

- (1) பக்கங்களின் எண்ணிக்கை 10
 (2) புதுக்கித் திருப்பிய நாள் 7/89
 (3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் low

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

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PW

துறை

அரசாணை எண். மு. கோப்புத் தாள் எண்.	<u>1919</u>	அச்சகம் பலவகை
நாள் :	<u>17 . 7 . 1989</u>	198 .

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

55 sheets

Copy of letter from Dr. Jopp, Engineer, Procurement Engineer, Panama, to the Superintg. Engineer
 VI Circle No 1465 dated 19th June 1889

17/9 I have the honor to submit the report on the Light House at Pambou as requested in your letter No: 1067. J. & of 26th February 1889.

Light House	Plan of Light	Height of tower of lantern above M. S. L.	Distance at which light is visible in miles	Object of light	Remarks.
Pambou	42. order Catadioptric pined white	96.45	12 to 13 miles	Guide to entrance to Pambou pass Channel	Light apparatus has been stated to be incorrectly set up and to require alteration. The Light house requires sundry petty repairs. As to the efficiency of the Lightning Conductor please to see remarks accompanying report.

2. Doubts have at various times existed as to the efficiency of the light owing to the manner in which the apparatus is fixed with reference to the platform. A set of detailed drawings have been taken and will be submitted in a few days by means of which any suitable alterations can if deemed necessary be arranged.

3. The Lightning Conductor is I think in an inefficient state; but as it was tested by Mr. Sand of the Telegraph Department early in 1888, and that Officer reported it to be efficient; I shall merely give details in support of

of my opinion and leave it to the Superintending Engineer to determine finally.

4. (a). The Conductor consists of a Copper rod 76 feet in length from its upper terminal to ground level; at this point it is joined to a galvanised iron wire, which is buried about 1 foot below the surface of the ground and terminates near the sea in permanently moist earth at a distance of 215 feet from its junction with the Copper rod (as shown in the sketch)



The soil at the base of the Column and throughout the length of the iron wire is pure sand and quite dry.

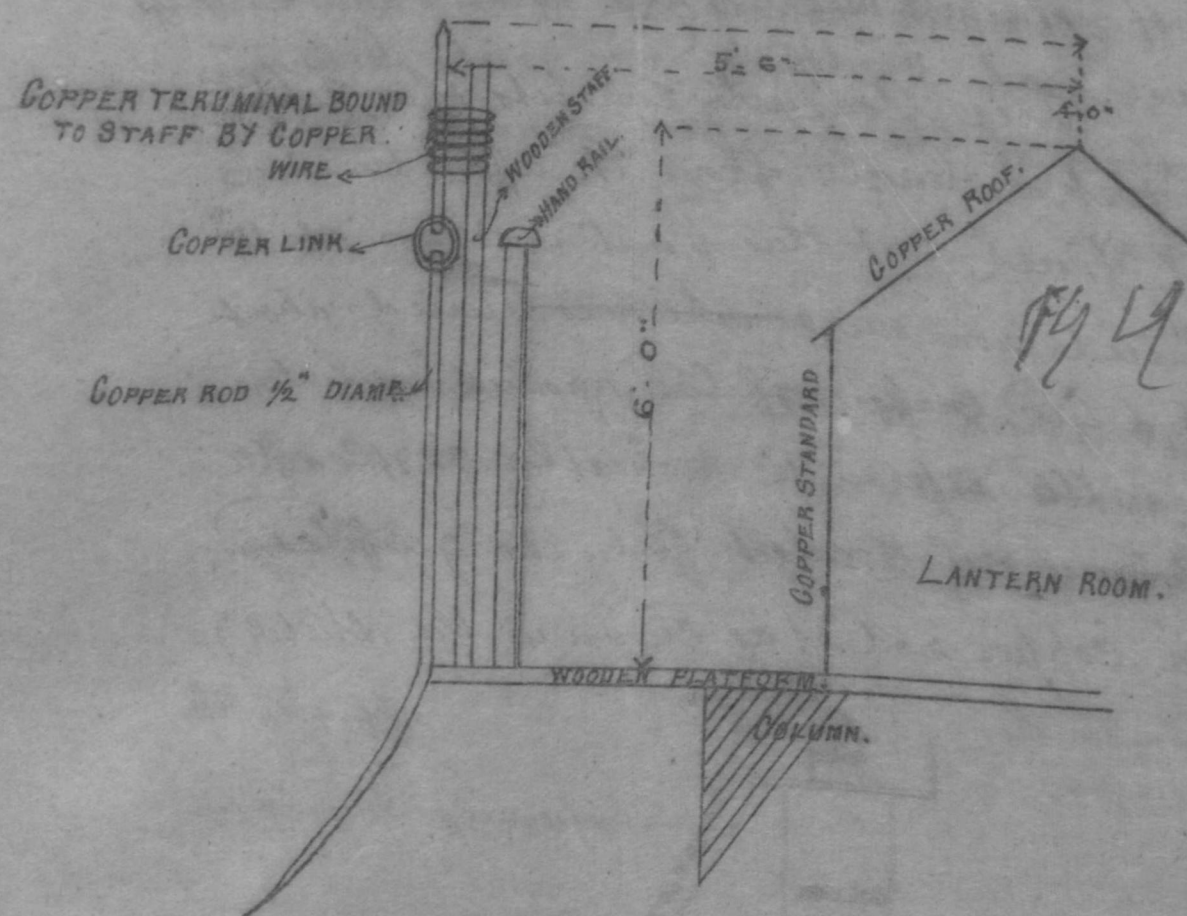
(b). The diameter of the Copper rod is a little less than $\frac{1}{2}$ an inch which may be considered sufficient but the diameter of the iron wire is only $\frac{1}{3}$ of an inch and as it passes for 215 feet through an almost non conducting medium of dry sand, its diameter should be at least $\frac{1}{2}$ inch.

(c). Again the junction between the Copper rod and iron wire is electrically inefficient.

The iron wire is merely twisted tightly several times round the Copper rod and as the wire is also considerably rusted, the junction cannot be said to be electrically a safe one.

(d). The upper terminal is not jointed and soldered to the Copper rod but is merely connected to it by a copper link as shown in the

the sketch.



(e). There is a considerable mass of metal, chiefly Copper, in the roof and frame work of the lantern room. This is not connected with the Conductor; the upper terminal of which is not more than 4 feet higher than the top of roof and at a horizontal distance of about 5'-6" from it.

(f). There is no metal plate at the lower terminal of the Conductor.

5. In order to render the Conductor efficient I think it would be necessary.

1st To replace the iron wire by a Copper rod of $\frac{1}{2}$ " diameter.

2nd To properly joint and solder the Conductor to its upper terminal.

3rd To connect all metal of the roof and frame work of the lantern room to the Conductor.

4th To provide a metal plate of sufficient size at the lower terminal.

6. The sundry repairs required to the building consist chiefly of white washing the column and railings at the base and caulking the joints between the planking of the platform around the lantern room.

N^o 130A

Submitted to the Chief Engineer
D. P. W., with reference to his no. 891.C of
22nd February 1889, through the Port Officer
Madras.

Camp: Kodai Kanal
25th June 1889.
Despatched
Lt. Col. H. B.
Superintg. Engineer

1909

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13th 20th PW of 1889.

From
The Supg Engineer
III Circle,
Trichinopoly.

To
The Chief Engineer,
P. W. D.
thru the Port Officer,
Madras.

N^o 130 P. D. ^E
Dated 25th }
Despd 27th } June 1889

Enclosure rit.

Lighthouse at Pamban.

Forwarded for information
Copy of letter from the District
Engineer Ramnad Division
N^o 1465 reporting on the
19-6-89

N^o 141 P. W. 19/9

Forwarded, observing that, with respect to the report that "the light apparatus has been incorrectly set up and to require alterations," I have been informed by the Port Officer at Pamban that, when Mr. Randall, the Superintending Engineer, visited the lighthouse during March 1888, he expressed an opinion, that the lantern should be raised, on account of the standard on which it is placed being below the outer masonry of the tower, thus causing the lower part of the lantern to be only about one foot above the platform. Mr. Randall, therefore, considered that the rays of light would consequently be obstructed, but the Port Officer states, that he (the Port Officer) afterwards carefully examined the light and found that the rays cleared the outer edge of the platform by ten inches

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inches and that there was no perceptible
obstruction and as raising the lantern
would entail considerable expense
and no particular advantage, he is
of opinion, that the lantern had better
be left as it stands.

H. H. Street

Captain M. S. P. M.

Presidency Port Officer.

Presidency Port Officer
Madras 4th July 1889.

1919

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Sp. Bus 5994 of 20.2.89
muu as 8916 of 22.2.89
- 4589 of 20.11.88.

✓
PNC No 6187

10/1919 Wd 14 July 1889

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Communicated
Communicated
to the Marine Dept
to the Marine Dept
of the Supty Engrs.
The Supty Engrs
will submit an
estimate of the cost
of providing the
light house at Pamban
with an efficient
lightning conductor.

Vide Cn 6176

original 14/5
AD No 8916
10/1919 Wd 14 July 1889
Ry 8.7.89
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10/1919 Wd 14 July 1889

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15/7
To Mr Birch
S. S. VI Cncl
Marine Dept
Marine Dept

2/7
O.S. 54/7
18/7-1889

W. Thorden