

- (1) பக்கங்களின் எண்ணிக்கை 12
 (2) புதுக்கித் திருப்பிய நாள் 2-12-88
 (3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் 6ya

தமிழ்நாடு ஆவணக் காப்பகம்.

(64)

தமிழ்நாடு அரசு

P.W.D. குறை

அரசாணை எண். மு. கோப்புத் தாள் எண்.	83	அச்சகம் பலவகை
நாள் :	14-1-1889	198

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

சே

6. sheets

ஆவண கர-1-18,006-15-6-87.

5+ 1 = 610.4 Stalmt.

8TH JANUARY 1889, No. 27 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From R. W. BARLOW, Esq., C.S., Chairman, Harbour Trust Board, to the Chief Secretary to Government, dated Madras, 17th December 1888, No. 3674.

I have the honor to submit, for the information of Government, copy of a letter from the Board's Engineer, No. 1212, dated 7th December 1888, reporting in detail upon the progress made on the Harbour Works during the month of September 1888, together with a plan and statement showing comparison of expenditure for that month and the total up to the 30th idem.

ENCLOSURE.

From A. L. POGSON, Esq., Engineer, Harbour Trust Board, to the Chairman, Harbour Trust Board, dated Madras, 7th December 1888, No. 1212.

I have the honor to submit a report on the progress made on these works during the month of September 1888, with a plan in duplicate showing in red the wave-breaker blocks deposited to protect the superstructure built during the season.

2. The statement of expenditure is also submitted, in duplicate, in accordance with para. 2 of G.O., No. 3743 W.

3. *South Pier Superstructure.*—No advance at this arm was made during the month above water-level, but, as is usual at the close of the season, and with a view to making everything secure below water-level, four of the lower blocks were set in position which act as a footing to the pier, and would prevent any possible movement in the last row of blocks should a severe cyclone strike Madras.

4. *Wave-breaker.*—On the 11th of September the south pier Titan crane was turned so as to overhang the sea face of the wall, and on the 13th I commenced to deposit the wave-breaker blocks to a width of 28 feet from the face of the pier. This work was pushed on with as fast as possible, and, by the end of the month, 131 blocks of 30 tons each had been placed in position.

5. *Rubble Base.*—Fifty-five and a half tons of rubble was deposited from boats to make up the full section of the rubble base as far as the superstructure is completed.

6. *Concrete Block-making.*—The work of concrete block-making was carried on briskly up to the 26th evening, when 251 blocks representing 4,175½ cubic yards of concrete was the outturn in the month, after which date this work had to stop for the want of stone from the Pallavaram quarries.

7. *Stores from England.*—The steamers *India* and *Navarino* brought out 2,652 casks of Portland cement, containing 473 tons 18 cwt. 2 quarters 8 lb. and one case of stores.

8. *Sleepers, local supply.*—The contractor delivered 282 hard-wood sleepers during the month.

9. *Casuarina Firewood.*—Thirty-four tons of green casuarina firewood was delivered by the contractor during September.

RETURN OF WORK FOR SEPTEMBER 1888.

10. *Railway Lines.*—The lines at the beach and the quarries were kept in repair. 616 running feet temporary broad-gauge line and 24 running feet Titan line removed from south pier during monsoon. 104 running feet new steel rails and one crossing issued to renew worn out portions.

11. *Quarries.*—Two trains ran early in the month of September bringing chips and rubble from Pallavaram.

				TONS.
Rubble—				
Total quantity received up to 30th September	...	...	...	3,50,552½
Do. do. to 30th June 1888	...	...	...	3,50,497½
Received in September ...				55½

				TONS.
Chips—				
Total quantity received up to 30th September	...	...	...	1,10,090½
Do. do. to 31st August 1888	...	...	...	1,09,825½
Received in September ...				265

Ballast	...	...	...	None received.
North Pier surf bank	...	...	...	Nothing done since 31st December 1886.
Do. rubble base	...	...	Do.	30th April 1887.
Do. superstructure	...	...	Do.	29th February 1888.
Do. supplementary works	...	...	Do.	30th September 1887.
Do. capping	...	...	Do.	31st May 1887.
Do. cramps	...	...	Do.	30th April 1888.
South Pier surf bank	...	...	Do.	

South Pier Rubble Base.

	FORESHORE.		Base.
	Large rubble under wave-breaker.	Widening foreshore.	
Total quantity deposited to 30th September	9,380	38,389½	1,19,889½
Do. do. to 30th April 1888	9,380	38,334½	1,19,889½
Deposited in September ..	...	55½	...

South Pier Superstructure.

				NOS.	CON. C. YDS.
Blocks set up to 30th September 1888				1,187	19,260½
Do. to 31st August 1888				1,183	19,191½
In September ...				4	68½

South Pier Supplementary Works.

	Number of blocks.	Con. cubic yards.	Distance on pier.	Average breadth from face of pier.
FEET.				
Blocks deposited in wave-breaker up to 30th September	1,022	17,398½		...
Blocks deposited in wave-breaker up to 30th April 1888	891	15,040½		...
In September ...	* 131	2,358	{ 2,850 to 3,179 2,838 to 2,361½	30 25

* Wave-breaker blocks.

South Pier capping	...	...	Nothing done since 30th June 1888.
Do. cramps	...	...	Do. 30th April 1888.
Protective works	...	...	Nothing done.

Concrete Blocks.

Description of blocks.	Made up to 31st August 1888.	Made in September.	Made up to 30th September 1888.	PLACED IN WORK		In hand.
				Up to 31st August 1888.	Up to 30th September 1888.	
Old blocks	806	..	806	806	806	..
Wave-breaker blocks	2,592	22	2,614	1,927	2,058	556
Superstructure	..	..	..	..	..	..
North Pier bottom blocks	..	..	..	..	..	..
Do. middle do.	227	..	227	108	108	119
Do. top do.	673	..	673	405	405	268
South Pier bottom blocks	222	..	222	130	130	92
Do. middle do.	290	46	336	145	147	189
Do. top do.	802	137	939	633	635	304
Special blocks	294	46	340	233	233	107
Counter balance	71	..	71	71	71	..
	1	..	1	..	..	1

Concrete blocks containing 4,175½ cubic yards of concrete were made in the month, and block-making ceased on the 26th for want of stone. 116 wave-breaker and 65 superstructure blocks were transferred from north to south pier block grounds and stacked.

Nine hundred and twenty-eight tons cement was the balance on the works at the end of the month.

12. *Tools and Plant—Stone-crushers.*—To No. 2 a new movable jaw and set plates were fitted; Nos. 3 and 5 set plates fitted; No. 4 a new side wedge fitted. Twelve handles were made and rivetted into set plates for the stone-crushers. Four concrete skips and three elevator boxes were repaired. No. 1 concrete mixer fitted was with a new door bracket and No. 6 with a new door catch. Nos. 1 and 2, Donkey pumps brass bearings closed.

No. 2, *Goliath Crane.*—Fitted with two new travelling wheels and two new brass bearings for the crab.

No. 3, *Goliath Crane.*—"Lift" of pumps regulated, new leather-washers supplied, and glands repacked.

No. 4, *Light Traveller.*—Liners fitted to pedestals of wheels.

13. *North Pier Titan.*—Chain fixed and greased; cradle removed from releasing gear; ballast tank tarred and fitted. Counterbalance fixed, driving gear eased, governor valve repaired, and brass bearings of connecting and coupling rods closed. This crane was run on to the masonry pier on the 9th to repair the wave-breaker crane ground for its reception, and was travelled back on the 16th to the spot where the wave-breaker crane formerly stood.

14. *South Pier Titan.*—Two new travelling wheels to the crab girder and ten ¾ inch turned bolts were fitted. The crane was turned into position for dropping wave-breaker blocks in foreshore on the 11th and stood at 2,349 feet from E. at the close of the month.

15. *Wave-breaker Crane.*—Under erection at the south pier.

No. 2, *Locomotive Engine.*—Waste water cocks repaired.

No. 3, *Locomotive Engine.*—New blower-pipe in smoke-box and cranks for waste water cocks were fitted.

Block Trucks No. 9.—A pair of wheels removed for repairs.

Do. No. 14.—Dismantled.

Sand Wagon No. 4.—A new coupling chain and hook and pin fitted.

Do. No. 5.—Two tail-boards and hinges were fitted.

Do. No. 7.—A pair of new wheels fixed.

Do. No. 9.—A door lock fitted.

Do. No. 10.—Dismantled.

Do. No. 11.—Repaired and fitted with new coupling chains. Two concrete skip trucks were repaired.

Divers' air-pump repaired and fitted ready for use.

16. *Beach Improvements—Iron Pier Repairs.*—Seventy feet (for the half width) of wood-work thoroughly renewed and for a length of 36' 4", 13' 9" wide, longitudinal beams and all the deck planking was removed.

17. *Eight-ton Pier Truck.*—A new 8-ton truck No. 12 was completed.

Trucks Nos. 16 and 17 were thoroughly repaired and No. 2 saloon carriage was repaired.

18. *Goods Sheds.*—All the masonry work to the two new goods sheds was completed and the roofing was being erected as speedily as possible.

Transferred to the Public Works Department.

(By order.)

18th December 1888.

(Signed) W. S. MEYER,
Assistant Secretary.

ORDER—dated 8th January 1889, No. 27 W., Public Works.

The report will be forwarded to the Secretary of State for India.

2. The attention of the Chairman, Madras Harbour Trust Board, is invited to para. 2 of G.O., No. 3743 W., dated 27th November 1888.

(Here enter No. $\frac{1}{27}$ W., dated 8th January 1889.)

(True Extract.)

(Signed) H. R. MEAD, Colonel, R.E.,
Ag. Secretary to Govt., P.W.D.

To the Chairman, Madras Harbour Trust Board.
„ Marine Department.

Exd. J. Henricus.
Spare Copies

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BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1889} Madras.
PUBLIC WORKS.

Dated January, 8th.

Recd.

Encl.

G.O., 8th Jan. 1889, No. 27 W.

JANUARY.

Madras Harbour Works

Orders on progress report on the — for
September 1888.

Comparison of Expenditure to date with Sanctioned

rate for the month of

September

1888.

Sub-head of Work.	AS PER ESTIMATE.				AS EXECUTED.				REMARKS.			
	Quantity.	Rate.	Per	Cost.	Cost.							
					Up to date.							
1	2	3	4	5	6	7	8	9	10	11	12	13
AS PER OLD ESTIMATE.												
1 Works												
2 Establishment												
3 Tools and Plant												
Total												
NEW ESTIMATE.												
4 Alteration and extension of block ground												
NORTH PIER.												
Rubble Stone in Forechannel and Buoy.												
5 Ordinary deposited from break-water												
6 Do. from boats												
7 Large ordinary deposited under wave breaker from break-water												
8 Concrete blocks for building												
9 Setting blocks at commencement of new work												
10 Do. from 2,500 to 3,000 feet												
11 Do. at Pier head												
12 Concrete to mass for filling												
WAVE BREAKER.												
13 Built blocks												
14 Ordinary concrete blocks												
15 Depositing do.												
16 Ayron blocks												
17 Setting do.												
18 Concrete in bags												
19 Gramps												
20 Concrete capping												
Total for North Pier												
SOUTH PIER.												
Rubble Stone in Forechannel and Buoy.												
21 Ordinary deposited from break-water												
22 Do. from boats												
23 Large ordinary deposited under wave breaker from break-water												
24 Concrete blocks for building												
25 Setting blocks at commencement of new work												
26 Do. from 2,500 to 3,000 feet												
27 Do. at Pier head												
28 Concrete to mass for filling												
WAVE BREAKER.												
29 Concrete blocks												
30 Depositing blocks												
31 Ayron do.												
32 Setting do.												
33 Concrete in bags												
34 Gramps												
35 Concrete capping												
Total for South Pier												
36 Tools and Plant												
37 Contingencies at 2 1/2 per cent.												
38 Lighting entrance												
39 Establishment												
40 Materials at site (concrete blocks in yards)												
41 Advances to work-people												
42 Other stores												
43 Materials at site at <i>Madras Harbour</i>												
Total of Estimate and value of work done												
Deduct Probable recoveries due to sales of Tools and Plant												
Deduct Arrears due												
Total Outlay to date by books												
Deduct Total Outlay to end of last year												
Deduct Value of Stock												
Add Net Debits to Suspense Heads during the year												
Net Debits of the year												
Grant for 1888-89, Rupees 12,00,000												

MADRAS,

7 December 1888.

Robert Curzon
Secretary
H. C. S. S.

To The Chairman
Madras Harbour Works
Madras

Admiral
Superintendent, Madras Harbour Works
Madras

Outlay on work up to 31st March 1888
Rs. 3,72,970.2
Outlay on work up to 31st March 1888
Rs. 3,72,970.2

Total the outlay up to 31st September 1888
Rs. 3,72,970.2
Outlay on work up to 31st March 1888
Rs. 3,72,970.2

Harbour Trust Board,

MADRAS, 10th January 1889.

No. 100

83

FROM

J. P. Piddian Esq. C.S.

Ag. Chairman HARBOUR TRUST BOARD,
MADRAS,

TO

Colonel H. R. Mead R.E.

Ag. Secretary to Government
Public Works Department

Sir

I have the honor to acknowledge
the receipt of G.O. No. 2741 dated 8th
instant, and in reference to para
2 thereof, and para 2 of G.O. No. 3743H
dated 27th November 1888, to forward
a duplicate copy of the statement,
showing comparison of expenditure
for the month of September last,
forwarded with my letter No. 3674
dated 17th December 1888.

I have the honor to be
Sir

Your most obedient servant

J. P. Piddian

Ag. Chairman

Harbour Trust Board

Rec

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1883

83
83
6

Mills 245

From

THE

HARBOUR TRUST BOARD,

MADRAS,

To

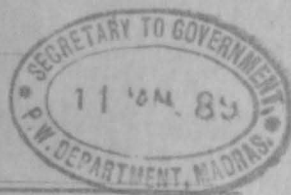
Col. J. R. Mead R.E.
ag. Secy to Government
P.W. Dept.

DATED 10

RECEIVED

January 1889.

No. 100



SUBJECT.

Forwarding a duplicate
statement showing the
comparison of expenditure
on the Madras Harbour
works for September 1888.

No. 83 W of 14.1.89.

B

Recorded.
Recorded

6

WMS
14.1.89

on

W

187

note - copy of statement
first received was sent to
District Office