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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Public works. DEPARTMENT

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads
Civil Works

AD—the following paper:—

NOTES of inspection by the Chief Engineer, Public Works Department.
I Circle, February-March 1885.

COCANADA.—*Extension of harbour groynes.*—This work is making slow progress. It of a projected additional length of 1,900 feet, the north groyne has advanced out 60 feet and the south groyne about 140 feet. I am aware that difficulty has been experienced in the supply of stone, and the port officer has been obliged to build its suitable for the rough work. It may be hoped that progress will be more rapid future.

The section adopted by Captain Baker for these groynes is a good one; but the ones which I saw being placed in position seemed far too small to withstand the force of the sea during a monsoon gale from the north-east; and there seemed reason to anticipate some considerable subsidence through the soft yielding bottom on which the groynes are built.

It seems by no means certain that the extension of the groynes will exercise any permanent effect upon the depth of water over the bar. The bar will, of course, be dredged further into the bay, but whether a better depth of water will be secured is far from certain.

2. *Groynes committee.*—The native merchants of Cocanada are anxious to be represented upon the groynes committee. When that body was first formed, Mr. Samakristna, one of the principal merchants, was appointed as one of the three members; but it is understood that he was obliged to resign through ill-health, and his place was taken by a European merchant. Considering how largely they are interested in the welfare of the port, it seems not unreasonable that the native merchants should be represented on the committee.

3. *Boat traffic in river.*—Some effectual mode of maintaining order among the boats anchored in the river is greatly needed. At present they seem to be moored wherever their owners choose, and at some points almost the whole of the available waterway is blocked.

4. *Iron lattice bridge over river.*—The iron work of this bridge is in great need of careful overhauling. The bracing between the piles is broken in many places, owing probably to corrosion and other causes. The piles also appear to be in need of strengthening. It is understood that the bridge is entirely in the hands of the municipality, and no time should be lost in having it carefully inspected and in carrying out all needful repairs.

5. *Cocanada water supply.*—I understand that this is led off from the Samalkot canal, above the tidal lock, and carried in an open channel into the town. At a point where I saw this channel, it was taken close alongside of a public highway, without any attempt to secure it from pollution by fence or otherwise. The arrangement appeared objectionable in many ways.

6. *Additions to Collector's cutcherry.*—The work is well advanced, and appears to be making fair progress; but the quality of the masonry is not so good as it might be. The walls are constructed of rubble stone, at a rate of about Rs. 3-8-0 per cubic yard. The work is certainly not dear, but it is very rough and lacking in bond.

7. *Quarters for telegraph signallers.*—The work is well advanced, and should be finished before long. The quality of the masonry is better than at the cateberry, but cannot be termed good.

8. *Repairs to Marine Villa.*—This work has proved to be more extensive and more costly than was at first expected. The sanctioned estimate amounts to Rs. 7,700; and when the building is finished, the accommodation afforded will probably be larger than required by the port officer. No time should be lost in bringing the work to completion.

9. *New church.*—This work is in progress under the Local Fund engineer, and the quality of the masonry seems above the average. I was informed that the sanctioned estimate has been exceeded, and that work had therefore come to a stand for the present.

10. *DOWLAISHWERAM—Houses for Superintending and Executive Engineers.*—These buildings are urgently required, as the only ones at present available are in every way unsuitable, being low and damp, and the walls riddled with white-ants. The new house for the Superintending Engineer is in progress, and had risen to basement level at the time of inspection; the work appeared sound and good. The proposal to build the Executive Engineer's house is now before the Government of India.

11. *Telegraph office.*—Considerable inconvenience arises from there being no telegraph office nearer to Dowlaishweram than Rajahmundry, a distance of more than 3 miles, and it seems in every way desirable that an office should be established at a station of such importance as Dowlaishweram.

12. *VIZAGAPATAM—Old military buildings, &c.*—The removal of the native infantry regiment from Vizagapatam has set free a considerable number of military buildings, and these have been, for the most part, handed over to the police and other civil departments.

The land occupied by the native infantry lines was ordered to be cleared, and handed to the Revenue authorities. The clearance has not been done properly, and should be carried out thoroughly without delay, as the huts, in their half destroyed state, are certain to be used as latrines.

The main road is being thoroughly repaired before being handed over to the municipality.

13. *Proposed pier.*—Nothing has been done towards the construction of this pier beyond ascertaining, by boring, that there is sufficient depth of sand to allow screw piles being fixed along the proposed line. It appears probable that the project for a pier must be shelved until the construction of the railway to Raipur is undertaken.

14. *Pontoon bridge across the backwater.*—Beyond advertising for tenders, I could not learn that anything has yet been done towards securing the construction of this much needed communication.

15. *Signal tower on Dolphin's Nose.*—This building is in a state of great disrepair, and has evidently been neglected for years. It is surmounted by a flagstaff, the supporting ropes of which appeared to be rotten, and the wood-work might fall at any time. The present condition of the building is certainly dangerous, and it should be either repaired or pulled down.

16. *BIMLIPATAM—Stone groyne in harbour.*—This groyne has been completed according to estimate at a cost of Rs. 8,107. The quality of the work shows a decided improvement since I inspected it a year ago. The entire length of the groyne is 300 feet; but the result has not been to open a passage into the boat harbour at the point expected, the failure being attributed to the unusually low freshes in the river during 1884.

It was suggested by the Master Attendant that the action of the river freshes should be assisted by cutting an opening through the sand ridge at a point near the groyne, and a sum of Rs. 200 has been sanctioned for the purpose from Port funds, the work to be carried out by the Port officer.

17. *GOPALPUR—New buildings for customs and port offices.*—An estimate, amounting to Rs. 4,050, for adding an upper story to the existing customs building,

was sanctioned in November 1883; but the present Collector of Ganjam took exception to the proposal, and recommended the erection of a new and much larger building, for which estimates are now being prepared. If Mr. Horsfall's recommendation is accepted, the existing buildings must be removed to make way for the new ones. The old buildings are inconveniently designed for the addition of an upper story; and, so far as I am able to judge, looking to the prospects of the port, the course recommended by Mr. Horsfall is the correct one. The site is suitable to the purpose, and convenient in all respects. The line of the proposed pier will start from the centre of the new buildings.

18. *Proposed pier.*—Messrs. Massey and Company's tender for the construction of this pier has been accepted, and it is hoped that the deed of contract will shortly be signed, in which case the completion of the work may be looked for within 18 months or two years.

19. *CHATRAPUR—New residence for Collector of Ganjam.*—The construction of a new residence for the Collector has been ordered, and the plans and estimates are now under preparation by the Consulting Architect. The circumstances connected with the purchase of Onslow Court, and the condemnation of the old building, are briefly stated in an attached précis.

In connection with this, the question arises whether the new house should be built at Chatrapur, which is some 10 miles from everywhere. It is situated at a very inconvenient distance from each of the important towns, Berhampore and Gopalpur; and is near to no place of importance.

Before final action is taken towards building a new house, it seems right to suggest for consideration whether the site should not be changed to Berhampore, where there is a large native town, a regiment, a judge's court, a bank, &c., whereas at Chatrapur there is nothing of the kind, only the Collector and the Superintendent of Police living in the country.

The cost of building a residence for the Collector would probably be the same, whether at Chatrapur or at Berhampore; but, of course, if built at Berhampore, there would be the additional cost of a new cateberry.

One point which deserves consideration in dealing with the question is that any railway made in Ganjam would certainly run from Gopalpur, through Berhampore and Aska, to the valley of the Mahanadi, and by Sonapur to join the new lines under construction and proposed in the Central Provinces. For that reason, as well as for other important reasons connected with administrative convenience, it may be thought worthwhile to incur some present additional outlay, and to take advantage of this opportunity to locate the chief civil officer of the district at a large centre of population and trade.

As regards the purposes for which existing public buildings at Chatrapur might be utilised, in the event of the Collector being moved to Berhampore, it may be thought desirable to transfer to Chatrapur the Senior Assistant now located at Berhampore; and I learn from the Commissioner of Salt and Abkari Revenue that part of the Chatrapur buildings might possibly be utilised in his department. A demi-official letter on the subject from Mr. Bliss is appended.

20. *BERHAMPORE—New cateberry for Senior Assistant Collector.*—This building is in progress, and is capable of enlargement, if thought desirable, with advertence to the previous remarks.

21. *Site for new buildings.*—For any new civil buildings that may be required at Berhampore, an excellent site is available on the high land to the east of the town, near the jail. It is understood that good water is to be had on that site.

22. *Chilka canal.*—This most useful short line of water communication was first suggested by Lieutenant-Colonel (now Major-General) F. C. Cotton, in his interesting report on the capabilities of the Ganjam district, dated 12th July 1856 (*vide* proceedings of Government, dated 24th November 1857, No. 2157). It connects the Ganjam backwater with the Chilka lake, and through it with the Mahanadi and its system of navigable canals.

The work was executed in 1866-1868 by the Public Works Department, and has proved of great assistance to traffic.

Unfortunately, the canal appears not to have been excavated to a sufficient depth, and heavily laden boats have, consequently, great difficulty in navigating it. During 1884 it was decided to deepen the canal to a uniform depth of 6-5 feet below M.S.L., and an estimate was prepared amounting to Rs. 74,000, which sum was allotted in G.O., dated 20th August 1884, No. 2040 W. It was subsequently discovered that this estimate was grossly incorrect, and a revised estimate is now under preparation. It is hoped that this very important work will be carried out early during the year 1885-86.

23. *Extension of canal to Gopálpur.*—As stated above, the object of the Chilka canal was to connect the Ganjam backwater and port with the large system of inland water communication which lies to the north; but the trade of the town of Ganjam seems to have entirely disappeared, and all goods which came down the Chilka canal for export are transferred to carts when they reach the south of the Ganjam backwater and carried by road to Gopálpur.

What has caused the complete disappearance of Ganjam as a trading port is by no means clear; but even 29 years ago General Cotton mentioned the growing preference for Gopálpur, though he was unable to account for it.

In consequence of that tendency shown by goods to seek shipment at Gopálpur, General Cotton suggested, in the report already alluded to, the construction of a second section of canal, to connect the Ganjam and the Gopálpur (or Munsurcotta) backwaters. He observed that such a canal would pass through a singularly favorable natural hollow, occupied then (and now) by a chain of small freshwater lakes; and he raised the question whether the canal should be a tidal one, or a freshwater one with locks.

Up to the present time, nothing has been done towards the construction of this canal; but in 1882-83 the country was carefully surveyed and examined, and a decision arrived at in favor of a tidal canal uniting the two backwaters.

In 1884 an estimate, amounting to Rs. 4,44,335, was submitted to the Government of India for sanction; but, in consequence of slight omissions, a revised estimate, amounting to Rs. 4,51,145, has recently been submitted, and is now awaiting sanction.

It would be difficult to exaggerate the importance to the Ganjam district of this short section of canal. Its construction will complete the last link in the long chain of inland water communication to the north of Gopálpur, and will allow goods to be brought from great distances, without break of bulk, right up to that port, in which, when the pier is completed, the trade of the surrounding country will become more than ever concentrated.

24. *VIZIANAGRAM—Experimental Artesian well.*—At the request of His Highness the Maharajah of Vizianagram, I inspected a boring which is being made near the fort of Vizianagram, in the hope of striking a water-bearing stratum from which a supply may be obtained by an Artesian well.

Mr. Fraser, the engineer in charge, was good enough to show the boring apparatus at work, and to give full information on the subject.

The apparatus and plant seem excellent and suitable in every way. The cost is understood to have been about Rs. 12,000, which did not seem excessive.

At the date of inspection, the depth reached was stated to be 192 feet; and the rock which was being bored through was said by Mr. Fraser to be "intensely hard." On that point, the stuff brought up from the boring left no room for doubt. So far as could be judged, the boring was being made through a very close-grained and hard granitic rock; and it was understood that the greater part of the depth reached had been through rock of a similar character.

The opinion I formed was that there is not much prospect of obtaining water in that locality from an Artesian well, and I have informed His Highness the Maharajah accordingly, advising him to discontinue all expenditure there. I was not, however, in a position to say whether there are better prospects of success in other parts of the territory belonging to him.

ORDER—dated 23rd March 1885, No. 722 W., Public Works.

The above notes of inspection by the Chief Engineer, Public Works Department, are recorded, with the following observations.

Paragraph 1.—The action of the Cocanada harbour groynes on the depth of water over the bar should be carefully watched, and the result reported after sufficient time has elapsed for a decided opinion being formed.

Paragraphs 2, 3 and 15.—Orders on the questions herein raised will issue in the Marine Department.

Paragraphs 4 and 5.—Referred to the Financial Department.

Paragraphs 6, 7, 8 and 12.—The special attention of the Superintending Engineer, I Circle, is drawn to these remarks.

Paragraph 11.—The Director-General of Telegraphs will be requested to favor Government with his views on the subject of a telegraph office at Dowlaishweram.

Paragraphs 19, 20 and 21.—The suggestions in these paragraphs as to the selection of Berhampore for the site of the Collector's new residence and headquarter offices, and the utilisation of existing buildings at Chatrapur will be considered in the Revenue Department.

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, I Circle.

" Chief Engineer for Irrigation.

" Director-General of Telegraphs.

" Marine Department.

" Financial "

" Revenue Department, with two enclosures.

Exd. E. Fernandez.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1885) Madras
PUBLIC WORKS

Dated March, 23rd.

Recd.

Encl.

G.O., 23rd March 1885, No. 722 W.

MARCH.

Notes of Inspection

The — by the Chief Engineer, Public Works Department, of the I Circle, recorded with certain observations.

Notes of inspection by the Chief Engineer.

I Circle February March 1885.

Cocanada. Extension of Harbour Groynes.

This work is making slow progress. Out of a projected additional length of 1900 feet, the north groyne has advanced about 50 feet, and the south groyne about 140 feet. I am aware that difficulty has been experienced in the supply of stone, and the Port Officer has been obliged to ~~supply himself~~ ^{supply} boats suitable for the rough work. It may be hoped that the work will progress will be more rapid in future.

The section adopted by Captain Baker for these groynes is ~~just~~ ^{as good, maybe} ~~the best~~; but the stones which I saw being placed in position seemed ~~to~~ far too small to withstand the force of the sea during a monsoon gale from the north east; and there seemed ~~to~~ ^{be} reason to anticipate some considerable subsidence through the soft ^{yielding} ~~bottom~~ bottom on which the groynes are built.

It seems ~~to~~ ^{be} no means certain that the extension of the groynes will exercise any permanent effect upon the depth of water over the bar. The course be ~~thrown~~ ^{forced} further

into the bay, but whether a better depth of water will be secured is ^{far from} ~~by no means~~ certain.

Groynes Committee. The Native merchants of Cocanada are anxious to be represented upon the Groyne Committee. When that body was first formed, Mr. Namakristna, one of the principal merchants, was appointed as one of the three members; but it is understood that he was obliged to resign through ill health, and his place was taken by a European merchant. Considering how largely they are interested in the welfare of the port, it seems not unreasonable that the Native merchants should be represented on the Committee.

Boat traffic in River.

3 - Some effectual mode of maintaining order among the boats anchored in the river is greatly needed. At present they seem to be moored wherever their owners choose, and at some points almost the whole of the available waterway is blocked.

Iron Lattice Bridge over River.

4 - This bridge is understood to have

4/20 The ironwork of this bridge is in great need of careful overhauling. The bracing between the piers is broken in many places, owing ^{probably} to corrosion & other causes. The piers also appear to be in need of strengthening. It is understood that the bridge is entirely in the hands of the Municipality, and no time should be lost in having it carefully inspected, & in carrying out all needful repairs.

Cocanada water supply.

5 - I understand that this is led off from the Samuel's Canal, above the tidal lock, and carried in an open channel into the town. At a point where I saw this channel, it ~~was~~ was taken ~~along~~ close alongside of a public highway, without any attempt to secure it from pollution by fence or otherwise. The arrangement appeared ^{objectionable} in many ways.

Water supply

New Cuttings for Collector.

Additions to Collector's Cutcherry.

6 - The work is well advanced, & appears to be making fair progress; but the quality of the masonry is not so good as it is. The walls are constructed

of rubble stone, at a rate of about $\$3\frac{1}{2}$ per cubic yard. The work is certainly not dear, but it is very rough, and lacking in bond.

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Repairs to ~~Port~~ Marine Villa.

8. This work has proved to be more extensive & more costly than was at first expected. The sanctioned estimate amounts to $\$700$; and when the ~~work~~ ^{building} is finished, the accommodation afforded will probably be larger than required by the Port Officer. ~~It is~~ No time should be lost in bringing the work to completion.

New Chapel.

9. This work is in progress under the L. F. Engineer, and the quality of the masonry seems above the average. I was informed that the sanctioned estimate has been exceeded, and that work had therefore come to a stand for the present.

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Houses for Sup? &

Executive Engineers.

10. These buildings are urgently required, as the only ones at present available or in every way suitable, being low & damp, and the walls riddled with white ants. The new house for the Sup? Engineer is in progress, and had risen to basement level at the time of my inspection; the work appeared sound & good. The proposal to build the Exec. Engineer's house is now before the Govt. of India.

Telegraph Office.

11. Considerable inconvenience arises from there being no telegraph office nearer to Dowlaiswaram than Rajahmundry, a distance of 10 miles, and it seems in every way desirable that an office should be established at a station of such importance as Dowlaiswaram.

Vijayapattanam

12 - Old Military Buildings 1/22
The removal of the N. I. Regiment from Vijayapattanam has set free a considerable number of military buildings, and these have been for the most part handed over to the Police, & other Civil Dept.

The land occupied by the N. I. lines was ordered to be cleared, & handed to the Revenue authorities. The clearance has not been done properly, and should be carried out thoroughly without delay; as the huts, in this half destroyed state, are certain to be used as latrines.

The main road is being thoroughly repaired, before being handed over to the Municipality.

Proposed Pier

13 - Nothing has been done towards the construction of this pier, beyond ascertaining by boring, that there is sufficient ^{depth of ground} ~~depth of ground~~ to allow screw piles, ^{being fixed} along the proposed line. It appears probable that the ~~construction~~ project for a pier will be shelved until the construction of the railway to Raipur is undertaken.

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Beyond advertising for tenders, I could

not learn that anything has yet been done towards securing the construction of this much needed communication.

Signal tower on Dolphin's nose.

15. This building is in a state of great disrepair, & has evidently been neglected for years. It is surmounted by a flag-staff, the supporting ropes of which appeared to be rotten, and the woodwork might fall at any time. The present condition of the building is certainly dangerous, and it should be either repaired, or pulled down.

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It was suggested by the Master Attendant that the action of the river freshes should be assisted by cutting an opening through the sand ridge at a point near the quay, and a sum of £200 has been sanctioned for the purpose from Port funds; the work to be carried out by the Port Office.

Gopalpur.

New Buildings for Customs & Port Offices.

7. An estimate, amounting to £4,050, for adding an upper story to the existing Customs building, was sanctioned in November 1883; but the present Collector of Ganjam took exception to the proposal, & recommended the erection of a new & much larger building, for which estimates are now being prepared. If Mr. Horsfall's recommendation is accepted, the existing buildings must be removed to make way for the new ones. The old buildings are certainly inconducive to the design for the addition of an upper story; and so far as I am able to judge, looking to the prospect of the port, the course recommended by Mr. Horsfall is the correct one. The site is suitable to the purpose, and convenient in all respects. The line of the proposed pier will start from the centre of the new buildings.

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8. Messrs Messer & Co. tenders for the construction of this pier has been accepted, and it is hoped that the deed of contract will shortly be signed, in which case the completion of the work may be looked for within 18 months or two years.

Chattrapur. new Residence for Collector

19-7-72 Surgeon

The construction of a new residence for the Collector ^{has been} ordered, in G. S. Resam and the plans & estimates are now under preparation by the Town Architect. The circumstances connected with the purchase of Dulong Court, and the condemnation of the old building, are briefly stated in an attached precis.

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Before final action is taken towards building a new house, it seems right that I should ^{to} suggest for consideration whether the site should not be changed to Berhampur, where there is a large native town, a Regiment, a Judge's Court, a Bank, &c. &c.; whereas at Chattrapur there is nothing of the kind, only the Collector & the Supd. Police, living in the country.

The cost of building a residence for the Collector would probably be the same, whether at Chattrapur or at Berhampur; but of course, if built at Berhampur, there would be the additional cost of a new Cutcherry.

One point which deserves consideration in dealing ^{with} the question is that any railway made in Ganjam would certainly run from Gopelpur, through Berhampur & Aska, to the valley of the Mahanadi, and by Dhonepur & ~~Lambapur~~ to join the new line, under construction & proposed, in the Central Provinces.

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Berhampur New Cutcherry for
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This building is in progress, and is capable of enlargement, if thought desirable, with advantage to the previous remarks.

Site for new buildings

For any new civil buildings that may be required at Berhampur, ~~before the~~ an excellent site is available on the high land to the east of the town, near the jail. It is understood that ^{good} excellent water is to be had on that site.

The cost of building a residence for

Chilka Canal.

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This most useful short line of water communication was first suggested by Lt. Colonel (now Major General) F. C. Cotton, in his ^{interesting} report on the capabilities of the Ganjam district, dated 12.7.56. Vide Pro. of Govt. 24-11-57 W.P. 2157. It connects the Ganjam backwater with the Chilka Lake, and through it with the Mahanadi & its system of navigable canals.

The work was executed in 1866-8 by Captain Berby, and has proved of great assistance to traffic.

Unfortunately the canal appears ^{not} to have been excavated to a sufficient depth, and heavily laden boats have consequently great difficulty in navigating it. During 1887, it was decided to deepen the canal to a uniform depth of 5.5 feet below M.S.L. and an estimate was prepared amounting to Rs. 14,600. On 20.6.84 W.P. 2040 W. it was ^{subsequently} discovered that this

8.

estimate was grossly incorrect, and a revised estimate is now under preparation. It is hoped that ^{this very important} work will be carried out early during the year 1885-6.

19/22

Extension of Canal to Gopalpur.

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In 1884, an estimate amounting to £4,44,335 was submitted to the G. of India for sanction; but in consequence of a slight omission, a revised estimate amounting to £4,51,145 has recently been submitted, and is now awaiting sanction.

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11/17.3.85

Saw in Cows 19/3/85

220 hours 19/3/85
13/1/85
C. J. W. 19/3/85

12/22

Notes of inspection by the
Chief Engineer - I. W. L.
February, March 1885.

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4. The iron work of this bridge is in great need of careful overhauling. The bracing between the piles is broken in many places, owing probably to corrosion and other causes. The piles

123
14/22 also appear to be in need of strengthening. It is understood that the bridge is entirely in the hands of the Municipality, and no time should be lost in having it carefully inspected, and in carrying out all needed repairs.

Cocanada Water Supply.

5. I understand that this is led off from the Samulcotta Canal, above the tidal lock, and carried in an open channel into the town. At a point where I saw this channel, it was taken close alongside of a public highway, without any attempt to secure it from pollution by fence or otherwise. The

arrangement appeared
objectionable in many ways.

Additions to Collectors' Cutcherry.

6. The work is well advanced,
and appears to be making
fair progress; but the quality
of the masonry is not ^{so} good
as it might be. The walls
are constructed of rubble
stone, at a rate of about
Rs 3/8 per cubic yard. The
work is certainly not dear,
but it is very rough, and
lacking in bond.

Quarters for Telegraph Signallers.

7. The work is well
advanced, and should be

15/222 finished before long. The
quality of the masonry is
better than at the Cutcherry,
but cannot be termed good.

Repairs to Marine Villa

8. This work has proved to
be more extensive and more
costly than was at first
expected. The sanctioned
estimate amounts to Rs 7,700;
and when the building is
finished, the accommodation
afforded will probably be
larger than required by the
Port officer. No time should
be lost in bringing the
work to completion.

New Church

9. This work is in progress

under the S. I. Engineer,
and the quality of the masonry
seems above the average.

I was informed that the
sanctioned estimate has been
exceeded, and that work
had therefore come to a
stand for the present.

Dowlaishevaram.

Ames for Supt. and Executive Engineers.

10. These buildings are
urgently required, as the
only ones at present ^{available} are in
every way unsuitable, being
low and damp, and the
walls piddled with white
ants. The new house for
the Supt. Engineer is in
progress, and had risen

16/22

to basement level at the
time of inspection; the
work appeared sound and
good. The proposal to
build the Executive Engineer's
house is now before the
Govt of India.

Telegraph Office.

11. Considerable inconvenience
arises from there being no
telegraph office nearer to
Dowlaishevaram than

Rajahmundry, a distance
^{more than} of three miles, and it seems
in every way desirable
that an office should be
established at a station
of such importance as
Dowlaishevaram.

Vizagapatnam

Vizagapatam

Old Military Buildings &c

12. The removal of the N. I. Regt from Vizagapatam has set free a considerable number of military buildings, and these have been for the most part handed over to the Police, and other Civil Departments.

The land occupied by the N. I. lines was ordered to be cleared, and handed to the Revenue authorities. The clearance has not been done properly, and should be carried out thoroughly without delay, as the huts, in their half

12/22 destroyed state, are certain to be used as latrines.

The main road is being thoroughly repaired, before being handed over to the Municipality.

Proposed Pier.

13. Nothing has been done towards the construction of this pier, beyond ascertaining, by boring, that there is sufficient depth of sand to allow screw piles being fixed along the proposed line. It appears probable that the project for a pier must be shelved until the construction of the railway to Raipur is undertaken.

Pontoon Bridge across
the Backwater.

14. Beyond advertising for
tenders, I could not learn
that anything has yet
been done towards securing
the construction of this much
needed communication.

Signal Tower on Dolphin's
Nose.

15. This building is in a
state of great disrepair, and
has evidently been neglected
for years. It is surmounted
by a flagstaff, the supporting
ropes of which appeared to
be rotten, and the wood-
work might fall at any
time. The present condition
of the building is certainly

18/222

dangerous, and it should
be either repaired, or pulled
down.

Bimlipatam. Stone
Groyne in Harbour.

16. This groyne has been
completed according to estimate,
at a cost of Rs 8,207/-.
The quality of the work shows
a decided improvement
since I inspected it a year
ago. The entire length
of the groyne is 300 feet;
but the result has not been
to open a passage into the
boat harbour at the point
expected; the failure being
attributed to the unusually
low freshes in the river
during 1884.

It was suggested by
the Master Attendant
that the action of the river
fresher should be assisted
by cutting an opening
through the sand ridge
at a point near the groyne,
and a sum of £ 200 has
been sanctioned for the
purpose from Port funds,
the work to be carried
out by the Port officer.

Gopalpur New Buildings
for Customs and Port
offices.

17. An estimate, amounting
to Rs 4,050, for adding
an upper story to the existing
Customs building, was sanctioned
in November 1883, but the

19
222

present Collector of Ganjam
took exception to the proposal,
and recommended the erection
of a new and much larger
building, for which estimates
are now being prepared.
If Mr Horsfall's recom-
mendation is accepted,
the existing buildings must
be removed to make way
for the new ones. The old
buildings are inconveniently
designed for the addition
of an upper story; and so
far as I am able to judge,
looking to the prospects of
the port, the course recom-
mended by Mr Horsfall
is the correct one. The
site is suitable to the

purpose, and convenient
in all respects. The line
of the proposed pier will
start from the centre of the
new buildings.

Proposed Pier.

18. Messrs Massey & Co's
tender for the construction
of this pier has been
accepted, and it is hoped
that the deed of contract
will shortly be signed, in
which case the completion
of the work may be looked
for within 18 months or
two years.

Chattrapur - New Residence
for Collector of Ganjam

19. The construction of a new

20/22

residence for the Collector
has been ordered, and the
plans and estimates are now
under preparation by the
Consulting Architect.

The circumstances connected
with the purchase of Ouslon
Court, and the condemnation
of the ~~whole~~^{old} building, are
briefly stated in an
attached paper.

In connection with this,
the question arises whether
the new house should be
built at Chattrapur, which
is some ten miles from
everywhere. It is situated
at a very inconvenient
distance from each of the
important towns, Berhampur

and Gopalpur, and is near
to no place of importance.

Before final action is
taken towards building a
new house, it seems right
to suggest for consideration
whether the site should not
be changed to Berhampur,
where there is a large
native town, a Regiment,
a Judge's Court, a Bank,
११०० - १६०० -; whereas
at Chattrapur there is
nothing of the kind, only
the Collector and the
Superintendent of Police,
living in the country.

The cost of building
a residence for the Collector
would probably be the same,

2/22 whether at Chattrapur or
at Berhampur; but of course,
if built at Berhampur,
there would be the additional
cost of a new cantonment.

One point which deserves
consideration in dealing with
the question is that any
railway made in Ganjam
would certainly run from
Gopalpur, through Berhampur
and Aska, to the valley of
the Mahanadi, and by
Sonepur to join the new
lines under construction and
proposed in the Central
Provinces. For that reason,
as well as for other important
reasons connected with
administrative convenience,

it may be thought worth
while to incur some present
additional outlay, and to
take advantage of this
opportunity to locate the
chief civil officer of the
district at a large centre
of population and trade.

As regards the purposes
for which existing public
buildings at Chattrapur
might be utilised, in the
event of the Collector being
moved to Berhampur, it
may be thought desirable
to transfer to Chattrapur
the Senior Assistant, now
located at Berhampur; and
I learn from the Commissioners

22/22

of Salt and Akhari Revenue
that part of the Chattrapur
buildings might possibly
be utilised in his Dept.

A demi official letter on
the subject from Mr. Bliss
is appended.

Berhampur. New Cutcherry
for Senior Assistant Collector

20. This building is in
progress, and is capable of
enlargement, if thought desirable,
with advertence to the previous
remarks.

Site for new buildings.

21. For any new civil
buildings that may be required
at Berhampur, an excellent
site is available on the

high land to the east of
the town, near the jail.

It is understood that
good water is to be had
on that site.

Chilka Canal.

22. This most useful short
line of water communication
was first suggested by

Lt Colonel (now Major General)

J. C. Cotton, in his interesting
report on the capabilities
of the Ganjam District,

dated 12th July 1856 - vide

Pro: of Govt 24th Novr 1857

N^o 2167. It connects the

Ganjam backwater with

the Chilka Lake, and

through it with the Mahanadi

and its system of navigable
canals.

23/22 The work was executed
in 1866-8 by the S.W. Dept.,
and has proved of great
assistance to traffic.

Unfortunately the canal
appears not to have been
excavated to a sufficient
depth, and heavily laden
boats have consequently
great difficulty in navigating
it. During 1884, it was
decided to deepen the canal
to a uniform depth of
6.5 feet below M.S.L.;
and an estimate was
prepared amounting to
Rs 74,600, which sum was
allotted in G.O. 20th August 1884

N^o 2040 W. It was
subsequently discovered
that this estimate was
grossly incorrect, and a
revised estimate is now
under preparation. It is
hoped that this very
important work will be
carried out early during
the year 1885/86.

Extension of Canal to Gopalpur.

23. As stated above, the
object of the Chilka Canal
was to connect the Ganjam
backwater and port with
the large system of inland
water communication which
lies to the north; but the
trade of the town of

24/27

h 13
Ganjam seems to have
entirely disappeared; and all
goods which come down the
Chilka Canal for export are
transferred to carts when they
reach the mouth of the
Ganjam backwater, and
carried by road to Gopalpur.

What has caused the
complete disappearance of
Ganjam as a trading port
is by no means clear, but
even 29 years ago General
Cotton mentioned the growing
preference for Gopalpur,
though he was unable to
account for it.

In consequence of that
tendency shown by goods
to seek shipment at Gopalpur

General Cotton suggested,
in the report already alluded
to, the construction of a
second section of Canal, to
connect the Ganges and
the Gopulpur (or Muniswatta)
backwaters. He observed
that such a Canal would
pass through a singularly
favourable natural hollow,
occupied then (and now) by
a chain of small fresh water
lakes, and he raised the
question whether the canal
should be a tidal one, or
a fresh water one with locks.

Up to the present time,
nothing has been done
towards the construction of

25/22

^{h 16}
this Canal, but in 1882/83
the country was carefully
surveyed and examined, and
a decision arrived at in
favour of a tidal canal
uniting the two backwaters.

In 1884, an estimate
amounting to Rs 4,44,335
was submitted to the Govt
of India for sanction, but
in consequence of slight omissions,
a revised estimate amounting
to Rs 4,51,145 has recently
been submitted, and is
now awaiting sanction.

It would be difficult
to exaggerate the importance,
to the Ganges St., of this
short section of Canal. Its
construction will complete

the last link in the long
chain of inland water
communication to the north
of Gopalpur, and will allow
goods to be brought from
great distances, without
breath of bulk, right up
to that port, in which, when
the pier is completed, the
trade of the surrounding
country will become more
than ever concentrated.

Vizianagram. Experimental
Artesian Well

At the request of
H. H. the Maharajah of
Vizianagram, I inspected a
boring which is being
made near the fort of
Vizianagram, in the hope

28/22

of striking a water bearing
stratum from which a supply
may be obtained by an
Artesian well.

Mr. Fraser, the Engineer
in charge, was good enough
to show the boring apparatus
at work, and to give full
information on the subject.

The apparatus and
plant seem excellent and
suitable in every way. The
cost is understood to have
been about Rupees 12,000/-
which did not seem excessive.

At the date of inspection,
the depth reached was stated
to be 192 feet; and the
rock which was being
bored through was said
by Mr. Fraser to be

"intensely hard." On that
point, the stuff brought
up from the boring left
no room for doubt. So far
as could be judged, the
boring was being made
through a very close-grained
and hard granitic rock,
and it was understood
that the greater part of
the depth reached had
been through rock of a
similar character.

The opinion I formed
was that there is not
much prospect of obtaining
a water in that locality
from an artesian well,
and I have informed
H. H. the Maharajah

22/22

16
accordingly, advising him
to discontinue all expendi-
ture there. I was not
however in a position to
say whether there are
better prospects of success
in other parts of the
territory belonging to him.

US.
19.3.85

Chilka Canal

28/22
 # 1044 Waf 10. 8. 84
 " 2618 Waf 17. 10. 84
 " 2634 Waf 17. 10. 84
 " 25 J af 15. 1. 85
 " 301 C af 14. 2. 85
 " 385 J af 8. 4. 84
 " 710 J af 6. 8. 84

Ganjam Gopalpur Canal

" 717 J af 4. 9. 83
 " 556 J af 14. 6. 84
 " 843 J af 16. 9. 84
 " 165 J af 12. 2. 85

Marmia Silla Canal

" 2275 Waf 10. 8. 83
 " 4 W af 3. 1. 84
 " 730 W af 10. 3. 84
 " 1024 Waf 11. 4. 84
 " 1234 W af 10. 5. 84
 " 658 E af 11. 9. 84
 " 2773 Waf 6. 11. 84

Mayapalli Moulipatan

" 1272 Waf 28. 5. 80
 " 2563 W af 8. 11. 80
 " 711 W af 16. 3. 81
 " 2957 Waf 9. 11. 82

Buildings or Hydropatan

" 610 Waf 3. 84
 " 2394 W af 16. 9. 84
 " 2750 W af 5. 11. 84
 " 3329 W af 11. 11. 84
 " 900 W af 1. 84

Onolur Canal

" 3126 Waf 17. 11. 82
 " 377 C af 6. 2. 83
 " 766 W af 5. 3. 83
 " 646 C af 7. 3. 83
 " 2215 C af 23. 11. 83
 " 2665 C af 17. 12. 83

843 C af 8. 11. 84
 1955 Waf 11. 8. 84
 1719 Waf 11. 11. 84

1250 Waf 31. 3. 84

" 1250 Waf 14. 5. 84

" 1423 Waf 6. 6. 84

" 1424 Waf 6. 6. 84

" 1987 Waf 13. 8. 84

" 1337 Waf 28. 5. 84

" 451 Eaf 11. 8. 84

" 585 Eaf 28. 8. 84

" 1719 Waf 8. 7. 84

" 352.3 Waf 7. 2. 84

" 579 Caf 11. 3. 84

" 787 Caf 21. 3. 84

" 1924 Waf 9. 7. 83

" 177 Waf 21. 1. 84

" 365 Waf 11. 2. 84

" 1882 Waf 2. 8. 84

" 2700 Waf 3. 11. 84

" 3233 Waf 14. 11. 83

" 2040 Waf 20. 8. 84

" 2368 Waf 24. 7. 84

" 3072 Waf 20. 10. 83

" 1164 Waf 8. 5. 84

" 1263 Waf 19. 5. 84

" 2446 Waf 4. 10. 84

" 3069 Waf 12. 12. 84

" 2405 Waf 30. 4. 84

" 2667 Waf 27. 10. 84

" 3514 Waf 30. 11. 82

" 176.7 Waf 19. 1. 83. Feb

" 214.7 Waf 25. 9. 84. Feb

" 2777 Waf 20. 10. 83

" 3574 Waf 19. 12. 83

" 1577 Waf 21. 10. 84

" 765 Eaf 20. 10. 84

" 872 Eaf 23. 10. 84

Vizagapatnam Sea

Apr. Sontoon

Bridge, Vizag.

Vizag. Bombardment

of Vizagapatnam

harbour

Quilpata Graynes

Sea Customs

Office at

Gopalpur

Gopalpur Sea

Sontoon Light House

Cocanada Graynes

1357
el. 107. 105
No. 722. W. W. Department,

Proceedings of the Madras Government,
Under date the 23rd March 1885.

Read the following.

Notes of Inspection by the Chief Eng. S. W. D. of 19th March, 1885.

18

1. The above notes of inspection by the Chief Engineer S. W. Dept are recorded, with the following observations.

2. Para 1. The action of the Cocanada Harbour Graynes on the depth of water over the bar should be carefully watched, and the result reported after sufficient time has elapsed for a decided opinion being formed.

Paras 2, 3, and 15 - Orders on 3.
the questions herein raised
will issue in the Marine
department.

Paras 4 and 5 - Referred 4.
to the Financial Dept

Paras 6, 7, 8, & 12. - The 5.
special attention of the
Supty Engineer I Circle is
drawn to these remarks.

Para 11. The Director 6.
General of Telegraphs will
be requested to forward
Government with his views
on the subject of a telegraph
office at Dandakshwaram.

Paras 19, 20, & 21. The 7.
suggestions in these paras
as to the selection of

12/19
Berhampur for the site
of the Collector's new residence
and head quarter offices, &
the utilisation of existing
buildings at Chattrapur
will be considered in the
Revenue dept.

W.
19.3.85

S.E. I Circle. ✓

C.E. for Sprague ✓

Director Genl of Telegraphs.

Marine dept ✓

Financial dept ✓

Revenue dept with 2 Encls.

2 Encls

1/4/85

RS



31/722

Aug 19/3/85

27-7-12

CHART OF 1885

PUBLIC WORKS.

Scary

24/3/15

23 March

722/11

Notes of inspection

The — by the Chief
Engs P.W.R. of the
I Canile recorded
with certain observations

100

8

24/3