

(1) Number of pages _____

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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. H 32, H 33, H 34	1575 - 1576	Press Mis.
Dated	28.6	1872

Not to be folded or roughly handled

F. 5

*Proceedings of the Madras Government, Public Works Department,
28th June 1872.*

No. 432. Read the following letter from the Consulting Engineer for Railways, to the Secretary to Government, Public Works Department, dated Madras, 12th June 1872, No. 302 :—

In the Order of Government dated the 22nd April 1872, No. 1,034, certain rates for the carriage of construction materials on the Railways in this Presidency were sanctioned, subject to the confirmation of the Government of India. Subsequently, with the Order of Government dated the 14th May 1872, No. 1,273, a letter from the Government of India was communicated, in which certain considerations affecting the traffic in railway materials were pointed out, and it was suggested that, with regard to those considerations, a rate of 4 pies per ton mile would represent the actual cost, *plus* a small margin for contingencies, of carrying construction materials on the Railways in this Presidency.

2. With reference to paragraph 2 of the letter from the Government of India, I understand that when addressing you on the 22nd March last, Major Prendergast was in doubt whether, in order to carry out the views of the Government of India conveyed in the Order of the Madras Government dated the 18th December 1871, No. 3,191, the cost of superintendence in each department should be included in calculating the rate to be charged for the carriage of construction materials.

As I have already stated in my letter of the 17th ultimo, No. 246, I am of opinion that, in calculating this rate, the cost of all fixed establishments should be excluded. A note appended to this letter will show that, if these items were struck out, the actual cost to the Companies, per ton mile, of hauling construction materials, will be reduced in the case of the Madras Railway from 5.30 pies to 3.78 pies, and in the case of Great Southern of India Railway from 4.70 pies to 2.84 pies. These figures include a margin for contingencies.

The points noticed in paragraphs 3 and 4 of the letter from the Government of India were all duly considered by Major Prendergast when he addressed you on this subject on the 22nd March.

3. Upon receipt of the Order of Government dated the 14th May 1872, No. 1,273, I sent copies of it to the Agents of the three Railway Companies in this Presidency, with a request that they would state whether, in view of the arguments

From Agent, Madras Railway, No. 351, dated 27th May 1872.

From Agent, Great Southern of India Railway, No. 4,500, dated 9th May 1872.

From do. do. No. 4,521, dated 27th May 1872.

From Agent, Carnatic Railway, No. 432, dated 23rd May 1872.

set forth by the Government of India, they saw any reason why a charge of 4 pies per ton mile should not be held to represent the actual cost, *plus* a small margin for contingencies, of carrying construction materials on their lines;

and I have now the honour to enclose, for the consideration of Government, the replies with which I have been favoured.

4. The Agent of the Madras Railway has no observations to offer on the subject. He states that he has referred to his Directors for instructions as to whether the rate of 5½ pies per ton mile, which was approved by the Government of Madras, would be accepted by them.

5. The Agent of the Great Southern of India Railway, in the first of the letters submitted by him, states that, in his opinion, the proposed rate of 5 pies per

ton mile does not cover the cost of carrying railway materials, leaving a small margin for contingencies. Mr. Betts says, "if all material was sent in truck load, and no empty mileage had to be run on account of such traffic, the rate referred to might probably cover the actual working cost; but it constantly happens that smaller consignments have to be sent; and whenever material is worked in train loads at a fixed hour daily, the whole of the trucks have to be worked back empty, our stock not being sufficiently large to keep the trucks at stations for a back load; even if a back load could be obtained, the traffic which flows to the coast requires covered goods trucks for its conveyance, and not low-sided open trucks which are used for material."

I cannot admit that Mr. Betts' arguments are valid. When making the calculations contained in his letter of the 22nd March, Major Prendergast assumed that one-half of all trucks used in the conveyance of railway material would be run back empty. The following figures, taken from the vehicle mileage returns for the half-years ended 31st December 1870 and 30th June 1871, show that this assumption is within the mark. In considering these figures it should be remembered that railway material travels exclusively "up," that is from Negapatam; and that it is almost wholly carried in high-sided and low-sided open trucks:—

Description of trucks.	Direction.	Loaded or empty.	MILEAGES IN	
			Second half of 1870.	First half of 1871.
High-sided open ...	Up ...	Loaded ...	21,600	14,071
		Empty ...	143,769	138,273
	Down ...	Loaded ...	154,492	144,315
		Empty ...	7,423	5,063
Low-sided open ...	Up ...	Loaded ...	12,693	20,713
		Empty ...	37,755	88,868
	Down ...	Loaded ...	39,605	89,210
		Empty ...	7,947	14,430

N. B.—"Up" is from Negapatam.

"Down" is to Negapatam.

These figures show that of the vehicles used for carriage of railway materials on the Great Southern of India Railway, a very large proportion are at present run empty in the direction in which railway material is sent.

6. In the second of his letters Mr. Betts states that the "trucks which are used for the conveyance of rails, girders, etc., are not suitable for the carriage of damageable goods." This may be quite correct, but a reference to the foregoing figures will show that the high-sided and low-sided open trucks are very largely used in the conveyance of merchandise to Negapatam.

Mr. Betts also states that "trucks have to be taken to dépôts away from the open line, whence no back load is available." From this I gather that he is under the impression that the special material rates are to be used on the unopened line, which was never intended.

7. The Agent of the Carnatic Railway represents that the case of that line is quite exceptional, and that no stores are likely to be carried over the existing portion of open line for the construction of the Southern Extension. Mr. Fischer

evidently considers it to be a matter of little moment what rates are nominally fixed for the carriage of construction materials; he only stipulates "that the Revenue Account should not be burdened with any charge which legitimately appertains to the construction of the Southern Extension."

8. Upon full consideration of the subject, I have no hesitation in stating that I consider that the rate named by the Government of India, 4 pies per ton mile, will amply cover the whole actual cost to the Companies of carrying construction materials upon their lines, together with a margin for contingencies. The figures given in the appended note show that on the Great Southern of India Railway a rate of 3 pies per ton mile would be sufficient, so that the proposed rate of 4 pies will actually leave a not inconsiderable profit.

I have, therefore, the honour to recommend that from the 1st July, the commencement of the Railway half-year, the revised rate of 4 pies per ton mile for the carriage of construction materials be introduced upon all the lines of Railway in this Presidency. I think it would be desirable to allow no exception to this rate.

Note by the Consulting Engineer for Railways.

THE proposed charges for the carriage of railway material on the Madras Railway and Great Southern of India Railway were originally calculated on the basis of the total expenditure in each department; under the subsequent orders of the Government of India, it became necessary to omit from consideration certain items of expenditure in the Maintenance, Locomotive, Carriage and Waggon, and Traffic Departments, and the whole of the General charges and Special and Miscellaneous expenditure.

2. The items which it is proposed to omit are as follow:—

Maintenance of Way and Works.—Superintendence, repairs of stations and buildings, plantations and loss on stores.

Locomotive Department Expenses.—General Superintendence.

Carriage and Waggon Expenses.—General Superintendence, Repairs and Renewals of Coaching vehicles.

Traffic Expenses.—Salaries, Wages, etc.; Fuel, Lighting, etc.; Clothing, Printing, Stationery, etc.; Expenses at joint stations.

3. Taking then the two half-years ended 31st December 1870 and 30th June 1871 (on the basis of which the charges for conveyance were originally calculated), the total expenses (A), the expenses to be omitted from the calculations (B), the expenses which will now be alone considered (C), and the proportion of C to A will be as follows, for the Madras Railway:—

	Maintenance.	Locomotive.	Carriage and Waggon.	Traffic.
A ...	8,95,275	10,58,463	1,56,480	4,38,744
B ...	1,67,910	74,098	35,444	3,76,959
C = A - B ...	7,27,365	9,84,365	1,21,036	61,785
$\frac{C}{A}$...	0.812	0.930	0.773	0.140

*Proceedings of the Madras Government, Public Works Department,
23th June 1872.*

4. The cost, in the several departments, of hauling a truck and 6.75 tons of material over one mile, as originally calculated, and the corrected figures, obtained by multiplying the cost in each department as originally obtained by the corresponding multiplier $\frac{C}{A}$ is as follows:—

	Mainte- nance.	Locomo- tive.	Carriage and Waggon.	Traffic.	General.	Special and Miscel- laneous.	Total.
Original figures D ...	Pies. 11.48	Pies. 13.99	Pies. 1.83	Pies. 4.13	Pies. 1.27	Pies. 1.38	Pies. 34.08
Corrected do. $D \times \frac{A}{C}$...	9.32	13.01	1.41	0.58	0.00	0.00	24.32
Add for contingencies, at 5 per cent.	...	...	...	...	...	...	1.22
							25.54

dividing the total thus obtained, 25.54 pies, by the assumed load of a truck in tons, 6.75, the cost of hauling a ton of material one mile is obtained, 3.78 pies.

5. The corresponding figures for the Great Southern of India Railway will be as follows for the expenses of the several departments:—

	Maintenance.	Locomotive.	Carriage and Waggon.	Traffic.
A	1,06,406	1,61,107	26,876	65,408
B	30,060	27,428	9,459	58,263
C = A - B	73,346	1,33,679	17,417	7,145
$\frac{C}{A}$	0.689	0.830	0.648	0.109

and for the cost of carriage,

	Mainte- nance.	Locomo- tive.	Carriage and Waggon.	Traffic.	General.	Special and Miscel- laneous.	Total.
Original figures D ...	Pies. 7.05	Pies. 11.91	Pies. 1.71	Pies. 3.19	Pies. 2.37	Pies. 0.65	Pies. 26.88
Corrected do. $D \times \frac{C}{A}$...	4.86	9.88	1.11	0.35	0.00	0.00	16.20
Add for contingencies, at 5 per cent.	...	...	...	...	...	...	.81
							17.01

6. Dividing this total, 17.01 pies, by the assumed number of tons in an average load of material, 6, the cost of hauling a ton of materials one mile is arrived at 2.835 pies.

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

MADRAS,
23th June 1872.

*Proceedings of the Madras Government, Public Works Department,
28th June 1872.*

From the Agent and Manager of the Madras Railway Company, to the Consulting Engineer for Railways, dated Madras, 27th May 1872, No. 351.

In reference to your letter No. 386 of the 21st instant, and to the Orders of Government noted in the margin, I have the honour to inform you that I have not at present any further observations to offer upon the subject of the rates for the conveyance of railway materials.

No. 1,034, 22nd April 1872.
" 1,373, 14th May "

2. Upon the receipt of G. O., No. 1,034, dated the 22nd ultimo, I wrote to my Directors and asked for instructions as to whether the rate approved by the Government of Madras, namely, 5½ pies per ton per mile, would be accepted by the Board.

3. I have not, of course, yet received a reply to my letter.

From the Agent of the Great Southern of India Railway Company, to the Consulting Engineer for Railways, dated Negapatam, 9th May 1872, No. 4,500.

I HAVE to state, in reply to your Memorandum No. 160 of the 24th ultimo, that, in my opinion, a rate of 5 pies per ton per mile does not cover the cost of conveyance (plus a small margin for contingencies) of railway material. If all material was sent in truck loads, and no empty mileage had to be run on account of such traffic, the rate referred to might probably cover the actual working cost; but it constantly happens that smaller consignments have to be sent; and whenever material is worked in train loads at a fixed hour daily the whole of the trucks have to be worked back empty, our stock not being sufficiently large to keep the trucks at stations for a back load; even if a back load could be obtained, the traffic which flows to the coast requires covered goods trucks for its conveyance, and not low-sided open trucks which are used for material.

2. I beg to solicit, therefore, the sanction of Government to the 9½ pies rate (quoted in my letter No. 4,316) being charged for consignments of less than 6 tons, and also to the 27½ annas rate being applied to the return empty train mileage, as the cost of working train mileage during the half-year ending 30th June last included empty as well as full train mileage.

3. I may mention that the actual cost of working per train mile last half-year rose to 29½ annas. The proposed charge for small consignments, before referred to, I wish to point out, is not a charge for the load placed in the waggon by the Traffic Department, and, therefore, no premium would be offered for running half loaded waggons, but the weight of the consignment is fixed by the indent of the Engineering Department.

From the Agent of the Great Southern of India Railway Company, to the Consulting Engineer for Railways, dated Negapatam, 27th May 1872, No. 4,521.

YOUR letter No. 194 of the 21st instant. If the arguments set forth by the Government of India in letter No. 672 G. R., of the 11th idem, be adopted, I do not see any reason why a charge of 4 pies per ton per mile should not be held to represent the actual cost, plus a small margin for contingencies, of carrying construction materials.

2. Holding the views set forth in my previous communications on this subject, I need hardly say, however, that I consider those arguments untenable.

3. We have practically no goods traffic of great bulk on this line, a reference to the half-yearly commodity returns show this.

4. The expenditure on all fixed establishments being excluded would leave in the calculation only the value of the stores consumed, which, I hold, would not correctly represent the cost of haulage.

5. Trucks which are used for the conveyance of rails, girders, etc., are not suitable for the carriage of damageable goods and *vice versa*.

6. Hitherto we have found it necessary, in order that the work of platelaying might be systematically and economically carried on, to work up material by special daily train service and at fixed hours; trucks have to be taken to depôts away from the open line, whence no back load is available.

From the Agent and Manager of the Carnatic Railway Company, to the Consulting Engineer for Railways, dated Madras, 23rd May 1872, No. 432.

I HAVE the honour to acknowledge receipt of your letter, No. 121, enclosing G. O., No. 1,273, and, in reply, beg to state that the case of the Carnatic Railway as respects the carriage of materials for construction purposes is quite exceptional.

2. No stores are carried, or are likely to be carried, over the existing portion of the open line for the construction of the Southern Extension, excepting perhaps an occasional consignment of sundries, weighing probably in most cases a few pounds only, and to charge a rate of 4 pies per ton per mile for these would, as stated in my letter, No. 339, be productive of nothing but inconvenience in the accounts. Unless, therefore, we can adhere to the arrangement approved in G. O., No. 1,034, I should recommend that no charge whatever is made upon this Railway until a further portion of the line is open for traffic; at the same time, however, I am of opinion that the Revenue Account should not be burdened with any charge which legitimately appertains to the construction of the Southern Extension.

No. 433.

ORDER THEREON, 28th June 1872, No. 1,575.

RAILWAY, No. 55.

THE rates proposed in the papers recorded with Proceedings, No. 1,034, dated 22nd April 1872, for the carriage of construction materials on open lines of Railway in this Presidency were deduced on the assumption that the cost of fixed establishments should be included in the calculation. The Government of India have no real bearing on the outlay due to the transport of construction stores they should be omitted, and that if due weight be given to other considerations which tend to lower the haulage expenses, the actual cost will be found not to exceed 4 pies per ton per mile, with a small margin for contingencies.

2. Proceeding on this basis, Major Shaw-Stewart arrives at the following result as the actual cost to the Companies, plus a margin for contingencies, of the carriage of their materials for construction purposes, namely:—

On the Madras Line, 3.78 pies per ton per mile.

Do. Great Southern of India Line, 2.835 pies per ton per mile.

and he accordingly considers that the rate of 4 pies named by the Government of India will amply cover all expenses.

3. Under these circumstances, His Excellency the Governor in Council sees no objection to the 4 pie rate being brought into operation on all Railways from the 1st July next as proposed by the Consulting Engineer, and care should be taken that this rate is not exceeded in estimates for works to be executed from Capital which may be submitted for sanction after the date specified.

4. With reference to the observations of the Agent of the Great Southern of India Railway, adverted to in paragraph 5 of the Consulting Engineer's letter, to the effect that in order to arrive at the true cost of the carriage of construction materials the empty mileage which is necessarily run should not be omitted from the calculation, it is observed that in the original proposals submitted by Major Prendergast one-half of all loaded material waggons was allowed for as being returned empty, and this seems to be a sufficiently large proportion. It appears to the Government that if advantage were taken of the large number of waggons which are shown to be forwarded empty in the same direction as that in which construction materials are conveyed the cost of carriage might be still further reduced.

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,

Secretary to Government.

No. 434. (DOCKET No. 1,576, dated 28th June 1872.)

COPY of the above is forwarded to the Government of India, with reference to their letter, No. 672-G. R., dated 11th May 1872.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

Railway Depart
Cons: Eng'g Office

Sir,

Lieut Colonel J. M. Shaw Stewart
Cons: Engineer for Railways
Madras.

Sir,

Colonel L. W. Walker. R.E.
Off: Secretary to Government
Public Works Department
— Fort Saint George.

N^o 1134

In the order of Govern-
ment dated the 22^d April 1872,
certain rates for the carriage of
construction materials on the railway
in the Presidency were sanctioned,
subject to the confirmation of the
Government of India. Subsequently

N^o 1270. with the order of Government dated
the 14th May 1872, a letter from the
Government

Government of India, was communicated in which certain considerations affecting the traffic in railway materials were pointed out, and it was suggested that, with regard to these considerations, a rate of 6 pice per ton mile would represent the actual cost, plus a small margin for contingencies, of carrying construction materials on the railways in this Presidency.

2 With reference to paragraph 2 of the letter from the Government of India, I understood that when addressing you on the 20th March last, Major Prendergast was in doubt whether, in order to carry out the views of the Government of India conveyed in

N. 3191.

in the order of the Madras Government dated the 18th December 1871, the cost of superintendence in each department should be included in calculating the rate to be charged for the carriage of construction materials.

As I have already stated in my letter of the 17th ultimo, N. 246, I am of opinion that, in calculating this rate, the cost of all fixed establishments should be excluded. A note appended to this letter will show that, if these items were struck out, the actual cost to the Companies per ton mile, of hauling construction materials, will be reduced in the case of the Madras Railway from 5.30 pice

pieces to 3.78 pice, and in the case of Great Southern of India Railway from 2.70 pice to 2.80 pice. These figures include a margin for contingencies.

The points noted in paragraphs 3 and 4 of the letter from the Government of India were all duly considered by Major Prendergast when he addressed you on this subject in the 22nd March.

3 Upon receipt of the order of Government dated the 14th May 1872, I sent copies of it to the Agents of the three Railway Companies in the Presidency, with a request that

N. 1273

that they would state whether, in view of the arguments set forth by the Government of India, they saw any reason why a change of 10 pice per ton mile should not be held to represent the actual cost, plus a small margin for contingencies, of carrying construction materials on their lines: and I have now the honour to enclose for the consideration of Government

- From Agent Madras Railway N. 351 of 27th July 1872.
- do do S. of I Railway N. 45008 of 9th May 1872.
- do do do do N. 45218 of 27th May 1872.
- do do do do Casualty Railway N. 4377 of 23rd July 1872.

the replies with which I have been favoured.

4 The Agent of the Madras Railway had no observations to offer on the subject. He states that

that he has referred to his
Directors for instructions as to
whether the rate of 5 1/2 pice per
ton mile, which was approved
by the Government of Madras
would be accepted by them.
5 The Agent of the Great
Southern of India Railway in
the first of the letters submitted
by him, states that in his opinion
the proposed rate of 5 pice per
ton mile does not cover the cost
of carrying railway materials,
leaving a small margin for
contingencies. Mr. Belto
says "if all material was
sent in truck loads, and no
empty mileage had to be run
on account of such traffic,
the

4
the rate referred to might
possibly cover the actual working
cost, but it constantly happens
that smaller consignments have
to be sent, and whenever material
is worked in train loads at
a fixed hour daily, the whole
of the trucks have to be worked
back empty, no stock not
being sufficiently large to keep
the trucks at stations for a back
load, even if a back load
could be obtained, the traffic
which flows to the coast requires
covered goods trucks for its
conveyance, and not low-sided
open trucks which are used for
material."

I cannot admit that
Mr. Belto

Mr. Betts' arguments are valid.
 When making the calculations
 contained in his letter of the
 22nd March, Major Prendergast
 assumed that one-half of all
 trucks used in the conveyance
 of railway material would be
 seen back empty. The following
 figures, taken from the vehicle
 mileage returns for the half years—
 ended 31st December 1870 and 30th
 June 1871, show that this
 assumption is within the
 mark. In considering these
 figures it should be re-
 membered that railway material
 travels exclusively "up", that
 is from Nagapatam, and that
 it is almost wholly carried
 in

7+
 in high-sided and low-sided
 open trucks:—

Description of trucks	Direction	Loaded or empty	Mileage in	
			Second half of 1870.	Second half of 1871.
High sided open	up	Loaded	21,600	14,071
		Empty	14,376	13,273
	down	Loaded	754,492	144,315
		Empty	7,423	5,063
Low-sided open	up	Loaded	12,693	20,713
		Empty	37,755	88,868
	down	Loaded	39,605	89,210
		Empty	7,947	14,430

N.B. "up" is from Nagapatam.
 "down" is to Nagapatam.

These figures show that
 of the vehicles used for carriage
 of railway materials on the Great
 Southern of India Railway, a
 very large proportion are at
 present run empty in the
 direction

a. direction in which railway material
is sent.

b. In the second of his
letters Mr. Betts states that the
"trucks which are used for the
conveyance of rails, girders, &c.,
are not suitable for ^{the} carriage of
"damageable goods". This may
be quite correct: but a reference
to the foregoing figures will show
that the high-sided and low-
sided open trucks are very largely
used in the conveyance of
merchandise to Nagasaki.

Mr. Betts also states
that "trucks have to be taken
to depots away from the open
line, whence no back load is
available." From this I
gather

gather that he is under the im-
pression that the special material
rates are to be used on the un-
opened line, which was never
intended.

The Agent of the Carnation
Railway represents that the case
of that line is quite exceptional,
and that no stones are likely to
be carried over the existing
portion of open line for the con-
struction of the Southern extension.
Mr. Fisher evidently considers
it to be a matter of little im-
portance what rates are numerally
fixed for the carriage of construction
materials: he only stipulates
that the Revenue Account
should

87

Maderas
12th June.
1892

I have the honour to be
 Sir,
 Your most obedt^t &c
 Mantleway St ball 18
 Genl: Enn for Mackay

Pro 18 Dec/71 No 325-326
 " 22 April/72 -- 324-326
 " 11 May -- 337-338
 " 21 -- 175 Misc

Public Works Department
 Secy of Govt
 The Comr Genl
 by The Secy to Govt
 P. N. S.

Dated 12 June/72
 No 18

No 302

Encl: 5. V

Regarding
 the notes for the
 carriage of Railway
 materials

No 1575-1576. 28 Dec/72

No 432

6 Dec/71 15 June/72

Notes.

— The proposed charges
 for the carriage of railway material
 on the Madras Railway and Great
 Southern India Railway were originally
 calculated on the basis of the total
 expenditure in each department;
 under the subsequent orders of the
 Government of India it became
 necessary to omit from consideration
 certain items of expenditure in the
 Maintenance, Locomotive, Carriage
 and Wagon, and Traffic departments,
 and the whole of the General charges,
 and Special and Miscellaneous
 expenditure.

2. The items which it is proposed to omit are, as follows:—

Maintenance of Way and Works:—

Superintendence, Repairs of Stations and Buildings, Plantations and Locomotive Stones.

Locomotive department expenses:—

General Superintendence:

Carriage and Wagon expenses:— General

Superintendence, Repairs and Renewals of Coaching Vehicles.

Traffic expenses:— Salaries, Wages &c,

Fuel, Lighting &c, Clothing, Booting, Stationery &c, expenses at joint stations.

3. Taking then the two half-years ended 31st December 1870

and 30th June 1871 (on the basis of which the charges for conveyance were originally calculated), the total expenses (A), the expenses to be omitted from the calculations (B), the expenses which will now be alone considered (C), and the proportion of C to A will be as follows, for the Madras Railway:—

	Maintenance	Locomotive	Carriage and Wagon	Traffic
A —	895,275	105,846	156,480	4,38,744
B —	167,910	74,098	35,444	376,959
C = A - B	727,365	98,436	121,036	61,785
$\frac{C}{A}$ —	0.812	0.930	0.773	0.140

4. The cost, in the several departments, of hauling a truck and 6.75 tons of material over 1 mile, as

originally calculated, and the corrected figures, obtained by multiplying the cost in each department as originally obtained by the corresponding multiplier $\frac{C}{A}$, is as follows:—

	Maintenance	Locomotive	Carriage and wagon	Traffic	General	Special and Miscellaneous	Total
	Pies	Pies	Pies	Pies	Pies	Pies	Pies
Original figures D	1148	1399	183	413	127	138	3408
Corrected - $80 \times \frac{C}{A}$	932	1301	141	0.58	0.00	0.00	2432
Add for contingencies, at 5 percent $\frac{A}{C}$							1.22
							<u>25.54</u>

dividing the total thus obtained, 25.54 pies, by the assumed load of a truck in tons, 6.75, the cost of hauling a ton of material one mile is obtained, —
3.78 pies.

5. The corresponding figures for the Great Southern India Railway will be as follows for the expenses of the several departments:—

	Maintenance	Locomotive	Carriage and wagon	Traffic
A—	106,406	161,107	26,876	65,408
B—	30,060	27,428	9,459	58,263
C = A - B	73,346	133,679	17,417	7,145
$\frac{C}{A}$ —	0.689	0.830	0.648	0.109

and for the cost of carriage

	Maintenance	Locomotive	Carriage and wagon	Traffic	General	Special and Miscellaneous	Total
	Pies	Pies	Pies	Pies	Pies	Pies	Pies
Original figures D	705	1191	171	319	237	0.65	2688
Corrected - $80 \times \frac{C}{A}$	486	988	111	0.35	0.00	0.00	1620
Add for contingencies, at 5 percent							.81
							<u>17.01</u>

6. Dividing this total, 17.01

~~Civil Engineers for Railways~~

نصف روزی / ۱۰/۱۱

CP

The Government of India
however point out that
as these charges have no
real bearing on the out-
lay due to the transport
of construction stores they
should be omitted, and
that if due weight be

Letter No 672 G. P.
dated 11th May 1872-

given to other considerations
which tend to lower the
freight expenses, the ac-
tual cost will be found
not to exceed 4 pice per
ton per mile, with a
small margin for con-
tingencies.

Proceeding on this
basis, Major Shaw Stewart
arrived at the following
result as the actual cost
to

to the Companies, plus
a margin for conting-
encies, of the carriage
of their materials for
construction purposes.
vizt-

On the Madras Line - 3.78 pice per ton
per mile

- - - Great Southern of India } do - 2.835 - do - do

and he accordingly con-
sidered that the rate of
4 pice named by the
Government of India
will amply cover all
expenses.

Under these
circumstances His Ex-
cellency the Governor
in Council sees no
objection

objection to the 4 pie rate
being brought into opera-
tion on all railways
from the 1st July next
as proposed by the
Consulting Engineer, and
care should be taken that
this rate is not exceeded
in Estimates for works
to be executed from Cap-
ital which may be sub-
mitted for sanction after
the date specified.
With reference
to the observations of the
Agent of the Great In-
dian Railway
adverted to in para 5
of the Consulting Engi-
neer's letter, to the effect
that

that in order to arrive
at the true cost of the
Carriage of Construction
materials the empty
milders which is nei-
cessarily run should
not be omitted from
the calculation, it is
observed that in the
original proposals sub-
mitted by Major
Fundergast one half
of all loaded material
wagons was allowed
for as being returned
empty, and this seems
to be a sufficiently
large proportion. It
appears to the Govern-
ment that if advantage
were

of were taken of the large
number of wagons which
are shown to be forwarded
empty in the same direction
as those in which con-
struction materials are
carried. The cost of
carriage might be still
further reduced.

done by Mr. J. J. [unclear]
[unclear] [unclear]
[unclear] [unclear]
[unclear] [unclear]

Copy of the above
is forwarded to the Govt
of India with reference to
their letter No 672 G. P.
dated 11th May 1872.

The [unclear] [unclear]
[unclear] [unclear]
[unclear] [unclear]
[unclear] [unclear]
[unclear] [unclear]

To the Comr. Engr for
the Govt Railways
Examiner - Railway
Accounts.

Recd 8/7/72
17/7/72

50
Recd 8/7/72 with 35 of [unclear]
[unclear]

Op 2943
Govt. of 1872 Madras.
PUBLIC WORKS.

To

Dated

Recd.

Ex. 5

G. 028-¹⁸⁷² June 1875-1876

Nos. 432-433-434

Encls. Paving orders
Letter from the Chief Engineer
on the rates
chargeable for
carriage of construction
materials on open lines
Railways in this
Presidency.