M.R.O. 1—77,006—8-6-37.

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MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 61, 62, 163 — 1396-1397 Press / Mis.

Dated 6-6- 1872.

Not to be folded or roughly handled

No. 61. Read the following letter from the Consulting Engineer for Railways, to the Officiating Secretary to Government, Public Works Department, dated Madras, 23rd April 1872, No. 193 :—

In their Order dated the 15th August 1871, No. 2,083, the Government directed that the train service on the Carnatic Railway should be reduced experimentally, and that one train only should run daily in each direction for a period of three months. Subsequently, in their Order dated the 11th October 1871, No. 2,596, they allowed the experiment to be postponed until the 1st January 1872.

I have now the honour to submit a report* drawn up by the Agent, and purporting to show the financial results of the experiment in question.

* No. 397, dated 12th April 1872.

2. Mr. Fisher correctly discards from consideration the goods traffic on the line as not having been affected by the reduction in the train service, and he compares the results of the passenger traffic for the first quarter of 1872 (during which the reduced train service has been tried) with the corresponding figures for the first and third quarters of 1871. He shows that, as compared with the first quarter of 1871, there has been a saving in working expenses of Rupees 926, and a falling off in receipts of Rupees 128, having a net gain of Rupees 798; while, as compared with the third quarter, there has been a saving of Rupees 197 in working expenses, and a falling off in receipts of Rupees 1,063, having a net decrease of Rupees 866 in the profits.

3. Mr. Fisher wishes to set aside the comparison with the first quarter of 1871 on the ground that certain increased facilities, in the shape of through-booking arrangements, which were introduced during the third quarter of 1871, have been in force during the first quarter of 1872, but were not in force during the corresponding quarter of 1871. He points out that the traffic receipts of railways in this Presidency are generally larger during the first than during the second half of the year, but that the receipts on his line during the third quarter of 1871 (a quarter ordinarily embraced in the worse half-year) exceeded the receipts during the first quarter of the same year (a quarter ordinarily embraced in the better half-year) by the sum of Rupees 1,171. Mr. Fisher attributes this result *entirely* to the through-booking arrangements referred to above; he considers that if these increased facilities had not been neutralized by the reduction in the train service, the traffic earnings for the first quarter of 1872 would have exhibited an increase commensurate with that which occurred in the third quarter of 1871; and he further expresses his opinion that the close correspondence between the receipts for the first quarters of 1871 and 1872 "has only been arrived at by the increased facilities afforded to the travelling public by a modification in the fares during the New Year's holidays in January, the annual feast at Trivellore in February, and the annual feast at Great Conjeveram, and the Easter holidays in March, as well as by the continuance of the through-booking arrangements."

4. Mr. Fisher has not shown sufficient reason for departing from the ordinary method of comparison with the corresponding quarter of the previous year. The through-booking arrangements, though they undoubtedly exercise a wholesome influence on the goods traffic, are not calculated to produce any marked

effect upon the passenger traffic. Moreover, the particular arrangements referred to by Mr. Fisher only came into operation on the 1st September 1871, and the traffic returns show that of the Rupees 1,171, by which the receipts for the third quarter of 1871 exceeded the receipts for the first quarter of that year, Rupees 791 are accounted for by the excess of the receipts for July and August over the receipts for January and February thus:—

Coaching Receipts.

First Quarter.		Third Quarter.	
	Rs.		Rs.
January	2,322	July	2,302
February	2,151	August	2,962
Total...	4,473	Total...	5,264

It would seem, therefore, that the exceptionally large receipts in the third quarter of 1871 must be attributed to the ordinary fluctuations of commercial activity rather than to facilities for through-booking.

5. The inference* which Mr. Fisher draws from the circumstance that the receipts during the first half of the year were generally better than the receipts during the second half falls through when the details are scrutinized; for the following figures show that this circumstance is entirely due, as regards the Carnatic Railway, to the exceptionally large traffic carried during the annual festival at Little Conjeveram in May and June, that is in the second quarter:—

* *Vide* paragraph 3 of his letter.

Receipts from Coaching Traffic from 1868 *to* 1871.

—	In the first half-year.	In the second half-year.	In a festival month.†
	Rs.	Rs.	Rs.
In 1868	23,201	15,315	10,659
In 1869	23,899	15,256	10,957
In 1870	17,209	12,931	5,581
In 1871	18,112	14,314	7,011
Total...	82,421	57,816	34,208
Average..	20,605	14,454	8,552

There is thus an average excess of Rupees 6,251 in the second half as compared with the first; but if from the average receipts for the first half year, Rupees 20,605, the average amount of the receipts during a festival month, Rupees 8,552, is deducted, there remains Rupees 12,053, representing the average receipts of five ordinary months of the first half-year; which amount is equivalent to Rupees 14,463 for six ordinary months of the first half-year, being only Rupees 9 in excess of the average receipts during the second half-year. Clearly, then, the circumstance of the receipts being generally better during the first than during the second half of the year will not affect a comparison between the first and third quarters of any one year.

6. The following figures show that there is nothing abnormal in the fact that the receipts for the third quarter of 1871 exceeded the receipts for the first quarter of that year:—

Receipts from Coaching during the First and Third Quarters of each year from 1868 *to* 1870:—

Year.	First quarter.	Third quarter.
	Rs.	Rs.
In 1868	7,574	8,191
,, 1869	8,808	8,465
,, 1870	6,912	6,775
Total...	23,294	23,431
Average...	7,765	7,810

7. The subjoined figures show that the increased facilities alluded to by the Agent* as having been afforded during certain holidays and festivals in the first quarter of this year have not materially influenced the passenger traffic:—

* *Vide* paragraph 4 of his letter.

Coaching receipts during periods given below.	1871.	1872.	Increase in 1872.	Decrease in 1872.
	Rs.	Rs.	Rs.	Rs.
From 1st to 6th January (New Year holidays)	569	474	...	95
From 3rd to 17th February (Feast at Trivellore)	1,062	1,073	11	...
From 15th to 31st March (Feast at Great Conjeveram and Easter holidays)	971	1,166	195	...

Showing a net increase during 1872 of Rupees 111 for the three periods alluded to by Mr. Fisher.

8. In his report the Agent gives no detailed comparison between the results for the first quarter of 1872 and the third quarter of 1871, and I am, therefore, unable to say how far he is justified in* putting the net saving at Rupees 197; but any such comparison is clearly supererogatory so long as the figures for the corresponding quarters in the two years can be compared.

* *Vide* paragraph 10 of his letter.

9. Taking, then, the first quarters respectively of the years 1871 and 1872, the figures given by* Mr. Fisher show the following results:—

* In paragraph 4 of letter.

Period.	Receipts from Passengers.
	Rs.
Quarter ending 31st March 1871	6,486
Do. do. 1872	6,357

there being a falling off in 1872 of Rupees 129. But, as the latter period embraced

comparison, to add 1-90th to the receipts in 1871. This will raise those receipts to Rupees 6,558; and the entire falling off in 1872 is therefore Rupees 201.

10. The saving in working expenses during the first quarter of 1872 is represented by Mr. Fisher* to have been as follows:—

	Rs.
In Coal	270
In Oil, etc.	61
In general charges	876
	1,207
Deduct increase in repairs to stations	281
Net saving...	926

* *Vide* paragraph 9 of letter.

11. The general charges are not affected by the reduction in the train service, and should not be taken into account. On the other hand, the cost of repairs to stations should be omitted, and certain allowances should be made for savings in repairs to engines, and in maintenance of permanent way. In Major Prendergast's letter* of the 5th March 1872, these last items were estimated at Rupees 44 per mensem in repairs to engines, and Rupees 79 in maintenance of permanent way.

* No. 115.—*Vide* G. O., 16th March 1872, No. 750.

12. The following figures are, therefore, submitted as giving a fair comparison of the working expenses during the first quarters of 1871 and 1872:—

Particulars of expenditure.	1871.	1872.
	Rs.	Rs.
Fuel	772	502
Oil, tallow, etc.	142	81
	914	583
Add 1-90th to 1871 period for leap year ...	10	...
	924	583

	Rs.
Saving in current expenses	341
Do. in repairs of engines	132
Do. in maintenance of permanent way	237
Total...	710

13. The saving in the working expenses for the quarter, due to the reduction in the train service, may therefore be taken at Rupees 710. If from this sum there be deducted Rupees 201, which, as shown above, represents the falling off in the receipts from passengers, there remains a sum of Rupees 509, and this may be assumed to be the saving effected during the quarter by the change in the train service.

14. These figures seem conclusive, and the argument to be deduced from them is all the stronger when it is borne in mind that of the falling off in the passenger traffic it is impossible to say how much is directly due to the reduction in the train service; the whole sum, Rupees 201, being certainly within the

ordinary annual fluctuations. On the other hand, the savings which have been taken into account are either directly traceable to the reduction in the trains, or are such as might reasonably be expected to follow therefrom.

15. I am of opinion that the experiment has been clearly successful, and I strongly recommend the continuance, for the present, of the reduced train service.

From the Agent and Manager of the Carnatic Railway Company, to the Consulting Engineer for Railways, dated Madras, 12th April 1872, No. 399.

With reference to your office letter No. 55, dated the 11th ultimo, I have now the honour to submit a statement showing the results of the whole of the last quarter, as compared with the quarters ending March and September 1871.

2. Although as the books and accounts have not been audited for this period, the statement can only be said to be approximate, still it has been prepared with care with a view to its being accepted as a correct exposition of the results of the experiment of a reduced train service, directed to be undertaken in G. O., No. 2,083.

3. As you are doubtless aware the traffic receipts of railways in this Presidency are generally larger during the first than during the second half of the year, but notwithstanding there has been a falling off in the number and amount of the passenger traffic during this quarter, as compared with the quarter ending September 1871, of 6,983 passengers and of Rupees 1,299-9-4.

4. Comparing the passenger traffic of this quarter with that of the quarter ending March 1871, the results are as under, namely:—

—	No. of Passengers.	—	Amount.
	Rs.		Rs. A. P.
March 1871	17,900		6,485 9 4
,, 1872	19,006		6,357 5 11
Increase in number	1,106	Decrease in money	128 3 5

but this result has only been arrived at by the increased facilities afforded to the travelling public by a modification in the fares during the New Year's holidays in January, the annual feast at Trivellore in February, and the annual feast at Great Conjeveram, and the Easter holidays in March, as well as by the continuance of the through-booking arrangements which were established for the first time in the quarter ending September 1871.

5. It will be seen from the statement that the traffic for the quarter ending September 1871, a period which is ordinarily embraced in the worse half-year as compared with that of March 1871, the better showed a marked improvement as under:—

—	No. of Passengers.	Amount.
	Rs.	Rs. A. P.
March 1871	17,900	6,485 9 8
September 1871...	23,989	7,656 15 3
Showing a gain of	6,089	1,171 5 7

resulting, as the statement shows, entirely from the through-booking arrangements before alluded

to, and I am of opinion therefore that had it not been for the curtailment of the facilities by a reduction of the train service in the quarter ending March 1872, the results would have been much more satisfactory, and that an increase in the traffic earnings might have been looked for commensurate with that which has taken place upon the Madras and other Railways during this period.

6. The receipts from the goods traffic and other miscellaneous sources, it will be admitted, are not affected by the number of, or times at which, trains run so long as the journey to be performed is accomplished in reasonable time, and, therefore, the revenue from these sources cannot fairly be admitted as an element in the judgment to be formed as to the result of the experiment.

7. These resources are retarded or developed in proportion, within certain limits, of the liberality or otherwise of the policy which obtains; thus it is that as a fact there has been an actual increase in the receipts from goods and other sources during the quarter ending March 1872, as compared with the two previous periods resulting from the arrangement to book from Conjeveram to Madras salt, grain, and some other articles at reduced through rates, which had then come into operation, and it is quite possible if not probable that with a continuance of the train arrangements formerly in operation, by which means passengers might have travelled to, and returned from, Conjeveram the same day in pursuit of their business, a still further development of the receipts from this branch might have resulted.

8. As a whole, then, although the receipts for the quarter ending March 1872 have equalled those of the corresponding period of the previous year, there has been a decrease as compared with the quarter ending September 1871 of Rupees 1,063-6-4.

9. The statement further sets forth the particulars of the expenditure during the comparative periods under review. Comparing March 1871 with March 1872 the saving is as under, namely,—

		Rs.
In Coal		270
In Oil, etc.		61
In general charges		876
		1,207
Less increase in repairs to stations		281
	Net saving...	926

10. In the accounts for the quarter ending September 1871 an item of Rupees 670-1-11 was* erroneously debited to general charges, if this is deducted from the amount of gross expenditure shown in the statement, the expenditure will be correctly represented by the sum of Rupees 4,184-15-4. Comparing the expenditure for March 1872, against this corrected figure the saving is Rupees 196-14-2.

* A duplicate entry corrected in November.

11. It is true there was an actual saving in the cost of fuel, oil, etc., in March 1872, as against September 1871 of Rupees 386, but of this amount about Rupees 200 was expended in excess of the previous period in repairs to stations, etc., so that against the loss of traffic as between September 1871 and March 1872 of Rupees 1,063-6-3, there was a saving in expenses of Rupees 196-14-2 only.

12. I trust the statement herewith submitted and the explanations contained in this letter will have satisfactorily demonstrated that the experiment has not been successful, and that the Government will be pleased at once to give permission for the train to be restored.

Proceedings of the Madras Government, Public Works Department, 6th June 1872.

Statement showing the Passenger Traffic for quarter ending March and September 1871 and March 1872.

—	SINGLE TICKETS. First Class. No.	First Class. Amount. Rs. A. P.	Second Class. No.	Second Class. Amount. Rs. A. P.	Third Class. No.	Third Class. Amount. Rs. A. P.	RETURN TICKETS. Second Class. No.	Second Class. Amount. Rs. A. P.	Third Class. No.	Third Class. Amount. Rs. A. P.	Total. No.	Total. Amount. Rs. A. P.
Local.												
Quarter ending March 1871.	117	124 3 6	1,193	641 1 10	15,132	5,431 7 4	...	.....	404	99 6 0	16,846	6,296 2 8
Do. Sept. ,,	68	72 2 0	1,144	633 14 6	14,927	5,368 0 4	...	.....	...	.....	16,139	6,074 0 10
Do. March 1872.	44	52 8 6	1,073	543 8 4	9,344	3,380 14 4	394	147 12 0	592	148 0 0	11,447	4,272 11 2
Through.												
Quarter ending March 1871.	...	.....	...	.....	...	.....	...	.....	1,054	189 7 0	1,054	189 7 0
Do. Sept. ,,	...	.....	...	.....	1,324	413 12 0	...	.....	6,526	1,169 2 5	7,850	1,582 14 5
Do. March 1872.	...	.....	...	.....	4,749	1,577 9 0	...	.....	2,810	507 1 9	7,559	2,084 10 9

Total Passenger Traffic, Local and Through, for same periods.

—	Number.	—	Per Train Mile.
		RS. A. P.	RS. A. P.
March 1871	17,900	6,485 9 8	0 15 2
September ,, ...	23,989	7,656 15 3	1 1 5
March 1872	19,006	6,357 5 11	1 13 5

Goods Traffic, including Telegraph and Miscellaneous Receipts, for same periods.

—	—	Per Train Mile.
	RS. A. P.	RS. A. P.
March 1871	822 4 6	0 1 11
September ,, ...	741 0 4	0 1 8
March 1872	976 9 4	0 4 6

Gross Receipts from all sources and Expenditure and Profits.

—	Receipts.		Expenditure.		Profits.
	—	Per Train Mile.	—	Per Train Mile.	
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
March 1871 ...	7,307 14 2	1 1 1	4,953 3 9	0 11 7	2,354 10 5
September ,, ...	8,397 15 7	1 3 1	4,855 1 3	0 11 1	3,542 14 4
March 1872 ...	7,334 9 3	2 1 11	3,988 1 2	1 2 5	3,346 8 1

(Signed) J. T. FISHER,
Agent and Manager.

Abstract of Expenditure for working and upholding Locomotive Engines for quarter ending March and September 1871 and March 1872.

WORKING.

—	Coal Consumed.			Wood Consumed.			Total Cost of Fuel per Engine mile.
	Quantity.		Cost.	Quantity.		Cost.	
	Total Cwts.	Per Engine mile.	Total. / Per Engine mile.	Total Cwts.	Per Engine mile.	Total. / Per Engine mile.	
		lbs.	RS. A. P. / RS. A. P.		lbs.	RS. A. P. / RS. A. P.	RS. A. P.
March 1871	114	2	102 2 10 / 0 0 3	2,171	85	670 4 0 / 0 1 7	0 1 10
September ,,	191	3	222 13 4 / 0 0 6	1,754	28	584 2 1 / 0 1 4	0 1 11
March 1872	19	1	21 15 7 / 0 0 1	1,544	49	459 0 8 / 0 2 1	0 2 3

—	Core Consumed.			Labourers', Cleaners', etc., Wages.		Engineman and Firemen's Wages.		Total Cost of Working.
	Quantity.		Cost.	Total Cost.	Cost per Engine mile.	Total Cost.	Cost per Engine mile.	
	Total Cwts.	Per Engine mile.	Total. / Per Engine mile.					
		lbs.	RS. A. P. / RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Quarter ending March 1871	...	...	... / ...	84 6 0	0 0 2	118 2 0	0 0 8	1,117 4 8
Do. Sept. ,,	...	...	... / ...	86 4 0	0 0 2	118 12 0	0 0 3	1,163 6 6
Do. March 1872	...	...	... / ...	85 5 0	0 0 6	118 2 0	0 0 6	786 6 0

WORKING.—(*Contd.*)

—	Cost of Oil, Tallow, Waste, etc.		Total Cost of Upholding Engines.					
	Total.	Per Engine mile.	Proportion of Cost of Superintendence.		Repairs.			
			Total.	Per Engine mile.	Total.	Per Engine mile.	Amount.	Per Engine mile.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Quarter ending March 1871	142 5 10	0 0 4	184 4 0	0 0 5	202 5 8	0 0 6	1,503 14 4	0 3 6
Do. Sept. ,,	126 10 5	0 0 3	172 8 0	0 0 5	120 13 0	0 0 3	1,456 11 6	0 3 3
Do. March 1872	80 13 7	0 0 5	173 12 0	0 0 10	263 11 1	0 0 7	1,223 13 1	0 5 7

—	Total cost of Fuel.	Oil and other small Stores.	Cost of upholding Engines per mile exclusive of Fuel.	Cost of upholding Engines per mile inclusive of Fuel.	Cost of Repairs to Carriages and Waggons per mile.	Total expenditure of Locomotive and Carriage Departments per Engine mile.	Cost of maintenance of Permanent-way per mile.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
March 1871.	772 6 10	142 5 10	0 1 8	0 3 6	0 0 3	0 3 9	59 2 7
Sept. ,,	831 12 1	126 10 5	0 1 4	0 3 3	0 0 4	0 3 7	55 4 7
March 1872.	502 1 5	80 13 7	0 3 4	0 5 7	0 0 4	0 5 11	70 8 2

Cost of Repairs of Carriages and Waggons for quarter ending March and September 1871 and March 1872.

—	Workmen's wages.	Materials.	Proportion of Superintendence.	Total Cost.	Cost per Engine mile.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Quarter ending March 1871.	16 14 0	78 5 4	.....	95 3 4	0 0 3
Do. Sept. ,,	50 2 6	87 12 0	.....	137 14 6	0 0 4
Do. March 1872.	39 11 0	42 3 2	.....	81 13 2	0 0 4

Statement showing the details of Expenditure on maintenance of Way, Works, and Station for quarters ending March and September 1871 and March 1872.

—	Permanent-way.	Masonry.	Earthwork and Fencing.	Stations, etc.	Bungalows and Platelayers' huts.	Miscellaneous.	Ballasting.	Superintendence, etc.	Value of Stores expended.	Gross Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Quarter ending March 1871 ...	712 13 3	.....	.....	.....	.....	.....	.....	184 4 0	226 15 3	1,124 0 6
Do. September ,, ...	535 8 0	.....	.....	.....	.....	.....	.....	172 8 0	342 6 5	1,050 6 5
Do. March 1872 ...	531 0 0	.....	.....	281 4 3	.....	.....	.....	173 12 0	353 10 2	1,339 10 5
Cost per mile open Quarter ending March 1871 ...	59 2 7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do. September 1871...	55 4 7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do. March 1872 ...	70 8 2	.....	.....	.....	.....	.....	.....	.....	.....	.....

Proceedings of the Madras Government, Public Works Department, 6th June 1872.

No. 62. ORDER THEREON, 6th June 1872, No. 1,396.

RAILWAY, No. 5.

IN these papers the Agent and Manager of the Carnatic Railway and the Consulting Engineer submit their views on the result of the experimental reduction of the train service on that Railway, which it was decided on adopting for three months from the 1st January 1872 by the running of one train daily in each direction.

2 The conclusions arrived at by the Agent are based on a comparison of the passenger traffic of the first quarter of 1872 with that of the first and third quarters of 1871. Mr. Fisher shows that in the first quarter of 1872 there was an increase of 1,106 in the number of passengers and a falling off of Rupees 128 in receipts as contrasted with results of the corresponding quarter of 1871; and a decrease of 4,983 (not 6,983 as stated by Mr. Fisher in paragraph 3) and of Rupees 1,300 in receipts as compared with the operations of the third quarter of 1871. These results, the Agent considers, are conclusive as to the failure of the experiment; more especially when it is remembered that the traffic receipts on the Railways in this Presidency are generally larger during the first than during the second half of the year. Mr. Fisher is of opinion that the marked increase of traffic during the third over the first quarter of 1871 is due to the establishment of through-booking arrangements, and that a further development of the traffic which might reasonably have been expected was hindered by the reduction of the train service in 1872.

3. The Consulting Engineer dissents from these views on the ground that the through-booking arrangements, which he remarks did not come into operation until the last month of the third quarter of 1871, cannot produce any marked effect on the passenger traffic which it undoubtedly does on the goods traffic. He points out that no less than Rupees 791 of the Rupees 1,171 by which the receipts of the third quarter of 1871 exceeded those of the first quarter of that year, were in the months of July and August, and by an analysis of the traffic operations of four years, Lieutenant-Colonel Shaw-Stewart shows, and the Government think satisfactorily, that so far as the Carnatic Railway is concerned the traffic receipts in the first half of a year being larger than in the second is due to the influx of travellers which usually takes place during the annual festival at Little Conjeveram in May and June.

4. Adopting the ordinary method of comparing the results of one quarter with the corresponding quarter of the previous year, the Consulting Engineer shows that while there was a falling off of Rupees 201 in the receipts during the first three months of 1872, there was a saving in the working expenses of Rupees 710, leaving a net saving of Rupees 509 due to the reduced train service, and being of opinion that the experiment has been decidedly successful, he strongly recommends the continuance of the arrangement for the present. In this view the

Proceedings of the Madras Government, Public Works Department, 6th June 1872.

Government concur, and request that a further report may be submitted of the result of the measure after the expiration of a period of six months from the 1st April last.

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

No. 63. (DOCKET No. 1,397, dated 6th June 1872.)

COPY of the above forwarded to the Government of India, with reference to their letter dated 2nd September 1871, No. 1,629 R.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

Exd. S. T. Augustin.

Cons: Engrs' Office

Railway Depart

No. 193 7

Dirom.

Lieutt Colonel J. H. M. Shaw Stewart R.E.
Consulting Engineer for Railways
Madras.

&c, Colonel G. W. Walker R.E.
Secretary to Government
Public Works Department
Fort Saint George.

Sir,

In their order dated the 15th August 1871, No. 2083, the Government directed that the train service on the Carnatic Railway should be reduced experimentally, and that one train only should run daily in each direction for a period of three months. Subsequently, in their order dated the 11th October 1871, No. 2596, they allowed the experiment to be prolonged until the 1st January 1872. I have now the honour to

to submit a report drawn up by the Agent and purporting to show the financial results of the experiment in question.

x No. 397 of 12th April 1872.

2 Mr. Fisher correctly discards from consideration the goods traffic on the line, as not having been affected by the reduction in the train-service, and he compares the results of the passenger traffic for the first quarter of 1872 (during which the reduced train-service has been tried) with the corresponding figures for the first and third quarters of 1871. He shows that, as compared with the first quarter of 1871, there has been a saving in working expenses of Rs: 926, and a falling off in receipts of Rs: 128, having a net gain of Rs: 798; while, as compared with the

third quarter, there has been a saving of Rs: 197 in working expenses, and a falling off in receipts of Rs: 1063, having a net decrease of Rs: 866 in the profits.

3 Mr. Fisher wishes to set aside the comparison with the first quarter of 1871 on the ground that certain increased facilities, in the shape of through booking arrangements which were introduced during the third quarter of 1871, have been in force during the first quarter of 1872, but were not in force during the corresponding quarter of 1871. He points out that the traffic receipts of railways in this Presidency are generally larger during the first than during the second

second half of the year, but that the Receipts on his line during the third quarter of 1871 (a quarter ordinarily embraced in the worse half-year) exceeded the Receipts during the first quarter of the same year, (a quarter ordinarily embraced in the better half-year) by the sum of Rs: 1171. Mr. Fisher attributes this result entirely to the through-booking arrangements referred to above; he considers that if these increased facilities had not been neutralized by the reduction in the train-service, the traffic earnings for the first quarter of 1872 would have exhibited an increase commensurate with that which occurred in the third quarter of 1871; and he further expresses his opinion — that

that the close correspondence between the Receipts for the first quarters of 1871 and 1872 "has only been arrived at" by the increased facilities afforded "to the travelling public, by a modification in the fares during the "New years holidays, in January; the "annual feast at Trichinopoly, in February; "and the annual feast at Great Conjeveram "and the Easter holidays, in March "as well as by the continuance of "the through-booking arrangements."

4 Mr. Fisher has not shown sufficient reason for departing from the ordinary method of comparison, with the corresponding quarter of the previous year. The through-booking arrangements, though they undoubtedly exercise a wholesome influence on the goods traffic, are not calculated to produce any marked effect upon

upon the passenger traffic. Moreover the particular arrangements referred to by Mr Fricker only came into operation on the 1st September 1871, and the traffic returns show that of the 4th Qr: 1871, by which the receipts for the third quarter of 1871 exceeded the receipts for the first quarter of that year, 4th Qr: 791 are accounted for by the excess of the receipts for July and August over the receipts for January and February there:—

Coaching Receipts

First Quarter		Third Quarter	
January	4th Qr: 2322	July	4th Qr: 2302
February	4th Qr: 2151	August	4th Qr: 2962
	4th Qr: 4473		4th Qr: 5264

It would seem, therefore, that the exceptionally large receipts in the

the third quarter of 1871 must be attributed to the ordinary fluctuations of commercial activity rather than to facilities for through booking.

*Vide page 3 of his letter.

5 The conference which Mr Fricker draws from the circumstance that the receipts during the first half of the year were generally better than the receipts during the second half, falls through when the details are ascertained; for the following figures show that this circumstance is entirely due, as regards the Cadnaker Railway, to the exceptionally large traffic carried during the annual festival at Little Bryneveran in May and June, that is in the second quarter.

Receipts from Coaching Traffic from 1868 to 1871:—

Receipts

Receipts from Coaching traffic from 1868 to 1870.

	In the first half-year	In the second half-year	In a fes-tival month *
	Rs.	Rs.	Rs.
In 1868 —	23,201	15,315	10,659
In 1869 —	23,899	15,256	10,957
In 1870 —	17,209	12,931	5,581
In 1871 —	18,112	14,314	7,011
Total —	82,421	57,816	34,208
Average	20,605	14,454	8,552

* a month made up so as to embrace the period of the duration of the festival.

There is thus an average excess of Rs: 6,251 in the second half as compared with the first; but if from the average Receipts for the first half-year, Rs: 20,605, the average amount of the Receipts during a festival month, Rs: 8,552, is deducted, there remains Rs: 12,053, representing the average Receipts of five ordinary months of the first half-year; which amount is equivalent to Rs: 14,463 for six ordinary months of the first half-year

11

year, leaving only Rs: 2,010 in excess of the average Receipts during the second half-year. Taken by themselves the circumstances of the Receipts being generally better during the first than during the second half of the year will not affect a comparison between the first and third quarters of any one year.

The following figures show that there is nothing abnormal in the fact that the Receipts for the third quarter of 1871 exceeded the Receipts for the first quarter of that year;

Receipts from Coaching during the first and third quarters of each year from 1868 to 1870:-

Year.	First quarter.	Third quarter.
In 1868 — Rs.	7,574	8,191
In 1869 — "	8,808	8,465
In 1870 — "	6,912	6,775
Total —	23,294	23,431
Average.	7,765	7,810

7

7. The subjoined figures show that the increased facilities alluded to by the Agent, as having been afforded during certain holidays and festivals on the first quarter of the year, have not materially influenced the passenger traffic:— *Vide para 6 of his letter.*

Coaching receipts during periods given below.	1871	1872	Increase in 1872.	Decrease in 1872.
From 1st to 6th January (New year holidays)	569	474		95
From 28th to 17th February (Feast at Drieul-lez)	1062	1073	11	
From 15th to 31st March (Feast at Great Longueram and Easter holidays)	971	1166	195	

Showing a net increase during 1872 of £. 111 for the three periods alluded to by Mr. Drieu.

8

8. In his report the Agent gives a detailed comparison between the results for the first quarter of 1872 and the third quarter of 1870, and I am therefore unable to say how far his figures include the fortnight's traffic; but any such comparison is clearly superseded so long as the figures for the corresponding quarters in the two years can be contrasted. *Vide para 6 of his letter.*

9. Taking then the first quarters respectively of the years 1871, and 1872, the figures given by Mr. Drieu show the following results:— *In para 4 of letter.*

Period.	Receipts from passengers
	£.
Quarter ending 31st March 1871	6486
do do 1872	6357

these

there being a falling off in 1872 of £29. But as the latter period embraced the extra day due to leap year it is necessary, in order to arrive at a correct comparison, to add 1-92nd to the receipts in 1871. This will raise those receipts to £658, and the entire falling off in 1872 is therefore £201.

10 The saving in working expenses during the first quarter of 1872 is represented by £92 (Vide para 9 of letter.) to have been as follows:—

In coal	£270
In oil &c	61
In general charges	876
	£1207
Deduct increase in repairs to stations	281
Nett saving	£926

11 The general charges are not affected by the reduction in the train

13

train service, and should not be taken into account. On the other hand, the cost of repairs to stations should be omitted; and certain allowance should be made for saving in repairs to engines, and in maintenance of permanent way. In Major Prendergast's letter of the 6th March 1872 these last items were estimated at £44 per mensem in repairs to engines, and £79 in maintenance of permanent way.

No 115. Vide G.G. 16th June 1872, No 750.

12 The following figures are therefore submitted as giving a fair comparison of the working expenses during the first quarters of 1871 and 1872:—

Particulars of expenditure	1871	1872
Fuel	772	502
Oil, tallow &c	142	81
	914	583
add 1-92nd of 1871 period for leap year	10	
	924	583

	Rs:
Saving in current expenses	341
Do in Repairs of engines	132
Do in maintenance of permanent way	237
	Rs: 710

13 The saving in the working expenses for the quarter, due to the reduction in the train service may therefore be taken at Rs: 710. If from this sum there be deducted Rs: 201, which, as shown above, represents the falling off in the receipts from passengers, there remains a sum of Rs: 509, and this may be assumed to be the saving effected during the quarter by the change in the train service.

14 These figures seem conclusive; and the argument to be deduced from them is all the stronger when it is borne in mind that

that the falling off in the passenger traffic it is impossible to say, how much is directly due to the reduction in the train service; the whole sum, Rs: 201, being certainly within the ordinary annual fluctuations. On the other hand, the savings which have been taken into account are either directly traceable to the reduction in the trains, or are such as might reasonably be expected to follow there from.

15 I am of opinion that the experiment has been clearly successful, and I strongly recommend the continuance for the present of the reduced train service.

Madras
23rd April
1872

I have the honour to be
Sir
Your most obedt Servt
[illegible] Lieut Col RE
Mens: Pers. Ast Wks

Pol. 1872 Dept. Comp.
Cop of Govt Jour June
Diary No 2049

To The Consulting Engineer
for Railways
Madras

To The Secretary to Govt.
P. W. Depart.
Fort St George.

Dated 23
Recd 24 " April 1872

No 193

Submitting report
on the head of Reduced
Train Service of the
Mad Ry: Company during
the 1st quarter of 1872.

No 1396-1397-6 Enclosures/72

No 61
R.C. 8 June 1872 R. 285
C.S. Mad D. 7

15

Public Works Department

No 1396.

15

Proceedings of the Madras Government

Read the following

From The Consulting Engr } H.E. No 193 dd 23rd April 1872
for Railways. }

In these papers Re Agent and Manager of the Carnatic Railway and the Consulting Engineer submit their views on the result of the experimental reduction of the train service on that Railway which it was decided on adopting for three months

months from the 1st January 1872 by the running of one train daily in each direction.

The conclusions arrived at by the Agent are based on a comparison of the passenger traffic of the first quarter of 1872 with that of the first and third quarters of 1871. Mr Fisher shows that in the first quarter of 1872 there was an increase of 1106 in the number of passengers and a falling off of Rupees 128 in receipts as contrasted with the results of the corresponding quarter

quarter of 1871; and a decrease of 4983 (not 6983 as stated by Mr Fisher in Para 3) and of Rupees 1300 in receipts as compared with the operations of the third quarter of 1871. These results, the Agent considers are conclusive as to the failure of the experiment more especially when it is remembered that the traffic receipts on the Railways in this Presidency are generally larger during the first than during the second half of the year.

Mr

Mr. Fisher is of opinion that the marked increase of traffic during the third over the first quarter of 1871 is due to the establish-ment of through booking arrangements, and that a further development of the traffic which might reasonably have been expected was hinder-ed by the reduction of the train service in 1872.

The Consulting Engineer dissents from these views on the ground that the through booking arrangements, which he remarks did not come into operation until the last month of the third quarter of 1871, cannot produce any marked effect on the passenger traffic which it undoubtedly does on the goods traffic. He points out that no less than Rupees 791 of the Rupees 1171 by which the receipts of the third quarter of 1871 exceeded those of the first quarter of that year, were in the months of July and August, and by an analysis of the traffic operations of four years, Lt. Colonel Shaw

Shaw Stewart shows,
and the Government
think satisfactorily, that
so far as the Carnatic
Railway is concerned,
the traffic receipts in
the first half of a year
being larger than in
the second is due to the
influx of travellers which
usually takes place during
the annual festival at
Little Conjeveram in
May and June.

Adopting the
ordinary method of
comparing the results
of one Quarter with
the corresponding Quarter
of the previous year
the

the Consulting Engineer
shows that while there
was a falling off of
Rupees 201 in the
receipts during the
first three months
of 1872, there was a
saving in the working
expenses of Rupees 710,
leaving a net saving
of Rupees 509 due to
the reduced train service,
and being of opinion
that the experiment
has been decidedly suc-
-cessful, he strongly
recommends the contin-
-uance of the arrange
-ment for the present.
In this view the
Government

Government concurs and request that a further report may be submitted of the result of the measure after the expiration of a period of six months from the 1st April last.

40

12 To Govt Engineers Depr 7/6/72

Docket No 1399/1

Copy of the above forwarded to the Government of India with reference to their letter dated 2d September 1871, No 1629 R.-

Govt

50

Depr 7/6/72 inta 35 Jamesp.

Rec'd 8 Jany/72 D. 28 Jany/72

No 2049

Govt. of [1872] Madras.

PUBLIC WORKS.

To The Commutting Engr.
for Railways
And
To The Secretary to the
Govt of India

Dated

Recd. Encl. 2

G. O. 6th June 72. N. 1396-139

Nos. 61-62 & 63

Carnatic Railway. Papers
relative to the
Engineer submitting report
from the Agent & Manager
on the Results of the
experimental reduction of
the Train Service on the
Carnatic Ry.

Demand Copy of Proceedings
relative to the Engineer submitting
report from the Agent & Manager
on the Results of the experimental
reduction of the Train Service
on the Carnatic Ry.