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MADRAS RECORD OFFICE

Government of Madras

Public works. DEPARTMENT

G.O. No.	1884A	Press
B.P. No.	1884B	Mis.
249A249B		
Dated	13-7-1874	-195.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
13th July 1874.*

No. 249A. Read the following despatch from the Right Honorable the Secretary of State for India:—

Public Works.

No. 8.

INDIA OFFICE,
London, 11th June 1874.

MY LORD,—In continuation of my despatch, No. 6 of 21st ultimo, transmitting copy of a letter from the Elder Brethren of the Trinity Board on the subject of Mr. Parkes' project for the construction of a Harbour at Madras, I now transmit copy of some remarks* by Mr. Parkes on the Board's letter.

* Dated 26th May 1874.

I have, etc.,
SALISBURY.

His Excellency the Right Honorable
The Governor in Council, Fort St. George.

From W. PARKES, Esq., to the Under Secretary of State for India, dated 23, Abingdon Street,
26th May 1874.

MADRAS HARBOUR.

YOUR letter of the 21st instant encloses, for my information, one from the Elder Brethren of the Trinity House, dated 23rd April, containing their opinion on the nautical aspects of my design for a harbour at Madras.

2. You do not call upon me to submit any remarks upon this communication, but I think it right to take the earliest opportunity of calling attention to the fact that the opinion of the Elder Brethren appears to be based upon a misconception of fact in at least one important point, and I would express the hope that the Secretary of State will take such measures as he may think desirable to prevent the mischief which would otherwise follow the circulation of a conclusion, based on a misconception, emanating from so influential a quarter as the Trinity Board.

3. It is stated "that the opinion of the Elder Brethren would be in favour of the breakwater, provided the expense would not be greater than that of making a harbour." They then proceed to describe the advantages which would be secured by a breakwater detached from the shore, 9,000 feet in length, and they appear to have assumed that such a breakwater would cost about as much as the harbour I proposed. In that assumption I am unable to concur. The cost of such a breakwater would be at least 200,000*l.* greater than that of the harbour, owing to its whole length being in deep water, and to the necessity of constructing enormously strong and very expensive stagings for the conveyance of the large concrete blocks from the shore to the line of the breakwater.

4. The length of breakwater which could be made for the same cost as the harbour (say 565,000*l.*) would certainly not exceed 6,000 feet, and that is the length which had been proposed by the Breakwater Committee in 1869, and by Mr. Robertson in 1871, which they estimated respectively to cost 1,062,000*l.* and 1,311,000*l.*, the system of construction by "*pierre perdue*" in both cases being much more expensive than that I have proposed.

5. It was this length of 6,000 feet which was the basis of the comparison made in my report; but the addition of 3,000 feet to the length makes all the difference between efficient and inefficient shelter, and I fear that, at the same time, the addition of 200,000*l.* to the cost makes all the difference between a financially practicable and impracticable scheme. I submit, therefore, that so far my conclusion is not inconsistent with the authoritative nautical opinion of the Elder Brethren, the two having reference respectively to totally different proposals.

6. It must not be concluded, however, that, even if the objection of extra cost were put out of the question, I should recommend the lengthened breakwater in preference to the harbour. If

Fort St. George.

*Proceedings of the Madras Government, Public Works Department,
13th July 1874.*

there were no other object than to provide smoother water for the anchorage, and the easiest possible communication between the anchorage and the sea, which from a purely nautical point of view is the primary object, I should not be disposed to contest the conclusion arrived at by the Elder Brethren, though even on that point the opinions of nautical men are much divided; but when I consider the equally if not more important questions of communication between the shipping and the shore, and the facility of providing for extension of trade when necessary, the preference appears to me to be due very decidedly to the harbour, which can be constructed for 200,000*l.*, less cost.

7. The Elder Brethren make two comments upon my proposed works, which I think are also based on misapprehensions as to matters of fact. First, "that the seaward portion of the harbour would not be free from a dangerous surf outside the entrance." As to this I can speak with every confidence. There is no surf at that distance from shore and in that depth of water (7½ fathoms). True surf has never been seen much beyond the head of the present pier, 1,200 feet from shore, whereas my proposed entrance would be 3,600 feet from shore. During cyclones the crests of the waves are broken by the violence of the wind far out to sea, but this is in itself harmless to shipping.

8. The second objection is "that the contemplated elevations (of the piers) would not be sufficient to protect vessels inside from the effects of the fury of wind and sea." Here, again, I can speak with confidence. The Manora breakwater at Kurrachee is relatively about 3 feet lower than the proposed Madras work, and the ordinary monsoon seas to which it is exposed are heavier than those at Madras, yet it is perfectly efficient as a breakwater, and I am informed that, at a distance of 100 yards to leeward, the state of the sea is such that ships could lie there without inconvenience during the heaviest weather. It is not proposed to moor them so close as that at Madras. The quantity of water thrown over the piers by the waves would not be materially decreased by their being raised 5 or 6 feet, while, if they were raised to 18 feet above high water, as Mr. Dalrymple suggests, a very considerable amount of water would still be thrown over in heavy seas, and the additional cost would be about 200,000*l.*

In conclusion, I would beg to observe that, since I submitted my report to the Government of Madras, I have taken every opportunity, and I have had many, of consulting with experienced nautical men. Upon two points I have found them so far unanimous, viz., that the breakwater, 6,000 feet long, would be quite inefficient, and the harbour efficient, for the purposes required; some (though decidedly the minority) are favorable to the idea of a long breakwater, but the majority prefer the enclosed harbour. There are differences of opinion as to the form, width, and position of the entrance to the latter, and I have carefully considered the several suggestions made, the result of which will probably be that I may submit some slight modification of, or addition to, my design as it stands, with the view of meeting the more substantial objections to the present form.

No. 249B.

ORDER THEREON, 13th July 1874, No. 1,884A.

CIVIL WORKS, No. 16.

ORDERED that the Home Government be addressed on the subject of this letter and that the following letter

be despatched to the Government of India.

(Here enter No. 1,884B, dated 13th July 1874.)

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,

Secretary to Government.

Exd. S. T. Austin.
Spare Copies

PUBLIC WORKS DEPARTMENT,
OOTACAMUND, 13th July 1874.

No. 249c.

No. 1,884B.

FROM

COLONEL G. W. WALKER, R.E.,

Secretary to the Government of Madras,

Public Works Department,

TO

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

CIVIL WORKS, No. 17.

SIR,—In continuation of my letter, No. 1,750-B, dated 29th June 1874, I am directed by His Excellency the Governor

in Council to forward copy of a letter which has been addressed by Mr. Parkes to the Secretary of State in connection with the remarks of the Elder Brethren of the Trinity Board on his scheme for a close harbour at Madras, together with copy of a despatch which has been sent home on the subject.

I have the honor to be,

Sir,

Your most obedient servant,

(Signed) G. W. WALKER, Colonel, R.E.,

Secretary to Government.

Exd. S. T. Austin.
Spare Copies

Public Works.
No. 8.

06 5
India Office, London.
11th June, 1874.

My Lord,

In continuation
of my despatch, No. 6
of 21st ultimo, transmitting
copy of a letter from the
Elder Brethren of the Trinity
Board on the subject of Mr.
Parker's project for the ---
construction

His Excellency
The Right Honorable,
The Governor in Council,
Fort St. George.

Construction of a Harbour
at Madras, I now transmit

Copy of some remarks by
W. Parkes on the Board's
letter.

* dated 26th May, '87

I have the honour to be,

My kind regards

Your Lordship's most obedient
humble Servant,

Salisbury

1731/12/11

[The page contains several lines of extremely faint, illegible handwriting.]

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No 1884 B.

To the Secretary to the
Govt of India
C.S.O.

Sir,

In continuation
of my letter ^{of} 27th June 1874 I am di-
rected by His Excellen-
cy the Governor in Coun-
cil to forward copy of a
letter which has been
addressed by Mr Parker
to the Secretary of State
in connection with the
remarks of the Elder

No. 4.
Pms: of good for July
Public Works

11th June 1874

Recd 11th July 1874.

The
Letter to Govt of India
No 8.

1874

27/4/74

Forwarding a
copy of remarks by Mr
Parker on the letter from
the Elder Brethren of
the Trinity House re-
garding Mr Parker's
design for a Harbour
at Madras.

1884 A.
Ordered that Mr Stone ^{shall} be authorized on the subject
of this letter and that the following letter be forwarded to the
Govt of India

28.20

87

249 A-249C

Brethren of the Trinity
Board on his scheme
for a close harbour
at Madras together with
copy of a Despatch which
had been sent home
on the subject.

1 Copy of 6 Copies of previous
Presidents desps 17/7/74.

Govt. of 1874 Madras.

PUBLIC WORKS.

To

The Secy. Genl.
of India

Dated

Recd.

Encl.

G. O. Duly 1874, No. 1884A-
1884B.

Nos. 245A-C.

Harbour at Madras.

Passing orders on a Despatch from the Secretary of State for India forwarding a copy of remarks by Mr. Parkes in the letter from the Elder Brethren of the Trinity House regarding Mr. Parkes' design for a Harbour at Madras, and the Home Government and the Govt. of India addressed in the subject.

Forwarding copy of a letter which has been addressed by Mr. Parkes to the Secretary of State in connection with the remarks of the Elder Brethren of the Trinity Board on his scheme for a close Harbour at Madras together with copy of a Despatch which has been sent home on the subject.