

(1) Number of pages _____

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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 1120	Press
300-301	~~Mis.~~
Dated 21-4-18	7/

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
21st April 1871.*

No. 300. Read the following Endorsement of the Chief Secretary to Government, Fort Saint George, dated 24th March 1871 :—

Read the following letter from the Master Attendant, to the Chief Secretary to Government, Fort Saint George, dated Madras, 23rd March 1871, No. 2,002.

I HAVE the honour to report my return to Madras on the 19th instant, after having visited Cochin, Narakal, Calicut, and Beypore.

2. I arrived at Cochin on the 20th of February, accompanied by Captain Castor, and commenced inspecting all the protective works carried out by the Marine and Public Works Departments, and employed Captain Castor in taking soundings on the bar at the entrance of the harbour.

3. I was joined by Lieutenant-Colonel Farewell and Mr. Robertson, C.E., on the 23rd idem, and in carrying out their inquiries and inspections every assistance was afforded them by Captain Castor and myself.

4. As Mr. Robertson will no doubt send into Government a complete report on the harbour of Cochin, I shall confine myself to a brief description of the state in which I found the works I reported on last year.

5. The sunken groynes to the southward, Nos. 1 and 2, have done their work well, still holding the beach together as before. Nos. 3 and 4 have also held the beach together to the same extent as before, north and south of the Light-house, and a revetment of stone ballast in front of the Light-house between the groynes is all that is required. No. 5 groyne has succeeded admirably, having gained additional 50 feet since I saw it last year. No. 6 has also done well, but has not reclaimed the beach to such an extent as No. 5 has done. No. 7, a short groyne placed at the southernmost corner of Messrs. Pierce, Leslie and Co.'s yard on the recommendation of the Harbour Committee and constructed by the late Assistant Engineer in charge, has also acted admirably, having gained a considerable width of beach beyond the outer end.

6. In passing over to the north side of the harbour, I need only refer Government to paragraph 7 of my former report, and to state that, since I visited

Cochin last year, the effects produced by the dismantling of groynes, Nos. 8 and 9, have been still more disastrous.*

* *Vide* Lieutenant-Colonel Farewell's letter to Government, dated Cochin, 6th October 1870, No. 151, paragraph 4.

7. The removal of the inner end of groyne No. 8 having made an opening for the ebb and flow of the tides, the consequences are what were predicted. There is now a wide channel between the outer or remaining end of the groyne and the shore, and the scouring force of the tides through this passage has encroached on the Vypeen side to so great an extent that it has carried away houses and trees, a return of which can be rendered by the local authorities.

8. When I visited the spot on the 20th ultimo, I saw a well-built native house in great jeopardy, the high tides rapidly undermining it, and before I left Cochin it had disappeared altogether.

9. Lieutenant-Colonel Farewell did his best to arrest the progress of the sea with stakes and stone ballast; but it was too late.

10. It was for this emergent work, namely, that of protecting the Vypeen side of the harbour from further destruction, that I applied, through my Deputy, Captain Crowther, for the sum of Rupees 1,000 to be allotted from the Port Funds, and at least Rupees 2,000 more will be required for the purpose.

*Proceedings of the Madras Government, Public Works Department,
21st April 1871.*

11. I now turn to the Vypeen main groyne. The unimpeded force of the tides was rapidly turning the flank of the main groyne, and had not the Assistant Engineer in charge acted with promptitude and energy by throwing down quantities of stone ballast, the groyne would have been cut off from the main land and rendered useless, and much more of the land would doubtless have gone with it.

12. With reference to paragraph 5 of Colonel Carpendale's report, when on this last occasion I was in Cochin, during ordinary tides, when the breeze was from the northward and westward, the sea was making a clean breach over the main groyne, and the ballast groyne at high tides entirely submerged.

13. I am happy to report most favourably on the next groyne to the northward, constructed of good sized blocks of stone by the late Assistant Engineer in charge of the works. It is built on the ruins of a pagoda, which were partially under water, and, as far as it goes, it has done its work thoroughly and only requires to be lengthened.

14. Of the wooden one, which I described last year as "a wreck," there is now little of it left to report on.

15. I propose shortly to submit to Government reports on the ports of Beypore and Calicut, and of the lights required for Cape Comorin and Cadiapatam.

TRANSFERRED to the Department of Public Works.

(Signed) R. S. ELLIS,
Chief Secretary.

No. 301. ORDER THEREON, 21st April 1871, No. 1,120.

CIVIL WORKS, No. 19.

THE Government are glad to learn from this report that the groynes and other defensive works which have been carried out for the protection of the port of Cochin have generally answered their purpose, with the exception of groyne No. 8, the removal of the inner end of which it appears has opened a passage through which the scouring force of the tides has exerted a prejudicial effect on the Vypeen side of the harbour.

2. The Assistant Engineer in charge of the works should be instructed to give his attention to this groyne, and to take such measures as may appear to be immediately necessary, pending the prosecution of any comprehensive scheme which it may be determined on carrying out on the receipt of Mr. Robertson's report upon the Cochin Harbour.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To the Acting Superintending Engineer, 7th Division.

„ Controller of Public Works Accounts.

„ Marine Department.

Exl. E. C. Shunker.

Administrative Department.

Madras.

Marine Office

23rd March 1871.

No. 2002.

From

H. D. E. Dalrymple Esq.

Master Attendant

Administrative Department

To

Madras.

The Honourable P. S. Ellis Esq.

Chief Secretary to Government

Marine Department.

Fort Saint George.

Sir

I have the honour to report

*my return to Madras on the 19th instant,
after having visited Cochin, Narakkal,
Calicut and Beypore.*

*2 I arrived at Cochin on the
20th of February, accompanied by Captain
Castor, and commenced inspecting all
the protective works carried out by the
Marine and Public Works Departments,
and employed Captain Castor in taking
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3

*I was joined by Colonel
Forewell*

Farewell and Mr. Robertson C.E. on the 23^d idem, and in carrying out their enquiries and inspections, every assistance was afforded them by Captain Castor and myself.

4 As Mr. Robertson will no doubt send in to Government a complete report on the Harbour of Cochin, I shall confine myself to a brief description of the state in which I found the works, I reported on last year.

5 The sunken groynes to the Southward, Nos 1 and 2, have done their work well, still holding the beach together as before. Nos 3 and 4 have also held the beach together to the same extent as before, North and South of the Light House, and a revetment of stone ballast, in front of the Lighthouse between the groynes, is all that is required. No 5 groyne has succeeded admirably, having gained additional 50 feet since I saw it last year. No 6 has also done well, but has not reclaimed

reclaimed the beach to such an extent as No 5 has done. No 7, a short groyne placed at the Southernmost corner of Messrs Pierce Leslie's Yard, on the recommendation of the Harbour Committee, and constructed by the late Assistant Engineer in charge, has also acted admirably, having gained a considerable width of beach beyond the outer end.

6. In passing over to the North side of the Harbour, I need only refer Government to Para 7 of my former Report, and to state that, since I visited Cochin last year, the effects produced by the dismantling of groynes

* Vide Colonel Farewell's letter to Government, dated Cochin 6th Dec. 1870, No 151, Para 4.

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7. The removal of the inner end of groyne No 8 having made an opening for the ebb and flow of the tides, the consequences are what were predicted. There is now a wide channel between the outer or remaining end of the groyne and the shore, and

and the scouring force of the tides through this passage has encroached on the Vypren side to so great an extent that it has carried away houses and trees, a return of which can be rendered by the local Authorities.

8. When I visited the spot on the 20th ultims, I saw a well built native House in great jeopardy, the high tides rapidly undermining it, and before I left Cochin, it had disappeared altogether.

9. Colonel Forewell did his best to arrest the progress of the sea with stakes and stone ballast, but it was too late.

10. It was for this emergent work - viz^t. that of protecting the Vypren side of the Harbour from further destruction that I applied, through my Deputy, Captain Creswell, for the sum of Rupees (1,000) one thousand, to be allotted from the Port funds, and at least Rupees (2,000) Two thousand more will be required for the purpose. I



11. I now turn to the Vypren Main groyne. The unimpeded force of the tides was rapidly turning the flank of the chain groyne, and had not the Assistant Engineer in charge acted with promptitude and energy by throwing down quantities of stone ballast, the groyne would have been cut off from the chain land and rendered useless, and much more of the land would doubtless have gone with it.

12. With reference to Para V of Colonel Carpendale's report - when on this last occasion I was in Cochin - during ordinary tides, when the breeze was from the Northward and Westward, the sea was making a clean breach over the Main groyne, and the ballast groyne at high tides entirely submerged.

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to the Northward, constructed of good sized blocks of stone by the late Assistant Engineer in charge of the works. It is built on the ruins of a Pagoda, which were partially under water, and as far as it goes, it has done its work thoroughly, and only requires to be lengthened.

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I have the honour to be
Sir

Your most obedient Servant

H. D. S. Dalrymple

Master Attendant
Administrative Department.

6/11

No 1120.

Proceedings of the Madras Government.
Under date the April 1871
Read the following letter.

From the Master Attendant
Madras thro the Marine
Dept
No. 2008 of 23rd
March/71

The Government are
glad to learn from this
report that the groynes
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through which the scouring
force of the tides has exerted

No 25 October/70 No 358.
369

From the Master Attendant
No 1475.

The Master Attendant
at Dept.

To the Chief Secy to Govt.
Marine Department
Fort St George

Dated 23 March 1871
No 25
Recd. 30
No 125. No 2008

Reports of his Holiness to
Madras on the 19th inst.
and submit report on the
Cochin protective works.

No 1120. 21 April/71

Forwarded to the Dept.

of Public Works

P. S. Ellis

March 24. 71

Chief Secretary

Ap 30

6 April/71 A. 12

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Typhoon side of the harbour.

The Assistant Engineer
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-carrying out on the receipt
of Mr. Robertson's report upon
the Cochin Harbour.

[Signature]

To. The Super^g Eng^r. 7.00.7
S. Controller P.M. Acct^y ✓
H. Marine Depart^t ✓

Desp^d 24/4/71

1871
Govt of 1871 Madras.

PUBLIC WORKS.

Mr. The Superintending Engineer
of the Division

Date

By

21 April 1120

Nos. 3001 311

In the presence of the
Commissioner of the
Public Works Department
at the Madras
Public Works Department