

Marine (1898) Department.

G.O., No. 253 Mar

DATED 4 April 1898

[Despatch Abstract.]

Indents Authorizing the Supply of Works, Light House
to submit in the P.W.D. an — for ^{for manifest} ~~the~~ ^{the} ~~the~~
apparatus mentioned in para 8 of his letter

B
4.4.98

to
call
the

6/4/98

BACK PAPERS.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

Marine

DEPARTMENT.

Papers to be read in Proceedings:—

Again G.O., dated

189 , No.

Again G.O., dated

Current No. *354*

renewal by the P.O.O. No. ¹⁸⁹270₁₀₉ & dated 19.3.98 on letter from the
of 1898, dated 22.3.98, from Supt. of Works, Light House
gn

” ”

„ 189 „

22 22

„ 189 „

~~The Hon. W. Green~~ C. J. E.

ORDER.

The Superintendent of Works, Light House Division, is authorised to submit, in the Public Works Department, an indent for the apparatus mentioned in para 8 of his letter, Items (a) (b) & (c). There being no buoy to be lighted, item (d) will be omitted.

C.S.

hbal
23-3-96

C. A. W.
B / 7/15
The Presq. Post Office.

" Sept 17 of Wats, Light House & Earth & Incls.

" F. W. Dep^t

Desmond
7/4/98

р. в. 4.

W C. No 384

A careful search has been made by the information can be got from the records as to lighting a buoy off Godavari Point. If required, the P.P.O. will be telephoned to.

R.S.
24 Mar 98

Telephone
To The P.P.O.

" Jmr No $\frac{1271}{100}$ 8.

of 19 March

Is there not a buoy off Godavari Point which it is proposed to light "

Disputed
25/3/98

W.S. 2.90

C.A.W.

~~Public Works~~

(1898) Department.

CURRENT No. 354



Order

From The Supdt of works
Light House Dept
Madras

No. 917

Dated 14th March 1898

Received } 22—do—
Registered }

Enclosures 3

Spare copies

SUBJECT.

Submitting certain proposals for apparatus for Port & other lights and requesting permission to prepare an indent for the apparatus noted in para 8 of this letter.

Dated 14th March 1898.

No.

Madras,

THE Secretary to Government.
Marine Department.

Thro' the Presidency Post Officer Madras.

SIR,

I have the honor to submit herewith certain proposals for Apparatus for Port and other lights and request permission to prepare an indent for the apparatus noted in para 8 of this letter.

(2) Any modifications made in Post
lights in this Presidency should, I ^{believe} ~~think~~,
be based on the following considerations—

(1) Wherever possible a burner should be introduced which will run without attention throughout the night so as to reduce establishment and avoid the necessity of keeping a watch.

(2) Every light should be given a distinctive character so that it may not be confused with others in the neighbourhood and without reducing its power.

(3) For lights burning without attention, putting aside those burners which only consume very volatile oils, there are three burners in the market all of which appear to attain the object for which they are intended. These are the "feu permanent" of the French Administration, the Carbon burner adopted by Trinity House and the burner invented by Mr. Wigham.

(4) The "feu permanent" of the French Administration burning without attention for from 60 to 80 days has been installed at numerous places and has been proved to be satisfactory though somewhat difficult to manage. I was afforded the opportunity of seeing one of these burners.

burners in actual use at the Ile de Groix. I do not, however, suggest its adoption in Madras as, in my opinion, the Trinity House Carbon burner is likely to give far better results under the conditions which obtain in this Presidency and does not require the very troublesome preparation which is essential to the satisfactory working of the French "feu permanent."

(5) The burner which appears to me to suit the requirements of local port lights is the Carbon burner adopted by Trinity House. This burner is not permanent in the same sense as the French "feu permanent" as it is not intended to burn without attention for more than 2 or 3 days. This is no drawback to its use as a burner which will run for 12 hours without attention and without serious diminution in intensity is all that is required. The

Carbon

Carbon burner is constructed on the same lines as the Trinity House burner but, instead of cotton ^{wick}, a carbon wick of considerable thickness and diameter is employed. It can be used with the ordinary constant level lamp of the type now in use in this Presidency and, so far as I have been able to judge, its maintenance gives little or no trouble. It is possible also that the Longlass burners now in use can be altered at small expense to take the carbon wick but of this I am not certain. The intensity of the burner is said to be about 40 candles and the consumption of oil about the same as the Longlass 2 wick burner.

(6) The Wigham permanent burner is described in the accompanying extract from the Scientific Proceedings of the Royal Dublin Society. I was afforded the opportunity

? I don't understand the Carbon & the T.H. House. Well

opportunity of seeing this burner at Mr. Wigham's factory and see no reason why it should not be tried in this Presidency in the event of its being considered necessary to establish illuminated buoys or beacons. The mechanism is simple and not likely to get out of order and its practical efficiency is vouched for by the Secretary to the Carlingford Lough Commissioners at Greenore a copy of whose letter is attached. This form of illuminated buoy has also been established at Belfast and the harbour Engineer of that port has also informed me that it gives complete satisfaction.

not attached

supplam.

The cost of a buoy lighted on this system delivered f. o. b. at Liverpool is estimated by Mr. Wigham as follows but it would probably be cheaper to construct every thing except the lamp locally. —

Steel buoy as per drawing £ 100-0-0
 Cham & Swivel for dials £ 25-0-0
 mooring dunnop £ 10-0-0
 Lamp to burn 31 days with ^{gimbal} gimbal
 apparatus and fitted to buoy ... £ 66-10-0
Total £ 201-10-0

If the lamp is used for a beacon on shore
 the cost without ^{gimbals} gimballs is £ 49-15-0 but,
 in my opinion, the Trinity House carbon
 burner will be found more suitable for
 this purpose except perhaps in places
 such as islands and isolated rocks
 where it is considered necessary to instal
 a light burning for a considerable period
 without attention. The illuminating
 power is said to be 75 Candles but
 this probably ^{varies} means in a fixed
 apparatus of the 6th order.

(7) In order to give Port lights in this
 Presidency a distinctive character I would
 suggest that, setting aside occulting
 machinery

machinery ^{driven} ~~actuated~~ by clockwork

Mr. Wigham's improvement on the Lindberg
 Brother occulting apparatus seems to be
 the most suitable. A description will be
 found in the accompanying paper on
 occulting lights for buoys and beacons
 read before the Royal Dublin Society.
 These occulting screens appear to be a
 distinct improvement on the Lindberg
 Brother occulting Apparatus and after
 a practical trial may prove extremely
 valuable as a means of giving a dis-
 tinctive character to existing port light
 apparatus at a small cost. The
 price of the apparatus small size is
 £ 4-0-0 and of the turbine pattern
 £ 6-6-0 with an extra charge of
 £ 1-0-0 for ball bearings and of £ 1-5-0
 for regulating fans.

(8) I request permission to submit
 incidents

incidents for the following for trial. —

- (a) A Trinity House Carbon burner with lamp
complete with spare carbons etc probably about £ ^{15.0.0} ~~15~~
- (b) A Wigham's improved occulting screen small size £ 4-0-0
- (c) A Wigham's improved occulting screen turbine
pattern with ball bearings & fan complete £ 8-11-0
- (d) (If an illuminated buoy is required) a Wigham's
burner fitted with ^{gimbals} gunballs for installation
on a buoy £ 66-10-0. X

(9) The advantages I anticipate if the
carbon burner and occulting screens
prove to be a success are. —

- (1) A reduction in Establishment charges.
- (2) Every port light will have a distinctive
character.

I have the honor to be,
Sir,
your most obed^t servant,

Enclosure 1 plain

W. Ashpitel
Superintendent of works.
Light House Division.

10.3.98.

Presidency Port-Office
Madras 19th March 1898.

No $\frac{127}{108}$ G.

Forwarded for favorable
consideration, except as regards
the apparatus specified in (d) of
para 8, which seems unnecessary
at present, as there are no buoys
to be lighted.

H. A. Street

Commander R. M.
Presidency Port-Officer.

perhaps, now go on.
 28 Mar 98