

(1) Number of pages _____

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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 357-58	Press
116-118	Mis.
Dated 3 - 2	1863.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
3rd February 1869.*

No. 116. Read the following letter from the Consulting Engineer for Railways, to the Secretary to Government, Public Works Department, dated Madras, 31st December 1868, No. 465 :—

1. I have the honour to report that, in compliance with the request contained in the 2nd paragraph of the Order of Government, dated the 23rd October last, No. 3,344, a Committee was formed to consider and report on the best description of points, and the most secure and efficient way of working them. The Proceedings of that Committee, which assembled on the 13th ultimo, I have the honour to submit for the information of Government.

* No. 563, dated 22nd December 1868.
„ 2,822, dated 1st „

2. Letters* from the Agents of the Madras and the Great Southern of India Railway Companies, illustrative of the present mode of working the points, are also herewith submitted. Carr's patent self-acting points are in use on both lines. Upon the Madras Railway it has lately been the rule to lock at night all points upon the main line at those stations through which trains pass without stopping, and the rule will in future be observed during the day also. Upon the Great Southern of India Railway a similar rule will also be introduced.

3. The unanimous opinion of the Railway officials who formed the Committee was to the effect that the description of points now in use, and the mode of working them, can hardly be improved upon. In that opinion I fully concur. It would, doubtless, be a great improvement if, without cancelling their self-acting properties, the points could, as suggested by the Bengal Committee, be so constructed that the pointsman should not be able to shift them during the passage of a train; but I question whether the two conditions are easily compatible, and I attach more weight to the self-acting properties of the present system than to the condition suggested by the Bengal Committee.

4. From the enclosure to Mr. Elwin's letter it will be seen that, during the 12½ years which have elapsed since the first portion of the Madras Railway was opened for traffic, the ratio of accidents at facing points, which have been caused by the irresolution or carelessness of the pointsmen in charge, to the number of facing points passed over by trains, has been as 1 to 179,707. This result affords a strong argument in favour of the system of points now in use, and the present mode of working them.

5. The preparation of the statistics submitted with Mr. Elwin's letter has delayed the disposal of this subject.

Proceedings of a Meeting held at Royapooram on the 13th November 1868.
PRESENT.

Major J. H. M. SHAW STEWART, Consulting Engineer for Railways.

Mr. R. B. ELWIN, Agent and Manager, Madras Railway Company.

„ W. S. BETTS, Agent and Traffic Manager, Great Southern of India Railway Company.

„ B. ANDERSON, Chief Engineer, Madras Railway Company.

„ J. A. PINSON, Deputy do.

„ B. C. ST. JOHN, Resident Engineer, Great Southern of India Railway Company.

„ H. E. CHURCH, Traffic Manager, Madras Railway Company.

„ E. G. SHEWARD, Locomotive Superintendent, Great Southern of India Railway Company.

The Proceedings of Government, No. 3,344, dated 23rd October, in compliance with which the meeting was assembled, were read.

*Proceedings of the Madras Government, Public Works Department,
3rd February 1869.*

After a long discussion the following resolutions were unanimously agreed to:—

That, in the opinion of this meeting, there is no better description of points, for all practical purposes, than that now in use upon the Madras and the Great Southern of India Railways, viz., Carr's patent self-acting points; and that the present mode of working them can scarcely be improved upon.

That, therefore, any compulsory alteration of the system in force upon the portions of Railway now open for traffic would be highly undesirable.

That any system of points, into which, with due regard to efficiency of working and to simplicity, the conditions recommended by the Bengal Committee can be introduced, would possess decided advantages; and the members present would be prepared to advocate the use of such system, in the event of any extension of the Railways in this Presidency. Those conditions are understood to be—

1st.—The points upon the main line should show by signal to the passing driver the line to which they are open—such signal to be attached to the lever or switch rail, and to be worked with the points.

2nd.—The points should be so constructed that the pointsman should not be able to shift them during the passing of a train.

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

From the Agent and Manager of the Madras Railway Company, to the Consulting Engineer for Railways, dated Madras, 22nd December 1868, No. 563.

1. Adverting to the discussion which took place at the meeting held in this office on Friday the 13th November 1868, arising out of the Proceedings of Government, No. 3,344, dated the 23rd of October, on the subject of points and crossings, I have the honour to state that, in the opinion of the Officers of this Company, the best description of points is that known as "Carr's patent Switch," with a fish joint, as illustrated in plan No. 102.

2. We have in use on this Railway some old points known as "Wild's patent," but as they differ so slightly from those shown on drawing No. 80, it has not been thought necessary to submit a third sketch.

3. With reference to the conversation at the meeting as to the number of accidents caused on this Company's lines by the irresolution or carelessness on the part of pointsmen, it affords me much pleasure to solicit your special attention to the accompanying Memorandum, No. C/390, dated the 22nd instant, prepared by the Traffic Manager, which shows that from the opening of the Railway on the 1st July 1856 down to the present time, extending over a period of nearly 12½ years, there have been only ten accidents at points, seven of which occurred at facing points leading from the main line, and were due to irresolution or carelessness on the part of the pointsmen in charge; and the remaining three occurred at "lay-bye" points, and were the result of neglect on the part of Station Masters to have the points locked.

4. The Traffic Manager concludes his Memorandum as follows:—"During the 12½ years referred to no less than 83,659 trains have been run, performing a train-mileage of 9,330,000, and these trains passed over 1,259,350 sets of facing points on the main line alone, so that the ratio of accidents at facing points, owing to the irresolution or carelessness of pointsmen in charge of them, to the number of facing points passed over, has been as 1 to 1,79,707.

"In no instance has an accident at points been attended with any injury either to passengers or to servants of the Company."

5. The result of our working, as reported by Mr. Church, appears to me to have been so eminently successful as to render any further comment unnecessary.

*Proceedings of the Madras Government, Public Works Department,
3rd February 1869.*

No. C/390.

Accidents at Facing Points.

Order of Government, No. 3,344, dated 23rd October 1868.

From the opening of the Madras Railway on the 1st July 1856 up to the present time, extending over a period of nearly 12½ years, there have been only (10) ten accidents* at points. Seven of these accidents occurred at facing points leading from the main line, and were due to irresolution or carelessness on the part of the pointsmen in charge, and three accidents occurred at lay-bye points, and were the result of neglect on the part of Station Masters to have the points locked.

Year.	Facing points, main line.	Facing points at lay-byes.
1859	2	..
1860	1	1
1861	1	..
1862	1	..
1863	1	1
1864	1	1
1865	..	1
1866	..	1
1867	..	1
1868	..	..
Total	7	3

During the 12½ years referred to no less than 83,659 trains have been run, performing

a train mileage of 9,330,000, and these trains passed over 1,259,350 sets of facing points on the main line alone, so that the ratio of accidents at facing points, owing to the irresolution or carelessness of pointsmen in charge of them, to the number of facing points passed over, has been as 1 to 1,79,707.

In no instance has an accident at points been attended with any injury either to passengers or to servants of the Company.

MADRAS,
22nd December 1868.

(Signed) H. E. CHURCH,
Traffic Manager.

(True Copy.)

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

From the Agent of the Great Southern of India Railway, to the Consulting Engineer for Railways, Madras; dated Negapatam, 1st December 1868, No. 2,822.

As called for in your No. 314 of the 19th ultimo, I have the honour to send you a sketch of the "points" now in use upon the Great Southern of India Railway. These points are self-acting, and close of themselves. It is intended to have them locked in future, so that the main line may at all times be clear.

ORDER THEREON, 3rd February 1869, No. 357.

No. 117.

RAILWAY, No. 6.

Ordered that these papers be forwarded to the Government of India.

(Here enter No. 358, dated 3rd February 1869.)
(True Extract.)

Colonel, R. E.,
Secretary to Government.

To the Consulting Engineer for Railways.

Ed. J. Tulloch.

Sept. of 1869 Madras.

PUBLIC WORKS.

To

THE CONSULTING ENGINEER FOR

RAILWAYS.

Passed February, 1869.

Recd.

G. O., and February 1869, No. 157.

FEBRUARY.
Nos. 116-117

Facing Points (Letter J. - Passing
orders on the letter from the Consulting
Engineer relative to the management, &c.
of facing points.

PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, 3rd February 1869.

No. 358.

No. 118.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

SIR,

RAILWAY, No. 7.

1. With reference to your letter of the 24th September 1868, No. 1,116 R, I am directed to forward herewith a letter from the Consulting Engineer for Railways, giving cover to reports from the Agents of the Madras and Great Southern of India Railways on the practice which is now followed on those Railways for the management of facing points, and to the Proceedings of a Committee of Railway officials, convened to consider and report on the best description of points and the most secure and efficient way of working them.

2. It will be observed that Carr's patent self-acting points are now in use on the Railways in this Presidency and that the Committee are unanimously of opinion that, for all practical purposes, no better description of points can be employed, though they admit that additional security would be ensured by the introduction of a system which, without detriment to the self-acting principle, should provide for the points indicating by signal to the passing driver the line to which they are open, and for their being so constructed that the pointsman should not be able to shift them during the passing of a train.

I have the honor to be,

Sir,

Your most obedient servant,

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

Exd J. Tulloch.

Govt. of (1869) Madras.

PUBLIC WORKS.

THE SECRETARY TO THE GOVERNMENT
OF INDIA.

Dated February 5, 1869.

Recd.

Encl.

G. O., S. I. No. 189, N^o 358.

FEBRUARY.

No. 113

*Facing Points (Railway).—*Latter from the Consulting Engineer regarding the management, &c., of facing points, forwarded to the Government of India with observations.

577 1 8
Great Southern of India Railway
Agents office Negapatam 8 Decr 1868

No 2822

From

The Agent

Great Southern of India Railway

To The Consulting Engineer
for Railways
Madras.

As called for in your No 314 of the 19th ultimo, I have the honor to send you a sketch of the points now in use upon the Great Southern Railway. These points are self acting and close of themselves. It is intended to have them locked in future, so that the main line may at all times be clear.

I have the honor to be
Sir

Your most obedient servant

William S. Roberts
Agent

Handwritten notes at the top left of the page, partially illegible.

Handwritten notes in the middle left section, including "The Consulting Engineer" and "for drawing".

Extensive handwritten notes at the bottom left of the page.

No. 563

MADRAS RAILWAY COMPANY.

AGENT AND MANAGER'S OFFICE.

Madras, December 22nd 1868.

From

R. B. Edwin Esq.
Agent and Manager of the M.R.C.

To

Major J. H. M. Shaw Stewart R.E.
Consulting Engineer for Railways.

SIR,

Addressing to the discussion which took place at the meeting held in this Office on Monday the 13th November 1868, arising out of the proceedings of Government at 3344, dated the 23rd of October, on the subject of points and crossings, I have the honor to state that in the opinion of the Officers of this Company the best description of Points is that known as Jarvis patent worked with a fish joint, as illustrated in plan at 102.

2. We have in use on this Railway some old points known as "Weld's patent" but as they differ so slightly from those shown on drawing at 80, it has not been thought necessary to submit a third sketch.

3. With reference to the conversation at the meeting as to the number of accidents caused on this Company's lines by the resolution

negligence or carelessness on the part of
Passengers, it affords me much pleasure to
direct your special attention to the accompanying
Memorandum of 1890 dated the 22nd instant
prepared by the Traffic Manager, which shows
that from the opening of the Railway on the
1st July 1856 down to the present time
extending over a period of nearly 12 1/2 years,
there have been only few accidents at Passes,
seven of which occurred at passing Passes
leading from the Main line, and were due
to negligence or carelessness on the part
of the Passengers in Charge, and the remaining
three occurred at "lay bye" Passes, and were
the result of neglect on the part of Station
Masters to have the Passes locked.

4. The Traffic Manager concludes
his Memorandum as follows: "During the
12 1/2 years referred to, no less than 83,659 trains
have been run, performing a Main Mileage of
9,330,000, and these Main passed over 1,257,350
sets of Passing Passes on the Main line alone,
so that the Ratio of accidents at passing Passes,
owing to the negligence or carelessness of Passengers
in Charge of them, to the number of Passing Passes
passed over, has been as 1 to 1,79,707."
In no instance has an accident at
Passes been attended with any injury either to
Passengers or to Servants of the Company."

The

5. The result of our working as
reported by Mr. Church appears to me to have
been so eminently successful, as to render
any further comment unnecessary.

I have the honor to be,
Sir,

Your most obedient servant,

Wm. J. Church
Agent and Manager

No 6/390 Accidents at Facing Points.
Order of Government No 3344 dated 23rd October 1868

From the opening of the Madras Railway on the 1st July 1856 up to the present time, extending over a period of nearly 12 1/2 years, there have been only ten (10) accidents at Points.

Year	Facing Points Mainline	Facing Points at Lay-byes
1859	2	"
1860	1	"
1862	1	1
1863	1	"
1864	1	"
1866	1	"
1867	"	1
1868	"	1
Total	7	3

Seven of these accidents occurred at Facing Points leading from the Main Line, and were due to irresolution or carelessness on the part of the Pointsmen in charge, and three accidents occurred at Lay-bye Points and were the result of neglect on the part of Station Masters to have the Points locked.

During the 12 1/2 years referred to, no less than 83,659 Trains have been run, performing a Train Mileage of 9,330,000, and these Trains passed over 1,259,350 sets of Facing Points on the Main Line alone, so that the ratio of accidents at facing Points, owing to the irresolution or carelessness of Pointsmen in charge of them to the number of Facing Points passed over, has been as 1 to 179,707.

In no instance has an accident at Points been attended with any injury either to Passengers or to servants of the Company.

Signed H. E. Church
Traffic Manager

Madras Railway
Traffic Manager's Office
Madras, 22nd December 1868

True copy
H. E. Church
Agent and Manager

Comptroller

MADRAS RAILWAY.

From

The Agent and Manager

To

The Consulting Engineer

for Railways

S. M. H. 1/69-

Dated December 2nd 1868

Recd.

No. 573.

Attention that in the opinion of the Officer of the Works, the best description of being is that known as 'burnt' and that the same should be sent, per post.

Proceedings of a Meeting held at
Royapuram on the 13th November 1868.

Present:

Major J. H. W. Shaw Stewart,	Conv. Engineer for Railway.
Mr. R. B. Elwin,	Agent and Manager Madras Ry. Company
Mr. W. S. Betts,	Agent and Traf. Manager G. S. of India Ry. Company
Mr. B. Anderson,	Chief Engineer Madras Ry. Company
Mr. J. A. Omsen,	Resident Engineer G. S. of I. Ry. Company
Mr. B. C. St. John,	Traffic Manager Madras Ry. Company
Mr. H. E. Church,	Loco Superintendent G. S. of I. Ry. Company

The Proceedings of Government No. 3344,
dated 23rd October, in compliance with which the
meeting was assembled, were read.
After a long discussion the following
resolutions

resolutions were unanimously agreed to:-

That in the opinion of this meeting there is no better description of points, for all practical purposes, than that now in use upon the Madras and the Great Southern of India Railways, viz: Carr's patent self acting points; and that the present mode of working them can scarcely be improved upon.

That, therefore, any compulsory alteration of the system in force upon the portions of Railway now open for traffic would be highly undesirable.

That any system of points, into which, with due regard to efficiency of working and to simplicity, the conditions recommended by the Bengal Committee can be introduced, would possess decided advantages; and the members present would be prepared to advocate the use of such system in the event of any extension of the Railway in this Presidency. Those conditions are understood to be,

1st The points upon the main line should show by signal to the passing driver the line to which they are open, - such signal to be attached to the lever or switch rail, and to be worked with the points.

2^d The points should be so constructed that the pointsman should not be able to

to shift them during the passing of a train.

Wm Stewart
Major R.E.
Com: Engineer for Railways

Railway Department
N^o 465

Consulting Engineer's Office
Madras 31st December 1868.

From The Consulting Engineer
for Railways
Madras

To The Secretary to Government
Public Works Department
Fort St. George

Sir

I have the honor to report that in compliance with the request contained in the second paragraph of the order of Government dated the 23rd October last, N^o 3344, a Committee was formed to consider and report on the best description of points, and the most secure and efficient way of working them. The proceedings of that Committee, which assembled on the 13th ultimo, I have the honor to submit for the information of Government.

N^o 563 d/22 Dec^r 2
1868.

N^o 2822 d/1 Dec^r
1868.

Letters from the Agents of the Madras and the Great Southern of India Railway Companies, illustrative of the present mode of working the points, are also herewith submitted. Carr's patent self-acting

S. W. R. 18/69-

self-acting points are in use on both lines. Upon the Madras Railway it has lately been the rule to lock at night all points upon the main line at those stations through which trains pass without stopping, and the rule will in future be observed during the day also. Upon the Great Southern of India Railway a similar rule will also be introduced.

3 The unanimous opinion of the Railway officials who formed the Committee was to the effect that the description of points now in use, and the mode of working them, can hardly be improved upon. In that opinion I fully concur. It would doubtless be a great improvement if without cancelling their self-acting properties, the points could, as suggested by the Bengal Committee, be so constructed that the pointsman should not be able to shift them during the passage of a train: but I question whether the two conditions are easily compatible, and I attach more weight to the self-acting properties of the present system than to the condition suggested by the Bengal Committee.

4 From the enclosure to Mr. Elwin's letter it will be seen that during the 12½ years which have elapsed since the first portion of the Madras

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2
Madras Railway was opened for traffic, the ratio of accidents at facing points which have been caused by the irresolution or carelessness of the pointsmen in charge, to the number of facing points passed over by trains, has been as 1 to 179,707. This result affords a strong argument in favor of the system of points now in use, and the present mode of working them.

5 The preparation of the statistics submitted with Mr. Elwin's letter has delayed the disposal of this subject.

I have the honor to be,
Sir,
Your most Obedient Servant,

Wm Stewart Napier R.E.
Conv. Engr. for Railways

2. 9. 1869

No 116

No 357 & 358. 3. 3. 1869

Enclosure in the
description
of works in use
on the Railway

Enclosure in

No 116

State 231. 8. 1869
No 3. 3. 1869

No 116

No 116

No 116

No 116

No 116

Public Works Dept

No 357

Proceedings of the Madras Government
Under date 11th 3rd 1869

Read the following

From the Chief Engineer
for Railways.

(Here enter No 116 of 31. Dec. 1869)

Ordered that

these papers be forwarded

To the Chief Engineer
for Railways
Sept 24/69

to the Govt of India.

No 358

The Secretary to the
Govt of India.

Sir,
With reference to
your letter of the 24th Sept.
1868, No 116 B, I am directed
to forward herewith a letter
from the Consulting Engineer
for Railways, giving cover
to reports from the Agents

W. A.

of the Madras and Great
Southern of India Railways
on the practice which is
now followed on those
Railways for the manage-
ment of facing points, and
to the Proceedings of a Com-
mittee of Railway Officials,
convened to consider and
report on the best de-
scription of points, and
the most secure and
efficient way of work-
ing them.

It will be observed
that Carr's patent
self acting points are
now in use on the
Railways in this Presidency
and

and that the Committee
are unanimously of
opinion that for all
practical purposes, no
better description of points
can be employed, though
they admit that addition-
al security would be
ensured by the intro-
duction of a system
which, without detriment
to the self acting princi-
ple, should provide
for the points indicating
by signal to the passing
driver the line to which
they are open; and for
their being so constructed
that

that the pointman
should not be able to
shift them during the
passing of a train.

W.E.

Rec'd 4/2/69 with copy of
Genl 257 of 1869.

Cue 4
Govt. of 1869, Madras.

PUBLIC WORKS.

To
The Consulting Engineer
for Railways

Dated

Recd.

G. O. 3rd Feb 1871 No. 357+358

Nos. 116 @ 118

Facing points (By) Copying orders
on the subject from the Comptroller
relative to the management, sec, 2
facing points.

Facing points (By) Letter from
the Comptroller regarding the
management, sec, 1 of facing points
forwarded with file of India
with observations.