

MADRAS RECORD OFFICE.

Government of Madras.

Marine DEPARTMENT.

G.O. No.

247

Press
~~Mis~~

Dated

22.6.

18*57*

Not to be folded or roughly handled

Fort Saint George, Marine Consultation, 23rd June 1857.

No. 7. From Lieutenant Colonel J. T. SMITH, Madras Engineers ; to T. PYCROFT, Esq., Chief Secretary to Government, Fort St. George, dated Wellesley House, Shooter's Hill, 20th April 1857.

SIR,

1. With reference to my letter of the 17th November last, on the subject of improving the lights on the Madras Coast, I have the honor to state for the information of the Right Honorable the Governor in Council, that since that date I have made enquiries in various quarters, in the hopes of obtaining information which might be useful ; but I regret to say I have been unsuccessful, owing to the fact that the lights above referred to are of a peculiar construction, very different to any thing in this country, and incapable of being benefited by any of the improvements adopted here, except by the substitution of the entire apparatus ; which I do not think could be done with advantage, on account of the much greater expense of the European systems.

2. The only modification of the Madras ("periscopic") apparatus, which affords any promise of increase of its efficiency, seems to me to be the use of oil gas ; but the results of my enquiries into the experience of its use here, do not warrant me in putting the Government to any expense either in purchasing apparatus, or in making experiments ; on account of the risk inseparable from its use ; and although I have little doubt it would increase the effect of the reflectors, and would be quite suitable to their peculiar shape (which an improved burner, such as an argand, might not be, it being essential that there should be as little opaque matter forming the burner as possible, and a chimney being also objectionable) yet the preparation of the gas and the precautions necessary to avoid accidents, involve an amount of intelligence unsuited to the class of agency at present found sufficient, and would add very materially to the current outlay.

3. Under these circumstances I am at a loss what recommendation to make to meet the wishes of the Marine Board, as I am of opinion that any improvement in the lights can only be effected in their manufacture on the spot, and by increased vigilance and attention on the part of the keepers watching the lights at night. I learn on enquiry that there are no other tools used in the construction of lanterns and lighting machinery than those commonly known in Madras, such as lathes, drills, screwing machines, files, &c., &c., and no more efficient machine for purifying oil can be had than a common flannel filter, unless the system be followed which I believe is already adopted in Madras, when the oil is procured by the Commissariat, namely, purchasing it in considerable quantities and storing it in large vessels in which it is left for a long time, during which all the impurities settle to the bottom.

4. There can be little doubt that the system of "catadioptric" lights invented by Mr. Fresnil and now much used on the French and British Coasts is theoretically more perfect than that introduced by me for the Madras Presidency, but I think it would be found less suitable on account of its more expensive construction, greater weight of apparatus, and comparative want of simplicity. Under certain peculiarly favorable circumstances, however, it might perhaps be found to offer greater advantages ; namely in the case of such a light as that at Paumban where the illumination is required throughout the entire circumference of the horizon. In this case, I think a single fixed light of the 4th order would perhaps be found of as good effect and of less current expense than a set of four "periscopic" reflectors as at present in use ; and, as it would be extremely desirable that an opportunity should be afforded for the trial of one of these fine lights by the Marine Authorities in Madras, I would respectfully suggest that authority should be sent to me to order one at an expense not exceeding £350.

5. I am inclined to think that the cost including freight would not in reality much exceed £200 as I have estimates from two houses in London, one of which is short of £350 and the other of £200, but without further enquiry I cannot be sure that the latter would be suitable though I think it would be.

6. I forward by this opportunity a printed Volume containing drawings and brief account of the various "catadioptric" lights now in use in England and France, thinking the particulars it contains may be of service for reference in the office of the Marine Board, and I have only further to add that in event of any information coming to my knowledge likely to be of any use in improving the efficiency, or diminishing the cost of the lighting establishments on the Madras Coasts, I shall have the greatest pleasure in making the same known to you at the earliest opportunity.

(Signed) J. T. SMITH, Lieut. Colonel,
Madras Engineers.

Fort Saint George, Marine Consultation, 23rd June 1857.

No. 8.

ORDER THEREON, No. 247; dated 22nd June 1857.

Ordered that a copy of the foregoing letter and the printed Volume received with it, containing drawings and an account of the various Sea-Lights in use on the French and British Coasts, be forwarded to the Marine Board in continuation of Colonel Smith's letter communicated to them under date the 10th January last.

2. Before acting on the suggestion of Colonel Smith that opportunity should be afforded for the trial of one of the "catadioptric" Lights invented by Mr. Fresnil by the Marine Authorities in this Presidency, and that he may be authorised to order one at an expense not exceeding £350, the Right Honorable the Governor in Council desires to have the opinion of the Marine Board on the subject, especially with reference to what is stated in para: 4 of that Officer's letter as to the greater advantages which a single fixed Light of the 4th Order might be found to offer under certain peculiarly favorable circumstances.

Exd. J. A. Wilson.

Marine Department.

No. 247

Extract from the Minutes of Consultation
under date 22^d June 1857.

Read letter from Lt.
Colonel Smith, Madras
Engineers:

(Dated 20th April 1857. No. 220)

Ordered that a copy
of the foregoing letter and
the printed Volume re-
ceived with it, contain-
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account of the various
Sea-Lights in use on ^{the} French & British Coasts, be
forwarded to the Marine
Board in continuation
of Colonel Smith's letter
communicated to them
under date the 10th January
last.

2. Before acting
on

Memorandum to the
No. 20 of 1859 -

Re: 11th August
1859

27-3-220

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Further letter from the Marine Board of 22nd July/59 No. 280.

Adm. Sec. Com. 23 June
Marine Board 23 June 1859

22nd July

Exh. 11th August 1859

22nd June 1859

24th
23 June