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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	630-31	Press
B.P. No.		Mis.
Dated	10-3-	CE 74 195

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
10th March 1874.*

No. 219. 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, 28th January 1874, No. 85 :—

ADVERTING to the Proceedings of the Government of India, under date the 2nd July 1873, Nos. 1,105-1,121 G.R., forwarded to this office for information and guidance on the 4th August 1873, I have the honour to submit, for the consideration of His Excellency the Governor in Council, certain correspondence* which has passed with the Agent of the Madras Railway Company upon the subject of the standard loading gauge and bridge gauge, with special reference to the diagram which accompanied the above-quoted Proceedings of the Government of India.

* From Agent, No. 50, 19th January 1874, with enclosure.
To do. „ 61, 20th „ „ „
From do. „ 74, 22nd „ „ „ with enclosure.

gauge, with special reference to the diagram which accompanied the above-quoted Proceedings of the Government of India.

2. It will be seen that the Chief Engineer draws attention to two difficulties which stand in the way of the adoption of the maximum fixed and moving dimensions shown in that diagram :—

- (1.) That the maximum height of platforms is not clearly and authoritatively laid down; and
- (2.) That the spark-catchers in general use on the Madras Railway would come into contact with loading gauges built in accordance with those dimensions.

3. As regards the maximum height of platforms, no rule for general adoption upon Indian Railways seems to have been at any time authoritatively laid down. An order of the Madras Government under date the 20th March 1856, No. 85, authorized the adoption in this Presidency of 4 feet above rail level as the maximum height of platforms at terminal stations, and 3 feet 3 inches at minor stations. This order continued in force until September 1872, when the interchange of rolling stock with the Great Indian Peninsula Railway showed that it was necessary, in order to accommodate their vehicles, to reduce, from 4 feet to 3 feet 9 inches, the maximum height of platforms upon the railways in this Presidency. This change received the approval of Government on the 14th September 1872, in their order No. 2,412, and the rule now in force is as follows :—

	Ft.	In.
Maximum height, passenger platforms, at terminal stations	3	9
Do. at minor stations	3	3
Do. goods platforms	3	9

4. When addressing Government on the 28th November 1872, I drew attention to the omission of the maximum height of platforms from the list of standard dimensions agreed to in Proceedings of Government, 19th December 1872, No. 3,021.

1856 by the Guaranteed Companies and the Secretary of State; and the omission was again specially alluded to in the papers which accompanied my letter No. 198, dated the 1st April 1873. In the

Proceedings of Government, 17th April 1873, No. 1,115. Proceedings of the Government of India under date the 2nd July 1873, the

maximum height above rail level to which platform walls may be built is not

*Proceedings of the Madras Government, Public Works Department,
10th March 1874.*

explicitly stated, but in the diagram appended thereto the platform appears to have a maximum height of 3 feet 6 inches assigned to it. I beg that the Government of India may be moved to issue explicit instructions upon this important point, applicable to all Indian Railways on the broad gauge. From Mr. Going's letters it will be seen that the cotton wagons used by the Great Indian Peninsula Railway Company could not, without danger, pass a platform of the following dimensions:—

	Ft.	In.
Maximum height above rail level	3	6
Minimum Maximum clear distance of wall from rail	2	6
Maximum projection of nosing	0	3

And that, owing to the want of some generally received rules upon this point, great expense is entailed in the matter of trans-shipment of cotton at Raichore.

5. As regards the spark-catchers now in use upon the Madras Railway, and the impossibility of an engine fitted with one of them passing beneath the standard loading gauge as fixed by the Government of India, I beg to draw attention to the enclosed diagram No. 82, and to the correspondence which passed between the Board of Directors, their Consulting Engineer, and their Agent, in the years 1861-62.

6. This correspondence seems to have been lost sight of by the Board when addressing the Under Secretary of State for India in their letter, No. 2,873, dated the 3rd January 1873; and similarly, in the report embodied in the Proceedings of Government, dated 19th December 1872, No. 3,021, it seems to have escaped Captain Thompson's notice that engines, when fitted with these spark-catchers, were considerably in excess of the authorized standard dimensions. While the bridge over the Kistna river was under construction, the Madras Railway Company undertook, during the monsoon months, to work the Great Indian Peninsula traffic between Raichore and the south bank of the Kistna river; but, with this exception, none of the Madras Railway engines have been employed beyond the limits of the Company's system; and, so long as they are confined to those limits, there is no danger of an accident occurring from the use of the spark-catchers in question. I beg that the instructions of the Government of India may be asked for upon this point.

From R. B. ELWIN, Esq., Agent and Manager of the Madras Railway Company, to Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, dated Madras, 19th January 1874, No. 50.

With reference to the conversation that took place at the meeting of the Committee held in my office on the 16th instant, I have the honour, in accordance with your request, to send you a copy of the Acting Chief Engineer's letter upon the subject of the authorized standard loading and bridge gauge, with special reference to the diagram forwarded with your letter, No. 709, of the 6th August 1873.

2. I shall be much obliged if you will lay this communication before the Government, and favour me with the orders passed thereon as soon as practicable.

From T. H. GOING, Esq., Acting Chief Engineer, to R. B. ELWIN, Esq., Agent and Manager of the Madras Railway Company, dated Madras, 16th January 1874, No. 47.
Standard Loading and Bridge Gauge.

The Traffic Manager having applied for a number of loading gauges to be placed at different stations on the line, I wish before deciding upon the pattern to be adopted to call attention to the

*Proceedings of the Madras Government, Public Works Department,
10th March 1874.*

very important subject of standard gauges which, it appears to me, has not been decided in a sufficiently clear manner by any orders which have yet been received.

2. The orders at present in force on the Madras Railway on the subject of standard dimensions are—

Court's despatch to the Government of India, No. 8, dated London, 5th March 1856, printed with G. O., No. 1,986, of 20th August 1872.

Resolution of Government of India, dated Simla, 2nd July 1873, with a diagram of standard loading gauge and bridge gauge for Indian Railways, and the following letters from the Consulting Engineer bearing on the subject:—

No. 729, of 9th September 1872, fixing height of terminal and goods shed platforms at 3' 9" above rails; and No. 397, of 3rd December 1869 (printed with G. O., No. 36, of 5th January 1870) recommending that the rule should be that no standing work should be nearer the rails than 3' 6" at any point between 3' 9" above rails and top of highest carriage door.

But I am unable from these to design a gauge which will allow all vehicles built correctly to pass, but will stop all such as are likely to come into collision with fixed structures built in accordance with the orders of Government.

The Government of India Resolution of 2nd July 1873, omits to define the height above rail from which the limiting widths of the maximum moving structure and the minimum fixed structure are to be dated; or, in other words, the maximum height to which platform walls may be built so as not to interfere with the authorized maximum width of rolling stock.

Unless this be clearly defined for all railways uniformly, there must always be a difficulty in the interchange of vehicles between the different railways.

As an instance of the great practical inconvenience which has arisen from the want of a perfectly defined vehicle gauge on Indian Railways, I may mention that all Great Indian Peninsula Railway cotton wagons are stopped at Raichore, and great expense consequently incurred on account of trans-shipment, because these wagons would, if allowed to pass, come in contact with the goods shed platforms on this line.

These platforms conform strictly to the orders of Government, being 3' 9" high, distant 2' 6" from rail, with a coping projecting not more than 3", but I can find no order amongst those mentioned above which can be quoted in proof of the Great Indian Peninsula wagons being wrong.

A still more important reason for not adopting as our standard, without further reference, the maximum moving dimensions shown in the diagram which accompanied Consulting Engineer's letter No. 709, is that the spark-catchers of engines would come in contact with gauges placed 13' 6" above rails.

This appears to have been forgotten by the Secretary when writing his No. 2,873 of 3rd January 1873, but a reference to the correspondence noted in the margin will show that at the time spark-catchers were introduced it was found necessary to alter the dimensions given in the original diagram, as shown in lithographed plan No. 82, a copy of which is annexed.

I would suggest that the subject be brought forward for discussion at the next meeting of the Stores Committee.

From F. CHURCH, Esq., Acting Agent and Manager, to the Chief Engineer, Madras Railway, dated Madras, 30th September 1861, No. 580.

REFERRING to the correspondence relative to the adoption of uniform standard dimensions for railway structures, the last communication on the subject from your office being No. 416 of the 3rd May, I beg to send you now, for your information and for such notice as you may wish to take, a copy of paragraph 11 of a letter from the Board, No. 275, dated 9th August, together with a copy of Mr. Hawkshaw's letter therein quoted, and the tracing referred to by the Board, of which I shall thank you to send me a copy for transmission to the Locomotive Superintendent.

*Proceedings of the Madras Government, Public Works Department,
10th March 1874.*

Extract from a letter from the Managing Director, Madras Railway Company, No. 275,
dated London, 9th August 1861.

PARAGRAPH 11.—The diagram of dimensions No. 2 and the correspondence relating to it,
transmitted with your letter, No. 427 (paragraph 5) having been referred to Mr. Hawkshaw, I
have now to send you a copy of his observations
thereon,* and an accompanying tracing. You
will call the Chief Engineer's attention to the fact that the dimensions given in the diagram are
not sufficient to admit of the passage of engines fitted with spark-catchers of the most approved
construction.

From J. HAWKSHAW, Esq., to J. WALKER, Esq., dated 33, Great George Street, Westminster,
5th July 1861.

I RETURN you the correspondence sent with yours of the 6th ultimo, relating to the dimensions
of structures, etc.; also diagram No. 2 showing maximum moving dimensions and minimum fixed
structure out of stations. The dimensions in diagram No. 2 will give sufficient room and will
allow everything to pass freely excepting engines fitted with spark-catchers. If these are used
the fixed structures will have to be made higher (as will be seen from the accompanying tracing),
or the spark-catcher made of a very different construction from that usually adopted. The spark-
catcher shown in the accompanying tracing is the same as represented in the tracing sent to you
on the 5th January last, and is of the most approved construction, and does not, I believe, materi-
ally differ in size from others that are in use in America and elsewhere.

(True Extract and Copy.)

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

Extract from a letter from the Managing Director, Madras Railway Company, No. 290,
dated London, 31st January 1862.

PARAGRAPH 13.—In reference to the Chief Engineer's letter and plan mentioned in paragraph
18 of your No. 457, and the insufficiency of the headway of over-bridges built after the standard
of uniform dimensions to admit of the passage of engines on the line fitted with spark-catchers,
it appears desirable that, in the bridges still to be built, this insufficiency of room should be
guarded against, and the attention of the Chief Engineer should be called to the subject.

(True Extract.)

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

From Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways,
to R. B. ELWIN, Esq., Agent and Manager of the Madras Railway Company, dated
Madras, 20th January 1874, No. 61.

In acknowledging receipt of your letter, No. 50, dated the 19th instant, I have the honour to
observe that, although the maximum height above rail level to which platform walls may be built
is not explicitly stated in the Government of India Resolution, dated the 2nd July 1873, which
accompanied my letter, dated 6th August 1873, No. 709, yet in the diagram of the maximum
fixed and moving dimensions appended to that Resolution the platform appears to have a maxi-
mum height of 3 feet 6 inches assigned to it. Before submitting your letter to Government,
I request that you will be so good as to ask the Chief Engineer whether there would be any
danger of the Great Indian Peninsula cotton wagons coming into contact with platforms built
within the following dimensions:—

Maximum height above rail level	...	...	...	...	Ft. In.
" clear distance of wall from rails	...	...	...	...	3 6
" projection of nosing	...	...	...	...	2 6
	...	...	...	...	0 3

*Proceedings of the Madras Government, Public Works Department,
10th March 1874.*

* From Agent and Manager, to Chief Engineer, No. 580, dated
30th September 1861, enclosing extract of Board's letter
No. 275 of 9th August 1861
Extract from a letter from the Board, No. 290, dated 31st
January 1862.

2. I shall also be greatly obliged if you
will favour me with copies of the corre-
spondence* regarding the dimensions of the
spark-catchers in use upon the Madras Railway,
to which Mr. Going refers in his letter to you.

From R. B. ELWIN, Esq., Agent and Manager of the Madras Railway Company, to Lieutenant-
Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, dated
Madras, 22nd January 1874, No. 74.

With reference to your letter of the 20th instant, No. 61, I have the honour to enclose you
a copy of the Acting Chief Engineer's letter, No. 90, of this date, in which Mr. Going expresses
his opinion that with platforms built to the dimensions mentioned by you there would still be
danger of their coming into contact with the Great Indian Peninsula Company's cotton wagons.

2. I have also the honour to enclose you copies of the documents noted in the last para-
graph of your letter under reply.

From T. H. GOING, Esq., Acting Chief Engineer, to R. B. ELWIN, Esq., Agent and Manager,
Madras Railway, dated Madras, 22nd January 1874, No. 90.

With reference to the question asked in Consulting Engineer's letter No. 61 of 20th instant,
I beg to state that with platforms built to the dimensions suggested by Colonel Shaw-Stewart
there would still be danger of their coming into contact with the Great Indian Peninsula cotton
wagons.

2. I have before me a drawing, made from measurement, of one of these wagons (No. 3,262)
in which the iron work attaching the projecting rollers on which the sliding doors move is 3' 7"
above rail vertically and 2' 2½" from rail horizontally.

3. If this wagon were loaded and in motion, it is probable that it would come in contact
with a platform whose—

						Ft. In.
Height above rail is	...	...	...	...	...	3 6
Clear distance from rail	...	...	...	...	...	2 6
Projection of nosing	...	...	...	...	...	0 3

No. 220.

ORDER THEREON, 10th March 1874, No. 630.

RAILWAY, No. 26.

ORDERED that these papers be for-
warded for the consideration of the
Government of India:—

(Here enter No. 631, dated 10th March 1874.)

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Consulting Engineer for Railways.*

Exd. E. C. Shunker.
Spare Copies

Govt. of 1874 Madras.

PUBLIC WORKS.

To

THE CONSULTING ENGINEER FOR

RAILWAYS.

Dated March 10th.

Encl.

Recd.

G. O., 10th March 1874. No. 600.

MARCH

Nos. 219-220

Railway.—Passing orders on letter from the Consulting Engineer submitting correspondence on the subject of the standard loading gauge and bridge gauge.

PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, 10th March 1874.

No. 221.

No. 631.

From

COLONEL G.W. WALKER, R.E.,
Secretary to the Government of Madras,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

RAILWAY, No. 27.

From Govt. of India, No. 35, 1st August 1872.
To " " 1,209 G.R. " "
To " " 3,022, 19th Dec. " "
From " " 1,827 G.R., 29th Nov.,
To " " 188, 20th Jan. 1873.
To " " 493, 15th Feb. "
From " " 496 G.R., 22nd Mar.,
To " " 1,116, 17th April "
From " " 1,105—1,121 G.R., 2nd
July 1873.

SIR,—Adverting to the papers noted in the margin regarding the standard dimensions to be observed in the construction of railways of the 5' 6" gauge, I am directed by His Excellency the Governor in Council to forward, herewith, copies of correspondence with the authorities of the Madras Railway, in which is pointed out the desirability of authoritatively fixing for general adoption the maximum height above rail level

to which platform walls may be built, these dimensions having been omitted in the diagram which accompanied the Resolution of the 2nd July 1873, No. 1,105-1,121 G.R.

2. The Chief Engineer of the Company also draws attention to the fact that the spark-catchers in use on the Madras Railway are so constructed that it is impossible for an engine fitted with one of them to pass beneath the authorized standard loading gauge. This circumstance appears to have escaped the notice of the Directors of the railway when replying* to the inquiry of the Secretary of State as to the suitability of the loading and bridge gauge referred home by the Government of India.

3. I am to request that the questions raised in this correspondence may engage the early consideration of the Government of India.

I have the honour to be,

Sir,

Your most obedient servant,

Colonel, R.E.,
Secretary to Government.

Exd. E. C. Shunker.
Spare Copies

Gobt. of 1874 Madras
PUBLIC WORKS.

To

THE SECRETARY TO GOVERNMENT

IN

Dated March 19th.

Recd

Encl

G. O., 10th March 1874. No 64

MARCH

No. 221

50
Extract from a letter from the Madras
Director, Madras Railway Company,
No 290 dated London the 31 January 1862.

Para 13. In reference to the Chief
Engineer's letter and plan mentioned in
paragraph 18 of your No. 457, and the
insufficiency of the headway of over
bridges built after the standard of
uniform dimensions to admit of the
passage of engines on the line fitted with
spark-catchers, it appears desirable that,
in the bridges still to be built, this in-
sufficiency of room should be guarded
against, and the attention of the Chief
Engineer should be called to the subject.

True Extract

W. J. L. W. M.
Agent Madras

Railway Department

Consulting Engineer's Office

No 61.

The Agent and Manager
Madras Railway Company

Sir,

In acknowledging
receipt of your letter No 50, dated
the 19th instant, I have the honour
to observe that, although the
maximum height above rail level
to which platform walls may be
built is not explicitly stated in the
Government of India Resolution
dated the 2nd July 1873 which
accompanied my letter dated 6th
August 1873, No 409, yet ⁱⁿ the
diagram

S. N. 552/74

P.S. 7/10th March/74

In N^o 219

diagram of the maximum fixed
and moving dimensions appended
to that Resolution the platform
appears to have a maximum height
of 3 feet 6 inches assigned to it.

Before submitting your letter to
Government, I request that you
will be so good as to ask the
Chief Engineer whether there
would be any danger of the
Great Indian Peninsula —

cotton wagons coming into con-
tact with platforms built within
the following dimensions:-

Maximum height above rail level	3	feet.	6	inches
Minimum clear distance of wall from rails	2	"	6	
Maximum projection of roof	3	"	3	

2. I shall also be greatly
obliged if you will forward me such
copies of the correspondence regarding

From Agent and Manager to Ch.
Engr. No 580 d/30 Sept. 61 enclosing
extract of Board's letter No 275 of
9 August. 61.
Extract from a letter from the Board
No 290 d/31 Jan'y/62.

the dimensions of the
spark-catchers in
use upon the Madras
Railway, to which

Mr. Spring refers in his letter to you.

I have &c

Madras 2 d/ J. H. M. Shaw Stewart Esq. RE.
20 Jan'y/74 Cons. Engr. for Railways

/ Truecopy /

McIntosh
Lt. Col. RE.

Ed
Reut. F.

Cons. Engineer for Railways

17-1-74
Madras Railway Company
Chief Engineer's Office
Madras 16th January 1874.

To

The Agent and Manager,
Dear Sir,
Standard Loading and Bridge Gauges.

The Traffic Manager having applied for a number of loading gauges to be placed at different stations on the line, I wish before deciding upon the pattern to be adopted to call attention to the very important subject of standard gauges which, it appears to me, has not been decided in a sufficiently clear manner by any orders which have yet been received.

The orders at present in force on the Madras Railway on the subject of standard dimensions are:—

Govt's despatch to the Government of India C.P. & dated London 5th March 1856. Printed with G. O. 1986 of 20th August 1872.

Resolution of Government of India dated Simla 2nd July 1873 with a diagram of standard loading gauge and bridge gauge for Indian Railways.

And the following letters from the Consulting Engineer bearing on the subject.

C.P. 729 of 9th September 1872 fixing

P. N. 552/7 "
7

1257 2710 " 11th March 1874.
L. N. 219.

height of Terminal and Goods shed
Platforms at 3' 9" above rails and
G. O. 397 of 3^d December 1869 (printed with
G. O. 236 of 5th January 1870) recom-
mending that the rule should be
that no standing work should be
nearer the rails than 3' 6" at any
point between 3' 9" above rails and
top of highest carriage door.

But I am unable from these to
design a gauge which will allow all
vehicles built correctly to pass, but
will stop all such as are likely to
come into collision with goods struc-
tures built in accordance with the
orders of Government.

The Government of India Reso-
lution of 2^d July 1873 omits to define
the height above rails from which
the limiting widths of the maximum
moving structure and the minimum
fixed structure are to be taken. Or
in other words the maximum height
to which Platform walls may be
built so as not to interfere with
the authorized maximum and the
rolling stock.

Unless this be clearly defined
for all Railways uniformly there
must always be a difficulty in
the interchange of vehicles between
the different Railways.
As an instance of the great

practical inconvenience which has
arisen from the want of a perfectly
defined vehicle gauge on Indian
Railways I may mention that all
G. I. P. Railway Cotton waggons
are stopped at Raichore and great
expense consequently incurred on
account of trans-shipment because
these waggons would, if allowed
to pass, come in contact with the
goods shed platforms on this line.

These platforms conform strictly
to the orders of Government being 3' 9"
high, distant 2' 6" from rail, with
a coping projecting not more than
3" but I can find no order amongst
those mentioned above which can
be quoted in proof of the G. I. P.
waggons being wrong.

It is still more important reason
for not adopting as our standard,
without further reference, the maxi-
mum moving dimensions shown
in the draught and which accompanied
Consulting Engineer's letter of 709
with the spark-catchers of
Engines would come in contact with
gauges placed 13' 6" above rails.

This appears to have been
for cotton by the Secretary when
writing his No 2873 of 3^d
January 1873 but a reference
to the correspondence noted
in the margin will show
that the same was also
mentioned in the margin of the
letter of 275 of 7th August 1861
enclosing extract of the
Engineer's letter of 580 of 30th Sept 1861
and the letter of 290 dated
31st January 1862.

that at the time spark-catchers were introduced it was found necessary to alter the dimensions given in the original diagram as shown in lithographed plan no 82, a copy of which is annexed.

I would suggest that the subject be brought forward for discussion at the next meeting of the Stores Committee.

Yours faithfully
W. H. Spring
Acting Chief Engineer.

R. H. Cooper

W. H. Spring
Agent & Manager.

No. 50.

MADRAS RAILWAY.

AGENT AND MANAGERS OFFICE

Madras, 19th Jan'y 1874.

From

R. B. Clavin Esq
Agent and Manager of the M. R. Co.

To

Mr J. H. Shaw Esq, R.E.
Consulting Engineer for Railways.

Sir,

With reference to the conversation that took place at the meeting of the Committee held in my Office on the 16th instant, I have the honour to acknowledge with your request to send you a copy of the Acting Chief Engineer's letter upon the subject of the authorized standard loading and bridge gauges with special reference to the diagram forwarded with your letter of the 6th of August 1873.

I shall be much obliged if you will keep this communication before the Government and favour me with the orders passed thereon as soon as practicable.

I have the honour to be
Sir

Yours most Obedient Servant
W. H. Spring

P. H. 552/74

P. H. 552/74
22nd Jan'y 1874

Extract from a letter from the Managing Director, Madras Railway Company, No. 275 dated London the 9th August 1861.

Para. 11. The diagram of dimensions etc and the correspondence relating to it, transmitted with your letter No 427 (Para 5), having been referred to Mr Hawkshaw, I have now to send you a copy of his observations thereon, and an accompanying tracing. You will call the Chief Engineer's attention to the fact, that the dimensions given in the diagram are not sufficient to admit of the passage of Engines fitted with spark catchers of the most approved construction.

Madras Railway
Engineer's Office
33 Great George St. Westminster
5th July 1861.

Dear Sir, I return you the correspondence sent with yours of the 6th ultimo relating to the dimensions of structures etc also diagram etc showing maximum moving dimensions, and maximum fixed structure etc of stations. The dimensions in Diagram etc will give sufficient room and will allow every thing to pass freely excepting Engines fitted with spark catchers. If these are used the

MADRAS RAILWAY.

From

The Agent and Manager,

To

The Consulting Engineer

for Railways.

N. 552/74

12.5.74 1st March/74

Ln 91:219

Date 19th Aug 1874
Recd 26.11

No. 30.

Forwarding a copy of the Chief Engineer's letter on the subject of the construction of the Auckland Road and Bridge -

fixed structures will have to be made higher (as will be seen from the accompanying tracing) on the spark catcher made of a very different construction from that usually adopted. The spark catcher shown in the accompanying tracing is the same as represented in the tracing sent to you on the 5th January last and is of the most approved construction, and does not I believe materially differ in size from others that are in use in America and elsewhere.

Yours truly, your
 J. H. Walker

James Walker Esq.

True Extract & Copy

W. J. L. L. L.
 Agent & Manager

07552/74

2580.

Madras Railway Company
 Madras 30th September 1861

Dear Sir,

Referring to the correspondence relative to the adoption of Uniform Standard Dimensions for Railway Structures, the last communication on the subject from your Office being No. 416 of the 3rd May, I beg to send you now for your information and for such notice as you may wish to take, a copy of paragraph 11 of a letter from the Board of 27th dated 9th August, together with a copy of Mr. Hawkshaw's letter therein quoted, and the tracing referred to by the Board, of which I shall thank you to send me a copy for transmission to the Locomotive Superintendent.

Yours faithfully,
 J. C. Church,
 Agt. Agent & Manager

To
 The Chief Engineer.

True Copy
 W. J. L. L. L.
 Agent & Manager

N^o 90

Madras Railway boundary
Chief Engineer's Office
Madras 22 January 1874

The Agent and Manager
Dear Sir

With reference to the question asked in
consulting Engineer's letter N^o 61 of 20 instant
I beg to state that with Platforms built to the
dimensions suggested by Colonel Shaw Stewart
there would still be danger of their coming
into contact with the Great Indian Peninsula
bottom Wagons

2. I have before me a drawing made from
measurement of one of these Wagons (N^o 3212)
in which the ironwork attaching the projecting
rollers on which the sliding doors move
is 3' 7" above Rail vertically
and 2' 2 1/8" from Rail horizontally

3. If this Wagon were loaded and in motion
it is probable that it would come in contact
with a platform whose

height above Rail is 3' 6"
clear distance from Rail 2' 6"
projection of roof 0' 3"

yours faithfully
(signed) J. A. Young
Ag. Chief Engineer

(True copy)

W. J. Shaw
Agent and Manager

P. W. 558/74

3 - 4 - 5.

P. G. 2710 10 March 74.

In N^o 289.

No. 74

MADRAS RAILWAY.

AGENT AND MANAGER'S OFFICE.

Madras, 22^d Jan'y 1874

From

R. B. Clavin Esq^r
Agent and Manager. of the M. R. Co.

To

Mr. C. B. J. H. Shaw Stewart, Esq.
Consulting Engineer for Railways.

SIR,

With reference to your letter of the 20th instant at p. 11, I have the honour to enclose you a copy of the Acting Chief Engineer's letter of 9th of this date, in which Mr. J. G. J. expresses his opinion that with platforms built to the dimensions mentioned to be, you there would still be danger of their coming into contact with the Great Indian Peninsula Company's Cottonnaggans.

I have also the honour to enclose you copies of the documents noted in the last paragraph of your letter under reply.

I have the honour to be
Sir

Your most obedient servant.

R. B. Clavin
Agent and Manager

8 W. 552/74

Pls. 7/10 15 March/74
In N^o 219.

Railway Department.

CONSULTING ENGINEER'S OFFICE.

No. 85

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,

Adverting to the Proceedings of the Government of India under date the 2nd July 1873, Nos 1105-1121 G. R., forwarded to this office for information and guidance on the 4th August 1873, I have the honour to submit for the consideration of His Excellency the Governor in Council certain correspondence which has passed with

MADRAS RAILWAY.

From

The Agent and Manager.

To

The Consulting Engineer,

for Railways.

Dated 22nd Jan 1874

Recd 24th Dec.

No. 74

Forwarding copy of the
Memorandum to the
Consulting Engineer
for Railways as to
height of Platforms at
the Madras Railway

P.W. 552/74

By J. H. M. Shaw Stewart
In No 219.

From Agent to 50 Jan 1874
To 19 Jan 1874
From 22 Jan 1874
To 26 Jan 1874

with the Agent of the Madras
Railway Company upon the subject
of the standard loading gauge
and bridge gauge, with special
reference to the diagram which
accompanied the above-quoted
Proceedings of the Government
of India.

2. It will be seen
that the Chief Engineer draws
attention to two difficulties which
stand in the way of the adoption
of the maximum fixed and
moving dimensions shown in that
diagram,

(1) that the maximum
height of platform is not
clearly

clearly and authoritatively
laid down, and
(2) that the fork-catchers
in general use on the Madras
Railway would come into con-
tact with loading gauges
built in accordance with
those dimensions.

3. As regards the
maximum height of platform,
no rule for general adoption
upon Indian railways seems to have
been at any time authoritatively
laid down. An order of the
Madras Government under date
the

the 20th March 1856, to 85, authorized the adoption in this Presidency of 4 feet above rail level as the maximum height of platforms at terminal stations, and 3 feet 3 inches at minor stations. This order continued in force until September 1872, when the interchange of rolling-stock with the Great Indian Peninsula Railway showed that it was necessary, in order to accommodate their vehicles, to reduce, from 4 feet to 3 feet 9 inches, the maximum height of platforms upon the railways.

3
railways in this Presidency. This change received the approval of Government on the 14th September 1872, in their order No. 2412, and the rule now in force is as follows:-

Maximum height -
passenger platforms at
terminal stations — 3 feet 9 inches
— " — at minor stations — 3 " 3
Maximum height -
goods platforms — 3 " 9

4. When addressing Government on the 28th November 1872 I drew attention to the omission

Pro: of Govt
19th December
1872. No 3021.

omission of the maximum height
of platforms from the list of
standard dimensions agreed to
in 1856 by the Guaranteed Com-
-panies and the Secretary of State;
and the omission was again spe-
-cially alluded to in the papers
which accompanied my letter

to 198, dated the 1st April 1873.

Pro: of Govt
17 April 1873
No 1115.

In the Proceedings of the Government
of India under date the 2nd July
1873, the maximum height
above rail level to which
platform walls may be built
is not explicitly stated, but
in

in the diagram appended thereto
the platform appears to have a
maximum height of 3 feet 6 inches
assigned to it. I beg that
the Government of India may
be moved to issue explicit in-
-structions upon this important
-point, applicable to all Indian
railways on the broad gauge.
From Mr. Goring's letters it
will be seen that the cotton
wagons used by the Great Indian
Peninsula Railway Company could
not without danger pass a plat-
-form of the following dimensions:-

Maximum height above rail level—^{feet inches} 3-6

Minimum clear distance of walls

from rail— 2-6

Maximum projection of casing—0-3

and that, owing to the want of some generally received rules upon this point, great expense is entailed in the matter of transshipment of cotton at Raichore.

5. As regards the spark-catchers now in use upon the Madras Railway, and the impossibility of an engine fitted with one of them passing beneath the standard loading gauges as

fixed

fixed by the Government of India, I beg to draw attention to the enclosed diagram No 82, and to the correspondence which passed between the Board of Directors, their Consulting Engineer, and their Agent, in the years 1861-62.

This correspondence seems to have been lost sight of by the Board when addressing the Under-Secretary of State for India in their letter No 2873, dated the 3rd January 1873; and similarly, in the report embodied in the Proceedings of Government dated

19th

19th December 1873, to 30 21, it seems to have escaped Captain Thompson's notice that engines, when fitted with these spark-catchers, were considerably in excess of the authorised standard dimensions.

While the bridge over the Christua river was under construction, the Madras Railway Company undertook, during the monsoon months, to work the Great Indian Peninsula traffic between Raichore and the South Bank of the Christua river; but, with this exception, none of the Madras Railway.

Railway engines have been employed beyond the limits of the Company's system; and, so long as they are confined to those limits, there is no danger of an accident occurring from the use of the spark-catchers in question.

It is hoped that the instructions of the Government of India may be asked for upon this point.

I have the honour to be,
Sir,

Your most obedient servant,
W. M. M. M.
Lieut. Col. B. R. E.

Genl. Engin. for Railways

Madras
28th Jan 1874
1874
B. R. E.

630 W. Sept

Proceedings of the Madras Government

Under date the 18th

Read the following

From the Commr Engineer
for Railways

(See entry No 588/28: Aug 1/74)

Ordered that these
papers be forwarded for the
consideration of the Govern-
ment of India.

[Signature]

To The Commr Eng^r for Railways
Despatched 13/3/74

631

To The Secretary to the
Government of India.

Sir,
Referring to the
papers noted in the margin
regarding

- From Govt of India No 35 of 11 Aug 1872
- To " " " " No 1209 S.R. " "
- From " " " " 3012 - 19 Decr "
- To " " " " 1527 S.R. 29 Nov "
- From " " " " 188 - 20 Aug 1873
- To " " " " 493 - 15 Feb "
- From " " " " 496 S.R. 22 March "
- To " " " " 1116 - 17 Feb "
- From " " " " 1105 - 1121 S.R. - 2 July "

W. 1874, 4th March
Pro. 1874, 11/3/74

RAILWAY DEPARTMENT.

1874

From

The Consulting Engineer
for Railways,

To

The Secretary to Government,
P. W. Department,
Fort Saint George.

Dated 29th Jan 1874
Recd. 29 Jan 1874

No. 58
Submitted for

the consideration of
H.E. in Council
reference relating
to the standard
loading of trucks
per page

Dr 29 Jan

1874-75-6-7-9

regarding the standard dimensions to be observed in the construction of railways of the 5' 6" gauge, I am directed by His Excellency the Governor in Council to forward herewith copies of correspondence with the authorities of the Madras Railway in which is pointed out the desirability of authoritatively fixing for general adoption the maximum height above rail level to which platform walls may be built, these dimensions having been omitted in the diagrams which accompanied the Resolution of the 2^d July 1873, No 1105-1121 G. P.

The

The Chief Engineer of the Company also draws attention to the fact that the spark catchers in use on the Madras Railway are so constructed that it is impossible for an Engine fitted with one of them to pass beneath the authorized standard loading gauge. This circumstance appears to have escaped the notice of the Directors of the Railway when replying to the enquiry of the Secretary of State as to the suitability of the loading and bridge gauge referred to by the Government of

* Letter No 2873-3^d Jan'y 1873
printed with Resolution
No 1105-1121 G. P. 2^d July 1873.

of India.

I am to request
that the questions raised
in this correspondence
may engage the early
consideration of the
Government of India.

LYNN

Despatch to S-C 31 copies of Enq
630 of 1874 + 31 copies of a sketch.
13/3/74.

219-224

M 552
Gt. of 1874 Madras.
PUBLIC WORKS.

To The Committee
for Railways
& The Secretary to
the Govt of India

Date:

Recd.

Encl 9

G. O. 10th March 1874, No. 630 & 631

No. 213-720 & 221

Railway. Papers orders
One letter from the J. & M. Esq.
re submitting correspondence
on the subject of the Standard
loading stage & bridge
stage.

Forwarded for orders
Correspondence on the
subject of the Standard
loading stage & bridge
stage.