

(1) Number of pages _____

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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No.	863 (ly)	Press
		~~Mis.~~
Dated	15-3-	1877.

Not to be folded or roughly handled

No. 337. Read the following letter from Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, to the Secretary to Government, Public Works Department, dated Madras, 7th February 1877, No. 91:—

I HAVE the honor to request that the Government of India may be moved to issue definite instructions for the guidance of this department as regards the action to be taken in the investigation of serious accidents.

2. The following two orders bearing upon the subject are now in force:—

Proceedings of Government, dated 27th April 1874, No. 1,071, laying down that, on the occurrence of a serious accident on the Madras Railway, an investigation should immediately be conducted on the spot by a joint Committee of Officers belonging to the three working departments, the Engineering, the Locomotive, and the Traffic, associated with an officer from the Consulting Engineer's Department.

Proceedings of Government, dated 14th November 1875, No. 3,121, in which it is laid down by the Government of India that, on the occurrence of any serious accident, such as a collision with or without injury to life or limb, the breaching of an embankment, or the failure of a bridge, the Consulting Engineer is to inspect, investigate, and report on behalf of Government. It is also laid down that, when an accident is attended with fatal consequences, the Magistrate of the District, or an officer deputed by him, is to conduct the inquiry.

3. These two orders are antagonistic, in so far that the first provides for a joint investigation by a body of whom the majority are Railway Officials, and intimately connected with the departments whose conduct is the subject of inquiry; while the second expressly provides for an investigation to be conducted by an officer of Government, "and not by the servants of the Company directly responsible for the safe working of the railway on which the accident may have occurred."

4. A reference to the papers printed with the Proceedings of Government, under date the 27th April 1874, No. 1,071, will show that the arrangement therein provided for was proposed at an official meeting with the authorities of the Madras Railway. The subject came forward for discussion in consequence of the unsatisfactory results which had attended the inquiries into several accidents; and it was suggested by this office that a system of Railway Police, similar to that which obtains in the Bombay Presidency, should be adopted. This proposal was set aside on the score of expense; and an alternative proposal, for an immediate investigation at the site of every serious accident by a Committee of Officers, was recommended in its place. The latter proposal was tentatively approved by this Government; but later experience conclusively shows that the principle laid down by the Government of India is correct, and that all such investigations should be conducted by independent officers of Government.

5. There are, however, serious difficulties in the way of carrying out the investigation ordered by the Government of India. Of these difficulties the chief one is that the Consulting Engineer has no means of receiving information regarding the occurrence of an accident except from the Railway Officials; and, under Act XVIII of 1854, they are bound to report every accident only within forty-eight hours of its occurrence. It cannot be doubted that, in order to conduct an effectual and conclusive investigation, the officer charged with the duty should be upon the spot with as little delay as

possible, and for this purpose *immediate* information regarding the accident is absolutely necessary. But as matter of fact it is rarely if ever that this office receives immediate information regarding an accident. It is a point upon which I have been obliged to address the Agent on several occasions; and the following particulars regarding the most serious accidents which have lately occurred on the Madras Railway will illustrate the matter:—

- (1.) Collision near Vaniembady on 2nd November 1876, occurred about 5 A.M., within 3 miles of station. Information reached this office at 2 P.M., after nine hours interval.
- (2.) Collision near Amboor on 25th December 1876, occurred at 1-25 A.M., within two miles of station. Information reached the Consulting Engineer at 7-40 A.M., after six hours interval.
- (3.) Collision near Camalapoor on 23rd January 1877, occurred about 2-50 A.M., within one mile of station. Information reached the Consulting Engineer at 7-20 A.M., after four and a half hours interval.

6. With reference to the second of these instances I beg to enclose two letters for the perusal of Government, which will show the practical difficulties experienced by this department. As stated above, the

To Agent No. 1,406, 28th December 1876.
From „ „ 1,429, 29th „ „

collision occurred at 1-25 A.M., and the telegram reporting it reached Madras at 2-45 A.M. The information, however, did not reach me until 7-40 A.M., too late to be of any practical use; and the report which has been furnished to Government regarding this collision will show that the investigations have been unsatisfactory and inconclusive. With regard to the Agent's letter, it is hardly necessary to say that what I desired was, not that the train should have been detained on my account, but that earlier intimation of the collision should have reached me.

7. As will be seen by the third of the instances cited above in paragraph 5, the arrangement newly introduced by the Agent has failed to secure the desired object viz., the earliest possible intimation to this office of serious accidents. In nine cases out of ten these accidents occur during the night, and I submit that no consideration whatever should be allowed to stand in the way of the immediate transmission of the necessary information. This should be a matter of easy arrangement.

8. Another serious difficulty in the way of giving effect to the orders of the Government of India is to be found in the fact that, under the existing system, the Consulting Engineer is vested with no authority for conducting a formal inquiry. He is not empowered to summon witnesses nor to examine them. He is in fact, as has already been represented, entirely dependent in these matters upon the co-operation of the Railway Officials—a co-operation which not only he cannot claim, but which also places him in opposition to the express desire of the Government, that his investigation should be altogether independent of the Company's officials.

9. If it is still the wish of the Government of India that every serious accident occurring on a railway should be investigated and reported on by an officer of this department, I submit for consideration the necessity of placing the Consulting Engineer in a position similar to that held in England by the Inspecting Officers of the Board of Trade. It is scarcely necessary to observe that the Government have a more direct interest in India than in England in the prevention of accidents, inas-

much as the loss and expenditure entailed by every railway accident in India falls in great measure, if not altogether, upon the State. But on the other hand the arrangements for investigating accidents are far more complete in England than in India.

10. With advertence to the Proceedings of Government under date the 27th April 1874, No. 1,071, I beg also to submit for consideration the necessity of making an entire change in the Railway Police system. The arrangements for securing immediate inquiry into all cases of serious accidents, which were tentatively approved by Government in the above-quoted Proceedings, have wholly failed in their object; and the introduction of some system of Railway Police, similar to that which has been found to answer well in Bombay, seems highly expedient. When brought forward for discussion three years ago at an official meeting with the Madras Railway authorities, the proposal was set aside on the score of expense; but, with regard to this it may be observed—first, that all questions bearing on the cost of the various railway departments should, under existing circumstances, be a matter more for the consideration of the Government than of the Company; and, second, that the prevention of one such accident as that which occurred near Amboor in December last would probably outweigh the extra cost of the proposed Police system during several years.

11. In the event of the introduction of a system of Railway Police, such as is in force in Bombay, it seems not improbable that the investigation into accidents desired by the Government of India could be efficiently conducted through the instrumentality of the Superintendent of Police, acting in concert with the Consulting Engineer. From some points of view, this arrangement would be more satisfactory than that the Consulting Engineer should alone undertake the conduct of such investigations. The attention of His Grace the Governor in Council is solicited to the chapter on “Railway Police,” to be found at page 112 of the accompanying Police Manual for the Bombay Presidency, especially to the Rules at pages 133 to 135.

From Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways,
to R. B. ELWIN, Esq., Agent and Manager, Madras Railway Company, dated Madras,
28th December 1876, No. 1,406.

ADVERTING to my letter, dated the 20th instant, No. 1,372, and to what was said at the meeting held at Royapooram on the 21st instant, regarding the delay experienced by this office in receiving reports of serious accidents, I have the honor to request particular attention to the following circumstances connected with the unfortunate collision which occurred on the 25th instant.

2. At 7-40 A.M. on that day I received from you a note which had been addressed to you by the Traffic Manager, announcing that a serious collision had taken place near Amboor, and that several lives had been lost. Mr. Church also mentioned that Dr. Elder had been sent for and asked to accompany the special train which was to start about 7 A.M. This note was written by Mr. Church at 6 A.M., and apparently reached you at 6-50 A.M., being sent on to me at once.

3. Immediately on receiving Mr. Church's note forwarded by you I ordered my coach and drove to the Central Station, arriving there at 8-23 A.M. To my extreme disappointment I found that you, the Traffic Manager, the Locomotive Superintendent, and the Consulting Physician had started for the scene of the accident a few minutes before I reached the station.

4. I found, however, that the 8-30 A.M. train was on the point of starting, and, as there was no other apparent chance of getting forward, I joined it, telegraphing to you from Peram-

bore that I had done so, and asking your advice as to my movements. In reply you advised me to come on to Vellore, which I did. On reaching Vellore, I again telegraphed to you, suggesting that I should go on at once to the scene of the accident; but in reply you stated that you were bringing the injured passengers to Madras, and asked me to await your arrival at Vellore.

Accordingly I remained at Vellore for more than two hours; and when you arrived 6-30 P.M., it was too late to go on; and I returned to Madras, having spent the whole day in an unavailing attempt to reach the scene of the collision.

5. I mention these circumstances in detail, not with the intention of imputing blame to any one, but in the hope that the great disappointment and annoyance experienced by me upon that day may lead to a change in the system of reporting to this office the occurrence of such an accident.

6. I beg again to draw special attention to the arrangements agreed to at the meeting held at Royapooram on the 10th February 1874, for the proper investigation of serious accidents: when it was determined that, in every such case, the inquiries shall be immediately conducted on the spot by a joint Committee of Officers belonging to each of the three working departments, associated with an officer from this department. I beg also to draw special attention to paragraph 5 of the Order of Government, dated the 27th April 1874, No. 1,071, in which His Excellency the Governor in Council stated that he would not "for the present object to the trial of the system by which it is now proposed to make immediate inquiry into all serious accidents. But it must be understood that unless such inquiries result in decided action, the only alternative will be to place such inquiries in the hands of a Government Police Officer."

7. Not only have those arrangements, as you are aware, received the approval of this Government; but the Government of India have also laid down that, on the occurrence of any serious accident, the Consulting Engineer is to inspect, investigate, and report on behalf of Government. Bearing in mind that the Government are interested, even more directly than the Railway Company, in the investigation and prevention of accidents,—in as much as the loss caused by an accident falls entirely upon the State, not in any degree upon the Company,—it is not unreasonable that they should desire to be represented at the investigation, into the circumstances attending every accident.

8. In the case of the collision on the 25th instant, the late hour at which the information reached me, and the starting of the train before I had time to reach the station, rendered it simply impossible for me either to carry out the arrangements agreed to in February 1874, or to give effect to the instructions of the Government of India above alluded to.

9. In your letter No. 1,411 of the 26th instant, I do not find mention made of the hour at which the collision occurred; but, judging from the time-table, I gather that it must have taken place before 2 A.M. As the place where the trains came into collision was within two miles of a station, I cannot avoid the conclusion that information regarding the accident ought to have been with you long before 6-50 A.M., and with me long before 7-40 A.M.

10. As bearing upon this point, I beg also to draw your attention to the late hour at which information regarding the collision near Vaniembady on the 2nd November reached this office. The collision occurred about 5 A.M., and within three miles of a station; but information regarding it did not reach this office until about 2 P.M.; and if Major Smith had not heard of the collision from an independent source, he would not have been able to accompany the heads of the three working departments to the scene of the accident. In that case it was by mere chance that the arrangements approved by Government for immediate investigation of an accident upon the spot were carried into effect. I submit for your consideration whether information regarding that accident should not have been with you and with the representative of Government before 8 or 9 A.M.

11. I trust you will agree with me in considering it a matter of urgent importance to adopt such measures as will render it possible, in every case of serious accident, to give effect to the arrangements agreed to by all concerned, and approved by Government. There can be no doubt that, in order to be thorough and effectual, the inquiry into an accident should be held upon the

spot, and as soon as possible after its occurrence. These two essential points were duly provided for in the arrangements agreed to on the 10th February 1874.

12. I am well aware that, after such an accident as a derailment or a collision, involving stoppage of traffic, it is of vital importance that the line should be cleared as soon as possible; but I fail to see any valid reason why this consideration should interfere with the presence of the representative of Government, in order to enable him to enter upon an immediate investigation into the causes of the accident.

13. I beg to suggest for consideration that, in the case of every serious accident to a train in motion, such as a derailment of vehicles, or a collision, with or without injury to life or limb, the Traffic Manager should be instructed to inform the Consulting Engineer direct, at the earliest possible moment. The information to be as brief as is consistent with clearness; and to be sent to the office if between 11 A.M. and 5 P.M., at other times and on Sundays to the Consulting Engineer's quarters.

14. If for instance, on the 25th instant, I had received from the Traffic Manager some such message as this:

"Collision on main line east of Amboor. Several lives lost. Start from Central station at A.M."

and if such message had been sent to me at the same time at which you and the Consulting Physician were informed, I should not now have the unsatisfactory duty of reporting to Government that I was not able to carry out their instructions.

15. Similarly, in the event of a serious accident to the way or works, such as the breaching of an embankment, or the failure of a bridge, I beg to suggest that the Chief Engineer be instructed to communicate direct with this office.

16. The object which I have in view in making these suggestions is that the representative of Government should be placed, at the earliest possible moment, in possession of information regarding the occurrence of any serious accident upon the railway, and should have it in his power to carry out his instructions; which, on the occasion of the collision on the 25th instant, he was unable to do. I shall be glad if you can suggest any better mode of carrying out the object in view.

17. I need scarcely say, in conclusion, that I attach very great importance to the subject of this letter, and that I shall be glad to hear from you at your earliest convenience.

From R. B. ELWIN, Esq., Agent and Manager of the Madras Railway Company, to the Consulting Engineer for Railways, dated Madras, 29th December 1876, No. 1,429.

In acknowledging the receipt of your letter of the 28th instant, No. 1,406, I have the honor to express my regret for the disappointment and annoyance which you experienced on the 25th instant. You are aware, however, that I gave you the earliest possible intimation in my power of the unfortunate collision that occurred near Amboor on the morning of the 25th instant, and I can assure you that in regard to the communications I made to you later in the day, I acted to the best of my judgment under the very trying circumstances in which I found myself placed.

2. On receiving the telegram which you sent to me from Perambore, I thought that, if you came on to Vellore, we should be able to bring you on by special engine to the scene of the accident. But by the time I received your second telegram from Vellore we were about to start from Mailputty with the wounded, and as the running of a special with you would have delayed our train on the road, and as it was of the utmost importance to get the injured passengers into Madras with the least possible delay, I ventured to ask you to await our arrival at Vellore, knowing that you could, if you desired it, be at the place where the collision occurred early on the following morning.

3. As regards the train by which the Officers of the Company left Madras, not having waited for you, I beg to point out that it started, not a few minutes before you reached the

station at 8-23 A.M., but at 7-15 A.M. The train was not a special, but the ordinary 7 o'clock train, and was delayed for a quarter of an hour to allow the invalid and other carriages to be attached. The Traffic Manager did not wait for me, and I should have considered that he would have acted wrongly had he done so; for, as it appears to me, his first duty in such a case, was to take medical aid to the spot where the injured passengers were lying with all possible despatch. Much valuable time was unavoidably lost as it was; for, owing to the crowded state of the line, it was found impossible to save time by running a special to Arcconum, but had the ordinary train been delayed in order that an officer of your department might have gone with it to enter upon an immediate investigation into the causes of the accident, a still further delay of more than an hour would have occurred before skilled assistance reached the wounded.

4. By a mere accident I reached the Madras station on the morning of the accident in time to go with the other officers of the Company by the 7 A.M. train, and I lost no time in communicating the intelligence of the loss of life that had occurred to the Magistrate of Vellore, who, as you have already been informed, held an inquiry which elicited what in his and the Jury's opinion was the cause of the accident.

5. A copy of the evidence which was taken by this officer of the Government has been obtained by me and forwarded to your office, and I have invited your presence at the departmental inquiry which is to be held in my office to-morrow, when I cannot think that you will have any difficulty in satisfying yourself personally as to the cause of the accident, and so practically carrying out the instructions of Government and the arrangement agreed to at the Committee meeting held in my office on the 10th of February 1874.

6. As regards the reporting of accidents, you are aware that the practice has hitherto been for the guards and drivers of trains to report to the nearest Station-master, who is required to send on the information by telegram to heads of departments, who report to me. In order to meet the proposal made in your letter I have arranged that all messages reporting serious accidents whether to the line or to trains, shall be sent direct to me by telegraph, by Resident Engineers and Station-masters, at the same time as messages are sent to the heads of departments. I will take care that the intelligence is sent on to you in the manner you propose, and this, while it will answer the purpose you have in view equally well, will be more regular than for heads of departments to communicate with your office direct.

7. While I thus do all I can to meet your wishes, in accordance with what I believe the Board of Directors would desire, I must at the same time point out that it is impossible under any system that can be devised but that the Executive Officers of the Railway shall be in possession of earlier information of serious accidents than your office can be, and in such cases I consider it most undesirable that their action should be delayed or fettered by any consideration whatever.

No. 338.

ORDER THEREON, 15th March 1877, No. 863.

RAILWAY, No. 50.

HIS GRACE the Governor in Council is of opinion that the procedure ordered by the Government of India is sufficient to secure the object in view; but, to this end, it is essential not only that the earliest possible intimation of every accident should be given to the Consulting Engineer's Office, but that all traces of the accident which might throw light upon its cause, such as fragments of machinery, rails, &c., should be preserved as far as possible untouched, consistently with the necessary operation of clearing the road for resumption of traffic.

2. His Grace trusts that the Managers of the Railway Companies will do all in their power thus to assist the Government Officers in an investigation, which, alike

in the interests of the Company concerned, of the State, and of the Public, should be thorough and effective.

3. These papers will be communicated to the Inspector-General of Police, for such measures as he may consider likely to assist the Consulting Engineer in the conduct of an inquiry.

(True Extract.)

Lieut.-Col,
Joint Secy. to Govt., P.W.D.,
Railway Branch.

To the Consulting Engineer for Railways.

„ Inspector-General of Police.

„ Judicial Department.

Erd. E. C. Shunker.
Spare Copies

Not to be
omitted -

W. C. No 818 on 15/3/17

There appears to me to be
in the case of a R. W.
accident

2 somewhat distinct objects
to be attained

1st the causes not only
direct but indirectly
contributing to the
accident

2nd the ^{due} punishment
of any individual
who has caused it

The first of these includes
the bringing to light
indistinct or improper

Under regulations -
general laxity of
staff -
insufficiency of
mechanical or other
appliances -
overwork - many
the matters which
constantly contribute to
the. They do not directly
cause accident

When any cause of
personal injury or
loss of life occurs -
the pecuniary claims

arising generally
in Europe ~~in the~~
~~United States~~ require
a full examination of
the discovery in the
cause of trial of matter
which can in any way
have been of importance
but the cases thus
investigated are not
the most numerous -
nor because no injury
follows an accident is
then as a question of
railway management
the less reason for the
strict investigation.

How is this to be best done?

The 1st can be best dealt
with by a person with the
knowledge & experience of
a Consulting Engineer ^{and}
accordingly if I have
directed in 1875. That the
beginning with all cases of
accident.... shall be by
Cons. Eng^r

The 2^d case must be
investigated by Magistrates
a Justice Office & should be
left to them. The enquiry
being if Just. think it
necessary watched by
Just. Officer ^{not so much} to ensure any
particular individual being

punished as I cannot
the truth being elicited -
The Cons. Eng^r points out rightly
that he is vested with
no authority for conducting
a formal enquiry. Not
imposed to summon witnesses
nor to examine them -
He is in fact exactly in
the position which until
very recently the Inspector
of S. of B. of Trade held
in England in respect of
accident enquiries -
A change was made

recently - & the few
inquiries which have been
held had not when I
left England & my
means led to a
personal opinion on
the experiment & I
did not be disposed to
allow it until further
experience has been
obtained -

I think the 2 objects
of prevention & of
punishment - should be
kept always clearly present
in these cases -

The Govt. the public. the
U. W. ^{inquiries} all
are common interest in
the same

preventing the recurrence
of an accident
fellow servants ~~knowing~~
~~the~~ feel a strong
intent in preventing if
they can the punishment
of one of themselves -
Employers naturally
feel a difficulty in
preparing a case against
their servant
With these views I do
not see any necessity
for reference of J. P.

I should leave the
enquiry to the Ins.
Eng. as regards causes
of accident. & the
Institute as regards
injury to life or limb
to the owner as regards
property damaged —

There is no doubt that
the promptness of
investigation is most
desirable. But if help
in removal of material
the repair of road &c. the
examination is most
valuable. because. Thus

are slight derangements
frequently in motion
on ballast — broken parts
of machinery &c. — or
peculiar position which
are important tests of the
evidence of those concerned
but which the necessity
of restoration &
clearing the line often
is of course diminishing
that the C. & N. W. should
be informed as early as possible
economically of any accident
But I do not think that to
blame can be attached to the
the officers in the cases referred
re?

22 to - In a serious accident
on ~~the~~ train - must come
1st aid to the injured
to which every thing must
give way

2^d clearing the line
ballast track to be
removed

During these 2 processes
little if any accurate
information is obtainable
except what is gathered by
the observation of a
practiced eye. & thoughtful
mind -

at the end of them - the

traces & marks are
necessarily
lost - and it
becomes a matter of

evidence - that from
whom evidence is obtainable
are passengers -

Bystanders
Officials

The 1st have been securing
away as the road is
cleared by the first train
only too anxious to escape
from a scene of suffering
& calamity - The second
seldom throw any light
on after describing the
accident. The answer to
the enquiry "what made
you attend to the
movement of the train?"

nearly always is. "O"
 "I heard the crash" "3"

The third are
excited - frightened,
or exhausted with
work -

and I believe that ~~unless~~
the office is on the spot
the truth is better situated
by a calm - observation.

circumstances in situ
than the questioning of
those concerned - although
that may take place.

48 hours after than by
the examination of

Agitated & excited
intrigues

I would not therefore
make any change except
leave the engine as
always directed by J. J. S.

to point out to the
N.W. authorities without
imputing any blame the
importance of giving ~~the~~
~~exact~~ ~~proper~~ ~~circumstances~~
information to our. ^S Eng. ^S office

and of furnishing all
fragments of Machinery
Laid on as far as

Letter from the Consulting Engineer
for Railways No. 91, dated 7th Feb. 1877

FOR ORDERS.

The points raised
in this correspondence
requiring the orders of
Government and
ultimate reference to
the Government of
India are

- (1) The arrangements
under which Railway
accidents shall in
future be conducted.
- (2) The introduction of
a new system of Rail-
way Police in con-
nection with which
attention

the people interested
consistently with the
necessary operation of
clearing the road for
resumption of traffi-
and I would doubt
the police to give any
regard assistance to the
cause in the course
of an enquiry —

25/2

I agree in the views
expressed by His Grace the
Governor in this note.
The sole practical difficulty
is the possible delay in in-
formation of accidents reaching
the Consulting Engineer.

But I have no doubt that
this can be ^{overcome} by
addressing the Railway
managers, in the manner
indicated by His Grace.

25.2.77

I concur
26/2 Mr. R.

attention is invited
to Chapter VIII of the
accompanying Police
Manual: particularly
pages 133 to 135.

13/13

Manturam

S. H. C. C.

Joint Secy. to Government
Railway Branch.

Gr 9-2-77

Railway Department Madras 28th December 1876.
Consulting Engineers Office
N^o 1406

To

The Agent and Manager
Madras Railway Company

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27
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such inquiries result in
decided action, the only
alternative will be to
place

35 15
place such inquiries in the
hands of a Government-
Police Officer."

7- Not only have those
arrangements, as you are a-
ware, received the approval
of this Government; but the
Government of India have
also laid down that, on the
occurrence of any serious ac-
cident, the Consulting En-
gineer is to inspect, inves-
tigate, and report on behalf
of

of Government. Bearing in mind that the Government are interested, even more directly than the Railway Company, in the investigation and prevention of accidents,—was much as the loss caused by an accident falls entirely upon the State, not in any degree upon the Company,—it is not unreasonable that they

they should desire to be represented at the investigation, into the circumstances attending every accident.

8. In the case of the collision on the 25th instant, the late hour at which the information reached me, and the starting of the train before I had time to reach the station, rendered it simply impossible for me either to carry out the arrangements agreed

agreed to in February 1874,
or to give effect to the instruc-
tions of the Government of
India above alluded to.

9- In your letter No 1411 of
the 26th instant, I do not find
mention made of the hour
at which the collision oc-
curred; but, judging from
the time-table, I gather -
that it must have taken
place before 2 A.M. As the
place where the trains -
came

39 19
came into collision was with-
in two miles of a station,
I cannot avoid the conclu-
sion that information re-
garding the accident ought
to have been with you -
long before 6-50 A.M., and
with me long before 7-40
A.M.

10- As bearing upon this -
point, I beg also to draw
your attention to the late
hour at which information
regarding

regarding the collision near
Vancimbady on the 2nd Novem-
ber reached this office.

The collision occurred about
5 A.M., and within three-
miles of a station; but in-
formation regarding it did
not reach this office until
about 2 P.M.; and if Major
Smith had not heard of
the collision from an in-
dependent source, he would
not have been able to—
accompany

41 18
accompany the heads of the
three working departments
to the scene of the accident.
In that case it was by mere
chance that the arrangements
approved by Government for
immediate investigation
of an accident upon the
spot were carried into-
effect. I submit for
your consideration whether
information regarding that
accident should not have
been

been with you and with the
the representative of Govern-
ment before 8 or 9 A.M.

11- I trust you will agree
with me in considering
it a matter of urgent im-
portance to adopt such
measures as will render
it possible, in every case of
serious accident, to give ef-
fect to the arrangements
agreed to by all concerned,
and approved by Government.
There

43 19
There can be no doubt that, in
order to be thorough and
effectual, the inquiry into
an accident should be
held upon the spot, and
as soon as possible after
its occurrence. These two es-
sential points were duly
provided for in the arrange-
ments agreed to on the
10th February 1874.

12- I am well aware that,
after such an accident as
a

a derailment or a collision,
involving stoppage of traffic,
it is of vital importance
that the line should be
cleared as soon as possible;
but I fail to see any valid
reason why this considera-
tion should interfere with
the presence of the represen-
tative of Government, in
order to enable him to
enter upon an immediate
investigation into the causes
of

65 20
of the accident.

13- I beg to suggest for
consideration that, in the case
of every serious accident to
a train in motion, such
as a derailment of vehicles,
or a collision, with or with-
out injury to life or limb,
the Traffic Manager should
be instructed to inform the
Consulting Engineer direct,
at the earliest possible moment.
The

The information to be as brief
as is consistent with clearness;
and to be sent to the office
if between 11 A.M. and 5 p.M.,
at other times and on Sundays
to the Consulting Engineer's
quarters.

14- If for instance, on the
25th instant, I had received
from the Traffic Manager
some such message as
this:

"Collision on main line
east

47 21
"east of Ambrose. Several lives
lost. Start from Central
Station at A.M."
and if such message had
been sent to me at the same
time at which you and
the Consulting Physician
were informed, I should
not now have the unsatis-
factory duty of reporting
to Government that I was
not able to carry out their
instructions

15- Similarly, in the event of a serious accident to the way or works, such as the breaching of an embankment, or the failure of a bridge, I beg to suggest that the Chief Engineer be instructed to communicate direct with this office.

16- The object which I have in view in making these suggestions is that the representative of—
Government

19 12
Government should be placed, at the earliest possible moment, in possession of information regarding the occurrence of any serious accident upon the railway, and should have it in his power to carry out his instructions; which on the occasion of the collision on the 25th instant, he was unable to do. I shall be glad if you can suggest any

any better mode of carrying
out the object in view.

17— I need scarcely say,
in conclusion, that I attach
very great importance to
the subject of this letter;
and that I shall be
glad to hear from you
at your earliest convenience.

I have &c

(Signed) J. H. M. Shaw Newark N.J. Col. R.E.

Cons. Engr. for Railways

(True copy)

Wm. M. M. M.

Lieut. Col. R.E.

Cons. Engr. for Railways

P.W.D.
8 FEB 27
NR. 1367
1

G. O. 15: March/77 J.B. L. 337

No. 1429.

S P 24
MADRAS RAILWAY.

AGENT AND MANAGERS' OFFICE.

Madras, 29th December 1876.

From Robert B. Elwin Esq.
Agent and Manager. M.R.C.

To Lieut Colonel J. H. M. Shaw Stewart Esq.
Consulting Engineer for Railways.

Sir,

In acknowledging the receipt of your letter of the 28th instant, N^o. 1406, I have the honour to express my regret for the disappointment and annoyance which you experienced on the 25th instant. You are aware however that I gave you the earliest possible intimation in my power of the unfortunate collision that occurred near Amboor on the morning of the 25th instant, and I can assure you that in regard to the communications I made to you later in the day, I acted to the best of my judgment under the very trying circumstances in which I found myself placed.

2. On receiving the telegram which you sent to me from Pirmabore, I thought that if you came on to Vellore we should be able to bring you on by special Engine to the scene of the

accident. But by the time I received your second telegram from Vellore we were about to start from Mailputty with the wounded, and as the running of a special with you would have delayed our train on the road, and as it was of the utmost importance to get the injured passengers into Madras with the least possible delay, I ventured to ask you to await our arrival at Vellore, knowing that you could if you desired it, be at the place where the collision occurred early on the following morning.

3. As regards the train by which the officers of the company left Madras not having waited for you, I beg to point out that it started, not a few minutes before you reached the station at 8.23 a.m., but at 7.15 a.m. The train was not a special, but the ordinary 7 O'clock train, and was delayed for a quarter of an hour to allow the Invalid and other carriages to be attached. The Traffic Manager did not wait for me, and I should have considered that he would have acted wrongly had he done so, for as it

57 26
appears to me, his first duty in such a case, was to take Medical aid to the spot where the injured passengers were lying with all possible despatch. Much valuable time was unavoidably lost as it was, for owing to the crowded state of the line it was found impossible to save time by running special to Arcconum, but had the ordinary train been delayed in order that an officer of your Department might have gone with it to enter upon an immediate investigation into the causes of the accident, a still further delay of more than an hour would have occurred before skilled assistance reached the wounded.

4. By a mere accident I reached the Madras station on the morning of the accident in time to go with the other officers of the company by the 7 a.m. train, and I lost no time in communicating the intelligence of the loss of life that had occurred to the Magistrate of Vellore, who as you have already been informed held an inquiry which elicited what in his and the jury's opinion was the cause of the accident.

MADRAS RAILWAY.

From

The Agent and Manager.

To

The Consulting Engineer
for Railways.

Dated

187

Recd.

No.

+ 89 27

5. A copy of the evidence which was taken by this office of the Government has been obtained by me and forwarded to your office, and I have invited your presence at the Departmental inquiry which is to be held in my office tomorrow, when I cannot think that you will have any difficulty in satisfying yourself personally as to the cause of the accident, and so practically carrying out the instructions of Government and the arrangement agreed to at the committee meeting held in my office on the 10th of February 1874.

6. As regards the reporting of accidents you are aware that the practice has hitherto been for the Guards and Drivers of trains to report to the nearest station master, who is required to send on the information by telegram to Heads of Departments who report to me. In order to meet the proposal made in your letter I have arranged that all messages reporting serious accidents whether to the line or to trains, shall be sent direct to me, by telegraph, by Resident Engineers

MADRAS RAILWAY.

From

The Agent and Manager.

To

The Consulting Engineer

for Railways.

Dated

187

Recd.

No.

and station masters, at the same time as messages are sent to the Heads of Departments. I will take care that the intelligence is sent on to you in the manner you propose, and this, while it will answer the purpose you have in view equally well, will be more regular than for Heads of Departments to communicate with your office direct.

7. While I thus do all I can to meet your wishes, in accordance with what I believe the Board of Directors would desire, I must at the same time point out that it is impossible under any system that can be devised but that the executive officers of the Railway shall be in possession of earlier information of serious accidents, than your office can be, and in such cases I consider it most undesirable that their action should be delayed or fettered by any consideration whatever.

I have the honour to be
Sir

Your most obedient servant

W. H. Williams

Agent and Manager

MADRAS RAILWAY.

From

The Agent and Manager.

To

The Consulting Engineer

for Railways.

Dated

187

Recd.

No.

P.W.D.
8 FEB 77
No. 1363

The Consulting Engineer

for Railways.

Dated 29 Dec 1876
Recd. 30 Dec 1876

No. 1429.

*Interlocking Apparatus
as to the alleged delay
in reporting the second
collision near Oudum.*

by G.O. 15th March 1877 S.B.R. 337

RAILWAY DEPARTMENT.

CONSULTING ENGINEER'S OFFICE,

Madras, 7 Feb. 1877

No. 91

From

LIEUT.-COLONEL J. H. M. SHAW-STEWART, R.E.,
Consulting Engineer for Railways,

To

Lib. J. Mullins R.E.
MAJOR-GENERAL G. W. WALKER, R.E.,
Secretary to Government,
Public Works Department,
Fort Saint George.

SIR,

I have the honour to request that the Government of India may be moved to issue definite instructions for the guidance of this department as regards the action to be taken in the investigation of serious accidents.

2 The following two orders bearing upon the subject are now in force:

Proceedings of Govern-
ment dated 27th April 1874, No. 1041.
Laying

Laying down that, on the occurrence of a serious accident on the Madras Railway, an investigation should immediately be conducted on the spot by a joint Committee of Officers belonging to the three working departments, the Engineering, the Locomotive, and the Traffic, associated with an officer from the Consulting Engineer's Department.

Proceedings of Government dated 4th November 1875, No 3/21. - In which it is laid down by the Government of India that, on the occurrence of any serious accident, such as a collision with or without injury to life or limb, the breaching of an embankment, or the failure

failure of a bridge; the Consulting Engineer is to inspect, investigate, and report on behalf of Government. It is also laid down that, when an accident is attended with fatal consequences, the Magistrate of the District, or an officer deputed by him, is to conduct the inquiry.

3. These two orders are antagonistic, in so far that the first provides for a joint investigation by a body of whom the majority are Railway Officials, and intimately connected with the departments whose conduct is the subject of inquiry; while the second expressly

expressly provides for an investigation to be conducted by an Officer of Government, "and not by the servants of the Company directly responsible for the safe working of the railway on which the accident may have occurred".

4. A reference to the papers printed with the Proceedings of Government under date the 27. April 1844, N^o 1041, will show that the arrangement therein provided for was proposed at an official meeting with the Authorities of the Madras Railway.

5. The subject came forward for discussion in consequence of the unsatisfactory results which had attended the inquiries into several

934
accidents; and it was suggested by this office that a system of Railway Police, similar to that which obtains in the Bombay Presidency, should be adopted. This proposal was set aside on the score of expense; and an alternative proposal, for an immediate investigation at the site of every serious accident by a Committee of Officers, was recommended in its place. The latter proposal was tentatively approved by this Government; but later experience conclusively shows that the principle laid down by the Government of India is correct, and that all such investigations should be conducted by

by independent Officers of Government.

5. There are however serious difficulties in the way of carrying out the investigation ordered by the Government of India. Of these difficulties the chief one is that the Consulting Engineer has no means of receiving information regarding the occurrence of an accident except from the Railway Officials; and, under Act XVIII of 1854 they are bound to report every accident only within 48 hours of its occurrence. It cannot be doubted that, in order to conduct an effectual and conclusive investigation, the Officer charged with the duty should be upon the spot with as little delay as possible; and for this

4
this purpose immediate information regarding the accident is absolutely necessary. But as matter of fact, it is rarely if ever that this office receives immediate information regarding an accident. It is a point upon which I have been obliged to address the Agent on several occasions; and the following particulars regarding the most serious accidents which have lately occurred on the Madras Railway, will illustrate the matter:—

(1) Collision near Vaniembady on 2^d November 1846. Occurred about 5 a.m., within 3 miles of station. Information reached

reached this office at 2 p.m. after nine hours interval.

(2). Collision near Amboor on 25th December 1876. Occurred at 1.25 a.m. within two miles of station. Information reached the Consulting Engineer at 7.40 a.m., after six hours interval.

(3). Collision near Camalapur on 23rd January 1877. Occurred about 2.50 a.m. within one mile of station. Information reached the Cons. Engineer at 7.20 a.m. after four and a half hours interval.

To Agent Mr. Webb - 28th Decr. 1876
From " " 14 29-29th do

With reference to the second of these instances, I beg to enclose two letters for the perusal of Government, which will show the practical difficulties experienced by this Department. As stated above, the collision occurred at 1.25 a.m., and the telegram reporting it reached Madras at 2.45 a.m. The information however did not reach me until 7.40 a.m. too late to be of any practical use; and the report which has been furnished to Government regarding this collision will show that the investigations have been unsatisfactory and inconclusive. With regard to the Agent's letter,

it is hardly necessary to say that what I desired was, not that the train should have been detained on my account, but that earlier intimation of the collision should have reached me.

As will be seen by the third of the instances cited above in paragraph 5, the arrangement newly introduced by the Agent has failed to secure the desired object, namely, the earliest possible intimation to this office of serious accidents. In nine cases out of ten, these accidents occur during the night; and I submit that no consideration whatever should be allowed to stand in the way of the immediate

immediate transmission of the necessary information. This should be a matter of easy arrangement.

8. Another serious difficulty in the way of giving effect to the orders of the Government of India is to be found in the fact that, under the existing system, the Consulting Engineer is vested with no authority for conducting a formal inquiry. He is not empowered to summon witnesses, nor to examine them. He is in fact, as has already been represented, entirely dependent in these matters upon the cooperation of the Railway Officials; a coopera-

cooperation which not only he cannot claim, but which also places him in opposition to the express desire of the Government that his investigation should be altogether independent of the Company's Officials.

9. If it is still the wish of the Government of India that every serious accident occurring on a railway should be investigated and reported on by an officer of this Department, I submit for consideration the necessity of placing the Consulting Engineer in a position similar to that held in England by the Inspecting Officers of the Board of Trade. It is scarcely necessary to observe that the Government

Government have a more direct interest in India than in England in the prevention of accidents, inasmuch as the loss and expenditure entailed by every Railway accident in India falls in great measure, if not altogether, upon the State. But on the other hand, the arrangements for investigating accidents are far more complete in England than in India.

10. With advertence to the Proceedings of Government under date the 27th April 1844, N^o 1041, I beg also to submit for consideration the necessity of making an entire change in the Railway Police system. The arrangements

arrangements for securing immediate inquiry into all cases of serious accidents, which were tentatively approved by Government in the above-quoted Proceedings, have wholly failed in their object; and the introduction of some system of Railway Police, similar to that which has been found to answer well in Bombay, seems highly expedient. When brought forward for discussion three years ago at an official meeting with the Madras Railway Authorities, the proposal was set aside on the score of expense; but, with regard to this it may be observed, first, that all questions bearing on the cost

8
cost of the various Railway departments should, under existing circumstances, be a matter more for the consideration of the Government, than of the Company; and, second, that the prevention of one such accident as that which occurred near Amboor in December last would probably outweigh the extra cost of the proposed Police system during several years.

11. In the event of the introduction of a system of Railway Police, such as is in force in Bombay, it seems not improbable that the investigation into accidents desired by the Government of India could

could be efficiently conducted through the instrumentality of the Superintendent of Police, acting in concert with the Consulting Engineer. From some points of view, this arrangement would be more satisfactory than that the Consulting Engineer should alone undertake to conduct of such investigations. The attention of His Grace the Governor in Council is solicited to the chapter on "Railway Police," to be found at page 112 of the accompanying Police Manual for the Bombay Presidency, especially to the rules at pages 133 to 135.

Shave the honour to be,
Sir,
Your most Obedt Servant,
Wm Brewster
H. C. R. E.

Long Caesar Railway

9827-4-74 h₂ 1071
 4-11-75 3/21.
 5-1-76 8A

P.W.D.
 8 FEB 77
 No 1363 =

No 863

Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 15 March 77
 Read the following:—

From The Consulting Engineer for Railways { (H.E. Dr. G. J. J. 17th July 1877)

His Grace the Governor in Council is of opinion that the procedure ordered by the Government of India is sufficient to secure the object in view; but, to this end, it is essential not only that the earliest possible intimation of every accident should be given to the Consulting Engineer's Office, but that all traces of the accident which might throw light upon its cause, such as fragments of machinery, rails, &c, should be preserved as far as possible unharmed, consistently with the necessary operation of clearing the road for resumption of traffic.

His Grace trusts that the Managers of the Railway

337
 9827-2-77
 The instructions may be issued for the investigation of the accidents

Must definitely in-

Received
 17th February 1877
 No. 911
 The Secretary to Government,
 P. W. Department,
 Fort Saint George.

To
 From
 The Consulting Engineer for Railways,
 RAILWAY DEPARTMENT.

Companies will do all in
their power thus to assist
the Government Officers
in an investigation, which,
alike in the interests of
the Company concerned,
of the State, and of the
public, should be thorough
and effective. . .

These papers will be
communicated to the
Inspector General of
Police, for such measures
as he may consider likely
to assist the Consulting
Engineers in the conduct
of an enquiry.

W.

337

C. E. for Rgo. ✓
J. G. for Police ✓
J. L. for Dept. ✓

Recd 31-3-77

1870
Govt. of India
PUBLIC WORKS.

To

The Secy to Govt.

Dated

Issued

Recd.

Encl.

G. O., 15th March 1877, No. 863

Nos. 337-338

Accidents, Railway.

The procedure ordered by the
Govt of India with regard
the investigation of —
considered sufficient to secure
object in view, and
has been communicated
to Inspector of Police
the view to his considering
measures would be
assist the Comptroller
conduct an enquiry

1877