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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	1511	(W)	Press
B.P. No.			Mis.
Dated	19-6-	1876.	

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
19th June 1876.*

No. 293. Read the following circular letter from the Secretary to the Government of India, Public Works Department, (Civil Works—Miscellaneous,) to the Governments of Madras, Bombay, Bengal, North-Western Provinces and the Punjab, in the Public Works Department; the Chief Commissioners of Oudh, Central Provinces, British Burmah, Mysore and Coorg, and Assam; the Resident at Hyderabad; the Agents to the Governor-General for Central India and Rajpootana; the Superintendent of Port Blair; the Inspector-General of Military Works; the Principal, Thomason College, Roorkee, dated Simla, 1st June 1876, No. 32, Public Works:—

In continuation of Circular No. 12 P—W, of the 29th February 1876, forwarding, for information and guidance, a paper containing remarks on "practical points connected with the construction of lightning-conductors" by Dr. R. J. Mann, M.D., F.R.S., the undersigned is directed to forward a memorandum showing the points of information which the Committee of the British Association for the Advancement of Science consider important in cases of accident from lightning.

2. It is requested that any marked cases that may be observed of injury caused by lightning discharge may be communicated to the Government of India, especially instances in which the efficiency, or otherwise, of a lightning-conductor appear to be involved.

(Signed) C. H. DICKENS, Colonel, R.A.,
Secretary to the Govt. of India.

Committee of the British Association for the Advancement of Science—re-appointed at the Meeting at Bradford to investigate the efficacy of lightning-conductors, to give suggestions for their improvement, and to report upon any case in which a building professedly protected by a lightning-conductor has been injured by lightning—consisting of James Glaisher, Esq., F.R.S.; Lieutenant-Colonel A. Strange, F.R.S.; Professor Sir William Thomson, F.R.S.; Charles Brooke, Esq., F.R.S.; Charles V. Walker, Esq., F.R.S.; M. De Fonviellie of Paris; Professor Zenger, of Prague; and Dr. Mann (Secretary).

The Committee charged with this investigation and report desires to have as much information as possible regarding accidents from lightning. But, in order that information of this class may possess scientific value, it is essential that all statements communicated should be clearly and definitely expressed, that they should be carefully authenticated, and that the address, as well as the name, of the observer should be given, to allow any further inquiry to be instituted that may be found to be desirable in the circumstances. The Committee has consequently drawn up the following memorandum to define the nature of the information it seeks, and earnestly requests that any person who may chance to know of accidents from lightning, or who may be able to give practical assistance in this inquiry, in the sense and particulars suggested by the memorandum, will address such communications as they may be in a position to make on these subjects to the Chairman of the Permanent Committee on Atmospheric Electricity and Lightning-rods, Meteorological Society, 30, Great George Street, Westminster, London.

Memorandum of information required in any case of accident from lightning.

1. The day, hour, and place of the occurrence.
2. The exact nature of the occurrence, especially specifying any unusual appearance or sound that has attended the discharge of lightning.
3. A minute and precise description of any damage that may have been produced by the discharge.

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4. Record of any visible traces of electrical action that may have been left in the tract of the discharge.
5. The names and addresses of any persons who may have witnessed the actual discharge producing damage, or who may have suffered in any way from its effects.
6. The existence or non-existence of a lightning-rod in any form in the immediate neighbourhood of the accidents, and an exact description of the rod when any such appendage has been ascertained to be near, especially as to—
 - (a) the nature of the metal of which the rod is composed :
 - (b) the size of the rod :
 - (c) the character of the conductor ; whether it has the form of a solid cylinder, of a tube, of a flat strip, of a chain, or of a wire-rope :
 - (d) the actual continuity of the conductor from end to end :
 - (e) the character of the termination above, and the distance to which it extends there beyond any building or solid structure :
 - (f) the character of the termination below ; whether in dry or moist ground, how it runs into the ground, and how the earth-contact is ultimately made :
 - (g) the manner in which the conductor is connected with any building, and especially whether there are any masses of metal in the building near, and whether such masses are or are not placed in metallic communication with the conductor.
7. Allusion to the fact whether the injurious discharge did or did not form part of an ordinary thunder-storm in progress at the time.
8. In case of the occurrence of a thunder-storm in progress at the time of the discharge, a description of the character of the storm as to intensity, duration, fall of rain, and apparent movement over the locality.
9. Any subsidiary or incidental observations that may have been made, and that may seem to bear practically upon the physical conditions and circumstances of the phenomenon.

No. 294.

ORDER THEREON, 19th June 1876, No. 1,511.

CIVIL WORKS, No. 45.

COMMUNICATED to all officers of the
Public Works Department.

(True Extract.)

Colonel,

Offg. Under Secy. to Govt., P.W.D.

To District Engineers.
To the Chief Engineer for Irrigation.

Exd. A. Grubert.
Spare Copies

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4. Record of any visible traces of electrical action that may have been left in the track of the discharge.
5. The names and addresses of any persons who may have witnessed the actual discharge producing damage, or who may have suffered in any way from its effects.
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 - (b) the size of the rod :
 - (c) the character of the conductor ; whether it has the form of a solid cylinder, of a tube, of a flat strip, of a chain, or of a wire-rope :
 - (d) the actual continuity of the conductor from end to end :
 - (e) the character of the termination above, and the distance to which it extends there beyond any building or solid structure :
 - (f) the character of the termination below ; whether in dry or moist ground, how it runs into the ground, and how the earth-contact is ultimately made :
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8. In case of the occurrence of a thunder-storm in progress at the time of the discharge, a description of the character of the storm as to intensity, duration, fall of rain, and apparent movement over the locality.
9. Any subsidiary or incidental observations that may have been made, and that may seem to bear practically upon the physical conditions and circumstances of the phenomenon.

P. W. D. No. 92—G. C. B. Press—5.6.76—600.

No 1511 dt 19 June 1876
Communicated to
all officers of
the Public Works
Department

P. W. 237/76

293/94

District Engineer
Ch. L. for Brig
C. L. for Brig
Despd 3/7/76

P. W. 1876 Department
P. W. 237

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
CIVIL WORKS.
Miscellaneous.

To
THE GOVERNMENTS OF MADRAS, BOMBAY, BENGAL,
NORTH-WESTERN PROVINCES AND THE PUNJAB,
IN THE PUBLIC WORKS DEPARTMENT.
THE CHIEF COMMISSIONERS OF OUDH, CENTRAL
PROVINCES, BRITISH BURMAH, MYSORE AND
COORG, AND ASSAM.
THE RESIDENT AT HYDERABAD.
THE AGENTS TO THE GOVERNOR GENERAL FOR
CENTRAL INDIA AND RAJPOOTANA.
THE SUPERINTENDENT OF PORT BLAIR.
THE INSPECTOR GENERAL OF MILITARY WORKS.
THE PRINCIPAL, THOMASON COLLEGE, ROORKEE.

CIRCULAR No. 32 PUBLIC WORKS.

Dated SIMLA, June 1, 1876.

Received

Enclos: One ✓

Forwards a memorandum from the British
Association for the Advancement of Science, and
with reference thereto requests that marked cases
of injury caused by lightning discharge may be
communicated to the Government of India.

With order

4237 L.H.

Govt. of 1876 Madras.

PUBLIC WORKS.

To

The District Engineers

W. H. C.

Dated

Issued

Recd

Encl.

G. O. 19 June 1876, No. 1571

Recd. 293

Encl. 10/1/76

Injury caused by lightning discharge - Circular from the Govt. of India forwarding a memorandum from the British Association for the advancement of science, and with reference thereto requesting that marked cases of ——— may be sent to them. Comd to all Officers of the P.W.D.