

3RD JUNE 1886, No. 280, MARINE.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

READ—the following paper :—

From J. H. TAYLOR, Esq., Lieut., R.N.R., Master Attendant, Madras, to the
Chief Secretary to Government, dated Madras, 15th April 1886, No. 3476.

Administrative Department.

I have the honor to report that on the 13th February last, I visited the port of Negapatam, found the light and house in good order, Hon. Colonel Shaw-Stewart accompanying me. No changes of any sort in the river have occurred since my last visit, and I endeavoured to elicit some expression of opinion as to the best method of improving the port, having previously circulated a plan of my own proposal as being in my opinion likely to do good, but not by any means insisting upon it. I noticed that, on the occasion of His Excellency the Governor's recent visit, great stress was laid by the local European authorities as to the good that would result if they had control of the port funds. Under present legislation, that could not be listened to, nor does the Port Dues Act sanction the funds being diverted to river improvements unconnected with shipping; but from what they advanced, I entertained a hopeful conviction that they were ready to come forward with some feasible plan, which, if approved by the Chief Engineer, might receive assistance in the same way that help is being given to Gopálpur, Tuticorin, Cocanada, &c. I have since received letters, through the Collector, copies of which are sent herewith, from which it appears that the Natives wish nothing done, and the European members of the community seem only to desire the money, which they have been assured cannot be granted them. I beg respectfully to recommend therefore that, when the dredge is in good working order, the boat basin be filled up, and its outer wall strengthened, and the low ground at the back of the quay filled up to the quay level, and revetted on the north side, so as to divert the town sewer and storm water clear of the quay, which now suffers damage from town floods. The ground recovered in both cases will become valuable. The deputations that addressed His Excellency the Governor omitted to draw his attention to the fact that the failure of the works hitherto attempted was due partly to the entire absence of any intelligent method of drainage by the Municipality, and partly to the action of the Railway Company, who have for years encouraged the large lighters bringing railway material to lie at the jetty, where their crane is constructed, and thus accumulated silt and caused shallows on the town side. To such an extent was the evil permitted that a large bank was formed into the river, upon which coal was stored. This was interdicted in 1883, and if a moderately deep current could be maintained along the town side, and the sewage and storm water diverted to the sea, north of the quay, a very important improvement would be effected, and the sanitary condition of the town, which is now one of the most unhealthy in the Presidency, would be benefited. The prosperity of the sea-borne trade is not in any way interfered with by the evil condition of the town, and the native merchants, who conduct by far the largest portion of export and import business, do not desire any change. The difficulties, such as they are, are inseparable from those of all other ports similarly placed on rivers debouching on a loose sandy shore, and troubled with a bar, which changes its position and altitude with every variation of the seasons.

2. From Negapatam we proceeded to Pámban, and in going through, an accident happened to the steamer *Madras*, which obliged us to leave her there for repair, and apply for the *Margaret Northcote*, which fortunately was idle at Tuticorin. The accident was brought about solely by the characteristic obstinacy of the Commander, Mr. Lloyd. His attention had been drawn by me to the slack condition of his wheel-chains, and he had been ordered to take them in. In this climate chains corrode so rapidly that they require constant attention. He neglected to take this precaution, and, on entering the pass with steam and current acting upon the vessel, the port pilot

steering and in charge, a sudden rapid movement of the wheel caused the chain to ride on the barrel, and effectually stopped all steerage. She took the ground on the left bank, and though the shock was not great, her plates seem to have suffered from the coral of which the bottom is composed. A leak developed under the engine, but this was stopped by concrete and an iron plate fortunately at hand. I did not, however, consider it advisable to proceed in her, but directed Mr. Lloyd to remain in Pámban for a few days, and, if nothing more occurred, to proceed slowly to Madras. This he did, but soon after getting the boat in motion, another leak sprang under the after-boiler, and necessitated her being placed on the beach in a very secure place, where she is now waiting a careful examination of the bottom.

3. The lighthouse is in very good condition, but several complaints had reached me in Madras regarding the quality of the light, which was admitted by the Port Officer, Mr. James, to be inferior—a defect which he, in the first case, attributed to the size of the wick, and afterwards to the nature of the oil. The wick was changed and the oil sent up to Madras, where it was pronounced by the Chemical Examiner to be very superior. On inspection, we found that ignorance of the right way of trimming the wick was the real cause; it had been cut so as to form a point in the centre, and the volume of the light was diminished more than half. A lesson was administered to the keepers, and I hope to hear no more complaints. The prism is in perfect order.

4. We inspected the buildings, which had suffered in the last cyclone, and left instructions as to what portions should be repaired. The Pámban Pass itself does not seem to have silted up, but a dredge is wanted on the sand banks between Cooreesuddy and Pámban, where the currents take bends and cause obstructions. But the question of going to the great expense of providing efficient dredgers has become to a great extent dependent on the realization, or withdrawal, of the Pámban Canal project. We from time to time hear this scheme alluded to in newspapers and occasional letters, and a confident tone is assumed about it. Hon. Colonel Shaw-Stewart saw some of the trial pits bored early in 1882 by order of the Madras Government, and was able to take a very good view of the country and form an opinion on the feasibility of the canal. I also took occasion to point out to him the difficulties connected with navigation, which, in my judgment, will prove fatal to any pecuniary return; the cut itself is nothing, but the approaches on either side are formidable obstacles, and have not received the attention they will claim hereafter, if capitalists are committed to the scheme. In the *Madras Mail* of 15th March 1886, this passage occurs in a leading article dealing with Pondicherry and Monsieur Richaud, its Governor:—"Some progress in the shape of international negotiations has been made in respect to the Pámban Channel project, but neither the English nor French Government has been able to allot funds for the work out of the current year's budget."

5. So far as my inquiries have proceeded, no circular or invitation of any kind has been issued to the mercantile communities of Colombo, Madras or Calcutta, to invest money towards the capital required. The Government of Ceylon, in a letter to the Government of Madras, dated 22nd April 1885, repudiated all active interest in the concern, and though letters direct to the Government of Madras from the promoters, Messrs. Grindrod and Jenkins, relating to railroads in the extreme south of the presidency between Tuticorin, Madura and Ramnad promontory, in connection with the project, have been received, it seems difficult to believe they were written with any hope of practical results. Some opinions of Sir John Coode's have also been published, though probably not under his authority.

6. The general effect of all these communications is to throw discouragement on any effort of ours to improve or maintain the present pass at what will be great expense to port funds. If the canal is formed, it will certainly be sufficient for small vessels such as now frequent the Pámban Pass, and it will, by allowing light-draught steamers of the British India Steam Navigation Company to go through, soon destroy entirely the native trade, which now finds employment for a very good style of vessel and a large class of seafaring natives. Negapatam will be a sufferer by the change, for a steamer will take as many coolies in one trip as half-a-dozen schooners, and only pay one port due. Native merchants exhibit no disposition at present to invest in steam. They know little or nothing about it, and have a very reasonable dread of

placing their interests so completely in the hands of European Commanders and Engineers.

7. On leaving Pámban in the little *Margaret Northcote*, we passed through that portion of the channel where the proposed Lorne Harbour is situated. It is ten miles from the promontory, and the canal would be on the mainland of India, thus affording a harbour, to which railroads and other conveniences might converge; but there is no real necessity for any such harbour, and an enormous sum of money would be required to construct the breakwater to the south-west, which is now completely exposed to the force of the monsoon, and breakwater protection would also be required to protect the mouth of the canal in Palk's Bay, while similar difficulties in navigation would arise to those connected with the Rámesvaram project. It should never be forgotten that, if the latter canal was formed, it would be of no use to Southern India on account of the transshipment of cargo that would be compulsory. All merchants dread the inconvenience, the expense and the risk of this interference with their shipments, which necessitates another agency and commission, which, in these days, cannot be afforded. We discharged our native pilot at Heelakarai—a port which represents very fairly the uncertainty of trade and the fluctuations of prosperity. It was once a large and flourishing seaport, but now shows every symptom of decay. It used to maintain eighteen pilots to conduct the navigation between it and Pámban, but the demand has fallen short, and I am compelled to instruct the Port Officer at Pámban not to fill up vacancies among the pilots until the reduction of numbers to nine.

8. At Tuticorin we inspected the lighthouse on Hare Island, a very handsome column of stones, with the lamp and prisms in perfect order, as everything under Mr. Phipps' charge is found to be. The pier, which has been lengthened recently, might be well improved by the inner half having the roadway widened; it pays well enough to justify this expense, and I have instructed Mr. Phipps to send in an estimate, for submission and recommendation to Government.

9. From Tuticorin, Hon. Colonel Shaw-Stewart returned to Madras, but as the *Margaret Northcote* was not immediately required, and the coals on board belonged to the Marine Department, I thought it right to continue my inspection as far as Beypore, from which port the expected visit of His Excellency the Viceroy to Madras would compel my return.

10. Captain Phipps and I left Tuticorin in the afternoon of the 18th February, timing ourselves to arrive at night off Manapaud Point, where a small light is very much required.

11. During the day, the great Trichendore temple is a splendid land mark. It is about six miles north-east of Manapaud Point, but at night the ever-increasing growth of the dangerous shoal between the two places renders it very desirable that a light, such as the one at Tellicherry, be exhibited. The ground close to the church is of considerable elevation, probably sixty or seventy feet, so that an inexpensive turret for the light, and a room beneath for the keeper, would suffice.

12. On the morning of the 19th, we inspected the Muttum Lighthouse, and the new buildings for the establishment. Everything about the light and house was in perfect order, and would do credit to any Trinity light in England. The house and offices are advancing rapidly, and will be strong and comfortable when completed. The lightning conductor is carried down the hill to water. Proceeded at 9 A.M., and anchored that night at Quilon to give the firemen a rest, the vessel not being manned for constant work. I have already reported on the capabilities of Quilon for harbour purposes. But in the absence of trade, or promise of it, nothing can well be done. Left at 8 A.M., 20th, and entered Cochin Harbour next morning. There was a fair depth of sixteen feet water on the bar. I inspected the lighthouse and light, all in good order. The Government jetty is in need of repairs, and Mr. Winckler was ordered to send in an estimate. I sent for Mr. Pinto, the senior pilot, who has been so unfavorably reported on by Mr. Logan and Mr. Winckler with regard to his conduct on board the Barque *Cyrene*. I informed him that Government had ordered his early retirement, and advised him to send in any petition he could get supported by local authorities. This he has failed to do. He has been for several years a

N^o 1612 h 4/24 June 1886

Communicated to the
Suptg Engineer IV + VI circles
in continuation of G.O. N^o 1218 h
d/13 May 1886

(D) (Jss)

Govt. of (1886) Madras.

MARINE.

87.C
R. 4588/86

Issued

Recd.

Encl.

G.O., 3rd June 1886, No. 280.

1612 h 24/6/86

JUNE.

Ports.

Passing orders on a report submitted by the
Master Attendant of his inspection of the southern
and some of the western ports of this presidency.

SE IV
" VII

3. No 1218 W 13-5-86
" 1297 W 25-5-86

B No 1612 W d/24-6-86

Communicated to the
Comm. to the

Supy. Engineer W &

W files for information
or files for info.

in continuation of G.O.

No 1218 W dated 13th

May 1886.
1218 W. 8 13/5/86

17/6/86

20-6-86

26-11-86

1) Piles 4585

Gobt. of 1886 Madras.

MARINE.

H.C

Issued

Recd. 15/6/86

Encl.

G.O., 3rd June 1886, No. 280.

B No 1612 W d/24-6-86

JUNE.

Ports.

Passing orders on a report submitted by the
Master Attendant of his inspection of the southern
and some of the western ports of this presidency.

SE D B C ✓ Sec
" D B C 24/6/86

1886 1887 1888

Entd in R.R.

2 copies to only

5/7/86

constant source of trouble to the Port Officer. The previous Port Officer had been directed to send in a monthly report of his conduct and attendance, and only a short time before the *Cyrene's* accident, Mr. Winckler had applied for permission to fine him for insubordination and non-attention to orders and duty. He has a large family, and on their account I regret that I can urge nothing in his favor. The head clerk of this Cochin office has just been convicted of theft and embezzlement of Government money, and sentenced to 18 months' rigorous imprisonment, for want of proper supervision. He discovered a way of falsifying the pilot's accounts, and by altering the counterfoils, after signature of the Port Officer had been given to the bills, secured a large sum of money. How far back this robbery dates cannot be ascertained, but the late Mr. Gahan, Port Officer, and Mr. Winckler, present Port Officer, evidently allowed themselves to be hoodwinked by this clever rascal. The Cruz Milagre Gap and the town groynes are fairly well reported on, and I could see nothing in the port or harbour on which port funds could legitimately or usefully be applied.

13. Went on same day to Ponani, which place I was desirous of examining on account of some claims for jetty improvements sought to be placed on port funds. The bar is not passable for dhonies, of which class of vessel there were eight in the roads. There are three or four places for landing and shipping cargo at some distance from one another, and the attempt to unite all trade on one small jetty would seriously embarrass the trade. It is at once evident that revetment of the beach wall and protection of the most exposed portion of it is the only reason for the attempt on the general port fund. Native vessels pay a very small tonnage due, and when I recommended the extension of the Dues Act to this class of vessel, it was only that they might pay a reasonable compensation for the lighting of the coast, the charts for their guidance, and the general protection they enjoyed.

14. Same evening arrived at Beypore; the red light at that port did not show well, the colors of the glass being too opaque. I have now had that attended to, and thin, colored chimney supplied instead of glass sides to the lantern. The Calicut light gives a good light, and Port Officer reports the lighthouse and all appliances in good order.

ENCLOSURES.

From J. B. PENNINGTON, Esq., Collector of Tanjore, to the Master Attendant, Administrative Department, Madras, dated Vallam, 5th March 1886, No. 1433.

With reference to your D.O., dated 27th January 1886, forwarding a rough plan in connection with the proposed improvements at the port of Negapatam, I have the honor to inform you that the leading merchants and others consulted through Mr. Denison, have given no decided opinion as regards the expediency or otherwise of the improvements proposed, except that some native merchants say that such improvements are unnecessary. It appears that the Executive Engineer has given his opinion on the subject and that his letter has been forwarded to you by Mr. Denison. The sketch referred to is herewith returned.

2. The other plan alluded to in your demi-official under reference is probably the one forwarded by you to the Chairman, Municipal Council, Negapatam. His reply * is enclosed with the plan and extract from the proceedings of the councillors.

* No. 407, dated 19th February 1886.

From R. H. SHIPLEY, Esq., Chairman, Municipal Council, Negapatam, to the Master Attendant, Administrative Department, Madras, dated Negapatam, 19th February 1886, No. 407.

With reference to your letter, No. 808, dated 2nd February 1886, enclosing a rough plan on the proposed improvement to the port of Negapatam, I have the honor to forward herewith an extract from the proceedings of the municipal council, No. 32, dated 10th February 1886. The plan is returned.

EXTRACT from the Proceedings of the Municipal Council, Negapatam, dated 10th February 1886.

32. Read letter from the Master Attendant, Administrative Department, Madras, forwarding a rough plan of a proposed improvement to the port of Negapatam.

The plan is so incorrect that the council are unable to submit any criticism on the proposed improvement. The council fully endorse Captain Taylor's remark that much capital has been wasted in abortive plans. They deprecate most strongly any further taxation on account of the port, as the port dues are largely in excess of the legitimate annual expenditure.

EXTRACT from the Inspection Notes of C. H. WILKS, Esq., Executive Engineer, Negapatam Division, for the 1st February 1886.

Negapatam Harbour Works.—Captain Denison having sent a circular with a rough plan of certain improvements to the port, I inspected the place. The proposals are chiefly old ones—(1) To continue the jetty wall up to the Railway compound; (2) to divert the river so that the deep channel shall be along the new wall, i.e., on the east of the river, and this it is proposed to do by means of groynes. The first is a simple matter and can be definitely estimated for, the second is very doubtful. The river is so wide that the groynes must be of great length to act with any useful result, in which case, they would be liable to be washed away in any sudden land flood. The deposit is always on the town side, because the curve on the river helps it, and the drainage from the town is all on that side, forming shoals which will require constant dredging.

I should have expected that such an important suggestion would have come through the Superintending Engineer, and after the proposed action of the municipality, it seems best to wait till the works have been inspected by His Excellency the Governor. I can give no useful opinion in a hurried manner; probably a new plan and cross sections would be necessary before any scheme could be recommended.

ORDER—dated 3rd June 1886, No. 280, Marine.

The recommendations made in paragraph 1 of the foregoing report in reference to the port of Negapatam will be referred to the Collector of Tanjore for remarks. The Government await the report called for in G.O., 5th January 1886, Mis. No. 9. The Master Attendant does not advocate regarding the dredger. It is gathered that the Master Attendant's remarks regarding the defective extension of Act III of 1885 to the port for the present. The attention of the municipality will be drawn to the Master Attendant's remarks regarding the defective system of drainage.

2. With reference to paragraph 2 of his letter, the Master Attendant will report in due course the result of the examination by Mr. Phipps of the Steam Tug *Madras*, sanctioned in G.O. of the 4th March 1886, Mis. No. 115, and will also expedite the submission of the explanations from the Commander and Engineer of the *Madras*, called for in G.O. of the 9th April 1886, Mis. No. 172.

3. The Secretary of State for India has recently been addressed in reference to the dredger required for the Pamban Pass.

4. Separate orders have already been passed in connexion with the estimate submitted for the improvement of the Tuticorin Pier.

5. The Master Attendant will take the necessary steps for the exhibition of a light at Manapaud Point.

6. With reference to the embezzlement of Government money by the head clerk in the Cochin port office, the port officer will be required to exercise a closer supervision of the work of his subordinates, so as to prevent such embezzlements in future. A copy of the magisterial proceedings in the case should be submitted for the information of Government, together with a full report as to the nature and amount of the defalcations.

(True Extract.)

Justine

Chief Secretary.

To the Master Attendant, Madras.
" Collector of Tanjore.
" Revenue Department.
" Public Works Department.
" Financial (M.) Department.
" Accountant-General.

Exd. A. Raitt.

placing their interests so completely in the hands of European Commanders and Engineers.

7. On leaving Pámban in the little *Margaret Northcote*, we passed through that portion of the channel where the proposed Lorne Harbour is situated. It is ten miles from the promontory, and the canal would be on the mainland of India, thus affording a harbour, to which railroads and other conveniences might converge; but there is no real necessity for any such harbour, and an enormous sum of money would be required to construct the breakwater to the south-west, which is now completely exposed to the force of the monsoon, and breakwater protection would also be required to protect the mouth of the canal in Palk's Bay, while similar difficulties in navigation would arise to those connected with the Ramesvaram project. It should never be forgotten that, if the latter canal was formed, it would be of no use to Southern India on account of the transshipment of cargo that would be compulsory. All merchants dread the inconvenience, the expense and the risk of this interference with their shipments, which necessitates another agency and commission, which, in these days, cannot be afforded. We discharged our native pilot at Heelakarai—a port which represents very fairly the uncertainty of trade and the fluctuations of prosperity. It was once a large and flourishing seaport, but now shows every symptom of decay. It used to maintain eighteen pilots to conduct the navigation between it and Pámban, but the demand has fallen short, and I am compelled to instruct the Port Officer at Pámban not to fill up vacancies among the pilots until the reduction of numbers to nine.

8. At Tuticorin we inspected the lighthouse on Hare Island, a very handsome column of stones, with the lamp and prisms in perfect order, as everything under Mr. Phipps' charge is found to be. The pier, which has been lengthened recently, might be well improved by the inner half having the roadway widened; it pays well enough to justify this expense, and I have instructed Mr. Phipps to send in an estimate, for submission and recommendation to Government.

9. From Tuticorin, Hon. Colonel Shaw-Stewart returned to Madras, but as the *Margaret Northcote* was not immediately required, and the coals on board belonged to the Marine Department, I thought it right to continue my inspection as far as Beypore, from which port the expected visit of His Excellency the Viceroy to Madras would compel my return.

10. Captain Phipps and I left Tuticorin in the afternoon of the 18th February, timing ourselves to arrive at night off Manapaud Point, where a small light is very much required.

11. During the day, the great Trichendore temple is a splendid land mark. It is about six miles north-east of Manapaud Point, but at night the ever-increasing growth of the dangerous shoal between the two places renders it very desirable that a light, such as the one at Tellicherry, be exhibited. The ground close to the church is of considerable elevation, probably sixty or seventy feet, so that an inexpensive turret for the light, and a room beneath for the keeper, would suffice.

12. On the morning of the 19th, we inspected the Muttum Lighthouse, and the new buildings for the establishment. Everything about the light and house was in perfect order, and would do credit to any Trinity light in England. The house and offices are advancing rapidly, and will be strong and comfortable when completed. The lightning conductor is carried down the hill to water. Proceeded at 9 A.M., and anchored that night at Quilon to give the firemen a rest, the vessel not being manned for constant work. I have already reported on the capabilities of Quilon for harbour purposes. But in the absence of trade, or promise of it, nothing can well be done. Left at 8 A.M., 20th, and entered Cochin Harbour next morning. There was a fair depth of sixteen feet water on the bar. I inspected the lighthouse and light, all in good order. The Government jetty is in need of repairs, and Mr. Winckler was ordered to send in an estimate. I sent for Mr. Pinto, the senior pilot, who has been so unfavorably reported on by Mr. Logan and Mr. Winckler with regard to his conduct on board the Barque *Cyrene*. I informed him that Government had ordered his early retirement, and advised him to send in any petition he could get supported by local authorities. This he has failed to do. He has been for several years a

Gobt. of {1886} Madras.

MARINE.

No 1012 W d/24-6-86

Communicated to the

Eng. Engineer W & W fireles.

in formation in continuation

P.O. No 1218 W d/13th May/86

f Ld J L L W

Issued

Recd.

Encl.

G.O., 3rd June 1886, No. 280.

B No 1012 W d/24-6-86

JUNE.

P.E. IV fireles

P.E. VI fireles

Ports.

Passing orders on a report submitted by the Master Attendant of his inspection of the southern and some of the western ports of this presidency.

With order.

constant source of trouble to the Port Officer. The previous Port Officer had been directed to send in a monthly report of his conduct and attendance, and only a short time before the *Cyrene's* accident, Mr. Winckler had applied for permission to fine him for insubordination and non-attention to orders and duty. He has a large family, and on their account I regret that I can urge nothing in his favor. The head clerk of this Cochin office has just been convicted of theft and embezzlement of Government money, and sentenced to 18 months' rigorous imprisonment, for want of proper supervision. He discovered a way of falsifying the pilot's accounts, and by altering the counterfoils, after signature of the Port Officer had been given to the bills, secured a large sum of money. How far back this robbery dates cannot be ascertained, but the late Mr. Gahan, Port Officer, and Mr. Winckler, present Port Officer, evidently allowed themselves to be hoodwinked by this clever rascal. The Cruz Milagre Gap and the town groynes are fairly well reported on, and I could see nothing in the port or harbour on which port funds could legitimately or usefully be applied.

13. Went on same day to Ponani, which place I was desirous of examining on account of some claims for jetty improvements sought to be placed on port funds. The bar is not passable for dhonies, of which class of vessel there were eight in the roads. There are three or four places for landing and shipping cargo at some distance from one another, and the attempt to unite all trade on one small jetty would seriously embarrass the trade. It is at once evident that revetment of the beach wall and protection of the most exposed portion of it is the only reason for the attempt on the general port fund. Native vessels pay a very small tonnage due, and when I recommended the extension of the Dues Act to this class of vessel, it was only that they might pay a reasonable compensation for the lighting of the coast, the charts for their guidance, and the general protection they enjoyed.

14. Same evening arrived at Beypore; the red light at that port did not show well, the colors of the glass being too opaque. I have now had that attended to, and thin, colored chimney supplied instead of glass sides to the lanthorn. The Calicut light gives a good light, and Port Officer reports the lighthouse and all appliances in good order.

ENCLOSURES.

From J. B. PENNINGTON, Esq., Collector of Tanjore, to the Master Attendant, Administrative Department, Madras, dated Vallam, 5th March 1886, No. 1432.

With reference to your D.O., dated 27th January 1886, forwarding a rough plan of the proposed improvements at the port of Negapatam, I have the honor to inform that the leading merchants and others consulted through Mr. Denison, have given no definite opinion as regards the expediency or otherwise of the improvements proposed, except that some native merchants say that such improvements are unnecessary. It appears that the Executive Engineer has given his opinion on the subject and that his letter has been forwarded to you by Mr. Denison. The sketch referred to is herewith returned.

2. The other plan alluded to in your demi-official under reference is probably the one forwarded by you to the Chairman, Municipal Council, Negapatam. His reply* is enclosed with the plan and extract from the proceedings of the councillors.

* No. 407, dated 19th February 1886.

From R. H. SHIPLEY, Esq., Chairman, Municipal Council, Negapatam, to the Master Attendant, Administrative Department, Madras, dated Negapatam, 19th February 1886, No. 407.

With reference to your letter, No. 808, dated 2nd February 1886, enclosing a rough plan on the proposed improvement to the port of Negapatam, I have the honor to forward herewith an extract from the proceedings of the municipal council, No. 32, dated 10th February 1886. The plan is returned.

EXTRACT from the Proceedings of the Municipal Council, Negapatam, dated 10th February 1886.

32. Read letter from the Master Attendant, Administrative Department, Madras, forwarding a rough plan of a proposed improvement to the port of Negapatam.

The plan is so incorrect that the council are unable to submit any criticism on the proposed improvement. The council fully endorse Captain Taylor's remark that much capital has been wasted in abortive plans. They deprecate most strongly any further taxation on account of the port, as the port dues are largely in excess of the legitimate annual expenditure.

EXTRACT from the Inspection Notes of C. H. WILKS, Esq., Executive Engineer, Negapatam Division, for the 1st February 1886.

Negapatam Harbour Works.—Captain Denison having sent a circular with a rough plan of certain improvements to the port, I inspected the place. The proposals are chiefly old ones—(1) To continue the jetty wall up to the Railway compound; (2) to divert the river so that the deep channel shall be along the new wall, i.e., on the east of the river, and this it is proposed to do by means of groynes. The first is a simple matter and can be definitely estimated for, the second is very doubtful. The river is so wide that the groynes must be of great length to act with any useful result, in which case, they would be liable to be washed away in any sudden land flood. The deposit is always on the town side, because the curve on the river helps it, and the drainage from the town is all on that side, forming shoals which will require constant dredging.

I should have expected that such an important suggestion would have come through the Superintending Engineer, and after the proposed action of the municipality, it seems best to wait till the works have been inspected by His Excellency the Governor. I can give no useful opinion in a hurried manner; probably a new plan and cross sections would be necessary before any scheme could be recommended.

ORDER—dated 3rd June 1886, No. 280, Marine.

The recommendations made in paragraph 1 of the foregoing report in reference to the port of Negapatam will be referred to the Collector of Tanjore for remarks. The Government await the report called for in G.O., 5th January 1886, Mis. No. 9, regarding the dredger. It is gathered that the Master Attendant does not advocate the extension of Act III of 1885 to the port for the present. The attention of the municipality will be drawn to the Master Attendant's remarks regarding the defective system of drainage.

2. With reference to paragraph 2 of his letter, the Master Attendant will report the course the result of the examination by Mr. Phipps of the Steam Tug *Madras*, The depot in G.O. of the 4th March 1886, Mis. No. 115, and will also expedite the attention to the explanations from the Commander and Engineer of the *Madras*, to the entire and G.O. of the 9th April 1886, Mis. No. 172.

partly to the Secretary of State for India has recently been addressed in reference lighters bridge required for the Pamban Pass.

4. Separate orders have already been passed in connexion with the estimate was submitted for the improvement of the Tuticorin Pier.

5. The Master Attendant will take the necessary steps for the exhibition of a light at Manapaud Point.

6. With reference to the embezzlement of Government money by the head clerk in the Cochin port office, the port officer will be required to exercise a closer supervision of the work of his subordinates, so as to prevent such embezzlements in future. A copy of the magisterial proceedings in the case should be submitted for the information of Government, together with a full report as to the nature and amount of the defalcations.

(True Extract.)

E. F. WEBSTER,
Chief Secretary.

To the Master Attendant, Madras.
" Collector of Tanjore.
" Revenue Department.
" Public Works Department.
" Financial (M.) Department.
" Accountant-General.

Exd. A. Raitt.

steering and in charge, a sudden rapid movement of the wheel caused the chain to ride on the barrel, and effectually stopped all steerage. She took the ground on the left bank, and though the shock was not great, her plates seem to have suffered from the coral of which the bottom is composed. A leak developed under the engine, but this was stopped by concrete and an iron plate fortunately at hand. I did not, however, consider it advisable to proceed in her, but directed Mr. Lloyd to remain in Pámban for a few days, and, if nothing more occurred, to proceed slowly to Madras. This he did, but soon after getting the boat in motion, another leak sprang under the after-boiler, and necessitated her being placed on the beach in a very secure place, where she is now waiting a careful examination of the bottom.

3. The lighthouse is in very good condition, but several complaints had reached me in Madras regarding the quality of the light, which was admitted by the Port Officer, Mr. James, to be inferior—a defect which he, in the first case, attributed to the size of the wick, and afterwards to the nature of the oil. The wick was changed and the oil sent up to Madras, where it was pronounced by the Chemical Examiner to be very superior. On inspection, we found that ignorance of the right way of trimming the wick was the real cause; it had been cut so as to form a point in the centre, and the volume of the light was diminished more than half. A lesson was administered to the keepers, and I hope to hear no more complaints. The prism is in perfect order.

4. We inspected the buildings, which had suffered in the last cyclone, and left instructions as to what portions should be repaired. The Pámban Pass itself does not seem to have silted up, but a dredge is wanted on the sand banks between Cooreesuddy and Pámban, where the currents take bends and cause obstructions. But the question of going to the great expense of providing efficient dredgers has become to a great extent dependent on the realization, or withdrawal, of the Pámban Canal project. We from time to time hear this scheme alluded to in newspapers and occasional letters, and a confident tone is assumed about it. Hon. Colonel Shaw-Stewart saw some of the trial pits bored early in 1882 by order of the Madras Government, and was able to take a very good view of the country and form an opinion on the feasibility of the canal. I also took occasion to point out to him the difficulties connected with navigation, which, in my judgment, will prove fatal to any pecuniary return; the cut itself is nothing, but the approaches on either side are formidable obstacles, and have not received the attention they will claim hereafter, if capitalists are committed to the scheme. In the *Madras Mail* of 15th March 1886, this passage occurs in a leading article dealing with Pondicherry and Monsieur Richaud, its Governor:—"Some progress in the shape of international negotiations has been made in respect to the Pámban Channel project, but neither the English nor French Government has been able to allot funds for the work out of the current year's budget."

5. So far as my inquiries have proceeded, no circular or invitation of any kind has been issued to the mercantile communities of Colombo, Madras or Calcutta, to invest money towards the capital required. The Government of Ceylon, in a letter to the Government of Madras, dated 22nd April 1885, repudiated all active interest in the concern, and though letters direct to the Government of Madras from the promoters, Messrs. Grindrod and Jenkins, relating to railroads in the extreme south of the presidency between Tuticorin, Madura and Ramnad promontory, in connection with the project, have been received, it seems difficult to believe they were written with any hope of practical results. Some opinions of Sir John Coode's have also been published, though probably not under his authority.

6. The general effect of all these communications is to throw discouragement on any effort of ours to improve or maintain the present pass at what will be great expense to port funds. If the canal is formed, it will certainly be sufficient for small vessels such as now frequent the Pámban Pass, and it will, by allowing light-draught steamers of the British India Steam Navigation Company to go through, soon destroy entirely the native trade, which now finds employment for a very good style of vessel and a large class of seafaring natives. Negapatam will be a sufferer by the change, for a steamer will take as many coolies in one trip as half-a-dozen schooners, and only pay one port due. Native merchants exhibit no disposition at present to invest in steam. They know little or nothing about it, and have a very reasonable dread of

placing their interests so completely in the hands of European Commanders and Engineers.

7. On leaving Pámban in the little *Margaret Northcote*, we passed through that portion of the channel where the proposed Lorne Harbour is situated. It is ten miles from the promontory, and the canal would be on the mainland of India, thus affording a harbour, to which railroads and other conveniences might converge; but there is no real necessity for any such harbour, and an enormous sum of money would be required to construct the breakwater to the south-west, which is now completely exposed to the force of the monsoon, and breakwater protection would also be required to protect the mouth of the canal in Palk's Bay, while similar difficulties in navigation would arise to those connected with the Ramesvaram project. It should never be forgotten that, if the latter canal was formed, it would be of no use to Southern India on account of the transshipment of cargo that would be compulsory. All merchants dread the inconvenience, the expense and the risk of this interference with their shipments, which necessitates another agency and commission, which, in these days, cannot be afforded. We discharged our native pilot at Heelakarai—a port which represents very fairly the uncertainty of trade and the fluctuations of prosperity. It was once a large and flourishing seaport, but now shows every symptom of decay. It used to maintain eighteen pilots to conduct the navigation between it and Pámban, but the demand has fallen short, and I am compelled to instruct the Port Officer at Pámban not to fill up vacancies among the pilots until the reduction of numbers to nine.

8. At Tuticorin we inspected the lighthouse on Hare Island, a very handsome column of stones, with the lamp and prisms in perfect order, as everything under Mr. Phipps' charge is found to be. The pier, which has been lengthened recently, might be well improved by the inner half having the roadway widened; it pays well enough to justify this expense, and I have instructed Mr. Phipps to send in an estimate, for submission and recommendation to Government.

9. From Tuticorin, Hon. Colonel Shaw-Stewart returned to Madras, but as the *Margaret Northcote* was not immediately required, and the coals on board belonged to the Marine Department, I thought it right to continue my inspection as far as Beypore, from which port the expected visit of His Excellency the Viceroy to Madras would compel my return.

10. Captain Phipps and I left Tuticorin in the afternoon of the 18th February, timing ourselves to arrive at night off Manapaud Point, where a small light is very much required.

11. During the day, the great Trichendore temple is a splendid land mark. It is about six miles north-east of Manapaud Point, but at night the ever-increasing growth of the dangerous shoal between the two places renders it very desirable that a light, such as the one at Tellicherry, be exhibited. The ground close to the church is of considerable elevation, probably sixty or seventy feet, so that an inexpensive turret for the light, and a room beneath for the keeper, would suffice.

12. On the morning of the 19th, we inspected the Muttum Lighthouse, and the new buildings for the establishment. Everything about the light and house was in perfect order, and would do credit to any Trinity light in England. The house and offices are advancing rapidly, and will be strong and comfortable when completed. The lightning conductor is carried down the hill to water. Proceeded at 9 A.M., and anchored that night at Quilon to give the firemen a rest, the vessel not being manned for constant work. I have already reported on the capabilities of Quilon for harbour purposes. But in the absence of trade, or promise of it, nothing can well be done. Left at 8 A.M., 20th, and entered Cochin Harbour next morning. There was a fair depth of sixteen feet water on the bar. I inspected the lighthouse and light, all in good order. The Government jetty is in need of repairs, and Mr. Winckler was ordered to send in an estimate. I sent for Mr. Pinto, the senior pilot, who has been so unfavorably reported on by Mr. Logan and Mr. Winckler with regard to his conduct on board the Barque *Cyrene*. I informed him that Government had ordered his early retirement, and advised him to send in any petition he could get supported by local authorities. This he has failed to do. He has been for several years a

placing their interests so completely in the hands of European Commanders and Engineers.

7. On leaving Pámban in the little *Margaret Northcote*, we passed through that portion of the channel where the proposed Lorne Harbour is situated. It is ten miles from the promontory, and the canal would be on the mainland of India, thus affording a harbour, to which railroads and other conveniences might converge; but there is no real necessity for any such harbour, and an enormous sum of money would be required to construct the breakwater to the south-west, which is now completely exposed to the force of the monsoon, and breakwater protection would also be required to protect the mouth of the canal in Palk's Bay, while similar difficulties in navigation would arise to those connected with the Rámesvaram project. It should never be forgotten that, if the latter canal was formed, it would be of no use to Southern India on account of the transshipment of cargo that would be compulsory. All merchants dread the inconvenience, the expense and the risk of this interference with their shipments, which necessitates another agency and commission, which, in these days, cannot be afforded. We discharged our native pilot at Heelakarai—a port which represents very fairly the uncertainty of trade and the fluctuations of prosperity. It was once a large and flourishing seaport, but now shows every symptom of decay. It used to maintain eighteen pilots to conduct the navigation between it and Pámban, but the demand has fallen short, and I am compelled to instruct the Port Officer at Pámban not to fill up vacancies among the pilots until the reduction of numbers to nine.

8. At Tuticorin we inspected the lighthouse on Hare Island, a very handsome column of stones, with the lamp and prisms in perfect order, as everything under Mr. Phipps' charge is found to be. The pier, which has been lengthened recently, might be well improved by the inner half having the roadway widened; it pays well enough to justify this expense, and I have instructed Mr. Phipps to send in an estimate, for submission and recommendation to Government.

9. From Tuticorin, Hon. Colonel Shaw-Stewart returned to Madras, but as the *Margaret Northcote* was not immediately required, and the coals on board belonged to the Marine Department, I thought it right to continue my inspection as far as Beypore, from which port the expected visit of His Excellency the Viceroy to Madras would compel my return.

10. Captain Phipps and I left Tuticorin in the afternoon of the 18th February, timing ourselves to arrive at night off Manapud Point, where a small light is very much required.

11. During the day, the great Trichendore temple is a splendid land mark. It is about six miles north-east of Manapud Point, but at night the ever-increasing growth of the dangerous shoal between the two places renders it very desirable that a light, such as the one at Tellicherry, be exhibited. The ground close to the church is of considerable elevation, probably sixty or seventy feet, so that an inexpensive turret for the light, and a room beneath for the keeper, would suffice.

12. On the morning of the 19th, we inspected the Muttum Lighthouse, and the new buildings for the establishment. Everything about the light and house was in perfect order, and would do credit to any Trinity light in England. The house and offices are advancing rapidly, and will be strong and comfortable when completed. The lightning conductor is carried down the hill to water. Proceeded at 9 A.M., and anchored that night at Quilon to give the firemen a rest, the vessel not being manned for constant work. I have already reported on the capabilities of Quilon for harbour purposes. But in the absence of trade, or promise of it, nothing can well be done. Left at 8 A.M., 20th, and entered Cochin Harbour next morning. There was a fair depth of sixteen feet water on the bar. I inspected the lighthouse and light, all in good order. The Government jetty is in need of repairs, and Mr. Winckler was ordered to send in an estimate. I sent for Mr. Pinto, the senior pilot, who has been so unfavorably reported on by Mr. Logan and Mr. Winckler with regard to his conduct aboard the Barque *Cyrene*. I informed him that Government had ordered his early retirement, and advised him to send in any petition he could get supported by local authorities. This he has failed to do. He has been for several years a

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

READ—the following paper :—

From J. H. TAYLOR, Esq., Lieut., R.N.R., Master Attendant, Madras, to the Chief Secretary to Government, dated Madras, 15th April 1886, No. 3476.

Administrative Department.

I have the honor to report that on the 13th February last, I visited the port of Negapatam, found the light and house in good order, Hon. Colonel Shaw-Stewart accompanying me. No changes of any sort in the river have occurred since my last visit, and I endeavoured to elicit some expression of opinion as to the best method of improving the port, having previously circulated a plan of my own proposal as being in my opinion likely to do good, but not by any means insisting upon it. I noticed that, on the occasion of His Excellency the Governor's recent visit, great stress was laid by the local European authorities as to the good that would result if they had control of the port funds. Under present legislation, that could not be listened to, nor does the Port Dues Act sanction the funds being diverted to river improvements unconnected with shipping; but from what they advanced, I entertained a hopeful conviction that they were ready to come forward with some feasible plan, which, if approved by the Chief Engineer, might receive assistance in the same way that help is being given to Gopálpur, Tuticorin, Cocanada, &c. I have since received letters, through the Collector, copies of which are sent herewith, from which it appears that the Natives wish nothing done, and the European members of the community seem only to desire the money, which they have been assured cannot be granted them. I beg respectfully to recommend therefore that, when the dredge is in good working order, the boat basin be filled up, and its outer wall strengthened, and the low ground at the back of the quay filled up to the quay level, and revetted on the north side, so as to divert the town sewer and storm water clear of the quay, which now suffers damage from town floods. The ground recovered in both cases will become valuable. The deputations that addressed His Excellency the Governor omitted to draw his attention to the fact that the failure of the works hitherto attempted was due partly to the entire absence of any intelligent method of drainage by the Municipality, and partly to the action of the Railway Company, who have for years encouraged the large lighters bringing railway material to lie at the jetty, where their crane is constructed, and thus accumulated silt and caused shallows on the town side. To such an extent was the evil permitted that a large bank was formed into the river, upon which coal was stored. This was interdicted in 1883, and if a moderately deep current could be maintained along the town side, and the sewage and storm water diverted to the sea, north of the quay, a very important improvement would be effected, and the sanitary condition of the town, which is now one of the most unhealthy in the Presidency, would be benefited. The prosperity of the sea-borne trade is not in any way interfered with by the evil condition of the town, and the native merchants, who conduct by far the largest portion of export and import business, do not desire any change. The difficulties, such as they are, are inseparable from those of all other ports similarly placed on rivers debouching on a loose sandy shore, and troubled with a bar, which changes its position and altitude with every variation of the seasons.

2. From Negapatam we proceeded to Pámban, and in going through, an accident happened to the steamer *Madras*, which obliged us to leave her there for repair, and apply for the *Margaret Northcote*, which fortunately was idle at Tuticorin. The accident was brought about solely by the characteristic obstinacy of the Commander, Mr. Lloyd. His attention had been drawn by me to the slack condition of his wheel-chains, and he had been ordered to take them in. In this climate chains corrode so rapidly that they require constant attention. He neglected to take this precaution, and, on entering the pass with steam and current acting upon the vessel, the port pilot

Gobt. of (1886) Madras.

MARINE.

No 1612 W d/ 24-6-86

Communicated to the
Sg. Engineer IV & V forces.
in formation in continuation
C.O. No 1218 W d/ 13th May/86

Self Issd W

Issued

Recd.

Encl.

G.O., 3rd June 1886, No. 280.

B No 1612 W d/ 24-6-86

JUNE.

Ports.

Passing orders on a report submitted by the Master Attendant of his inspection of the southern and some of the western ports of this presidency.

With order

3RD JUNE 1886, No. 280, MARINE.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

READ—the following paper :—

From J. H. TAYLOR, Esq., Lieut., R.N.R., Master Attendant, Madras, to the Chief Secretary to Government, dated Madras, 15th April 1886, No. 3476.

Administrative Department.

I have the honor to report that on the 13th February last, I visited the Negapatam, found the light and house in good order, Hon. Colonel Shaw-Stewart accompanying me. No changes of any sort in the river have occurred since my last visit, and I endeavoured to elicit some expression of opinion as to the best method of improving the port, having previously circulated a plan of my own proposal as being in my opinion likely to do good, but not by any means insisting upon it. I noticed that, on the occasion of His Excellency the Governor's recent visit, great stress was laid by the local European authorities as to the good that would result if they had control of the port funds. Under present legislation, that could not be listened to, nor does the Port Dues Act sanction the funds being diverted to river improvements unconnected with shipping; but from what they advanced, I entertained a hopeful conviction that they were ready to come forward with some feasible plan, which, if approved by the Chief Engineer, might receive assistance in the same way that help is being given to Gopālpur, Tuticorin, Cocanada, &c. I have since received letters, through the Collector, copies of which are sent herewith, from which it appears that the Natives wish nothing done, and the European members of the community seem only to desire the money, which they have been assured cannot be granted them. I beg respectfully to recommend therefore that, when the dredge is in good working order, the boat basin be filled up, and its outer wall strengthened, and the low ground at the back of the quay filled up to the quay level, and revetted on the north side, so as to divert the town sewer and storm water clear of the quay, which now suffers damage from town floods. The ground recovered in both cases will become valuable. The deputations that addressed His Excellency the Governor omitted to draw his attention to the fact that the failure of the works hitherto attempted was due partly to the entire absence of any intelligent method of drainage by the Municipality, and partly to the action of the Railway Company, who have for years encouraged the large lighters bringing railway material to lie at the jetty, where their crane is constructed, and thus accumulated silt and caused shallows on the town side. To such an extent was the evil permitted that a large bank was formed into the river, upon which coal was stored. This was interdicted in 1883, and if a moderately deep current could be maintained along the town side, and the sewage and storm water diverted to the sea, north of the quay, a very important improvement would be effected, and the sanitary condition of the town, which is now one of the most unhealthy in the Presidency, would be benefited. The prosperity of the sea-borne trade is not in any way interfered with by the evil condition of the town, and the native merchants, who conduct by far the largest portion of export and import business, do not desire any change. The difficulties, such as they are, are inseparable from those of all other ports similarly placed on rivers debouching on a loose sandy shore, and troubled with a bar, which changes its position and altitude with every variation of the seasons.

2. From Negapatam we proceeded to Pámban, and in going through, an accident happened to the steamer *Madras*, which obliged us to leave her there for repair, and apply for the *Margaret Northcote*, which fortunately was idle at Tuticorin. The accident was brought about solely by the characteristic obstinacy of the Commander, Mr. Lloyd. His attention had been drawn by me to the slack condition of his wheel-chains, and he had been ordered to take them in. In this climate chains corrode so rapidly that they require constant attention. He neglected to take this precaution, and, on entering the pass with steam and current acting upon the vessel, the port pilot

steering and in charge, a sudden rapid movement of the wheel caused the chain to ride on the barrel, and effectually stopped all steerage. She took the ground on the left bank, and though the shock was not great, her plates seem to have suffered from the coral of which the bottom is composed. A leak developed under the engine, but this was stopped by concrete and an iron plate fortunately at hand. I did not, however, consider it advisable to proceed in her, but directed Mr. Lloyd to remain in Pámban for a few days, and, if nothing more occurred, to proceed slowly to Madras. This he did, but soon after getting the boat in motion, another leak sprang under the after-boiler, and necessitated her being placed on the beach in a very secure place, where she is now waiting a careful examination of the bottom.

3. The lighthouse is in very good condition, but several complaints had reached me in Madras regarding the quality of the light, which was admitted by the Port Officer, Mr. James, to be inferior—a defect which he, in the first case, attributed to the size of the wick, and afterwards to the nature of the oil. The wick was changed and the oil sent up to Madras, where it was pronounced by the Chemical Examiner to be very superior. On inspection, we found that ignorance of the right way of trimming the wick was the real cause; it had been cut so as to form a point in the centre, and the volume of the light was diminished more than half. A lesson was administered to the keepers, and I hope to hear no more complaints. The prism is in perfect order.

4. We inspected the buildings, which had suffered in the last cyclone, and left instructions as to what portions should be repaired. The Pámban Pass itself does not seem to have silted up, but a dredge is wanted on the sand banks between Cooreesuddy and Pámban, where the currents take bends and cause obstructions. But the question of going to the great expense of providing efficient dredgers has become to a great extent dependent on the realization, or withdrawal, of the Pámban Canal project. We from time to time hear this scheme alluded to in newspapers and occasional letters, and a confident tone is assumed about it. Hon. Colonel Shaw-Stewart saw some of the trial pits bored early in 1882 by order of the Madras Government, and was able to take a very good view of the country and form an opinion on the feasibility of the canal. I also took occasion to point out to him the difficulties connected with navigation, which, in my judgment, will prove fatal to any pecuniary return; the cut itself is nothing, but the approaches on either side are formidable obstacles, and have not received the attention they will claim hereafter, if capitalists are committed to the scheme. In the *Madras Mail* of 15th March 1886, this passage occurs in a leading article dealing with Pondicherry and Monsieur Richaud, its Governor:—"Some progress in the shape of international negotiations has been made in respect to the Pámban Channel project, but neither the English nor French Government has been able to allot funds for the work out of the current year's budget."

5. So far as my inquiries have proceeded, no circular or invitation of any kind has been issued to the mercantile communities of Colombo, Madras or Calcutta, to invest money towards the capital required. The Government of Ceylon, in a letter to the Government of Madras, dated 22nd April 1885, repudiated all active interest in the concern, and though letters direct to the Government of Madras from the promoters, Messrs. Grindrod and Jenkins, relating to railroads in the extreme south of the presidency between Tuticorin, Madura and Ramnad promontory, in connection with the project, have been received, it seems difficult to believe they were written with any hope of practical results. Some opinions of Sir John Coode's have also been published, though probably not under his authority.

6. The general effect of all these communications is to throw discouragement on any effort of ours to improve or maintain the present pass at what will be great expense to port funds. If the canal is formed, it will certainly be sufficient for small vessels such as now frequent the Pámban Pass, and it will, by allowing light-draught steamers of the British India Steam Navigation Company to go through, soon destroy entirely the native trade, which now finds employment for a very good style of vessel and a large class of seafaring natives. Negapatam will be a sufferer by the change, for a steamer will take as many coolies in one trip as half-a-dozen schooners, and only pay one port due. Native merchants exhibit no disposition at present to invest in steam. They know little or nothing about it, and have a very reasonable dread of