M.R.O. 1—77,006—8-6-37.

(1) Number of pages_____

(2) Date of repair_____

(3) Initials of the Referencer_____

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 1819.	2818	Press / Mis.
Dated	2-12-	1892.

Not to be folded or roughly handled

No. 18. Read the following Endorsement of the Consulting Engineer for Railways, dated Madras, 16th November 1872, No. 630:—

From the Agent of the Great Southern of India Railway, to the Consulting Engineer for Railways, dated Negapatam, 23rd October 1872, No. 4,767.

YOUR No. 446. Attached I hand you, for the information of Government, copy of letter No. 923, from the Locomotive Superintendent on the subject of the burning of Australian coal, etc.

From the Locomotive Superintendent, to the Agent of the Great Southern of India Railway, dated 21st October 1872, No. 923.

CONSULTING Engineer's No. 446.

I am sorry I am unable to give any further data on this subject. The Australian Newcastle coal we had has been covered over by, and got mixed up with, English coal for want of space. The driver was in error in telling Captain Thompson he had only Australian. I could not get at the Australian to obtain any reliable result beyond what has already been furnished to Government. My own opinion is much in its favour, smoke it certainly does from its bituminous nature, and in the hands of a careless driver is rather objectionable, but with common care, attention to dampers, and intelligent manipulation, its performance is very good, better than the Hartley coal we get. I mix it with the patent fuel to avoid having to break up the latter, a necessity if it is used alone. The two together give a fair result, 35 lbs. per mile for a gross load of 450 tons. This would appear even better, but for the great stumbling block on our Negapatam and Trichinopoly division, the Tanjore incline; our through-working is thereby reduced by one-third. While upon this subject, I think it might be well to draw the attention of Government to the moral arising from the mistaken principle "very cheap first cost" in construction, as borne out by the case in point, the Tanjore incline occurring in the middle of an otherwise level country. Say roughly our goods traffic receipts are 3,000 a month, equal to Rupees 36,000 per annum. An expenditure of Rupees 50,000 upon the Tanjore incline in reducing the gradient would have enabled us to work one-third more traffic, and during the season of the year, when the traffic is low, would have permitted of one train a day doing the work; the extra traffic to accrue from this expenditure would be 36,000 over ⅓, equal to Rupees 12,000, which in six years would have paid off capital and interest. This is leaving out the saving of the one train meeting the requirement in the slack season. Our new south line affords another example. The traffic between Trichinopoly and Madura has a millstone round its back in the shape of a series of heavy inclines to reach a gap in a hill-range above Dindigle, the country on either side being nearly level. A few thousand pounds spent in relieving these gradients will be repaid over and over again in perpetuity in traffic receipts by the extra goods loads hauled. As it is now, we must either have a constant charge against Revenue if an extra engine is to be stationed at the foot of these inclines to help trains up, or reduce our loads. This question is one of grave consideration, and will effect the future success of our narrow gauge, and, as I hope to live long enough to see it well at work, it is a matter of personal interest to me that the large traffic which is said to exist between Tuticorin and Trichinopoly should be carried by us at such an expenditure as may maintain our reputation for economy and efficiency and reflect credit upon all concerned.

SUBMITTED for the information of Government, with reference to paragraph 2 of their Order dated the 5th November 1872, No. 2,603.

2. It will be seen that the Locomotive Superintendent, though strongly in favour of Australian coal, is at present unable to give any trustworthy data upon the subject.

Proceedings of the Madras Government, Public Works Department,
2nd December 1872.

3. Mr. Sheward takes this opportunity to animadvert upon the heavy gradients on the line of the Southern Extension between Trichinopoly and Madura. The ruling gradient on this part of the extension is 1 in 100; and the nature of the country is such that, within a distance of 57 miles, there are more than 23 miles upon gradients steeper than 1 in 170. There can be no doubt that it would be simply impossible to construct a railway along the direct route between Trichinopoly and Dindigul, and to ease the proposed gradients to any appreciable extent without at the same time adding enormously to the cost.

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

No. 19. ORDER THEREON, 2nd December 1872, No. 2,818.

RAILWAY, No. 5.

ORDERED to be recorded.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Consulting Engineer for Railways.

Ed. E. C. Shunker.

No. 476. No — Loco Works. A 1/12/3

GREAT SOUTHERN OF INDIA RAILWAY.

AGENT'S OFFICE,

NEGAPATAM, 23d October 1872

From

THE AGENT,

Great Southern of India Railway,

To

The Consulting Engineer
for Railways
Madras.

SIR,

Your No 446.

Attached I hand you, for the information of Government, copy of letter No 923 from the Locomotive Superintendent on the subject of the burning of Australian Coal &c.

I have the honor to be
Sir
Your most obedient Servant
William Betts
Agent

Letter No 923 from the Commissioner Superintendent to the Agent of the Great Southern Railway, Adelaide dated 21st October 1872.

Copy.

Railway Engineer's Office No 446

Adelaide 21st October 1872.

Sir,

I am directed to enclose for your information a copy of a letter from the Australian Natives Association, and to request that you will report for the information of the Commissioner whether the Engineer in charge of the Kanmantoo Railway has been consulted on the subject, and if not whether he has any objection to offer to the proposal.

The Engineer in charge of the Kanmantoo Railway was consulted before the Association's letter was addressed to the Commissioner.

I am Sir
Your obedient Servant
(Signed) W. Peacock
Engineer in Chief

The Agent
Great Southern Railway
Adelaide

No 4764

From
The Agent for Railways
G. S. Railway

To
The Secretary
for Railways

Dated 25 October 1872
Received 25 Oct

Forwarding copy of letter No 923 from the Commissioner Supt. re Burning of Australian Coals.

P. W. 5675/72.

occurring in the middle of an otherwise level Country. Say roughly our goods traffic receipts are 3000 a month equal to Rupees 36000 per annum. An expenditure of Rupees 50000 upon the Tanjore incline in reducing the gradient would have enabled us to work ⅓ more traffic, and during the season of the year when the traffic is low would have permitted of one train a day doing the work - the extra traffic accruing from this expenditure would be 36000 equal to Rs 12,000 which in 6 years would have paid off Capital and interest. This is leaving out the saving of the one train meeting the requirement in the slack season. Our new South line affords another example. The traffic between Trichinopoly and Madura has a millstone round its neck in the shape of a series of heavy inclines to reach a gap in a hill range above Dindigle, the Country on either side being nearly level: A few thousand pounds spent in relieving these gradients will be repaid over and over again in perpetuity in traffic receipts by the extra goods loads hauled. As it is now, we must either have a "constant" charge against Revenue of an extra engine to be stationed at the foot of these inclines to help trains up, or reduce our loads. This question is one of grave consideration, and will effect the future success of our narrow gauge, and as I hope to live long enough to see it well at work it is a matter of personal interest to me that the large traffic which is said to exist between Tuticorin

and Trichinopoly, should be carried by us at such an expenditure as may maintain our reputation for economy and efficiency and reflect credit upon all Concerned.

William Bell

Agent

23/10/72

№ 630.

Submitted for the infor-
-mation of Government, with reference
to paragraph 2 of their order dated
the 5th November 1872, № 2603.

2. It will be seen that
the Locomotive Superintendent, though
strongly in favour of Australian
Coal, is at present unable to give
any trustworthy data upon the subject.

3. Mr Sheward takes
this opportunity to animadvert upon
the heavy gradients on the line of
the Southern extension, between
Trichinopoly and Madura. The
ruling gradient on this part of the
extension is 1 in 100; and the nature
of the country is such that, within

a

P.W. 3/5/72.

a distance of 57 miles, there are more than 23 miles upon gradients steeper than 1 in 170. There can be no doubt that it would be simply impossible to construct a railway along the direct route between Trichinopoly and Dindigul, and to ease the proposed gradients to any appreciable extent, without at the same time adding enormously to the cost.

Madras
16th November
1872
Gen. 1307
Ch
J.

Lieut. Colls, R.E.,
Cons. Engineer for Railways.

The Secretary to Government
Public Works Department
Fort Saint George.

Ry Dept.

P. W. 1872 Depart.

From   No. 5675.

The Con. Engineer for Railways

To The Secretary for Pub. Works Dept.

Dated 16th } Nov/72.
Recd 18th }

Enc: 2 No 630.

Submitting correspondence with regard to the use of Australian coal, & stating that heavy gradients on S. Extension if lessened would repay well by a greater amount of goods being hauled.

With an Order

No. 2818. Railway

Ordered to be recorded.

C.Y. / Gmr.

39/a

To P/ The C. Engr.   Desp: 3/12/72

25/13

No. 5675

Govt. of Madras.

PUBLIC WORKS.

To The Consulting Engr for Railways

Dated

Rcvd. 1 Encl. 2

G. O. 2nd Dec 1872, 2810.

Nos. 1819

Encl. Report, submitted by the Engrs. on the suitability of Australian Coal as fuel for Locomotive Engines recorded.