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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P. W. DEPARTMENT

G.O. No.	2874	Press.
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Dated	17-11-1881	197

Not to be folded or roughly handled

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2875

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

17th November 1881, No. 2874 W.

Buildings and Roads.
Civil Works.

Read the following paper:—

No. 91. From F. N. THOROWGOOD, Esq., M. Inst. C.E., Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, Buildings and Roads, Fort St. George, dated Madras, 5th November 1881, No. 57 W.

I HAVE the honor to submit the following report of the progress on these works during the past month of October.

2. NORTH PIER.—No work has been done at the north pier, either in the way of block-setting or depositing rubble base. The end of the pier has been made secure against bad weather, and the Titan crane has been withdrawn to a place of safety. Some slight repairs have been carried out to the corners and edges of blocks that have been damaged at some previous period, and altogether the pier is in a very efficient state to meet those storms which may be expected at this season.

3. QUARRIES.—At Ambatūr quarries I have taken up and brought away a large quantity of railway material, but have not yet closed the quarry, as much small laterite is still required for the beach improvement work. During October 2,040 tons were sent from the quarry for this purpose. From Pallāvaram 3,485 tons of granite were received, but I think after the 20th of the current month I shall be able to stop work there.

4. SOUTH PIER, SUPERSTRUCTURE AND BASE.—There were eighty-six blocks set in the south pier head during October, which very nearly served to complete the work, with the exception of the return wall or horn. I found that I could not completely finish the actual pier by 1st November, and I have therefore placed two rows of blocks in a temporary position and withdrawn the Titan crane to a safe spot. When we can with safety resume work at the pier ends, these blocks will be removed and the pier head finished in the proper manner.

5. In the rubble base of the south pier there have been deposited 1,018 tons of granite for levelling up the base in several places.

6. PROTECTIVE WORKS, NORTH OF HARBOUR.—Every exertion has been made to push on the revetment to the north of the harbour, and the result is very satisfactory. The railway has been extended for a distance of 1,800 feet, and the serious encroachment referred to in my last report has ceased. This is partly due to the action of the waves, which now begin to leave sand where they formerly cut it out, but it is also due to the protection afforded by the loose rubble stone. The new works are shown in red on the plan accompanying this report. There have been 2,780 tons of stone deposited in this work during October, a large proportion of which comes from the surf bank of the south pier now enveloped in sand.

7. I shall extend the protective revetment about 200 feet further north, but it does not appear desirable to continue it indefinitely, as there must be some spot at which the action of the waves in encroaching is not due to the harbour piers.

8. STORES RECEIVED ON WORKS.—During October the S.S. *Elthopia* brought some coils of Manila rope from Calcutta for the mooring apparatus, and the S.S. *Camorta* brought the shackles for attaching the large buoys to their chains which were much needed.

9. BEACH IMPROVEMENT WORKS.—The levelling up of the beach and the rubble work of the northern jetty have been proceeded with, but the construction of the jetties have for a time stopped until I hear from Mr. Parkes by next mail. There have been 2,400 tons of stone and laterite used on these works during October. I hope to be able to push on this work briskly now that I can withdraw men from the pier ends.

10. EXPENDITURE.—The expenditure on the works during October has been Rs. 31,091-5-0, of which Rs. 5,000 is due to the beach improvement works, the total expenditure on the Harbour Works themselves has been Rs. 57,54,165.

11. PLANS AND SECTIONS.—The accompanying plan shows the harbour piers practically completed in length, the width of entrance being now 550 feet. It will be observed that the high water line within the harbour has hardly varied at all, but to the south it has advanced slightly near the south pier. This is rather extraordinary and I cannot explain it, for latterly the sand has not advanced seaward close to the pier, but at some distance south.

12. I have shown the buoys that were fixed up to 31st October, and also the 4 fathom, $4\frac{1}{2}$ and 5 fathom contour lines. The large buoy with its four screw moorings is placed on the average $4\frac{1}{2}$ fathom line, as agreed in 12th August by the Committee appointed to consider the mooring question. It is in reality in 25 feet 6 inches depth below mean sea level, but it is probable that in the north-east monsoon there will be 1 foot deepening at this spot.

13. Two screws are shown for the next large buoy, but we could not complete this mooring owing to the swell, and the mooring vessels are now at work on the north side of the harbour.

14. A longitudinal section of the south pier is forwarded as usual.

No. 92.

ORDER THEREON, 17th November 1881, No. 2874 W.

Recorded.

(True Extract.)

Lieut.-Col., R.E.,
Ag. Under Secy. to Govt., P.W.D.

To the Superintendent, Madras Harbour Works.
" Marine Department.

Encl. E. C. Shunker.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of 1881 Madras

PUBLIC WORKS.

To

THE SUPERINTENDENT, MADRAS
HARBOUR WORKS.

cc. cc. cc.

Dated November, 1881.

Encd.

Recd.

Encl.

G.O., 17th November 1881, No. 2573 W.

NOVEMBER.

Nos. 91-92.

MADRAS HARBOUR WORKS - November 1881 reported

No. 57W.

28/11/81

FROM

THE SUPERINTENDENT,
MADRAS HARBOUR WORKS.

TO

Colonel R. H. Lankey, C. B. R. C.
Secretary to Government, P.W. Dept.
Buildings & Roads
Fort Saint George
Madras, 28th November 1881.

Sir,

I have the honor to submit the following report of the progress on these works during the past month of October.

North Pier.

2. No work has been done at the North Pier, either in the way of blocksetting or depositing rubble base. The end of the pier has been made secure against bad weather, and the Titan crane has been withdrawn to a place of safety. Some slight repairs have been carried out to the corners and edges of blocks that have been damaged at some previous period, and altogether the pier is in a very efficient state to meet those storms which may be expected at this season.

At

3 At Ambatur quarries I have Quarries
taken up and brought away a large
quantity of railway material, but have
not yet closed the quarry, as much small
laterite is still required for the Beach
Improvement work. During October
2040 tons were sent from the quarry
for this purpose. From Pallavaram
3485 tons of granite were received,
but I think after the twentieth of
the current month I shall be able
to stop work there.

4. There were 86 blocks set in the South Pier
South Pier head during October, which Superstructure
very nearly served to complete the work and Base
with the exception of the return wall
or horn. I found that I could not
completely finish the actual pier by
November 1st and I have therefore
placed two rows of blocks in a tem-
porary position and withdrawn
the Titan Crane to a safe spot. -
When we can with safety resume work

at

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at the Pier Ends these blocks will be removed
and the pier head finished in the pro-
per manner. -

5. In the rubble base of the South
Pier there have been deposited 1018 tons
of granite for levelling up the base in
several places. -

Protective Works
North of Harbour

6. Every exertion has been made
to push on the revetment to the North
of the Harbour, and the result is very
satisfactory. The railway has been
extended for a distance of 1800 feet and
the serious encroachment referred to
in my last report has ceased. This
is partly due to the action of the
waves, which now begin to leave
sand where they formerly cut it out,
but it is also due to the protection
afforded by the loose rubble stone.
The new works are shown in red on
the plan accompanying this report.
There have been 2780 tons of stone
deposited in this work during October,

a

12. I have shown the buoy that were fixed up to October 31st, and also the 4 fathom, 4½ and 5 fathom contour lines. The large buoy with its four screw moorings is placed on the average 4½ fathom line, as agreed on August 12th by the Committee appointed to consider the mooring question. It is in reality in 25.6 depth below Mean Sea Level, but it is probable that in the North East Monsoon there will be 1 foot deepening at this spot.

13. Two screws are shown for the next large buoy, but we could not complete this mooring owing to the swell, and the mooring vessels are now at work on the North side of the Harbour -

14. A longitudinal section of the South Pier is forwarded as usual.

I have the honor to be

Sir

Your most obedient servant

J. H. Mowbray.

Superintendent

Madras Harbour Works

2552-53W-18-10-87

1436 w - 8 - 6 - 81 -

1826w 26-7-81

From

The Superintendent
Madras Harbour Works

No. 57 W

Dated 5th

Recd 7th November 1887

No. of Enclosure 2

Progress Report

Submits for the month
of October 1884.

Dec. 10. 11. 12.

For information

I saw Mr Parker before I
left England. He is most un-
willing to come out & maintained
when I saw him that his presence
could be of no possible use. I think
it would be inexpedient to bring
him ^{back} again at his own judgment
unless some urgent necessity arising
should ^{dictate} it. I hear soon.

Whether Mr. Parkes is
coming out. I do not
know or what position
is being created by Mr.
Thompson as regards the
situation at the base of
the harbor. This is
not found book. I have
nothing to do with Mr.
Parkes estimate.

The book seems all
going on as well as can
be. Under W. Thoroughbred
as usual. It must be
it mid Sect. at many points
I'll send the very necessary
to determine as far as possible
to go to the
on 5/11 the black nucleus
can be as on the 10

in circulating with
draft-order Mr. Shorro.
- Goods progress report of
the Madras Harbour works
In October I may men-
- tion that I inspected
the works with the Super-
-intendent in the morning
of the 3rd inst. and found
all as described

The titans have been withdrawn and are apparently very secure against any bad weather that may occur — and to all intents and purposes the harbour is complete to the extent originally contemplated, but three remains

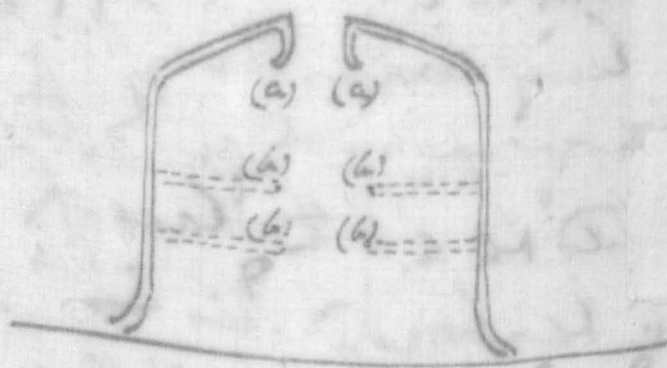
(1) the construction of the
horns at end of the
breakwaters

- (2) The fixture of the mooring buoys
 (3) The completion of jetty and otter work at base of the Harbour
 (4) The completion of longitudinal revetment works of the harbour to counteract the erosion in that direction

As regards (1) the horns, the object of which is to break up and disperse the seas entering the mouth (see margin) it is clear that considerable difficulties will present themselves in the construction owing to the angle at which they stand, needing changes to be made in the tidal sea and, even when constructed, it is not quite clear that they will any materially diminish the surf which with easterly winds now breaks along the harbour base — I am myself inclined to think

the harbour works.

It may be necessary to extend protective work beyond this point, but at any rate for the work which has been done for damage to property.



(a) (a) The horns

26/7/6

that the most effective way of dispersing the seas will be found in the construction of solid piers (b) (b) and as these will allow of vessels being berthed & discharged their cargoes on the land side in still water it seems to me that this arrangement would dispose at the same time of the difficulty which has arisen in reference to harbours dues — With the exception of this character the harbour boat will disappear and with it the Submarine "et hoc genus omne" — The Government in fact will become master of the position.

I cannot of course enter into details of the matter and merely allude to it generally here in connection with the construction of the horns to show that there is still a question to be solved — and that it is one requiring Mr. Parker's presence here.

To Jan on (2) the picture
of the buoy is concerned
I understood generally
in Mr. Larrons good but
if all go well the whole
should be out of hand by
next May — but here
again the question of breaking
up the sea intervenes, and
if the proposal to construct
the wharfs (b)(b) & take
a consistent form the
plan of screw pile mooring
as now being carried out
may require consideration

The fact is all calculations
have hitherto turned
on the supposed certainty
that there would be no
all intents and purposes
a still water harbour
when the piers had sufficiently
approached each other

This has not been realized
at all to the extent
expected, and if the
works fail to do the
needed dispersion

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other expedients
must be thought of

As regards the completion
of the jetty for at base
of the harbour the work
has made very good progress
and the arrangements for
Jan promise to be successful

Whether with the men-
spected action of the surf
it will eventually be
found that the platforms
of the several jetties (off
above mean sea level)
are high enough out
of the water in bad weather
especially from the east-
remains to be seen

I confess to feeling rather
doubtful on this point

The completion of the
longitudinal mooring
(head & above) north of
the harbour is a more
serious matter than
was at first contemplated
as the erosion of the
shore has lately gone
on to such an extent

as to isolate all
the rough stone piers,
demolish all the front-
row of fishermen's huts,
destroy the old saw-
mill & Mrs. Padden's
house — and threaten
others in advance to the
north

At one point the sea
was cut across the main
road

As stated by Mr.
Thurmond the action
was in nature to pile
up sand along the
previously eroded
portions, but the ^{entire} action
will certainly recur

The question of where the
restriction work is to
stop (see para 7 of the
Sept. Report) is a serious
one, but it certainly cannot
be made dependent
on whether the original
action was generated
by the harbour works
or not.

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There is clearly a
matter regarding which
Mr. Parkes' presence
here at an early date
is most desirable

Meanwhile it may
suffice to say that
Mr. Thurmond has been
unfailing in his efforts
to save private property
all along the shore
and deserves much
credit for the manner
in which he has carried
out the work here

The action noted in
para 11 of the Report
showing that the shore
line has advanced
at the South corner of
the harbour in a manner
inexplicable to Mr.
Thurmond should
be further inves-
tigated — it may be
that owing to the
loose way in which
the "root" of the South

piece had necessarily
to be constructed in
battling through the
surf the sand is now
washed through the
interstices

If this be the case the
remedy will not be
difficult, but the point
seems worth investigating
and I shall direct Mr
Thornrood's attention
to it.

Atts

5/11/81

Received
16.11.81
2874

Generally
in the views expressed
in this note. but
it does appear
that our Despatch
of 17 Aug. has been
sent back & I
wait a little before
drawing our
suggestion. The fact
is Mr Parker is asking
a good deal & I don't
like to be the giver
of the job. LK

The "urgent necessity" alluded
to in my note of the 8th has come
upon us - Mr Parker must obviously
come out as soon as possible
C-10-11. 12 15 11 15th Jan/81

Mr W. H. Hudson
Mr R. H. Hudson

For order

With reference to
the note by the R. H. Hudson
the Governor of the District
I should be glad to
have instructions

Para 5 of the despatch
No 51 W of 17th August
2012 to the S of S conveyed
the opinion of the Govt.
as to the necessity for
Mr Parker's presence
in Andaman I. but
the correspondence ending
with letter to the S of S
No 2553 W of 18th October
may or may not in
the opinion of Government
be held to modify the
last letter with
S.O. 2552 W practically
leaves the Chief matter

at issue (ant. the
stability of the rubble
base) an open question

The remaining points
are (1) the unexpected
amount of disturbance
within the Harbour
(2) the increased active
work of the
lock

For the settlement
of both points no doubt
Mr. Parker's presence
is highly desirable
and were I in his place
I think I should un-
questionably desire to
come out

I cannot however under-
take to say that there
is such an urgent
necessity that he
should be ordered
out against his will

I can only offer my
personal opinion that

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12

if Mr. Parker does
not feel inclined to
come the Government are
perfectly safe in Mr.
Thornycroft's hands

Whether Mr. Parker
be here or not we must
push on vigorously
with the protective
works to the north -
and as regards the
disturbance inside the
harbour it is not
apparently a matter
warranting a hasty decision,
and will 'keep'

On the whole I venture
to think that with a
full knowledge of the
facts - and the opinion
entertained here as already
sufficiently recorded it
might perhaps be left
to Mr. Parker himself
to decide - Should
this be accepted it
would I presume be
necessary to convey the

decision to him through
the Sd S

In Colliery question
which has been raised
on the demand of the
Sd S to furnish a report
of the Trinilipatam Harbour
and which it was proposed
to refer as an independent
question to Mr. Parkes
might still be left on the
original footing - Should
Mr. Parkes not return to
this country the Government
might not be empowered
to report

Information regarding the
point referred to
by the H. M. about the
jetties will be ascertained
from Mr. Thoroughgood

10/11/81

Att

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Cin

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PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 17th November 1881
Read the following:—

Letter from the Superintendent
Madras Harbour Works } (M.E. No. 57 W of 5 Nov 1881)

Recorded.

Att

5/11/81

Superintendent, Madras
Harbour Works. ✓

Marine Dept ✓

2874W

28/11/81

R.S.

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Gobt. of 1881, Madras.
PUBLIC WORKS.



To

Dated

Issued

Recd.

Encl.

G. O. 17th Nov 1881, No. 2874/11.

Nos. 91 to 92

Madras Public Works
Progress Report for
October 1881, enclosed.

Supd. in Receipts

Indexed 1871