

MADRAS RECORD OFFICE.

Government of Madras.

Marine DEPARTMENT.

G.O. No.	<i>344</i>	Press ~~Mis.~~
Dated	<i>3 - 9</i>	18 <i>58</i> .

Not to be folded or roughly handled

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Fort Saint George, Marine Consultation, 7th September 1858.

No. 10. From J. J. FRANKLIN, Esq., Superintendent of Marine; to T. PYCROFT, Esq., Chief Secretary to Government, Fort Saint George, dated 20th August 1858, No. 3264.

SIR,

Referring to Extract Minutes of Consultation, of the 5th May 1858, No. 169, para: 4, I have the honor to submit the accompanying copies of correspondence which has taken place between the Chief Engineer's Department and the late Marine Board, on the subject of the Moorings to be laid down in the Monsoorcottah Roads.

2. It will be seen that Mr. Boothby, whose nautical experience was acquired in the Royal Navy, has doubts of the suitability of screw Moorings for those Roads, and I perfectly agree with him. It would be very difficult to secure them in a sea-way, and once down they cannot be removed or lifted for examination or repair. In the Board's letter to the Acting Chief Engineer of the 24th July last, it was therefore recommended that Bridle Moorings should be No. 2935. obtained from England, and as that Officer suggests that they should be applied for by this Department, I beg to annex a specification of what is required, soliciting that the Honorable Court may be requested to procure and forward them to Madras, whence they might be conveyed to Monsoorcottah by one of the Government Steamers, whose Commander could be instructed to lay them down.

For large Ships two Iron-stocked single-fluke Anchors of 42 Cwt. with 60 Fathoms of 1½ inch Chain to be shackled to each and a third piece of the same size and length to lead from a mooring Swivel joining the ends of the Anchor chains.

A strong Mooring Iron Buoy and two chain Buoy ropes with nun Buoys for the Anchors.

Spare shackles and swivel.

Depth of water, 9 fathoms at low water.

Rise and fall, 6 feet.

Bottom sand and shell mixed with stiff mud.

For smaller Ships the same, but the Anchors to be 33 Cwt; Chains 1½ inch, and Buoys proportional.

It will be sufficient for the present if one set of Moorings of each size be sent out.

From Captain C. C. JOHNSTON, Acting Superintending Engineer, Northern Circle; to the Secretary to the Marine Board, Fort Saint George, dated 21st July 1858, No. 2116.

SIR,

With reference to Extract Minutes of Consultation, No. 1068 of the 4th Ultimo, I have the honor by desire of the Officiating Chief Engineer to transmit to you for the opinion of the Marine Board an original letter (to be returned) from the District Engineer, Ganjam, recommending that two Moorings be procured from England for the Port of Munsoorcottah according to a specification furnished to him by Mr. Boothby of Aska.

Enclosures 2.

1 *Superintending District Engineer, Ganjam,*
No. 102, dated 3rd July 1858.

1 *Sketch.*

From Captain E. H. HARRINGTON, Acting District Engineer of Ganjam; to the Chief Engineer, Department Public Works, Fort Saint George, dated 3rd July 1858, No. 102.

SIR,

I have the honor to acknowledge receipt of your Proceedings, No. 953, dated 8th June 1858, forwarding Extract Minutes of Consultation, No. 1068 of 4th June 1858, para: 4 of which, *Ports.* conveys the opinion of Government that screw Moorings would be very useful and are much required at the Port of Munsoorcottah in the Ganjam District, and directs the preparation of the necessary Plans and Estimates.

Fort Saint George, Marine Consultation, 7th September 1858.

2. I have carefully studied the subject in communication with Mr. Boothby, the Manager of the Aska Sugar Works. This Gentleman having formerly been an Officer in the Navy, and having had for some years past a thorough acquaintance with the Port in question, and being naturally interested in any measures proposed for its improvement, is able to give valuable and reliable information as to the description and suitability of Moorings best adapted to the Port.

3. I cannot do better than give in his own words, a copy of a Memorandum with which he has obligingly supplied me. It is as follows:

Roadstead. "The depth of water in the anchorage of the Munsoorcottah (or Gopalpore) Roadstead varies from $8\frac{1}{2}$ to $9\frac{1}{2}$ fathoms at low water, the rise and fall of tide being about 6 feet. The bottom at these depths is sand and shells mixed with stiff mud, and is very good holding ground, but inside $7\frac{1}{2}$ to 8 fathoms, the bottom consists of sand and shells only, through which an anchor easily drags."

"It will be advisable therefore not to place Moorings in less than 9 fathoms at low water."

Screw Moorings. "Screw Moorings, though the most secure, are not at all necessary for this Anchorage, moreover they are difficult to place, and still more so to remove, besides being expensive. Mushroom Moorings are very simple, and in some places superior to all other kinds, but it may be doubted if the bottom in Gopalpore Roads is sufficiently soft for this description of Moorings which answer best in soft mud."

Mushroom Moorings. "On the whole therefore the simplest and best kind of Moorings for these Roads will be found to be the common Anchor Bridle Moorings, which can be laid down or taken up with the greatest ease, and which are adapted for any kind of bottom."

Bridle Moorings. "The specification of such Moorings suitable for Munsoorcottah (or Gopalpore) Roads is as follows: each of the Moorings to consist of two iron stocked Anchors with a total length of 180 fathoms of Chain. To each of these Anchors 60 fathoms of Chain is to be attached and both ends brought together to a large swivel, to which is to be attached the remaining length of 60 fathoms of Chain, the end of this Chain being secured to a suitable large sized Mooring Buoy which must be made of very strong boiler plate iron, with a large strong ring at the top of it, and to each Anchor an ordinary Anchor Buoy secured by a light Chain (not rope) must be attached so as to mark the spot where the anchor is, and thus prevent Vessels fouling it. Regarding the dimensions of the Mooring Chains and Anchors, it will be well to have them of different sizes, say one of the Moorings suitable for Ships of 1000 to 1200 tons, and another for Ships of 600 to 800 tons. It is impossible to give a correct estimate of the cost of such Moorings as they are sold at so much per lb. generally about $3\frac{1}{2}$ d, but the rate is constantly varying."

Detailed specification. "The specification of such Moorings suitable for Munsoorcottah (or Gopalpore) Roads is as follows: each of the Moorings to consist of two iron stocked Anchors with a total length of 180 fathoms of Chain. To each of these Anchors 60 fathoms of Chain is to be attached and both ends brought together to a large swivel, to which is to be attached the remaining length of 60 fathoms of Chain, the end of this Chain being secured to a suitable large sized Mooring Buoy which must be made of very strong boiler plate iron, with a large strong ring at the top of it, and to each Anchor an ordinary Anchor Buoy secured by a light Chain (not rope) must be attached so as to mark the spot where the anchor is, and thus prevent Vessels fouling it. Regarding the dimensions of the Mooring Chains and Anchors, it will be well to have them of different sizes, say one of the Moorings suitable for Ships of 1000 to 1200 tons, and another for Ships of 600 to 800 tons. It is impossible to give a correct estimate of the cost of such Moorings as they are sold at so much per lb. generally about $3\frac{1}{2}$ d, but the rate is constantly varying."

How to lay down the Moorings. "The Moorings must be laid down as follows: The anchor are to be dropped North and South with 120 fathoms distance between them thus it will be impossible under any changes or states of winds or tides for a Vessel riding at these Moorings to foul either of the anchors, and with the only really dangerous wind that blows at Gopalpore, viz., that from East and E. S. E., a Vessel will be riding by both anchors."

Winds. "The prevailing wind at Gopalpore (or Munsoorcottah) is from South to S. S. E., which blows at times very strongly for fully 8 months of the year, during the other 4 months from November till February, moderate N. E. winds prevail."

Currents. "The Current as a rule runs with the wind, as early in February when the N. E. wind generally ceases and Southerly winds commence especially in the Southern part of the Bay, the Current is found setting strong to the North and it continues to do so until towards the end of the S. W. Monsoon when the large Rivers discharging themselves into the head of the Bay cause a slight set to the Southward which increases and becomes a strong Southerly Current as soon as the N. E. Monsoon sets in, but Currents which ever way they may run cannot affect Moorings laid down in the method described."

Fort Saint George, Marine Consultation, 7th September 1858.

4. Mr. Boothby's Memorandum it will be seen fully and clearly describes every thing which it would be necessary for the manufacturers to know so as to ensure their providing Moorings adapted to the Port.

5. Government have recognized the value of the Port and the necessity for Moorings and I hope that application may be made to England for two Anchor Bridle Moorings as above described in the detailed specification.

6. In this year 1858, Ships of the following Tonnage have anchored in the Roads.

One	of	2000	Tons.
One	of	1200	"
One	of	900	"
Two	of	800	"
One	of	700	"
Four	of	600	"
Two	of	500	"
Three	of	450	"
Two	of	400	"
One	of	300	"

7. During and after September we may expect a few more. Besides the above the "Harbinger" and 5 other Steamers for conveyance of Troops, &c., have visited the Port.

From J. J. FRANKLIN, Esq., Secretary Marine Board; to the Acting Chief Engineer, dated 24th July 1858, No. 2935.

SIR,

I have the honor by desire of the Marine Board to acknowledge receipt of the letter, noted in the margin, forwarding an original letter from the District Engineer of Ganjam submitting plan of Moorings for the Roadstead of Munsoorcottah and recommending that they should be procured from England.

2. Mr. Boothby's plan is good and easy of execution and as the Right Honorable the Governor in Council has recorded his opinion that Moorings are necessary at Munsoorcottah, the Board would recommend that they should be obtained from England ready fitted with spare shackles.

3. The following are the dimensions that would be required and the Anchors should have but one fluke.

<i>For large Ships.</i>	
Anchors	42 Cwt.
Chains	$1\frac{3}{8}$ Inch.
<i>For smaller Vessels.</i>	
Anchors	33 Cwt.
Chains	$1\frac{3}{4}$ Inch.

From Captain C. A. ORR, Acting Superintending Engineer, Northern Circle; to the Secretary to the Marine Board, Fort Saint George, dated 31st July 1858, No. 2399.

SIR,

As in the third para: of your letter of the 17th March 1858, No. 1206, you state, with reference to the correspondence regarding the laying down of Buoys in the entrance of the Tuddry River, that your Board had applied to Government for a number of Beacon Buoys to be sent out from England, it is inferred the duty of making arrangements for the provision of all such articles devolves in your Department, and I am therefore directed by the Officiating Chief Engineer to request you to apply to Government for the Moorings which, in your letter, No. 2935 of the 24th Instant, you approve of, and recommend to be laid down at Munsoorcottah in the Ganjam District.

Fort Saint George, Marine Consultation, 7th September 1858.

No. 11. ORDER THEREON, No. 344; dated 3rd September 1858.

Under the explanation afforded in the foregoing communication, Government approve of Bridle, instead of Screw, Moorings being laid down in the Roadstead of Munsoocottah; and resolve accordingly to apply to the Honorable the Court of Directors to take measures for obtaining and sending out to Madras two Anchor Bridle Moorings as detailed in the Specification submitted by the Superintendent of Marine.

(Signed) T. PYCROFT,
Chief Secretary.

Exd. J. A. Wilson.

Marine Department

No 344

*Extract from the Minutes of Consultation
dated 3rd September 1858.*

*Read the following letter from
the Superintendent of Marine.*

(Here enter 20th Aug. 1858 No 3264)

*Under the explanation afford-
ed in the foregoing communication
Govt. approve of Bridle, instead of
Screw, Moorings being laid ^{down} in the
Roadstead of Munsoocottah;
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to the Honble the Court of Directors
to take measures for obtaining
and sending out to Madras
two anchor Bridle Moorings
as detailed in the Specification
submitted by the Superintendent
of Marine.*

*Copy to Supt. of Marine }
" Public Works Dept. } Sept 11th*

JP

Chasine Oct 27 1858

Replied to from the day
of the 10th for a notice of
24th of the same day

Convey Sept 7
Monroe 1858

Sept 34 1

Chasine 1858

Sept 34 1

Whitney of 13 miles
instead of seven morning
being local down in
the 10th and 10th of 11th
accordingly to a bill
to the 10th and 10th
to take measures for
obtaining and sending
out to the 10th and 10th
Chasine 1858

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