange on 18 months' furlough on 1st May. Mr. A. M. Stevenson, appointed by the Board as temporary Assistant Engineer in accordance with special terms, arrived at Madras on 21st March.

Messrs. J. M. Bourne and J. G. R. Marsh, appointed by the Board as temporary Assistant Engineers on the Calicut-Cannanore Extension, arrived at Madras on 24th April.

The work in the Chief Engineer's office has recently increased and both the Accounts Branch and Drawing Office have been severely tasked in coping with the preparation of plans and estimates for new projects in addition to the current work in connection with the open line.

NEW PROJECTS.

(1) **Calicut-Cannanore Extension.**—Sanction for the construction of the first 26 miles having been accorded on 29th December 1897, the superior staff was appointed in February 1898, as well as the requisite number of subordinates, for the demarcation and acquisition of land. Owing to the large number of small holdings to be dealt with, this has occupied a longer period than was at first anticipated. At this time also the question of change of gauge, not only on this extension but on the open line section from Mettupaliyam to Calicut, was submitted for the consideration of the Board by the Government.

Meanwhile, provisional sanction was granted to proceed with the earthwork on a metre gauge basis, the collection of materials and necessary plant, and the construction of minor bridges up to girder level, all indents for ironwork from England being in abeyance. The early advent however of the south-west monsoon unfortunately prevented any material progress being made.

The Engineering Staff have since been occupied with the preparation of land plans for the remaining sections, as well as of working drawings of bridges and stations; so that when the decision as to the gauge has been pronounced, and construction sanctioned beyond the 26th mile, work can be pushed on rapidly at several points simultaneously.

(2) **Shoranur-Cochin Extension.**—On 6th April 1898, the sum of Rs. 26,949 was sanctioned for the realignment of this extension for a metre gauge. The work was placed in charge of Mr. C. R. Dallas, Executive Engineer, with Mr. A. M. Stevenson as Assistant, and the work had been completed up to the 30th mile by 15th June 1898, when field operations had to be suspended owing to the south-west monsoon. The Survey Staff returned to Madras to prepare the plans and estimates for the first section of 30 miles, and these will be shortly submitted for sanction, with a view to the construction of this section being undertaken at once if considered desirable, and advantage thus taken of the working season. Field operations in connection with the realignment of the remaining portion of this project will be resumed in September when the rains cease.

(3). **Arcot-Ranipet Branch**.—This short branch of 4 miles (standard gauge) has made excellent progress under Mr. H. W. Perry, Assistant Engineer. Up to the date of my inspection its condition was as follows:—

1st	Mile	Earthwork	finished.		Masonry	completed.	
2nd	Do.	do.	⅔	do.	do.	½	do.
3rd	Do.	do.	¾	do.	do.	½	do.
4th	Do.	do.	¼	do.	do.	¼	do.

The permanent way, temporarily transferred from open line stock, had been laid for ⅓ mile; materials for Ranipet Station (Arcot Town) had been collected, while at Arcot Junction the necessary additions and alterations were half finished. It is suggested that on the opening of this branch, which it is hoped will take place in November next, the names of these Stations be changed to "Arcot" and "Ammur Junction," respectively.

(4). **Kolar Gold Fields Railway**.—In accordance with the resolutions passed at the Meeting at Bangalore on 18th March, plans and estimates were, at the request of the Mysore Durbar, submitted for introducing easier curves on certain parts of this branch, equivalent to the re-construction of 3·60 miles, to accommodate our heaviest type of Engines, and thus enable increased loads to be hauled, as well as for replacing the present second hand iron rails by new steel rails throughout. These works are estimated to cost Rs. 2,77,580 which, if sanctioned, the Mysore Durbar are prepared, it is understood, to accept as a charge to Capital, and it will be necessary to retain the services of a Special Assistant Engineer for the execution and efficient supervision of this extensive modification in the alignment.

(5). **Junction of M. R. and B. M. R. at Basin Bridge (Near Salt Cotaurs, Madras)**.—Plans and Estimates amounting to Rs. 7,95,226 were submitted for this work in 1896; these have now been modified and revised estimates have been forwarded for Rs. 7,77,686 and the sanction of Government is awaited for putting this work in hand.

(6). **New Engine Shed for B. M. R. at Madras**.—A Plan and Estimate amounting to Rs. 1,41,483 for a comprehensive scheme have been prepared and forwarded for the establishment of the Head Quarters Shed for stabling the B. M. R. Engines (exclusively) at the proposed site in a portion of the Government Salt Depôt.

(7). **Beach Line Extension at Rayapuram**.—Plans and Estimate have been submitted for the extension of the Rayapuram Branch through the Harbour Trust premises to a joint M. R. and S. I. R. passenger station on the Beach opposite the General Post Office. This work is estimated to cost Rs. 75,669, and the S. I. Ry. have agreed to accept half the outlay on the new terminal station.

(8). **Conversion of Gauge**.—Lastly, the preparation of plans and estimates is in progress with a view to ascertain the total outlay which would be incurred in the proposed conversion of the standard to metre gauge on the Mettupalayam-Calicut Section of the open line, and in the establishment of a central metre gauge Engine Shed and Loco. Workshops at Podanur, in accordance with the scheme framed by the Special Committee appointed to report upon this important subject.

I have the honor to be
Sir,
Your Most Obedient Servant.

Henry Close

Chief Engineer.

PRINTED AT THE LAWRENCE ASYLUM PRESS, 1898.

(3)

MADRAS RAILWAY COMPANY,
LOCOMOTIVE SUPERINTENDENT'S OFFICE,
PERAMBUR WORKS, 10*th September* 1898.

L. S. MOSS, Esq.,
Agent and Manager,
Madras Railway.

SIR,

I have the honour to submit my Report upon the working of the Locomotive and Carriage and Wagon Departments, for the half-year ending 30th June 1898.

2. A tabular statement is attached, shewing the expenditure in detail, under each of the several sub-heads of account, as compared with similar figures for the preceding and corresponding half-years.

3. The general totals, as shewn in this statement, are as follows:—

Half-year ending	Mileage.	Total cost of Department, including all charges.	Total cost per mile.				
			Rs.	A.	P.	Rs.	A.	P.
June 1897	1,535,936	13,28,233	12	9	0	13	10·04
December 1897	1,616,892	13,90,471	5	7	0	13	9·11
June 1898	1,551,560	11,87,290	3	5	0	12	2·92

and on comparing these figures, the final results will be found to be:—

	HALF-YEAR ENDING 30TH JUNE 1898 AS COMPARED WITH	
	Preceding half-year.	Corresponding half-year.
	Per cent.	Per cent.
Miles run...	Decrease 4·04	Increase 1·02
Total cost of Department, including Loss by Exchange, Carriage of Revenue Stores, &c.	Decrease 14·61	Decrease 10·61
Total cost, as above, per mile	Decrease 11·02	Decrease 11·52

4. From these figures it will be seen that, although the mileage during the half-year has been 1·02 per cent. in excess of that during the corresponding period, the total cost of working the Department has decreased by a sum of Rs. 1,40,944, or by 10·61 per cent. As is explained below, no debit on account of the two new engines, hitherto replaced at the cost of Revenue in each half-year, has come into the accounts, and this will account for about Rs. 75,944 of this total sum. Deducting this, however, from the total of Rs. 1,40,944, a sum of Rs. 65,000 still remains, and represents the actual saving on the half-year's work. This is equivalent to a total saving of 5·17 per cent. on the total Locomotive and Carriage expenditure.

Locomotive Engines: Running.

5. Under "Wages and Salaries," there is a slight increase in expenditure amounting to Rs. 978, and this is to be found wholly under labour for fuelling and watering engines, the wages paid to Drivers and Firemen being, as will be noticed, despite the increased mileage, slightly below the figure for the corresponding half-year. The total cost, worked out per mile, is somewhat lower than the period with which comparison is being made.

6. Under "Coal and Patent Fuel" a rather larger total consumption is apparent, due partly to the increased mileage, although the consumption per mile is ·11 lbs. only greater than during the corresponding half-year. As compared with the preceding term, there is a reduction of ·33 lbs. per mile, while in cost per mile there is a saving of pies 2·17, or 3·67 per cent. upon the charges for the first half of 1897.

7. The consumption of firewood shews a slight increase in both quantity burnt, and cost per mile, amounting in the latter case to 1·01 pies only.

8. The average cost per mile of fuel of all kinds shews a reduction as compared with either of the two terms dealt with. The differences are however so slight that they do not appear to call for further comment.

9. Under "Oil, Tallow, Waste, &c.", the total debit has increased by Rs. 4,000, and the explanation of this is to be found partly in the increased mileage and partly in the continued high price of Castor Oil, which was issued to the engines during the half-year under report, at a rate of about 13 per cent. in excess of that for the corresponding half-year. The faster speed of the North-West Line Mails may also be held to have in some measure contributed to the extra expenditure under this head. The extra cost of Oil and Tallow has more than balanced the savings under the other heads, and brought about an increase of ·13 pies per mile in the total cost of Locomotive Running.

Locomotive Engines: Repairs.

10. Thirty-one engines passed through the Shops for repair during the half-year, as compared with 47 dealt with in the corresponding period. Owing to the strike which took place in the Engineering trades in England, Messrs. Kitson & Co., with whom is the contract for 8 new $K.C_2$ engines now under indent, were unable to deliver these, as had been arranged should be done. A sum of Rs. 51,000, which had been included in the Estimates to meet this charge, remained therefore unspent, and in comparing the expenditure under this head, as well as in the totals, and summary given in the statement, the comparison should be made between the actual (black) figures given for the half-year now under review, and the red figures for the two preceding terms.

11. Dealing then with the figures in this way, and so eliminating the charges on account of the two new engines, it will be seen that a saving per mile of 1·37 pies, or 5·35 per cent., on the total cost of repairs, has resulted. This appears practically all under the head of Labour.

12. In total cost per mile of Running and Repairs there is a reduction of pies ·54.

Carriages and Wagons: Running.

13. The expenditure under this head shews an increase of Rs. 4,716 over the figure for the corresponding half-year. The cause of this increase is the same as that mentioned in my report for the last year, viz., substitution in great measure of the more expensive Castor Oil, for the cheaper Mineral Oils hitherto used with such unsatisfactory results. Compared with the preceding half-year there is a slight reduction in the total expenditure.

Carriages and Wagons: Repairs.

14. The number of vehicles repaired during the half-year was 2,683, as compared with 2,665 dealt with during the first half of 1897. There were also renewed at the cost of Revenue—

Covered Goods Wagons	60
Travelling Water Tank	1
Total ...	61

and two trucks for carrying Gas-holders were built at the cost of Capital.

15. The total expenditure, both in Wages and Material, was, it will be noted, considerably lower than that for the corresponding half-year, and this is due to the fact that the bulk of the renewals having been finished, the Carriage Shop was working for the greater part of the term on the construction of the new stock for the Bezwada-Madras Railway. As stated in the preceding paragraph, 60 covered Goods wagons were actually turned out of the Works, but 50 of these had been practically entirely finished during the latter half of 1897, and had only not been handed over to the Traffic owing, as is explained in other correspondence, to our having run out of the stock of buffer and draw springs. This is also referred to in para. 12 of the report for last half-year.

16. The renewal of the old open wagons as covered Goods wagons is now almost completed, the last 12 being now in the Shops, and the heavy expenditure, which has for so many years been incurred on this account, may now be considered to be at an end. There are still a few odd ballast and fuel wagons and other vehicles awaiting renewal, but, in view of the proposal to convert the West Coast Section of the Company's system to Metre gauge, it is probable that these renewals need not be carried out, since the conversion of the gauge will of course set free a certain proportion of broad gauge stock, which can be utilized elsewhere, and which will therefore take the place of the vehicles now condemned and removed from the inventory.

General.

17. As has been reported in correspondence ending with my letter to your address quoted in the margin, an unfortunate strike amongst the Company's Native workmen at Perambur occurred in May 1898. The history of the strike has been fully given in the correspondence, and it is not therefore necessary for me to now enter into further details. I may mention however that the effect of it was to bring about a saving in wages which would otherwise have been paid, amounting to about Rs. 6,200 in the Locomotive and Rs. 9,150 in the Carriage Departments respectively, and to this saving is in part due the reduction which appears under Labour both of Locomotive and Carriage Repairs.

No. R. 2574/645 of 21st June 1898.

18. On the 16th May 1898 a serious fire broke out in the Coal stacks at Raichur. The fire, which was in the first instance no doubt due to spontaneous combustion, brought about very possibly by damp, was very much increased by the high wind which was blowing at the time, and it was not until the whole of the several heaps which had ignited had been moved, and thoroughly wetted, that it was got under. About 822 tons of Coal were burnt, and the total cost of this, and of the labour incurred in moving the Coal, carrying water, and extinguishing the fire, amounted to Rs. 12,695, which sum it has been decided to debit to the Fire Insurance Fund.

Staff.

19. I availed myself in February 1898 of 3 months' privilege leave granted to me, Mr. Pilkington, the Deputy Loco. Superintendent, officiating during my absence. I returned from England and resumed charge of the Department on the 30th May 1898.

20. Mr. R. G. Bamford, Chief Draughtsman, proceeded to England on 3 months' privilege leave in January 1898, returning to duty on the 6th April 1898.

21. Mr. E. Outon, Lathe Shop Foreman, to whom the grant of six months' leave was sanctioned in Minute No. 3 of Official Meeting, dated 28th January 1898, went home on the 22nd April 1898.

22. Mr. W. J. Thynge and Mr. J. W. Austin, appointed respectively as Boilersmith and Springsmith, in succession to Messrs. Scriven and Smith, arrived in India and assumed charge of their duties on the 14th January 1898 and 11th March 1898, respectively.

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

C. E. PHIPPS,
Locomotive Superintendent.

LAWRENCE ASYLUM PRESS.

Abstract of -year ending June 1898.

YEAR NG	Total Engine Miles worked.	Drivers and Firemen.			Clea a	Oil, Tallow, Waste, &c. Actual Cost.			Oil, Tallow, Waste, &c. Cost per Mile.			Total Cost.			Cost per Mile.		
		Rs.	A.	P.	Rs	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P	Rs.	A.	P.
97 ...	1,535,936	1,43,725	7	7	40,	32,842	7	4	0	0	4·11	6,54,500	3	9	0	6	9·82
97 ...	1,616,892	1,48,726	0	7	41,	32,981	11	1	0	0	3·92	6,91,252	2	9	0	6	10·08
98 ...	1,551,560	1,43,660	0	2	41,	36,842	11	4	0	0	4·56	6,62,206	7	0	0	6	9·95

—Gross Cost of Running pairs.

HALF-YEA ENDING	l Cost.			Deduct for K. G. F. Ry., Madras-Ennur Ry. and Fire Insurance Fund.			Nett Total.			Cost per Mile.		
		A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
June 1897	92	11	7	24,702	5	3	9,54,790	6	4	0	9	11·35
Dec. 1897	75	1	10	27,534	0	7	9,96,641	1	3	0	9	10·35
June 1898	75	1	0	22,843	14	8	9,06,328	2	4	0	9	4·15

s in red show actual ex- s after deducting value ed at cost of Revenue in preceding and corres- ing half-years.

CARRIAGES A-Gross Cost of Running and Repairs.

-YEAR DING	Total Engine Miles worked.	Cost of Material.			Wa Wor	Deduct for K. G. F. Ry., Madras-Ennur Ry. and Fire Insurance Fund.			Nett Total.			Cost per Mile.		
		Rs.	A.	P.	Rs.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
1897 ...	1,535,936	12,994	12	9	20,0	8	7,092	4	11	2,67,066	0	9	0	2	9·38
1897 ...	1,616,892	17,885	10	3	20,1	5	8,061	3	7	2,85,758	13	10	0	2	9·93
1898 ...	1,551,560	17,482	4	4	20,2	9	5,405	8	4	2,17,421	4	5	0	2	2·91

tment.

Final Total Cost per Mile.		
Rs.	A.	P.
0	13	10·04
0	13	0·52
0	13	9·11
0	13	0·20
0	12	2·92

ORKS,

C. E. PHIPPS,

Locomotive Superintendent.

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(4)

MADRAS RAILWAY COMPANY,

No. 2749. TELEGRAPH ENGINEER'S OFFICE,

ARKONAM, 29*th August* 1898.

THE AGENT AND MANAGER,
Madras Railway.

DEAR SIR,

REPORT FOR THE HALF-YEAR ENDING 30TH JUNE 1898.

I beg to submit my report for the half-year ending 30th June 1898.

Offices and Fittings.

Telegraph instruments, fittings, &c., were shifted and refixed at the following stations in consequence of alterations to station buildings by the Engineering Department :—

Ennur.	Tiruvothiyur.
Ernavur.	Chinnamapet.
Tondiarpettai.	Mungapatnam.

A morse instrument was fixed at Ferok in connection with No. 1 Circuit, Podanur to Calicut, to meet Traffic requirements.

Electric Starting Semaphores.

The West Electric Starting Semaphore at Morappur was shifted farther out to meet the requirement of the Engineering Department owing to alterations of sidings.

The South Electric Starting Semaphore at Gooty was renewed.

The North and South Electric Semaphore levers were removed from the temporary wooden stagings to a new double lever pit at Mungapatnam.

The levers of the undermentioned Electric Starting Semaphores were shifted into new pits owing to alterations and additions of Station buildings :—

Tirur, East. | Gooty, North.

The lever frames of the undermentioned Electric Starting Semaphores were renewed :—

Morappur, East and West. | McDonald's Choultry, West.

Uttukuli, West.

No. 9½ Signal wires connected to the East and West Electric Starting Semaphore levers at Morappur were replaced by stranded wires.

Comparative Statement of percentage of Semaphore failures for the Half-year ending 30th June 1898.

—	Half-year ending 30th June 1897.	Half-year ending 30th June 1898.
Total number of Semaphore operations (not including those for ballast and locomotive wood trains)	146,532	147,553
Number of failures—		
(*a*) Due to station staff	104	76
(*b*) Due to faults in apparatus caused by lightning and interference without Inspector's knowledge	29	34
(*c*) Due to faults in apparatus	88	108
Total ...	221	218
Percentage of failures to number of operations	0·15	0·15

Line Work.

Telegraph lines were diverted at Arcot for the purpose of constructing the branch Railway between Arcot and Ranipet.

Cross over wires at the west end of the boundary wall of Perambur Works were raised on existing poles to meet requirements.

A temporary line was erected and a Morse Office opened at Ambattur during the camp of exercise.

Two telegraph posts at $\frac{0}{8\ \&\ 9}$ and one at Tirupatur on South West Line and four at $\frac{176}{6}$, $\frac{180}{7,\ 8\ \&\ 9}$ on North West Line were shifted to clear new buildings.

Stays attached to Telegraph posts between Arkonam and Salem and between Cuddapah and Kamalapuram were tightened and regulated.

The Earth wire was removed from the well staging and led on a separate post into the well at Nandalur.

Telegraph poles at $\frac{129}{6}$, $\frac{301}{2}$, $\frac{310}{2}$, $\frac{314}{4}$, $\frac{338}{16}$, $\frac{339}{1}$, $\frac{348}{13}$, $\frac{359}{20}$, $\frac{365}{17}$, one on the Podanur platform, four at Pallipuram, one on the Nilgiri Branch at $\frac{302}{13}$ and one at Olavakkot, all on South West Line, were renewed.

Telegraph posts and lines at Rayapuram Station yard were diverted owing to alterations in the yard.

Lightning Conductors.

One Lightning conductor with two rods and finials was erected on the Deputy Locomotive Superintendent's bungalow, and one lightning conductor with two rods and finials on the First Assistant Locomotive Superintendent's bungalow at Perambur.

Bell Circuit.

A call bell was fixed in the Chief Engineer's Drawing Office with two bell pushes, viz., one on Chief Engineer's table and the other on the table of Personal Assistant to the Chief Engineer.

The Bell communication between Bangalore Cantonment and Maharajah's Gate was removed owing to altered arrangements.

The following are comparative statements of interruptions on the telegraph and block Circuits :—

Interruptions on Telegraph Lines.

—	Interruptions caused by the neglect and carelessness of the Signallers.	Accidental interruptions.	Total.
Half-year ending 30th June 1898	3	58	61
Half-year ending 30th June 1897	4	62	66

Of the accidental interruptions—

26 were due to Line faults.
17 „ to Instrumental faults.
3 „ to Battery faults.
8 „ to Unknown causes.
3 „ to Lightning.
1 was due to Weak signals.

Interruptions of Block Sections.

—	Miles open.	Number of Circuits.	Interruptions caused by the neglect and carelessness of the Signallers.	Accidental interruptions.	Total.
Half-year ending 30th June 1898	857½	126	9	81	90
Half-year ending 30th June 1897	857½	126	8	75	83

Of the accidental interruptions—

12 were due to Line faults.
32 „ to Instrumental faults.
8 „ to Battery faults.
29 „ to Lightning.

Intercommunication.

The undermentioned vehicles were fitted with Electrical Intercommunication Appliances at Perambur Works :—

—	Vehicles newly fitted.	Vehicles refitted.
Water Tank	1	...
Engine	1	17
Covered Goods	20	4
Gas Tank	1	1
Composite Carriages	...	14
Second Class do.	...	16
Third Class do.	...	34
Open Goods	...	1
Timber Truck...	...	1

Statement showing the working of Electrical Intercommunication in trains.

—	Half-year ending 30th June 1897.	Half-year ending 30th June 1898.
Total mileage of fitted trains	1,219,144	1,235,250
Mileage of fitted trains with complete communication...	1,213,722	1,228,315
Percentage of interruption	0·44	0·56

List of cases in which Electrical Intercommunication was used and trains stopped during the half-year.

Month	Date 1898.	Particulars taken from the Guards' Journals.
		Fire.
March ...	22nd	The 20-20 o'clock mail train was stopped at $\frac{193}{13}$ mile, Bangalore Branch, owing to fire in train.
		Safety of Passengers and Public Property.
January ...	9th	The 6-45 o'clock train was stopped at $\frac{204}{9}$ mile owing to Permanent-way Inspector having fallen from train.
February ...	15th	The 20-45 o'clock mail train was stopped at Gooty to arrest a passenger who jumped into train when in motion.
April ...	29th	The 15-0 o'clock mail was stopped at Gooty as a passenger complained that his son was left behind.
		Derangement in the Rolling Stock.
February ...	15th	The 9-0 o'clock train was stopped at 143rd mile, Bangalore Branch, to remove the brake hanger of C. G. 353 which dropped owing to the bolt having worked out.

Electric Clocks.

Statement showing the working of the Electric Clocks during the half-year.

	1897.						Mean of six months.
	January.	February.	March.	April.	May.	June.	
Clock Failures. Caused through circumstances beyond Signallers' control...per cent.	2·28	0·00	2·28	2·55	0·38	2·55	1·67
Clock Failures. Caused through the negligence of Signallers, per cent.	3·41	3·99	0·95	0·59	0·19	0·78	1·65
Clock errors two minutes and over ... ...per cent.	0·00	0·00	0·00	0·00	0·19	0·00	0·03
Clock errors under two minutes, but one minute and over, per cent.	0·00	0·00	0·00	0·00	0·00	0·00	0·00
Clock errors under one minute, per cent.	94·31	95·59	96·20	96·86	99·05	96·47	96·42
Clock stopped ...per cent.	0·00	0·42	0·57	0·00	0·19	0·20	0·23
	100·00	100·00	100·00	100·00	100·00	100·00	100·00

Mr. G. K. Winter, Telegraph Engineer, died on 17th January 1898, and Mr. J. B. Duncan was appointed to act as Telegraph Engineer.

Mr. H. H. L. Prendergast arrived on the 9th May 1898 and assumed charge of his Office as Assistant Telegraph Engineer.

Appended is a statement showing the total cost of maintenance of the Electric Telegraph during the half-year under report.

Yours faithfully,

H. H. L. PRENDERGAST,
Acting Telegraph Engineer.

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(5)

No. 1123.

MADRAS RAILWAY COMPANY,
MEDICAL OFFICER'S OFFICE,
RAYAPURAM, *8th October* 1898.

To

THE AGENT AND MANAGER,
Madras Railway.

SIR,

I have the honor to submit my report for the half-year ending 30th June 1898, on the health of the Company's employés, and on the conservancy of the stations on both lines.

The number of cases treated during the six months under review is 4,107, over a thousand less than in the corresponding half of last year.

Mortality.—There were 21 deaths amongst the Company's employés during the half-year amongst whom were Mr. G. K. Winter, Telegraph Engineer, and Mr. J. J. Chatterton, Cashier.

Cholera.—There were only three cases of cholera during the six months, one each at Renigunta, Erode and Calicut, only the Erode case proving fatal.

Small-pox.—This disease manifested itself in epidemic form at Perambur during the months of February, March and April, and that station was responsible for 32 of the total number of 54 cases which occurred during the half-year. The disease was of a benign type, owing no doubt to the patients having been all vaccinated on entertainment in the service, and not a single death happened among the 54 employés attacked.

Quarantine.—The number of employés put into quarantine owing to the prevalence of Small-pox in their houses was 33, of whom 8, owing to having unprotected persons in their houses, received no pay during their enforced idleness. Twenty-five had all persons in their houses protected by vaccination and Rs. 400 in wages were disbursed among them.

Staff.—The Medical and Conservancy Staff have, with very few exceptions, discharged their duties in a satisfactory manner. Mr. A. M. Dravyam, L. M. and S., resigned the service and Mr. V. P. Subba Aiyar, L. M. and S., was appointed in his place.

I have inspected all the Dispensaries and all the conservancy arrangements on the line and found the same in good order.

I have the honor to be,
Sir,
Your most obedient servant,

J. CURRIE,
Medical Officer.

Comparative Statement of Cases treated during the half-years ending 30th June 1897 and 1898.

Date.	Small-pox.	Measles.	Influenza.	Simple Fever.	Malarial Fever.	Remittent Fever.	Cholera.	Choleraic Diarrhœa.	Dysentery.	Diarrhœa.	Accidents and other Diseases.	Total Treated.
1897.												
January	1	...	...	33	237	...	9	...	22	58	511	871
February	3	...	2	53	173	...	2	...	27	38	503	801
March	4	4	5	53	234	6	1	2	40	43	554	946
April	3	...	5	31	223	1	...	...	34	34	586	917
May	1	...	5	43	248	1	2	...	29	64	571	964
June	...	...	1	39	215	...	...	...	32	57	543	887
Grand Total ...	12	4	18	252	1,330	8	14	2	184	294	3,268	5,386
1898.												
January	1	...	...	17	265	...	1	...	23	27	464	798
February	9	1	23	29	250	1	...	...	22	36	442	813
March	23	...	23	62	357	...	...	...	16	40	386	907
April	19	1	13	37	233	7	1	...	24	25	173	533
May	2	...	16	53	245	2	1	...	15	18	174	526
June	...	...	20	41	206	...	...	...	25	37	201	530
Grand Total ...	54	2	95	239	1,556	10	3	...	125	183	1,840	4,107

Return of Vaccinations for the half-year ending 30th June 1898.

Number Vaccinated.	Traffic Department.				Locomotive Department.				Engineer Department.				Telegraph Department.			
	Sex.				Sex.				Sex.				Sex.			
			Children.				Children.				Children.				Children.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
75	3	...	16	21	11	...	6	2	12	...	...	1	...	...	2	1

(6)

MADRAS RAILWAY COMPANY,
CHIEF AUDITOR'S OFFICE,
MADRAS, *3rd September* 1898.

To

THE AGENT AND MANAGER,
Madras Railway Company.

DEAR SIR,

I beg to forward herewith the usual statements of the Company's accounts for the half-year ending 30th June 1898.

CAPITAL.

1. *Statement No. V.*—The capital expenditure for the half-year amounted to Rs. 2,56,729, and was chiefly incurred on stations and buildings, rolling stock and the construction of the Arcot-Ranipet Branch Line.

2. *Statement No. VI.*—The total capital outlay including suspense from the commencement of operations to end of the half-year under review was Rs. 12,21,42,614 and the expenditure on open line, excluding suspense, Rs. 11,93,68,236, which gives an average of Rs. 1,42,237 per mile open.

3. *Arcot-Ranipet Branch Line.*—The actual construction of this branch line was commenced and the amount expended during the half-year, including Rs. 6,145 charged to preliminary expenses, was Rs. 52,939.

4. *Calicut-Cannanore Extension.*—The amount expended during the half-year on the construction of this line was Rs. 35,684, making the total expenditure to 30th June 1898 Rs. 86,311.

REVENUE.

General Results.

5. The following table shews the general results of working :—

	Half-year ending June 1897.	Half-year ending June 1898.	Difference.	
	Miles.	Miles.	Miles.	Per cent.
Mean mileage worked	839·22	839·22	...	...
Train mileage	1,262,217	1,265,284	+ 3,067	+ ·24
	No.	No.	No.	
Average number of trains over the whole line daily in both directions	8·31	8·33	+ ·02	...
	Rs.	Rs.	Rs.	Rs.
Gross earnings	57,89,562	56,34,736	− 1,54,826	− 2·67
Working expenses	26,99,926	24,77,847	− 2,22,079	− 8·23
Net earnings	30,89,636	31,56,889	+ 67,253	+ 2·18
Percentage of working expenses to gross earnings	46·63	43·97	− 2·66	...
Percentage of net earnings to capital outlay including suspense	2·56	2·58	+ ·02	...

6. The gross earnings per mean mile worked per week averaged Rs. 258 against Rs. 265 and were realized at a cost of 43·97 per cent. against 46·63 per cent. in the corresponding half of the previous year.

7. The net earnings gave after paying the interest charges for the half-year a surplus of Rs. 2,49,593-6-10.

Gross Earnings.

8. The following table shews the gross earnings for the two half years :—

———	Half-year ending June 1897.	Half-year ending June 1898.	Difference.	
			Amount.	Per cent.
	Rs.	Rs.	Rs.	Rs.
Coaching	22,89,695	22,46,066	— 43,629	— 1·91
Goods	33,95,726	32,72,465	—1,23,261	— 3·63
Electric telegraph	10,460	8,508	— 1,952	— 18·66
Steam-boat	...	...	...	...
Sundries	93,681	1,07,697	+ 14,016	+ 14·96
Total ...	57,89,562	56,34,736	—1,54,826	— 2·67

9. **Abstract H.**—*Coaching Traffic.*—The number of passengers of the various classes carried including troops and police and season tickets, and the earnings therefrom compare as follows :—

———	First Class.		Second Class.		Third Class.		Total.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		Rs.		Rs.		Rs.		Rs.
First half of 1897 ...	13,386	1,03,271	50,892	1,23,416	5,090,606	17,55,265	5,154,884	19,86,952
First half of 1898 ...	11,137½	1,04,889	54,089	1,38,820	4,630,348½	16,80,191	4,695,575	19,23,900
Increase	...	...	3,197	15,404	...	...	...	...
Decrease	2,248½	3,382	...	...	460,257½	75,074	459,309	63,052

10. The increases and decreases in the various descriptions of passenger traffic are shewn in the detail statement of Abstract H, *vide* para. 122.

11. The first-class traffic shews a decrease of 2,248½ and Rs. 3,382. The decrease is in ordinary passenger and season ticket traffic. Troops and police shew an increase of Rs. 1,300.

12. The second-class traffic shews an increase of 3,197 and Rs. 15,404. Over Rs. 14,000 of this increase is in respect of troops and police.

13. The third-class traffic shews a decrease of 460,257½ and Rs. 75,074, including an increase under the heading of Troops and Police of nearly Rs. 11,000. The net decrease occurs in ordinary passenger traffic, and is apparently caused by a falling off in the number travelling.

14. The number of third-class passengers and unit mileage by mail and ordinary trains respectively excluding excess, return, troops and police and season ticket traffic are as follows :—

Mail.		*Ordinary.*	
Number.	Unit Mileage.	Number.	Unit Mileage.
759,177	44,370,077.	3,606,268½	101,208,310.

15. In passengers' luggage a decrease of Rs. 2,926 is recorded.

16. The receipts from ordinary horse, carriage and dog traffic shew a decrease of Rs. 2,418. Military traffic under the same head, however, yields an increase to the extent of Rs. 1,364.

17. Military baggage shews an increase of Rs. 10,070.

18. Parcels for the Public shew increased receipts in comparison with the June 1897 period, amounting to Rs. 13,486.

19. **Abstract I.**—*Goods Traffic.*—The following is a summary of the tonnage of goods lifted and the earnings therefrom, as compared with the corresponding period of 1897 :—

———	Half-year ending June 1897.		Half-year ending June 1898.	
	Quantity.	Earnings.	Quantity.	Earnings.
	Tons.	Rs.	Tons.	Rs.
Merchandise, General	440,528	30,28,042	409,569	28,67,463
Military Stores	890	44,819	978	37,851
Railway Materials for construction	1,229	3,896	1,109	3,904
Coal (including Locomotive Revenue)	73,212	2,39,050	79,145	2,86,114
Revenue Stores (excluding Locomotive Coal) ...	110,439	49,541	94,303	50,284
Other Goods Traffic	...	30,378	...	26,850
	626,298	33,95,726	585,104	32,72,466
Less—Outstanding irrecoverable or not recovered ...	...	...	...	...
Total ...	626,298	33,95,726	585,104	32,72,466

20. **Merchandise, General.**—Decrease Tons 30,959 and Rs. 1,60,579. This large decrease is to a great extent attributable to very considerable movements of grain in the corresponding period probably on account of the famine then prevailing.

21. **Coal** (*including Locomotive Revenue*).—Increase Tons 5,933 and Rs. 47,064. The greater portion of this increase is in public traffic, principally in consignments from Rayapuram. The receipts from locomotive revenue coal shew an increase of Rs 2,295.

22. **Other Goods Traffic** shews a decrease of Rs. 3,528.

23. The following table shews some of the principal commodities included above under the head of "Merchandise, General" carried during the two half-years under comparison :—

	Half-year ending June 1897.		Half-year ending June 1898.	
	Quantity.	Earnings.	Quantity.	Earnings.
	Tons.	Rs.	Tons.	Rs.
COTTON—				
Raw	8,003	1,18,116	8,679	1,21,281
DYES AND TANS—				
Others	8,962	96,822	8,188	80,984
GRAIN AND PULSE—				
Rice in the husk	5,363	22,039	9,118	55,424
Rice not in the husk	50,606	2,13,757	24,969	1,48,404
Jawar and Bajra	16,024	99,711	12,231	82,798
Grain and Pulse	32,074	2,31,499	14,979	88,253
Others	23,731	1,65,221	31,465	2,13,732
HIDES AND SKINS—				
SKINS OF SHEEP, &c.—				
(*a*) Dressed or Tanned	3,832	57,060	2,957	47,015
(*b*) Raw	8,597	1,08,•75	7,328	83,598
METALS—				
Iron	11,470	99,628	7,553	85,458
OILS—				
Kerosine	4,921	66,236	6,049	71,048
OIL SEEDS—				
Others	5,715	38,403	10,095	76,979
PROVISIONS—				
Others	32,854	2,42,801	37,663	2,87,958
SALT	26,034	1,45,421	28,362	1,50,634
SPICES—				
Chillies	4,926	48,455	4,795	56,353
SUGAR—				
Unrefined, *viz.*, Molasses and Jaggery or Gur and other Saccharine Produce	13,192	92,041	18,147	94,556
TIMBER	63,053	2,32,396	62,401	2,06,305
TOBACCO—				
Unmanufactured	6,227	56,976	6,745	59,554
ALL OTHER ARTICLES OF MERCHANDISE	34,448	3,57,606	34,111	3,29,734

NOTE.—The Traffic Manager's Report will give the causes of the principal differences in the receipts from the various commodities.

24. **Cotton**—*Raw.*—Increase tons 676 and Rs. 3,165.

25. **Dyes and Tans**—*Others.*—Decrease Tons 774 and Rs. 15,838.

26. **Grain and Pulse**—*Rice in the husk.*—Increase Tons 3,755 and Rs. 33,385. The whole of this increase is due to traffic received *via* Bangalore City.

27. **Grain and Pulse**—*Rice not in the husk.*—Decrease Tons 25,637 and Rs. 65,353. This decrease is about equally divided between local and foreign traffic. In local traffic it is observed that a large increase, amounting to Rs. 40,000, occurs in traffic from Rayapuram alone. This is almost balanced by a falling off in traffic from Katpadi, leaving the decrease to be explained in traffic principally from Arcot and Salem. The falling off in foreign is noticed in traffic handed to us at Arkonam, Katpadi and Guntakal, while our traffic to the G. I. P. *via* Raichur has also depreciated.

28. **Grain and Pulse**—*Jawar and Bajra.*—Decrease Tons 3,793 and Rs. 16,913.

29. **Grain and Pulse**—*Gram and Pulse.*—Decrease Tons 17,095 and Rs. 1,43,246. The local portion of this decrease is mainly due to traffic from Coimbatore-Tiruppur. Palghat and Erode also, however, shew a falling off in local forwarded consignments. A decrease of some Rs. 50,000 occurs in traffic from Madras Railway to the G. I. P. and beyond *viâ* Raichur, whereas a somewhat considerable increase is recorded in traffic in the reverse direction. In the month of June 1897 a considerable, apparently abnormal, traffic was forwarded from our stations to foreign lines *viâ* Bangalore City. The traffic received at Madras Railway Stations from *viâ* Guntakal shews a small decrease.

30. **Grain and Pulse**—*Others.*—Increase Tons 7,734 and Rs. 48,511. Local traffic here shews a decrease but in received traffic *viâ* Bangalore City a considerable increase of about Rs. 73,000 appears.

31. **Hides and Skins.**—*Skins of Sheep, &c., Dressed or Tanned.*—Decrease Tons 875 and Rs. 10,045. A large decrease is noticeable in bookings from Bangalore Cantonment.

32. **Hides and Skins**—*Skins of Sheep, &c., Raw.*—Decrease Tons 1,269 and Rs. 24,877. Nearly all of this falling off is in traffic received from G. I. P. and beyond *viâ* Raichur.

33. **Metals**—*Iron.*—Decrease Tons 3,917 and Rs. 14,170.

34. **Oils**—*Kerosine.*—Increase Tons 1,128 and Rs. 4,812. Through traffic here shews a decrease. The increase is in local consignments booked from Rayapuram and Calicut.

35. **Oil Seeds**—*Others.*—Increase Tons 4,380 and Rs. 38,576. Increases appear both in local and foreign traffic, the improvement in the latter being due to increased traffic received from foreign lines *viâ* Bangalore City.

36. **Provisions**—*Others.*—Increase Tons 4,809 and Rs. 45,157.

37. **Salt.**—Increase Tons 2,328 and Rs. 5,213.

38. **Spices**—*Chillies.*—Decrease Tons 131 and increase Rs. 7,898.

39. **Sugar**—*Unrefined, viz., Molasses and Jaggery or Gur and other Saccharine Produce.*—Increase Tons 4,955 and Rs. 2,515.

40. **Timber.**—Decrease Tons 652 and Rs. 26,091.

41. **Tobacco**—*Unmanufactured.*—Increase Tons 518 and Rs. 2,578.

42. **All other articles of Merchandise.**—Decrease Tons 337 and Rs. 27,872.

Working Expenses.

43. The working expenses compare as follows with those of June 1897 half-year :—

	First Half of 1897.		First Half of 1898.		Difference.	
	Amount.	Per cent. on Gross Earnings.	Amount.	Per cent. on Gross Earnings.	Amount.	Per cent.
	Rs.		Rs.		Rs.	
Maintenance	6,20,106	10·71	5,41,515	9·61	− 78,591	− 12·67
Locomotive	10,38,798	17·94	9,57,248	16·99	− 81,550	− 7·85
Carriage and Wagon ...	2,89,436	5·00	2,30,042	4·08	− 59,394	− 20·52
Traffic	4,04,684	6·99	4,19,982	7·45	+ 15,298	+ 3·78
General	2,84,635	4·92	2,86,478	5·08	+ 1,843	+ ·65
Steam-boat	...	...	...	...	...	...
Special and Miscellaneous ...	62,267	1·07	42,582	·76	− 19,685	− 31·61
Total ...	26,99,926	46·63	24,77,847	43·97	− 2,22,079	− 8·23

44. **Abstract A.**—A net decrease of Rs. 78,591 occurs under Maintenance charges.

45. Under "General Superintendence" there is a net decrease of Rs. 1,136, which represents the net result of changes affecting the pay and allowances of almost the whole staff charged to this head. There are increases due to Mr. West having acted as Agent and Manager and to Mr. Pawley's absence on furlough during the corresponding period of 1897, also to the recent appointment of new Engineers, Messrs. Stuart, Evans, Bridges and Bourne, and to general increases to subordinate superintendents. The principal decreases are due to the absence on furlough of Messrs. Stoney and Strange, to the transfer to the Calicut-Cannanore Extension of Mr. Strange (temporarily) and Mr. French, to Mr. Duncan's transfer to act as Telegraph Engineer, to the resignation of Messrs. Percy, Sandford and Gallagher and Sub-Assistant Engineer Mr. Dalgairns, and to a reduction in the amount of exchange compensation allowance owing to the more favourable rates ruling during the half-year under review.

46. "Maintenance and Renewal of Permanent Way."—There is a decrease of Rs. 18,495. The decrease in ordinary outlay on materials, after crediting the value of stores returned to stock, is Rs. 26,833, there being increases under "Wages" of Rs. 5,633 and for covering sand ballast with stones of Rs. 2,705.

47. "Repairs of Bridges, &c."—Decrease Rs. 7,368.

48. "Repairs of Stations and Buildings."—Decrease Rs. 24,030.

49. "New Minor Works."—Increase Rs. 1,760.

50. "Unclassified Expenditure."—Decrease Rs. 32,446, of which Rs. 25,935 is in loss by exchange due to a smaller consumption of English stores and to the more favourable rate of exchange. A credit of Rs. 5,952 also appears under this head for sums previously charged on account of Arcot-Ranipet Survey which have now been transferred to the construction account of that branch line.

51. There is a credit to Abstract A of Rs. 10,203 for working the Kolar Gold Fields Railway.

52. The number of miles of rails removed during the half-year was 37·9848 against 56·4340 in the first half of 1897.

53. The cost of maintaining a mile of single track including sidings was Rs. 532·62 against Rs. 610·94. The figures in this and preceding paragraphs include the mileage maintained for the Kolar Gold Fields Railway.

54. Famine batta to employés was discontinued from 1st February 1898. The expenditure for the month of January under this head was Rs. 1,088, of which Rs. 24 was charged to Capital and Rs. 1,064 to Revenue.

55. **Abstract B.**—*Locomotive Expenses.*—A decrease of Rs. 81,550.

56. Under "General Superintendence" of Abstracts B and C there is an increase of Rs. 6,792 chiefly under subordinate superintendents and office expenses. A gratuity on retirement of Rs. 3,150 was paid to Mr. W. Barefoot; Erectingshop Foreman Mr. Ward drew sick pay in June 1897 half-year and full pay in the period under review, Mr. Bamford, who had been acting as General Storekeeper, resumed duty as Chief Draughtsman, and Assistant Draughtsman, Mr. W. Ward, was paid exchange compensation allowance including arrears from June 1895.

57. "Running Expenses."—Increase Rs. 133.

58. "Fuel."—Increase Rs. 2,727 probably due to increased engine-mileage which was 15,624 more than in June 1897 half-year.

59. "Oil, Tallow and other Stores."—An increase of Rs. 4,278 due to extra mileage and enhanced cost of oil.

60. "Maintenance and Renewal of Locomotive Engines."—There is a decrease of Rs. 63,942, of which Rs. 51,373 represents the value of two new engines charged for in June 1897 half-year. The decrease in ordinary maintenance charges, after allowing credit for value of stores returned to stock, is Rs. 23,800, evidently owing to economical working on the part of the Locomotive Department.

61. "Maintenance and Renewal of Machinery, &c."—A net increase of Rs. 1,622. The increase under wages and materials is Rs. 3,141, which is reduced by an increase of Rs. 1,295 in the credit for stores returned to stock.

62. "Unclassified Expenditure."—Decrease Rs. 33,088. There is a decrease of Rs. 36,230 in loss by exchange caused by a reduction in the consumption of English stores, &c., and to a more favourable rate of exchange. There is an increase of Rs. 3,143 in the charges for carriage of Revenue stores.

63. There are credits of Rs. 18,042 to Abstract B for working the Kolar Gold Fields Railway and of Rs. 4,459 for working the Madras-Ennur Line.

64. The expenditure on famine batta amounted to Rs. 138.

65. The cost of the department per train-mile was Annas 12·08 against Annas 13·14 and per engine-mile Annas 10·10 against Annas 11·08 in the first half of 1897.

66. **Abstract C.**—*Carriage and Wagon Expenses.*—A decrease of Rs. 59,394.

67. "Repairs and Renewals of Vehicles."—Decrease Rs. 58,166, doubtless due to the same causes as the saving in maintenance of locomotive engines.

68. There is an increase of Rs. 4,716 in the charge for cleaning and oiling vehicles due to increased mileage and to higher cost of oil.

69. "Unclassified Expenditure."—Decrease Rs. 9,749, of which Rs. 9,582 is in loss by exchange.

70. There are credits to this abstract of Rs. 4,334 for working the Kolar Gold Fields Railway and of Rs. 1,071 for working the Madras-Ennur Line.

71. The expenditure on famine batta amounted to Rs. 10.

72. The carriage and wagon expenses per train-mile were Annas 2·90 against Annas 3·66 and per 1,000 vehicle-miles run by home vehicles Rs. 8·48 against Rs. 10·14 in the corresponding half of 1897.

73. **Abstract D.**—*Traffic Expenses.*—A net increase of Rs. 15,298.

74. "Salaries, Wages, &c.," show a net increase of Rs. 11,997, of which Rs. 484 are the result of the Traffic Manager's return from furlough, Mr. Byron's retirement from the service on 31st December 1897, and Mr. Giles' appointment to fill the vacancy. There are increases of Rs. 1,157 for Station Staff and of Rs. 9,148 for Train Staff, the latter being due to mileage allowances paid to Guards.

75. "Fuel, Lighting, &c."—An increase of Rs. 2,575 appears.

76. "Printing, Stationery and Tickets."—Increase Rs. 2,637.

77. "Unclassified Expenditure."—Decrease Rs. 1,500, of which Rs. 1,233 is in loss by exchange.

78. There are credits to this abstract of Rs. 7,914 for working the Kolar Gold Fields Railway and of Rs. 1,956 for working the Madras-Ennur Line.

79. The expenditure on famine batta amounted to Rs. 349.

80. The charges for station staff, the tonnage of goods lifted and the ton mileage of goods carried compare as follows :—

—	First half of 1897.	First half of 1898.	Difference.	
	Tons.	Tons.	Tons.	Per cent.
Tonnage of goods	626,298	585,104	– 41,194	– 6·58
	Ton-miles.	Ton-miles.	Ton-miles.	
Ton-mileage of goods	79,049,199	75,816,632	– 3,232,567	– 4·09
	Rs.	Rs.	Rs.	
Station Staff	1,95,672	1,96,829	+ 1,157	+ ·59
Train Staff	52,945	62,094	+ 9,149	+ 17·28

81. The total cost of the department averaged Annas 5·30 against Annas 5·12 per train-mile in the first half of 1897.

82. **Abstract E.**—"General Charges" show a net increase of Rs. 1,843.

83. There is an increase of Rs. 3,926 in Home expenditure.

84. "Salaries of Indian Management" show a decrease of Rs. 924. The decrease in the Agent's Office is Rs. 4,811, chiefly due to the Agent and Manager's return from furlough and consequent saving to that office of the pay of Mr. West who acted during Mr. Moss' absence. An increase of Rs. 2,991 in the Audit Department is principally due to increases of pay to subordinate staff which had been working considerably under sanction. In the Medical Department an increase of Rs. 1,393 is due to increase of salary to Doctor Currie and a gratuity to the widow of Apothecary J. D. Jones.

85. The expenditure under "Electric Telegraph" is Rs. 2,047 more.

86. "Unclassified Expenditure."—There is a decrease of Rs. 4,432, of which Rs. 2,298 is in loss by exchange.

87. There are credits to this abstract of Rs. 5,511 for working the Kolar Gold Fields Railway and of Rs. 1,362 for working the Madras-Ennur Line.

88. The expenditure on famine batta was Rs. 3 for the Medical, Rs. 13 for the Police, and Rs. 11 for the Telegraph Departments.

89. **Abstract G.**—"Special and Miscellaneous Expenditure" shows a decrease of Rs. 19,685.

90. "Law Charges" show a decrease of Rs. 1,272 owing to the Solicitors' bills for two half-years having been included in June 1897 half-year.

91. "Compensation."—Increase Rs. 1,078.

92. "Rates and Taxes."—Increase Rs. 1,866.

93. "Miscellaneous."—Decrease Rs. 20,630, of which Rs. 6,668 is in loss by exchange and Rs. 13,482 in commission and stamp duty on debentures.

94. There are credits to this abstract of Rs. 811, from the Kolar Gold Fields Railway and of Rs. 200 from the Madras-Ennur Line.

95. The expenditure on famine batta drawn through the conservancy pay sheets was Rs. 13.

96. *Kolar Gold Fields Railway.*—A sum of Rs. 46,815, being the cost of working this line for the half-year to 30th June 1898 (exclusive of Rs. 5,302 for hire of rolling stock), has been recovered and distributed over the several abstracts of the Madras Railway Revenue Accounts as shown against each.

97. *Madras-Ennur Section of the Bezwada-Madras Railway.*—A sum of Rs. 11,911, being the cost of working this line for the first half of 1898 (exclusive of Rs. 1,310 for hire of rolling stock), has been recovered. Of this sum Rs. 2,862 represents the actual cost of engineering maintenance and the balance has been distributed over the other abstracts of expenditure in the Madras Railway Revenue Accounts as credits.

98. Statement of train-mileage No. XIV. As compared with the first half of 1897, there was an increase in the train-mileage of 2,771, or about ·21 per cent., the miscellaneous engine-mileage was 19·57 per cent. of train-mileage against 18·62 per cent. in the corresponding half of the previous year.

SUPPLEMENTARY.

99. The total Capital expenditure of the half-year has been as follows :—

Madras Railway Line open for Traffic—

	Rs.	A.	P.
Cash	89,758	8	9
Stores	1,14,031	5	6
Rs.	2,03,789	14	3

Arcot-Ranipet Branch (Construction)—

	Rs.	A.	P.
Cash	23,418	11	7
Stores...	29,520	6	1
Rs.	52,939	1	8

Calicut-Cannanore Extension—

	Rs.	A.	P.
Cash	33,094	5	6
Stores	2,589	7	2
Rs.	35,683	12	8

100. The following particulars show in detail the capital outlay of the half-year on the open line :—

ALTERATIONS AND ADDITIONS TO STATIONS AND STATION YARDS.

	Rs.	A.	P.	Rs.	A.	P.
	41,441	3	2			
Bangalore City	15,022	11	2			
Perambur	4,704	15	2			
Arkonam	4,678	2	7			
Rayapuram	4,433	14	1			
Kalamalla	4,397	13	9			
Mangalam	4,397	3	9			
Central Station	4,257	7	3			
Kallayi	3,985	3	4			
Gooty	3,708	9	2			
Whitefield	3,652	13	4			
Jalarpet	2,999	0	8			
Podanur	2,958	11	1			
Yerraguddipadu	2,580	13	3			
Kamalapuram	2,577	12	4			
Washermanpet	2,526	0	9			
Mangapatnam	1,623	9	8			
Bowringpet	1,305	1	8			
Bisanattam	1,148	9	3			
Mettupalaiyam	1,106	15	10			
Kristnarajapuram	4,222	2	9			
Other Stations				1,17,728	14	0

				Rs.	A.	P.
			Brought over...	1,17,728	14	0
Strengthening bridge at $\frac{107}{10\text{-}11}$ mile				5,839	0	1
Diversion of Koduru River				5,558	10	4
Foot overbridge at Elephant Gate Level-crossing				5,201	13	2
Alteration of Home signals				2,261	8	5
Converting 30' arch into a girder opening at $\frac{168}{10}$ mile, B. B. Line				2,175	13	3
Filling up side ditches at $\frac{3}{13\text{-}20}$ mile, S. W. Line				1,137	8	0
Strengthening bridge at $\frac{308}{17}$ mile, N. B. Line				1,709	1	2
Do. $\frac{313}{12}$ mile „				1,262	2	8
Other bridges &c.				3,547	7	0
Plant—						
Locomotive Shop Plant		Rs.	2,146 15 8			
Stations and Office Furniture		„	10,415 15 5			
				12,562	15	1
Working Stock—						
Fitting engines tenders and carriages with vacuum brake				33,776	3	4
1 bogie corridor composite carriage				5,291	8	11
2 new locomotive engines for working the Ennur Branch				3,244	12	5
2 composite bogie day 17 third class carriages 2 do. do. with brakes 2 ordinary brake vans				2,068	3	8
46 third-class carriages				417	15	7
5 bogie third class carriages				6	5	2
			Rupees ...	2,03,789	14	3

101. The following is a summary of the operations on the Store Accounts during the half-year :—

				Rs.	A.	P.
Store balances at 31st December 1897				24,01,914	3	8
Add Receipts—						
From England		Rs.	5,76,968 10 1			
„ Local purchases...		„	9,49,140 11 11			
				15,26,109	6	0
				39,28,023	9	8
Deduct Issues—						
Capital Account		Rs.	1,11,031 5 6			
Do. (Arcot-Ranipet Branch)		„	29,520 6 1			
Do. (Calicut-Cannanore Extension)		„	2,589 7 2			
Revenue Stores		„	8,89,232 9 8			
By Sales		„	1,41,553 2 8			
				11,76,926	15	1
Stores balances at 30th June 1898			Rs. ...	27,51,096	10	7

102. The following particulars show the balances of the several Store Accounts at 30th June 1898, as compared with 31st December 1897 :—

	31st December 1897.	30th June 1898.
General Store Account	...Rs. 2,46,598	Rs. 3,58,868
Locomotive Store and Workshop Account	... „ 13,19,772	„ 12,82,348
Engineering do. do.	... „ 6,43,749	„ 7,89,062
All others, including stores in transitu	... „ 1,91,795	„ 3,20,818
Total...	Rs. 24,01,914	Rs. 27,51,096

103. The figures show an increase under all heads except Locomotive.

104. The increase in the balance of Engineering Stores is due to the receipt of new Permanent-Way materials taken into account in June 1898 and that of General Stores partly to stores received for Locomotive Department which had not been charged to that Department at 30th June 1898. The balance of Stores in transitu includes Permanent-Way materials to the value of Rs. 1,77,800.

105. The total of Rs. 27,51,096 includes Rs. 2,66,630 for returned stores, of which Rs. 10,921 belongs to Locomotive Department, Rs. 5,445 to the Telegraph, and the balance, Rs. 2,50,264, to the Engineers.

REVENUE.

106. The percentage of expenditure to gross earnings for the past three half-years has been as under—

June 1897	... 46·63 per cent.
December 1897	... 48·68 „
June 1898	... 43·97 „

107. The net revenue amounts to Rs. 31,56,889 as compared with Rs. 30,89,636 in the corresponding half of 1897. It gives at 1*s.* 10*d.* per rupee, £289,381-9-10, equal to £2-11-10 per cent. for the half-year on the Capital bearing interest at the 30th June 1898, *viz.*, £11,155,630.

108. The net earnings after providing for interest on over-drafts and additional contribution to Provident Institution exceed the guaranteed interest by Rs. ~~2,37,798~~. 237,918

109. From statement No. XVI of the printed accounts it will be seen that the divisible surplus amounts to Rs. ~~2,30,079-13-11~~, 268,184.4.6 of which the Company's share is Rs. ~~1,15,039-15-0~~, 109,092.2.3 equal at current rate of exchange to an additional return of more than one-eighth per cent. per annum on the subscribed capital.

109 (*a*). There is also a sum of Rs. 890-3-11 in the Bank of Madras General Account, being a portion paid by Government and accepted on account by the Company of our share, *viz.*, Rs. 3,615-14-8, of the surplus profits of December 1897 half-year.

The difference has been withheld by Government to cover interest on Calicut-Cannanore Debentures, but this procedure the Company declare is contrary to the intention of the letter of agreement for constructing and working that line, and as the Board decline to agree to it, the amount (less income-tax), *viz.*, Rs. 2,631-8-1, is therefore still due to us by Government.

110. The following results of our traffic operations in the way of dividend are continued from the last report :—

Period.			Miles open.	Capital raised at 31st December.	Sterling equivalent of net revenue @ 1s. 10d. per rupee.			Average per cent. per annum for periods of five years, &c.		
				£	£	s.	d.	£	s.	d.
Average for 5 years,	1871—75	...	845	10,280,682	235,549	1	0	2	6	0
Do.	1876—80	...	858	10,526,673	224,439	17	6	2	2	9
Do.	1881—85	...	860	10,638,258	245,448	10	6	2	6	1
Do.	1886—90	...	842	10,697,630	327,998	6	9	3	1	3
Do.	1891—95	...	840	11,017,630	448,194	19	8	4	1	4
Do.	1896	...	840	11,057,630	493,651	12	6	4	9	3
The year	1897	...	840	11,155,630	550,200	10	6	4	18	8
Do.			840	11,155,630	* 289,381	10	6	5	3	9
First half of	1898	...								

* Must be doubled to give percentage per annum.

111. The Revenue Accounts for the half-year now under review exhibit the most satisfactory results yet attained on the Madras Railway.

112. Notwithstanding the fact that the gross earnings were more than a lakh-and-a-half below those of the first half of 1897, the great spending Departments (Engineers and Locomotive and Carriage) worked so economically that they show savings over the corresponding half of 1897 of more than two lakhs and nineteen thousand rupees, or just upon 3 per cent. of gross earnings.

113. Net earnings consequently show surplus profits of Rs. ~~2,80,080~~, 218184 divisible between the Company and Government.

114. The percentage of working expenses to gross earnings is only 43·97, the lowest on record: the nearest approach to this was in June 1893 half-year when the expenditure was reduced by abnormal credits, but even then the percentage was more than 2¼ per cent. higher than in the last half-year.

115. The above results show very clearly how economy in working can more than compensate for reduced traffic earnings, and they promise well for the future of the line.

116. With reference to para. 106 of my Report for December 1897 half-year, the withdrawals in England and in India have again exceeded the Company's available funds, and a charge for interest on over-drawn capital, amounting to Rs. 393-2-11, therefore appears in statement No. XVII of the printed accounts.

117. The amount charged to Revenue for "loss by exchange" on the cost of Revenue stores and Home expenditure was Rs. 83,120, being Rs. 81,947 less than in the corresponding period of 1897, the rate of exchange being 15·855*d.* per rupee, which is ·949*d.* above the rate for June 1897 half-year.

118. The following particulars are taken from the accounts of the Kolar Gold Fields Railway:—

Receipts—

From Coaching traffic	Rs.	28,106 10 9	
„ Goods do	„	77,584 3 11	
„ Electric Telegraph	„	104 2 0	
„ Sundries	„	242 0 10	
Total...	Rs.	1,06,037 1 6	

Expenses—

Madras Railway for cost of working ...	Rs.	46,815 6 0	
Do do for use of rolling stock.	„	5,301 13 8	
		52,117 3 8	
Net Revenue...	Rs.	53,919 13 10	

equal to a return of 13·32 per cent. per annum on the Capital outlay, including suspense, of the Mysore Durbar, which is stated at Rs. 8,09,538.

119. The following particulars are taken from the accounts of the Madras-Ennur section of the Bezwada-Madras Railway:—

Receipts—

From Coaching traffic	Rs.	20,952 10 3	
„ Goods do	„	5,172 13 1	
„ Electric Telegraph	„	11 5 0	
„ Sundries	„	70 11 1	
Total...	Rs.	26,207 7 5	

Expenses—

Actual cost of Engineering Maintenance ...	Rs.	2,861 11 9	
Madras Railway percentage proportion for other expenses	„	9,049 6 11	
Hire of rolling stock	„	1,310 6 0	
		13,221 8 8	
Net Revenue...	Rs.	12,985 14 9	

This is equal to a return at the rate of 4·33 per cent. per annum on the capital outlay (exclusive of charge for capitalization of Land Revenue) Rs. 5,99,150.

120. The actual working cost, exclusive of Engineering maintenance, of the combined undertakings, the Madras, Kolar Gold Fields and Madras-Ennur Lines, works out to Rs. 1-8-6 per train-mile, while the sum of Rs. 9,049-6-11 recovered by the Company from the Madras-Ennur Line represents only Rs. 0-10-7 per train-mile on the 13,644 train-miles run for that Branch.

Earnings.

121. **Abstract H.**—*Coaching Traffic*—Form No. X of the accounts presents the following results when compared with the corresponding half-year:—

Abstract H, June 1897	Rs.	22,89,694 10 1	
Do. „ 1898	„	22,46,066 4 11	
Decrease ...	Rs.	43,628 5 2	

122. The details of the above results are given in the following table:—

TRAFFIC.	Half-year ending June 1897.			Half-year ending June 1898.			Increase.			Decrease.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Ordinary Passengers, 1st Class.	1,01,255	13	0	97,591	9	6	...	...	...	3,664	3	6
Periodical ...	1,869	9	8	849	0	0	...	...	...	1,020	9	8
2nd Class ...	1,03,789	6	7	1,03,638	5	6	...	...	...	151	1	1
Periodical ...	2,898	7	1	4,439	12	10	1,541	5	9	...	...	...
3rd Class ...	17,15,802	10	10	16,26,088	1	8	...	...	...	89,714	9	2
Periodical ...	2,719	0	5	6,527	12	3	3,808	11	10	...	...	...
Troops and Police, 1st Class...	5,145	14	0	6,448	5	0	1,302	7	0	...	...	...
2nd Class...	16,728	0	9	30,741	15	9	14,013	15	0	...	...	...
3rd Class...	36,742	12	5	47,574	11	0	10,831	14	7	...	...	...
Passengers' Luggage ...	73,353	14	11	70,428	1	9	...	...	...	2,925	13	2
Carriages ...	9,991	1	8	10,903	6	0	912	4	4	...	...	...
Horses ...	31,114	9	5	27,582	8	5	...	...	...	3,532	1	0
Dogs ...	2,871	14	8	3,073	10	10	201	12	2	...	...	...
Parcels ...	1,43,104	14	6	1,56,591	0	1	13,486	1	7	...	...	...
Do. for Revenue ...	3,009	1	7	2,992	6	4	...	...	...	16	11	3
Special Trains ...	569	0	0	...	...	...	...	...	...	569	0	0
Miscellaneous ...	564	3	1	1,002	2	0	437	14	11	...	...	...
Haulage and hire of Post Office Vans ...	24,438	6	2	24,433	11	1	...	...	...	4	11	1
MILITARY.												
Military Baggage ...	9,800	9	9	19,870	5	11	10,069	12	2			
Carriages ...	...	...	...	82	2	0	82	2	0			
Horses ...	3,881	10	0	5,111	10	5	1,230	0	5			
Dogs, &c. ...	43	9	7	95	10	7	52	1	0			
	22,89,694	10	1	22,46,066	4	11	57,970	6	9	1,01,598	11	11
									Deduct Increase ...	57,970	6	9
									Net Decrease ...	43,628	5	2

123. The ordinary coaching traffic, ascertained by eliminating all troops and police and military items of traffic is continued from the last report—

		Rs.	A.	P.
December	1880	11,47,898	1	5
June	1881	12,54,404	1	5
December	1881	12,18,181	7	10
June	1882	12,78,447	11	0
December	1882	13,02,002	4	1
June	1883	12,97,015	15	6
December	1883	12,73,014	2	7
June	1884	14,10,745	4	7
December	1884	13,85,847	11	7
June	1885	14,63,321	5	7
December	1885	15,29,401	15	10
June	1886	15,02,885	3	6
December	1886	15,49,747	3	4
June	1887	15,84,759	3	3
December	1887	15,31,357	3	9
June	1888	16,61,024	2	10
December	1888	17,13,097	12	10
June	1889	17,81,789	6	8
December	1889	17,75,541	7	2
June	1890	17,64,039	8	10
December	1890	18,19,560	1	1
June	1891	17,68,118	0	7
December	1891	16,52,970	14	10
June	1892	17,24,126	14	10
December	1892	18 03,769	5	4
June	1893	19,49,056	4	11
December	1893	18,72,896	13	4
June	1894	19,27,016	3	8
December	1894	20,47,177	7	9
June	1895	23,03,421	12	8
December	1895	22,46,345	3	11
June	1896	22,79,220	11	1
December	1896	21,63,575	1	6
June	1897	22,17,352	1	7
December	1897	21,40,958	13	5
June	1898	21,36,141	8	3

124. Statement showing 3rd and 4th Class Receipts minus Troops and Police from 1873 to June 1898.

PERIOD.		3rd-Class Single Journey, Excess, Return Journey and Season Tickets.			4th or Cooly Class.			Total 3rd and 4th Classes.		
		Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Half-year ending	June 1873	8,54,760	15	9	93,640	13	0	9,48,401	12	9
,,	December 1873	8,41,653	1	4	1,08,073	9	0	9,49,726	10	4
,,	June 1874	7,89,366	1	11	1,13,226	15	0	9,02,593	0	11
,,	December 1874	8,31,655	4	7	1,18,789	11	0	9,50,444	15	7
,,	June 1875	7,32,250	15	8	1,68,858	13	0	9,01,109	12	8
,,	December 1875	6,72,465	4	6	1,73,676	13	0	8,46,142	1	6
,,	June 1876	7,16,531	11	6	2,03,373	9	0	9,19,905	4	6
,,	December 1876	7,41,657	1	7	2,19,170	13	0	9,60,827	14	7
,,	June 1877	6,38,448	12	8	2,42,352	2	6	8,80,800	15	2
,,	December 1877	8,79,633	13	10	1,20,088	11	0	9,99,722	8	10
,,	June 1878	9,01,376	1	3	67,642	11	0	9,69,018	12	3
,,	December 1878	8,04,743	8	3	1,14,829	12	0	9,19,573	4	3
,,	June 1879	6,35,114	10	2	2,65,729	13	0	9,00,844	7	2
,,	December 1879	9,29,071	10	9	...	...	...	9,29,071	10	9
,,	June 1880	9,04,920	9	10	...	...	...	9,04,920	9	10
,,	December 1880	8,96,463	1	1	...	...	...	8,96,463	1	1
,,	June 1881	9,52,306	12	1	...	...	...	9,52,306	12	1
,,	December 1881	9,43,731	12	9	...	...	...	9,43,731	12	9
,,	June 1882	9,72,568	4	7	...	...	...	9,72,568	4	7
,,	December 1882	10,05,113	6	2	...	..	...	10,05,113	6	2
,,	June 1883	10,10,789	4	7	...	...	...	10,10,789	4	7
,,	December 1883	9,61,665	0	1	...	...	...	9,61,665	0	1
,,	June 1884	10,58,699	12	8	...	...	...	10,58,699	12	8
,,	December 1884	10,47,457	10	4	...	...	...	10,47,457	10	4
,,	June 1885	10,95,135	7	6	...	...	...	10,95,135	7	6
,,	December 1885	11,65,264	9	5	...	...	...	11,65,264	9	5
,,	June 1886	11,59,988	9	10	...	...	...	11,59,988	9	10
,,	December 1886	11,84,455	6	3	...	...	...	11,84,455	6	3
,,	June 1887	12,20,247	9	0	...	...	...	12,20,247	9	0
,,	December 1887	11,61,859	8	10	...	...	...	11,61,859	8	10
,,	June 1888	12,48,832	15	11	...	...	...	12,48,832	15	11
,,	December 1888	13,34,289	7	9	...	...	...	13,34,289	7	9

PERIOD.		3rd-Class Single Journey, Excess, Return Journey, and Season Tickets.			4th or Cooly Class.			Total 3rd and 4th Classes.		
		Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Half-year ending	June 1889	13,57,252	6	7	...	...	...	13,57,252	6	7
,,	December 1889	13,92,223	13	3	...	...	...	13,92.223	13	3
,,	June 1890	13,69,221	5	1	...	...	...	13,69.221	5	1
,,	December 1890	14,48,927	4	1	...	...	...	14,48,927	4	1
,,	June 1891	14,00,154	9	11	...	...	...	14,00,154	9	11
,,	December 1891	12,73,641	14	9	...	...	...	12,73,641	14	9
,,	June 1892	13,53,452	15	6	...	...	...	13,53.452	15	6
,,	December 1892	14 11,625	15	5	...	...	...	14,11,625	15	5
,,	June 1893	15,37,298	5	4	...	...	...	15,37,298	5	4
,,	December 1893	14,57,772	11	4	...	...	...	14,57,772	11	4
,,	June 1894	15,09,595	15	2	...	...	..	15,09,595	15	2
,,	December 1894	15,78,599	10	11	...	..	..	15,78,599	10	11
,,	June 1895	18,29.510	14	1	...	...	...	18,29,510	14	1
,,	December 1895	17,36,777	1	3	...	...	...	17,36,777	1	3
,,	June 1896	17,86,841	4	8	...	...	...	17,86,841	4	8
,,	December 1896	16,99,951	5	3	...	...	...	16.99,951	5	3
,,	June 1897	17,18,521	11	3	...	...	...	17,18,521	11	3
,,	December 1897	16,63,221	10	4	...	...	...	16,63,221	10	4
,,	June 1898	16 32,615	13	11	...	...	...	16,32.615	13	11

125. The number, mileage and earnings of 3rd-Class Ordinary traffic, leaving out Troops and Police, are as follows:—

PERIOD.		Number.	Mileage.	Earnings.		
				Rs.	A.	P.
Half-year ending	December 1879	1,774,690	76,638,889½	(a) 9,29,071	10	9
,,	June 1880	1,964,346	79,706,402	(b) 9,04,920	9	4
,,	December 1880	1,943,145	86,424,275	8,96,463	1	1
,,	June 1881	2,111,075	91,844,076	9.52,306	12	1
,,	December 1881	2,087,218½	90,818,781	9,43,731	12	9
,,	June 1882	2,189,409	93,761,162	9,72,568	4	7
,,	December 1882	2,046,457	96,895,425	10,05.113	6	2
,,	June 1883	2,195,218½	97,623,795	10,10,789	4	7
,,	December 1883	2,150,308	97,581,832	(c) 9,61,665	0	1
,,	June 1884	2,593,543	108,370,675	10,58,699	12	8
,,	December 1884	2,488,817	108,124,439	10,47,457	10	4
,,	June 1885	2,639,473½	112,860,077	10,95,135	7	6
,,	December 1885	2,798,556	121,224,909	11,65,264	9	5
,,	June 1886	2,928,490	120,522,393	11,59,988	9	10
,,	December 1886	3,288,543½	135,980,143	(d) 11,84,455	6	3
,,	June 1887	3,543,684½	140,170,209	12,20.247	9	0
,,	December 1887	3,372,135½	133,848,628	11,61,859	8	10
,,	June 1888	3,724,290	142,695,239	(e) 12,48,832	15	11
,,	December 1888	3,951,553½	151,690,598	13,34.289	7	9
,,	June 1889	4,198,943	155,414,335	13,57,252	6	7
,,	December 1889	4,218,179	159,361,635	13,92,223	13	3
,,	June 1890	4,184,208	156,902,111	(f) 13,69,221	5	1
,,	December 1890	4,133,756½	162,833,527	(g) 14,48,927	4	1
,,	June 1891	4,206,099½	156,004,790	14,00,154	9	11
,,	December 1891	3,919,473	148,726,896	(h) 12,73,641	14	9
,,	June 1892	4,259,953½	159,063,622	13,53,452	15	6
,,	December 1892	4,487,133	165,641,362	14,11,625	15	5
,,	June 1893	4,998,677	180,292,338	15,37,298	5	4
,,	December 1893	4,675,724	170,719,562	14,57,772	11	4
,,	June 1894	4,954,351	177,046,939	15,09,595	15	2
,,	December 1894	5,048,748	185,288,555	15,78,599	10	11
,,	June 1895	4,314,512	166,901,011	(i) 18,29,510	14	1
,,	December 1895	4,327,774	157,966,610	(k) 17,36,777	1	3
,,	June 1896	4,814,350½	162,524,803	17,86,841	4	8
,,	December 1896	4,727,778½	155,332,652	16,99,951	5	3
,,	June 1897	5,057,896½	157,058,852	17,18,521	11	3
,,	December 1897	4,821,593	152,579,394	16,63,221	10	4
,,	June 1898	4,600,357½	149,008,513	16,32,615	13	11

NOTE.—(a) Half-year ending 1879, 2 pies for Ordinary trains from 1st July, 1879 and 4 pies for Mail trains.
(b) Half-year ending June, 1880, 2 pies are charged for Ordinary trains and 4 pies for Mail trains for first four months, and 2 pies by all trains for the last 2 months, *viz.*, from 1st May, 1880.
(c) Fare and half for Return tickets from 1st October, 1883.
(d) One and half pies for single journey passengers for Ordinary trains and 2 pies for Mail trains, but to and from stations between Podanur and Mettupalaiyam and Podanur and Beypore, 1½ pies rate charged by Mail trains.
(e) Half-year ending June, 1888, on and after 5th March, 1888, 2 pies are charged for passengers booked to and from stations west of Podanur by Mail trains except that for stations on the Nilgiri and Palghat branches the fares by Mail trains are 1½ pies per mile.
(f) From 1st March, 1890, the fares by Mail trains throughout the line are 2 pies per mile.
(g) From 1st October, 1890, the fares by Mail trains throughout the line are 3 pies per mile.
(h) From 1st August, 1891, the fares by Mail trains are 2½ pies per mile except that for stations between Podanur and Calicut and Palghat branches the fares by Mail trains are 1½ pies per mile.
(i) From 1st January, 1895, the fares by Mail trains between Podanur and Olavakkot and between Tirur and Calicut are raised from 1½ to 2½ pies per mile and between Olavakkot and Tirur from 1½ to 2 pies per mile.
The fares by ordinary trains all over the line are increased from 1½ to 2 pies.
(k) From July, 1895, the above figures include periodical ticket traffic as number of trips, instead of number of tickets issued.

126. The receipts from Parcels traffic (Public) during the past ten years have been as follows :—

		Rs.	A.	P.
Half-year ending	June 1888	1,13,351	13	6
"	December 1888	1,22,872	15	2
"	June 1889	1,14,325	6	2
"	December 1889	1,22,051	4	4
"	June 1890	1,06,372	12	1
"	December 1890	1,23,187	6	8
"	June 1891	1,04,585	8	4
"	December 1891	1,18,642	12	8
"	June 1892	1,01,956	0	11
"	December 1892	1,34,095	5	1
"	June 1893	1,15,188	2	4
"	December 1893	1,49,422	7	5
"	June 1894	1,30,321	15	4
"	December 1894	1,67,055	9	8
"	June 1895	1,33,435	13	3
"	December 1895	1,47,925	7	4
"	June 1896	1,42,225	5	4
"	December 1896	1,44,519	8	3
"	June 1897	1,43,104	14	6
"	December 1897	1,69,622	9	9
"	June 1898	1,56,591	0	1

127. It will be seen from a comparison of the several heads of Abstract I, that the following have been the fluctuations which have led to the net decrease of Rs. 1,23,260-0-10 :—

TRAFFIC.	Half-year ending June 1897.			Half-year ending June 1898.			Increase.			Decrease.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
1. Merchandise, General ...	30,28,041	14	10	28,67,463	5	5	...	...	...	1,60,578	9	5
2. Military Stores ...	44,818	11	0	37,850	14	0	...	...	...	6,967	13	0
3. Railway Materials ...	3,895	12	2	3,903	6	10	7	10	8	...	...	...
4. Coal	2,39,050	0	4	2,86,113	8	2	47,063	7	10	...	...	...
5. Revenue Stores ...	49,541	4	8	50,284	6	6	743	1	10	...	...	...
6. Live Stock	12,077	5	0	8,511	8	6	...	...	...	3,565	12	6
7. Military Live Stock ...	8,435	15	6	8,618	3	0	182	3	6	...	...	...
8. Rents and Demurrage ...	6,177	5	5	6,189	12	7	12	7	2	...	...	...
9. Interest on Outstanding Bills	... 3,687	... 5	... 10	... 3,530	... 8	... 11	...	...	...	... 156	... 12	... 11
10. Miscellaneous												
TOTAL ...	33,95,725	10	9	32,72,465	9	11	48,008	15	0	1,71,268	15	10
Deduct Increase ...										48,008	15	0
Net Decrease ...										1,23,260	0	10

128. The following table prepared from the Analysis will show the progress of our business and the economy observed in conducting it :—

TRAFFIC.	Dec. 1888.	June 1889.	Dec. 1889.	June 1890.	Dec. 1890.	June 1891.	Dec. 1891.	June 1892.	Dec. 1892.	June 1893.	Dec. 1893.	June 1894.	Dec. 1894.	June 1895. *	Dec. 1895. *	June 1896. †	Dec. 1896. †	June 1897. †	Dec. 1897. †	June 1898. †
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Re.	Rs.	Rs.	Rs.
Total earnings per train-mile ...	3·552	3·778	3·908	3·977	3·757	3·802	3·612	3·811	3·828	4·064	3·888	4·031	4·171	4·53	4·31	4·98	4·34	4·57	4·30	4·44
" working expenses per train-mile ...	2·097	2·128	2·405	2·109	1·648	2·220	2·084	2·147	2·086	1·880	1·965	2·089	2·181	2·13	2·08	2·21	2·22	2·14	2·09	1·96
Total net earnings per train-mile...	1·455	1·650	1·503	1·868	1·509	1·582	1·518	1·664	1·742	2·184	1·923	1·942	1·930	2·40	2·23	2·17	2·12	2·43	2·21	2·48
COACHING TRAFFIC.																				
Average sum received for carrying a unit one mile.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.
First class ...	10·95	14·07	9·37	11·66	10·16	11·24	9·73	10·32	10·32	10·18	9·94	11·65	10·42	10·46	10·37	11·55	9·83	10·08	9·41	11·42
Second class ...	5·58	5·51	5·21	5·33	4·52	5·48	5·16	5·29	5·34	5·18	4·92	5·25	5·19	5·01	4·72	4·52	4·98	4·79	4·14	4·61
Lowest class ...	1·70	1·68	1·68	1·68	1·72	1·73	1·65	1·63	1·64	1·64	1·64	1·64	1·64	2·10	2·11	2·11	2·10	2·09	2·09	2·10
Average for all classes ...	1·87	1·87	1·81	1·84	1·86	1·90	1·90	1·81	1·78	1·79	1·79	1·80	1·78	2·26	2·30	2·27	2·26	2·27	2·24	2·23
Average cost of hauling a coaching unit one mile.																				
Per passenger unit ...	1·01	·99	1·07	·90	·91	1·09	1·09	1·03	1·04	·82	·90	·92	·89	·90	·96	·99	1·04	·95	·98	·90
Average profit per passenger ...	·36	·88	·74	·94	·95	·81	·81	·78	·74	·96	·89	·83	·89	1·36	1·34	1·28	1·22	1·32	1·26	1·38
Average sum received for other coaching traffic per ton per mile.	37·30	39·25	35·31	38·60	37·60	39·77	37·34	37·92	38·88	39·07	32·21	37·66	31·32	36·98	35·69	36·80	35·22	34·22	31·14	35·51
Average cost of hauling other coaching traffic per ton per mile.	13·46	14·06	14·39	12·17	11·81	14·00	12·52	13·29	11·81	11·16	9·31	11·96	9·12	11·11	9·92	11·52	10·67	9·91	8·40	8·99
Average profit per ton	23·84	25·19	20·92	26·43	25·79	25·77	24·82	24·63	25·07	27·91	22·90	25·70	22·20	25·87	25·77	25·28	24·55	24·31	22·74	26·52
GOODS TRAFFIC.																				
Average sum received for carrying a ton one mile ...	7·79	7·60	7·60	7·83	7·49	7·42	7·16	8·33	8·27	8·12	8·25	8·57	8·52	8·46	8·34	8·49	8·43	8·34	8·37	8·39
Average cost of hauling a goods unit, viz., one ton one mile ...	5·02	4·73	4·88	4·13	4·05	4·46	4·25	4·63	4·41	3·76	4·30	4·58	4·07	4·38	4·48	4·72	4·70	4·20	4·49	3·97
Average profit on working a goods unit (viz., one ton), one mile ...	2·77	3·17	2·72	3·70	3·44	2·96	2·91	3·70	3·86	4·36	3·45	3·99	3·85	4·08	3·86	3·77	3·73	4·14	3·88	4·42

* Including Kolar Gold Fields State Railway.
† " " and Madras-Ennur Railway.
" "

129. The following Classification of all Goods carried is designed to shew Country and Foreign Trade :—

Description.	Half-year ending June 1897.		Half-year ending June 1898.	
	Maunds.	Rupees.	Maunds.	Rupees.
Country Trade.				
Food Grains	3,501,527	7,33,060	2,549,354	5,93,103
Miscellaneous articles for Domestic consumption	2,098,511	6,29,675	2,462,295	7,41,646
Salt and Saltpetre	712,172	1,46,639	773,733	1,51,079
Materials used in Building, Construction and Manufacture	2,773,383	3,86,440	2,419,743	3,89,924
Cloths, Piece goods and Twist (Indian) ...	156,143	75,553	154,803	71,003
Sundries	1,087,101	4,15,093	1,066,776	3,83,333
Total ...	10,328,837	23,91,460	9,420,754	22,80,088
Foreign Trade.				
Exports or Colonial Produce...	1,457,833	5,78,271	1,531,210	5,29,521
Imports, Cloths, Piece goods and Twist (European)	88,134	51,259	93,368	54,723
European Stores for consumption in India ...	137,414	49,526	114,518	43,279
Coal and Coke for the public	1,589,764	2,23,659	1,927,428	2,68,515
Do. for the Company	403,233	15,391	227,088	17,599
Railway Materials, &c.	47,606	6,240	46,349	7,606
Total ...	3,713,984	9,24,346	3,939,961	9,15,243
Grand Total ...	14,042,821	33,15,806	13,360,715	31,95,331

130. The following statement is framed to give a comparison of the Internal Trade, (sub-divided into Food Grains and other Commodities) and the External or Foreign Trade (Exports or Imports) passing over the Railway for a series of years :—

Periods.	Country Trade.				Foreign Trade, Exports or Imports.		Railway Stores.		Total.	
	Food Grains.		Other Commodities.							
	Weight.	Amount.	Weight.	Amount.	Weight.	Amount.	Weight.	Amount.	Weight.	Amount.
	Maunds.	Rupees.	Maunds.	Rupees.	Maunds.	Rupees.	Maunds.	Rupees.	Maunds.	Rupees.
December 1876	6,418,865	15,09,576	8,276,612	17,24,504	1,961,615	10,20,858	31.521	4,791	16,718,613	42,59,729
Do. 1877	20,037,072	47,11,730	5,526,394	17,51,285	1,323,601	5,65,916	36,818	6,159	26,923,885	70,35,090
Do. 1878	6,068,324	12,59,187	6,897,239	15,83,706	1,508,633	6,72,187	38,055	4,646	14,512,251	35,19,726
Do. 1879	5,724,530	12,24,775	10,068,871	16,84,744	1,791,713	7.66,609	27,769	3,755	17,612,883	36,79,883
Do. 1880	3.553,664	6,58,852	11,107,066	17,94,168	1,876,213	7,99,668	51,461	8,685	16,588,404	32,61,373
Do. 1881	3,377,162	6,38,158	8,070,509	18,42,019	2,112,658	8,52,893	15 805	16,013	13,646,134	33,49,083
Do. 1882	3,380,180	6,44,323	7,131,950	20,54,220	2,676,042	10,35,624	2,723	528	13,190,895	37,34,695
Do. 1883	3,158,585	4,90,871	8,168,934	21,47,050	2,679,301	9,82,154	5,067	1,387	14.011,887	36,21,462
Do. 1884	4,757,712	7,03,707	8,628,133	22,07,239	3,044,239	9,05,763	2,242,349	20,133	18,672,433	38,36.842
Do. 1885	5,392,637	7,60,500	9,320,806	23,08,174	2,366,882	7,83 519	716,531	2,81,658	17,736,856	41,33,851
Do. 1886	4,919,219	7,42,809	9,505,486	22,55,441	3,070,405	10.77,417	612,079	2,16,169	18,107,189	42,91,836
Do. 1887	4,764,534	7,00,158	11,045,625	24,08,793	3,022,418	10,77,268	977,516	2,80,148	19,810,093	44,66,367
Do. 1888	5,397,284	8,55,062	11,414,388	25,09,664	2 796,380	10,41,747	556,794	82,813	20,164,846	44,89,286
Do. 1889	5,903,788	11,08,772	11,610,840	25,13,396	3,348,244	12,13,195	1,335,291	1,95,869	22,198,163	50,31 232
Do. 1890	6,233,007	10,96,066	12,956,764	25,85,619	3,532,286	12,80,920	859,999	1,97,166	23,582,056	51,59,771
Do. 1891	7,816,784	14,15,899	11,428,971	25,85,640	3,939,242	11,73,211	1,004,857	1,88,837	24,189,854	53,63,587
Do. 1892	6,250,715	13,20,407	11,291,235	27,89,039	4,706,829	13,65,830	1,406,171	59,357	23,654 950	55,34,633
Do. 1893	7,195.917	16,31,950	11,684,042	29,37,169	5,561,551	15,57,186	371.355	35,269	24,812,865	61,61,574
Do. 1894	5,070,000	11,65,590	11,926,771	30,26,752	6,090,168	16,35,151	817,187	30,858	23.904,126	58,58,351
Do. 1895	4,936,020	12,28,406	12,665,222	31,57,426	6,557,311	17,22.098	332,630	13,495	24,491,183	61,21,425
Do. 1896	4,964,813	11,10,352	12,594,690	30,31,028	6,925,138	17,56,169	431,206	36,824	24,915,847	59,34,373
Do. 1897	6,946,083	14.96,646	13,556,505	32,34,163	7,628,765	17,97,124	257,134	9,135	28,388,488	65,37,068
Half-year ending June 1898	2,549,354	5,93,103	6,871,400	16,86,985	3,893,612	9,07,637	46,349	7,606	13,360,715	31,95,331

The total in the foregoing for the past half-year, *viz.*, Rupees 31,95,331 is made up from items in Abstract I of the Revenue Account, thus :—

1. Merchandise ...	...	Rs. 28,67,463
2. Military Stores ...	...	,, 37,851
3. Railway Materials ...	...	,, 3,903
4. Coal for the Public, &c.	...	,, 2,86,114
		Rs. 31,95,331

131. The following are the chief Commodities interchanged with Foreign Railways working with the Madras Railway in the half-year under review, and the corresponding half-year in 1897 :—This statement shews an increase in weight of 28,134 tons and a decrease in amount of Rs. 6,507 during the past half-year.

DESCRIPTION OF COMMODITY.	To and from Foreign Railways.			
	Half-year ending June 1897.		Half-year ending June 1898.	
	Tons.	Rs.	Tons.	Rs.
I. Coal and Coke carried for the Public and Foreign Railways	53,348	2,07,115	64,634	2,49,511
II. Cotton, Raw	1,697	22,679	2,731	30,280
III. Cotton, Manufactured—				
1. Twist and Yarn, European ...	438	7,659	721	8,974
2. Do. Indian	1,088	11,767	976	8,198
3. Piece Goods, European	518	8,885	602	11,818
4. Do. Indian	1,726	22,023	1,902	23,454
IV. Drugs and Chemicals—				
1. Intoxicating, other than Opium ...	...	...	...	...
2. Non-intoxicating—				
(*a*). Cinchona bark	...	...	...	...
(*b*). Others	718	9,260	614	6,463
V. Dyes and Tans—				
1. Indigo	155	2,967	147	2,433
2. Myrabolams	234	1,636	284	1,774
3. Cutch	...	...	...	...
4. Turmeric	413	2,800	577	4,191
5. Aniline dyes	...	...	...	...
6. Others	5,558	65,634	4,986	50,385
VI. Grain and Pulse—				
1. Wheat	753	5,333	801	3,887
2. Rice in the husk	1,067	4,132	5,696	38,348
3. Rice not in the husk	8,374	54,391	4,998	25,404
4. Jawar and Bajra	10,152	58,684	8,226	48,706
5. Gram and Pulse	12,656	101,749	7,868	41,790
6. Others	9,143	70,396	21,799	1,46,205
VII. Hides and Skins—				
1. Hides of Cattle—				
(*a*). Dressed or tanned ...	65	802	46	921
(*b*). Raw	1,260	24,413	506	6,967
2. Skins of Sheep, &c.—				
(*a*). Dressed or tanned ...	1,323	25,031	1,234	24,229
(*b*). Raw	6,437	91,755	5,467	71,221
VIII. Horns	...	...	...	...
IX. Jute—				
1. Raw	...	...	...	...
2. Gunny Bags and Cloth	1,089	11,163	1,218	11,172
X. Lac—				
1. Stick	...	...	...	...
2. Shell	...	...	...	...
XI. Leather, Manufactured	59	1,001	32	853
XII. Liquors—				
1. Beer	966	15,978	542	8,141
2. Spirits	896	5,915	935	7,364
3. Wines	...	...	...	...
XIII. Metals—				
1. Copper, unwrought	...	...	...	...
2. Brass, unwrought	...	...	78	697
3. Copper, wrought	...	...	...	...
4. Brass, wrought	88	1,326	79	997
5. Iron	3,651	37,361	2,924	32,990
6. Others	105	1,364	97	923
XIV. Oils—				
1. Kerosine	1,183	24,105	1,513	20,921
2. Castor	1,164	2,764	878	1,819
3. Cocoanut	210	2,496	134	1,517
4. Others	848	5,738	399	2,771
Carried forward ...	127,682	9,08,922	143,644	8,95,324

DESCRIPTION OF COMMODITY.	To and from Foreign Railways.			
	Half-year ending June 1897.		Half-year ending June 1898.	
	Tons.	Rs.	Tons.	Rs.
Brought forward...	127,632	9,08,922	143,644	8,95,324
XV. Oil Seeds—				
1. Linseed	...	...	448	3,260
2. Rape and Mustard	...	...	...	...
3. Til or Jingili	2,244	18,156	4,714	31,363
4. Poppy	...	...	...	...
5. Earthnuts	662	1,485	2,024	3,858
6. Castor	881	4,175	3,208	18,264
7. Others	1,822	13,588	4,832	35,139
XVI. Opium	...	...	...	...
XVII. Paper and Paste Board	43	751	53	832
XVIII. Provisions—				
1. Ghee	332	4,769	403	4,882
2. Dried fruits and nuts	197	2,243	327	2,815
3. Others	10,281	78,625	11,330	89,694
XIX. Railway Plant and Rolling Stock *carried for the Public and Foreign Railways*—				
1. Loco. engines and tenders and parts thereof	...	...	...	...
2. Carriages and trucks and parts thereof	...	...	...	1,421
3. Materials—				
(*a*). Steel rails and fish plates...	293	1,074	90	748
(*b*). Sleepers and keys of steel and cast iron	...	...	...	...
(*c*). Other sorts	...	...	345	718
XX. Salt	3,146	10,992	2,103	8,837
XXI. Saltpetre, &c.—				
1. Saltpetre	...	...	...	...
2. Other saline substances ...	...	...	...	...
XXII. Silk, Raw—				
1. Foreign	...	...	...	...
2. Indian	34	721	28	572
XXIII. Silk, Piece Goods—				
1. Foreign	...	...	...	...
2. Indian	...	...	...	...
XXIV. Spices—				
1. Betel nuts	2,522	27,494	2,708	29,715
2. Pepper	400	4,598	326	3,508
3. Ginger	90	767	124	1,125
4. Chillies	2,668	19,733	1,858	15,865
5. Cardamoms	...	...	...	...
6. Others	687	6,326	486	4,192
XXV. Stone and Lime	7,245	15,838	4,218	11,399
XXVI. Sugar—				
1. Refined or crystallized including sugarcandy	1,755	12,878	1,153	8,298
2. Unrefined, *viz.*, mollasses and jaggery or gur and other saccharine produce	6,728	48,671	10,649	44,038
XXVII. Tea—				
1. Foreign	...	...	...	...
2. Indian	36	1,418	40	1,543
XXVIII. Timber	26,165	1,06,746	27,487	84,351
XXIX. Tobacco—				
1. Unmanufactured	1,694	14,266	1,456	10,833
2. Manufactured—				
(*a*). Cigars	383	4,955	364	4,511
(*b*). Other sorts	353	4,412	611	7,482
XXX. Wool, Raw	94	673	62	511
XXXI. Wool, Manufactured—				
1. Piece Goods, European ...	...	...	66	2,179
2. Piece Goods, Indian	166	2,432	320	4,333
3. Shawls	...	...	...	...
XXXII. All other Articles of Merchandise ...	11,433	1,68,206	12,693	1,46,797
Total ...	210,036	14,84,914	238,170	14,78,407

132. The interchange of Passenger Traffic with the Railways that are connected with the Madras Railway is given in the following table, and shews a decrease in number by 18,636½ and in amount of Rs. 3,334-9-9 as compared with the corresponding half-year :—

PASSENGERS' TRAFFIC.		To and from Foreign Railways.							
		Half-year ending June 1897.				Half-year ending June 1898.			
		No.	Amount.			No.	Amount.		
			Rs.	A.	P.		Rs.	A.	P.
Passengers	1st Class	3,797½	36,290	0	3	3,888½	34,521	5	6
	2nd Class	8,248½	36,244	9	4	8,346	36,757	4	0
	3rd Class	398,524	3,54,739	4	9	375,116	3,26,021	6	9
Soldiers	1st Class	404	3,627	13	0	564½	4,801	7	0
	2nd Class	2,945½	9,344	5	0	6,284½	22,021	12	0
	3rd Class	18,780½	27,613	10	4	20,954	37,605	10	8
Return Fares	1st Class	68	932	12	0	182	3,314	0	0
	2nd Class	203	1,243	11	0	235	1,247	10	0
	3rd Class	5,538	359	6	10	4,302	359	1	8
Excess	1st Class	...	954	11	6	...	1,252	14	0
	2nd Class	...	171	12	0	...	231	4	9
	3rd Class	...	280	13	3	...	334	7	2
	Total ...	438,509	4,71,802	13	3	419,872½	4,68,468	3	6

Expenditure.

133. The notes against each head of Expenditure in the following table shew, generally, in a comparative form, the work done in each department for each half-year :—

Departments.	Half-year ending June 1897.					Half-year ending June 1898.				
	Work of Departments.	Cost.			Per cent.	Work of Departments.	Cost.			Per cent.
	Ms. chs. ft.	Rs.	A.	P.		Ms. chs. ft.	Rs.	A.	P.	
Abstract A. Maintenance of Way, Works and Stations ...	1,047 34 33½	6,39,620	8	10	10·80	1,046 45 61½	5,54,579	9	4	9·62
Abstract B. Locomotive Expenses ...	Gross mileage of engines, 1,535,936. Number of engines under repair at any one time, 31.	10,63,500	8	5	17·95	Gross mileage of engines, 1,551,560 Number of engines under repair at any one time, 33.	9,79,749	10	3	16·99
Abstract C. Carriage and Wagon Expenses.	Number of vehicles under repair at any one time, 217. Number constructed and renewed, 89.	2,96,356	13	0	5·00	Number of vehicles under repair at any one time, 205. Number constructed and renewed, 72.	2,35,447	8	2	4·08
Abstract D. Traffic Expenses ...	Profitable train mileage, 1,294,803. Number of stations, 160.	4,14,026	10	1	6·99	Profitable train mileage, 1,297,574 Number of stations, 163.	4,29,851	15	10	7·45
Abstract E. General Charges ...	Miles 857.	2,90,908	3	9	4·91	Miles 857.	2,93,351	11	2	5·09
Abstract G. Special and Miscellaneous Expenditure.	.....	70,382	1	10	1·20	.....	50,205	6	1	·87
	Total ...	27,74,794	13	11		Total ...	25,43,185	12	10	

Railway Schools.

134. The particulars of attendance and cost of all Railway Schools during the half-year are as under :—

Name of School.	Number on Register.	Average attendance.	Expenditure.			Receipts.			Net Cost.		
			Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Perambur	121	106·9	(a)2,467	9	8	1,741	11	0	725	14	8
Arkonam	32	24·33	506	6	1	153	15	0	352	7	1
Katpadi	15	16·37	343	4	2	87	10	11	255	9	3
Jalarpet	61	55·31	1,137	9	10	711	8	9	426	1	1
Salem	29	20·36	746	6	1	335	4	9	411	1	4
Podanur	50	37·45	1,115	4	11	584	11	1	530	9	10
Renigunta	4	2·83	235	3	8	70	9	8	164	10	0
Gooty	48	39·11	855	6	6	531	1	9	324	4	9
Raichur	43	36·56	1,102	13	2	661	11	6	441	1	8
Railway School Library	...	...	60	0	0	...	...	...	60	0	0
Total ...	...	...	8,570	0	1	4,878	4	5	3,691	11	8

(a) The expenditure on Perambur School includes the cost of Gymnastic Instructors.

Madras Railway Provident Institution.

135. The following details are given in continuation of those contained in my report for the half-year ending 31st December 1897 :—

Number of Subscribers.

	31st December 1897.	30th June 1898.
Obligatory	3,228	3,064
Voluntary	83	72
Total ...	3,311	3,136

Amount at credit at 30th June 1898—	Rs.	A.	P.
Obligatory	7,81,146	10	2
Voluntary	54,665	14	3
Bonus	20,163	10	5
Profit and Loss Account	6,094	12	11
Reserve Fund	14,039	7	0
Subscribers old balances	2,452	13	6
Total ...	8,78,563	4	3

The above bonus has been included in the accounts of the half-year under review.

The following Securities were purchased during the half-year :—

Government Securities	Rs. 33,000
Madras Municipal Debentures	„ 5,000

136. There is a decrease of 164 in the number of obligatory subscribers owing to the services of 234 members, belonging to the Perambore Workshops, having been dispensed with.

Staff.

137. Mr. A. Corben was granted three months' privilege leave from 16th May.

138. A list of statements forwarded herewith is annexed.

Yours faithfully,

F. DUNSTERVILLE,
Chief Auditor.

MADRAS RAILWAY COMPANY,
CHIEF AUDITOR'S OFFICE,
MADRAS, *3rd September* 1898.

To

THE AGENT AND MANAGER,
Madras Railway Company.

DEAR SIR,

I beg to report as follows on the working of the Mysore State Kolar Gold Fields Railway for the half-year ending 30th June 1898 :—

CAPITAL.

Statements Nos. V, VI and XVIII.—The capital expenditure during the half-year amounted to Rs. 732-2-11. The total capital outlay, including suspense, from the commencement of operations to the end of the half-year under review, is Rs. 8,09,538 and the expenditure, excluding suspense Rs. 7,40,184 which gives an average of Rs. 74,018 per mile open.

REVENUE.

General Results.

The following table shews the General results of working :—

——	Half-year ending June 1897.	Half-year ending June 1898.	Difference.	
	Miles.	Miles.	Miles.	Per cent.
Mean mileage worked	10	10	...	...
Train mileage	17,942	18,646	+ 704	+ 3·92
	No.	No.	No.	
Average number of trains over the whole line daily in both directions	9·91	10·30	+ ·39	...
	Rs.	Rs.	Rs.	Rs.
Gross earnings	98,854	1,06,037	+ 7,183	+ 7·27
Working expenses	54,963	52,117	— 2,846	— 5·18
Net earnings	43,891	53,920	+ 10,029	+ 22·85
Percentage of working expenses to gross earnings	55·60	49·15	— 6·45	...
Percentage of net earnings to capital outlay including suspense	5·85	6·66	+ ·81	...

The gross earnings per mean mile worked per week averaged Rs. 408 against Rs. 380 and were realized at a cost of 49·15 per cent. against 55·60 per cent. in the corresponding half of the previous year.

The net earnings amounted to Rs. 53,919-13-10, which gives a return at the rate of 13·32 per cent. per annum on the capital outlay, including suspense.

Gross Earnings.

The following table shews the gross earnings for the two half-years :—

——	Half-year ending June 1897.	Half-year ending June 1898.	Difference.	
			Amount.	Per cent.
	Rs.	Rs.	Rs.	Rs.
Coaching	26,383	28,107	+ 1,724	+ 6·53
Goods	72,208	77,584	+ 5,376	+ 7·45
Electric Telegraph	133	104	— 29	— 21·80
Steam-boat	...	...	...	...
Sundries	130	242	+ 112	+ 86·15
Total ...	98,854	1,06,037	+ 7,183	+ 7·27

Abstract H.—*Coaching Traffic.*—The number of passengers of the various classes carried including Troops and Police and Season tickets, and the earnings therefrom are as follows:—

—	First Class.		Second Class.		Third Class.		Total.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		Rs.		Rs.		Rs.		Rs.
First half of 1897 ...	1,637	662	7,761½	1,388	324,501½	23,156	333,900	25,206
First half of 1898 ...	2,224½	874	7,591½	1,478	336,021½	24,246	345,837½	26,598

The receipts from passengers' luggage amount to Rs. 981.
The earnings under Horse, Carriage and Dog traffic are Rs. 70.
Parcels for the public shew a receipt of Rs. 245.

Abstract I.—*Goods Traffic.*—The following is a summary of the tonnage of goods lifted and the earnings therefrom, as compared with the corresponding period of 1897 :—

—	Half-year ending June 1897.		Half-year ending June 1898.	
	Quantity.	Earnings.	Quantity.	Earnings.
	Tons.	Rs.	Tons.	Rs.
Merchandise, General	28,533	26,502	23,462	22,284
Military Stores	...	...	...	...
Railway materials for construction...	191	50	263	68
Coal (including Locomotive Revenue)	53,153	45,234	64,654	55,027
Revenue Stores (excluding Locomotive Coal) ..	1,578	249	717	89
Other Goods traffic	...	173	...	116
	83,455	72,208	89,096	77,584
Less outstandings irrecoverable or not recovered ...	...	...	...	...
Total ..	83,455	72,208	89,096	77,584

The following table shews some of the principal commodities carried during the two half-years:—

—	Half-year ending June 1897.		Half-year ending June 1898.	
	Quantity.	Earnings.	Quantity.	Earnings.
	Tons.	Rs.	Tons.	Rs.
Coal	53,153	45,234	64,654	55,027
Metals—				
Iron...	1,914	1,756	1,555	1,468
Stone and Lime...	3,891	3,414	2,249	2,128
Timber	17,156	15,325	13,685	12,380

Working Expenses.

The Kolar Gold Fields Railway is worked by the Madras Railway Company, and the charge to the Mysore Durbar therefor is ascertained in the manner set forth in the foot-note to Statement No. 8 of the printed accounts.

The Kolar Gold Fields Railway having earned surplus profits a claim will be made of one per cent. of its net earnings for the Provident Institution as per Agreement.

Statistics.

The usual statements accompany this report for the information of the Durbar.

Yours faithfully,

F. DUNSTERVILLE,

Chief Auditor.

(8)

MADRAS RAILWAY COMPANY,

Chief Auditor's Office,

Madras, *3rd September* 1898.

To

The AGENT and MANAGER,

Madras Railway Company.

Dear Sir,

I beg to report as follows on the working of the Madras-Ennore section of the Bezwada-Madras Railway for the half-year ending 30th June 1898 :—

CAPITAL.

Statements Nos. V, VI and XVIII.—The capital expenditure for the half-year, which amounted to Rs. 6,532-6-9, was chiefly incurred on Stations and Offices. The total capital outlay (excluding capitalization of abatement of land revenue) from the commencement of operations to the end of the half-year under review is Rs. 5,99,149-15-4, which gives an average of Rs. 70,905 per mile open.

REVENUE.

General Results.

The following table shews the general results of working :—

—	Half-year ending June 1897.	Half-year ending June 1898.	Difference.	
	Miles.	Miles.	Miles.	Per cent.
Mean mileage worked	8·45	8·45	...	...
Train-mileage	14,644	13,644	— 1,000	— 6·83
	No.	No.	No.	
Average number of trains over the whole line daily in both directions...	9·57	8·92	— ·65	...
	Rs.	Rs.	Rs.	Rs.
Gross Earnings	34,583	26,207	— 8,376	— 24·22
Working Expenses	19,906	13,221	— 6,685	— 33·58
Net Earnings	14,677	12,986	— 1,691	— 11·52
Percentage of Working Expenses to Gross Earnings	57·56	50·45	— 7·11	...
Percentage of Net Earnings to Capital Outlay, including Suspense ...	2·52	2·17	— ·35	...

The Gross Earnings per mean mile worked per week averaged Rupees 119 against Rupees 157 and were realized at a cost of 50·45 per cent. against 57·56 per cent. in the corresponding half of the previous year.

The Net Earnings amounted to Rs. 12,985-14-9, which gives a return of 4·33 per cent. per annum on the total capital outlay including suspense.

Gross Earnings.

The following table shows the Gross Earnings for the half-year under review :—

——	Half-year ending June 1897.	Half-year ending June 1898.	Difference.	
			Amount.	Per cent.
	Rs.	Rs.	Rs.	Rs.
Coaching	24,728	20,952	– 3,776	– 15·27
Goods	9,690	5,173	– 4,517	– 46·62
Electric Telegraph	25	11	– 14	– 56·00
Steam-boat	.....	.....	.....	.....
Sundries	140	71	– 69	– 49·29
Total ...	34,583	26,207	– 8,376	– 24·22

Abstract H.—*Coaching Traffic.*—The number of passengers of the various classes carried including troops and police and season tickets, and the earnings therefrom, are as follows :—

——	First Class.		Second Class.		Third Class.		Total.	
	No.	Earnings.	No.	Earnings.	No.	Earnings.	No.	Earnings.
		Rs.		Rs.		Rs.		Rs.
First half of 1897 ...	1,035½	416	2,489½	481	399,378½	23,041	402,903½	23,938
First half of 1898 ...	752	320	1,705½	388	353,704	19,639	356,161½	20,347

The receipts from passengers' luggage amount to Rs. 552.
The earnings under Horse, Carriage and Dog traffic are Rs. 20.
Parcels for the Public shew a receipt of Rs. 14.

Abstract I.—*Goods Traffic.*—The following is a summary of the tonnage of goods lifted and the earnings therefrom, as compared with the corresponding period of 1897 :—

——	Half-year ending June 1897.		Half-year ending June 1898.	
	Quantity.	Earnings.	Quantity.	Earnings.
	Tons.	Rs.	Tons.	Rs.
Merchandise, General	20,499	9,282	10,678	5,004
Military Stores	...	...	...	...
Railway materials for construction	1	...	1	51
Coal (including Locomotive Revenue)	5	2	146	20
Revenue Stores (including Locomotive Coal)	9,805	376	1,945	92
Other Goods Traffic	...	30	...	6
	30,310	9,690	12,770	5,173
Less—Outstandings irrecoverable or not recovered ...	...	...	...	...
Total ...	30,310	9,690	12,770	5,173

The following table shews some of the principal commodities carried during the two half-years :—

——	Half-year ending June 1897.		Half-year ending June 1898.	
	Quantity.	Earnings.	Quantity.	Earnings.
	Tons.	Rs.	Tons.	Rs.
Stone and Lime	2,791	1,012	927	303
Timber	8,218	2,915	8,423	4,062

Working Expenses.

The working arrangement is embodied in letter, No. 159, dated 28th February 1896, addressed by you to the Consulting Engineer for Railways, Madras, the chief provisions being that the actual expenditure incurred upon the maintenance and renewal of way, works and stations shall be charged, other expenses to be calculated at the same percentage of the gross earnings of the State line as shall in each half-year be found to represent the percentage of working expenses (exclusive of maintenance and renewal of way, works and stations) on gross earnings of the amalgamated undertaking. Five per cent. of gross earnings of the State line to be paid to Madras Railway for use of rolling stock.

The following figures are taken from the printed accounts :—

	Rs.	A.	P.
Actual outlay on maintenance of way, works and stations...	2,861	11	9
Percentage expenses under other Abstract heads	9,049	6	11
Hire of rolling-stock, &c.	1,310	6	0

The actual outlay on engineering maintenance, Rs. 2,862, is equal to 10·92 per cent. of the gross receipts, as compared with 9·61 per cent. on the Madras Railway.

The sum of Rs. 9,049 paid to Madras Railway Company for charges under other Abstract heads of expenditure is equal to a payment of Rs. 0-10-7 on each of the 13,644 train miles run over the Madras-Ennore line, while the actual expenditure incurred by the Madras Railway under those heads of expenditure on the whole undertaking amounted to Rs. 1-8-6 per train-mile.

Yours faithfully,

F. DUNSTERVILLE,

Chief Auditor.

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MADRAS RAILWAY COMPANY,
TRAFFIC MANAGER'S OFFICE,
MADRAS, *25th October* 1898.

To

THE AGENT AND MANAGER,
Madras Railway Company,
RAYAPURAM.

SIR,

I have the honor to submit my report upon the traffic of the Madras Railway for the half-year ending 30th June 1898.

2. OPEN MILEAGE.—The open mileage (including the Kolar Gold Fields and Madras-Ennur Railways worked by the Madras Railway Company) on the 30th June 1898 was the same as on the 31st December 1897, viz., 859 miles.

3. TRAIN SERVICE.—The train service during the half-year under review remained the same as during the half-year ending December 1897.

Numbers 37 Down and 32 Uptrains were cancelled between Gooty and Raichur N. W. Line on the 6th April 1898, traffic having decreased owing to plague on connecting railways.

4. FARES AND RATES—There was no alteration in the **PASSENGER FARES** for the half-year ending 30th June 1898. They are shown below :—

First class	... ...	12 pies.
Second class	... ...	6 „
Third class { Mail	... ...	2½ „
Third class { Other trains	... ...	2 „

The following changes in the **GOODS RATES** were made during the half-year :—

JANUARY.

Commodities.	Conditions.	Rates per md. per mile.	Alterations.	Rates per md. per mile.	Remarks.
Bricks ...	In wagon loads of 8 tons (216 mds.) at O. R.	0·185 pie inclusive of terminals.	From Ferok to *via* Bowringpet in lots of 60 tons.	0·148 pie inclusive of terminals.	To encourage traffic.
Magnesite stones.	Not classified.		In wagon loads of 12 tons at O. R.	0·185 pie.	New traffic.
Divi Divi, chargeable at the rates notified for bark for tanning.	In wagon loads of 4 tons (108 mds.) at O. R. consigned for distance of 200 miles and over.	0·370 pie.	In wagon loads of 8 tons (216 mds.) at O. R.	0·296 pie.	To bring new traffic.
Doors and window frames as Joiners' work.	3rd Class ...	0·666 pie.	In wagon loads of 6 tons (162 mds.) at O. R. for distances exceeding 300 miles.	0·370 pie.	To encourage long distance traffic.

FEBRUARY.

Stone (common) dressed or undressed.	In wagon loads of 270 mds. at O. R. for distances of 300 miles and above.	0·168 pie.	In wagon loads of 324 mds. at O. R. for distances of 300 to 350 miles.	0·148 pie.	To encourage the traffic.
Do. do.	Do. do. for distances of 350 miles and above.	0·148 pie.	In wagon loads of 324 mds. at O. R. for distances of 350 to 400 miles.	0·129 pie.	Do.
Do. do.	Do. do. for distances of 400 miles and above.	0·148 pie.	In wagon loads of 324 mds. at O. R. for distances of 400 miles and above.	0·111 pie.	Do.
Tiles, Mangalore ..	In wagon loads of 216 maunds at O. R. for distances of 400 miles and above.	0·185 pie inclusive of terminals.	In 120 ton lots at O. R. loaded in 10 wagons for distances of 400 miles and above.	0·148 pie inclusive of terminals.	Do.

APRIL.

Commodities.	Conditions.	Rates per md. per mile.	Alterations.	Rates per md. per mile.	Remarks.
Bran ...	1st Class ...	0·370 pie.	In wagon loads of 216 maunds and above at O. R. for distances of 350 miles and over.	0·203 pie inclusive of terminals.	...
Cotton, loose ...	Molagavalli to Adoni in wagon loads of 90 mds. at O. R.	1·111 pies.	In wagon loads of 90 mds. at O. R.	0·888 pie.	To be reconsigned to Madras after being pressed at Adoni.
Cotton, full pressed.	Pressed to 35 lbs. & over per c. ft. from Tiruppur to Madras.	0·504 pie.	...	0·444 pie.	To encourage traffic to Madras
Do. ...	Do. do. from Erode to Madras.	0·504 pie.	...	0·444 pie.	Do.
Cotton ...	Pressed to over 26 lbs per c. ft. from Guntakal to Madras.	0·369 pie.	...	0·361 pie.	Do.
Do. ...	Do. do. from Timmencherla to Madras.	0·372 pie.	...	0·361 pie.	Do.
Do. ...	Pressed to 25 lbs. & over per c. ft. from Erode to Madras.	0·592 pie.	...	0·584 pie.	Do.

MAY.

Cotton, full presed.	Pressed to over 35 lbs. per c. ft. from *via* Erode to Madras.	0·504 pie	...	0·222 pie.	To encourage traffic to Madras.
Arecanuts (betel nuts, raw).	From Aleppy *via* Tirur to Madras.	0·504 pie.	...	0·416 pie.	In competition with sea traffic.

JUNE.

Cotton, full pressed.	From *via* Guntakal to Madras ...	0·329 pie.	...	0·215 pie.	To encourage traffic to Madras.

5. TRAFFIC TRAIN MILES.—The traffic train mileage for the June half-years of 1897 and 1898 is shown in the following table :—

Allocation.	Description of train.	June 1897.				June 1898.			
		Madras Railway.	K. G. F. Railway.	Madras-Ennur Railway.	Total.	Madras Railway.	K. G. F. Railway.	Madras-Ennur Railway.	Total.
		Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Coaching...	Mail	318,404	...	...	318,404	318,404	...	...	318,404
	Passenger	171,916	...	8,896	180,812	164,998	...	...	164,998
	Special	3,644	...	472	4,116	4,653	...	352	5,005
	Troops	1,777	...	...	1,777	5,491	...	...	5,491
Mixed ...	Ordinary	601,479	14,560	2,896	618,935	589,901	14,825	12,748	617,474
Goods ...	Ordinary	39,398	...	544	39,942	47,758	...	...	47,758
	Extra	70,359	2,970	...	73,329	70,224	3,288	144	73,656
	Ballast trains for construction.	2,131	...	557	2,688	2,396	...	...	2,396
	Light engines ...	23,577	42	...	23,619	30,841	294	...	31,135
	Maintenance ...	11,333	370	1,279	12,982	8,575	239	400	9,214
	Fuel	18,199	...	...	18,199	22,043	...	...	22,043
	Total ...	1,262,217	17,942	14,644	1,294,803	1,265,284	18,646	13,644	1,297,574

Increase in Light Engines mileage is due to the running of Light Engines from Nandalur to Cuddapah to assist Nos. 4 and 32 trains.

Excluding maintenance and fuel mileage the total train mileage of the Madras Railway was 1,234,666 against 1,232,685 for the corresponding period of 1897 or an increase of 1,981 miles equivalent to 0·16 per cent.

Taking the figures as shown in the Capital and Revenue accounts where Mixed and Light Engine mileage is divided between the Coaching and Goods traffic, a decrease of 4,555 occurs in Coaching and an increase of 6,536 in Goods train mileage on the Madras Railway, an increase of 401 in Coaching of 434 in Goods on the K. G. F. S. Railway, and a decrease of 2,802 in Coaching and an increase of 2,681 in Goods on the Madras-Ennur Railway.

6. GROSS AND NET EARNINGS.—Compared with the corresponding period of 1897 the gross earnings from all sources were Rs. 56,34,736 against Rs. 57,89,562 or a decrease of Rs. 1,54,826 equivalent to 2·67 per cent.

The net earnings were Rs. 31,56,889 against Rs. 30,89,636 or 56·03 per cent. of revenue.

The working expenses were Rs. 24,77,847 against Rs. 26,99,926 or 43·97 per cent. of revenue.

The average receipts per train mile work out to Rs. 4·45 against Rs. 4·59.

The increases and decreases in the several heads of the gross earnings are shown in the following table :—

Heads.	Earnings.		Increase.	Decrease.	Net Decrease.
	Half-year ending June 1897.	Half-year ending June 1898.			
	Rs.	Rs.	Rs.	Rs.	Rs.
Passengers	19,28,335	18,39,135	...	89,200	
Troops and Police ...	58,617	84,765	26,148	...	
Passengers' luggage ...	83,155	90,298	7,143	...	
Parcels	1,43,105	1,56,591	13,486	...	
Parcels (Revenue) ...	3,009	2,992	...	17	
Horses, carriages and dogs.	47,903	46,849	...	1,054	
Special trains	569	...	...	569	
Goods	32,96,519	31,73,829	...	1,22,690	
Goods (Revenue) ...	64,933	67,883	2,950	...	
Railway material ...	3,896	3,903	7	...	
Live stock	20,513	17,130	...	3,383	
Rents and demurrage ...	6,177	6,190	13	...	
Miscellaneous	4,252	4,533	281	...	
Haulage of postal vans ...	24,438	24,434	...	4	
Sundries	93,681	107,697	14,016	...	
Telegraph	10,460	8,507	...	1,953	
Total ...	57,89,562	56,34,736	64,044	2,18,870	1,54,826

7. The net decrease in the working expenses is explained, as follows :—

Heads.	Expenditure.		Increase.	Decrease.	Net Decrease.
	June 1897.	June 1898.			
	Rs.	Rs.	Rs.	Rs.	Rs.
Permanent way	6,20,106	5,41,515	...	78,591	
Locomotive	10,38,798	9,57,248	...	81,550	
Repairs to carriages and wagons.	2,89,436	2,30,042	...	59,394	
Traffic	4,04,684	4,19,982	15,298	...	
General charges	2,84,635	2,86,478	1,843	...	
Special and miscellaneous ...	62,267	42,582	...	19,685	
Total ...	26,99,926	24,77,847	17,141	2,39,220	2,22,079

8. PASSENGER TRAFFIC.—The receipts from passengers (exclusive of troops and police) were Rs. 18,39,135 against Rs. 19,28,335, or a decrease of Rs. 89,200 equivalent to 4·63 per cent. The lowest class contributed in money 88·77 per cent. against 89·12 per cent. and in number 98·77 per cent. against 98·36 per cent.

9. The receipts from each class of passengers are shown in the following table :—

Half-years ending	First class.	Second class.	Third class.	Total.
	Rs.	Rs.	Rs.	Rs.
30th June 1898	98,441	1,08,078	16,32,616	18,39,135
Do. 1897	1,03,125	1,06,688	17,18,522	19,28,335
Increase in 1898	...	1,390	...	...
Decrease in 1898	4,684	...	85,906	89,200
Increase per cent.	...	1·30	...	...
Decrease do.	4·54	...	5·00	4·63

10. The numbers carried in each class were :—

Half-years ending	First class.	Second class.	Third class.	Total.
	No.	No.	No.	No.
30th June 1898	10,497	46,722½	4,600,357½	4,657,577
Do. 1897	12,869½	45,484	5,057,896½	5,116,250
Increase in 1898	...	1,238½	...	...
Decrease in 1898	2,372½	...	457,539	458,673
Increase per cent.	...	2·72	...	...
Decrease do.	18·44	...	9·04	8·96

11. The percentage of numbers and average mileage of each class were as follows :—

Periods.	Percentage of numbers.			Average mileage.		
	First class.	Second class.	Third class.	First class.	Second class.	Third class.
Half-year ending 30th June 1898.	0·23	1·00	98·77	164	103	32
Do. do. 1897.	0·25	0·89	98·86	154	97	31

12. The average fare paid by each class of passenger was :—

Period.	First class.	Second class.	Third class.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Half-year ending 30th June 1898	9 6 1	2 5 0	0 5 8
Do. do. 1897	8 0 2	2 5 6	0 5 5

13. In the first class passenger traffic there was a decrease of 18·44 per cent. in number and of 4·54 per cent. in money. In the second class there was an increase of 2·72 per cent. in number and of 1·30 per cent. in money. In the third class there was a decrease of 9·04 per cent. in number and of 5·00 per cent. in money. The average sum paid by a third class passenger by *all* trains was annas 5–8 against annas 5–5. The average sum by *Mail* trains was annas 12–0 against annas 11–5 and the average sum by *other trains* annas 4–5 against annas 4–4. The percentage of numbers carried by Mail and Other trains remained the same as in the corresponding half-year 1897, viz., 16 and 84, respectively.

14. The Return fare and Festival traffic is shewn in the following table :—

Period.	First class.		Second class.		Third class.		Total.	
	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.
Half-year ending 30th June 1898..	1,091	4,080	14,334	5,635	243,912	16,025	259,337	25,740
Do. 1897...	2,503	2,848	12,090	4,086	232,847	12,556	247,440	19,490
Increase ...	...	1,232	2,244	1,549	11,065	3,469	11,897	6,250
Decrease ...	1,412	...	...	...	...	...	...	...

15. The number of third class passengers booked by all trains on different sections of the line, excluding Troops and Police, Return, Excess and Season ticket traffic, in the first half-years of 1897 and 1898, is shown in the following table :—

Between	Half-year ending June		Increase per cent.	Decrease per cent.
	1897.	*1898.		
Madras to Jalarpet	1,767,737	1,589,970½	...	10·06
Tirupattur to Podanur	633,069	596,780½	...	5·73
Bangalore Branch	565,787	435,566½	...	23·02
Nilgiri Branch	269,927½	245,277	...	9·13
Madukarai to Calicut	618,028½	581,109½	...	5·97
Tiruttani to Cuddapah	472,488	386,824	...	18·13
Krishnapuram to Raichur	498,012½	339,059	...	3·19
Ex-Great Indian Peninsula, Southern Mahratta, South Indian, Kolar Gold Fields and Madras-Ennur Railways	...	181,858½	...	...
Total ...	4,825,049½	4,356,445½	...	9·71

* As the Audit Department have discontinued the compilation of sectional figures it is impossible to do more than give approximate figures in this form, but although the present percentage comparisons are vitiated the figures will be useful for corresponding periods at a later date.

16. The numbers carried and receipts derived from third class passengers (exclusive of Troops and Police) during the half-years ending June 1889 to June 1898 inclusive are given below :—

Period.	Numbers.	Receipts.
		Rs.
Half-year ending June 1889	4,198,943	13,57,252
Do. 1890	4,184,208	13,69,221
Do. 1891	4,206,099½	14,00,155
Do. 1892	4,259,953½	13,53,453
Do. 1893	4,998,677	15,37,298
Do. 1894	4,954,851	15,09,596
Do. 1895	4,314,512	18,29,511
Do. 1896	4,814,350½	17,86,841
Do. 1897	5,057,896½	17,18,522
Do. 1898	4,600,357½	16,32,616

17. In the special report, dated 20th April 1898, on 3rd class traffic during the December half-year of 1897 para. 17, the loss of revenue which has now occurred was anticipated. The plague is slowly, but—as far as can be seen—surely, closing in upon the Presidency Town itself and traffic comparisons of any value are therefore likely to be impossible, for some time to come.

18. PARCELS.—Compared with the corresponding period of 1897 there was an increase of 16·76 per cent. in number and of 9·42 per cent. in money. The increased revenue from parcels traffic has been principally due to Betel leaf, Mangoes, Betel Nuts, Garlic and Cloth on the South-West Line.

19. The following table shows the number carried and revenue derived from parcels during the June half-years of the last ten years :—

Half-years ending June	Number.		Receipts.		Total.	
	Local.	Foreign.	Local.	Foreign.	Number.	Receipts.
			Rs.	Rs.		Rs.
1889	56,437	56,730	59,795	54,531	113,167	1,14,326
1890	63,692	60,641	56,190	50,182	124,333	1,06,372
1891	66,089	53,112	56,217	48,369	119,201	1,04,586
1892	55,070	57,347	55,837	46,118	112,417	1,01,955
1893	59,572	66,066	59,886	55,302	125,638	1,15,188
1894	68,060	80,858	66,581	63,741	148,918	1,30,322
1895	82,507	82,886	66,183	67,254	165,393	1,33,437
1896	85,494	106,586	66,228	75,997	192,080	1,42,225
1897	77,582	122,140	67,478	75,627	199,722	1,43,105
1898	89,248	143,940	71,906	84,685	233,188	1,56,591

20. GOODS TRAFFIC.—Compared with the corresponding half-year of 1897, the receipts from Goods Traffic (exclusive of Railway Material and Revenue Stores) were Rs. 31,73,829 against Rs. 32,96,519 equivalent to a decrease of 3·72 per cent. The tonnage carried was 481,350 against 499,818 in the corresponding half-year or a decrease of 3·70 per cent. The average sum earned per ton carried was Rs. 6·59 against Rs. 6·60, and the average sum per ton per mile was pies 8·40 against 8·40 pies. The fluctuations in the commodities which contributed to this result are shown in para. 23.

21. The following table represents the weight of and revenue from the Goods traffic carried for the public for the ten years ending June 1898 :—

Years.	Goods traffic exclusive of Madras Railway Material and Revenue Stores.	Government Stores and Foreign Railway Material.	For the Public.	
			Weight.	Receipts.
	Rs.	Rs.	Tons.	Rs.
1888–1889	46,91,781	1,06,599	727,583	45,85,182
1889–1890	50,16,899	2,63,139	791,394	47,53,760
1890–1891	52,85,836	2,81,908	841,463	50,03,928
1891–1892	53,94,534	1,35,179	814,826	52,59,355
1892–1893	58,57,767	90,001	866,670	57,67,766
1893–1894	59,58,478	88,375	836,549	58,70,103
1894–1895	60,12,175	74,743	830,389	59,37,432
1895–1896	58,98,534	76,610	854,122	58,21,924
1896–1897	62,63,526	1,21,250	940,096	61,42,276
1897–1898	63,70,809	73,087	988,810	62,97,722

22. Statement showing earnings from and tonnage of Goods traffic for the half-years ending 30th June 1897 and 1898 :—

Details.	Half-year ending June 1897.	Half-year ending June 1898.
Receipts from goods ... ... Rs.	32,96,519	31,73,829
Tonnage of goods ... ... Tons	499,818	481,350
Average receipt per ton carried ... ... Rs.	6·60	6·59
Do. per ton per mile ... ... Pies	8·40	8·40

23. The increase and decrease in each commodity composing the Goods traffic for the half-year ending 30th June 1898 appears in the following statement :—

Description.	Increase.		Description.	Decrease.	
	Tons.	Rs.		Tons.	Rs.
Coke and Coke	12,403	44,856	Cotton, Manufactured ...	...	1,086
Cotton, Unmanufactured..	676	3,165	Dyes and Tans	752	13,888
Cotton, Manufactured ..	144	...	Grain and Pulse	34,978	1,44,957
Drugs and Chemicals ...	210	1,950	Hides and Skins... ...	3,194	53,295
Oil Seeds	8,119	55,773	Jute	609	6,072
Provisions	5,152	47,239	Liquors	473	6,247
Railway Plant and Rolling Stock.	74	1,359	Metals	3,889	14,560
	2,328	5,213	Oils	85	4,454
Salt	...	9,119	Spices	526	...
Spices	5,699	5,948	Stone and Lime	8,672	5,865
Sugar	735	4,680	Timber	652	26,091
Tobacco	359	5,504	Wool, Raw	89	2,256
Wool, Manufactured ...			All others Articles of Merchandise.	337	27,872
Commodities which yielded a total revenue of less than Rs. 1,000 each during the half-year.	18	1,055	Commodities which yielded a total revenue of less than Rs. 1,000 each during the half-year.	129	1,908
By Decrease	18,468	1,22,690			
Total ...	54,385	3,08,551	Total ...	54,385	3,08,551

The deficit in grain traffic receipts more than explains the total decrease in revenue for goods traffic irrespective of the decrease of Rs. 53,295 for skins and other decreases. To what extent the plague has affected grain traffic it is impossible to say, but we know that it has had a considerable effect upon skin traffic and it undoubtedly exercises a depressing influence upon business generally.

The ground nut crop was again a failure.

24. *Grain.*—The total quantity of Grain carried was 93,649 tons, yielding a revenue of Rs. 5,93,103 against 128,627 tons and a revenue of Rs. 7,38,060 or a decrease of 27·19 per cent. in weight and 19·64 per cent. in money. The average amount earned per ton carried was Rs. 6·44 against Rs. 5·74.

25. The following table is designed to show the tonnage of Grain *sent* from and *received* at each district during the half-years ending 30th June 1897 and 1898 :—

Districts.	1897.				1898.			
	Sent from		Received in		Sent from		Received in	
	Tons.	Percentage of tons.	Tons.	Percentage of tons.	Tons.	Percentage of tons.	Tons.	Percentage of tons.
Madras	3,201	2·5	13,515	10·5	10,512	11·2	13,754	14·7
North Arcot ...	31,264	24·3	4,867	3·8	10,007	10·7	10,031	10·7
Salem	17,078	13·3	2,261	1·8	5,736	6·1	12,238	13·1
Coimbatore	22,529	17·5	7,489	5·8	2,362	2·6	19,861	21·2
Malabar	12,401	9·6	49,031	38·1	6,731	7·2	5,791	6·2
Cuddapah	2,963	2·3	4,668	3·6	1,403	1·5	2,950	3·2
Bellary	9,548	7·4	11,732	9·1	27,270	29·1	4,849	5·2
South Indian Railway...	8,189	6·4	2,086	1·6	3,295	3·5	5,087	5·4
Great Indian Peninsula Railway.	990	0·8	10,890	8·5	6,434	6·9	608	0·6
Mysore Dominions ...	11,104	8·6	11,744	9·1	12,470	13·3	10,314	11·0
Intra	9,360	7·3	10,344	8·1	7,429	7·9	8,166	8·7
Total ...	128,627	100·0	128,627	100·0	93,649	100·0	93,649	100·0

26. The tonnage of Grain brought into Madras by Sea, by the Buckingham Canal, and by the Madras Railway, during the two periods under notice, was—

Means of Transport.	1897.	1898.
	Tons.	Tons.
Sea	6,330	36,522
Buckingham Canal	7,876	9,888
Madras Railway	12,471	13,475
Total ...	26,677	59,885

27. The Cotton was contributed by the following stations :—

Stations.	Half-year ending 30th June 1897.			Half-year ending 30th June 1898.		
	Pressed.	Loose.	Total.	Pressed.	Loose.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Southern Mahratta Railway ...	1,348	1	1,349	1,857	21	1,878
Adoni	1,173	346	1,519	1,956	289	2,245
Raichur	332	17	349	316	16	332
Tadpatri	813	176	989	805	...	805
Timmancherla	...	1	1	119	56	175
Guntakal	...	...	...	602	...	602
Nancherla	...	1	1	...	12	12
Yerraguntla	1,349	...	1,349	514	...	514
Muddanuru	...	...	...	...	4	4
Krishnapuram	29	...	29	...	...	...
Great Indian Peninsula Railway...	68	...	68	59	35	94
Tiruppur	835	286	1,121	986	57	1,043
Coimbatore...	35	22	57	116	...	116
Somanur	289	12	301	245	...	245
Singanallur	95	3	98	...	...	...
Erode	117	260	377	396	6	402
Sankaridrug	...	29	29	...	...	...
Malabar District	25	184	209	...	55	55
Minor Stations	...	157	157	1	156	157
Total ...	6,508	1,495	8,003	7,972	707	8,679

28. And was distributed as under :—

Stations.	Half-year ending 30th June 1897.			Half-year ending 30th June 1898.		
	Pressed.	Loose.	Total.	Pressed.	Loose.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Madras	5,735	137	5,872	6,414	142	6,556
Southern Mahratta Railway ...	134	48	182	37	5	42
Adoni	...	13	13	...	35	35
Malabar	442	373	815	217	3	220
Guntakal	...	312	312	101	113	214
Raichur	...	...	...	193	...	193
Cuddapah District...	...	...	...	...	107	107
Bellary District	...	...	...	...	29	29
Great Indian Peninsula Railway...	47	...	47	674	14	688
South Indian Railway	7	31	38	...	12	12
Tiruppur	...	87	87	...	...	...
Coimbatore	...	172	172	...	32	32
Mysore Dominions	143	251	394	324	109	433
Minor Stations	...	71	71	12	106	118
Total ...	6,508	1,495	8,003	7,972	707	8,679

29. The condition in which the Cotton was carried is shown in the following table :—

Condition.	June 1897.		June 1898.	
	Tons.	Rs.	Tons.	Rs.
Loose	1,495	19,821	707	8,851
Full pressed	6,508	98,295	7,972	1,12,430
Total ...	8,003	1,18,116	8,679	1,21,281

30. The quantity of Cotton brought into Madras during the two half-years under comparison was as follows :—

Districts.	1897.	1898.
	Tons.	Tons.
North-West Line	3,106	3,310
Southern Mahratta Railway...	1,348	1,858
Great Indian Peninsula Railway	400	60
Coimbatore and Salem	1,018	1,328
Total ...	5,872	6,556

31. Tonnage of Cotton delivered at Madras by Railway and the tonnage exported therefrom during the last and corresponding half-years :—

Periods.	Delivered by Railway at Madras.	Exported at Madras.
	Tons.	Tons.
Half-year ending June 1897	5,872	1,738
Do. do. 1898	6,556	1,764

32. The following figures show the Cotton traffic during the June half of the last ten years :—

Periods.	Pressed.	Loose.	Total.	
			Weight.	Receipts.
	Tons.	Tons.	Tons.	Rs.
June 1889	10,648	2,986	13,634	1,87,003
Do. 1890	8,835	3,401	12,236	1,51,116
Do. 1891	6,403	3,789	10,192	1,29,669
Do. 1892	4,865	1,702	6,567	93,370
Do. 1893	7,120	3,919	11,039	1,32,934
Do. 1894	6,382	2,384	8,766	1,35,458
Do. 1895	8,333	1,696	10,029	1,55,236
Do. 1896	7,460	1,493	8,953	1,31,682
Do. 1897	6,508	1,495	8,003	1,18,116
Do. 1898	7,972	707	8,679	1,21,281

33. The total quantity of Salt carried over the whole system was 28,362 tons yielding a revenue of Rs. 1,50,634 against 26,034 tons with a revenue of Rs. 1,45,421 or an increase of 2,328 tons in weight, and Rs. 5,213 in money. The sum earned per ton carried was Rs. 5·3

against Rs. 5·6. The exports from Madras amounted to 16,684 tons, or 59 per cent. of the Salt carried against 12,191 tons and 47 per cent. in the corresponding half-year.

34. The following statement shows in tons the Salt carried from stations other than Madras, and the districts to which it was sent :—

Stations.	Half-year ending 30th June 1897.		Half-year ending 30th June 1898.	
	Sent from	Received at	Sent from	Received at
	Tons.	Tons.	Tons.	Tons.
Tirur	956	...	1,022	...
Ferok	736	...	1,442	...
Calicut	8,260	...	7,674	...
Salem	...	...	...	...
Erode	7	...	115	...
Coimbatore	28	...	9	...
Kallayi	104	...	72	...
Nellore	697	...	120	...
Vencatachellum	1,023	...	1,045	...
North Arcot District	...	113	...	164
Salem District	...	3,653	...	3,460
Coimbatore District	...	2,966	...	3,286
Malabar District	...	3,284	...	3,552
Mysore Dominions	...	164	...	24
Cuddapah District	...	1,428	...	1,001
Bellary District	...	179	...	...
Raichur	...	12	...	...
South Indian Railway	...	12	...	12
Total ...	11,811	11,811	11,499	11,499

35. Tonnage of Salt carried out of Madras to the various districts during the half-years ending 30th June 1897 and 1898:—

Districts.	1897.		1898.	
	Tons.	Tons.	Tons.	Tons.
Between Madras, Arkonam and Conjeveram ...	...	657	...	2,581
Cuddapah	60		92	
Other Stations on North-West Line ...	2,265		2,456	
		2,325		2,548
Arcot and Katpadi	...	2,321	...	2,903
Between Gudiyattam and Vaniyambadi ...	...	1,242	...	1,557
Bangalore	123		95	
Other Stations on Bangalore Branch ...	933		908	
		1,056		1,003
	48		12	
Salem	1,830		2,469	
Other Stations in Salem District ...		1,878		2,481
		2,306	...	2,980
Erode, Tiruppur and Coimbatore ...	...	51	...	247
Southern Mahratta Railway	...	353	...	384
South Indian Railway...	...	2	...	...
Kolar Gold Fields State Railway ...	...			
Total ...	...	12,191	...	16,684

36. The following table shows the Salt traffic carried out of Madras in each year for the five years ending 30th June 1898:—

Districts.	1894.	1895.	1896.	1897.	1898.
	Tons.	Tons.	Tons.	Tons.	Tons.
Between Madras and Conjeveram ...	2,110	1,697	1,607	1,278	4,168
Cuddapah	1,646	1,098	958	180	151
Other Stations on North-West Line ...	7,501	5,915	4,957	4,023	5,037
Arcot and Katpadi	6,323	5,313	4,696	4,629	5,596
Gudiyattam and Vaniyambadi	3,219	3,207	2,799	2,421	2,877
Bangalore	2,654	2,110	1,035	559	460
Mysore State Railway...	4	20	30	10	...
Other Stations on Bangalore Branch ...	1,627	1,716	1,654	1,626	1,955
Salem	470	693	60	298	270
Other Stations in Salem District ...	4,832	4,894	3,692	3,818	5,198
Erode, Tiruppur and Coimbatore ...	7,370	6,821	4,686	5,100	6,526
Great Indian Peninsula Railway ...	5	10	...	...	...
Southern Mahratta Railway	1,369	730	291	210	355
South Indian Railway	803	762	823	648	660
Kolar Gold Fields State Railway ...	...	...	...	2	...
Total ...	39,933	34,986	27,288	24,802	33,253

So much has been said and written during the last 10 or 15 years on the subject of Madras salt; as to its inferiority to Bombay salt as a marketable commodity; and—by merchants—as to the desired improvements in its manufacture and subsequent preparation for the market, apparently without effect, that possibly the Board may now conclude that the present importance of the commodity does not justify the work entailed by the compilation of paras. 33, 34, 35 and 36 of this Report. In that case the paras. might with advantage be omitted in the future.

37. Approximate Statement of traffic to the Gold Mines for the two half-years ending June 1897 and 1898.

Staples.	Half-year ending June 1897.						Half-year ending June 1898.					
	Total traffic at Bisanattam, Kamasamudram and Bowringpet.		Total traffic at Stations on the K. G. F. S. Ry.		Total.		Total traffic at Bisanattam, Kamasamudram and Bowringpet.		Total traffic at Stations on the K. G. F. S. Ry.		Total.	
	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
Coal and Coke	1	10	53,780	2,44,797	53,781	2,44,807	161	587	64,741	2,81,129	64,902	2,81,716
Timber	3,410	21,524	6,829	54,418	10,239	75,942	2,433	18,651	5,632	47,438	8,065	66,089
Firewood	4,867	4,867	10,651	14,368	15,518	19,235	5,882	6,289	7,553	9,307	13,435	15,596
Machinery	60	675	2,271	30,070	2,331	30,745	40	508	1,788	23,003	1,828	23,511
Unclassified Articles... ...	6,187	37,317	8,558	49,374	14,745	86,691	10,311	47,962	6,334	48,724	16,645	96,686
Total ...	14,525	64,393	82,089	3,93,027	96,614	4,57,420	18,827	73,997	86,048	4,09,601	104,875	4,83,598

38. A brief explanation of the variations in the commodities referred to in para. 23 is given below :—

		From		To
Coal and Coke—Increase	Larger despatches of Coal and Coke.	Rayapuram	...	K. G. F. S. Railway.
Cotton, Unmanufactured Increase	Larger despatches of Cotton Pressed.	Tiruppur	...	Madras.
		Adoni	...	Do.
		S. M. Railway	...	Do.
		Yerraguntla	...	Do.
		Guntakal	...	G. I. P. Railway.

		From		To
Cotton, Manufactured—Increase	Larger despatches of Twist and Yarn (European).	G. I. P. Railway	...	Tadpatri.
		S. I. Railway	...	Salem.
				Tiruppur.
	Larger despatches of Piece Goods (European).	Madras	...	Bangalore Branch.
				S. M. Railway.
		G. I. P. Railway	...	Madras.
	Larger despatches of Piece Goods (Indian).	Madras	...	S. M. Railway.
				S. I. do.
		Cuddapah	...	S. M. do.
		S. I. Railway	...	Malabar District.
Drugs and Chemicals—Increase	Larger despatches of Cinchona Bark.	Mettupalaiyam	...	Do.
		Bowringpet	...	Madras.
				North Arcot District.
Oil Seeds—Increase	Larger despatches of Linseed.	S. M. Railway	...	Coimbatore.
		Adoni	...	G. I. P. Railway.
		G. I. P. Railway	...	Madras.
				North Arcot District.
	Larger despatches of Til or Gingelly Seeds.	S. M. Railway	...	Madras.
				Salem District.
				Erode.
				Palghat.
	Larger despatches of Earthnuts (Groundnuts).	Trivellore	...	Madras.
		Tiruttani	...	Do.
		Do.	...	S. I. Railway.
		Nagari	...	Madras.
		Do.	...	S. I. Railway.
		Puttur	...	Madras.
		Do.	...	S. I. Railway.
	Larger despatches of Castor Seeds.	Sankaridrug	...	Do.
		Raichur	...	Madras.
		S. M. Railway	...	Do.
		G. I. P. Railway	...	Do.
	Larger despatches of Other Oil Seeds.	Madras	...	North Arcot District.
		Bangalore City	...	Do.
		Bellary District	...	Salem District.
				Combatore District.
				Bangalore Branch.
		Raichur	...	Cuddapah District.
		S. M. Railway	...	Salem District.
				Coimbatore District.
Provisions—Increase	Larger despatches of Ghee.	Salem District	...	Madras.
				Bangalore Branch.
		Coimbatore District		S. M. Railway.
		Cuddapah District		Madras.
				G.I.P. Railway.
	Larger despatches of Dried Fruits and Nuts.	North Arcot District		Madras.
		Salem District	...	Madras.
				Bangalore Branch.
				Raichur.
		Malabar District	...	Katpadi.
				Coimbatore District.
				Bellary District.
				S. M. Railway.
	Larger despatches of Other Provisions.	North Arcot District		Madras.
				S. I. Railway.
				S. M. do.
		Bangalore	...	Madras.
				S. I. Railway.
		Salem District	...	Madras.
				Bangalore Branch.
		Coimbatore	...	Madras.
				Malabar District.
		Palghat	...	Madras.
				Coimbatore.
				S. I. Railway.
		G. I. P. Railway	...	Mettupalaiyam.
				Bangalore Branch.
		S. M. Railway	...	Madras.
				Coimbatore District.
Railway Plant and Rolling Stock—Increase	Larger despatches of Other Materials.	Madras-Ennur Ry...		Madras.
		S. I. Railway	...	

		From	To
Sugar—Increase	Larger despatches of Refined Sugar.	Arcot	Madras. / Malabar District. / Bangalore Branch.
		Gudiyattam	Madras. / S. I. Railway.
		Podanur	Malabar District.
	Larger despatches of Unrefined Sugar.	Arcot	Bangalore City.
		Katpadi	Madras. / Malabar District. / G. I. P. Railway.
		Salem	Malabar District. / G. I. P. Railway.
		S. I. Railway	North Arcot District. / Coimbatore District.
		S. M. Railway	Raichur.
		Perundurai	Arcot.
Tobacco—Increase	Larger despatches of Unmanufactured, Tobacco.	Palghat	Malabar District.
		Razampeta	Madras.
		Sulur	North Arcot District. / Malabar District.
		Podanur	Do.
		Somanur	North Arcot District.
		Do.	S. I. Railway.
	Larger despatches of Tobacco, Other Sorts.	Razampeta	S. M. Railway.
		S. I. Railway	Bangalore Branch.
Wool, Manufactured—Increase	Larger despatches of Wool, Piece Goods (European).	Madras	G. I. P. Railway.
	Larger despatches of Wool, Piece Goods (Indian).	Bangalore City	Madras.
		Cuddapah	S. M. Railway.
		G. I. P. Railway	Madras.
Dyes and Tans—Decrease	Smaller despatches of Indigo.	Cuddapah District	S. M. Railway.
		S. M. Railway	Madras.
	Smaller despatches of Myrabolams.	Madras	North Arcot District. / G. I. P. Railway.
		Vaniyambadi	Madras.
		Salem	Do.
	Smaller despatches of Other Dyes and Tans.	Vaniyambadi	Madras. / North Arcot District. / Coimbatore District.
		Gooty	Madras.
		G. I. P. Railway	Madras.
		S. M. Railway	Madras.
		S. I. Railway	Madras.
		Do.	North Arcot District.
		Madras	Do.
Grain and Pulse—Decrease	Smaller despatches of Wheat.	Coimbatore District	S. I. Railway.
		Adoni	Madras. / G. I. P. Railway.
		G. I. P. Railway	Madras.
	Smaller despatches of Rice not in the Husk.	Arcot	Calicut.
		Katpadi	Malabar District. / Bangalore Branch.
		Salem	Malabar District. / Bangalore Branch. / Cuddapah District.
		Palghat	Malabar District.
		Parli	Malabar District.
		Ottapalam	Malabar District.
		S. I. Railway	Malabar District. / Bangalore Branch.
	Smaller despatches of Jawar and Bajra (Cholum and Cumbu).	Madras	Cuddapah District. / Raichur. / G. I. P. Railway. / S. M. Railway.
		Salem	Malabar District. / Bellary District. / G. I. P. Railway.

		From	To
Grain and Pulse—Decrease—*(contd.)*	Smaller despatches of Jawar and Bajra (Cholum and Cumbu)—*contd.*	Erode	Calicut. / G. I. P. Railway.
		Tiruppur	Malabar District. / S. M. Railway.
		Cuddapah	G. I. P. Railway.
		S. I. Railway	Malabar District. / Cuddapah District. / Raichur.
		S. M. Railway	Bellary District.
	Smaller despatches of Gram and Pulse.	Tirupattur	North Arcot District. / Bangalore Branch.
		Morappur	Malabar District. / Bangalore Branch.
		Vaniyambadi	Madras.
		Salem	Madras. / G. I. P. Railway.
		Erode	Malabar District. / S. M. Railway.
		Tiruppur	Cuddapah District. / S. M. Railway.
		Coimbatore	Madras. / Malabar District. / G. I. P. Railway.
		Palghat	Malabar District.
		S. I. Railway	Salem District. / Malabar District.
Hides and Skins—Decrease	Smaller despatches of Cattle Hides, Raw.	Madras	North Arcot District.
		G. I. P. Railway	Madras.
		S. I. Railway	Madras. / North Arcot District.
	Smaller despatches of Sheep Skins, Dressed or Tanned.	Ambur	Madras.
		Bangalore	Madras.
		G. I. P. Railway	Madras.
	Smaller despatches of Sheep Skins, Raw.	Madras	North Arcot District. / Salem District. / Bangalore Branch.
		Vaniyambadi	Madras.
		Tirupattur	S. I. Railway.
		G. I. G. Railway	Madras.
		S. I. Railway	Do. / North Arcot District.
Jute—Decrease	Smaller despatches of Gunny Bags and Cloth.	Madras	North Arcot District. / Coimbatore District. / Bangalore Branch.
		Calicut	Coimbatore District. / Malabar District.
		Bellary District	Cuddapah District. / Raichur. / S. M. Railway.
Liquors—Decrease	Smaller despatches of Beer.	Madras	Bangalore Branch. / G. I. P. Railway.
		Mettupalaiyam	Madras. / Malabar District. / Bangalore Branch.
Metals—Decrease	Smaller despatches of Copper, Unwrought.	Malabar District	S. I. Railway.
	Smaller despatches of Cast, Iron and Steel.	Madras	Bangalore. / S. M. Railway.
		Rayapuram	Madras-Ennur Ry.
	Smaller despatches of Unwrought, Iron and Steel.	Madras	Malabar District. / Bangalore.
	Smaller despatches of Wrought, Iron and Steel.	Rayapuram	Mettupalaiyam. / Madras-Ennur Ry. / K. G. F. S. Railway. / S. I. Railway.

		From		To
Metals—Decrease—*contd.*	Smaller despatches of Manufactured, Iron and Steel.	Madras	...	Bangalore Branch.
				R. G. F. S. Railway.
				S. M. Railway.
		Rayapuram	...	Perambur.
				Arcot.
		Ferok	...	Mettupalaiyam.
	Smaller despatches of Other Metals.	Madras	...	Coimbatore District.
				Bangalore Branch.
Oils—Decrease	Smaller despatches of Castor Oil.	Sankaridrug	...	S. I. Railway.
		Vaniyambadi	...	North Arcot District.
				Salem District.
	Smaller despatches of Other Oils.	Coimbatore	...	Madras.
				Coimbatore District.
		Palghat	...	Malabar District.
				S. I. Railway.
		S. I. Railway	...	Malabar District.
		Tirupattur	...	S. I. Railway.
Spices—Decrease	Smaller despatches of Pepper.	Palghat	...	S. I. Railway.
		Tirur	...	Malabar District.
	Smaller despatches of Other Spices.	Sulur	...	Coimbatore District.
		Cuddapah	...	S. I. Railway.
		Bellary District	...	G. I. P. Railway.
		Do.	...	S. M. Railway.
		Sankaridrug	...	North Arcot District.
Stone and Lime—Decrease...	Smaller despatches of Stone and Lime.	Ambattur	...	Madras.
		Avadi	...	
		Sholinghur	...	Madras.
				Madras-Ennur Ry.
		Tirupattur	...	K. G. F. S. Railway.
Timber—Decrease	Smaller despatches of Timber.	Madras	...	Bangalore Branch.
				K. G. F. S. Railway.
		Renigunta	...	Madras.
		Mullanur	...	Kamasmudram.
		Malur	...	K. G. F. S. Railway.
		Devenkundi	...	Do.
		Whitefield	...	
		Palghat	...	Bangalore Branch.
		Do.	...	S. I. Railway.
		Kallayi	...	K. G. F. S. Railway.
Wool, Raw—Decrease	Smaller despatches of Wool, Raw.	Madras	...	Bangalore.
		Adoni	...	Bangalore City.
				G. I. P. Railway.
All other Articles of Merchandise—Decrease	Smaller despatches of Other Articles of Merchandise.	Madras	...	K. G. F. S. Railway.
		Bangalore	...	Madras.
				Salem District.
				Coimbatore District.
				Malabar District.
		Calicut	...	Coimbatore District.
				Malabar District.
				Bangalore Branch.
		S. I. Railway	...	Salem District.
				Bangalore Branch.

39. The interchange of the principal commodities with Foreign Railways during the two half-years under review, is shown below :—

Commodities.	1897.		1898.	
	Tons.	Rs.	Tons.	Rs.
Cotton, raw	1,697	22,679	2,731	30,280
Do. manufactured	3,770	50,934	4,200	52,444
Dyes and Tans	6,366	73,072	6,003	58,845
Grain and Pulse	42,445	2,94,685	49,388	3,04,340
Hides and Skins	9,085	1,42,001	7,253	1,03,338
Liquors	1,882	22,285	1,499	15,964
Metals	3,919	40,921	3,206	35,838
Oils	3,405	35,103	2,923	27,028
Oil Seeds	5,707	38,103	15,279	92,331
Provisions	10,811	85,637	12,060	97,391
Railway Plant and Rolling Stock...	381	1,704	465	2,897
Salt	3,146	10,992	2,103	8,837
Spices	6,368	58,942	5,515	54,519
Sugar	8,483	61,549	11,802	52,336
Timber	26,165	1,06,746	27,486	84,351
Tobacco	2,430	23,633	2,430	22,826
All other Articles of Merchandise.	10,923	1,62,593	12,320	1,43,770

40. ABSTRACT OF COMMODITIES.—A detailed statement of the principal commodities carried during the half-years under review will be found printed on pages 20, 21 and 22 of the Capital and Revenue Accounts prepared by the Chief Auditor for the half-year ending June 1898.

Under Office Establishment the increase was due to the Office Manager having reverted from an acting appointment to his own duties; to periodical increases; and to the appointment of a Clerk to check the Guards' new mileage allowances. Travelling allowances—Increase due to the return of Officers from furlough and to Officers on special duty.

Station Staff—Increase due to the opening of new stations and to increased Staff for the Gold Fields Railway and for Bangalore City Joint Station.

Guards—Increase due to the new mileage allowances.

41. WORKING EXPENSES.—A detailed comparison of the working expenses of the Traffic Department for the last three half-years will be found in Appendix 20.

APPENDICES.

The undermentioned statements are enclosed :—

1. Coaching Traffic Receipts in each month.
2. Goods do. do.
3. Comparison of Coaching Receipts for 1897 and 1898.
4. Do. Goods do. do.
5. Average Receipts per mile open and per mile run during 1897 and 1898.
6. Expenditure table for 1897 and 1898.
7. Percentage of Working Expenses for 1897 and 1898.
8. Do. Revenue do. do.
9. Passenger traffic exclusive of return fares and soldiers for 1898.
10. Average of Passenger traffic exclusive of return fares do. do.
11. Passenger traffic inclusive of return fares but exclusive of soldiers for 1898.
12. Average of Passenger traffic do. do. do.

13. Return fare traffic for 1898.
14. Comparison of Passenger traffic inclusive of return fares but exclusive of soldiers for 1897 and 1898.
15. Comparison of Passenger traffic exclusive of return fares and soldiers for 1897 and 1898.
16. Comparison of return fare traffic for 1897 and 1898.
17. Parcels, Treasure and Passengers' luggage for 1897 and 1898.
18. Gross Earnings and Tonnage of Goods traffic.
19. Comparison of Goods traffic for 1897 and 1898.
20. Comparative statement of Traffic Expenses for 1897 and 1898.
21. Table of Coaching traffic in and out at stations for 1897 and 1898.
22. Table of Goods do. do. do. do.

I have the honor to be,

Sir,

Your obedient Servant,

(Signed) F. W. READ,

Traffic Manager.

APPENDIX

TO

TRAFFIC MANAGER'S HALF-YEARLY REPORT FOR 30th JUNE 1898.

1. *Coaching Traffic receipts in each month for the half-year ending 30th June* 1898.

Months.	Passengers.		Passengers' luggage.		Carriages, horses and dogs.		Parcels.		Special trains.	Miscellaneous.	Haulage of post office vehicles.	Total.
	Passengers and season tickets.	Troops and Police.	Ordinary.	Military.	Ordinary.	Military.	Ordinary.	Revenue.				
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.
January ...	3,04,824	13,811	10,526	2,102	6,242	821	22,628	472	...	62	4,080	3,65,568
February ...	2,74,228	10,070	9,663	2,898	5,027	1,104	22,400	558	...	184	4,064	3,30,196
March ...	2,99,632	17,960	11,383	2,374	6,900	612	26,007	541	...	46	4,068	3,69,523
April ...	3,02,512	18,340	11,483	3,753	10,964	1,141	27,205	421	...	476	4,070	3,80,365
May ...	3,25,971	13,949	16,411	5,759	6,536	800	29,767	451	...	114	4,082	4,03,840
June ...	3,31,968	10,635	10,962	2,984	5,891	811	28,584	549	...	120	4,070	3,96,574
Total...	18,39,135	84,765	70,428	19,870	41,560	5,289	1,56,591	2,992	...	1,002	24,434	22,46,066

2. *Goods Traffic receipts in each month for the half-year ending 30th June* 1898.

Months.	Merchandise and military stores and coal for the public.	Railway materials for construction.	Revenue stores.	Live Stock.		Rents and demurrage.	Miscellaneous.	Total.
				Ordinary.	Military.			
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
January ...	5,21,730	432	8,417	1,418	2,531	964	769	5,36,261
February ...	4,77,902	732	10,865	1,719	1,912	897	577	4,94,604
March ...	5,60,809	...	12,367	1,123	1,038	1,136	515	5,76,988
April ...	5,37,951	1,678	9,330	1,534	598	1,126	611	5,52,828
May ...	5,43,681	381	11,658	1,563	1,393	1,210	542	5,60,368
June ...	5,31,756	680	15,246	1,215	1,146	857	517	5,51,417
Total...	31,73,829	3,903	67,883	8,512	8,618	6,190	3,531	32,72,466

3. *Comparison of the Coaching traffic for the half-years ending June and December* 1897 *and June* 1898.

Half-years.	Passengers.		Passengers' luggage.		Carriages, horses and dogs.		Parcels.		Special trains.	Miscellaneous.	Haulage of post office vehicles.	Total.
	Passengers and season tickets.	Troops and Police.	Ordinary.	Military.	Ordinary.	Military.	Ordinary.	Revenue.				
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
June 1897...	19,28,335	58,617	73,354	9,801	43,978	3,925	1,43,105	3,009	569	564	24,438	22,89,695
December 1897...	18,45,458	78,222	62,788	24,207	33,467	4,434	1,69,623	3,370	366	971	24,917	22,47,823
June 1898...	18,39,135	84,765	70,428	19,870	41,560	5,289	1,56,591	2,992	...	,002	24,434	22,46,066

4. *Comparison of the Goods traffic for the half-years ending June and December* 1897 *and June* 1898.

Half-years.	Merchandise and military stores and coal for the public.	Railway material for construction.	Revenue stores.	Live Stock.				Rents and demurrage.	Miscellaneous.	Total.
				Ordinary.		Military.				
				Horses.	Other live stock.	Horses.	Other live stock.			
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
June 1897...	32,96,519	3,896	64,933	3,633	8,444	8,436	...	6,177	3,688	33,95,726
December 1897...	31,96,980	871	64,929	3,359	6,543	9,686	...	7,025	4,044	32,93,437
June 1898...	31,73,829	3,903	67,883	2,162	6,350	8,618	...	6,190	3,531	32,72,466

5. *Average receipt per "mile open" and per "mile run" for the same periods.*

Period.	Per mile open.	Per mile run.
	Rs.	Rs.
Half-year ending June 1897	6,892·34	4·59
Do. do. December 1897	6,756·85	4·30
Do. do. June 1898	6,708·02	4·45

6. *Table of expenditure for the half-years ending June and December* 1897 *and June* 1898.

Period.	Permanent way.	Locomotive.	Repairs to carriages and wagons.	Traffic.	General charges.	Special and miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Half-year ending June 1897	6,20,106	10,38,798	2,89,436	4,04,684	2,84,635	62,267	26,99,926
Do. do. December 1897	6,27,504	10,79,084	3,11,387	4,21,155	2,82,841	41,229	27,63,200
Do. do. June 1898	5,41,515	9,57,248	2,30,042	4,19,982	2,86,478	42,582	24,77,847

7. *Percentage of working expenses for the same periods.*

Period.	Permanent way.	Locomotive.	Repairs to carriages and wagons.	Traffic.	General charges.	Special and miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Half-year ending June 1897	22·97	38·47	10·72	14·99	10·54	2·31	100·00
Do. do. December 1897	22·71	39·05	11·27	15·24	10·24	1·49	100·00
Do. do. June 1898	21·86	38·63	9·28	16·95	11·56	1·72	100·00

8. *Percentage of revenue for the same periods.*

Period.	Permanent way.	Locomotive.	Repairs to carriages and wagons.	Traffic.	General charges.	Special and miscellaneous.	Profits.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Half-year ending June 1897...	10·71	17·94	5·00	6·99	4·92	1·07	53·37	100·00
Do. do. Dec. 1897...	11·05	19·01	5·49	7·42	4·98	0·73	51·32	100·00
Do. do. June 1898...	9·61	16·99	4·08	7·45	5·08	0·76	56·03	100·00

9. *Passenger traffic, exclusive of return fares and soldiers, in each month for the half-year ending June* 1898.

Months.	First class.		Second class.		Third class.		Total.	
	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.
Jrnuary ...	1,596	15,182	5,717½	18,165	696,772	2,66,292	704,085½	2,99,639
February ...	1,492	14,604	4,591	13,659	653,712½	2,41,852	659,795½	2,70,115
March ...	1,703½	16,776	5,015	14,552	772,626½	2,65,914	779,345	2,97,242
April ...	1,747½	18,826	5,497	18,002	708,663½	2,62,033	715,908	2,98,861
May ...	1,354	13,917	5,865½	20,107	759,824½	2,89,764	767,044	3,23,788
June ...	1,513	15,054	5,702½	17,958	764,846½	2,90,737	772,062	3,23,749
Total...	9,406	94,359	32,388½	1,02,443	4,356,445½	16,16,592	4,398,240	18,13,394

10. *Average of passenger traffic, exclusive of return fares and soldiers for the half-year ending June* 1898.

	Average miles open.	First class.	Second class.	Third class.	Total.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Average receipt per mile open ...	840	112 5 4	121 15 4	1,924 8 3	2,158 12 11
Average percentage of numbers ...	...	0·21	0·74	99·05	100·00
Average mileage of passengers ...	...	161	101	33	...
Average percentage of receipts ...	...	5·20	5·65	89·15	100·00

11. *Passenger traffic in each month, inclusive of return fares, but exclusive of soldiers, for the half-year ending June* 1898.

Months.	First class.		Second class.		Third class.		Total.	
	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.
January ...	1,847	17,252	7,815½	19,032	747,389	2,68,540	757,051½	3,04,824
Eebruary ...	1,725	14,999	5,980	14,091	693,827½	2,45,138	701,532½	2,74,228
March ...	1,721½	17,058	6,275	15,044	796,977½	2,67,530	804,974	2,99,632
April ...	2,164½	19,579	8,984	19,085	759,679½	2,63,848	770,828	3,02,512
May ...	1,398	14,066	8,152½	21,089	773,050½	2,90,816	782,601	3,25,971
June ...	1,641	15,486	9,515½	19,737	829,433½	2,96,744	840,590	3,31,967
Total...	10,497	98,440	46,722½	1,08,078	4,600,357½	16,32,616	4,657,577	18,39,134

12. *Average of passenger traffic, inclusive of return fares, but exclusive of soldiers, for the half-year ending 30th June 1898.*

	Miles open.	First class.	Second class.	Third class.	Total.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Average receipt per mile open ...	840	117 3 1	128 10 7	1,943 9 5	2,189 7 1
Average percentage of numbers ...	...	0·23	1·00	98·77	100·00
Average mileage of passengers ...	...	164	103	32	...
Average percentage of receipts ...	...	5·35	5·88	88·77	100·00

13. *Return fare traffic for the half-year ending 30th June 1898.*

Months.	Periodical tickets.								Return tickets.							
	First class.		Second class.		Third class.		Total.		First class.		Second class.		Third class.		Total.	
	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.
January ...	120	2	1,880	616	44,960	663	46,960	1,281	131	2,067	218	251	5,657	1,586	6,006	3,904
February.	222	244	1,355	286	28,256	441	29,833	971	11	151	34	146	11,859	2,845	11,904	3,142
March ...	...	...	1,231	293	18,160	323	19,391	616	18	282	29	199	6,191	1,293	6,238	1,774
April ...	400	362	3,440	856	47,040	582	50,880	1,800	17	391	47	227	3,976	1,233	4,040	1,851
May ...	40*	60	2,240	724	9,840	196	12,120	980	4	89	47	258	3,386	856	3,437	1,203
June ...	120	180	3,800	1,664	58,160	4,324	62,080	6,168	8	252	13	115	6,427	1,683	6,448	2,050
Total...	902	848	13946	4,439	206,416	6,529	221,264	11816	189	3,232	388	1,196	37,496	9,496	38,073	13,924

14. *Comparison of the passenger traffic, inclusive of return fares, but exclusive of soldiers, for the half-years ending June and December 1897 and June 1898.*

Half-years.	First class.		Second class.		Third class.		Total.	
	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.
Half-year ending June 1897	12,869½	1,03,125	45,484	1,06,687	5,057,896½	17,18,521	5,116,250	19,28,333
Do. do. December 1897	11,189	83,571	45,403	98,665	4,821,593	16,63,223	4,878,185	18,45,459
Do. do. June 1898	10,497	98,440	46,722½	1,08,078	4,600,357½	16,32,616	4,657,577	18,39,134

15. *Comparison of the passenger traffic, exclusive of return fares and soldiers, for the half-years ending June and December 1897 and June 1898.*

Period.	First class.		Second class.		Third class.		Total.	
	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.
June 1897	10,366½	1,00,019	33,394	1,02,427	4,825,049½	17,05,256	4,868,810	19,07,702
December 1897	8,633	79,789	31,210	92,522	4,596,385	16,51,731	4,636,228	18,24,042
June 1898	9,406	94,359	32,388½	1,02,443	4,356,445½	16,16,592	4,398,240	18,13,394

16. *Comparison of the return fare traffic for the half-years ending June and December 1897 and June 1898.*

Period.	First class.		Second class.		Third class.		Total.	
	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.
Half-year ending June 1897. Trivellore ...	...	...	...	...	**25,376**	**6,300**	**25,376**	**6,300**
Half-year ending June 1897. Other excursions ...	2,503	2,848	12,090	4,086	207,471	6,256	222,064	13,190
Half-year ending December 1897. Trivellore ...	...	...	...	...	**9,087**	**2,249**	**9,087**	**2,249**
Half-year ending December 1897. Other excursions ...	2,556	3,785	14,193	6,142	216,121	9,239	232,870	19,166
Half-year ending June 1898. Trivellore ...	...	...	...	...	**26,767**	**6,471**	**26,767**	**6,471**
Half-year ending June 1898. Other excursions	1,091	4,080	14,334	5,635	217,145	9,554	232,570	19,269

17. *Parcels, treasure and passengers luggage for the half-years ending June and December 1897 and June 1898.*

Period.	Parcels.			Luggage.				
				Ordinary.		Military.		Total.
	No.	Rs.	Revenue parcels.	Public.	Treasure	By ordinary trains.	By troop trains.	
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
June 1897 ...	199,722	1,43,105	3,009	41,020	32,334	6,469	3,331	83,154
December 1897 ...	200,604	1,69,622	3,370	36,331	26,457	5,351	18,856	86,995
June 1898 ...	233,188	1,56,591	2,992	39,211	31,217	5,695	14,175	90,298

18. *Gross earnings and tonnage of goods, exclusive of Railway materials and Revenue stores, for the half-year ending 30th June 1898.*

Months.	Tons.	Rupees.
January	79,075	5,21,730
February	73,429	4,77,901
March	86,415	5,60,809
April	80,659	5,37,951
May	83,678	5,43,680
June	78,124	5,31,758
Total ...	481,380	31,73,829

19. *Comparison of the goods traffic, exclusive of Railway materials and Revenue stores, for the half-years ending June and December 1897 and June 1898.*

Period.	Tons.	Rupees.
Half-year ending June 1897	499,818	32,96,519
Do. do. December 1897	509,286	31,96,980
Do. do. June 1898	481,380	31,73,829

20. *Comparative statement of the traffic expenses, for the half-years ending June and December 1897 and June 1898.*

Period.	Traffic Manager and Assistants.	Office establishment.	Travelling allowances.	Contingencies.	Station Masters, Clerks and Porters.	Guards and Assistant Guards and Overtime allowances.	Fire, lights, water and general stores.	Wagon covers & ropes.	Office and station fittings and furniture.	Clothing of Guards and Porters.	Printing, stationery and tickets.	Miscellaneous.	Traffic expenses at joint stations.	Loss on exchange.	Carriage of Revenue stores.	Charges for delivery and collection of goods.	Deduct Cost of Working K. G. F. S. and Madras-Ennur Railways.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1897 June	43,191	23,553	3,327	485	1,95,672	52,945	36,119	1,983	162	5,426	33,678	2,756	7,248	4,766	1,432	1,284	9,343	4,04,684
1897 Dec.	44,355	23,749	3,660	438	1,98,524	61,972	36,913	2,449	1,514	5,951	36,732	2,728	7,684	2,154	1,765	943	10,376	4,21,155
1898 June	43,015	24,190	4,470	572	1,96,829	62,094	38,008	2,319	511	6,050	36,315	2,974	6,473	3,533	1,165	1,334	9,870	4,19,982

MADRAS RAILWAY,
TRAFFIC MANAGERS OFFICE,
Madras, 25th October, 1898.

(Signed) F. W. READ,
Traffic Manager.

21. *The following Table shows the Coaching Traffic in and out of the following Stations on the Madras Railway for the half-years ending 30th June 1897 and 1898.*

These figures are compiled from the Chief Auditor's Return T. A. No. 44, the actual Numbers of Passengers and Coaching Receipts being extracted.

STATIONS.	Number of Passengers.						Coaching Receipts.					
	1897.			1898.			1897.			1898.		
	Inwards.	Outwards.	Total.	Inwards.	Outwards.	Total.	Inwards.	Outwards.	Total.	Inwards.	Outwards.	Total.
	No.	No.	No.	No.	No.	No.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Madras	319,247	313,613	632,860	321,239	307,716	628,955	3,32,870	3,86,957	7,19,827	3,45,310	3,69,587	7,14,897
Salt Cotaurs	...	...	...	...	...	...	...	...	...	...	...	...
Rayapuram	85,293	98,862	184,155	99,192	115,997	215,189	5,225	17,927	23,152	4,328	15,169	19,497
Washermanpet Junction	87,448	101,987	189,435	114,689	130,257	244,946	8,489	20,247	28,736	7,341	16,989	24,330
Veyasarpaudy	6,087	9,052	15,139	6,216	7,926	14,142	132	543	675	160	407	567
Perambur	132,086	158,855	290,941	193,402	212,460	405,862	9,166	24,037	33,203	6,921	20,046	26,967
Connur	46,626	48,438	95,064	34,446	35,117	69,563	3,057	3,753	6,810	2,514	2,965	5,479
Ambattur	22,627	20,862	43,489	18,141	17,297	35,438	1,995	2,039	4,034	1,811	1,769	3,580
Avadi	68,498	67,521	136,019	57,697	59,075	116,772	10,252	11,272	21,524	9,373	13,148	22,521
Tinnanur	46,600	46,962	93,562	37,468	37,425	74,893	6,762	7,002	13,764	5,778	5,983	11,761
Sevvapet Road	19,944	20,541	40,485	18,922	19,613	38,535	3,136	3,217	6,353	3,056	3,210	6,266
Trivellore	143,063	104,715	247,778	121,898	90,795	212,693	36,702	25,236	61,938	31,109	22,675	53,784
Kadambattur	24,707	25,552	50,259	23,668	25,273	48,941	4,437	4,728	9,165	4,377	5,063	9,440
Manur	13,193	14,096	27,289	11,230	12,857	24,087	1,881	2,224	4,105	1,773	2,205	3,978
Chinnamapet	13,312	12,811	26,123	13,316	12,825	26,141	2,610	2,660	5,270	2,814	2,746	5,560
Mosur	5,501	5,731	11,232	5,311	5,862	11,173	784	981	1,765	820	1,089	1,909
Arkonam Junction	160,388	156,337	316,725	119,187	116,052	235,239	68,976	64,942	1,33,918	53,720	49,007	1,02,727
Tiruttani	69,335	63,001	132,336	58,850	50,433	109,283	12,924	11,274	24,198	13,169	11,338	24,507
Ponpadi	9,357	9,890	19,247	7,571	8,343	15,914	778	920	1,698	785	1,097	1,882
Nagari	39,511	40,208	79,719	33,583	33,909	67,492	7,210	7,597	14,807	6,836	7,182	14,018
Vepagunta	6,699	7,414	14,113	5,929	6,442	12,371	940	1,150	2,090	844	1,074	1,918
Puttur	37,340	38,632	75,972	33,954	35,154	69,108	7,137	7,720	14,857	6,739	7,455	14,194
Taduku *	...	...	...	1,583	2,314	3,897	...	...	...	246	395	641
Pudi	21,787	23,737	45,524	20,474	21,378	41,852	3,998	4,489	8,487	3,932	4,352	8,284
Renigunta Junction	74,022	73,625	147,647	63,313	62,049	125,362	42,104	45,881	87,985	36,467	37,272	73,739
Mamanduru	3,682	3,372	7,054	1,981	2,004	3,985	499	565	1,064	243	334	577
Peddapadu	6,628	6,646	13,274	5,658	5,560	11,218	1,327	1,474	2,801	1,161	1,232	2,393
Koduru	17,625	17,521	35,146	15,881	16,045	31,926	4,925	4,797	9,722	4,629	4,596	9,225
Urampadu	8,878	8,699	17,577	9,619	9,748	19,367	1,523	2,110	3,633	1,751	2,912	4,663
Reddipalli	14,541	15,001	29,542	12,366	13,231	25,597	3,051	3,409	6,460	2,778	3,284	6,062
Razampeta	26,877	26,712	53,589	27,032	26,613	53,645	8,068	8,049	16,117	7,721	7,514	15,235
Nandalur	20,478	20,152	40,630	23,522	22,999	46,521	4,960	5,073	10,033	5,860	5,918	11,778
Vontimitta	21,590	21,590	43,180	20,140	19,882	40,022	5,177	6,056	11,233	4,583	5,213	9,796
Siddhavattam	1,871	2,459	4,330	1,717	2,215	3,932	809	373	1,182	204	308	512

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Cuddapah	58,658	59,774	118,432	51,709	52,011	103,720	31,671	34,033	65,704	28,372	27,512	55,884
Krishnapuram	14,780	12,565	27,345	10,922	10,574	21,496	2,203	2,311	4,514	1,884	2,060	3,944
Gangayapalli	11,472	11,976	23,448	9,009	8,522	17,531	1,259	1,418	2,677	1,285	1,262	2,547
Kamalapuram	19,951	20,679	40,630	18,295	18,216	36,511	4,172	4,333	8,505	4,356	4,539	8,895
Yerragudipadu	4,956	5,406	10,362	4,531	4,698	9,229	672	939	1,611	674	865	1,539
Yerraguntla	23,906	23,321	47,227	21,668	20,953	42,621	10,875	11,409	22,284	11,045	9,784	20,829
Kalamala	5,316	4,947	10,263	4,840	4,713	9,553	1,007	1,154	2,161	993	1,162	2,155
Muddanuru	15,537	15,536	31,073	13,369	13,883	27,252	6,428	5,859	12,287	4,896	5,407	10,303
Mangapatnam	3,882	4,046	7,928	3,231	3,237	6,468	694	1,000	1,694	650	783	1,433
Kondapuram	10,340	10,219	20,559	8,938	8,722	17,660	3,373	3,374	6,747	2,969	2,843	5,812
Regadipalli	3,825	4,070	7,895	4,105	4,061	8,166	628	935	1,563	861	971	1,832
Vanganur	5,731	5,698	11,429	5,025	4,901	9,926	1,457	1,578	3,035	1,309	1,358	2,667
Tadpatri	29,980	30,464	60,444	27,659	27,729	55,388	11,769	11,042	22,811	11,701	10,553	22,254
Penneru	11,332	10,358	21,690	9,916	9,722	19,638	2,075	1,985	4,060	1,931	1,951	3,882
Rayalcheruvu	15,163	15,533	30,696	12,907	13,462	26,369	3,327	3,387	6,714	3,0 2	3,275	6,357
Jakkulacheruvu	4,624	4,753	9,377	3,817	4,537	8,354	736	848	1,584	767	891	1,658
Gooty	39,045	38,420	77,465	35,975	34,566	70,541	12,006	14,322	26,328	14,933	14,046	28,979
Patakottacheru	5,324	5,780	11,104	4,306	4,529	8,835	687	787	1,474	630	767	1,397
Timmancherla	12,437	12,746	25,183	10,648	10,730	21,378	3,092	3,128	6,220	3,059	3,195	6,254
Guntakal Junction	41,005	35,399	76,404	29,625	25,109	54,734	34,496	26,085	60,581	25,858	21,383	47,241
Nancherla	3,383	3,488	6,871	3,808	3,683	7,491	798	840	1,638	1,029	971	2,000
Molagavalli	4,033	3,907	7,940	3,636	3,530	7,166	675	802	1,477	674	684	1,358
Aspari	7,639	7,762	15,401	5,911	5,554	11,465	1,706	1,821	3,527	1,118	1,113	2,231
Nagarur	4,017	4,409	8,426	3,723	3,231	6,954	510	617	1,127	501	503	1,004
Adoni	53,927	53,878	107,805	41,936	43,184	85,120	20,631	18,341	38,972	18,362	15,057	33,419
Kupgal	12,449	11,249	23,698	7,814	6,982	14,796	1,621	1,774	3,395	1,048	1,041	2,089
Kosgi	18,225	18,187	36,412	13,352	14,485	27,837	3,734	3,614	7,348	2,701	3,201	5,902
Tungabhadra	10,753	10,577	21,330	6,270	6,844	13,114	3,405	2,850	6,255	1,819	2,042	3,861
Matmari	12,668	12,902	25,570	6,376	5,865	12,241	1,917	2,095	4,012	1,050	1,029	2,079
Raichur Junction	27,465	28,397	55,862	17,587	17,446	35,033	29,049	28,137	57,186	21,862	20,665	42,527
Munnal	14,251	15,576	29,827	13,533	14,070	27,603	1,925	2,701	4,626	2,199	2,813	5,012
Sholinghur	29,231	29,142	58,373	28,384	28,012	56,396	8,584	8,425	17,009	9,439	9,913	19,352
Thalangai	2,921	3,781	6,702	2,786	3,770	6,556	292	469	761	287	561	848
Arcot	77,609	75,895	153,504	75,984	73,503	149,487	32,900	32,800	65,700	34,226	34,391	68,617
Ponnai Road	4,655	6,547	11,202	5,004	7,174	12,178	386	941	1,327	493	1,170	1,663
Tiruvalam	18,357	19,556	37,913	17,582	18 727	36,309	6,227	7,586	13,813	6,606	8,757	15,363
Katpadi Junction	142,429	130,077	272,506	135,813	123,888	259,701	73,862	67,747	1,41,609	73,497	68,737	1,42,234
Latteri	5,890	7,937	13,827	5,985	7,543	13,528	581	1,026	1,607	625	1,072	1,697
Virinchipuram	19,471	19,681	39,152	18,414	19,701	38,115	4,818	74,63	12,281	4,967	6,249	11,216
Kavanur †	...	...	...	1,094	1,796	2,890	...	...	...	114	313	427
Gudiyattam	61,054	59,001	120,055	56,555	53,257	109,812	17,132	18,730	35,862	17,484	18,354	35,838
Valathoor	15,358	12,901	28,259	14,828	12,749	27,577	2,527	2,574	5,101	3,182	2,792	5,974
Mailpatti	26,789	30,388	57,177	24,767	28,464	53,231	7,217	7,846	15,063	6,750	7,902	14,652
Ambur	60,259	62,855	123,114	53,858	55,930	109,788	14,740	26,069	40,809	14,244	22,476	36,720
Vinnamangalam	5,408	7,115	12,523	4,919	6,912	11,831	525	1,171	1,696	593	1,179	1,772
Vaniyambadi	77,018	76,183	153,201	70,234	69,692	139,926	21,362	20,989	42,351	20,845	21,306	42,151

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* Opened 15th September 1897.

† Opened 5th May 1898.

21. *The following Table shows the Coaching Traffic in and out of the following Stations on the Madras Railway*

The following Table shows the Coaching Traffic in and out of the following Stations on the Madras Railway for the half-years ending 30th June 1897 and 1898—continued.

STATIONS.	Number of Passengers.						Coaching Receipts.					
	1897.			1898.			1897.			1898.		
	Inwards.	Outwards.	Total.	Inwards.	Outwards.	Total.	Inwards.	Outwards.	Total.	Inwards.	Outwards.	Total.
	No.	No.	No.	No.	No.	No.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Kettandapatti	8,234	9,571	17,805	8,146	9,320	17,466	825	1,390	2,215	830	1,340	2,170
Jalarpet Junction	84,037	81,550	165,587	83,085	79,581	162,666	29,800	29,915	59,715	29,465	29,496	58,961
Patchur	14,340	16,175	30,515	14,145	16,189	30,334	3,003	4,564	7,567	2,960	4,383	7,343
Mulanur	7,722	7,374	15,096	6,953	7,065	14,018	707	880	1,587	717	997	1,714
Kuppam	35,937	37,123	73,060	33,985	33,692	67,677	9,738	9,700	19,438	9,814	9,818	19,632
Gudupalli	9,992	11,992	21,984	8,133	10,043	18,176	1,310	2,155	3,465	1,144	2,025	3,169
Bisanattam	14,142	13,985	28,127	15,720	15,427	31,147	4,408	5,434	9,842	6,207	6,880	13,087
Kamasamudram	20,907	19,742	40,649	18,447	17,301	35,748	4,381	3,386	7,767	4,959	4,045	9,004
Bowringpet Junction	82,316	72,686	155,002	73,420	67,033	140,453	43,183	32,319	75,502	42,689	32,573	75,262
Tyakal	22,008	22,142	44,150	18,669	18,186	36,855	3,197	3,185	6,382	2,932	2,914	5,846
Malur	38,082	36,945	75,027	32,462	31,289	63,751	14,327	14,815	29,142	12,777	12,707	25,484
Devankundi	17,738	17,543	35,281	14,996	14,756	29,752	2,880	2,963	5,843	2,559	2,524	5,083
Whitefield	36,229	32,707	68,936	30,065	26,402	56,467	6,170	5,575	11,745	5,568	4,801	10,369
Krishnarajapuram	19,615	22,552	42,167	16,022	16,983	33,005	2,620	3,522	6,142	2,618	3,114	5,732
Bangalore Cantonment	140,343	94,761	235,104	135,716	92,407	228,123	1,76,946	1,18,119	2,95,065	1,78,101	1,16,336	2,94,437
Do. City Junction	44,648	72,669	117,317	38,807	69,329	108,136	21,474	55,148	76,622	15,498	53,729	69,227
Do. Pettah	...	14,925	14,925	...	12,079	12,079	7	13,275	13,282	13	11,319	11,332
Tirupattur	74,828	70,958	145,786	69,916	67,668	137,584	26,450	24,865	51,315	25,159	23,652	48,811
Kagankarai	11,112	11,894	23,006	10,327	11,202	21,529	1,596	1,856	3,452	1,747	1,820	3,567
Samalpatti	14,761	14,588	29,349	14,726	14,120	28,846	4,286	4,444	8,730	4,662	4,662	9,324
Kallavi	8,918	9,796	18,714	8,001	8,666	16,667	1,815	2,054	3,869	1,667	1,823	3,490
Morappur	21,584	20,511	42,095	21,685	20,663	42,348	8,922	7,993	16,915	9,379	8,484	17,863
Buddireddippatti	7,598	7,273	14,871	6,322	6,358	12,680	1,975	2,003	3,978	1,769	1,995	3,764
Mallapuram	12,814	12,879	25,693	12,556	12,401	24,957	3,972	4,017	7,989	4,239	4,043	8,282
Lokur	2,492	2,154	4,646	2,074	1,460	3,534	260	322	582	221	227	448
Kadiampatti	9,617	10,359	19,976	9,360	10,340	19,700	2,089	2,076	4,165	1,857	1,959	3,816
Thinnappatti	13,676	12,800	26,476	12,003	11,360	23,363	1,831	2,016	3,847	2,038	2,141	4,179
Salem	88,633	86,741	175,374	81,200	79,101	160,301	58,234	60,489	1,18,723	54,157	56,597	1,10,754
Ariyanur	6,441	8,939	15,380	5,434	7,669	13,103	913	1,493	2,406	884	1,362	2,246
McDonald's Choultry	15,687	16,798	32,485	16,437	16,845	33,282	2,890	3,347	6,237	3,362	3,669	7,031
Sankaridrug	31,817	29,751	61,568	29,301	27,088	56,389	7,226	7,130	14,356	7,100	6,708	13,808
Anangur	6,774	6,378	13,152	5,417	5,185	10,602	600	585	1,185	541	573	1,114
Cauvery	10,005	14,571	24,576	4,527	4,796	9,323	1,000	1,455	2,455	698	970	1,668
Erode Junction	104,733	99,921	204,654	89,277	88,992	178,269	58,061	52,140	1,10,201	54,686	49,271	1,03,957
Totiapalaiyam	2,900	3,838	6,738	2,145	2,716	4,861	238	364	602	186	297	483

Perundurai...	24,586	20,606	45,192	21,407	18,200	39,607	5,179	4,209	9,388	4,955	3,987	8,942
Ingur	4,364	5,812	10,176	5,677	6,721	12,398	718	1,371	2,089	1,295	1,744	3,039
Viziamangalam	7,361	7,469	14,830	6,477	6,679	13,156	1,809	1,834	3,643	1,619	1,686	3,305
Uttukuli	14,454	15,098	29,552	14,536	14,533	29,069	3,925	4,128	8,053	4,137	4,150	8,287
Kulipalaiyam	2,109	3,065	5,174	2,159	2,911	5,070	279	478	757	358	593	951
Tiruppur	43,893	40,606	84,499	42,456	40,017	82,473	18,586	16,372	34,958	18,923	17,287	36,210
Dharapuram Out-Agency * ...	...	...	...	...	...	...	...	...	...	...	...	...
Mangalam	20,239	18,302	38,541	20,434	19,096	39,530	5,525	5,106	10,631	5,699	5,429	11,128
Somanur	11,990	11,972	23,962	11,114	11,619	22,733	2,690	2,739	5,429	2,724	2,697	5,421
Sulur	13,170	14,086	27,256	14,487	14,585	29,072	2,785	3,099	5,884	3,421	3,533	6,954
Singanallur...	12,443	12,328	24,771	10,837	10,980	21,817	2,459	2,506	4,965	2,373	2,422	4,795
Podanur Junction	69,086	69,506	138,592	77,688	77,171	154,859	17,449	18,621	36,070	18,703	19,950	38,653
Coimbatore...	131,592	125,299	256,891	140,726	132,738	273,464	52,352	48,675	1,01,027	55,899	51,419	1,07,318
Tudiyalur	15,638	15,965	31,603	15,536	16,563	32,099	2,011	2,145	4,156	2,365	2,575	4,940
Periyanayakkanpalaiyam	10,188	11,952	22,140	9,628	11,341	20,969	1,181	1,429	2,610	1,212	1,485	2,697
Karaimadai...	23,788	21,647	45,435	31,913	27,064	58,977	3,520	3,364	6,884	5,162	4,441	9,603
Mettupalaiyam	66,789	68,959	135,748	64,874	70,144	135,018	1,02,494	64,883	1,67,377	1,11,072	66,131	1,77,203
Madukarai	7,504	8,747	16,251	6,937	8,262	15,199	1,618	1,631	3,249	1,666	1,676	3,342
Walayar	6,081	6,871	12,952	5,103	5,777	10,880	1,100	1,257	2,357	960	1,175	2,135
Kanyikod	11,995	12,854	24,849	11,404	12,440	23,844	3,465	4,035	7,500	3,262	3,823	7,085
Olavakkot Junction	42,846	52,008	94,854	45,600	52,028	97,628	16,580	20,264	36,844	17,629	20,547	38,176
Palghat	48,653	38,613	87,266	48,347	40,413	88,760	30,077	21,163	51,240	29,780	22,695	52,475
Parli	11,478	13,091	24,569	13,095	15,015	28,110	2,944	3,345	6,289	3,090	3,662	6,752
Mankarai	13,085	13,810	26,895	13,336	14,095	27,431	4,358	4,617	8,975	4,531	5,370	9,901
Lakkiti	20,697	21,922	42,619	19,767	21,530	41,297	5,548	5,913	11,461	5,159	5,687	10,846
Ottappalam...	28,565	28,118	56,683	27,427	26,836	54,263	7,880	7,624	15,504	7,601	7,227	14,828
Shoranur	34,695	33,724	68,419	34,761	34,485	69,246	21,891	19,009	40,900	22,479	20,101	42,580
Pattambi	26,609	26,255	52,864	26,272	25,984	52,256	11,038	11,804	22,842	12,660	12,935	25,595
Pallipuram	9,918	10,554	20,472	9,648	10,193	19,841	2,284	2,508	4,792	2,294	2,603	4,897
Kuttippuram	10,227	10,799	21,026	9,388	9,462	18,850	2,714	2,873	5,587	2,692	2,707	5,399
Edakkolam...	15,215	16,816	32,031	13,364	14,447	27,811	4,269	4,764	9,033	4,036	4,332	8,368
Tirur	45,627	44,480	90,107	49,150	47,688	96,838	13,696	14,344	28,040	15,003	15,678	30,681
Tanore	22,262	22,671	44,933	21,067	21,787	42,854	3,418	4,491	7,909	3,426	4,294	7,720
Parpanangadi	45,836	44,992	90,828	44,284	43,452	87,736	6,452	6,651	13,103	7,146	7,382	14,528
Kadalundi	13,262	13,597	26,859	12,484	12,658	25,142	1,341	1,440	2,781	1,331	1,574	2,905
Ferok	57,453	58,919	116,372	49,206	47,948	97,154	6,144	6,705	12,849	5,662	6,209	11,871
Kallayi	25,037	36,004	61,041	29,519	36,368	65,887	4,787	7,918	12,705	5,341	8,659	14,003
Calicut	104,807	93,873	198,680	97,020	94,228	191,248	60,607	55,274	1,15,881	61,367	70,005	1,31,372
Madras-Ennur Railway	36,491	27,428	63,919	35,880	28,044	63,924	1,043	773	1,816	808	683	1,491
Southern Mahratta Railway ...	40,376	46,401	86,777	34,106	39,217	73,323	87,327	74,680	1,62,007	89,329	81,635	1,70,964
Great Indian Peninsula Railway...	16,029	16,673	32,702	13,295	15,820	29,115	1,27,489	88,405	2,15,894	1,19,930	1,02,218	2,22,148
South Indian Railway	67,257	84,095	151,352	60,228	80,191	140,419	83,991	93,912	1,77,903	75,744	92,375	1,68,119
Kolar Gold Fields State Railway...	50,140	53,623	103,763	55,646	57,451	113,097	39,188	55,790	94,978	46,274	61,979	1,08,253

* Opened 9th March 1898.

N.B.—This statement is intended to shew the relative importance of each station on the Madras Railway, but the actual total receipts for any particular section of the Railway cannot be obtained from it.

22. *The following Table shows the Goods Traffic in and out of the following Stations on the Madras Railway for the half-years ending 30th June 1897 and 1898, together with the gross traffic receipts.*

These figures are compiled from the Chief Auditor's Return T. A. No. 44, the Public merchandise and Railway materials being included in one total and maunds converted into tons.

STATIONS.	Tonnage of Goods and Railway Materials.						Goods Receipts.						Gross Receipts, Coaching & Goods, Inwards and Outwards.	
	1897.			1898.			1897.			1898.				
	Inwards.	Outwards	Total.	Inwards.	Outwards.	Total.	Inwards.	Outwards.	Total.	Inwards.	Outwards.	Total.	1897.	1898.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Madras ...	...	...	...	...	...	...	4,303	2,717	7,020	2,815	2,076	4,891	7,26,847	7,19,788
Salt Cotaurs ...	95,993	47,455	143,448	83,181	49,367	132,548	7,44,721	5,63,397	13,08,118	6,94,860	5,46,907	12,41,767	13,08,118	12,41,767
Rayapuram ...	1,567	70,553	72,120	1,999	90,297	92,296	2,134	3,01,022	3,03,156	1,239	3,80,474	3,81,713	3,26,308	4,01,210
Washermanpet Junc.	1	...	1	1	...	1	9	16	25	21	11	32	28,761	24,362
Veyasarpaudy ...	...	...	...	...	...	...	...	...	...	...	...	...	675	567
Perambur ...	2,152	392	2,544	553	346	899	3,988	2,286	6,274	1,620	5,738	7,358	39,477	34,325
Connur ...	76	20	96	34	31	65	640	35	675	31	43	74	7,485	5,553
Ambattur ...	35	7,331	7,366	71	3,942	4,013	50	3,797	3,847	41	2,233	2,274	7,881	5,854
Avadi ...	326	6,099	6,425	270	2,630	2,900	2,746	6,122	8,868	1,273	1,876	3,149	30,392	25,670
Tinnanur ...	102	62	164	75	65	140	395	176	571	227	125	352	14,335	12,113
Sevvapet Road ...	104	22	126	85	25	110	298	103	401	238	110	348	6,754	6,614
Trivellore ...	1,160	744	1,904	808	1,082	1,890	5,129	2,463	7,592	3,466	1,947	5,413	69,530	59,197
Kadambattur ...	238	479	717	240	820	1,060	1,134	1,282	2,416	853	1,797	2,650	11,581	12,090
Manur ...	37	195	232	42	194	236	150	449	599	160	446	606	4,704	4,584
Chinnamapet ...	138	923	1,061	126	807	933	474	1,567	2,041	457	1,500	1,957	7,311	7,517
Mosur ...	10	39	49	11	32	43	41	117	158	46	100	146	1,923	2,055
Arkonam Junction...	1,127	1,857	2,984	1,120	1,610	2,730	4,787	7,602	12,389	5,113	6,614	11,727	1,46,307	1,14,454
Tiruttani ...	1,376	1,592	2,968	1,146	1,307	2,453	6,305	4,567	10,872	5,624	3,904	9,528	35,070	34,035
Ponpadi ...	20	94	114	18	80	98	99	338	437	89	261	350	2,135	2,232
Nagari ...	882	1,622	2,504	1,016	1,951	2,967	3,914	6,019	9,933	4,661	5,106	9,767	24,740	23,785
Vepagunta ...	33	52	85	15	54	69	117	230	347	85	241	326	2,437	2,244
Puttur ...	574	2,177	2,751	533	1,652	2,185	2,210	7,103	9,313	1,849	6,169	8,018	24,170	22,212
Taduku * ...	...	...	...	1	21	22	...	...	...	3	40	43	...	684
Pudi ...	240	561	801	190	535	725	894	2,713	3,607	635	1,984	2,619	12,094	10,903
Renigunta Junction..	424	3,454	3,878	1,091	2,168	3,259	2,311	11,974	14,285	5,659	7,638	13,297	1,02,270	87,036
Mamanduru ...	4	295	299	1	254	255	41	1,149	1,190	4	906	910	2,254	1,487
Peddapadu ...	43	1,567	1,610	47	1,494	1,541	164	6,214	6,378	195	5,590	5,785	9,179	8,178
Koduru ...	511	1,331	1,842	439	669	1,108	1,941	7,317	9,258	1,865	3,990	5,855	18,980	15,080
Urampadu ...	36	302	338	38	617	655	170	1,419	1,589	216	3,864	4,080	5,222	8,743
Reddipalli ...	141	400	541	116	388	504	555	2,789	3,344	436	2,839	3,275	9,804	9,337
Razampeta ...	1,412	1,834	3,246	1,360	1,700	3,060	8,214	13,357	21,571	8,206	12,410	20,616	37,688	35,851
Nandalur ...	389	59	448	133	234	367	1,143	366	1,509	544	2,257	2,801	11,542	14,579

Vontimitta ...	149	339	488	92	295	387	828	2,981	3,809	536	2,735	3,271	15,042	13,067
Siddhavattam ...	2	7	9	1	5	6	12	50	62	13	50	63	1,244	575
Cuddapah	6,088	5,677	11,765	5,252	3,946	9,198	37,433	42,597	80,030	33,494	28,535	62,029	1,45,734	1,[illegible]13
Krishnapuram ...	288	659	947	264	174	438	1,704	4,527	6,231	1,373	1,157	2,530	10,745	6,474
Gangayapalli ...	79	43	122	187	62	249	628	436	1,064	1,497	398	1,895	3,741	4,442
Kamalapuram ...	335	143	478	723	205	928	2,062	1,081	3,143	3,680	1,336	5,016	11,648	13,911
Yerragudipadu ...	21	6	27	88	18	106	128	48	176	434	114	548	1,787	2,087
Yerraguntla ...	2,144	4,209	6,353	1,855	4,550	6,405	16,253	35,509	51,762	12,207	29,250	41,457	73,946	62,286
Kalamala ...	22	24	46	9	16	25	72	249	321	45	235	280	2,482	2,435
Muddanuru ...	1,727	548	2,275	917	397	1,314	14,327	3,971	18,298	6,352	3,096	9,448	30,585	19,751
Mangapatnam ...	40	27	67	11	43	54	241	176	417	53	263	316	2,111	1,749
Kondapuram ...	214	359	573	102	509	611	1,074	2,798	3,872	503	2,643	3,146	10,619	8,958
Regadipalli ...	...	...	...	4	15	19	...	...	...	22	81	103	1,563	1,935
Vanganur	60	74	134	35	255	290	324	483	807	129	1,024	1,153	3,842	3,820
Tadpatri	3,138	2,795	5,933	2,464	3,452	5,916	22,994	27,230	50,224	15,679	30,097	45,776	73,035	68,030
Penneru	50	337	387	56	388	444	265	761	1,026	258	1,253	1,511	5,086	5,393
Rayalcheruvu ...	300	215	515	230	209	439	1,425	1,999	3,424	1,189	1,345	2,534	10,138	8,891
Jakkulacheruvu ...	10	5	15	17	11	28	55	36	91	44	128	172	1,675	1,830
Gooty	1,677	671	2,348	1,065	1,227	2,292	12,404	6,289	18,693	5,684	9,356	15,040	45,021	44,019
Patakottacheru ...	25	25	50	18	194	212	53	213	266	56	1,183	1,239	1,840	2,636
Timmancherla ...	369	210	579	422	970	1,392	3,737	1,122	4,859	3,273	7,383	10,656	11,079	16,910
Guntakal Junction..	640	234	874	519	1,310	1,829	6,903	1,824	8,727	5,751	6,703	12,454	69,308	59,695
Nancherla... ...	167	59	226	150	244	394	1,858	274	2,132	503	1,941	2,444	3,770	4,444
Molagavalli ...	81	8	89	55	1,013	1,068	193	93	286	207	8,840	9,047	1,763	10,405
Aspari	227	146	373	77	432	509	2,839	1,289	4,128	537	3,427	3,964	7,655	6,195
Nagarur	3	...	3	1	...	1	19	...	19	7	1	8	1,146	1,012
Adoni	8,720	4,274	12,994	6,994	6,820	13,814	47,753	35,466	83,219	38,657	64,199	1,02,856	1,22,191	1,36,275
Kupgal	45	171	216	51	27	78	183	3,002	3,185	248	226	474	6,580	2,563
Kosgi	579	209	788	330	622	952	3,863	1,656	5,519	2,524	2,900	5,424	12,867	11,326
Tungabhadra ...	24	90	114	603	98	701	152	482	634	2,021	962	2,983	6,889	6,844
Matmari	52	221	273	19	147	166	349	1,430	1,779	49	731	780	5,791	2,859
Raichur Junction...	5,382	1,142	6,524	3,405	3,220	6,625	61,664	13,970	75,634	32,510	29,420	61,930	1,32,820	1,04,457
Munnal	275	198	473	354	162	516	940	676	1,616	1,859	560	2,419	6,242	7,431
Sholinghur ...	557	3,771	4,328	743	1,680	2,423	2,899	7,099	9,998	4,090	3,947	8,037	27,007	27,389
Thalangai	1	9	10	1	7	8	4	41	45	21	35	56	806	904
Arcot	12,888	8,911	21,799	18,987	8,621	27,608	61,207	60,546	1,21,753	77,781	52,349	1,30,130	1,87,453	1,98,747
Ponnai Road ...	2	16	18	24	157	181	15	206	221	197	766	963	1,548	2,626
Tiruvalam ...	60	345	405	243	209	452	529	1,605	2,134	1,595	1,275	2,870	15,947	18,233
Katpadi Junction...	6,627	14,647	21,274	8,216	8,888	17,104	51,821	99,895	1,51,716	58,489	60,809	1,19,298	2,93,325	2,61,532
Latteri	3	16	19	9	43	52	13	119	132	54	254	308	1,739	2,005
Virinchipuram ...	146	114	260	244	193	437	1,368	741	2,109	1,863	1,360	3,223	14,390	14,439
Kavanur †... ...	...	...	...	1	32	33	...	...	...	11	196	207	...	634
Gudiyattam ..	3,360	2,548	5,908	3,970	2,699	6,669	25,898	15,166	41,064	33,521	15,174	48,695	76,926	84,533
Valathoor	244	105	349	425	147	572	2,329	658	2,987	4,701	932	5,633	8,088	11,607
∞ Mailpatti	912	1,091	2,003	1,044	1,142	2,186	6,172	7,671	13,843	4,869	7,901	12,770	28,906	27,422
Ambur	2,117	2,205	4,322	2,572	2,019	4,591	14,113	12,174	26,287	16,301	10,497	26,798	67,096	63,518
Vinnamangalam ...	3	45	48	11	37	48	60	438	498	73	382	455	2,194	2,227
Vaniyambadi ...	4,487	3,996	8,483	4,562	3,447	8,009	28,120	24,288	52,408	28,193	19,138	47,331	94,759	89,482
Kettandapatti ...	31	71	102	48	113	161	122	336	458	148	536	684	2,673	2,854

* Opened 15th September 1897.

† Opened 5th May 1898.

The following Table shows the Goods Traffic in and out of the following Stations on the Madras Railway for the half-years ending 30th June 1897–1898.—cont.

STATIONS.	Tonnage of Goods and Railway Materials.						Goods Receipts.						Gross Receipts, Coaching & Goods, Inwards and Outwards.	
	1897.			1898.			1897.			1898.				
	Inwards.	Outwards.	Total.	Inwards.	Outwards.	Total.	Inwards.	Outwards.	Total.	Inwards.	Outwards.	Total.	1897.	1898.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Jalarpet Junction...	387	891	1,278	345	1,057	1,402	2,128	3,796	5,924	1,920	4,623	6,543	65,639	65,504
Patchur	252	671	923	369	385	754	793	2,289	3,082	1,384	1,328	2,712	10,649	10,055
Mulanur	9	2,029	2,038	12	1,332	1,344	41	2,007	2,048	45	1,173	1,218	3,635	2,932
Kuppam	1,195	1,726	2,921	1,128	1,589	2,717	6,090	4,812	10,902	5,413	4,047	9,460	30,340	29,092
Gudupalli	17	242	259	11	35	46	67	187	254	41	157	198	3,719	3,367
Bisanattam ...	2,304	15	2,319	4,151	10	4,161	3,383	87	3,470	6,315	39	6,354	13,312	19,441
Kamasamudram ...	3,320	228	3,548	2,546	190	2,736	2,581	663	3,244	2,586	660	3,246	11,011	12,250
Bowringpet Junc....	8,902	3,655	12,557	12,131	2,891	15,022	58,588	16,902	75,490	65,096	13,577	78,673	1,50,992	1,53,935
Tyakal	61	691	752	63	604	667	508	1,522	2,030	545	999	1,544	8,412	7,390
Malur	734	5,313	6,047	720	4,033	4,752	4,442	11,567	16,009	4,235	7,236	11,471	45,151	36,955
Devankundi ...	98	3,708	3,806	86	2,100	2,186	672	5,432	6,104	608	2,721	3,329	11,947	8,412
Whitefield ...	432	6,219	6,651	451	7,131	7,582	3,933	15,715	19,648	4,342	17,935	22,277	31,393	32,646
Krishnarajapuram..	88	852	940	309	1,409	1,718	1,098	3,848	4,946	1,928	2,988	4,916	11,088	10,648
Bangalore Cant. ...	17,546	5,423	22,969	14,301	5,333	19,634	1,48,772	65,620	2,14,392	1,39,163	60,759	1,99,922	5,09,457	4,94,359
Do. City Jun.	11,226	12,184	23,410	14,170	12,957	27,127	1,30,361	1,03,232	2,33,593	1,47,442	1,06,034	2,53,476	3,10,215	3,22,703
Do. Pettah...	...	...	...	...	...	...	...	63	63	...	...	...	13,345	11,332
Tirupattur... ...	3,844	10,516	14,360	5,029	8,123	13,152	23,213	47,090	70,303	31,295	35,396	66,691	1,21,618	1,15,502
Kagankarai ...	6	13	19	6	15	21	35	74	109	41	111	152	3,561	3,719
Samalpatti ...	204	634	838	301	336	637	1,909	3,547	5,456	2,024	2,101	4,125	14,186	13,449
Kallavi	27	356	383	101	143	244	137	2,155	2,292	547	863	1,410	6,161	4,900
Morappur	1,100	2,675	3,775	2,100	1,064	3,164	9,243	18,045	27,288	14,756	6,142	20,898	44,203	38,761
Buddireddippatti...	21	299	320	55	107	162	119	2,337	2,456	284	527	811	6,434	4,575
Mallapuram ...	132	417	549	150	360	510	698	2,204	2,902	903	2,108	3,011	10,891	11,293
Lokur ...	...	84	84	2	72	74	2	416	418	4	210	214	1,000	662
Kadiampatti ...	648	668	1,316	672	641	1,313	4,380	3,251	7,631	4,195	3,896	8,091	11,796	11,907
Thinnappatti ...	9	40	49	2	33	35	36	72	108	9	82	91	3,955	4,270
Salem	8,108	12,718	20,826	15,529	6,615	22,144	73,295	1,12,216	1,85,511	1,22,820	53,063	1,75,883	3,04,234	2,86,637
Ariyanur	1	40	41	6	77	83	8	515	523	33	542	575	2,929	2,821
McDonald's Choultry	346	715	1,061	401	629	1,030	2,586	5,664	8,250	2,822	4,463	7,285	14,487	14,316
Sankaridrug ...	2,117	4,849	6,966	2,550	4,435	6,985	13,900	21,123	35,023	17,837	19,041	36,878	49,379	50,686
Anangur	5	1	6	...	2	2	23	4	27	...	13	13	1,212	1,127
Cauvery	81	824	905	118	500	618	667	4,279	4,946	719	2,191	2,910	7,401	4,578
Erode Junction ...	4,729	7,046	11,775	6,832	4,971	11,803	31,654	72,269	1,03,923	51,131	58,462	1,09,593	2,14,124	2,13,550
Totiapalaiyam ...	...	71	71	...	13	13	4	406	410	3	162	165	1,012	648
Perundurai ...	227	300	527	362	650	1,012	1,929	2,087	4,016	2,666	4,158	6,824	13,404	15,766
Ingur	1	15	16	1	4	5	4	103	107	4	33	37	2,196	3,076
Viziamangalam ...	33	238	271	1	304	305	56	833	889	10	771	781	4,532	4,085
Uttukuli	219	1,131	1,350	220	692	912	889	4,641	5,530	1,333	3,549	4,882	13,583	13,369
Kulipalaiyam ...	13	62	75	17	110	127	110	692	802	150	1,040	1,190	1,559	2,141
Tiruppur	4,970	12,054	17,024	9,171	3,084	12,255	39,521	1,11,505	1,51,026	71,955	42,081	1,14,036	1,35,984	1,50,246
Dharapuram Out-Agency*	...	...	...	115	53	168	...	...	...	1,511	813	2,324	...	2,324
Mangalam ...	1,099	365	1,464	3,389	434	4,323	6,520	2,316	8,836	30,676	3,273	33,949	19,467	45,077
Somanur	144	553	697	322	605	927	383	6,541	6,924	1,614	8,864	10,478	12,353	15,899
Sulur	134	944	1,078	203	877	1,080	828	10,744	11,572	1,239	9,061	10,300	17,456	17,254
Singanallur ...	130	378	508	214	261	475	594	4,116	4,710	1,042	3,699	4,741	9,675	9,536
Podanur Junction ...	1,411	1,163	2,574	2,417	1,399	3,816	7,374	7,817	15,191	10,344	8,976	19,320	51,261	57,973
Coimbatore ...	18,285	15,729	34,014	23,753	7,524	31,277	78,532	1,24,437	2,02,969	1,40,369	60,078	2,00,447	3,03,996	3,07,765
Tudiyalur ...	39	204	243	157	286	443	111	901	1,012	212	752	964	5,168	5,904
Periyanayakkanpalayam	1	2	3	1	20	21	3	8	11	6	95	101	2,621	2,798
Karaimadai ...	483	308	791	434	171	605	1,647	1,793	3,440	1,710	1,006	2,716	10,324	12,319
Mettupalaiyam ...	13,936	4,060	17,996	13,368	4,009	17,377	1,22,564	32,786	1,55,350	1,30,279	30,918	1,61,197	3,22,727	3,38,400
Madukarai ...	36	328	364	40	705	745	112	2,424	2,536	169	2,584	2,753	5,785	6,095
Walayar ...	3	1,438	1,441	10	763	773	19	1,455	1,474	85	766	851	3,831	2,986
Kanyikod ...	69	4,549	4,618	442	2,406	2,848	337	9,971	10,308	2,663	4,058	6,721	17,808	13,806
Olavakkot Junction	318	5,319	5,637	539	6,562	7,101	939	26,611	27,550	1,390	26,918	28,308	64,394	66,484
Palghat	8,407	15,987	24,394	9,018	9,904	18,922	47,261	87,996	1,35,257	55,611	60,900	1,16,511	1,86,497	1,68,986
Parli	465	3,508	3,973	645	3,128	3,773	2,158	13,361	15,519	2,982	9,042	12,024	21,808	18,776
Mankarai ...	164	594	758	260	751	1,011	704	2,758	3,462	861	2,197	3,058	12,437	12,959
Lakkiti	484	792	1,276	432	492	924	2,174	2,984	5,158	1,849	2,268	4,117	16,619	14,963
Ottappalam ..	716	1,861	2,577	535	648	1,183	2,741	8,576	11,317	1,661	3,004	4,665	26,821	19,493
Shoranur ...	3,491	941	4,432	1,539	1,342	2,881	18,286	6,561	24,847	13,026	7,791	20,817	65,747	63,397
Pattambi	393	822	1,215	354	982	1,336	1,729	5,463	7,192	1,787	6,718	8,505	30,034	34,100
Pallipuram ...	62	165	227	45	119	164	245	1,592	1,837	155	1,223	1,388	6,629	6,275
Kuttippuram ...	269	133	402	180	125	305	1,273	1,027	2,300	885	1,041	1,926	7,887	7,325
Edakkolam ...	206	1,223	1,429	228	1,078	1,306	746	9,529	10,275	766	7,238	8,004	19,308	16,372
Tirur	6,061	6,023	12,084	3,143	5,645	8,788	35,780	34,772	70,552	17,895	31,326	49,221	98,592	79,902
Tanore	1,041	1,269	2,310	1,121	1,188	2,309	4,112	11,699	15,811	4,528	11,412	15,940	23,720	23,660
Parpanangadi ...	1,399	1,013	2,412	918	606	1,524	5,380	6,206	11,586	3,607	4,968	8,575	24,689	23,103
Kadalundi ...	312	433	745	39	483	522	1,375	2,076	3,451	119	2,412	2,531	6,232	5,436
Ferok	5,383	2,973	8,356	3,556	4,364	7,920	41,050	26,446	67,496	29,827	31,712	61,539	80,345	73,410
Kallayi	2,655	11,158	13,813	1,326	10,195	11,521	17,563	88,352	1,05,915	5,389	81,395	86,784	1,18,620	1,00,787
Calicut	36,082	13,247	49,329	12,044	16,637	28,681	2,73,735	1,03,495	3,77,230	1,16,999	1,19,850	2,36,849	4,93,111	3,68,221
Madras-Ennur Ry..	6,571	13,933	20,504	8,740	1,940	10,680	5,259	41,848	47,107	2,694	5,706	8,400	48,923	9,891
S. M. Railway ...	15,609	39,897	55,506	13,007	58,784	71,791	1,55,012	2,47,498	4,02,510	1,42,056	4,17,124	5,59,180	5,64,517	7,30,144
G. I. P. do. ...	23,033	13,679	36,712	10,421	20,003	30,424	2,13,571	2,11,234	4,24,805	1,07,369	2,34,105	3,41,474	6,40,699	5,63,622
S. I. do. ...	24,039	23,460	47,499	26,168	18,746	44,914	1,24,980	1,36,237	2,61,217	1,35,640	95,569	2,31,209	4,39,120	3,99,328
K. G. F. S. Ry. ...	78,980	434	79,414	86,164	347	86,511	3,40,405	2,548	3,42,953	3,71,086	2,067	3,73,153	4,37,931	4,81,406

* Opened 9th March 1898

N.B.—This statement is intended to show the relative importance of each station on the Madras Railway, but the actual total receipts for any particular section of the Railway cannot be obtained from it.

LAWRENCE ASYLUM PRESS.

(No. II.)

(No. I.) 5000-15-3-88.

No. 960

MADRAS RAILWAY.

AGENT AND MANAGER'S OFFICE,

MADRAS, 6th October 1898

CONSULTING ENGINEER FOR RAILWAYS
RECEIVED
7 OCT 1898
REGISTRY & DESPATCH

4651
7.10.98

From

The Agent and Manager,
Madras Railway Company,

To

The Consulting Engineer for Railways,
Madras.

SIR,

I have the honour to forward herewith 32 copies of the Chief Engineer's report for the half year ending the 30th June 1898. Copies of the reports of the other Heads of departments for the same period will follow.

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

Encl. 32

Agent and Manager.

Ams No. 10066 dt 25-10-98

Cb. Auditors report

Forwg: printed copies of the — on the Madras R C F. & M. E Rys each separately for H.y. ended 30-6-98 together with printed statt showing the Outwards & Inward Traffic at each stat on the M.R. including those Rys

Disposed of herein

(No. II.)

No. 10345/1044

MADRAS RAILWAY.

AGENT AND MANAGER'S OFFICE,

Madras, 4th November 1898.

CONSULTING ENGINEER FOR RAILWAYS. RECEIVED 7 NOV. 1898 MADRAS.

From

The Agent and Manager.
M. R. Co,

To

The Consulting Engineer for Railways.
Madras.

SIR,

In continuation of my letter No. 10345/1006 dated 25th October 1898, I have the honour to forward herewith 32 copies of each of the Reports by the undermentioned Heads of Departments for the half year ending 30th June 1898:—

The Agent & Manager
" Loco: Superintendent
" Ag: Telegraph Engineer
" Medical Officer

2. Copies of the Traffic Manager's Report will follow shortly.

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

Agent & Manager

MADRAS RAILWAY.

From

The Agent and Manager.

To

The Consulting Engineer

for Railways.

Dated 188

Recd.

No.

(No. II.)

No. 10345
1056

MADRAS RAILWAY.

AGENT AND MANAGER'S OFFICE,

Madras, 7th November 1898.

CONSULTING ENGINEER FOR RAILWAYS. RECEIVED 8 NOV. 1898 MADRAS.

From

The Agent and Manager.
M. & S. R.

To

The Consulting Engineer for Railways.
Madras.

SIR,

In continuation of my letter No. 10345/1044 dated 4th November 1898, I have the honour to forward herewith 32 copies of the Report by the Traffic Manager for the half year ending 30th June 1898.

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

Agent & Manager.

Encls:
32 Copies.

MADRAS RAILWAY.

From

The Agent and Manager.

To

The Consulting Engineer,

for Railways.

Dated

188

Recd.

No.

Form No. 18

Copy of a communication to The Superintendent Govern
ment Press Mint Buildings from the 1st a

to the Consulting Engineer for Railways, Madras, No. —, dated 10 Nov

189 8.

I herewith send 30 copies
each of the reports by the Heads of Depts.
of the Madras Ry for the first half of
1898. Please have them bound in the
usual way according to the followin
order (1) Agent & Manager's report (2) Co
Engineers (3) Locomotive Supt. (4) Ac
Telegraph Engineer (5) Medical Offic
(6) Chief Auditor for S. Ry Kolar and Cm
Ryo (7) Traf: Manager: I send herewith
progress
half year's report for guidance which
please return

Yours J.G.C.

Form No. 1.

PUBLIC WORKS DEPARTMENT,

RAILWAY BRANCH.

Papers to be read in Proceedings:—

Again G.O., dated 189 , No.

Again G.O., dated 189 , No.

Current No. 5799 of 1898, dated 7th Nov. , from C.E.M.

" " 5219 " 1898, " 8. " , " C.E.M.

" " " 189 , " , "

Submitting Reports by the Heads of Departments of the Madras Railway for the half-year ended the 30th June 1898

ORDER.

No. 1431-32 Ry. dated 21/11/98

Six copies of the Report will be forwarded to the Government of India.

H.E. No. 1432 Ry. dated 21/11/98

D.K.

To The Agent & Manager M. & S.M. Ry. with 12 copies of the Report

" Examiner of Railway accts with 3 copies.

To

The Secretary to the Government of India

Sir

I am directed to forward herewith six copies of the Reports by the Heads of Departments of the Madras Railway for the half-year ended the 30th June 1898.

I have &c

J.H.

14.11.98.

Despatched on 21/11/98

Report for Rs. per mail

Documents acd.

6 copies of Reports referred to

18.11.98