

(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.	1073	Press Mis.
271-213		
Dated	17-4-	1871

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
17th April 1871.*

No. 211. Read the following docket from the Government of India, Public Works Department, (Railway,) dated Fort William, 23rd March 1871, No. 518-R :—

COPY of the following and of its enclosure forwarded to the Government of Madras, Public Works Department, (Railway,) for communication to the several Railway Companies :—

By order,
(Signed) ALFRED H. VAUX,
Under Secretary.

From the Secretary to the Government of Bombay, Public Works Department, (Railway,) to the Secretary to the Government of India, Public Works Department, dated 11th March 1871, No. 276.

With reference to your No. 1,553, of 10th September 1870, and previous correspondence, I am directed to inform you that Mr. Saunders, the Assistant Locomotive Superintendent, has invented and patented a method of cooling carriages by means of a tattie, which has been tried, and promises to answer well. Appended is a memorandum on the subject by Captain Marryat, R.E. This Government has ordered the system to be applied to four more carriages, at a cost not exceeding Rupees 250 each; and as soon as these are ready they will be despatched to Calcutta, for final trial and inspection.

MEMORANDUM.

A CARRIAGE fitted with tatties on Mr. Saunders' principle was run up to Kurjut on Friday, 24th ultimo. It was practically shown by the trial that in the Concan District, which is the most unfavourable district which could be selected, owing to the moisture, and, consequently, non-evaporative power of the air, that the body of a carriage fitted with the tattie was 10° Fahrenheit cooler than that of a carriage without; that a current of air 20° cooler than the atmosphere of the carriage without the tattie was constantly flowing into the carriage; and that the tattie carriage was far freer from dust than the other.

The principle is simple and effective, and not likely to get out of order.

Part of the floor of the carriage is removed, and replaced by a wooden grating, underneath which is a pipe which distributes water at intervals into perforated zinc trays, which overlie three layers of *kuskus* tatties placed about 1½ inches apart. The tatties are carried on iron bars over the air chamber—a long box, opened at either end, according to the direction in which the carriage is travelling.

The water is supplied from a tank at the end of the carriage. It drips into a balanced bucket, which, when full, turns over, and fills the distribution pipe. The supply from the tank is so regulated as to fill the bucket every quarter or half hour, as may be required; and the tank contains about five or ten hours' supply, according to the frequency with which the bucket is filled.

The windows of the carriage are arranged to open outwards, according to the way the carriage is going, and the current of cool air that flows out by them keeps the carriage free from dust in a very marked manner.

The cost of the apparatus will probably not exceed Rupees 125 per compartment, or Rupees 250 per saloon carriage.

(Signed) E. L. MARRYAT, Captain, R.E.

BOMBAY, 3rd March 1871.

*Proceedings of the Madras Government, Public Works Department,
17th April 1871.*

No. 212.

ORDER THEREON, 17th April 1871, No. 1,073.

RAILWAY, No. 31.

COMMUNICATED to the Consulting
Engineer for Railways for communica-
tion to the Agents of the Railways in
this Presidency.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To the Acting Consulting Engineer for Railways.

Ed. S. T. Augustin.

MEMORANDUM.

A carriage fitted with tatties on Mr. Saunders' principle was run up to Kurjut on Friday, 24th ultimo. It was practically shewn by the trial that in the Concan District, which is the most unfavourable district which could be selected, owing to the moisture, and, consequently, non-evaporative power of the air, that the body of a carriage fitted with the tattie was 10° Fahrenheit cooler than that of a carriage without; that a current of air 20° cooler than the atmosphere of the carriage without the tattie was constantly flowing into the carriage; and that the tattie carriage was far freer from dust than the other.

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The windows of the carriage are arranged to open outwards, according to the way the carriage is going, and the current of cool air that flows out by them keeps the carriage free from dust in a very marked manner.

The cost of the apparatus will probably not exceed Rs. 125 per compartment, or Rs. 250 per saloon carriage.

(Signed) E. L. MARRYAT, Captain, R. E.

Bombay, 3rd March 1871.

All communications
should be addressed to
the Secretary.

No. 518 R.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.
RAILWAY.

Port William, 23rd March 1871

Copy of the following and of its
enclosure forwarded to the Government of
Madras, Public Works Department, (Railway),
for communication to the several Railway
Companies.

By Order -

Aspen Mann

Under Secretary.

May

No. 276 dated 11th March 1871.

From - The Secy. to the Govt. of Bombay.

P.W. Depart^t. (Railway).

To - The Secretary to the Govt. of India, P.W. Dept.

With reference to your No. 1553 of 10 Sept.
1870, and previous correspondence, I am
directed to inform you that Mr. Saunders,
the Assistant Locomotive Superintendent,
has invented, and patented, a method of
cooling

cooling carriages by means of a tattle,
which has been tried, and promises to
answer well. Appended is a memorandum
on the subject, by Captain Harnyat, R.E.
This Government has ordered the system
to be applied to four more carriages, at
a cost not exceeding Rs. 250 each; and
as soon as these are ready, they will be
despatched to Calcutta, for final trial
and inspection:-

1877/1878, Sept

No. 1421.

From.

The Govt of India

Dated 23

Recd. 29

Encl.

} Drafted,

No. 518 B.

Forwarding
a copy of papers
relating to an in-
-vention for cooling
Railway carriages
by means of a tattle.

10737, 17th April 1878

With an enclosure

1913
Communicated to the Comptroller
General for Railways for communication to
the Board of the Railways and the President
of the Board
1913 April 1911
C. C. Hughes for Railways
Dec 1913 1911

W. J.

1913 Dec 1911

Govt. of 1871 Madras.
PUBLIC WORKS.

*Mr. J. S. Consulting Eng^r
for Railways*

174 York St. 10/73

No. 211-212.

*Received of Mr. J. S. Consulting Eng^r
for Railways
the sum of Rs. 100/-
for the purchase of
materials for the
construction of the
road from the
station to the
bridge.*