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MADRAS RECORD OFFICE.

Government of Madras.

DEPARTMENT.

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Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
12th July 1872.*

No. 203. Read the following letter from the Acting Deputy Consulting Engineer for Railways, to the Secretary to Government, Public Works Department, dated Madras, 18th June 1872, No. 310 :—

In forwarding the Administration Report for the Official year 1871-72 upon the Railways in this Presidency I have the honour to state that a copy has, as usual, been sent to the Chief Secretary to Government.

MADRAS RAILWAY.

OPEN MILEAGE.—The number (832) of miles open for traffic remains the same as at the close of the year 1870-71.

2. THROUGH COMMUNICATION WITH BOMBAY.—At the commencement of the year under review the Madras Railway was open to Raichore; but on the Great Indian Peninsula line there was a gap between the left bank of the Kistna and Chicksagoor, on the right bank about three miles from the river; the traffic was, therefore, carried by the Madras Railway Company as far as Chicksagoor, thence by cart to the river, and across by ferry. On the 1st May 1871 a temporary roadway was opened across the Kistna, and through communication by rail between Madras and Bombay was thus established. On the 7th of the same month the temporary roadway was carried away by a flood but was soon restored, only, however, to be once more washed away on the 5th June. This last interruption continued about three weeks, when the roadway was once more made good. Through communication has since then been successfully maintained.

3. RAICHORE GOODS STATION.—The Raichore Station was opened to goods traffic on the 26th June 1871.

4. THROUGH BOOKING WITH GREAT INDIAN PENINSULA COMPANY.—Through booking between the Great Indian Peninsula and the Madras Railway Companies was commenced on the 1st January 1872.

5. INTERRUPTION TO TRAFFIC ON THE OPEN LINE.—On the Bellary branch the temporary roadway over the Huggry was twice washed away (on the 11th May and 30th June 1871), through communication being thereby interrupted for an aggregate of fifty-two days.

On the 6th June, on the same branch, one of the piers of a bridge, spanning one arm of a small river about nineteen miles east of Bellary, was carried away. The failure was attributable to insufficiency of waterway and to the absence of an apron. The bridge was temporarily restored and traffic resumed on the 22nd June.

On the South-West Line, on the night of the 15th November, traffic was interrupted between Coimbatore and Somanoor. The water in the Nellumboor Tank lying immediately above the line of railway about nine miles from Coimbatore first topped and then breached the tank bund. Eight chains length of the railway bank were carried away; but the bridges, though exposed to very great scour, were uninjured. The watchman on duty discovered the state of affairs in time to prevent any accident to a train. The bank was restored by noon on the 18th, and the night train from Madras passed over at 1 P.M. on the same day.

6. CONDITION OF THE LINE.—With the exception above mentioned the line has been maintained in good working order. The stations and out-offices have been kept clear and in good condition.

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Class.	NUMBERS.			RECEIPTS.		
	Total num- bers.	Number per mile open to traffic.	Percentage of total number.	Total re- ceipts.	Receipt per mile open to traffic.	Percentage of total receipts.
<i>Goods.</i>				RS.	RS.	
Merchandise, Govern- ment stores ...	286,004	388.6	92.04	27,61,311	3,753.9	91.21
Live stock ...	896	1.2	.29	18,523	25.1	0.61
Railway materials ...	23,838	32.4	7.67	2,47,959	336.9	8.18
Total ..	310,738	422.2	100.00	30,30,793	4,117.9	100.00
Miscellaneous ...				10,000	13.7	
Total...				30,40,853	4,131.6	
Electric Telegraph ...				16,866	22.9	
Sundry sources ...				1,61,000	218.8	
Grand Total...				52,57,132	7,142.8	

14. COMPARISON WITH RESULTS OF PREVIOUS YEAR.—Comparing the figures for the year under review with those for the year 1870-71 it will be seen that there is in each class of the passenger traffic a slight improvement in proportion to the mileage worked over. As compared, however, with the results in 1868-69 and 1869-70, in which years the total receipts from passengers per mile worked over were Rupees 2,776 and Rupees 2,582, respectively, the results for 1871-72 are not favourable. This falling off must be attributed chiefly to the greater extent of mileage which has been opened in the last few years, viz., 187 miles in the four years ended 1871-72 as against 74 miles in the four years ended 1868-69. The traffic over this newly-opened length has barely had time to develop; but it is probable that the next few years will show a considerable increase in the passenger traffic.* The improvement in the cooly class traffic is most satisfactory. This class has been in operation this year as well as last between Madras and Jollarpett only, so that the increase is altogether independent of any extension of open mileage. The steadily progressive improvement in this class of traffic is exhibited in the following figures:—

Half-years ending	30th June 1869.	31st Dec. 1869.	30th June 1870.	31st Dec. 1870.	30th June 1871.	31st Dec. 1871.
Receipts from cooly class ...	RS. 27,760	RS. 34,845	RS. 40,771	RS. 42,574	RS. 48,735	RS. 52,924

15. GOODS TRAFFIC.—The goods traffic receipts per mile worked over show an increase of Rupees 281 over the corresponding receipts for 1870-71; but, as

* Returns of traffic up to the 1st June show an increase in the receipts of the current year of 1.1 per cent. over the receipts for the corresponding period of 1871.

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compared with the figures for 1869-70 (taking the figures as given in last year's report), there would seem to be a positive decrease of 124,091 tons in weight carried and Rupees 2,26,760 in receipts, and it should, therefore, be explained that, in the first place, the number of tons given as carried in 1869-70 is the sum of the weights carried on the two lines (North-West and South-West), so that every ton of goods passing from the North-West Line to the South-West Line or *vice versa* is counted twice over, the numbers are, therefore, altogether exaggerated and cannot be compared with the figures for 1871-72; in the second place, the receipts from the carriage of railway material for construction purposes were Rupees 5,85,412 in 1869-70 against Rupees 52,640 in 1871-72. If the receipts from this source be deducted in each year the goods receipts for 1871-72 will show a positive increase of Rupees 3,06,012, but still a decrease of Rupees 325 per mile worked over.* This decrease may, like that in the passenger traffic, be partly accounted for by the fact that the traffic has not as yet had time to develop, and also by the unfavourable seasons during the last few years, especially in the Bellary District. There are already signs of substantial improvement in the goods traffic,† which may be fairly attributed, in a great measure, to the very numerous reductions effected and special rates introduced during the past year.

16. The increase in the merchandize receipts as compared with last year has taken place chiefly in the following staples:—

Staple.	Receipts in 1870-71.	Receipts in 1871-72.	Increase in 1871-72.
	RS.	RS.	RS.
Betel ...	51,627	66,346	14,719
Cotton ...	2,18,076	5,77,066	3,58,990
Grains of all sorts ...	35,776	68,349	32,573
Gunnies ...	28,239	45,479	17,240
Jaggery ...	46,861	77,836	30,975
Rice ...	2,48,076	5,88,834	3,40,758
Skins ...	50,312	78,192	27,880
Total ...	6,78,967	15,02,102	8,23,135

On the other hand, there has been a decrease of Rupees 48,176 in receipts from salt traffic.‡

17. COTTON TRAFFIC.—The traffic in cotton calls for special consideration at a time when the opening of the railway to Raichore has brought the port of Madras into direct communication with the great cotton-producing districts of Bellary, Kurnool, and Cuddapah, as well as the Raichore Doab. The following figures show the quantity of cotton carried and the receipts therefrom during the last four Official years:—

* Rupees 4,412 against Rupees 4,737.

† The receipts up to the 1st June show an increase of 14.8 per cent. over the receipts for the corresponding period of 1871.

‡ Rupees 3,11,479 against Rupees 3,59,654.

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Official year.	North-West Line open to	Tons of cotton carried.	Receipts.
1868-69	Cuddapah and Tadpatri	Tons.	RS.
1869-70	Gooty	23,112	7,83,758
1870-71	Gooty, Toongabudra	17,999	6,57,783
1871-72	Bellary and Raichore	8,142	2,18,073
		18,347	5,77,066

18. These figures show that though there is, as compared with 1870-71, a great increase both in tonnage and receipts, yet there is, as compared with 1868-69, a falling off in tonnage and (in spite of the greatly increased open mileage on the North-West Line) a falling off in receipts also. This falling off in receipts is accounted for by the change which has come over the nature of the cotton traffic. In 1868-69 all but a small fraction of the cotton was carried loose; in 1871-72 upwards of two-thirds were more or less pressed and carried, therefore, at reduced rates. This change has been brought about by the introduction of differential rates* in favour of pressed cotton, which stimulated the introduction of cotton presses into the cotton districts. Though the Railway Company may possibly have lost by the change a certain amount of gross revenue, they have, on the other hand, been saved from the necessity of making large additions to their rolling stock and goods-shed accommodation. They have been able to reduce greatly the proportion of tare, and the danger of fires (with loose cotton very great) has been reduced to a minimum. There can, moreover, be little doubt that if this change had not been encouraged by the Madras Railway Company a very large proportion of the cotton trade would have been diverted to Bombay. The following figures show the gradual change which has taken place:—

Official year.							Loose cotton.	Pressed cotton.	Total.	Proportion of pressed cotton to total.
1868-69	...	...	...	...	...	...				
1869-70	...	...	...	...	...	...				
1870-71	...	...	...	...	...	...	21,970	1,142	23,112	4.9
1871-72	...	...	...	...	...	...	16,287	1,712	17,999	9.5
	...	...	...	...	...	...	3,632	4,510	8,142	55.4
	...	...	...	...	...	...	3,531	12,816	18,347	69.8

19. With regard to the prospects of the cotton traffic for the year 1872-73 it may be mentioned that the acreage under cotton in the districts of Bellary, Cuddapah, Kurnool, and Coimbatore was 843,154 acres in 1871-72 against 763,746 acres in 1870-71; that the seasons generally were more favourable in the latter than in the former year, and the yield of the harvest is reported to be fair. A considerable increase may, therefore, be reasonably expected in the tonnage of

	... lbs.,	Per cubic foot	...	...	...	...	Pice per ton per millo.
* Loose cotton							
A. Pressed to 10	"	"	"	"	"	"	
B. Do. to 15	"	"	"	"	"	"	42
C. Do. to 19	"	"	"	"	"	"	28
D. Do. to 25	"	"	"	"	"	"	23
E. Do. to 35	"	"	"	"	"	"	19
		"	"	"	"	"	16
		"	"	"	"	"	14

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cotton carried; but, looking to the probable increase in the proportion of pressed cotton, it is unlikely that the receipts will increase in the same proportion as the quantity of cotton carried.

20. WORKING EXPENSES AND PROFITS.—The following figures show the working expenses in the several Departments and the profits for the year under review:—

Department.	Total expenses.	Expenses per mile open to traffic.	Percentage of total expenses.	Percentage of gross earnings.
	RS.	RS.		
Maintenance of Way, etc.	*9,76,039	†1,400	31·62	15·82
Locomotive	11,57,233	1,391	37·49	18·76
Carriage and Waggon	1,75,176	210	5·68	2·84
Traffic	4,91,889	591	15·94	7·97
General charges	1,97,644	238	6·40	3·20
Special and Miscellaneous	88,454	107	2·87	1·44
Total...	30,86,435	3,709	100·00	50·03
Balance, being profits...	30,83,183	3,706		49·97
Gross earnings...	61,69,618	7,415		100·00

21. The corresponding figures for 1870-71 were as follow:—

Department.	Total expenses.	Expenses per mile open to traffic.	Percentage of total expenses.	Percentage of gross earnings.
	RS.	RS.		
Maintenance of Way, etc.	7,96,599	‡1,200	28·06	15·15
Locomotive	10,31,570	1,402	36·83	19·62
Carriage and Waggon	1,50,312	204	5·29	2·86
Traffic	4,51,722	614	15·91	8·60
General charges	1,76,740	240	6·23	3·36
Special and Miscellaneous	2,32,268	315	8·18	4·42
Total...	28,39,211	3,858	100 00	51·01
Balance, being profits...	24,17,921	3,285		45·99
Gross earnings...	52,57,132	7,143		100·00

22. Comparing the figures for 1871-72 with those for 1870-71 it will be seen that, considering the increased mileage worked over, there is no appreciable alteration in the expenses of the Locomotive, Carriage and Waggon, Traffic and General Departments. The increase of Rupees 200 per mile maintained (or Rupees 1,40,000 altogether) in the Engineering Department is explained by an increase of upwards of Rupees 2,25,000 under the head "*Repairs of Bridges.*" Owing to expenditure in connexion with the Cheyaur Bridge and on account of protective works (principally on the North-West Line) there will be some considerable expenditure on this account during the first half of the year 1872-73. There have

* Including Rupees 1,15,368, expenditure in connexion with Cheyaur Bridge.

† Per mile maintained out of revenue, 697 miles.

† Do. do. do. 564 "

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been decreases under other heads. Of the decrease (Rupees 1,43,814) in special and miscellaneous expenses, Rupees 1,40,096 is accounted for by reduction in the demand for rates and taxes.

23. CHEYAU BRIDGE ACCIDENT COMPENSATION.—During the year Rs. 24,200 have been paid as compensation to the relatives of passengers who lost their lives in the Cheyaur Bridge accident in 1870.

24. DIVIDEND.—The total expenditure on Capital account up to the 31st March 1872 has been Rupees 10,77,87,202. The profits for the year, Rupees 30,83,183, are, therefore, equivalent to a dividend at the rate of £2 17s. 3d. per cent. per annum.

25. PROGRESS OF WORKS—HUGGRY BRIDGE.—Nineteen screw pile piers of the Huggry Bridge, eight miles from Bellary, have been completed on the Bellary side. Cylinders for the remaining fifteen piers have still to arrive from England. Seven sets of girders lie rivetted on the Bellary bank and six sets on the Madras side.

26. CHEYAU BRIDGE.—The excavation of the foundations for the piers of the new bridge over the Cheyaur was commenced in April 1871.

27. MADRAS CENTRAL STATION (TERMINAL).—This building is almost completed, and the opening of the station to traffic is only delayed on account of the water-supply and the lighting of the station and the doubling of the line from the Salt Cota Junction.

28. TOONGABUDRA STATION.—The passenger station at the Toongabudra river has been completed.

29. RAICHORE STATION (TERMINAL).—The passenger buildings at Raichore are finished. Of the goods-sheds, watering arrangements, staff quarters, engine-sheds, etc., about 90 per cent. is completed.

30. NEILGHERRY BRANCH.—On the Neilgherry branch about 70 per cent. of the earth-work in cuttings and embankments has been executed, 5.5 miles of way have been ballasted, and three miles of rails have been laid. On seven large bridges (three of 4 and three of two 64-feet openings, and one of three 30-feet openings) about 55 per cent. of the masonry in the piers and abutments has been completed. About 85 per cent. of the platforms at Tudialore and Karamadi stations has been finished. The passenger buildings, goods-sheds, watering arrangements, staff quarters, engine-sheds, etc., have not been commenced. It is expected that this branch will be completed by the end of March 1873.

31. TRANSFER OF TELEGRAPH TO GOVERNMENT.—It has been decided that the Company's line of telegraphs shall be transferred to the Government Telegraph Department, who will maintain the line, leasing to the Company such wires as may be required for working the traffic of the Railway, and generally for the Company's own business.

GREAT SOUTHERN OF INDIA RAILWAY.

32. OPEN MILEAGE.—The number (168) of miles open for traffic upon this line is the same as at the close of the last Official year.

33. TRAIN SERVICE.—The train service has been equivalent on week days to two trains daily in each direction between Madras and Erode and one train in each direction upon Sun days. Extra trains have been run according to requirements.

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34. RATES AND FARES.—The rates charged for passengers and goods have been as follow:—

Passengers.							Pies per mile.
First class	...	...	...	...	...	...	18
Second „	...	...	...	...	...	...	5
Third „	...	...	...	...	...	...	3
Goods.							Rate per ton per mile. Pies.
Special class	...	...	...	...	...	...	8
First „	...	...	...	...	...	...	12
Second „	...	...	...	...	...	...	14
Third „	...	...	...	...	...	...	18
Fourth „	...	...	...	...	...	...	24
Fifth „	...	...	...	...	...	...	36

A few special rates have also been in force.

35. CONDITION OF THE LINE.—The line has been maintained in good working order throughout.

36. TRAFFIC EARNINGS, ETC.—The number of passengers and the tons of goods carried as well as the receipts from the several classes of traffic are shown in the following table for the years 1871-72 and 1870-71 in comparison:—

Description.	1871-72.						1870-71.	
	NUMBER.			RECEIPTS.			Number.	Receipts.
	Number.	Number per mile.	Percentage of total number.	Receipts.	Receipt per mile.	Percentage of total receipt.		
COACHING.				RS.				RS.
Passengers.								
First class ...	1,965	11.7	24	9,320	55.5	2.15	1,105	6,229
Second „ ...	12,260	73.0	1.48	12,417	73.9	2.86	10,555	11,104
Third „ ...	815,197	4,852.4	98.28	4,12,154	2,453.3	94.99	7,66,048	3,86,087
Total...	829,422	4,937.1	100.00	4,33,891	2,582.7	100.00	7,77,708	4,03,420
Miscellaneous...				19,016	113.2			27,368
Total...				4,52,907	2,695.9			4,30,788
Goods.	Tons.							
Merchandise ...	74,659	444.4	99.40	3,23,829	1927.6	99.18	66,572	3,13,613
Live stock ...				354	2.1	.11		582
Railway materials ...	448	2.7	.60	2,285	13.6	.71	599	2,010
Total...	75,107	44.1	100.00	3,26,468	1,943.4	100.00	67,171	3,16,205
Miscellaneous...				850	5.1			335
Total...				3,27,318	1,948.3			3,16,540
Electric Tele-graph ...				4,805	28.6			3,959
Sundry sources.				10,915	65.0			13,936
Grand Total...				7,95,945	4,737.8			7,65,223

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37. The figures for the year under review compare favourably with those for 1870-71. The passenger receipts were swelled to the extent of some Rupees 15,000 by the larger attendance at the Srirungum festival in December; but apart from this the traffic in all three classes, but more especially in the first class, shows a considerable improvement—an improvement which, according to the latest available returns, appears likely to continue.*

The falling off in the miscellaneous coaching receipts is almost entirely owing to the fact that only Rupees 74 were realized during the year under review on account of special trains as compared with Rupees 6,557 in 1870-71.

GOODS TRAFFIC.—The goods traffic also compares favourably with that for 1870-71. There is an increase of Rupees 10,216 in the receipts from the carriage of merchandize. The principal fluctuations have been in the receipts on account of cloth, grain, granite stones, and salt. There is an increase of nearly Rupees 20,000 in the receipts on account of salt, which seems to be partly due to the larger tonnage secured by the reduction of the rate for salt from 12 Pies to 8 Pies in the latter half of the year, considerably more than one-third of the increase having taken place during the months of January, February, and March 1872. According to the latest returns the improvement in the salt traffic is still continuing, and increased receipts under this head may be looked for in the future.

GRANITE STONES.—Granite stones show an increase of upwards of Rs. 13,000; but during April and May 1872 the receipts as compared with those for the last year show a falling off.

GRAIN.—The receipts from grain have diminished by about Rupees 15,000 owing to the absence of activity in the grain markets. It is, however, satisfactory to observe that the greater part (almost the whole) of the decrease occurred during the first half of the year, whilst the receipts for the last quarter show a slight increase as compared with the corresponding quarter of the last year. According to the latest returns the improvement still continues, and must be attributed partly to renewed activity on the part of the grain merchants and partly to the much larger traffic secured by the introduction of special reduced rates for the carriage of grain for distances exceeding 200 miles in large consignments.

CLOTH.—The receipts from cloth have fallen off by above Rupees 5,000.

38. **RAILWAY MATERIALS.**—The receipts from the carriage of railway materials are slightly in excess of those for 1870-71. The Southern Extension having been commenced, a large increase may be looked for under this head during the current year.

39. **ELECTRIC TELEGRAPH.**—There is a slight increase (Rupees 816) in the Electric Telegraph receipts, of which Rupees 508 are due to the last quarter of the year. The large increase in this one quarter may be attributed to the revised scale of charges generally introduced on the 1st January 1872. The increase still continues, and good results may be expected in the future.†

* Returns received up to the 31st May 1872 show an increase of 5.32 per cent. in the receipts as compared with the corresponding period of 1871.

† Up to the 31st May 1872 Rupees 921 had been received on this account as compared with Rupees 828 during the corresponding period of 1871.

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40. **WORKING EXPENSES, NET PROFIT, ETC.**—The working expenses in the several Departments and the net profits for the two years, 1870-71 and 1871-72, are shown in comparison in the following table:—

Department.	1871-72.				1870-71.
	Amount.	Amount per mile.	Per-centage of total expenses.	Per-centage of gross earnings.	Amount.
	RS.	RS.			RS.
Maintenance of Way, etc.	1,07,787	642	23.70	13.54	1,09,639
Locomotive expenses	1,70,045	1,002	37.39	21.36	1,68,499
Carriage and Waggon expenses	37,112	221	8.16	4.66	26,064
Traffic expenses	64,322	383	14.14	8.68	67,553
General charges expenses	60,230	352	13.25	7.57	54,686
Special and Miscellaneous expenses.	15,270	90	3.36	1.92	21,778
Total...	4,54,766	2,691	100.00	57.13	4,48,219
Profits...	3,41,179	2,031		42.87	3,17,004
Gross earnings ..	7,95,945			100.00	7,65,223

41. **COMPARISON WITH PREVIOUS OFFICIAL YEAR.**—In comparing the expenditure in the several Departments with the corresponding expenditure in 1870-71, the Maintenance, Locomotive, and Traffic expenses call for no special remark.

The excess in the Carriage and Waggon Department is due to an increase of Rupees 18,836 in the charges for repairs and renewals of vehicles, the Company's rolling stock having now attained an age at which extensive repairs have become necessary.

The excess in the general charges is caused by a larger share of the Home and Indian management having been debited to Revenue. Work having been commenced on the Southern Extension, a larger share of these charges will now fall on Capital, and Revenue will to that extent be relieved.

The saving in special and miscellaneous expenditure is due to a diminution of Rupees 6,119 in the demand on account of rates and fares, and to the fact that the expenditure for 1870-71 includes an item of Rupees 820 for boats purchased for the use of employes.

42. **DIVIDEND.**—The net profits for the Official year amount to Rs. 3,41,179, which is at the rate of £1-16-10 per cent. on the total Capital expenditure, Rupees 1,84,65,731.

43. **DAMAGE TO COMPANY'S PROPERTY BY CYCLONE.**—On the 6th November 1871 a cyclone swept over the eastern portion of the Tanjore District causing damage to the Company's workshops and other buildings at Negapatam to the estimated amount of 10,000 Rupees.

44. **SOUTHERN EXTENSION.**—Working plans and estimates for the Southern Extension on the Indian gauge (5 feet 6 inches) from Trichinopoly, by Dindigul and Madura, to Maniachee, with branches from that point to Tuticorin and Tinnevely, were submitted shortly before the close of the last Official year; but, it having been decided that the extension should be on the metre gauge (3 feet 3 inches), these plans and estimates were returned to be re-cast.

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Revised plans and estimates were submitted in August 1871, and within a few days of the close of the year under review the sanction of the Government of India was accorded to the extent of Rupees 93,50,000, and work was at once commenced.

45. The telegraph will be erected by the Government Telegraph Department, and such wires as the Company may require for their own business will be leased to them.

46. NORTHERN EXTENSION.—Pending the receipt of the Government sanction to the Southern Extension estimates, a portion of the engineering staff was employed in making working surveys for a proposed line from Tanjore, in a north-easterly direction, by Combaconum and Mayaveram, to join somewhere near Chellumbrun, the extension southwards of the proposed Carnatic Railway. Plans and estimates for this extension have been submitted.

CARNATIC RAILWAY.

47. OPEN MILEAGE.—The number (19) of miles open for traffic upon this line remains the same as at the close of the last Official year.

48. TRAIN SERVICE.—The train service was performed from the 1st April up to 31st December 1871 by two mixed trains daily in each direction; but during the last quarter of the year under review the service was experimentally reduced to one train (mixed) in each direction daily. Additional trains have also been run, according to requirements, upon special occasions.

49. RATES AND FARES.—The rates and fares in force at the commencement of the Official year were as follow:—

Passengers.							Pies per mile.
First class	...	...	...	...	...	...	
Second	„	...	...	...	...	...	12
Third	„	...	...	...	...	...	6
Goods.							4
Rate per ton per mile.							
Special class	...	...	...	...	...	...	
First	„	...	...	...	...	...	12
Second	„	...	...	...	...	...	16
Third	„	...	...	...	...	...	20
Fourth	„	...	...	...	...	...	24
Fifth	„	...	...	...	...	...	36
							48

50. On the 1st September through booking of goods with the Madras Railway was introduced, and the Madras Railway rates* were made applicable to through traffic so booked. At the same time the following special goods rates between Conjeveram and Madras were introduced, viz:—

	RS.	A.	P.
Salt	...	...	...
Piece goods and twist	...	0	1 2 per maund.
Sundry articles, including raggy, seeds, jaggery, etc.	...	0	3 0
		0	1 6

51. From this date also third class passengers between Conjeveram and Madras were booked through for 1 Rupee, the Madras Railway taking 11 Annas

*Proceedings of the Madras Government, Public Works Department,
12th July 1872.*

and the Carnatic 5 Annas—a reduction of 21·5 per cent. on the fare between Conjeveram and Arconum. On the 1st January 1872 the Madras Railway goods rates were generally introduced on this line.

52. TRAFFIC.—The amount of the traffic and the receipts realized therefrom during the year under review are shown in the following table:—

Description.	Number of passenger or tons of goods.	Number per mile.	Percentage.	Receipts.	Receipts per mile.	Percentage.
COACHING.						
Passengers.	No.	No.		RS.	RS.	
First class	428	22·5	0·47	391	20·6	1·22
Second „	6,197	326·2	6·72	3,269	172·0	10·17
Third „	85,546	4,502·4	92·81	28,479	1,498·9	88·61
Total...	92,171	4,851·1	100·00	32,139	1,691·5	100·00
Miscellaneous...				464	24·5	
Total...				32,603	1,716·0	
Tons.						
Goods	1,988	104·6		2,849	149·9	
Electric Telegraph				80	4·2	
Sundries				94	4·9	
Grand Total...				35,626	1,875·0	

53. The corresponding figures for 1870-71 were as follow:—

Description.	Number of passenger or tons of goods.	Number per mile.	Percentage.	Receipts.	Receipts per mile.	Percentage.
COACHING.						
Passengers.	No.	No.		RS.	RS.	
First class	295	15·5	0·37	306	16·1	1·03
Second „	5,135	270·3	6·49	2,825	148·7	9·51
Third „	73,696	3,878·7	93·14	26,582	1,399·0	89·46
Total...	79,126	4,164·5	100·00	29,713	1,563·8	100·00
Miscellaneous...				472	24·9	
Total...				30,185	1,588·7	
Tons.						
Goods	2,402	126·4		3,606	189·8	
Electric Telegraph				45	2·4	
Sundries				523	27·5	
Grand Total...				34,359	1,808·4	

54. Comparing the results for the year under review with those for the year 1870-71 there appears an increase in both number of, and receipts from, passengers—an increase which may in some slight measure have been checked by the reduction of the train service during the last three months of the year; but neither in number nor in receipts does the passenger traffic for 1871-72 compare favourably with that for 1868-69 or 1869-70, in which years the numbers were 95,126 and

99,464, and the receipts Rupees 39,072 and Rupees, 37,984, respectively. This great decrease during the last few years is not due to any falling off in the ordinary traffic but to the very large diminution in the numbers attending the annual festival at Little Conjeveram in May and June, caused, it is believed, by the spreading of rumours of the existence of cholera with a view to discourage these great gatherings. If the festival traffic in each year be deducted, the ordinary passenger traffic will be found to have been pretty constant. As compared with the year 1870-71 there is a considerable falling off both in the weight of goods carried and in the receipts therefrom, and a still greater as compared with 1869-70, when the goods traffic was at a maximum, Rupees 6,699 having in that year been realized from the carriage of 5,416 tons of goods. There is no apparent reason for this great decrease; but it is satisfactory to observe that since October 1871 the goods traffic has shown, and at this moment continues to show, signs of improvement.

The falling off in the whole year's receipts is Rupees 757, and already at the end of October there was a decrease of Rupees 1,000 and odd, so that there has been during the last four months of the year an increase of about Rupees 275, which may be ascribed to the facilities for through booking and possibly also to the reduced rates simultaneously introduced.

55. The working expenses during the year under review compare as follows with the expenses in 1870-71:—

Department.	1871-72.			1870-71.		
	Expenses.	Per-centage of total expenses.	Per-centage of gross earnings.	Expenses.	Per-centage of total expenses.	Per-centage of gross earnings.
Maintenance of Way, etc...	Rs. 4,736	21.39	13.29	Rs. 6,367	16.83	18.53
Locomotive ...	6,036	27.26	16.94	7,794	20.60	22.68
Carriage and Waggon ...	622	2.81	1.75	986	2.61	2.87
Traffic ...	2,937	13.26	8.34	3,759	9.91	10.91
General ...	7,781	35.14	21.84	16,823	44.47	48.96
Special and Miscellaneous.	31	0.14	0.03	2,169	5.58	6.14
Total...	22,143	100.00	62.15	37,829	100.00	110.49
Net profit or loss...	13,483		37.85	3,470		10.09
Gross earnings...	35,626		100.00	34,359		100.00

56. It will be seen that there is in every Department a great saving in the year under review as compared with the year 1870-71. This saving is in a great measure due to a reduction of establishments; but it is mostly due to a more favourable distribution of establishment charges between Capital and Revenue and to the absence in 1871-72 of exceptional items of expenditure incurred in 1870-71.

57. DIVIDEND.—The total capital expenditure up to the 31st March has been Rupees 8,41,580, the net earnings of the year, Rupees 13,483, are, therefore, equivalent to a dividend of £1.12.0½ per cent. per annum on the capital expended.

58. **CONDITION OF LINE.**—The line has been maintained in good order. The Engineering staff have

59. **EMPLOYMENT OF ENGINEERING STAFF.**—The Engineering staff have been engaged in the survey of a line on the metre gauge from Madras by Chingleput to Cuddalore, and of an extension southward, either by Chellumbrum or by Woodiarpalium, to meet the proposed Great Southern of India Railway at Tanjore or Trichinopoly.

Trichinopoly.
It is hoped that plans and estimates will be shortly submitted.

Names of Railways.	Miles opened during the year.	Total miles opened.	PASSENGERS DURING THE YEAR.					Receipts from Passengers.	Receipts from Merchandize.	Receipts from Rail-way materials.	Total Receipts from Passengers and Goods.	Working Expenses for the year 1871-72.	Net profits or losses for the year 1871-72.	Number of Euro-pean Staff.	Number of Native Staff.	Total Capital ex-pended up to 31st March 1872.
			First Class.	Second Class.	Third Class.	Coaly Class.	Total.									
Madras Railway &c.	...	832	RS. 10,519	RS. 1,19,996	RS. 19,54,642	RS. 2,69,540	RS. 23,54,696	RS. 20,16,436	RS. 35,89,996	RS. 52,640	RS. 56,59,072	RS. 30,83,183	768	6,967	RS. 10,77,87,203	
Great Southern of India Railway.	...	168	1,965	12,260	8,15,197	...	8,29,422	43,891	8,23,829	2,885	7,60,005	4,54,766	129	1,385	1,84,65,731	
Carnatic Railway...	...	19	428	6,197	85,546	...	92,171	32,139	3,606		35,745	22,143	6	66	8,41,586	

(Signed) J. H. M. SHAW-STEWART, Lieut.-Colonel, R.E.,
Consulting Engineer for Railways.

MADEAS,
10th July 1872.

RETURN C.
Madras Railways for the year 1871-72.

*Proceedings of the Madras Government, Public Works Department,
12th July 1872.*

No. 209.

ORDER THEREON, 12th July 1872, No. 1,672.

RAILWAY, No. 44.

ORDERED that the following letter
be sent:—

(Here enter No. 1,673, dated 12th July 1872.)

(True Extract.)

Colonel, R. E.,

Secretary to Government.

To the Consulting Engineer for Railways.

Exd. A. S. Rodgers.

PUBLIC WORKS DEPARTMENT,
OOTACAMUND, 12th July 1872.

No. 210.

No. 1,673.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

RAILWAY, No. 45.

SIR,—I am directed to forward the
Railway portion of the Administration
Report of the Madras Presidency for
the year 1871-72.

I have the honour to be,

Sir,

Your most obedient servant,

Colonel, R. E.,

Secretary to Government.

Exd. A. S. Rodgers.

Govt. of 1872 Madras.
PUBLIC WORKS.

To

THE SECRETARY TO THE GOVERNMENT
of INDIA.

Dated July 12th.

Recd.

Encl.

G. O., 12th July 1872, No. 1,673.

JULY
No. 210

FORWARDING Railway portion of the
Administration Report of the Madras
Presidency for 1871-72.

Railway Department.

21 /
CONSULTING ENGINEER'S OFFICE,

No. 310.

From

Supt C. H. Christie, R.E.

Ag. Dy. Consulting Engineer for Railways,

To

The Secretary to Government
Public Works Department
Fort St George

SIR,

In forwarding the Ad-
ministration Report for the official
year 1871-72, upon the Railways
in this Presidency, I have the
honour to state that a copy
has, as usual, been sent to the
Chief Secretary to Government.

I have the honour to be,

Sir,

Your most Obedt Servant.

Wm Christie Supt R.E.

Madras
18 June
1872

Ag. Dy. Cons. Engr for Railways

Madras Railway

Open miles.

The number (833) of miles open for traffic remains the same as at the close of the year 1870-71.

Through Commu-
-nications with
Bombay.

At the commencement of the year under review the Madras Railway was open to Rischere; but on the Great Indian Peninsula line there was a gap, between the left bank of the Krishna and Chikmagalur, on the right bank about three miles from the river; the traffic was therefore carried by the Madras Railway Company as far as Chikmagalur, thence by port to the river, and across by ferry. On the 1st of May 1871 a temporary road was opened across the Krishna, and

through

Indra Nath M. Munnay
Ch: 1672
H. Z. R. R. R.
2nd Engineer, Dec 19/72

From
The Consulting Engineer for Railways,
To
The Secy to Govt
of M. S. S. S.
Dated 18th June 1872
Received 20th
No. 310.
See: H. M. S.
Arranging
the Administration
report of the Railways
for the official year
1871-72.
With notes
Ch: 1672

through communication by rail between
Madras and Bombay was thus establish-
ed. On the 7th of the same month the
temporary roadway was carried away by
a flood, but was soon restored; (only
however to be once more washed away on
the 5th June. This last interruption
continued about three weeks, when the
roadway was once more made good. Through
communication has since then been
successfully maintained.

3. The Poichere Station ^{Poichere Goods}
was opened to goods traffic on the 26th
June 1871.

4. Through looking between ^{Through looking}
the Great Indian Peninsula and the ^{with Great Indian}
Madras Railway Companies was commenced
on the 1st January 1872.

5. On the Bellary Branch ^{(Interruption to}
the temporary roadway over the ^{Traffic on the}
Koppa ^{open line.}

25
was twice washed away (on the 11th
May and 30th June 1871), through com-
-munication being thereby interrupted for
an aggregate of fifty-two days.

On the 6th June, on the
same branch, one of the piers of a bridge,
spanning one arm of a small river about
nineteen miles east of Bellary, was
carried away. The failure was attribu-
-table to insufficiency of waterway and
to the absence of an apron. The bridge was
temporarily restored, and traffic resumed
on the 22nd June.

On the South West
Line on the night of the 15th Novem-
-ber, traffic was interrupted between
Coimbatore and Dornakur. The water
in the Kallumboor Tank lying immedi-
-ately above the line of railway about nine
miles from Coimbatore, first topped
and

and then breached the tank bund.

Eight chains length of the railway bank were carried away, but the bridges, though exposed to very great scour, were uninjured.

The watchman on duty discovered the state of affairs in time to prevent any accident to a train. The bank was repaired by noon on the 18th and the night-train from Madras passed over at 1 p.m. on the same day.

6. With the exception already mentioned of the line has been maintained in good working order. The stations and sub-offices have been kept clear and in good condition.

7. The Chygaru bridge, temporarily restored, was reopened for traffic on the 15th June 1871, under stringent precautionary rules for the protection of the travelling public. Plans and estimates

(amounting

Palau Bridge. 8.

Mean mileage. 9.

Train Service. 10.

(amounting to Rs 5,19,232) for a new bridge on iron cylinder piers, have been submitted.

Iron girders have been substituted for the brick arches of the bridge over the Palau river, which had begun to show symptoms of failure.

The mean mileage worked over during the official year 1871-72 has been 832 miles, as compared with 706 miles during the year 1870-71.

The week day Train service has been equivalent to the following trains daily in each direction on the South West Line.

One train between Madras and Vellore.

Two trains — do — do — do — Bellary.

One train — do — do — do — Coimbatore.

Two trains — do — do — do — Mysore.

On the Bangalore Branch.

Three trains between Bellary and Bangalore.

On the North West Line.

One train between Arcot and Coimbatore.

— do — do — do — do — Bellary.

— do — do — do — do — Coimbatore.

On the North West Line the Sunday service has been the same as the week day;

but

but on the South West Line there has been only one train in each direction, between Madras and Coimbatore and one between Madras and Mysore; and on the Bangalore Branch two trains.

11. The rates in force throughout India for the year for the conveyance of passengers and goods have been as follows.

Passengers.

Rate per mile

First class, day.	18
" " night	22
Second " day	5
" " between Coimbatore & Mysore	11
" " night	12
Third " "	3
Goods " between Madras & Jolarpet.	2

Goods.

Rate per ton per mile

Special class.	8
First " "	12
Second " "	14
Third " "	18
Fourth " "	24

Reduced rates for passengers have been introduced on the occasion of festivals and holidays; and numerous special goods rates

have

Traffic and Earnings.

have been in force, ~~either~~ in favour of particular individuals or particular localities, in order to secure traffic which would not otherwise have been obtained.

12. The traffic received and the receipts realized therefrom, as well as the percentages of the several classes are shown in the following table.

Classes	Numbers			Receipts		
	Total numbers	Number per mile of total traffic	Percentage of total traffic	Total Receipts	Receipt per mile of total traffic	Percentage of total receipts
<u>Passengers</u>						
First class	10,519	12.7	0.45	1,39,698	167.9	6.93
Second do	119,995	144.0	5.09	1,80,931	217.5	8.97
Third do	1,954,642	2349.4	83.01	15,89,470	1910.14	76.83
Only do	269,540	324.0	11.15	1,06,337	127.8	5.27
Total	2,354,696	2830.1	100.00	20,16,146	2423.6	100.00
Miscellaneous				2,55,421	307.0	
Total				22,71,857	2730.6	
<u>Goods</u>						
Merchandise	335,036	402.7	96.51	35,89,996	4314.9	98.68
Coal, Iron, & Limestone	1,170	1.4	.35	17,404	20.9	0.48
Railway materials	3884	4.7	1.14	52,640	60.9	1.44
Total	340,090	407.8	100.00	36,60,040	4397.1	100.00
Miscellaneous				11,057	13.3	
Total				36,71,097	4412.4	
Electricity				19,059	22.9	
Land & Survey				2,07,605	249.5	
Grand Total				61,69,618	7415.4	

3 The corresponding figures for 1870-71 were as follows.

Class.	Numbers			Receipts		
	Total numbers	Number per mile open to traffic	Percentage of total number	Total Receipts	Receipts per mile open to traffic	Percentage of total receipts
<u>Coaching</u>						
Passengers				Rs.	Rs.	
First class.	9,979	13.6	0.48	121,615	168.2	6.91
Second do	105,550	143.4	5.09	1,57,612	214.2	8.95
Third do	1,736,559	2359.4	83.79	13,95,401	1895.9	79.25
Goods do	220,516	299.6	10.64	86,052	116.9	4.89
Total	2,072,604	2816.0	100.00	17,60,680	2392.2	100.00
Miscellaneous.				277,713	377.3	
Total				20,38,393	2769.5	
<u>Goods.</u>						
Wholesale goods.	288,004	388.6	92.04	27,64,311	3753.9	91.21
Direct to do.	896	1.2	.29	18,523	25.1	0.61
Railway materials.	23,838	32.4	7.67	2,47,959	336.9	8.18
Total	310,738	422.2	100.00	30,30,793	4117.9	100.00
Miscellaneous				10,060	13.7	
Total				30,40,853	4131.6	
Electric Telegraph				16,866	22.9	
Sundry Sources				1,61,020	218.4	
Grand Total.				52,57,132	7142.8	

14. Comparing the figures for the year under review with those for the year 1870-71 it will be seen that there is in each class of the passenger traffic, a slight improvement in proportion to the mileage worked out. So compared, however, with the results in 1868/69 and 1869-70, in which years the total receipts

from passengers per mile worked out were Rs 377.6 and Rs 2,582 respectively, the results for 1871-72 are not favourable. This falling off must be attributed chiefly to the greater extent of mileage which has been opened in the last few years, namely 187 miles in the four years ended 1871-72 as against 74 miles in the four years ended 1868-69. The traffic over the newly opened length has barely had time to develop; but it is probable that the next few years will show a considerable increase in the passenger traffic. The improvement in the goods class traffic, is most satisfactory. This class has been in operation this year as well as last between Madras and Bellary only; so that the increase is altogether independent of any extension of open mileage. The steadily progressive improvement in this class of traffic, is

x Action of traffic up to the 1st June show an increase in the receipts of the current year of 17.1 per cent over the receipts for the corresponding period of 1871.

is exhibited in the following figures, -

Half-year ending	30 June/69	31 Dec/69	30 June/70	31 Dec/70	30 June/71	31 Dec/71
Receipts from Railway	27,760	31,845	110,774	125,574	187,335	52,921

5. The goods traffic receipts per mile worked over show an increase of Rs 281 over the corresponding receipts for 1870-71; but as compared with the figures for 1869-70 (taking the figures as given in last year's report) there would seem to be a positive decrease of 134,091 tons, in weight carried, and Rs 22,760 in receipts; and it should, therefore, be explained that, in the first place, the number of tons given as carried in 1869-70 is the sum of the weights carried on the two lines (North West and South West) so that every ton of goods passing from the North West Line to the South West Line, or vice versa, is counted twice over; the numbers are therefore altogether exaggerated, and cannot be compared, with

73 with the figures for 1871-72; in the second place the receipts from the carriage of railway material for construction purposes were Rs 5,85,412 in 1869-70 against Rs 52,640 in 1871-72. If the receipts from this source be deducted in each year, the goods receipts for 1871-72 will show a positive increase of Rs 3,06,012, but still a decrease of Rs 325 per mile worked over*. This decrease may, like that in the passenger traffic, be partly accounted for by the fact that the traffic has not as yet had time to develop, and also by the unfavourable seasons during the last few years, especially in the Bellary District. There are already signs of substantial improvement in the goods traffic, which may be fairly attributed, in a great measure, to the very numerous reductions effected and special rates introduced during the past year.

16. The increase in the merchandise receipts, as compared with last year

* Rs 4,412 against Rs 4,737.
 † The receipts up to the 1st June show an increase of 84.8 percent over the receipts for the corresponding period of 1871.

has taken place chiefly in the following staples:-

Staple.	Receipts in 1870-71. (do.)	Receipts in 1871-72. (do.)	Amount in 1871-72. (do.)
Beetle.	51,627	61,346	114,719
Cotton	2,18,076	5,77,066	3,58,990
Grains of all sorts.	35,776	68,349	32,573
Gummi	28,239	115,479	17,210
Saggers	116,841	77,836	30,975
Pine	2,48,076	5,88,834	3,40,758
Skins.	50,312	78,192	27,880
Total	6,78,967	15,02,102	8,23,135

On the other hand, there has been a decrease of Rs 48,176 in receipts from Salt traffic.

17. The traffic in cotton falls cotton traffic for special consideration at a time when the opening of the railway to Panchore has brought the port of Madras into direct communication with the great cotton producing districts of Bellary, Kurnool, and Gudolapah, as well as the Panchore Deak. The following figures show the quantity of cotton carried, and the receipts therefrom during the

* Rs 3,11,478 against Rs 3,59,604.

the last four official years.

Official year	North West Line open to	Tons of Cotton Carried (Tons.)	Receipts (Rs)
1868-69	Gudolapah & Panchore	23,112	7,83,758
1869-70	Goody.	17,999	6,57,783
1870-71	Goody, Sanyalucha	8,142	2,18,073
1871-72	Bellary & Panchore	18,347	5,77,066

18. These figures show that though there is, as compared with 1870-71, a great increase both in tonnage and receipts; yet as compared with 1868-69, a falling off in tonnage, and (in spite of the greatly increased open mileage on the North West Line) a falling off in receipts also; this falling off in receipts is accounted for by the change which has come over the nature of the cotton traffic. In 1868-69 all but a small fraction of the cotton was carried loose, in 1871-72 upwards of two-thirds were more or less pressed and carried therefore at reduced rates. This change has been brought about by the introduction of differential rates in favour of

x 10000 cotton	42	per ton per mile.
A pressed to 10 lbs per cubic foot	28	
B do 15	22	
C do 19	19	
D do 25	16	
E do 35	14	

pressed cotton, which stimulated the introduction of cotton presses into the cotton districts. Though the railway company may possibly have lost by the change a certain amount of ^{gross} revenue, they have, on the other hand, been saved from the necessity of making large additions to their rolling stock and goods shed accommodation; they have been able to reduce, greatly the proportion of tare; and the danger of fires (with loose cotton very great) has been reduced to a minimum. There can, moreover, be little doubt that if this change had not been encouraged by the Madras Railway Company a very large proportion of the cotton trade would have been diverted to Bombay. The following figures show the gradual change which has taken place.

Official year	Loose Cotton	Pressed Cotton	Total	Proportion of pressed cotton to total
1868-69	21,970	1,142	23,112	4.9
1869-70	16,287	1,712	17,999	9.5
1870-71	3,632	1,510	5,142	29.1
1871-72.	3,531	12,816	16,347	69.8

(which

19. With regard to the prospects of the cotton traffic for the year 1872-73 it may be mentioned that the acreage under cotton in the districts of Bellary, Coimbatore, Kurnool and Lumbahere was 843,154 acres in 1871-72 against 763,746 acres in 1870-71; that the seasons, generally, were more favourable in the latter than in the former year; and the yield of the harvest is reported to be fair; a considerable increase may therefore be reasonably expected in the tonnage of cotton carried, but looking to the probable increase in the proportion of pressed cotton it is unlikely that the receipts will increase in the same proportion as the quantity of cotton carried.

20. The following figures show the working expenses in the several departments, and the profits for the year under

under Review.

Department	Total expenses	Expenses per mile of traffic	Percentage of total expenses	Percentage of Gross Earnings
	Rs.	+ Rs.		
Maintenance of Way & Locomotives	9,76,039	1,400	31.62	15.82
Carriage & Wagon	1,57,233	1,391	37.49	18.76
Traffic	1,75,176	210	5.18	2.81
General Charges	4,91,389	591	15.91	7.97
Special & Miscellaneous	1,97,614	238	6.10	3.20
	88,454	107	2.87	1.14
Total	30,86,435	3,709	100.00	50.03
Balance being Profits	30,83,183	3,706		49.97
Gross Earnings.	61,69,618	7,415		100.00

① including Rs 1,15,368 - expenditure in connection with Cheyarr Bridge.
+ Per mile maintained out of Revenue. 697 miles

21. The corresponding figures for 1870-71 were as follows:

Department	Total expenses	Expenses per mile of traffic	Percentage of total expenses	Percentage of Gross Earnings
	Rs.	+ Rs.		
Maintenance of Way & Locomotives	7,96,599	1,200	28.06	15.15
Carriage & Wagon	1,93,570	1,402	36.33	19.62
Traffic	1,50,312	204	5.29	2.81
General Charges	4,51,722	614	15.91	8.60
Special & Miscellaneous	1,76,710	240	6.23	3.36
	232,268	315	8.18	4.42
Total	28,39,211	3,858	100.00	51.01
Balance being Profits	24,17,921	3,285		45.97
Gross Earnings.	52,57,132	7,143		100.00

+ Per mile maintained out of Revenue. . . 614 miles

Comparing,

22.

Comparing the figures for 1871-72 with those for 1870-71, it will be seen that considering the increased mileage worked over, there is no appreciable alteration in the expenses of the Locomotive, Carriage and Wagon, Traffic and General Departments; the increase of Rs 200 per mile maintained (or Rs 1,40,000 altogether) in the Engineering Department is explained by an increase of upwards of Rs 2,25,000 under the head "Repairs of Bridges". Owing to expenditure in connection with the Cheyarr bridge and in account of protective works (principally on the North West Line). There will be some considerable expenditure on this account during the first half of the year 1872-73. There have been decreases under other heads. Of the decrease (Rs 1,43,814) in Special and Miscellaneous expenses Rs 1,40,096 is accounted for by a reduction in the demand for rates and taxes.

Cheyarr Bridge accident Compensation.

23.

During the year Rs 24,200 have been paid as compensation to the relatives of

of passengers who lost their lives in the Cheyenne Bridge accident in 1870.

24. The total expenditure on Capital account up to the 31st of March 1872, has been Rs. 10,77,87,202. The profits for the year, Rs. 30,83,183, are therefore equivalent to a dividend at the rate of Rs. 2. 24. 17. d. 3 per cent per annum. (Dividend)

25. Nineteen screw pile piers of the Huggly Bridge, eight miles from Bellary, have been completed on the Bellary side; cylinders for the remaining fifteen piers have still to arrive from England; seven sets of girders lie rivetted on the Bellary bank and six sets on the Madras side. (Progress of Huggly Bridge)

26. The excavation of the foundations for the piers of the new bridge over the Cheyenne was commenced in April 1871.

27. The building is almost completed, and the opening of the station to Madras (Enthal station) (Terminal) traffic

111
traffic is only delayed on account of the water supply and the lighting of the station, and the doubling of the line from the Salt Coaster Junction.

Seongabudra station.

28.

The passenger station at the Seongabudra river has been completed.

Paichere station Terminal.

29. The passenger buildings at Paichere are finished. Of the goods sheds, Watling, arrangements, Staff Quarters, Engine sheds &c. about 90 per cent is completed.

Neilyherry Branch.

30. On the Neilyherry Branch about 70 per cent of the earthwork, in cutting and embankments, has been executed; 5.5 miles of way have been ballasted; and 3 miles of rails have been laid. On seven large bridges (three of four and three of two by foot openings, and one of three 30 feet openings) about 55 per cent of the masonry in the piers and abutments has been completed. About 85 per cent of the platforms

at

at Indialore and Paramadi stations has been finished. The passenger buildings, Goods sheds, Watering arrangements, Staff Quarters, Engine sheds &c. have not been commenced. It is expected that this branch will be completed by the end of March 1873.

31. It has been decided that the Company's line of telegraphs shall be transferred to the Government Telegraph Department, who will maintain the line, leaving to the company such wires as may be required for working the traffic of the railway, and generally for the Company's own business.

12
43

Great Southern of India Railway.

Open mileage. 32. The number (188) of miles open for traffic upon this line is the same as at the close of the last official year.

new Service. 33. The train service has been equivalent on week days to two trains daily in each direction between Moodre and Orde, and one train in each direction upon Sundays. Extra trains have been run according to requirements.

Rates and fares. 34. The rates charged for passengers and goods have been as follows:-

Passenger.

First class—18 pice per mile

Second—5—

Third—3—

Goods

Goods.

Special class: 8 piers per ton per mile

First	12
Second	14
Third	18
Fourth	24
Fifth	36

A few special rates have also been in force.

35 The line has been maintained in good working order throughout. Condition of the line.

36 The number of passenger and the tons of goods carried, as well as the receipts from the several classes of traffic are shown in the following table for the years 1871-72 and 1870-71 in comparison.

Year 1871-72										1870-71										
Number					Receipts					Number					Receipts					
		Number	per mile	Percentage of total number			Receipts	per mile	Percentage of total receipts			Number	per mile	Percentage of total number			Receipts	per mile	Percentage of total receipts	
<u>Coaching</u>																				
<u>Passengers</u>																				
First class		1965	11.7	2.11	9,320		55.6	2.15	1105		6229									
Second		12260	73.0	4.45	12,417		73.9	2.86	10555		11,104									
Third		815,197	4562.4	98.28	412,154		2453.3	94.99	766,048		386,087									
Total		829,422	4727.1	100.00	433,891		2582.7	100.00	777,708		403,420									
Miscellaneous					19,016		113.2	4.22			27,368									
Total					4,529,907		2696.9				4,50,788									
<u>Goods</u>																				
Merchandise		74,659	444.4	99.40	323,829		1927.6	99.10	66,572		313,613									
Liv. Stock					354		2.1	1.11			582									
Railway materials		448	2.7	0.56	23285		13.6	1.71	599		2910									
Total		75,107	447.1	100.00	326,468		1940.4	100.00	67,171		316,205									
Miscellaneous					850		5.1				335									
Total					327,318		1945.3				316,540									
Electric Telegraph					4805		28.6				3959									
Lundry Services					10915		65.0				13,736									
Grands Total					7,969,254		4777.0				7,65,223									

37 The figures for the year under review compare favorably with those for 1870-71. The passenger receipts were equalled to the extent of some 1/10.

No. 15,000 by the larger attendance at the
Sieringum festival in December, but
apart from ^{the} traffic in all three
classes, but more especially in the first
class, shows a considerable improvement —
an improvement which according to
the latest available returns appears
likely to continue.

The falling off in the Miscellaneous
coasting receipts is almost entirely
owing to the fact that only No. 74
were realized during the year
under review, on account of special
treasures as compared with No. 6557
in 1870-71.

* Returns received up to the
31 May 1872 show an increase of 5.32
per cent in the receipts as compared with
the corresponding period of 1871.

Goods Traffic

149
The goods traffic also
compares favourably with that
for 1870-71. There is an increase
of No. 10,216 in the receipts from
the carriage of merchandise.
The principal fluctuations have
been in the receipts and payments
of salt, grain, granite stones,
and salt. There is an increase
of nearly No. 20,000 in the receipts
on account of salt, which seems
to be partly due to the larger
tonnage secured by the reduction
of the rate for salt from 12 pice
to 8 pice in the latter half of
the year; considerably more than
one-third of the increase having
taken place during the months
of

of January, February and March
1872. According to the latest
returns the improvement and the
salt traffic is still continuing
and increased receipts under
this head may be looked for
in the future.

Granite stones show an increase of upwards of Rs. 12,000;
but during April and May 1872
the receipts, as compared with
those for the last year, show a
falling off.

The receipts from grain
have diminished by about Rs. 15,000,
owing to the absence of activity in
the grain market. It is
however satisfactory to observe
that

49
that the greater part (almost the
whole) of the decrease occurred
during the first half of the
year, whilst the receipts for
the last quarter show a slight
increase as compared with the
corresponding quarter of the last ^{year}.
According to the latest returns
the improvement still continues
and must be attributed partly
to increased activity on the part of
the grain merchants, and partly
to the much larger traffic
secured by the introduction of
special reduced rates for the
carriage of grain for distances
exceeding 200 miles in large
consignments.

Glee

The receipts from cloth have fallen off by about 16: 5000.

38 The receipts from ^{the} carriage Railway materials of railway materials are slightly in excess of those for 1870-71. The Southern extension having been commenced a large increase may be looked for under this head during the current year.

39 There is a slight increase Electric Telegraph (16: 846) in the electric telegraph receipts; of which 16: 508 are due to the last quarter of the year; the large increase in the one quarter may be attributed to the revised scale of charges generally introduced on the 1st January 1872. The increase still continues and good results.

Results may be expected in the future:

Working expenses 40 The working expenses in the several departments and the net profits for the two years 1870-71 and 1871-72, are shown in comparison in the following table:-

Department	1871-72				1870-71	
	Amount	Per cent	Per cent	Per cent	Amount	Per cent
	16:	per cent	per cent	per cent	16:	per cent
Maintenance of way & locomotive expenses	107,787	642	23.70	13.54	109,639	
Carriage and wagon	17,004	1002	37.39	21.36	16,849	
Drayage	37,112	228	8.16	6.66	26,084	
General charges	64,322	382	14.14	8.08	67,553	
Special and Miscellaneous	60,230	352	13.25	7.57	54,686	
Total	15,270	90	3.36	1.92	21,778	
Profits	4,547.66	2691	100.00	57.13	4,482.19	
Gross Earnings	3,411.79	2037			42,873,700.04	
	79,594.5				100.00	7,652.23

* Up to the 31st May 1872 16: 991- had been received on this account as compared with 16: 528- during the corresponding period of 1871.

41. In comparing the expenditure in the several departments with the comparison ^{with previous} corresponding expenditure in 1870-71, official year the maintenance, locomotive and traffic expenses call for no special remark.

The excess in the carriage and Wagon department is due to an increase of Rs: 18,836 in the charges for repairs and renewals of vehicles, the Company's rolling stock having now attained an age at which extensive repairs have become necessary.

The excess in the General charges is caused by a larger share of the Home and Indian management having been debited to Revenue. Work having been commenced on the Southern extension

43
a larger share of these charges will now fall on Capital, and Revenue will to that extent be relieved.

The saving in Special and Miscellaneous expenditure is due to a diminution of Rs: 6,119, in the demand on account of Rates and Taxes and to the fact that the expenditure for 1870-71 includes an item of Rs: 820 for boats purchased for use of employees.

Dividend.

42 The net profits for the official year amount to Rs: 3,41,799 which is at the rate of 4-16-14 per cent on the total Capital expenditure Rs: 1,84,65,731.

Damage to
Company's property
by cyclone.

43 On the 6th November 1871 a cyclone swept over the Eastern portion

portion of the Dargone district,
causing damage to the Company's
workshops and other buildings
at Nagapalam, to the estimated
amount of ten thousand Rupees.

44 Working plans and ^{Sutherland}
estimates for the ^{Extension} Sutherland extension
on the Indian gauge (5'-6") from
Dichinopoly, by Dindigul and
Madurai, to Manasabes, with
branches from that point to
Dutchen and Dinneelly, were
submitted shortly before the
close of the last official year
1870, it having been decided
that the extension should be on
the metre gauge (3'-3 $\frac{3}{8}$ "), these
plans and estimates were
returned to be revised.

Revised plans and
estimates

estimates were submitted in
August 1871 and within a
few days of the close of the
year under review the sanction
of the Government of India was
accorded to the extent of
Rs. 93,50,000 and work was at
once commenced.

45 The telegraph will be
created by the Government
Telegraph Department, and such
wires as the Company may
require for their own business
will be leased to them.

^{Northern Extension} 46 Pending the receipt
of the Government sanction
to the Sutherland extension estimates
a portion of the Engineering staff
was employed in making working
surveys

surveys for a proposed line
from Dargone, in a north-easterly
direction, by Combacondum
and Nyaserau, to join, some-
where near Chellumberru,
the extension southwards of
the proposed Carnatic Railway.
Plans and estimates for this
extension have been submitted.

Carnatic Railway

Open mileage 47 — The number (19) of miles
open for traffic upon this line
remains the same as at the close
of the last official year.

Train service 48 — The train service was
performed, from the 1st April up
to 31st December 1874, by two mixed
trains daily in each direction;
but during the last quarter of
the year under review the service
was experimentally reduced to
one train (mixed) in each direction
daily. Additional trains have
also been run, according to
requirements, upon special occasions.

Rates and fares 49 — The rates and fares in
force at the commencement of the
official

official year were as follows;

Passengers

First class—12 pice per mile

Second—6—8—8—

Third—4—8—8—

Goods

Special—12 pice per ton per mile

First class—16—8—8—8—

Second—20—8—8—8—

Third—24—8—8—8—

Fourth—36—8—8—8—

Fifth—48—8—8—8—

50 On the 1st September through booking of goods with the Madras Railway was introduced and the Madras Railway rates were made applicable to through traffic so booked. At the same time the following special goods rates between Congeram and Madras were introduced. Vesp. Salt

Salt—12—2—10—
Piece goods and Quist—0—3—0—8—
Sundry articles including Kiggy, Ludo }
Jaggery &c—0—1—6—8—

51 From this date also third class passengers between Congeram and Madras were booked through for 1 Rupee; the Madras Railway taking 11 annas and the East India 5 annas, a reduction of 21.5 per cent on the fare between Congeram and Arcanum. On the 1st January 1872 the Madras Railway goods rates were generally introduced on this line.

Draffee. 52 The amount of the traffic and the receipts realized therefrom, during the year under review, are shown in the

the following table:-

Description	Number of passengers or tons		per mile	Percentage	Receipts		Percentage
	No	No			No	No	
Coaching							
Passenger							
First Class	428	22.5	0.47	391	20.6	1.22	
Second "	6197	326.2	6.72	3269	172.0	10.17	
Third "	85546	4502.4	97.81	28479	1498.9	88.61	
Total	92171	4851.1	100.00	32139	1691.5	100.00	
Miscellaneous				464	24.5		
Total				32603	1716.0		
Goods	1988	106.6		2849	149.9		
Electric Telegraph				80	4.2		
Sundries				94	4.9		
Grand Total				35626	1875.0		

53 The corresponding figures for 1870-71 were as follows:-

Description	Number of passengers or tons		per mile	Percentage	Receipts		Percentage
	No	No			No	No	
Coaching							
Passenger							
First class	295	15.5	0.37	306	16.1	1.00	
Second "	5135	270.3	6.49	2825	128.7	9.51	
Third "	72696	3878.7	93.14	26582	1397.0	89.46	
Total	79126	4164.5	100.00	29713	1563.8	100.00	
Miscellaneous				472	24.9		
Total				30185	1588.7		
Goods	2402	126.4		3606	189.8		
Electric Telegraph				45	2.4		
Sundries				523	27.5		
Grand Total				34359	1808.4		

54 Comparing the results for the year under review with those for the year 1870-71, there appears an increase in both number of, and receipts from, passengers; an increase which may, in some slight measure, have been checked by the reduction of the train service during the last three months of the year; but neither in number nor in receipts does the passenger traffic for 1871-72 compare favourably with that for 1868-69 or 1869-70, in which years the numbers were 95,126 and 99,464, and the receipts Rs. 39,072 and Rs. 37,984 respectively. The great decrease during the last few years is not

not due to any falling off in
the ordinary traffic, but to the
very large diminution in the
members attending the annual
festival at Little Comjivaram
in May and June, caused,
it is believed by the spreading
of rumours of the existence
of cholera with a view to dis-
courage these great gatherings.
If the festival traffic in
each year be deducted, the
ordinary passenger traffic —
will be found to have been
pretty constant. As compared
with the year 1870-71, there
is a considerable falling off
both in the weight of goods
carried

2365
carried, and in the receipts
therefrom; and still greater as
compared with 1869-70, when
the goods traffic was at a
maximum, Rs. 6699 having in
that year, been realized from
the carriage of 5416 tons of goods.
There is no apparent reason
for this great decrease; but it
is satisfactory to observe that
since October 1871 the goods traffic
has shown, and at this
moment continues to show signs
of improvement.

The falling off in the
whole year's receipts is Rs. 757,
and already at the end of
October there was a decrease
of Rs. 1100 and odd; so that
that

that there has been during the last four months of the year an increase of about Rs. 275 which may be ascribed to the facilities for through booking, and possibly also to the reduced rates simultaneously introduced.

55 The working expenses during the year under Review compare as follows with the expenses in 1870-71:-

Department	1871-72			1870-71		
	Expenses	Percentage of total of gross earnings	Percentage of gross earnings	Expenses	Percentage of total of gross earnings	Percentage of gross earnings
Maintenance of ways	4736	21.39	13.29	6367	16.83	18.53
Locomotive	6036	27.26	16.94	7794	20.60	22.68
Carriage & waggons	622	2.81	1.75	986	2.61	2.87
Staff	2937	13.26	8.34	3750	9.91	10.91
General	7781	35.14	21.84	16823	44.47	48.96
Special	31	0.14	0.09	2109	5.58	6.14
Total	22,143	100.00	62.15	37,829	100.00	111.09
Net profit or loss	13,483	.	37.85	.	.	.
Gross earnings	35,626	.	100.00	34,359	.	100.00

ST

56. It will be seen that there is in every department a great saving in the year under Review as compared with the year 1870-71. This saving is in a great measure due to a reduction of establishment; but it is mostly due to a more favourable distribution of establishment charges between Capital and Revenue, and to the absence in 1871-72 of exceptional items of expenditure incurred in 1870-71.

Dividends 57. The total Capital expenditure up to the 31 March has been Rs. 8,41,581, the net earnings of the year Rs. 13,483 are

are therefore equivalent to a
dividend of £ 1-12-0½ per cent
per annum on the capital.

expended.

58. The line has been maintained in good order. Condition of line.

59. The Engineering staff have been engaged in the survey of a line on the metre gauge from Madras by being kept to Guddalore and an extension southwards either by Chidambaram or by Woodchappalum, to meet the proposed Great Southern of India Railway at Dargone or Seremopol.

It is hoped that plans and estimates will be shortly submitted.

W. H. S. S. M. C.
Secy. Secy. Secy. Secy. Secy.

Return C.
Madras Railways for the year 1871-72.

Names of Railways	Miles opened during the year	Total miles opened	Passengers during the year					Receipts from Passengers	Receipts from Merchandise	Receipts from Railways or otherwise	Total Receipts from Passengers and Goods	Working expenses for the year 1871-72	Net Profits or Losses for the year 1871-72	Number of European Staff	Number of Native Staff	Total Capital expended upto 31 st March 1872
			First Class	Second Class	Third Class	Goods	Total									
Madras Railway		832	10,519	117,996	175,462	267,540	235,461	20,1436	3589,996	52,640	56,59,072	3386,485	Rs 2,83,183 being at the rate of Rs 2.7.85 per cent per annum	768	6,967	1,377,87,282
Great Southern of India Railway		168	1,965	12,260	85,197		82,432	4,20,891	3,23,829	2,285	7,60,005	4,54,766	Rs 3,41,179 being at the rate of Rs 10.16.10 per cent per annum	129	1,385	184,85,701
Carnatic Railway		19	428	6,197	85,546		92,171	32,139	2,606	35,745	22,143	Rs 13,483 being at the rate of Rs 1.12.0 1/2		6	66	84,15,86

Madras,
10th July 1872.

101/ J. H. M. Shaw Stewart, Esq., M.A.,
Consulting Engineer for Railways.

1 True Copy

Montgomery Lindsay, Esq.,
Consulting Engineer for Railways.

21
N^o 1673?
71
N^o 1693

To The Secretary to the
Government of India
F.W.D.

Sir

I am directed to
forward the Railway
portion of the Adminis-
tration Report of the
Madras Presidency
for the year 1871/72.

W.M.

Recd 19/1/72 via 35th vol of
of G.O. 1673 of 1872

3040
P.M. 20/1/72
J. M. L. & Co.

C/3040

Govt. of 1873 Madras.
PUBLIC WORKS.

To The Consulting Engineer
for Railways and
To The Secretary to the Govt.
of India

Dated

25. 8

Recd.

Encl. 2

G. O. 12th July 1872 No 1672-73

No. 208-209

Administration Report
submitted by the Acting
Joint Consulting Engineer
the Madras Railways for
1-72 Ordered to be forwarded
the Government of India

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