

(1) Number of pages _____

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MADRAS RECORD OFFICE

Government of Madras

Public works.

DEPARTMENT

G.O. No.	786	By	Press
B.P. No.			Mis.
580-581			
Dated	21-3-1874	195.	

Not to be folded or roughly handled

1

*Proceedings of the Madras Government, Public Works Department,
21st March 1874.*

No. 580. Read the following Proceedings of the Government of India in the Public Works Department, (Guaranteed Railways,) dated Fort William, 6th March 1874, Nos. 497—510 G. R:—

Cooling of Railway Carriages during the hot season.

Read again:—

Public Works Department Circular No. 41 R. of 11th September 1872.

Letter from the Consulting Engineer for Guaranteed Railways at Lucknow, No. 1,969, of 29th October 1872, and enclosures.

Do. from the Government of Madras, No. 2,020 of 24th August 1872, and enclosures.

Do. to " " " 1,477 G R of 13th September 1872.

Do. from " " " 2,576 of 2nd November 1872, and enclosure.

Do. from the Consulting Engineer for Guaranteed Railways, Calcutta, No. 712 of 29th March 1873, and enclosure.

Do. to ditto, No. 602 G R of 10th April 1873.

Do. from ditto, No. 893 of 21st April 1873, and enclosure.

Do. to ditto, No. 663 G R of 5th May 1873.

Do. from ditto, No. 1,241 of 29th May 1873, and enclosure.

Do. from ditto, Lahore, No. 701 of 9th June 1873, and enclosures.

Do. to ditto, Calcutta, No. 941 G R of 17th June 1873.

Do. from ditto, Lucknow, No. 1,780 of 15th July 1873, and enclosure.

Do. to ditto, No. 1,284 G R of 24th July 1873.

Do. from ditto, No. 1,933 of 31st July 1873.

Do. from the Government of Bombay, No. 897 of 23rd July 1873, and enclosures.

Do. from the Consulting Engineer for Guaranteed Railways at Calcutta, No. 2,435 of 24th July 1873, and enclosures.

Do. to ditto, Lahore, No. 1,732 G R of 8th October 1873.

Do. from ditto, No. 1,566 of 20th November 1873, and enclosures.

Do. to ditto, No. 2,179 G R of 19th December 1873.

OBSERVATIONS.—Since the issue of Public Works Department Circular No. 41 R of 11th September 1872, a variety of experiments have been made for the purpose of cooling railway carriages. It was to be expected, and it has been proved, that the results could not be acceptable to all travellers. But it has nevertheless been conclusively shown that there are apparatus which are more or less effective. Some have stated that they would prefer the hot winds to the effects of these apparatus; others again have professed great benefit from their use. There are so many travellers to whom journeys by rail in the hot weather cause not merely discomfort but sometimes risk to health, that the Governor-General in Council is of opinion that it is incumbent upon every Railway Company upon whose line it can be effectively worked to adopt a cooling apparatus of some kind.

2. All the inventions hitherto tried have depended upon evaporation for their success, and consequently there are parts of India where such inventions would, practically, be of little use. This is the case in Lower Bengal. The Eastern Bengal Railway, and the Calcutta and South-Eastern State Railway, may therefore be excepted from the general scope of this resolution; but upon all other railways in Northern India, the Governor-General in Council considers it essential that measures should at once be taken to secure the working of an efficient

*Proceedings of the Madras Government, Public Works Department,
21st March 1874.*

cooling apparatus during the ensuing hot season. His Excellency in Council is satisfied that the matter has only to be brought again to the notice of the Governments of Madras and Bombay to ensure their co-operation as respects the railways under their control.

3. Nor does His Excellency in Council think that the public will have reason to be satisfied if such apparatus are applied only to the upper classes of carriages; for, though travellers by the lower classes are chiefly natives of the country, and are, it may be argued, on that account well able to bear heat, it is nevertheless certain that they, like Europeans, do at times suffer severely from its effects. The Governor-General in Council would therefore be pleased to see the measure extended eventually to all classes of carriages, but for the present would be content with its application to not less than half the first and second-class carriages in each passenger train. For the lower classes some measure of relief may, in the meantime, be gained by reducing the number of passengers in each compartment during the extreme hot season.

4. There have been a number of inventions which have been experimented on, and some of these are, it is understood, being improved preparatory to further experiments.

The inventions which have been tried upon trains working for the public are enumerated below—

Apparatus invented by Mr. R. D. Sanders, Deputy Locomotive Superintendent, Great Indian Peninsula Railway.

Two forms of apparatus by Surgeon E. Drew, Royal Artillery.

Apparatus by Mr. J. G. Cooke, Locomotive Superintendent, Oudh, and Rohilkhand Railway.

The Governor-General in Council does not think that any one of these has, at present, shown such a marked superiority to the others as to lead to its absolute preference. It is not desired, therefore, to influence the choice of the several Railway Companies. But it may be as well to point out, for the information of such Companies as have not gone to expense in establishing a particular description of apparatus, that Dr. Drew's window apparatus has been tried with very fair success both on the East Indian, and Scinde, Punjab and Delhi Railways, that it is simple in construction, and that it is inexpensive. The material of which the evaporating surface is made is not, however, procurable in any quantity in India, and arrangements would have to be made for the supply of this from England.

ORDER.—Ordered that a copy of these observations be sent to the Governments of Madras and Bombay.

Also to the Consulting Engineers, Calcutta, Lahore and Lucknow; and to the Engineers-in-Chief of all State Railways, with a request that no time may be lost in reporting the measures about to be taken in the ensuing hot season upon the lines of railway open for traffic within their several jurisdictions for giving effect to the objects of this resolution.

(Signed) E. C. S. WILLIAMS, Lieut.-Colonel, R.E.,
Dy. Secy. to the Govt. of India.

*Proceedings of the Madras Government, Public Works Department,
21st March 1874.*

No. 581.

ORDER THEREON, 21st March 1874, No. 786.

RAILWAY, No. 64.

COMMUNICATED to the Consulting Engineer for Railways.

2. Lieut.-Colonel Shaw-Stewart will report whether arrangements have been completed for the trial of Mr. Stoney's cooling apparatus on the Madras Railway during the present season, and what number and description of carriages it is proposed to supply with that or any other means of lowering the temperature. The subject has been already commended to his special attention in paragraph 4 of G. O., No. 2,200, of 4th September 1873.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To the Consulting Engineer for Railways.

d. E. C. Shunker.

are Copies

No. 155.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
GUARANTEED RAILWAYS.

To

Nos. 497—510 G—R.

Dated March 6, 1874.

Received — 16 —

Cooling of Railway carriages during the hot season.

P. W. D. Press—7-3-74—300.

With order

786
Communicated to the Consulting Engineer for Railways.
Sir: The above statement will report whether arrangements have been contemplated for the heat of the day's cooling apparatus on the Indian Railway during the present season, and what number and description of carriages it is proposed to supply with that or any other means of cooling the temperature. The subject has been already communicated to his official attention in para 4 of G.O. No. 2200 of 14th September 1873.
Yours faithfully,
Sept 21/74
G. W. D.

1535
Govt. of (1874) Madras.
PUBLIC WORKS.

To

The Genl. Secy for
Railways

Dated

Recd.

Encl.

G. O. 21st March 1874, No.

786

Nos. 580-581.

Cooling of Railway Car:
riages

Observations of the
Government of India on
the subject, Comd^d to the
Comd^r for Railways
with certain instructions.