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(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.**Government of Madras.***Public Works* **DEPARTMENT.***Cons No 1259*

G.O. No.	2956	Press
		Mis.
161-62		
Dated	20.12.	1859.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
for the month of December 1859.*

No: 161. Read the following Proceedings of the Madras Government in the Military Department, dated 13th December 1859, No. 4419.

Read the following Proceedings of the Madras Government in the Public Works Department.

Communicating a letter from the Chief Engineer submitting the views entertained on the subject of lightning conductors adverted to in the circular memorandum published in the War office Army List for July 1858, and suggests that the Secretary of State be requested to issue such instructions in the matter as may after due enquiry be considered suitable for Indian practice.

(Here enter 1st December 1859, No. 2802.)

* No. 3193, 5th September 1859.

The Governor in Council observes, that sanction was given in proceedings of Government, Military Department,* to the only work of this description requiring immediate execution.

2. Meanwhile, in compliance with the suggestion of the Chief Engineer, His Honor directs that a copy of Colonel Bell's letter be forwarded for the consideration of the Secretary of State for India with a request, that if considered desirable, he will cause fresh instructions to be transmitted for the erection of lightning conductors in this country, prepared in accordance with the latest and most approved principles of modern science.

(Signed) R. HAMILTON, Lieut.-Colonel,
Ag. Dy. Secretary to Government.

No. 162. ORDER THEREON, 20th December 1859, No. 2956.

Ordered to be communicated to the Chief Engineer for his information with reference to his letter dated 18th November 1859 No. 7421.

(Signed) J. D. BOURDILLON,
Secretary to Government.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following letter from Lieutenant-Colonel J. H. BELL, Chief Engineer; to J. D. BOURDILLON, Esq., Secretary to Government, dated 18th November 1859, No. 7421.

Since the receipt of the order of Government, dated September 14th 1859, No. 2221, I have carefully considered the subject of lightning conductors in connexion with the circular memorandum of the 25th of May 1858, No. 260, with the Appendices thereto by Sir W. Snow Harris, and with the papers in No. XXII of 1857 of Selections from the Records of the Government of India (Public Works Department.)

2. The Government is aware that the present plan of insulated lightning conductors, originating with Professor Faraday and the late Professor Daniell, was authorized for general adoption in India by the Court of Directors in their letter to the Government of India of the 17th of September 1845.

3. This plan is now superseded under the authority of the Inspector General of Fortifications for Magazines in the United Kingdom, and I presume also the Colonies, by that of Sir W. Snow Harris, who disapproves of insulated conductors, and recommends that they shall be attached to the building and connected with all its metallic surfaces.

4. It appears that Sir W. O'Shaughnessy has declined to discuss the views of Sir W. Snow Harris, from whom he continues to differ on some points. He adds that his own arrangements for the protection of the Telegraph stations in India have been completely successful.

What these arrangements are I do not know. Sir W. O'Shaughnessy formerly proposed a plan of insulated conductors which was considered unobjectionable. His other plan of "bird-cage" conductors was disapproved by the great English electricians on account of the want of mass and consequently of conducting power in the straps of the proposed frame-work.

5. Upon the whole, I am disposed to prefer our present plan to that of Sir W. Harris, because I think that without frequent inspection and great care the continuity of his system of conductors might be broken, in which event they would be more likely to destroy than preserve the building; while if the insulated conductors, which would be more easily attended to, should nevertheless fail, no injury to the building would necessarily follow.

6. I must also remark that the connexion of metallic surfaces of a building independently of the thickness of the metal, with the conductors seems to me to cancel the distinction between statical and dynamical electricity so strongly insisted upon by Professors Faraday and Daniell, and to favor lateral discharges which would be extremely dangerous.

7. Considering, however, that great advances in electrical science have been made since Professors Faraday and Daniell wrote the reports contained in the Selections No. XXII, I am of opinion that the Secretary of State should be requested to issue such fresh instructions on the subject of lightning conductors as may, after due enquiry, be considered suitable for Indian practice. The question cannot, I think, be determined in India, especially as the leading electrician in the country is averse from discussing it.

ORDER THEREON, 1st December 1859, No. 2802.

Communicated to the Military Department with reference to proceedings in that department dated 8th September 1859 No. 3193.

(True Extract.)

(Signed) L. FORBES,

Dy. Secretary to Government.

To the Military Department.

Exd. Wm. Thomas.

Central Office of P.M.
Fort Saint George
14 November 1850

No 7370 / 11th March 1889
 From
 The Chief Engineer
 To
 The Secretary to Government
 Public Works Department

Public Sir,

I have the honor to forward for
submission to Government the accompanying
enclosures &
1 Letter from the District Engineer of
the Bangalore District forwarding an application
(with an inclosure) from Lieutenant Tulloch Acting
dated Nov 3/59 to 1192
Assistant District Engineer for House
Rent for his Office Establishment.

2 The District Engineer also re-
commends that House Rent may be
granted to all Officers and Subordinates
in charge of Ranges who have to provide
a suitable apartment for the accommo-
dation of their Range Establishments.

3 The Government of India in their Circular order dated the 25th September 1857, No. 4944, authorized Officer

Renb.

Communicated in
E. M. C. No. 2071
dated 11. November
1857.

March 1839
Wm. of York St. N. York
71-3256.

Proceeding of the
Board of Govt with the
Judiciary Officers

October 13th }
 November }
 1859.
 No. 4419

Dear long dead
old father, after an
the subject as a young
institutions the forward
and for the consideration
of the Home Board.

1861.
 8th. 1861.
 1861.

the Governor in Council observed, that another application in proceedings of summary judgment, to the only writ of this description requiring immediate execution.

1874.

Military Government.

2. I have the pleasure to comply with the suggestion of the Com^{rs} of Congress, ^{of 1833} Howard, that a copy of Nelson's Works be forwarded for the consideration of the Secretary of State, for publication, with a request, that if considered desirable, he will cause fresh instructions to be transmitted for the edition of ~~English~~ ^{English} conductors in this country, and in accordance with the latest and most approved principles of modern science.

Wm. Lewis George -
17th Decr 1857 }

Williamson & Co
177 St. Andrew & Greenmount

25
The Public Works Department.

Ms. 2956. 20. A. Deaconsdon
With an index &

1761-1762.

Exhibit D, 17
Exhibit 17, 17

אשר יצאנו ממצרים

1859-60/421.

It the Chief Engineer for his services
with reference to his letter dated 15th January
1889.

2956

Rent on the following scales.

Superintendent of Works of more than
one Executive Charge — Rs. 30
First and Second Class Executive Engineers — 30
Third and Fourth Class — 20 — and Sur.
Surveyors having Clerks and Draftsmen — 20.

4. By the order of Government dated
3rd February 1858, No. 192, the first rate
was made applicable to District Engineers
of the 1st and 2nd Class and to the late Super-
intendent East Coast Canal, and the
second rate to the Executive Engineers of
the 3rd and 4th Class, but the privilege
of drawing Office rent having been limited
by the order of the Government of India
to Executive Officers and Surveyors having
an Establishment of at least 2 Clerks
and Draftsmen, the Executive Engineers
of the 4th Class ceased to draw Office
Rent as the number of Clerks under
each of them was only three besides
Sascars.

5. The new arrangements for the
Executive Charge of Ranges having been
now introduced, some arrangements ap-
pear necessary to provide the Establish-
ments with accommodation. Under
the

the above order of the Government of India
none of these Establishments will be enti-
tled to Office Rent and all except the
District Engineers must discontinue draw-
ing it as none of these establishments has
so many as four Clerks and Draftsmen.
For the first 2nd Class establishment, the
number is limited to three, and for the
3rd and 4th Class Establishments the
number is only 2 besides Sascars.
6. But notwithstanding the small-
ness of the number, accommodation must
still be provided either at the expense
of Government or at those placed in charge
of the Ranges. But as the salary of the
Executive Officers of the 3rd Class have
been reduced as first Assistant District
Engineers to that of the 4th Class of Assist-
ants as 2nd Assistant District Engineers
from 200 to 150, and as many of the Ranges
are placed in charge of Upper Subordinates
it will operate as a fine on Officers and
Subordinates whose fidelity and energy
are called into action if they were re-
quired to provide accommodation for
their establishments. Unless provision
is made by Government the establishments
must.

must be very inconvenient, and uncomfortably
 housed, and as notwithstanding the
 smallness of the number of Members of
 Range Establishments accommodation
 has to be provided for Record for Instru-
 ments and Stores and for Members of the
 Upper and lower Subordinate Establish-
 ments in Executive Charge of particular
 works, for Masters and Sonicpillys
 and for Contractors and Pilgrims who
 will frequently have to be in attendance
 at a Range Office on business, it will not
 be proper to put Officers and Subordinates
 in charge of Ranges to so much incon-
 venience without some consideration
 on the part of Government; and I therefore
 beg to recommend that Office Rent may
 be granted to them on the following scale.
 For 1st and 2nd Class Range Offices Rs. 20
 For 3rd and 4th Class ————— Rs. 15
 To be drawn until Range Offices shall
 be built or until Public Buildings shall
 be provided for their accommodation.

7. I have called for Estimates
 for Range Offices, and if they arrive
 in time I shall submit them for entry
 in

in the next Budget.

Port Saint George
 17 November 1859

I have the honor to be
 Sir

Your Most Obedient Servt.

L. Saint George
 Dy. Secy to Govt.

H. Bell Esq. Colonel
 Chief Engineer

To The Secretary to Government
 Public Works Department.

Cons: 17 December 1859 at 1-2.
1-2 February 1858 - 1-2.

Q. M. 1859 2 of 1-2.
No. of Cons: 23. 20 December.

From

The Chief Engineer

To The Secretary to Govt.
G. H. D.

Dated 17
Dec 2 1859 November 1859

C-1. Returns 25-1-59

10/6/59.
I am writing a letter
to you with long & full
of details regarding our
allocation from the
Julesburg station. I have
written you for some time
on this subject. I have
and recommending under
circumstances that
these results may be
made to all of the
ordinates in charge of
the 2957. 20 December

State that estimates
have been called for
and will be submitted
in record in time for entry
in the index.

212 December 1859