GOVERNMENT OF MADRAS.

FINANCIAL DEPARTMENT.

READ—the following paper :—

Resolution of the Government of India, Finance and Commerce Department (Salaries, Establishments, &c.—Rules and General Matters), dated Simla, the 19th April 1892, No. 1637.

Read—

Resolution in this Department, No. 2232, dated 7th May 1890.

Read—also the following extracts from Despatches to and from the Secretary of State :—

Paragraph 2 of Despatch from the Secretary of State, No. 130, dated 9th July 1891.

I desire to direct your attention to the observations in paragraph 12 of the Despatch of the 13th July 1882, No. 81, Public, as to the necessity of submitting, for the consideration of the Secretary of State, any extensive reorganisation of administrative machinery in India.

Despatch to the Secretary of State, No. 342, dated 16th December 1891.

We have the honour to forward, for Your Lordship's consideration, copy of correspondence regarding a revision of the establishment of Naib Tahsildars in the Punjab, at an additional expenditure of about Rs. 18,000 a year.

* * * * *

3. We take this opportunity of suggesting, with reference to paragraph 2 of Your Lordship's Despatch, No. 130 (Financial), dated the 9th July 1891, the issue of somewhat more definite instructions to enable us to decide, in the exercise of the powers of financial control which have been delegated to the Government of India, whether proposals like that now recommended require Your Lordship's sanction. The orders now in force are contained in Lord Hartington's Despatches Nos. 160 (Financial), dated the 25th May 1882, and 81 (Public), dated the 13th July 1882, and Lord Kimberley's Despatch No. 47 (Revenue), dated the 27th May 1886, in which it is laid down that any proposal which involves either (1) a considerable increase of establishments, or (2) the regulation of payments of allowances to a large body of public servants, or (3) a general reorganisation of administrative machinery, should be submitted to Your Lordship, irrespective of the fact that no specific appointment may be created and no salary increased beyond the limits of our powers of sanction. We did not regard the reorganisation of the Punjab process-serving establishment, to which the Despatch of 9th July refers, as being of sufficient importance to require a reference to Your Lordship, either on account of the increased expenditure involved, or on more general grounds; and, but for the receipt of that Despatch, we should not have considered it necessary to trouble Your Lordship with the present reference from the Punjab.

4. We think it would be convenient if the orders quoted in the preceding paragraph were, so far as their nature permits, made more definite. And we propose that it should be laid down, as the rule for future practice, that any scheme for revision of establishments, the estimated annual cost of which exceeds one lakh of rupees, should be reported for Your Lordship's sanction apart from any other rule, but that less costly

measures need not be reported merely on account of the amount of expenditure involved. We should of course be careful to refer any proposal which, apart from the amount of expenditure, appeared to us to involve issues of sufficient importance to warrant their being brought to Your Lordship's notice before orders issued.

Despatch from the Secretary of State, No. 33, dated 25th February 1892.

I have considerd in Council Your Excellency's letter, dated the 16th of December 1891, No. 342, and sanction your revision of the establishment of Naib Tahsildars in the Punjab, at an additional expenditure of about Rs. 18,000 a year.

2. On the general question of a revision of establishments, you ask that you may receive permission to carry into effect, without reference to the Home Government, any scheme which involves a smaller annual cost than a lakh of rupees, provided that it does not include appointments or additions to salary which under other regulations need the Secretary of State's approval, nor contain points of sufficient importance to warrant its being brought to his notice before orders are issued.

3. It is probably desirable that the orders on this subject should be expressed with more precision than hitherto; but Your Excellency's proposal is wider than I am prepared to accept. I think that where urgency does not exist, a revision of establishments which will add more than Rs. 25,000 a year to the expenditure should not be announced or brought into effect until it has received the sanction of the Secretary of State in Council, even though on other grounds it may not, in the whole or in part, require his previous approval.

Resolution—

The Governor-General in Council is pleased to direct that the following addition be made to the audit rules prescribed by Resolution No. 2232, dated the 7th May 1890, in order to give effect to the instructions contained in the correspondence read in the preamble:—

"Under Rule III add—

(4) Revisions of establishments which involve expenditure of more than Rs. 25,000 a year."

Ordered—

That this Resolution be communicated in continuation of No. 2232, dated 7th May 1890, to all Local Governments and Administrations, to all Departments of the Government of India, to the Heads of Department subordinate to this Department, to the Comptroller and Auditor-General and to all Accountants-General and Comptrollers.

(Signed) A. KENSINGTON,
Dy. Secy. to the Govt. of India.

ORDER—dated 11th May 1892, No. 521, Financial.

Recorded.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Revenue Department.
" Public Works Department.

Exd W H. French.

Govt. of {1892} Madras.

FINANCIAL.

Issued

Read. Encl.

G.O., 11th May 1892, No. 521.

MAY.

Order No. 1562 W d/23-5-92

Commd. to the officers concerned in continuation of Govt No. 2482 W d/17.9.90.

(5) J.P. W

Ex. Off. A
Ex. Accts.

Additions to Establishments.

Recording Resolution of the Government of India adding a rule to those defining the powers of that Government in respect of —.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

READ—the following paper:—

From Captain B. P. CREAGH, R.I.M., Officiating Presidency Port Officer, Madras. to the Chief Secretary to Government, dated Madras, 22nd April 1892, No. 1402—114-G.

In continuation of my letter, dated 9th April 1892, No. 1402—102-G., I have the honour to submit the following report of my inspection of the ports and lighthouses on the Western coast between Kundapur and Madras:—

CALICUT.

I arrived here at 3 P.M. on the 19th ultimo and visited the lighthouse and Port office, which were found to be in good condition. The office books were up to date and the general port arrangements satisfactory. Next morning I proceeded to the adjacent port of

BEYPORE.

Here a complaint was made to me by certain Moplahs that a groyne which was run out sometime back to a small island in order to improve the bar was the cause of erosion to the southward of the groyne which is endangering a mosque situated about half-a-mile distant. The cutting away of the beach is, however, very gradual, and, as I informed the men, it would be obviated by a few cart-loads of stone sufficient to form a small groyne in the neighbourhood of the mosque.

The flagstaff at this port is in satisfactory condition.

At 3 A.M. on the 21st I embarked in the B. I. Steamer *Warora* and at 6 A.M. on the same day arrived at

BADAGARA.

The flagstaff and signal flags at this port were in good condition. At 9 A.M. I re-embarked in the *Warora* and at 11 A.M. landed at

TELLICHERRY.

I found the office books kept in order and the light in a satisfactory condition. There was an outer glass shade over the lens which I ordered to be removed, as it only appeared to obstruct the light's rays without being of any apparent use. At 3 P.M. I returned to the ship, and afterwards observed the lights of Tellicherry and Cannanore (also Mahé) from seaward and found them to be shewing fairly well and to their full range, *viz.*, about nine miles. The two former lights are shortly to be improved by circular burners which are to take the place of the duplex burners now in use. At 8 A.M. on 22nd March I arrived at

Mangalore.

The lighthouse and Port office were in good order and the office books up to date. The flagstaff at this port is completely rotten, and a new one already sanctioned by Government is about to be erected. There is a fair native trade at this port. Messrs. Shepherd and Company's steamers from Bombay are now able to cross the bar at high water and to come inside the sand spit that forms the harbour to discharge and load cargo and passengers. I am of opinion that the dredger *Wenlock* could be usefully employed here. The entrance to the port when I was here in 1885 was opposite to the Custom House. The different measures which have been adopted since 1871 to keep open this channel have all proved to be futile as this entrance has been entirely closed by the action of the sea. The channel to the bar is now cutting out by the southern boundary pillar. The Buntwall river is here causing a good deal of erosion, so much so that this boundary pillar has to be removed further back in order to prevent its being altogether washed away during the next rains.

A small wooden pier near the Custom House would be of great use for facilitating the discharging and loading of boats, the coolies having, for want of some such convenience, to wade through the water out to the boats with the goods which have to be shipped or landed. The river channels, however, being so uncertain, a small pier of an inexpensive structure would be all that is required or that would be warranted from the history of the port since 1858. The growth of sand plants, such as screw pine, rabbit wort and other protective vegetation, all along the sand-spit, should be encouraged and every means used to bind the sand-spit and to prevent the river in front of the town from again breaking through the strip of sand facing the sea. The only erosion, however, at present taking place is, as already remarked, towards the southern boundary pillar, and I have asked Mr. I. H. Fletcher, the Port officer, if he can suggest any method for binding the sand hereabouts.

A continuation of the present quay wall by reclamation assisted by the dredger's spoil if the *Wenlock* were employed at this port was discussed by the Collector, Mr. V. A. Brodie. I think that this would be a good method for utilizing the spoil and the reclamation would train the scour and probably assist in keeping the channel clear, besides becoming very valuable land and the outlay repaid if the railway were extended to Mangalore. On the 24th March I left Mangalore *viâ* Malpé in Messrs. Shepherd & Co.'s steamer and at 9 A.M. that day arrived at

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I landed here in a steam launch of Messrs. Shepherd & Co. which plies along the coast between here and Mangalore. Kundapur has deep water inside and tolerably large-sized buglahs are able to lie alongside and discharge on to the beach. The new sixth-order dioptric port light recently brought into use at this port is well placed and kept in good order and the light gives fair satisfaction. The Commanders of Messrs. Shepherd & Co.'s steamers say that they cannot see the light sufficiently far; this perhaps is owing to their dread of the outlying dangers keeping them outside the range of the light. I have left instructions for the range of this light being tested, and perhaps at some future period when the trade of the port has sufficiently developed itself, a more powerful light of the fourth order might be substituted for the present one.

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The new sixth order dioptric port light here gives satisfaction.

The want of a small stone bunder is much felt at this port. There is at present no place to stack goods awaiting shipment except a narrow public road—the only cart-track that there is to the beach. This obviously soon becomes blocked for some distance when there are any goods to be loaded or discharged, and during both operations things get hopelessly mixed. This reclamation would, therefore, be a great facility to the trade, but the subject, I observe, has already been represented to Government and action deferred on financial grounds—G.O., dated 15th October 1889, No. 438, Marine. At 6 A.M. on 26th March I visited

Deria Bahadur Ghur.

This would be a good site for a coast light if increased trade should hereafter render an improvement in such lights necessary. At present, however, the Malpé light appears to be all that is required for the trade of the port. Deria Bahadur Ghur is 70 feet high crowned by an old fort and distant two miles from the mouth of the Malpé river. The Salt Department have, I understand, removed their depôt from this island, and the natives of Ratnagiri, who frequent the island in large numbers for fishing and curing, are now able to carry on their trade unmolested and to water their boats from a small perennial spring of good water. This well is also used by the coasting craft, and the inconveniences that they experienced in being prevented from watering their boats have since been removed.

At 11 A.M. I left in the port boat for Mangalore, arriving there at 5 P.M. At 6 P.M. next day I left Mangalore in the S.S. *Camorta*, and at 6 A.M. on the following day (28th ultimo) I arrived at

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The boat jetty here is in good order, but, being some distance from the native town, is only used by troops landing and embarking.

At the request of Mr. F. W. Dumergue, the Collector of Malabar, I paid a visit to the small neighbouring port of Valiapatam, but had not time to inspect the bar on which I was led to understand there is 6 feet water at L.W.O.S. I directed the Conservator to have soundings taken on the bar. A large trade in timber is carried on here. At noon of the same day, I left by the *Camorta* and *via* Tellicherry and Calicut arrived at 7 A.M. on 30th March at

Cochin.

The Port office, lighthouse and Marine buildings were in good order, and the office books were satisfactorily kept. The back mirror for the Cochin light which was recommended by Mr. Douglass has been obtained from England, but the Port officer experienced some difficulty in fixing it, and Colonel Drake Brockman, Superintending Engineer, IV Circle, who lately visited the lighthouse, also saw some difficulty in the matter. I am therefore sending the lighthouse mechanic to Cochin to put up the mirror.

The beach in front of the Cruz Milagre Gap has extended considerably, so much so that the old groynes run out here are now completely buried in the sand and their site cannot easily be ascertained. There appears, at present, no probability of any difficulty arising at this place.

I also visited the Vypeen revetment which was completed last January and a small foreshore revetment which is now in hand and will be an improvement to the port when finished.

The European merchants complained that they have great difficulty with the boatmen when discharging grain from chartered ships, as the men will not wait at the Custom House to have the bags weighed when directed to do so, but, instigated probably by the native merchants with the object of defrauding the ship of ear[illegible]

freight, pass into native territory before the grain bags can be weighed. Competition among the merchants is keen and they do not appear willing to combine to protect themselves. I asked Mr. W. Black, of Messrs. Aspinwall and Co., who was the principal person to bring forward the complaint, to address the Collector of the district on the subject.

The Dredger *Wenlock* might be used on the Cochin bar as a tentative measure and I will ask the Port officer, Mr. Winckler, to send in a plan of soundings to form an idea of how long it will take to dredge here. I should think about a month would be sufficient for the experiment, and November and December should be the best months for work. On receipt of the necessary information from the Port officer, I will submit a more detailed report to Government.

A steamer of about 1,600 tons crossed the bar while I was here after discharging half of her cargo outside.

En route to Muttum, I availed myself of the opportunity afforded by the steamer paying a visit to

ALLEPPEY.

The lighthouse here is in very good condition. The pier, not having been made sufficiently long, has become silted up and the sea end is quite dry. When Madras has been supplied with its new 3rd-order light, Alleppey and Muttum will be the only 1st-class lights in this Presidency.

Through the courtesy of the Managing Agents of the B.I.S.N. Company, the steamer called at

MUTTUM

and I was thus enabled to land here and inspect the lighthouse. I found everything connected with the lighthouse in good order and reflecting much credit on the Superintendent. Some iron gratings which were supplied by the Public Works Department on Mr. Douglass' recommendation do not fit, owing to mistake in measurement. Mr. Chatterton, the Superintendent of the lighthouse, is in communication with the Divisional Engineer as to what can be done in the matter. I am afraid, however, that new castings will have to be made. At 6 A.M. on 2nd April I arrived at

TUTICORIN

and found the lighthouse in good condition, the general port arrangements satisfactory (the condition of the pier excepted), and the office books kept up to date. The pier is worn and the necessity for a new iron pier is becoming more and more apparent. The matter is before Government. From Tuticorin, in anticipation of the approval of Government to my doing so, I proceeded to

COLOMBO

where I arrived at 2 P.M. on 3rd April, and on the following day visited Messrs. John Walker and Co.'s iron works and saw a small slip on which the Ceylon Government Dredger *Merak* was hauled up for repairs and cleaning. I interviewed one of the partners of the firm, who informed me that they are thinking of increasing the size of the slip to take the new dredger building for Colombo. I am in correspondence with the firm relative to docking the *Wenlock* and as to whether her own crew would be allowed to do the cleaning and painting. I am inclined to believe that, could the *Wenlock* be docked at Colombo, a great saving in time and expenses would be effected. At 5 P.M. on the 4th April I left Colombo in the B.I. Steamer *Aska* and at 7 A.M. next day arrived at

PAMBAN

where I inspected the dredger *Wenlock* at work in the sand-bank channel and found her working satisfactorily. The repairs executed in Bombay and the spare gear supplied to the vessel appeared also to have been well done. One capstan pinion wheel was worn nearly through, and I directed the Port officer to replace it by obtaining a spare one from Colombo. It is only a small job of about 6″ in diameter.

The general port arrangements at Pámban were satisfactory, the office books up to date and the light in order.

Messrs. Adamson, MacTaggart and Co. requested that passengers might be allowed to embark on their ships at Pámban coming direct from Mandapam in boats. I see no objection to this and have already addressed Government on the subject.

I left Pámban at 1 P.M. on the 6th instant and at 4 P.M. arrived at

TONDI

and inspected the site for the new sixth-order dioptric port light to be exhibited at this port. The foundation for the mast is nearly finished, and I have directed the Port officer at Negapatam to arrange for having the mast and service cabin put up as soon as possible. The Sea Customs Superintendent here does not appear to understand much about lights or coast work. At 8 A.M. I returned on board and proceeded to Negapatam, inspecting *en route* the Calimere and Negapatam lights, which I found to be visible to their range, the Calimere light showing at a distance of about 9 miles. At daylight of the 7th instant I landed at

NEGAPATAM

and found the lighthouse and port arrangements in a satisfactory condition, and the office books up to date. A pier would be a facility to the work of the port in the summer months when the bar is bad, and the merchants as a body are anxious to have one, but the further consideration of the proposals in this connection has, I observe, been abandoned (G.O., Marine, No. 99, dated 24th March 1892). At daylight of the 8th instant I arrived at

CUDDALORE

and inspected the dredger at this port working in front of the Custom House. I ordered her to deepen the channel towards the bar, when the work in front of the Custom House is completed. The Fort St. David bar is rapidly closing up, it being now about half the width it was on my last visit, and provided there are strong south winds may close up altogether in two or three weeks. If it does not do so, nature should be assisted to accomplish this object, or trouble on the other bar may be expected, which will be seriously felt during the large shipments of ground nuts which are shortly expected at this port. The Conservator has been directed to report weekly on the condition of the Fort St. David bar.

The Conservator's office books were well kept and the light and flagstaff are in good condition.

At 6 A.M. on the 9th I returned to Madras, having inspected the Madras light from the steamer and found it to be satisfactory.

ORDER—dated 4th May 1892, No. 141, Marine.

Recorded, with the following remarks:—

Tellicherry.—A separate communication in regard to the proposed wooden jetty is awaited.

Malpé.—As the South Canara Port Fund has now a credit balance of over Rs. 35,000, the Collector will be requested to report as to the advisability of constructing a quay wall at this port.

Cannanore.—The Presidency Port Officer will report whether the lighthouse is protected by a lightning conductor, and, if so, when it was last tested.

Muttum.—Copy of the Presidency Port Officer's remarks regarding this port will be furnished to the Public Works Department.

Colombo.—Captain Creagh's deputation to Ceylon has been sanctioned by G.O., dated 26th April 1891, No. 128.

2. The report is satisfactory.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Presidency Port Officer.
" Public Works Department.
" Collector of Malabar.
" " of South Canara.
" " of Tinnevelly.
" " of Tanjore.
" " of South Arcot.
" " of Madura.
" Resident, Travancore and Cochin.

Exd. A. Raitt.

Govt. of {1892} Madras.

MARINE.

Issued

Recd. *Encl.*

G.O., 4th May 1892, No. 141.

MAY.

Ports and Lighthouses.

Recording, with remarks, inspection report of the Officiating Presidency Port Officer on the — on the Western coast.

No. 1561 W dy 23d May '92

Communicated to
the Supdg Engineer Cons
Cerned.

(Signed) C.V.B.

Ls Es IV. V & VI Circles

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En route to Muttum, I availed myself of the opportunity afforded by the steamer paying a visit to

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The lighthouse here is in very good condition. The pier, not having been made sufficiently long, has become silted up and the sea end is quite dry. When Madras has been supplied with its new 3rd-order light, Alleppey and Muttum will be the only 1st-class lights in this Presidency.

Through the courtesy of the Managing Agents of the B.I.S.N. Company, the steamer called at

MUTTUM

and I was thus enabled to land here and inspect the lighthouse. I found everything connected with the lighthouse in good order and reflecting much credit on the Superintendent. Some iron gratings which were supplied by the Public Works Department on Mr. Douglass' recommendation do not fit, owing to mistake in measurement. Mr. Chatterton, the Superintendent of the lighthouse, is in communication with the Divisional Engineer as to what can be done in the matter. I am afraid, however, that new castings will have to be made. At 6 A.M. on 2nd April I arrived at

TUTICORIN

and found the lighthouse in good condition, the general port arrangements satisfactory (the condition of the pier excepted), and the office books kept up to date. The pier is worn and the necessity for a new iron pier is becoming more and more apparent. The matter is before Government. From Tuticorin, in anticipation of the approval of Government to my doing so, I proceeded to

COLOMBO

where I arrived at 2 P.M. on 3rd April, and on the following day visited Messrs. John Walker and Co.'s iron works and saw a small slip on which the Ceylon Government Dredger *Merak* was hauled up for repairs and cleaning. I interviewed one of the partners of the firm, who informed me that they are thinking of increasing the size of the slip to take the new dredger building for Colombo. I am in correspondence with the firm relative to docking the *Wenlock* and as to whether her own crew would be allowed to do the cleaning and painting. I am inclined to believe that, could the *Wenlock* be docked at Colombo, a great saving in time and expenses would be effected. At 5 P.M. on the 4th April I left Colombo in the B.I. Steamer *Aska* and at 7 A.M. next day arrived at

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where I inspected the dredger *Wenlock* at work in the sand-bank channel and found her working satisfactorily. The repairs executed in Bombay and the spare gear supplied to the vessel appeared also to have been well done. One capstan pinion wheel was worn nearly through, and I directed the Port officer to replace it by obtaining a spare one from Colombo. It is only a small job of about 6″ in diameter.

The general port arrangements at Pámban were satisfactory, the office books up to date and the light in order.

Messrs. Adamson, MacTaggart and Co. requested that passengers might be allowed to embark on their ships at Pámban coming direct from Mandapam in boats. I see no objection to this and have already addressed Government on the subject.

I left Pámban at 1 P.M. on the 6th instant and at 4 P.M. arrived at

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and inspected the site for the new sixth-order dioptric port light to be exhibited at this port. The foundation for the mast is nearly finished, and I have directed the Port officer at Negapatam to arrange for having the mast and service cabin put up as soon as possible. The Sea Customs Superintendent here does not appear to understand much about lights or coast work. At 8 A.M. I returned on board and proceeded to Negapatam, inspecting *en route* the Calimere and Negapatam lights, which I found to be visible to their range, the Calimere light showing at a distance of about 9 miles. At daylight of the 7th instant I landed at

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and found the lighthouse and port arrangements in a satisfactory condition, and the office books up to date. A pier would be a facility to the work of the port in the summer months when the bar is bad, and the merchants as a body are anxious to have one, but the further consideration of the proposals in this connection has, I observe, been abandoned (G.O., Marine, No. 99, dated 24th March 1892). At daylight of the 8th instant I arrived at

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and inspected the dredger at this port working in front of the Custom House. I ordered her to deepen the channel towards the bar, when the work in front of the Custom House is completed. The Fort St. David bar is rapidly closing up, it being now about half the width it was on my last visit, and provided there are strong south winds may close up altogether in two or three weeks. If it does not do so, nature should be assisted to accomplish this object, or trouble on the other bar may be expected, which will be seriously felt during the large shipments of ground nuts which are shortly expected at this port. The Conservator has been directed to report weekly on the condition of the Fort St. David bar.

The Conservator's office books were well kept and the light and flagstaff are in good condition.

At 6 A.M. on the 9th I returned to Madras, having inspected the Madras light from the steamer and found it to be satisfactory.

ORDER—dated 4th May 1892, No. 141, Marine.

Recorded, with the following remarks:—

Tellicherry.—A separate communication in regard to the proposed wooden jetty is awaited.

Malpé.—As the South Canara Port Fund has now a credit balance of over Rs. 35,000, the Collector will be requested to report as to the advisability of constructing a quay wall at this port.

Cannanore.—The Presidency Port Officer will report whether the lighthouse is protected by a lightning conductor, and, if so, when it was last tested.

Muttum.—Copy of the Presidency Port Officer's remarks regarding this port will be furnished to the Public Works Department.

Colombo.—Captain Creagh's deputation to Ceylon has been sanctioned by G.O., dated 26th April 1891, No. 128.

2. The report is satisfactory.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Presidency Port Officer.
" Public Works Department.
" Collector of Malabar.
" " of South Canara.
" " of Tinnevelly.
" " of Tanjore.
" " of South Arcot.
" " of Madura.
" Resident, Travancore and Cochin.

Exd. A. Raitt.

Govt. of {1892} Madras.

MARINE.

Issued

Recd. *Encl.*

G.O., 4th May 1892, No. 141.

MAY.

Ports and Lighthouses.

Recording, with remarks, inspection report of the Officiating Presidency Port Officer on the — on the Western coast.

No: 1561 W dy 23d May 92

Communicated to Supdg Engineers Concerned.

(Signed) C.D.B.

S.Es. IV. V. VI Circles

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

READ—the following paper:—

From Captain B. P. CREAGH, R.I.M., Officiating Presidency Port Officer, Madras, to the Chief Secretary to Government, dated Madras, 22nd April 1892, No. 1402—114-G.

In continuation of my letter, dated 9th April 1892, No. 1402—102-G., I have the honour to submit the following report of my inspection of the ports and lighthouses on the Western coast between Kundapur and Madras:—

CALICUT.

I arrived here at 3 P.M. on the 19th ultimo and visited the lighthouse and Port office, which were found to be in good condition. The office books were up to date and the general port arrangements satisfactory. Next morning I proceeded to the adjacent port of

BEYPORE.

Here a complaint was made to me by certain Moplahs that a groyne which was run out sometime back to a small island in order to improve the bar was the cause of erosion to the southward of the groyne which is endangering a mosque situated about half-a-mile distant. The cutting away of the beach is, however, very gradual, and, as I informed the men, it would be obviated by a few cart-loads of stone sufficient to form a small groyne in the neighbourhood of the mosque.

The flagstaff at this port is in satisfactory condition.

At 3 A.M. on the 21st I embarked in the B. I. Steamer *Warora* and at 6 A.M. on the same day arrived at

BADAGARA.

The flagstaff and signal flags at this port were in good condition. At 9 A.M. I re-embarked in the *Warora* and at 11 A.M. landed at

TELLICHERRY.

I found the office books kept in order and the light in a satisfactory condition. There was an outer glass shade over the lens which I ordered to be removed, as it only appeared to obstruct the light's rays without being of any apparent use. At 3 P.M. I returned to the ship, and afterwards observed the lights of Tellicherry and Cannanore (also Mahé) from seaward and found them to be shewing fairly well and to their full range, *viz.*, about nine miles. The two former lights are shortly to be improved by circular burners which are to take the place of the duplex burners now in use. At 8 A.M. on 22nd March I arrived at

MANGALORE.

The lighthouse and Port office were in good order and the office books up to date. The flagstaff at this port is completely rotten, and a new one already sanctioned by Government is about to be erected. There is a fair native trade at this port. Messrs. Shepherd and Company's steamers from Bombay are now able to cross the bar at high water and to come inside the sand spit that forms the harbour to discharge and load cargo and passengers. I am of opinion that the dredger *Wenlock* could be usefully employed here. The entrance to the port when I was here in 1885 was opposite to the Custom House. The different measures which have been adopted since 1871 to keep open this channel have all proved to be futile as this entrance has been entirely closed by the action of the sea. The channel to the bar is now cutting out by the southern boundary pillar. The Buntwall river is here causing a good deal of erosion, so much so that this boundary pillar has to be removed further back in order to prevent its being altogether washed away during the next rains.

A small wooden pier near the Custom House would be of great use for facilitating the discharging and loading of boats, the coolies having, for want of some such convenience, to wade through the water out to the boats with the goods which have to be shipped or landed. The river channels, however, being so uncertain, a small pier of an inexpensive structure would be all that is required or that would be warranted from the history of the port since 1858. The growth of sand plants, such as screw pine, rabbit wort and other protective vegetation, all along the sand-spit, should be encouraged and every means used to bind the sand-spit and to prevent the river in front of the town from again breaking through the strip of sand facing the sea. The only erosion, however, at present taking place is, as already remarked, towards the southern boundary pillar, and I have asked Mr. I. H. Fletcher, the Port officer, if he can suggest any method for binding the sand hereabouts.

A continuation of the present quay wall by reclamation assisted by the dredger's spoil if the *Wenlock* were employed at this port was discussed by the Collector, Mr. V. A. Brodie. I think that this would be a good method for utilizing the spoil and the reclamation would train the scour and probably assist in keeping the channel clear, besides becoming very valuable land and the outlay repaid if the railway were extended to Mangalore. On the 24th March I left Mangalore *viâ* Malpé in Messrs. Shepherd & Co.'s steamer and at 9 A.M. that day arrived at

KUNDAPUR.

I landed here in a steam launch of Messrs. Shepherd & Co. which plies along the coast between here and Mangalore. Kundapur has deep water inside and tolerably large-sized buglahs are able to lie alongside and discharge on to the beach. The new sixth-order dioptric port light recently brought into use at this port is well placed and kept in good order and the light gives fair satisfaction. The Commanders of Messrs. Shepherd & Co.'s steamers say that they cannot see the light sufficiently far; this perhaps is owing to their dread of the outlying dangers keeping them outside the range of the light. I have left instructions for the range of this light being tested, and perhaps at some future period when the trade of the port has sufficiently developed itself, a more powerful light of the fourth order might be substituted for the present one.

At 12–30 P.M. I left Kundapur in the Mangalore port boat, which had been previously sent up, and at 4 P.M. arrived at

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The new sixth order dioptric port light here gives satisfaction.

The want of a small stone bunder is much felt at this port. There is at present no place to stack goods awaiting shipment except a narrow public road—the only cart-track that there is to the beach. This obviously soon becomes blocked for some distance when there are any goods to be loaded or discharged, and during both operations things get hopelessly mixed. This reclamation would, therefore, be a great facility to the trade, but the subject, I observe, has already been represented to Government and action deferred on financial grounds—G.O., dated 15th October 1889, No. 438, Marine. At 6 A.M. on 26th March I visited

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This would be a good site for a coast light if increased trade should hereafter render an improvement in such lights necessary. At present, however, the Malpé light appears to be all that is required for the trade of the port. Deria Bahadur Ghur is 70 feet high crowned by an old fort and distant two miles from the mouth of the Malpé river. The Salt Department have, I understand, removed their depôt from this island, and the natives of Ratnagiri, who frequent the island in large numbers for fishing and curing, are now able to carry on their trade unmolested and to water their boats from a small perennial spring of good water. This well is also used by the coasting craft, and the inconveniences that they experienced in being prevented from watering their boats have since been removed.

At 11 A.M. I left in the port boat for Mangalore, arriving there at 5 P.M. At 6 P.M. next day I left Mangalore in the S.S. *Camorta*, and at 6 A.M. on the following day (28th ultimo) I arrived at

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and visited the Conservator's office and lighthouse. One of the lenses of the light was found to be cracked, the cause being attributed to lightning, and although it does not appear to affect the range of the light much, I think a spare lens should be available to replace the cracked one and will have a suitable lens demanded in the next Home indent.

The boat jetty here is in good order, but, being some distance from the native town, is only used by troops landing and embarking.

At the request of Mr. F. W. Dumergue, the Collector of Malabar, I paid a visit to the small neighbouring port of Valiapatam, but had not time to inspect the bar on which I was led to understand there is 6 feet water at L.W.O.S. I directed the Conservator to have soundings taken on the bar. A large trade in timber is carried on here. At noon of the same day, I left by the *Camorta* and *via* Tellicherry and Calicut arrived at 7 A.M. on 30th March at

COCHIN.

The Port office, lighthouse and Marine buildings were in good order, and the office books were satisfactorily kept. The back mirror for the Cochin light which was recommended by Mr. Douglass has been obtained from England, but the Port officer experienced some difficulty in fixing it, and Colonel Drake Brockman, Superintending Engineer, IV Circle, who lately visited the lighthouse, also saw some difficulty in the matter. I am therefore sending the lighthouse mechanic to Cochin to put up the mirror.

The beach in front of the Cruz Milagre Gap has extended considerably, so much so that the old groynes run out here are now completely buried in the sand and their site cannot easily be ascertained. There appears, at present, no probability of any difficulty arising at this place.

I also visited the Vypeen revetment which was completed last January and a small foreshore revetment which is now in hand and will be an improvement to the port when finished.

The European merchants complained that they have great difficulty with the boatmen when discharging grain from chartered ships, as the men will not wait at the Custom House to have the bags weighed when directed to do so, but, instigated probably by the native merchants with the object of defrauding the ship of earned

freight, pass into native territory before the grain bags can be weighed. Competition among the merchants is keen and they do not appear willing to combine to protect themselves. I asked Mr. W. Black, of Messrs. Aspinwall and Co., who was the principal person to bring forward the complaint, to address the Collector of the district on the subject.

The Dredger *Wenlock* might be used on the Cochin bar as a tentative measure and I will ask the Port officer, Mr. Winckler, to send in a plan of soundings to form an idea of how long it will take to dredge here. I should think about a month would be sufficient for the experiment, and November and December should be the best months for work. On receipt of the necessary information from the Port officer, I will submit a more detailed report to Government.

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The lighthouse here is in very good condition. The pier, not having been made sufficiently long, has become silted up and the sea end is quite dry. When Madras has been supplied with its new 3rd-order light, Alleppey and Muttum will be the only 1st-class lights in this Presidency.

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and inspected the dredger at this port working in front of the Custom House. I ordered her to deepen the channel towards the bar, when the work in front of the Custom House is completed. The Fort St. David bar is rapidly closing up, it being now about half the width it was on my last visit, and provided there are strong south winds may close up altogether in two or three weeks. If it does not do so, nature should be assisted to accomplish this object, or trouble on the other bar may be expected, which will be seriously felt during the large shipments of ground nuts which are shortly expected at this port. The Conservator has been directed to report weekly on the condition of the Fort St. David bar.

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Exd. A. Raitt.

Govt. of {1892} Madras.

MARINE.

Issued

Recd. *Encl.*

G.O., 4th May 1892, No. 141.

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No. 1561 W dy 23d May '92.

Communicated to Supdg Engineers Concerned

(Signed) C.V.B.

Gles IV V & VI Circles.

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Cochin.

The Port office, lighthouse and Marine buildings were in good order, and the office books were satisfactorily kept. The back mirror for the Cochin light which was recommended by Mr. Douglass has been obtained from England, but the Port officer experienced some difficulty in fixing it, and Colonel Drake Brockman, Superintending Engineer, IV Circle, who lately visited the lighthouse, also saw some difficulty in the matter. I am therefore sending the lighthouse mechanic to Cochin to put up the mirror.

The beach in front of the Cruz Milagre Gap has extended considerably, so much so that the old groynes run out here are now completely buried in the sand and their site cannot easily be ascertained. There appears, at present, no probability of any difficulty arising at this place.

I also visited the Vypeen revetment which was completed last January and a small foreshore revetment which is now in hand and will be an improvement to the port when finished.

The European merchants complained that they have great difficulty with the boatmen when discharging grain from chartered ships, as the men will not wait at the Custom House to have the bags weighed when directed to do so, but, instigated probably by the native merchants with the object of defrauding the ship of earned

freight, pass into native territory before the grain bags can be weighed. Competition among the merchants is keen and they do not appear willing to combine to protect themselves. I asked Mr. W. Black, of Messrs. Aspinwall and Co., who was the principal person to bring forward the complaint, to address the Collector of the district on the subject.

The Dredger *Wenlock* might be used on the Cochin bar as a tentative measure and I will ask the Port officer, Mr. Winckler, to send in a plan of soundings to form an idea of how long it will take to dredge here. I should think about a month would be sufficient for the experiment, and November and December should be the best months for work. On receipt of the necessary information from the Port officer, I will submit a more detailed report to Government.

A steamer of about 1,600 tons crossed the bar while I was here after discharging half of her cargo outside.

En route to Muttum, I availed myself of the opportunity afforded by the steamer paying a visit to

ALLEPPEY.

The lighthouse here is in very good condition. The pier, not having been made sufficiently long, has become silted up and the sea end is quite dry. When Madras has been supplied with its new 3rd-order light, Alleppey and Muttum will be the only 1st-class lights in this Presidency.

Through the courtesy of the Managing Agents of the B.I.S.N. Company, the steamer called at

MUTTUM

and I was thus enabled to land here and inspect the lighthouse. I found everything connected with the lighthouse in good order and reflecting much credit on the Superintendent. Some iron gratings which were supplied by the Public Works Department on Mr. Douglass' recommendation do not fit, owing to mistake in measurement. Mr. Chatterton, the Superintendent of the lighthouse, is in communication with the Divisional Engineer as to what can be done in the matter. I am afraid, however, that new castings will have to be made. At 6 A.M. on 2nd April I arrived at

TUTICORIN

and found the lighthouse in good condition, the general port arrangements satisfactory (the condition of the pier excepted), and the office books kept up to date. The pier is worn and the necessity for a new iron pier is becoming more and more apparent. The matter is before Government. From Tuticorin, in anticipation of the approval of Government to my doing so, I proceeded to

COLOMBO

where I arrived at 2 P.M. on 3rd April, and on the following day visited Messrs. John Walker and Co.'s iron works and saw a small slip on which the Ceylon Government Dredger *Merak* was hauled up for repairs and cleaning. I interviewed one of the partners of the firm, who informed me that they are thinking of increasing the size of the slip to take the new dredger building for Colombo. I am in correspondence with the firm relative to docking the *Wenlock* and as to whether her own crew would be allowed to do the cleaning and painting. I am inclined to believe that, could the *Wenlock* be docked at Colombo, a great saving in time and expenses would be effected. At 5 P.M. on the 4th April I left Colombo in the B.I. Steamer *Aska* and at 7 A.M. next day arrived at

PAMBAN

where I inspected the dredger *Wenlock* at work in the sand-bank channel and found her working satisfactorily. The repairs executed in Bombay and the spare gear supplied to the vessel appeared also to have been well done. One capstan pinion wheel was worn nearly through, and I directed the Port officer to replace it by obtaining a spare one from Colombo. It is only a small job of about 6″ in diameter.

The general port arrangements at Pámban were satisfactory, the office books up to date and the light in order.

Messrs. Adamson, MacTaggart and Co. requested that passengers might be allowed to embark on their ships at Pámban coming direct from Mandapam in boats. I see no objection to this and have already addressed Government on the subject.

I left Pámban at 1 P.M. on the 6th instant and at 4 P.M. arrived at

TONDI

and inspected the site for the new sixth-order dioptric port light to be exhibited at this port. The foundation for the mast is nearly finished, and I have directed the Port officer at Negapatam to arrange for having the mast and service cabin put up as soon as possible. The Sea Customs Superintendent here does not appear to understand much about lights or coast work. At 8 A.M. I returned on board and proceeded to Negapatam, inspecting *en route* the Calimere and Negapatam lights, which I found to be visible to their range, the Calimere light showing at a distance of about 9 miles. At daylight of the 7th instant I landed at

NEGAPATAM

and found the lighthouse and port arrangements in a satisfactory condition, and the office books up to date. A pier would be a facility to the work of the port in the summer months when the bar is bad, and the merchants as a body are anxious to have one, but the further consideration of the proposals in this connection has, I observe, been abandoned (G.O., Marine, No. 99, dated 24th March 1892). At daylight of the 8th instant I arrived at

CUDDALORE

and inspected the dredger at this port working in front of the Custom House. I ordered her to deepen the channel towards the bar, when the work in front of the Custom House is completed. The Fort St. David bar is rapidly closing up, it being now about half the width it was on my last visit, and provided there are strong south winds may close up altogether in two or three weeks. If it does not do so, nature should be assisted to accomplish this object, or trouble on the other bar may be expected, which will be seriously felt during the large shipments of ground nuts which are shortly expected at this port. The Conservator has been directed to report weekly on the condition of the Fort St. David bar.

The Conservator's office books were well kept and the light and flagstaff are in good condition.

At 6 A.M. on the 9th I returned to Madras, having inspected the Madras light from the steamer and found it to be satisfactory.

ORDER—dated 4th May 1892, No. 141, Marine.

Recorded, with the following remarks:—

Tellicherry.—A separate communication in regard to the proposed wooden jetty is awaited.

Malpé.—As the South Canara Port Fund has now a credit balance of over Rs. 35,000, the Collector will be requested to report as to the advisability of constructing a quay wall at this port.

Cannanore.—The Presidency Port Officer will report whether the lighthouse is protected by a lightning conductor, and, if so, when it was last tested.

Muttum.—Copy of the Presidency Port Officer's remarks regarding this port will be furnished to the Public Works Department.

Colombo.—Captain Creagh's deputation to Ceylon has been sanctioned by G.O., dated 26th April 1891, No. 128.

2. The report is satisfactory.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Presidency Port Officer.
" Public Works Department.
" Collector of Malabar.
" " of South Canara.
" " of Tinnevelly.
" " of Tanjore.
" " of South Arcot.
" " of Madura.
" Resident, Travancore and Cochin.

Exd. A. Raitt.

P. W. CURRENT No. 2719

ECORD OFFICE.

Govt. of {1892} Madras.

MARINE.

Issued

Recd. Encl.

G.O., 4th May 1892, No. 141.

MAY.

Ports and Lighthouses.

Recording, with remarks, inspection report of the Officiating Presidency Port Officer on the — on the Western coast.

No. 1561 Wdy 23d May '92

Communicated to Supdg Engineers Cnz Concd.

(Signed) B.V.B.

Grs. IV. V & VI Circles.