

(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. | 640  | (Ry) | Press |
| B.P. No. |      |      | Mis.  |
| Dated    | 5-3- |      | 1875  |

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,  
5th March 1875.*

No 160. Read the following letter from Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Madras, 16th February 1875, No 103 —

I HAVE the honor to submit, for the information of Government, certain papers\* in connection with an accident which happened to one of the passenger carriages attached to the 6 P.M. mail train from Madras on the 30th December 1874.

\* From Agent, Madras Railway, No 2, dated 2nd January 1875  
Do do, No 104, dated 27th January 1875

2. The carriage in question was one of the new first-class double saloons, and was fitted with Handyside's patent disc wheels, a few pairs of which had been received from England for experiment. When near the Pothanoor junction, at the 299th mile, one of the wheels broke loose from the axle and left the rails. The carriage was empty at the time, and most fortunately the accident was not attended with any serious results.

3. The Acting Locomotive Superintendent states, as the cause of the fracture, "that the tendency of one wheel to skid in passing round a curve has put too severe a strain on the single feather fixed in the cast iron boss to prevent the disc revolving." Mr. Boodle adds that all the wheels of this class which have been tried have been found to fail more or less at the boss in like manner. I have had an opportunity of examining these wheels, and have no doubt as to the correctness of this explanation. It may be added that the pair of wheels to which the accident happened were almost new, and that the journals were running perfectly cool at the time.

4. No vehicles fitted with Handyside's wheels have been allowed to run since the accident, and the pair of wheels failed are to be sent home for examination by the makers. It is understood that wheels of this class have given satisfaction in England, and it is not easy to explain why their behaviour in India should be so different.

From E. C. BOODLE, Esq., Acting Locomotive Superintendent, to R. B. ELWIN, Esq., Agent and Manager of the Madras Railway Company, dated Perambore Works, 2nd January 1875, No. 2

I REGRET to have to inform you of an accident to the 6 P.M. mail train from Madras on the 30th ultimo, caused by one of the wheels fitted to first-class carriage No. A-23 having broken loose from the axle at the 298th mile, 4th telegraph post, South-West Line. The train was delayed 3 hours and 52 minutes, but I am informed that the carriage was fortunately empty at the time and that no one was injured.

2. The pair of wheels referred to is one of the "Handyside's Patent Disc" wheels, supplied upon Indent No. 84 of the 30th November 1872, and I have consequently issued instructions that all vehicles fitted with these wheels must be stopped at once. I will address you again with reference to this matter in the course of a few days.

No. 2

To the Consulting Engineer for Railways for information

2nd January 1875

(Signed) R. B. ELWIN,  
Agent and Manager

Proceedings of the Madras Government, Public Works Department,  
5th March 1875

From E C BOODLE, Esq., Acting Locomotive Superintendent, to R B ELWIN, Esq., Agent and Manager of the Madras Railway Company, dated Perambore Works, 23rd January 1875, No 45

In continuation of my letter No 2 of the 2nd instant, I beg to inform you that after careful investigation I do not consider the Handyside's patent disc wheels safe to run on the line, inasmuch as these wheels, as at present constructed, have not sufficient strength to withstand the strain of tension caused in passing over sharp curves

2 I beg to forward another pair of patent wheels which were taken from A-No 23, by which the cause of the fracture will be very apparent, viz, that the tendency of one wheel to skid in passing round a curve has put too severe a strain on the single feather fixed in the cast iron boss to prevent the disc revolving

3 I beg to state that out of six pairs of wheels tried I have found all to fail more or less at the boss as shown in the wheels herewith sent —

The total weight of the carriage is ..

Weight of wheels, two pairs ..

Centres of wheels ..

Total length of carriage over head stock ..

. Tons 9 0 0 0

" " 2 0 4 0

13 feet 6 inches

.. 24 feet

4 It will be observed that the journals at the time of the accident were running perfectly cool

No 104  
The Consulting Engineer for Railways for information in continuation of my endorsement No 2 of the 2nd instant  
MADRAS,  
27th January 1875.

(Signed) R B ELWIN,  
Agent and Manager

No 161  
ORDER THEREON, 5th March 1875, No. 640

RAILWAY, No 15

ORDERED to be recorded and communicated to the Government of India

2 Seeing that all the wheels of this class which have been tried have been found to fail more or less, it is presumed that others will at once be substituted for them so that the carriages shall be safely available for use with as little delay as possible Report on this point should be made; and the result of the further inquiries to be instituted in England made known.

(True Extract.)

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

No 162.  
(DOCKET No. 641, dated 5th March 1875.)  
Copy of the above forwarded to the Government of India.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

Encl. S. T. Austin.

Spare Copies

Railway Department

CONSULTING ENGINEER'S OFFICE.

From

LIEUT-COLONEL J. H. M. SHAW STEWART, R.E.

Consulting Engineer for Railways.

To

Colonel G. W. WALKER, R.E.

Secretary to Government,

Public Works Department.

Fort Saint George.

SIR,

I have the honour to submit, for the information of Government, certain papers in connection with an accident which happened to one of the passenger carriages attached to the 6 p.m. mail train from Madras on the 30th December 1874.

2 The carriage in question was one of the new first class double saloons, and was fitted with Handyside's

\* From Agent Madras Railway  
No 2 dated 22 January 1875.  
— 104 — 24 —

Handyside's patent disc wheels, a few pairs of which had been received from England for experiment. When near the Potho-moor junction, at the 299 mile, one of the wheels broke loose from the axle and left the rails.

The carriage was empty at the time, and most fortunately the accident was not attended with any serious results.

3 The Acting Locomotive Superintendent states, as the cause of the fracture, "that the tendency of one wheel to skid in passing round a curve has put too severe a strain on the single feather fixed in the cast iron boss to prevent the disc revolving

revolving. Mr. Boodle adds that all the wheels of this class which have been tried have been found to fail more or less at the boss in like manner.

I have had an opportunity of examining these wheels, and have no doubt as to the correctness of this explanation. It may be added that the pair of wheels to which the accident happened were almost new, and that the journals were running perfectly cool at the time.

No vehicles fitted with Handyside's wheels have been allowed to run since the accident, and the pair of wheels failed are to be sent home for examination by the makers. It is understood

16 10 11

understood that wheels of this class have given satisfaction in England, and it is not easy to explain why their behaviour in India should be so different.

I have the honour to be,  
Sir,  
Your most Obedt Servant,

Madras 16 Nov 1875  
M. S. Coll. R. B.

For the Engineer in Charge  
Railways

Enclosed are 10 copies of the report on the wheels of the class of 1875.

Submitting with these papers a letter to be read at the meeting of the Committee on the 16th inst. with a view to the substitution of the wheels of the class of 1875 for the wheels of the class of 1870.

Dated 16 Nov 1875  
No. 103

To  
The Secretary to Government,  
P. W. Department,  
Fort St. George

From  
The Consulting Engineer  
for Railways,  
No. 1047

P. W. 1875  
No. 1047

P. W. Dept.  
Proceedings of the Madras Government.  
Read the following  
from  
The Contg Engineer  
for Railways - } (H.E. No 103 of 16th Feb 75)  
40

Ordered to be  
recorded and commu-  
-icated to the Govern-  
-ment of India

Seeing that all the wheels of this class which have been tried have been found to fail more or less, it is presumed that others will at once be substituted for them so that the carriages shall be safely available

M. S.

for use with as little  
delay as possible. Report  
on this point should  
be made; and the result  
of the further enquiries  
to be instituted in reg-

arded made known.

Copy

to the Secy of the Govt

Docket No. 141 of

Copy of the above  
forwarded to the Secy  
of India —

to the Secy of the Govt

to the Secy of the Govt

to the Secy of the Govt

to the Secy of the Govt

to the Secy of the Govt

To The Comdant for  
P.O.V

Sept. 5-3-75

Sept. 5-3-75 with l.c.

N-160-162

1047

Govt. of 1875, Madras  
PUBLIC WORKS.

The Comptroller  
Secy. to Govt. of India

2

G.O. 5 Mar. 640  
641

No. 160-162

Railway Letter from  
the Comptroller submitting  
papers relating to an ac-  
cident to a passenger  
carriage fitted with  
"Handy wheels" patent  
disc wheels, ordered to  
be recorded <sup>with remarks</sup> & come to  
the Govt. of India -